UCLA 2008 Northwest Housing Infill Project & Long Range Development Plan Amendment Final Environmental Impact Report

Volume 1

Draft Environmental Impact Report & Technical Appendices

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SECTION 1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that lead agencies consider the environmental consequences of projects over which they have discretionary approval authority, prior to taking approval action on such projects. An Environmental Impact Report (EIR) is a public document designed to provide the lead, responsible and interested agencies, special districts, local and State governmental agency decision-makers and the public with an analysis of potential environmental consequences to support informed decision-making.

The University of California, Los Angeles (UCLA) is proposing to construct additional undergraduate student housing in the campus Northwest zone to meet the continued unmet demand. Because this additional undergraduate student housing was not contemplated under the 2002 Long Range Development Plan (LRDP), UCLA proposes to amend the 2002 LRDP (referred to as the "LRDP Amendment") to accommodate the proposed Northwest Housing Infill Project (2008 NHIP). A summary description of the proposed 2008 NHIP and proposed LRDP Amendment (collectively referred to herein as the "proposed Project") is provided below, and a detailed description is provided in Section 3, Project Description.

This EIR has been prepared to address the potential environmental effects associated with implementation of the proposed Project, and has been prepared pursuant to the requirements of the California Environmental Quality Act (CEQA, California *Public Resources Code,* Section 21000 et seq.), the CEQA Guidelines (Title 14, *California Code of Regulations,* Chapter 3, Section 15000 et seq.), and the University of California (UC) procedures for implementing CEQA. As discussed in Section 2.2, Type of EIR, the proposed 2008 NHIP is being evaluated in this EIR at a "project-level". The proposed amendment to the 2002 LRDP is being evaluated at a "program-level". A program level analysis for a proposed amendment to a LRDP is appropriate because a LRDP is not an implementation plan for a specific project, rather, it is a land use plan that guides the physical development of the campus This EIR updates the impact analysis and conclusions of the 2002 LRDP Final EIR (SCH # 2002031115, February 2003) to reflect new baseline conditions, and considers an extension of the LRDP planning horizon from 2010 to 2013 (refer to Section 3.6 for a description of the planning horizon year).

In addition to addressing the potential environmental impacts that would result from the proposed Project, this EIR would provide a basis for the preparation of subsequent environmental documentation for future campus development that could be proposed under the 2002 LRDP as amended, including all associated discretionary approvals required for implementation of those future projects. UCLA and the University of California (UC) Office of the President have reviewed and revised, as necessary, all submitted drafts, technical studies, and reports for consistency with UC policies and requirements and has commissioned the preparation of this EIR to reflect its own independent judgment, including: (1) reliance on appropriate UCLA technical personnel and (2) review of all technical subconsultant reports. Data for this EIR was obtained from on-site field observations; discussion with affected agencies; review of adopted plans and policies; review of available studies, reports, and data; and specialized environmental assessments prepared for the project (i.e., air quality, geology and soils, hazards, hydrology, water quality, noise, traffic, utilities, and climate change).

This EIR discusses alternatives to the proposed Project and includes a mitigation monitoring program that will offset, minimize, or otherwise avoid significant environmental impacts. Following is a summary of the Project; project alternatives; areas of controversy and issues to

be resolved; potential significant and unavoidable impacts; and mitigation measures identified through the analysis presented in this EIR.

1.2 PROJECT SUMMARY

The 419-acre UCLA campus is located in the Westwood Community in the City of Los Angeles, approximately 12 miles from Downtown Los Angeles and 6 miles from the Pacific Ocean (Figure 3-1 in Section 3, Project Description, depicts the regional location of the campus and Figure 3-2 depicts the local vicinity). The proposed 2008 NHIP is located in the Northwest zone, which constitutes approximately 90.5 acres of the 419-acre UCLA campus. The Northwest zone is bound by Sunset Boulevard to the north, Veteran Avenue to the west, Gayley Avenue to the south, and Charles E. Young Drive West to the east.

PROPOSED 2008 NHIP

Due to continuing unmet demand for on-campus undergraduate student housing (described in Section 3.2 of this EIR), UCLA proposes to design and construct infill housing in the Northwest zone, consisting of 1,525 beds, a Dining Commons, a Fitness Center, a Multi-Purpose Room, a small number of faculty-in-residence apartments, and a renovated/expanded Housing Maintenance space (which would replace the existing space with a larger space). Construction of the proposed 2008 NHIP is expected to begin approximately May 2009 with an anticipated completion by December 2012 and occupancy by 2013.

The proposed 2008 NHIP would total approximately 550,000 gross square feet (gsf) of new building space. The campus' Northwest zone (the only zone on campus designated for undergraduate housing) does not offer a single, large site that can accommodate 1,525 bed spaces and the related support facilities. As a result, the 2008 NHIP proposes an infill development strategy for the needed residential, support, and recreational facilities. The new housing would be accommodated in four new buildings (referred to as Sproul South/Complex, Sproul West, Upper De Neve, and Lower De Neve) at three locations. The proposed Sproul South would be a six-story residence hall constructed on top of the new three-story Sproul Complex, which would be located on the northwestern corner of De Neve Drive and Charles E. Young Drive West. Sproul West would be a nine-story building located on the northwestern corner of De Neve Drive and Sproul Circle Drive. The Upper De Neve and Lower De Neve would be nine and seven stories in height (respectively) located west of the existing De Neve Plaza housing complex, north of Gayley Avenue.

Development of the 2008 NHIP would require demolition of the small Office of Residential Life Building and a portion of Sproul Hall (Rooms Division and Maintenance) totaling approximately 10,000 gsf. Additionally, the proposed 2008 NHIP would require upgrades to, or installation of new and/or replacement connections to existing utilities to serve the proposed residential and support uses.

Vehicular access to Sproul West would be from Sproul Hall Circle Drive while access to Sproul South and Sproul Complex would be from De Neve Drive. For the new Upper De Neve building, a vehicular drop-off with two to three short-term parking spaces would be provided adjacent to De Neve Drive. The Lower De Neve component of the proposed 2008 NHIP would include modifications to the northern side of Gayley Avenue adjacent to the project boundary to provide two new service access driveways. Pedestrian facilities would also be provided throughout the proposed 2008 NHIP.

The proposed 2008 NHIP would create housing to accommodate 1,525 existing students (who are either commuting to campus or are currently housed in triple-room accommodations); no

increase in student enrollment would result from the proposed housing project. However, approximately 151 new staff members (or approximately 131 full-time-equivalent employees) would be employed on campus by 2013 to provide administrative, housing maintenance, information technology, and dining services to the expanded residential population. With completion of the proposed 2008 NHIP, UCLA would accommodate roughly 11,000 undergraduate student residents.

PROPOSED LRDP AMENDMENT

Because this proposed additional undergraduate student housing was not contemplated under the 2002 LRDP, UCLA proposes to amend the 2002 LRDP (referred to as the "LRDP Amendment") to allocate an additional 550,000 gsf of new development in the Northwest campus zone necessary to accommodate the proposed 2008 NHIP square footage. In addition, because the proposed 2008 NHIP has an anticipated completion date of 2013, the projected campus population in 2013 has been estimated to account for growth beyond the 2010 population projections provided in the 2002 LRDP for purposes of this environmental impact analysis. The proposed LRDP Amendment would update remaining square footage development allocations for each campus zone totaling 1.32 million gsf and maintain the same 2002 LRDP average daily vehicle trip and parking inventory limits from 2010 (the current LRDP horizon year) to 2013. The proposed LRDP Amendment would enable provision of additional on-campus undergraduate student housing while reserving the campus-wide remaining new development allocation of 1.32 million gsf previously approved under the 2002 LRDP to address the needs of the academic, research and community service mission of UCLA through 2013. Therefore, the maximum additional building space that could be developed under the 2002 LRDP, as amended, would be 1.87 million gsf.

1.3 PROJECT ALTERNATIVES

In accordance with Section 15126.6 of the CEQA Guidelines, Section 5 of this EIR addresses alternatives to proposed Project. Section 5 provides descriptions of each alternative, a comparative analysis of the potential environmental effects of each alternative to those associated with the proposed Project, and a discussion of each alternative's ability to meet the project objectives. Following is a summary description of the alternatives evaluated in this EIR; a detailed description is provided in Section 5.

ALTERNATIVE A: NO PROJECT/CONTINUED DEVELOPMENT UNDER 2002 LRDP

This alternative contemplates that the 2008 NHIP would not be constructed and that no amendment to the 2002 LRDP would be considered. It assumes, however, that the campus would proceed with the same level of development contemplated and previously approved under the existing 2002 LRDP, together with related pre-existing project approvals and current infrastructure. Accordingly, this alternative assumes continuation of the aggregate development level, vehicle trip limits, and parking limits, established under the 2002 LRDP. Taking into account current baseline conditions and infrastructure, approximately 1.32 million square feet remains for new development allocated among the 8 campus land use zones under the 2002 LRDP. Therefore, the square footage development analyzed under this Alternative would be approximately 1.32 million gsf of remaining allocation under the 2002 LRDP. The current parking limit of 25,169 spaces and vehicle trip limit of 139,500 trips would also be maintained.

ALTERNATIVE B: ALTERNATIVE LOCATION

Under this alternative, the proposed 2008 NHIP would be built, in its entirety (beds and support facilities), on surface Parking Lot 36 in the Southwest zone of the campus (Lot 36). This

alternative would include a proposed amendment to the 2002 LRDP to provide an additional 550,000 gsf to accommodate the 2008 NHIP in that zone of the campus. As with the proposed Project, under this alternative the remaining 2002 LRDP development allocation of 1.32 million square feet would continue to be implemented. Therefore, when combined with previously approved development under the 2002 LRDP, the total square footage of new potential development that could occur on the campus is the same as for the proposed Project, or approximately 1.87 million square feet. In order to construct the new housing at Lot 36, the existing surface parking spaces (approximately 637) would need to be replaced on a minimum one-for-one basis, in a subterranean parking structure located beneath the development. Because these spaces are needed for campus operations, during construction of the replacement parking, an interim stack parking plan would need to be implemented so as to ensure continued availability of parking for campus users.

ALTERNATIVE C: REDUCED FOOTPRINT ALTERNATIVE

Because of the limited land available in the Northwest zone for additional student housing, this alternative examines the potential development of the proposed 2008 NHIP on only two of the three sites considered for the proposed Project. That is, this alternative assumes that the proposed 2008 NHIP, in its entirety, would be accommodated in two high-rise buildings (approximately 16 to 18 stories each) on the sites for the proposed Sproul West and Sproul Complex/South buildings (i.e., Sproul sites). As with the proposed Project, this alternative would include a proposed amendment to the 2002 LRDP to provide an additional 550,000 gsf to accommodate the 2008 NHIP in the northwest zone of the campus, while continuing to implement the remaining development allocation under the 2002 LRDP of approximately 1.32 million square feet, for a total of approximately 1.87 million square feet of future development.

ALTERNATIVE D: REDUCED DEVELOPMENT ALTERNATIVE

This alternative involves provision of the same 2008 NHIP as the proposed Project without including the proposed Amendment to the 2002 LRDP to add 550,000 gsf of new development allocation to the Northwest zone to accommodate the 2008 NHIP. Because there is insufficient remaining development allocation in the Northwest zone (i.e., approximately 104,000 gsf) to accommodate the 2008 NHIP, under this alternative, an amendment to the 2002 LRDP to re-allocate (or transfer) development allocation from other campus zones (Bridge and Southwest zones) to accommodate the 2008 NHIP in the Northwest zone would be considered. Under this alternative the total square footage of new potential development that could occur on the campus would be the same as the remaining development allocation under the 2002 LRDP of 1.32 million square feet.

1.4 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain a discussion of issues to be resolved. With respect to the proposed Project, the key issues to be resolved include decisions by the The Board of Regents (The Regents) of the University of California as Lead Agency, as to:

- Whether this environmental document adequately describes the environmental impacts of the proposed Project;
- Whether the recommended mitigation measures and identified campus programs, practices and procedures should be modified and/or adopted;
- Whether the project benefits override those environmental impacts that cannot be feasibly avoided or mitigated to a level below significance;

- Whether there are other mitigation measures that should be applied to the project besides those identified in the EIR; and
- Whether there are any alternatives to the proposed Project that would substantially lessen any of its significant impacts while achieving most of the basic project objectives.

1.5 AREAS OF CONTROVERSY

Section 15123(b)(2) of the State CEQA Guidelines indicates that an EIR summary should identify areas of controversy known to the lead agency including issues raised by agencies and the public. At the time of the issuance of Notice of Availability for this Draft EIR, the UC is not aware of any areas of controversy.

This EIR has taken into consideration the comments received from the public, and various agencies in response to the Notice of Preparation (NOP) and during the public scoping session held on June 10, 2008. Written comments received during the NOP and scoping period are contained in Appendix A. Environmental issues that have been raised during opportunities for public input on the project are summarized in Section 2.3 of this EIR and addressed in each relevant issue area analyzed in Section 4 of this EIR

1.6 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS

Tables 1-1 and 1-2 provided at the end of this section present a summary of the environmental impacts resulting from the proposed 2008 NHIP and remaining buildout of the 2002 LRDP, as amended, respectively. These tables have been organized to correspond with the environmental issues discussed in Sections 4.1 through 4.15. It should be noted that the identified 2002 LRDP Final EIR campus programs, practices, and procedures (PPs) carried forward and new PPs that have been identified are considered to be part of the proposed Project for purposes of determining the level of significance prior to mitigation. While the campus has evaluated a range of potential mitigation measures (MMs) (including 2002 LRDP Final EIR MMs and new MMs) to reduce significant project impacts and will implement all feasible mitigation measures, construction and operation of the proposed Project would result in the significant and unavoidable impacts listed below.

PROPOSED 2008 NHIP

- ***Impact 4.2.2 –*** Regional construction emissions would exceed SCAQMD standards for oxides of nitrogen (NOx).

- ***Impact 4.2-4a –*** Construction activities would create a short-term, cumulatively considerable net increase of a criteria pollutant for which the project region is in nonattainment (NOx).

- ***Impact 4.9-2 –*** Construction activities could generate and expose persons on campus, including residents, to excessive groundborne vibration levels.

- ***Impact 4.9-7 –*** Construction activities could result in substantial temporary or periodic increases in ambient noise levels at on-campus locations.

- ***Impact 4.9-8 –*** Construction activities could result in substantial temporary or periodic increases in ambient noise levels at off-campus locations.

- ***Impact 4.13-2 –*** Generation of construction-related vehicle trips could impact traffic conditions along roadway segments and at individual intersections.

REMAINING BUILDOUT OF THE 2002 LRDP AS AMENDED

- ***Impact 4.2.2 –*** Regional construction emissions would exceed SCAQMD standards for NOx.

- ***Impact 4.2-3b –*** Daily operational emissions of volatile organic compounds (VOC) and NOx could substantially contribute to an existing or projected air quality violation.

- ***Impact 4.2-4c –*** There would be both a short-term and long-term cumulatively considerable net increase of a criteria pollutant for which the project region is in nonattainment (NOx).

- ***Impact 4.9-2 –*** Construction activities could generate and expose persons on campus, including residents, to excessive groundborne vibration levels.

- ***Impact 4.9-7 –*** Construction activities could result in substantial temporary or periodic increases in ambient noise levels at on-campus locations.

- ***Impact 4.9-8 –*** Construction activities could result in substantial temporary or periodic increases in ambient noise levels at off-campus locations.

- ***Impact 4.13-1b –*** Generation of additional vehicular trips would result in a substantial degradation in intersection levels of service.

- ***Impact 4.13-2 –*** Generation of construction-related vehicle trips could impact traffic conditions along roadway segments and at individual intersections.

- ***Impact 4.13-3b –*** The proposed Project would exceed established service levels at intersections designated by the Los Angeles Congestion Management Program.

CUMULATIVE IMPACTS

- ***Air Quality –*** Short-term construction activities and long-term operations associated with the proposed Project would contribute to a cumulatively considerable increase in regional emissions of a pollutant for which the Basin is in nonattainment (NOx is an ozone [O_3] precursor and the Basin is in nonattainment for O_3).

- ***Noise and Vibration –*** If there were concurrent construction projects in the same area (on and off campus), the combined noise increase would exceed 10 A-weighted decibels (dBA) resulting in a temporary cumulatively significant impact.

- ***Transportation/Traffic –*** The proposed Project would result in significant cumulative impacts at the following study intersections:

  15. Montana Avenue/Gayley Avenue and Veteran Avenue,

  35. Wilshire Boulevard and Sepulveda Boulevard,

  36. Wilshire Boulevard and Veteran Avenue,

  37. Wilshire Boulevard and Gayley Avenue,

38. Wilshire Boulevard and Westwood Boulevard,
43. Wilshire Boulevard and Beverly Glen Boulevard,
44. Ohio Avenue and Sawtelle Boulevard,
52. Santa Monica Boulevard and Veteran Avenue.

- ***Transportation/Traffic –*** The proposed Project would result in significant cumulative impacts at the following designated CMP arterial monitoring stations: (1) Sepulveda Boulevard/Wilshire Boulevard and (2) Wilshire Boulevard/Beverly Glen Boulevard.

- ***Transportation/Traffic –*** Due to the potential overlap between construction of projects under the 2002 LRDP, as amended, and construction of projects off campus, it is anticipated that at times the proposed Project's contribution to cumulative short-term traffic would be considerable and, therefore, significant and unavoidable.

1.7 MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires that a public agency adopt a Mitigation Monitoring and Reporting Program (MMRP) for mitigation measures that have been incorporated into the project to reduce or avoid significant effects on the environment. The MMRP is designed to ensure compliance during project implementation, as required by Section 21081.6 of the *Public Resources Code*. This EIR discusses existing 2002 LRDP Final EIR MMs that would be implemented to reduce significant environmental impacts, and identifies new MMs that further reduce impacts. In addition, existing campus 2002 LRDP Final EIR PPs that currently reduce environmental impacts will be continued throughout the extended LRDP planning horizon, and new PPs would be implemented. The MMRPs for the proposed 2008 NHIP and the 2002 LRDP, as amended, which obligate the University to implement MMs and continue to follow PPs equally, will be prepared and reviewed by The Regents in conjunction with consideration of the proposed Project and certification of the Final EIR.

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

In this summary table, 2002 LRDP Final EIR campus Programs, Practices and Procedures (PPs) or Mitigation Measures (MMs) that were modified or new as part of the 2008 NHIP and LRDP Amendment Draft EIR are shown in **bold** text, deleted text is shown in ~~strikeout~~. Clarifications and revisions made to PPs and MMs as part of the 2008 NHIP and LRDP Amendment Final EIR are identified with a line in the right margin.

In addition, under the *Summary of Impacts Prior to Mitigation* column, the level of significance is identified with the following abbreviations: **NI**: No Impact; **LS**: Less than Significant Impact; **PS**: Potentially Significant Impact

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Aesthetics (Section 4.1)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.1-1(a)	The design process shall evaluate and incorporate, where appropriate, factors including, but not necessarily limited to, building mass and form, building proportion, roof profile, architectural detail and fenestration, the texture, color, and quality of building materials, focal views, pedestrian and vehicular circulation and access, and the landscape setting to ensure preservation and enhancement of the visual character and quality of the campus and the surrounding area. Landscaped open space (including plazas, courts, gardens, walkways, and recreational areas) shall be integrated with development to encourage use through placement and design.	
PP 4.1-1(b)	The Mildred E. Mathias Botanical Garden, Franklin D. Murphy Sculpture Garden, Dickson Plaza, Janss Steps, Stone Canyon Creek area, Meyerhoff Park, Wilson Plaza, Bruin Plaza, and the University Residence shall be maintained as open space preserves during the 2002 LRDP planning horizon.	
PP 4.1-2(a)	Additions to, or expansions of, existing structures shall be designed to complement the existing architectural character of the buildings.	
PP 4.1-2(b)	The architectural and landscape traditions that give the campus its unique character shall be respected and reinforced.	
PP 4.1-2(c)	Projects proposed under 2002 LRDP shall include landscaping.	
PP 4.1-2(d)	The western, northern, and eastern edges of the main campus shall include a landscaped buffer to complement the residential uses of the surrounding community and to provide an attractive perimeter that effectively screens and enhances future development.	
Impact 4.1-1a: Implementation of the proposed 2008 NHIP would not impact any scenic vistas (focal views). **(NI)**	Applicable PPs: None. Mitigation measures are not required.	No Impact
Impact 4.1-2: Implementation of the proposed 2008 NHIP would not substantially degrade the visual character or quality of the campus and the immediately surrounding area. **(LS)**	Applicable PPs: PP 4.1-1(a) through PP 4.1-2(d), PP 4.8-1(d) (from Section 4.8, Land Use and Planning). Although mitigation measures are not required, implementation of MMs 4.3-1(c) and 4.3-4 from Section 4.3, Biological Resources, would further reduce this impact.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.1-3: Implementation of the proposed 2008 NHIP could create a new source of glare on campus or in the vicinity that would adversely affect day or nighttime views in the area. **(PS)** Implementation of the proposed 2008 NHIP would have less than significant impacts related to the introduction of new light sources. **(LS)**	Applicable PP: PP 4.1-2(d). ***2002 LRDP Final EIR Mitigation Measures Carried Forward*** MM 4.1-3(a) Design for specific projects shall provide for the use of textured non-reflective exterior surfaces and non-reflective glass. MM 4.1-3(b) All outdoor lighting shall be directed to the specific location intended for illumination (e.g., roads, walkways, or recreation fields) to limit stray light spillover onto adjacent residential areas. In addition, all lighting shall be shielded to minimize the production of glare and light spill onto adjacent uses. MM 4.1-3(c) Ingress and egress from parking areas shall be designed and situated so the vehicle headlights are shielded from adjacent uses. If necessary, walls or other light barriers will be provided.	Less than Significant
Impact 4.1-4: Implementation of the proposed 2008 NHIP would not cause shade and/or a shadow on currently unshaded, shadow-sensitive uses off campus. **(LS)**	Mitigation measures are not required.	Less than Significant
Air Quality (Section 4.2)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.2-2(a) The campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified ~~by the SCAQMD~~ **in the URBEMIS program** as being able to reduce dust generation between ~~30 and 85~~ **5 and 84** percent depending on the ~~source of the dust generation~~ **measure or combination of measures used from the list below:** • **Minimize land disturbance to the extent feasible.** • Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days) • **Apply water three times daily to all active disturbed areas.** • Replace ground cover in disturbed areas as quickly as possible. • Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content. • Water active grading sites at least twice daily. • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period. • All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code. • Sweep streets at the end of the day if visible soil material is carried over to adjacent roads.		

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	• Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip. • Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces. • Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads.	
	PP 4.2-2(b) The campus shall continue to require by contract specifications that construction equipment engines will be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction.	
	PP 4.2-2(c) The campus shall continue to require by contract specifications that construction operations rely on the campus' existing electricity infrastructure rather than electrical generators powered by internal combustion engines to the extent feasible.	
	New Campus Program, Practice, and Procedure	
	PP 4.2-2(d) The campus shall purchase and apply architectural coatings in accordance with SCAQMD Rule 1113, thereby ensuring the limitation of VOCs during construction.	
Impact 4.2-1: Implementation of the proposed 2008 NHIP would not conflict with or obstruct implementation of the Air Quality Management Plan. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.2-2: Regional construction emissions from the proposed 2008 NHIP would exceed SCAQMD standards for NOx. These exceedances would contribute substantially to an existing or projected air quality violation. **(PS)**	Applicable PPs: PP 4.2-2(a), PP 4.2-2(b), PP 4.2-2(c), and PP 4.2-2(d). ***2002 LRDP Final EIR Mitigation Measures Carried Forward (as amended)*** MM 4.2-2(a) The campus shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes. MM 4.2-2(b) The campus shall encourage contractors to utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and ~~unleaded gasoline) and low-emission diesel construction equipment~~ **low-NOx fuel)** to the extent that the equipment is ~~readily~~ **reasonably commercially** available and cost effective. ***New Mitigation Measure*** **MM 4.2-2(c) The campus shall require by contract specifications that construction-related equipment used on site and for on-road export of soil meet USEPA Tier III certification requirements, as feasible.**	Significant and Unavoidable

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.2-3a: Implementation of the proposed 2008 NHIP would result in daily operational regional emissions of criteria pollutants and O_3 precursors, but would not contribute substantially to an existing or projected air quality violation. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.2-4a: Construction of the proposed 2008 NHIP could result in a short-term cumulatively considerable net increase of a criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. **(PS)**	Applicable PPs: PP 4.2-2(a), PP 4.2-2(b), PP 4.2-2(c), PP 4.2-2(d), MM 4.2-2(a), MM 4.2-2(b), and MM 4.2-2(c). No additional feasible mitigation measures are available beyond those identified.	Significant and Unavoidable
Impact 4.2-4b: Operation of the proposed 2008 NHIP would not result in a long-term cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.2-5a: Implementation of the proposed 2008 NHIP would not expose sensitive receptors near roadway intersections to substantial pollutant concentrations due to carbon monoxide hotspots. **(NI)**	Mitigation measures are not required.	No Impact
Impact 4.2-6 Implementation of the proposed 2008 NHIP would not expose sensitive receptors to substantial criteria pollutant concentrations from emissions generated on the project site. **(LS)**	Mitigation measures are not required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.2-7 Implementation of the proposed 2008 NHIP would not expose sensitive receptors on or off campus to substantial pollutant concentrations due to campus-generated toxic air emissions. **(LS)**	Mitigation measures are not required.	Less than Significant
Biological Resources (Section 4.3)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.3-1(a)	Mature trees to be retained and protected in place during construction, shall be fenced at the drip-line, and maintained by the contractor in accordance with landscape specifications contained in the construction contract.	
PP 4.3-1(b)	Trees shall be examined by an arborist and trimmed, if appropriate, prior to the start of construction.	
PP 4.3-1(c)	Construction contract specifications shall include the provision for temporary irrigation/watering and feeding of these trees during construction, as recommended by the designated arborist.	
PP 4.3-1(d)	Construction contract specifications shall require that no building material, parked equipment, or vehicles shall be stored within the fence line of any tree.	
PP 4.3-1(e)	Examination of these trees by an arborist shall be performed monthly during construction to ensure that they are being adequately maintained.	
Impact 4.3-1: Implementation of the proposed 2008 NHIP could have a substantial adverse effect on nesting birds, including nesting raptors, which are protected by federal and State regulations, if trees are removed during the breeding season. **(PS)**	Applicable PPs: PP 4.3-1(a), PP 4.3-1(b), PP 4.3-1(c), PP 4.3-1(d), PP 4.3-1(e). ***2002 LRDP Final EIR Mitigation Measures Carried Forward (as amended)*** MM 4.3-1(a) Prior to the onset of construction activities that occur between March and mid-August **(February 1 through June 30 for raptors)**, surveys for nesting special status avian species and raptors shall be conducted on the affected portion of the campus following USFWS and/or CDFG guidelines. If no active avian nests are identified on or within 250 feet of the construction site, no further mitigation is necessary. MM 4.3-1(b) If active nests for avian species of concern or raptor nests are found within the construction footprint or **within** a 250-foot buffer zone **around the construction site**, exterior construction activities shall be delayed within the construction footprint and buffer zone until the young have fledged or appropriate mitigation measures responding to the specific situation have been developed and implemented in consultation with CDFG. MM 4.3-1(c) In conjunction with CEQA documentation required for each project proposal under the 2002 LRDP**, as amended,** that would result in the removal of one	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	or more mature trees, the project will include a tree replacement plan with a 1:1 tree replacement ratio at the development site where feasible and/or elsewhere within the campus boundaries where feasible. If it is not feasible to plant replacement trees at a 1:1 ratio within the campus boundaries, the tree replacement plan will include the planting of native shrubs in ecologically appropriate areas within the campus boundaries that would provide nesting, foraging or roosting habitat for birds so that the replacement number of trees and shrubs will result in a 1:1 replacement ratio.	
Impact 4.3-2a: Implementation of the proposed 2008 NHIP would not have a substantial adverse effect on special status plant or wildlife species. **(NI)**	Mitigation measures are not required.	No Impact
Impact 4.3-3: Implementation of the proposed 2008 NHIP would not have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species, established wildlife corridors, or native wildlife nursery sites. **(NI)**	Mitigation measures are not required.	No Impact
Impact 4.3-4: Implementation of the proposed 2008 NHIP could impact mature and protected tree species. **(PS)**	Applicable PPs/MMs: PP 4.3-1(a), PP 4.3-1(b), PP 4.3-1(c), PP 4.3-1(d), PP 4.3-1(e), MM 4.3-1(c). ***New Mitigation Measure*** **MM 4.3-4** **UCLA shall replace protected trees removed for construction of projects under the 2002 LRDP, as amended, <u>with protected trees of the same species</u> at a 2:1 ratio as presented in the City of Los Angeles Protected Tree Ordinance (Ordinance Number 177404). Protected trees are defined as coast live oak, valley oak, western sycamore, Southern California black walnut, and California bay laurel.**	Less than Significant
Impact 4.3-5a: Implementation of the proposed 2008 NHIP would not impact the area along Stone Canyon Creek or coastal sage scrub within the 4-acre parcel. **(NI)**	Mitigation measures are not required.	No Impact

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Cultural Resources (Section 4.4)		
New Campus Programs, Practices, and Procedures		
PP 4.4-1(a) **Structures outside the campus Historic Core that appear to have historic significance, or are over 45 years old, that may be directly or indirectly impacted by a proposed development project shall be reviewed by the campus and a qualified architectural historian or historic architect for eligibility for listing on the California Register of Historical Resources. If a structure is identified as eligible for listing in the California Register of Historical Resources, and it is determined that the project could have a significant adverse impact on the structure, the campus and a qualified historic architect shall consider design modifications, mitigation measures and/or alternatives that could minimize, avoid or substantially reduce the impacts, and consider whether and to what extent the project could comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Weeks and Grimmer 1995).** ~~Structures 45 years or older that have not yet been evaluated for significance and may be directly or indirectly impacted by a proposed development project shall be evaluated for eligibility for listing in the California Register of Historic Resources. The campus shall continue to implement all modifications to historic structures in compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995).~~		
~~PP 4.4-1(b) The integrity of the Campus Historic Core shall be maintained.~~		
Impact 4.4-1a: Implementation of the proposed 2008 NHIP would have no impact on the significance of structures that have been designated as eligible or potentially eligible for listing on the NRHP or CRHR. **(NI)**	Mitigation measures are not required.	No Impact
Impact 4.4-2: Construction associated with the proposed 2008 NHIP may cause a substantial adverse change in the significance of an archaeological resource. **(PS)**	***2002 LRDP Final EIR Mitigation Measures Carried Forward*** MM 4.4-2(a) Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering unique archaeological resources and taught how to identify these resources if encountered. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified, non-University archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of archaeological resources is prohibited. MM 4.4-2(b) Should archaeological resources be found during ground-disturbing activities	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)		Level of Significance After Mitigation
		for any project, a qualified Archaeologist shall first determine whether an archaeological resource uncovered during construction is a "unique archaeological resource" pursuant to Section 21083.2(g) of the Public Resources Code or a "historical resource" pursuant to Section 15064.5(a) of the CEQA Guidelines. If the archaeological resource is determined to be a "unique archaeological resource" or a "historical resource," the Archaeologist shall formulate a mitigation plan in consultation with the campus that satisfies the requirements of Section 21083.2 and 15064.5. If the Archaeologist determines that the archaeological resource is not a "unique archaeological resource" or "historical resource," s/he may record the site and submit the recordation form to the California Historic Resources Information System at the South Central Coastal Information Center. *The Archaeologist* shall *prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the University and to the California Historic Resources Information System at the South Central Coastal Information Center.*	
Impact 4.4-3: Construction of the proposed 2008 NHIP could directly or indirectly result in damage to, or the destruction of, unique paleontological resources on site or unique geologic features. **(PS)**	***2002 LRDP Final EIR Mitigation Measures Carried Forward***		Less than Significant
	MM 4.4-3(a)	Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering paleontological resources and taught how to identify these resources if encountered. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected; the type of activities that may result in impacts; and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified, non-University Paleontologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of paleontological resources is prohibited.	
	MM 4.4-3(b)	A qualified Paleontologist shall first determine whether a paleontological resource uncovered during construction meets the definition of a "unique archaeological resource" under Public Resources Code, Section 21083.2(g) or a "historical resource" under Section 15064.5 of the CEQA Guidelines. If the paleontological resource is determined to be a "unique archaeological resource" or a "historical resource", the Paleontologist shall formulate a Mitigation Plan in consultation with the campus that satisfies the	

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	requirements of Section 21083.2 of the CEQA Statutes. If the Paleontologist determines that the paleontological resource is not a unique resource, s/he may record the site and submit the recordation form to the Natural History Museum of Los Angeles County. The Paleontologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the University and to the Natural History Museum of Los Angeles County.	
Geology and Soils (Section 4.5)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.5-1(a)	During project-specific building design, a site-specific geotechnical study shall be conducted under the direct supervision of a California Registered Engineering Geologist or licensed Geotechnical Engineer to assess detailed seismic, geological, soil, and groundwater conditions at each construction site and develop recommendations to prevent or abate any identified hazards **in accordance with the requirements of the California Building Code applicable at the time of construction. Recommendations from the site-specific geotechnical study shall be included in the grading plans and/or building design specifications for each project.** The study shall follow applicable recommendations of CGS Special Publication 117 and shall include, but not necessarily be limited to: • Determination of the locations of any suspected fault traces and anticipated ground acceleration at the building site; • Potential for displacement caused by seismically induced shaking, fault/ground surface rupture, liquefaction, differential soil settlement, expansive and compressible soils, landsliding, or other earth movements or soil constraints; • Evaluation of depth to groundwater.	
PP 4.5-1(b)	The campus shall continue to implement its current seismic upgrade program.	
PP 4.5-1(c)	The campus shall continue to comply with the University Policy on Seismic Safety adopted on January 17, 1995 or with any subsequent revision to the policy that provides an equivalent or higher level of protection with respect to seismic hazards.	
PP 4.5-1(d)	Development projects under the LRDP Amendment shall continue to be subject to structural peer review; **following this review, any site-specific geotechnical study recommendations, including any recommendations added as a result of the peer review, shall be incorporated in the project design, as appropriate.**	
Impact 4.5-1: Implementation of the proposed 2008 NHIP would not expose people and/or structures to potentially substantial adverse effects from rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (i.e., liquefaction), or landsliding. **(LS)**	Applicable PPs: PP 4.5-1(a), PP 4.5-1(c), PP 4.5-1(d). ***New Mitigation Measure*** **MM 4.5-1** **Prior to approval of final building designs for the 2008 Northwest Housing Infill Project, a qualified Engineer shall review the final designs to verify that all geotechnical recommendations provided in the Geotechnical Engineering Investigation, Proposed UCLA Northwest Student Housing Infill Project (dated May 8, 2008 and prepared by Geotechnologies, Inc.) have been fully and appropriately incorporated.**	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	These recommendations shall include, but not be limited to, the following areas of concern: • **Grading Guidelines (removal of unsuitable soils, hillside grading, compaction).** • **Temporary Excavations (shoring, soldier piles and lagging, anchors, monitoring).** • **Seismic Design Considerations (2007 California Building Code Seismic Parameters).** • **Foundation Design (reinforcement, settlement, friction piles, retaining wall setbacks).** • **Retaining Wall Design (cantilever and restrained walls, waterproofing, drainage, backfill).** • **Slabs on Grade (concrete, waterproofing, reinforcement).** • **Pavements (moisture, thickness, weight management).** • **Site Drainage.** • **Construction Monitoring and Geotechnical Testing (geotechnical observation and laboratory testing of soils).**	
Impact 4.5-2: Construction and operation of the proposed 2008 NHIP would not result in substantial soil erosion or the loss of topsoil. **(LS)**	Applicable PPs: PP 4.7-1. Although mitigation measures are not required, implementation of MM 4.7-1 from Section 4.7, Hydrology and Water Quality, would further reduce this impact.	Less than Significant
Impact 4.5-3: Construction in areas underlain by soils of varying stability would not subject people and structures to hazards associated with landsliding, lateral spreading, subsidence, liquefaction, collapse, or differential settlement. **(LS)**	Applicable PPs: PP 4.5-1(a) through 4.5-1(d). Mitigation measures are not required.	Less than Significant
Impact 4.5-4: Implementation of the proposed 2008 NHIP would not result in construction of facilities on expansive soils, and would not create a substantial risk to people and structures. **(LS)**	Applicable PPs: PP 4.5-1(a), PP 4.5-1(c), and PP 4.5-1(d).	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Hazards and Hazardous Materials (Section 4.6)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.6-1	The campus shall continue to implement the same (or equivalent) health and safety plans, programs, practices, and procedures related to the use, storage, disposal, or transportation of hazardous materials during the LRDP Amendment planning horizon, including, but not necessarily limited to, the Business Plan, Hazardous Materials Management Program, Hazard Communication Program, Injury and Illness Prevention Program, Chemical Exposure Monitoring Program, Asbestos Management Program, Respiratory Protection Program, EH&S procedures for decommissioning and demolishing buildings that may contain hazardous materials, and the Broadscope Radioactive Materials License. These programs may be subject to modification as more stringent standards are developed or if the programs become obsolete through replacement by other programs that incorporate similar health and safety protection measures.	
PP 4.6-4	While not expected to occur on-campus, if contaminated soil and/or groundwater is encountered during the removal of on-site debris or during excavation and/or grading activities, the construction contractor(s) shall stop work and immediately inform the EH&S. An on-site assessment shall be conducted to determine if the discovered materials pose a significant risk to the public or construction workers. If the materials are determined to pose such a risk, a remediation plan shall be prepared and submitted to the EH&S to comply with all federal and State regulations necessary to clean and/or remove the contaminated soil and/or groundwater. Soil remediation methods could include, but are not necessarily limited to, excavation and on-site treatment, excavation and off-site treatment or disposal, and/or treatment without excavation. Remediation alternatives for cleanup of contaminated groundwater could include, but are not necessarily limited to, on-site treatment, extraction and off-site treatment, and/or disposal. The construction schedule shall be modified or delayed to ensure that construction will not inhibit remediation activities and will not expose the public or construction workers to significant risks associated with hazardous conditions.	
Impact 4.6-1: Implementation of the proposed 2008 NHIP would not expose campus occupants or the nearby public to a significant hazard due to the routine transport, use, disposal, or storage of hazardous materials (including chemical, radioactive, and biohazardous waste). **(LS)**	Applicable PPs: PP 4.6-1. Mitigation measures are not required.	Less than Significant
Impact 4.6-2: Implementation of the proposed 2008 NHIP would not expose construction workers and campus occupants to a significant hazard through the renovation or demolition of buildings or relocation of underground utilities that contain hazardous materials. **(LS)**	Applicable PPs: PP 4.6-1. Mitigation measures are not required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.6-3: Implementation of the proposed 2008 NHIP would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(LS)**	Applicable PPs: PP 4.6-1. Mitigation measures are not required.	Less than Significant
Impact 4.6-4: Implementation of the proposed 2008 NHIP would not create a significant risk of exposure of campus occupants and construction workers to contaminated soil or groundwater. **(LS)**	Applicable PPs: PP 4.6-1, PP 4.6-4. Mitigation measures are not required.	Less than Significant
Impact 4.6-5: Implementation of the proposed 2008 NHIP would not result in hazardous emissions, but could require the handling of hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school. **(LS)**	Applicable PPs: PP 4.6-1. Mitigation measures are not required.	Less than Significant
Impact 4.6-6a: There are no known hazardous materials sites within the proposed 2008 NHIP project site. **(NI)**	Mitigation measures are not required.	No Impact
Impact 4.6-7: Implementation of the proposed 2008 NHIP would not result in a safety hazard for an increased number of people residing or working on campus due to its proximity to the UCLA Medical Center helipad. **(LS)**	Mitigation measures are not required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.6-8: Implementation of the proposed 2008 NHIP would not impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan. **(LS)**	Applicable PPs: PP 4.13-5 and PP 4.13-8 from Section 4.13, Transportation/Traffic. Mitigation measures are not required.	Less than Significant
Hydrology and Water Quality (Section 4.7)		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
PP 4.7-5 **Site-specific hydrologic evaluation shall be conducted for each proposed development project based on the project-specific grading plan and site design of each individual project. This evaluation shall include, but not be limited to: (1) an assessment of runoff quality, volume and flow rate from the proposed project site; (2) identification of project-specific BMPs (structural and non-structural) to reduce the runoff rate and volume to appropriate levels; and (3) identification of the need for new or upgraded storm drain infrastructure (on and off campus) to serve the project.** Project design shall include measures to upgrade and expand campus storm drain capacity where necessary**, as identified through the project-specific hydrologic evaluation**. Design of future projects shall include measures to reduce runoff, including, **but not limited to,** the provision of permeable landscaped areas adjacent to structures to absorb runoff and the use of pervious or semi-pervious paving materials.		
New Campus Program, Practice, and Procedure		
PP 4.7-1 Construction and operation of projects on campus shall comply with requirements and water quality standards set forth within current NPDES Permit regulations (Phase I and Phase II) at the time of project approval. Pursuant to Phase I permit requirements, UCLA shall develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices (BMPs) for reducing or eliminating construction-related and post-construction pollutants in site runoff.		
Impact 4.7-1: Implementation of the proposed 2008 NHIP would not violate existing water quality standards or waste discharge requirements. **(LS)**	Applicable PPs: PP 4.7-1. ***New Mitigation Measure*** **MM 4.7-1 Best Management Practices (BMPs) shall be implemented for individual development projects, to the extent required by State law, to ensure compliance is maintained with all applicable NPDES requirements at the time of project construction. UCLA shall utilize BMPs as appropriate and feasible to comply with and/or exceed the current requirements under the NPDES program. BMPs that may be implemented include, but are not limited to, the following:** **Non-Structural/Structural** • **Landscape Maintenance** • **Catch Basin Stenciling and Clean-out** • **Efficient Irrigation Practices** • **Litter Control**	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	• **Fertilizer Management** • **Public Education** • **Efficient Irrigation** • **Permanent Vegetative Controls** • **Runoff – Minimizing Landscape Design** **Treatment Control BMPs (to minimize storm water pollutants of concern for Ballona Creek - Sediment, Bacteria/Viruses, Toxicity, Trash, and Metals):** • **Vegetated Swale(s) – An open, shallow channel with vegetation covering side slopes and the bottom.** • **Bioretention – A basin that functions as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes.** • **Turf Block – A grass area that has a structural component which allows it to be used in drive aisles and parking lots.** • **Drain Inserts – A manufactured filter placed in a drop inlet to remove sediment and debris.**	
Impact 4.7-2: Implementation of the proposed 2008 NHIP would not substantially deplete groundwater supplies or interfere with groundwater recharge. **(LS)**	No mitigation measures are required.	Less than Significant
Impact 4.7-3: Implementation of the proposed 2008 NHIP would not substantially alter site drainage patterns and would not result in substantial erosion or siltation on or off site. **(LS)**	Applicable PPs: PP 4.7-1 and PP 4.7-5. Although impacts are less than significant, implementation of MM 4.7-1 would further reduce this impact.	Less than Significant
Impact 4.7-4a: Implementation of the proposed 2008 NHIP would not substantially alter site drainage patterns or substantially increase the rate or amount of surface runoff and would not result in flooding either on or off site. **(LS)**	Applicable PPs: PP 4.7-5. Although impacts are less than significant, implementation of MM 4.7-1 would further reduce this impact.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.7-5: Implementation of the proposed 2008 NHIP would not result in runoff that exceeds the capacity of existing storm drain systems or provide substantial additional sources of polluted runoff. **(LS)**	Applicable PPs: PP 4.7-5. Although impacts are less than significant, implementation of MM 4.7-1 would further reduce this impact.	Less than Significant
Land Use and Planning (Section 4.8)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.8-1(a) Development of the southern edge of the main campus shall be designed to enhance the campus interface with Westwood Village.		
PP 4.8-1(b) The existing recreational fields in the Central zone of campus shall be maintained and will continue to provide a buffer between campus development and the residential uses north of Sunset Boulevard.		
PP 4.8-1(c) Infill development of the campus shall be continued, which reduces vehicle miles traveled and energy consumption.		
PP 4.8-1(d) New building projects shall be sited to ensure compatibility with existing uses and the height and massing of adjacent facilities.		
PP 4.8-1(e) Facilities shall be sited and designed to enhance spatial development of the campus while maximizing use of limited land resources.		
Impact 4.8-1: Implementation of the proposed 2008 NHIP would not result in incompatibilities between campus development and adjacent land uses. **(LS)**	Applicable PPs: PP 4.8-1(d), PP 4.1-2(d) (from Section 4.1, Aesthetics). Mitigation measures are not required.	Less than Significant
Impact 4.8-2: Implementation of the proposed 2008 NHIP would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. **(LS)**	Mitigation measures are not required.	Less than Significant
Noise and Vibration (Section 4.9)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.9-1 The campus shall continue to evaluate ambient noise conditions when placing new student housing near regular sources of noise such as roadways**, the on campus helistop,** and stationary equipment and design the new buildings to ensure that interior noise levels would be less than 45 dBA CNEL.		

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
PP 4.9-2	The campus shall continue to notify research facilities located near approved construction sites of the planned schedule of vibration causing activities so that the researchers can take necessary precautionary measures to avoid negative effects to their research.	
PP 4.9-6(a)	The campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses.	
PP 4.9-6(b)	The campus shall continue to provide a landscaped buffer along the western, northern, and eastern edges of the main campus in order to maximize the distance between the roadways and new buildings and provide an acoustically soft environment. At a minimum, this environment can be provided by planting grass and other low landscaping.	
PP 4.9-7(a)	To the extent feasible, construction activities shall be limited to 7:00 A.M. to 9:00 P.M. Monday through Friday, 8:00 A.M. to 6:00 P.M. on Saturday, and no construction on Sunday and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise.	
PP 4.9-7(b)	The campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers.	
PP 4.9-7(c)	The campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors.	
PP 4.9-7(d)	The campus shall continue to conduct regular meetings with on-campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed.	
PP 4.9-8	The campus shall continue to conduct meetings, as needed, with off-campus constituents that are affected by campus construction to provide advance notice of construction activities and ensure that the mutual needs of the particular construction project and of those impacted by construction noise are met, to the extent feasible.	
Impact 4.9-1: Implementation of the proposed 2008 NHIP would not expose new on-campus student residential uses to noise levels in excess of the State's 45 dBA CNEL interior noise standard. **(LS)**	Applicable PPs: PP 4.9-1 and PP 4.9-7(a). Mitigation measures are not required.	Less than Significant
Impact 4.9-2: The proposed 2008 NHIP construction activities could generate and expose persons on campus, including residents, to excessive groundborne vibration levels. **(PS)**	Applicable PPs: PP 4.9-2, PP 4.9-7(a) and PP 4.9-7(d). No feasible mitigation measures are available.	Significant and unavoidable

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.9-3: Construction activities associated with the proposed 2008 NHIP would not generate and expose persons off campus to excessive groundborne vibration levels from heavy construction trucks. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.9-4: Operation (post-construction) of the proposed 2008 NHIP would not generate and expose persons on or off campus to excessive long-term groundborne vibration levels. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.9-5: Implementation of the proposed 2008 NHIP would not cause a substantial permanent on- or off-campus increase in ambient roadway noise levels in the project vicinity. **(LS)**	Applicable PPs: PP 4.13-1(c), PP 4.13-1(d) from Section 4.13, Transportation/Traffic. Mitigation measures are not required.	Less than Significant
Impact 4.9-6: Implementation of the proposed 2008 NHIP could add new stationary sources of noise, but would not cause a substantial permanent on- or off-campus increase in ambient noise levels. **(LS)**	Applicable PPs: PP 4.9-6(a), PP 4.9-6(b).	Less than Significant
Impact 4.9-7: Construction of the proposed 2008 NHIP would result in substantial temporary or periodic increases in ambient noise levels at on-campus locations. **(PS)**	Applicable PPs: PP 4.9-7(a), PP 4.9-7(b), PP 4.9-7(c), PP 4.9-7(d). No feasible mitigation measures are available.	Significant and Unavoidable
Impact 4.9-8: Construction activities associated with the proposed 2008 NHIP could result in substantial temporary or periodic increases in ambient noise levels at off-campus locations. **(PS)**	Applicable PPs: PP 4.9-7(a), PP 4.9-7(b), PP 4.9-7(c), PP 4.9-8. No feasible mitigation measures are available.	Significant and Unavoidable

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.9-9: Implementation of the proposed 2008 NHIP would not result in substantial temporary or periodic increases in ambient noise levels due to special events. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.9-10: Implementation of the proposed 2008 NHIP would not expose additional students, faculty, and visitors within the UCLA campus to excessive noise levels generated by helicopter operations. **(LS)**	Applicable PP: PP 4.9-1. Mitigation measures are not required.	Less than Significant
Population and Housing (Section 4.10)		
Impact 4.10-1: Implementation of the proposed 2008 NHIP would not result in substantial population growth, either directly or indirectly. **(LS)**	Mitigation measures are not required.	Less than Significant
Public Services (Section 4.11)		
Fire Protection		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
PP 4.11-1	Fire alarm connections to the University Police Command Center shall continue to be provided in all new and renovated buildings to provide immediate location information to the Los Angeles Fire Department to reduce response times in emergency situations.	

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.11-1: Implementation of the proposed 2008 NHIP could increase the demand for fire protection services, but would not require the construction of new or physically altered facilities to accommodate the increased demand to maintain acceptable response times and fire flows. **(LS)**	Applicable PPs: PP 4.11-1. Mitigation measures are not required.	Less than Significant
Police Protection		
Campus Programs Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.11-2(a) Police staffing levels and equipment needs shall continue to be assessed on an ongoing basis as individual development projects are proposed and on an annual basis during the campus budgeting process to ensure that the appropriate service levels will be maintained to protect an increased campus population and an increased level of development.		
PP 4.11-2(b) Annual meetings shall continue to be attended by the Director of UCLA Housing and the UCPD to evaluate the adequacy of police protection service for University-owned housing, assess institutional priorities and budgetary requirements, and identify and implement appropriate actions to ensure the continued adequacy of police protection services for resident students.		
Impact 4.11-2: Implementation of the proposed 2008 NHIP could increase the demand for police services, but would not require new or physically altered facilities to maintain acceptable service ratios for police protection services. **(LS)**	Applicable PPs: PP 4.11-2(a) and PP 4.2-11(b). Mitigation measures are not required.	Less than Significant
Schools		
Impact 4.11-3: Implementation of the proposed 2008 NHIP would not require new or physically altered facilities to accommodate additional students in LAUSD schools. **(LS)**	Mitigation measures are not required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Recreation (Section 4.12)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.12-1(a) The campus shall continue to provide, operate, and maintain recreational facilities for students, faculty, and staff on campus.		
PP 4.12-1(b) The campus shall continue to integrate landscaped open space (including plazas, courts, gardens, walkways, and recreational areas) with development to encourage use through placement and design.		
Impact 4.12-1: Implementation of the proposed 2008 NHIP would increase the campus population, but would not result in the increased use of parks and recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. **(LS)**	Applicable PPs: PP 4.12-1(a), PP 4.12-1(b). Mitigation measures are not required.	Less than Significant
Impact 4.12-2: The 2008 NHIP would include a fitness center in the Sproul South residential structure. Impacts resulting from construction of this facility are addressed in the following sections: 4.2, Air Quality, 4.9, Noise, and 4.13, Transportation/Traffic.	Refer to Section 4.2, Air Quality; Section 4.9, Noise: and Section 4.13, Transportation/Traffic.	Not Applicable
Transportation/Traffic (Section 4.13)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.13-1(a) The campus shall continue to maintain the 1990 LRDP vehicle trip cap of 139,500 average daily trips.		
PP 4.13-1(b) The campus shall continue to maintain the 1990 LRDP parking cap of 25,169 spaces.		
PP 4.13-1(c) The campus shall continue to provide on-campus housing to continue the evolution of UCLA from a commuter to a residential campus.		
PP 4.13-1(d) The campus shall continue to implement a TDM program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.		
PP 4.13-2 UCLA Capital Programs will assess construction schedules of major projects to determine the potential for overlapping construction activities to result in periods of heavy construction vehicle traffic on individual roadway segments, and adjust construction schedules, work hours, or access routes to the extent feasible to reduce construction-related traffic congestion.		
PP 4.13-5 To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls		

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the campus shall provide appropriate signage indicating alternative routes.	
PP 4.13-6	For any construction-related closure of pedestrian routes, the campus shall provide appropriate signage indicating alternative route and provide curb cuts and street crossings to assure alternate routes are accessible.	
PP 4.13-8	To ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, UCLA shall consult with the UCPD, EH&S, and the LAFD to disclose temporary lane or roadway closures and alternative travel routes.	
Impact 4.13-1a: Implementation of the proposed 2008 NHIP would not generate additional vehicular trips and would not result in a substantial degradation in intersection or freeway mainline levels of service. **(NI)**	Applicable PPs: PP 4.13-1(c), PP 4.13-1(d).	No Impact
Impact 4.13-2: Construction of the proposed 2008 NHIP would result in the generation of construction-related vehicle trips, which could impact traffic conditions along roadway segments and at individual intersections. **(PS)**	Applicable PPs: PP 4.13-2. No feasible mitigation measures are available.	Significant and Unavoidable
Impact 4.13-3a: Implementation of the proposed 2008 NHIP would not result in additional vehicular traffic volumes, and would not exceed established service levels on roadways designated by the Los Angeles Congestion Management Program. **(NI)**	Applicable PPs: PP 4.13-1(a), PP 4.13-1(b), PP 4.13-1(c), PP 4.13-1(d).	No Impact
Impact 4.13-4: Implementation of the proposed 2008 NHIP would not substantially increase vehicular hazards due to design features or incompatible uses during operation (long-term). **(LS)**	No mitigation measures are required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.13-5: Construction of the proposed 2008 NHIP would not substantially increase vehicular hazards due to closure of traffic lanes or roadway segments. **(LS)**	Applicable PPs: PP 4.13-5. No mitigation measures are required.	Less than Significant
Impact 4.13-6: Construction of the proposed 2008 NHIP would not substantially increase pedestrian hazards due to closure of sidewalks or paths. **(LS)**	Applicable PPs: PP 4.13-6. No mitigation measures are required.	Less than Significant
Impact 4.13-7: Operation of the proposed 2008 NHIP would not result in inadequate emergency access. **(LS)**	No mitigation measures are required.	Less than Significant
Impact 4.13-8: Construction of the proposed 2008 NHIP would not result in inadequate emergency access. **(LS)**	Applicable PPs: PP 4.13-8.	Less than Significant
Impact 4.13-9: Implementation of the proposed 2008 NHIP would not result in inadequate parking capacity on campus. **(LS)**	No mitigation measures are required.	Less than Significant
Impact 4.13-10: Implementation of the proposed 2008 NHIP would not result in inadequate parking capacity off campus. **(LS)**	No mitigation measures are required.	Less than significant
Impact 4.13-11: Construction of the 2008 NHIP could result in the temporary elimination of on-campus parking spaces and would require additional temporary parking for construction workers. **(PS)**	***2002 LRDP Final EIR Mitigation Measure Carried Forward*** MM 4.13-11 To the extent that construction worker parking demand exceeds historical levels or available supply, off-site construction worker parking shall be provided with shuttle service to the remote parking location.	Less than Significant
Impact 4.13-12: Implementation of the proposed 2008 NHIP would not conflict with adopted policies, plans, or programs supporting alternative transportation. **(LS)**	Applicable PPs: PP 4.13-1(c), PP 4.13-1(d). No mitigation measures are required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Utilities and Service Systems (Section 4.14)		
Water Supply		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.14-2(a) New facilities and renovations (except for patient care facilities in the Medical Center) shall be equipped with low-flow showers, toilets, and urinals.		
PP 4.14-2(b) Measures to reduce landscaping irrigation needs shall be used, such as automatic timing systems to apply irrigation water during times of the day when evaporation rates are low, installing drip irrigation systems, using mulch for landscaping, subscribing to the California Irrigation Management Information System Network for current information on weather and evaporation rates, and incorporating drought-resistant plants as appropriate.		
PP 4.14-2(c) The campus shall promptly detect and repair leaks in water and irrigation pipes.		
PP 4.14-2(d) The campus shall minimize the use of water to clean sidewalks, walkways, driveways and parking areas.		
PP 4.14-2(e) The campus shall avoid serving water at UCLA food service facilities except upon request.		
PP 4.14-2(f) The campus shall provide ongoing water treatment programs for campus cooling equipment by adding biodegradable chemicals to achieve reductions in water usage.		
PP 4.14-2(g) The campus shall educate the campus community on the importance of water conservation measures.		
Impact 4.14-1: Implementation of the proposed 2008 NHIP would not require the construction of new water facilities. Potential impacts from construction are addressed in the following sections: 4.2, Air Quality, 4.9, Noise, and 4.13, Transportation/Traffic.	Refer to Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.	Not applicable
Impact 4.14-2: Implementation of the proposed 2008 NHIP would generate an additional demand for water, but would not require water supplies in excess of existing entitlements and resources or result in the need for new or expanded entitlements. **(LS)**	Applicable PPs: 4.14-2(a) through 4.14-2(g), and PP 4.15-1 in Section 4.15, Climate Change. No mitigation measures are required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Solid Waste		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
PP 4.14-3 The campus shall continue to implement a solid waste reduction and recycling program designed to limit the total quantity of campus solid waste that is disposed of in landfills during the LRDP plan horizon.		
Impact 4.14-3: Implementation of the proposed 2008 NHIP would not generate solid waste that exceeds the permitted capacity of landfills serving the campus. **(LS)**	Applicable PPs: PP 4.14-3, and PP 4.15-1 (Section 4.15, Climate Change). No mitigation measures are required.	Less than Significant
Impact 4.14-4: Implementation of the proposed 2008 NHIP would comply with all applicable federal, State, and local statutes and regulations related to solid waste. **(NI)**	Applicable PPs: PP 4.14-3, and PP 4.15-1(Section 4.15, Climate Change). No mitigation measures are required.	No Impact
Wastewater		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
The following PP has already been completed for the 2008 NHIP:		
PP 4.14-5 As part of the design process for proposed projects, an evaluation of the on-campus sewer conveyance capacity shall be undertaken, and improvements provided if necessary in order to ensure that connections are adequate and capacity is available to accommodate estimated flows.		
Impact 4.14-5: Implementation of the proposed 2008 NHIP would increase the amount of wastewater generated on campus, but would not require the construction of new or expanded wastewater conveyance systems beyond lines to connect to existing facilities. Potential impacts from construction are addressed in the following sections: 4.2, Air Quality, 4.9, Noise, and 4.13, Transportation/Traffic.	Refer to Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.	Not applicable

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.14-6: Implementation of the proposed 2008 NHIP would not increase wastewater generation such that treatment facilities would be inadequate to serve the project's projected demand in addition to the provider's existing commitments. **(LS)**	No mitigation measures are required.	Less than Significant
Energy		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
PP 4.14-9 The campus shall continue to implement energy conservation measures (such as energy-efficient lighting and microprocessor-controlled HVAC equipment) to reduce the demand for electricity and natural gas. The energy conservation measures may be subject to modification as new technologies are developed or if current technologies become obsolete through replacement.		
Impact 4.14-7: Implementation of the proposed 2008 NHIP would increase the demand for electricity, but would not require the construction of new or expanded electric facilities beyond lines to connect to existing facilities. Potential impacts from construction are addressed in the following sections: 4.2, Air Quality, 4.9, Noise, and 4.13, Transportation/Traffic.	Refer to Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.	Not applicable
Impact 4.14-8: Implementation of the proposed Project could increase the demand for natural gas but would not require the construction of new or expanded natural gas facilities beyond lines to connect to existing facilities. Potential impacts from construction are addressed in the following sections: 4.2, Air Quality, 4.9, Noise, and 4.13, Transportation/ Traffic.	Refer to Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.	Not applicable

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED 2008 NORTHWEST HOUSING INFILL PROJECT

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.14-9: Implementation of the proposed 2008 NHIP would not result in the wasteful or inefficient use of energy by UCLA. **(LS)**	Applicable PPs: PP 4.14-10, and PP 4.15-1 in Section 4.15, Climate Change.	Less than Significant
Climate Change (Section 4.15)		
New Campus Program, Practice, and Procedure		
PP 4.15-1 **The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices; and provisions of the applicable UCLA Climate Action Plan.**		
Impact 4.15-1: Implementation of the proposed 2008 NHIP would not impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32. **(LS)**	Applicable PPs: PP 4.15-1. No mitigation measures are required.	Less than Significant

[a] **NI:** No Impact; **LS:** Less than Significant Impact; **PS:** Potentially Significant Impact

TABLE 1-2
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

In this summary table, 2002 Final EIR LRDP campus Programs, Practices and Procedures (PPs) or Mitigation Measures (MMs) that were modified or new as part of the 2008 NHIP and LRDP Amendment Draft EIR are shown in **bold** text, deleted text is shown in ~~strikeout~~. Clarifications and revisions made to PPs and MMs as part of the 2008 NHIP and LRDP Amendment Final EIR are identified with a line in the right margin.

In addition, under the *Summary of Impacts Prior to Mitigation* column, the level of significance is identified with the following abbreviations: **NI**: No Impact; **LS**: Less than Significant Impact; **PS**: Potentially Significant Impact

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Aesthetics (Section 4.1)		
Campus Programs, Practices and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.1-1(a)	The design process shall evaluate and incorporate, where appropriate, factors including, but not necessarily limited to, building mass and form, building proportion, roof profile, architectural detail and fenestration, the texture, color, and quality of building materials, focal views, pedestrian and vehicular circulation and access, and the landscape setting to ensure preservation and enhancement of the visual character and quality of the campus and the surrounding area. Landscaped open space (including plazas, courts, gardens, walkways, and recreational areas) shall be integrated with development to encourage use through placement and design.	
PP 4.1-1(b)	The Mildred E. Mathias Botanical Garden, Franklin D. Murphy Sculpture Garden, Dickson Plaza, Janss Steps, Stone Canyon Creek area, Meyerhoff Park, Wilson Plaza, Bruin Plaza, and the University Residence shall be maintained as open space preserves during the 2002 LRDP planning horizon.	
PP 4.1-2(a)	Additions to, or expansions of, existing structures shall be designed to complement the existing architectural character of the buildings.	
PP 4.1-2(b)	The architectural and landscape traditions that give the campus its unique character shall be respected and reinforced.	
PP 4.1-2(c)	Projects proposed under 2002 LRDP shall include landscaping.	
PP 4.1-2(d)	The western, northern, and eastern edges of the main campus shall include a landscaped buffer to complement the residential uses of the surrounding community and to provide an attractive perimeter that effectively screens and enhances future development.	
Impact 4.1-1b: Implementation of the proposed Project would not have a substantial adverse effect on scenic vistas (focal views). **(LS).**	Applicable PPs: PP 4.1-1(a), PP 4.1-1(b), PP 4.4-1(b) (from Section 4.4, Cultural Resources), and PP 4.8-1(d) (from Section 4.8, Land Use and Planning). Mitigation measures are not required.	Less than Significant
Impact 4.1-2: Implementation of the proposed Project would not substantially degrade the visual character or quality of the campus and the immediately surrounding area. **(LS)**	Applicable PPs: PP 4.1-1(a), PP 4.1-1(b), PPs 4.1-2(a) through PP 4.1-2(d), PP 4.8-1(d) (from Section 4.8, Land Use and Planning). Although mitigation measures are not required, implementation of MM 4.3-1(c) from Section 4.3, Biological Resources, would further reduce this impact.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.1-3: Implementation of the proposed Project could create a new source of light or glare on campus or in the vicinity that would adversely affect day or nighttime views in the area. **(PS)** Implementation of the proposed Project would have less than significant impacts related to the introduction of new light sources. **(LS)**	Applicable PPs: PP 4.1-2(d). ***2002 LRDP Final EIR Mitigation Measures Carried Forward*** MM 4.1-3(a) Design for specific projects shall provide for the use of textured non-reflective exterior surfaces and non-reflective glass. MM 4.1-3(b) All outdoor lighting shall be directed to the specific location intended for illumination (e.g., roads, walkways, or recreation fields) to limit stray light spillover onto adjacent residential areas. In addition, all lighting shall be shielded to minimize the production of glare and light spill onto adjacent uses. MM 4.1-3(c) Ingress and egress from parking areas shall be designed and situated so the vehicle headlights are shielded from adjacent uses. If necessary, walls or other light barriers will be provided.	Less than Significant
Air Quality (Section 4.2)		
Campus Programs, Practices and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.2-2(a) The campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified ~~by the SCAQMD~~ **in the URBEMIS program** as being able to reduce dust generation between ~~30 and 85~~ **5 and 84** percent depending on the ~~source of the dust generation~~ **measure or combination of measures used from the list below:** • **Minimize land disturbance to the extent feasible.** • Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days) • **Apply water three times daily to all active disturbed areas.** • Replace ground cover in disturbed areas as quickly as possible. • Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content. • Water active grading sites at least twice daily. • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period. • All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code. • Sweep streets at the end of the day if visible soil material is carried over to adjacent roads. • Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.		

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	• Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces. • Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads. PP 4.2-2(b) The campus shall continue to require by contract specifications that construction equipment engines will be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. PP 4.2-2(c) The campus shall continue to require by contract specifications that construction operations rely on the campus' existing electricity infrastructure rather than electrical generators powered by internal combustion engines to the extent feasible. ***New Campus Program, Practice and Procedure*** **PP 4.2-2(d) The campus shall purchase and apply architectural coatings in accordance with SCAQMD Rule 1113, thereby ensuring the limitation of VOCs during construction.**	
Impact 4.2-1: Implementation of the proposed Project would not conflict with or obstruct implementation of the Air Quality Management Plan. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.2-2: Regional construction emissions from the proposed Project would exceed SCAQMD standards for NOx. These exceedances could contribute substantially to an existing or projected air quality violation. **(PS)**	Applicable PPs: PP 4.2-2(a), PP 4.2-2(b), PP 4.2-2(c), PP 4.2-2(d). ***2002 LRDP Final EIR Mitigation Measures Carried Forward*** MM 4.2-2(a) The campus shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes. MM 4.2-2(b) The campus shall encourage contractors to utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and ~~unleaded gasoline) and low-emission diesel construction equipment~~ **low-NOx fuel** to the extent that the equipment is ~~readily~~ **reasonably commercially** available and cost effective. ***New Mitigation Measure*** **MM 4.2-2(c) The campus shall require by contract specifications that all construction-related equipment used on site and for on-road export of soil meet USEPA Tier III certification requirements, as feasible.**	Significant and Unavoidable

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.2-3b: Implementation of the proposed Project would result in daily operational emissions of VOC and NOx that could contribute substantially to an existing or projected air quality violation. **(PS)**	Applicable PPs: PPs 4.13-1(a) through 4.13-1(d) (from Section 4.13, Transportation/Traffic). No feasible mitigation measures are available.	Significant and Unavoidable
Impact 4.2-4c Construction and operation of the proposed Project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. **(PS)**	Applicable PPs: PP 4.2-2(a), PP 4.2-2(b), PP 4.2-2(c), PP 4.2-2(d), MM 4.2-2(a), MM 4.2-2(b), and MM 4.2-2(c). No additional feasible mitigation measures are available beyond those identified.	Significant and Unavoidable
Impact 4.2-5b: Implementation of the proposed Project would not expose sensitive receptors near roadway intersections to substantial pollutant concentrations due to carbon monoxide hotspots. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.2-6 Implementation of the proposed Project would not expose sensitive receptors to substantial criteria pollutant concentrations from emissions generated on the project site. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.2-7 Implementation of the proposed Project would not expose sensitive receptors on or off campus to substantial pollutant concentrations due to campus-generated toxic air emissions. **(LS)**	Mitigation measures are not required.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Biological Resources (Section 4.3)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.3-1(a)	Mature trees to be retained and protected in place during construction, shall be fenced at the drip-line, and maintained by the contractor in accordance with landscape specifications contained in the construction contract.	
PP 4.3-1(b)	Trees shall be examined by an arborist and trimmed, if appropriate, prior to the start of construction.	
PP 4.3-1(c)	Construction contract specifications shall include the provision for temporary irrigation/watering and feeding of these trees during construction, as recommended by the designated arborist.	
PP 4.3-1(d)	Construction contract specifications shall require that no building material, parked equipment, or vehicles shall be stored within the fence line of any tree.	
PP 4.3-1(e)	Examination of these trees by an arborist shall be performed monthly during construction to ensure that they are being adequately maintained.	
Impact 4.3-1: Implementation of the proposed Project could have a substantial adverse effect on nesting birds, including nesting raptors, which are protected by federal and State regulations, if trees are removed during the breeding season. **(PS)**	Applicable PPs: PP 4.3-1(a), PP 4.3-1(b), PP 4.3-1(c), PP 4.3-1(d), PP 4.3-1(e). ***2002 LRDP Final EIR Mitigation Measures Carried Forward (as amended)*** MM 4.3-1(a) Prior to the onset of construction activities that occur between March and mid-August **(February 1 through June 30 for raptors)**, surveys for nesting special status avian species and raptors shall be conducted on the affected portion of the campus following USFWS and/or CDFG guidelines. If no active avian nests are identified on or within 250 feet of the construction site, no further mitigation is necessary. MM 4.3-1(b) If active nests for avian species of concern or raptor nests are found within the construction footprint or **within** a 250-foot buffer zone **around the construction site**, exterior construction activities shall be delayed within the construction footprint and buffer zone until the young have fledged or appropriate mitigation measures responding to the specific situation have been developed and implemented in consultation with CDFG. MM 4.3-1(c) In conjunction with CEQA documentation required for each project proposal under the 2002 LRDP**, as amended,** that would result in the removal of one or more mature trees, the project will include a tree replacement plan with a 1:1 tree replacement ratio at the development site where feasible and/or elsewhere within the campus boundaries where feasible. If it is not feasible to plant replacement trees at a 1:1 ratio within the campus boundaries, the tree replacement plan will include the planting of native shrubs in ecologically appropriate areas within the campus boundaries that would provide nesting, foraging or roosting habitat for birds so that the replacement number of trees and shrubs will result in a 1:1 replacement ratio.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.3-2b: Implementation of future projects that would impact the 4-acre parcel or Stone Canyon Creek could have a substantial adverse effect on special status plant species. Additionally, implementation of a future project that would impact the 4-acre parcel could have a substantial adverse effect on the coastal California gnatcatcher and other special status wildlife species that occur in coastal sage scrub. **(PS)**	***New Mitigation Measures*** **MM 4.3-2(a)** **In conjunction with CEQA documentation required for any future project proposal within the 4-acre parcel or <u>the aboveground portion of</u> Stone Canyon Creek, surveys for special status plant species shall be conducted during the appropriate blooming period for each species, as determined by reference populations, to determine the presence or absence of these species. If no special status plant species are identified within the impact area, no further mitigation are necessary and the results of the survey shall be included in the CEQA documentation.** **MM 4.3-2(b)** **If special status plant species are observed during focused surveys and if the status of the species and the size of the population warrant a finding of significance pursuant to CEQA, then appropriate mitigation measures shall be developed and included in the project-specific CEQA documentation. A detailed Mitigation Plan shall be prepared and approved prior to grading and may include, but not be limited to, one or more of the following actions:** • **Avoiding impacts to the species to the extent possible through project planning;** • **Minimizing impacts to the species to the extent possible through project planning;** • **Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;** • **Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the project;** • **Compensating for the impact by replacing or providing substitute resources or environments.** **As appropriate, the Mitigation Plan may include, but not be limited to:** • **Details for a salvage program;** • **Replacement ratios;** • **Performance criteria for the relocated population;** • **Site-selection parameters to ensure there are no secondary impacts from mitigation;** • **Program implementation methods within one year of grading;** • **Methods to maintain the site for 5 years;** • **Long-term preservation in dedicated open space.**	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)		Level of Significance After Mitigation
	MM 4.3-2(c)	**In conjunction with CEQA documentation required for any future project proposal within the 4-acre parcel, focused surveys for the coastal California gnatcatcher and other special status wildlife species that could occur in coastal sage scrub shall be conducted. Surveys shall follow the USFWS protocol to determine the presence or absence of this species. If no coastal California gnatcatchers are identified in the impact area, no further mitigation are necessary and the results of the survey shall be included in the CEQA documentation**	
	MM 4.3-2(d)	**In conjunction with CEQA documentation required for any future project proposal within the 4-acre parcel, a Coastal Sage Scrub Mitigation Plan shall be prepared and approved by the USFWS prior to grading. In addition, grading of coastal sage scrub shall not occur during the coastal California gnatcatcher nesting season (February 15 to August 15). The Mitigation Plan may include, but not be limited to, one or more of the following actions:** • **Avoiding impacts to coastal sage scrub to the extent possible through project planning;** • **Minimizing impacts to coastal sage scrub to the extent possible through project planning;** • **Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;** • **Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the project;** • **Compensating for the impact by replacing or providing substitute resources or environments.** **As appropriate, the Mitigation Plan may include, but not be limited to:** • **Replacement ratios;** • **Performance criteria;** • **Site-selection parameters to ensure there are no secondary impacts from mitigation;** • **Program implementation methods within one year of grading;** • **Methods to maintain the site for 5 years;** • **Long-term preservation in dedicated open space.**	
	MM 4.3-2(e)	**If coastal California gnatcatcher or other special status species is observed within or immediately adjacent to the impact footprint during focused surveys, construction will not proceed until authorization is**	

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	granted by the U.S. Fish and Wildlife Service via a Section 7 Permit or a 10a Permit. All conditions of such permits will be complied with in order to avoid or minimize impacts on the coastal California gnatcatcher.	
Impact 4.3-3: Implementation of the proposed Project would not have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species, established wildlife corridors, or native wildlife nursery sites. **(NI)**	Mitigation measures are not required.	No Impact
Impact 4.3-4: Implementation of the proposed Project could impact mature and protected tree species. **(PS)**	Applicable PPs/MMs: PP 4.3-1(a), PP 4.3-1(b), PP 4.3-1(c), PP 4.3-1(d), PP 4.3-1(e), MM 4.3-1(c). ***New Mitigation Measure*** **MM 4.3-4** **UCLA shall replace protected trees removed for construction of projects under the 2002 LRDP, as amended, <u>with protected trees of the same species</u> at a 2:1 ratio as presented in the City of Los Angeles Protected Tree Ordinance (Ordinance Number 177404). Protected trees are defined as coast live oak, valley oak, western sycamore, Southern California black walnut, and California bay laurel.**	Less than Significant
Impact 4.3-5a: Implementation of the proposed Project (but not the 2008 NHIP), may impact the area along Stone Canyon Creek or coastal sage scrub within the 4-acre parcel. **(PS)**	Applicable MMs: MM 4.3-2(a) through MM 4.3-2(e). ***New Mitigation Measures*** **MM 4.3-5(a)** **In conjunction with CEQA documentation required for any future project proposal in proximity to Stone Canyon Creek, a jurisdictional delineation shall be conducted to describe and map the extent of resources under the jurisdiction of the USACE and/or the CDFG following the guidelines presented in the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2006). The results of the delineation shall be included in the CEQA documentation.** **MM 4.3-5(b)** **Prior to any direct or indirect impacts to jurisdictional areas within Stone Canyon Creek, permits/agreements from the USACE, the RWQCB, and/or the CDFG shall be required. Acquisition and implementation of the permit/agreement may constrain proposed activities; impacts on jurisdictional resources should be minimized to the extent practicable. Mitigation for impacts on jurisdictional**	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	resources may include avoidance or minimization of impacts, compensation in the form of habitat restoration, or compensation through participation in a mitigation bank. The exact requirements of any special permit conditions established for impacts on the creek would be determined by the USACE (Section 404) and/or the CDFG (Streambed Alteration Agreement) following review of the formally submitted project application after completion of the CEQA process.	
Cultural Resources (Section 4.4)		
New Campus Programs, Practices, and Procedures		
PP 4.4-1(a)	**Structures outside the campus Historic Core that appear to have historic significance, or are over 45 years old, that may be directly or indirectly impacted by a proposed development project shall be reviewed by the campus and a qualified architectural historian or historic architect for eligibility for listing on the California Register of Historical Resources. If a structure is identified as eligible for listing in the California Register of Historical Resources, and it is determined that the project could have a significant adverse impact on the structure, the campus and a qualified historic architect shall consider design modifications, mitigation measures and/or alternatives that could minimize, avoid or substantially reduce the impacts, and consider whether and to what extent the project could comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Weeks and Grimmer 1995).** ~~Structures over 45 years old that have not yet been evaluated for potential historic significance and may be directly or indirectly impacted by a proposed development project shall be evaluated for eligibility for listing on the California Register of Historic Resources. The campus shall continue to implement all modifications to historic structures in compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995).~~	
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.4-1(b)	The integrity of the Campus Historic Core shall be maintained. **Structures over 45 years old within the Campus Historic Core that have not yet been evaluated for potential historic significance and may be directly or indirectly impacted by a proposed development project shall be reviewed by the campus and a qualified architectural historian or historic architect for eligibility for listing in the California Register of Historical Resources. The campus shall continue to implement all modifications to historic structures within the Historic Core in compliance with the *Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Weeks and Grimmer 1995).**	

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.4.1b: Implementation of the proposed Project would not result in a substantial adverse change in the significance of structures that have been designated as eligible or potentially eligible for listing on the NRHP or CRHR. **(LS)**	Applicable PPs: PP 4.4-1(a), PP 4.4-1(b). No mitigation measures are required.	Less than Significant
Impact 4.4-2: Construction associated with the proposed Project may cause a substantial adverse change in the significance of an archaeological resource. **(PS)**	***2002 LRDP Final EIR Mitigation Measures Carried Forward*** MM 4.4-2(a) Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering unique archaeological resources and taught how to identify these resources if encountered. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified, non-University archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of archaeological resources is prohibited. MM 4.4-2(b) Should archaeological resources be found during ground-disturbing activities for any project, a qualified Archaeologist shall first determine whether an archaeological resource uncovered during construction is a "unique archaeological resource" pursuant to Section 21083.2(g) of the Public Resources Code or a "historical resource" pursuant to Section 15064.5(a) of the CEQA Guidelines. If the archaeological resource is determined to be a "unique archaeological resource" or a "historical resource," the Archaeologist shall formulate a mitigation plan in consultation with the campus that satisfies the requirements of Section 21083.2 and 15064.5. If the Archaeologist determines that the archaeological resource is not a "unique archaeological resource" or "historical resource," s/he may record the site and submit the recordation form to the California Historic Resources Information System at the South Central Coastal Information Center. The Archaeologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the University and to the California Historic	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	Resources Information System at the South Central Coastal Information Center. ***New Mitigation Measure*** **MM 4.4-2(c)** **Prior to initiation of construction activities for projects that require disturbance of native sediments/soils (as identified through site-specific geotechnical analysis), the campus shall retain a qualified non-University Archaeologist to observe grading activities and recover, catalogue, analyze, and report archaeological resources as necessary. The qualified Archaeologist shall submit to the Capital Programs University Representative, a written plan with procedures for archaeological resource monitoring. This plan shall include procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the resources as appropriate.**	
Impact 4.4-3: Construction of the proposed Project could directly or indirectly result in damage to, or the destruction of, unique paleontological resources on site or unique geologic features. **(PS)**	***2002 LRDP Final EIR Mitigation Measures Carried Forward*** MM 4.4-3(a) Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering paleontological resources and taught how to identify these resources if encountered. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected; the type of activities that may result in impacts; and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified, non-University Paleontologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of paleontological resources is prohibited. MM 4.4-3(b) A qualified Paleontologist shall first determine whether a paleontological resource uncovered during construction meets the definition of a "unique archaeological resource" under Public Resources Code, Section 21083.2(g) or a "historical resource" under Section 15064.5 of the CEQA Guidelines. If the paleontological resource is determined to be a "unique archaeological resource" or a "historical resource", the Paleontologist shall formulate a Mitigation Plan in consultation with the campus that satisfies the requirements of Section 21083.2 of the CEQA Statutes. If the Paleontologist determines that the paleontological resource is not a unique resource, s/he may record the site and submit the recordation form to	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	the Natural History Museum of Los Angeles County. The Paleontologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the University and to the Natural History Museum of Los Angeles County.	
Geology and Soils (Section 4.5)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.5-1(a)	During project-specific building design, a site-specific geotechnical study shall be conducted under the direct supervision of a California Registered Engineering Geologist or licensed Geotechnical Engineer to assess detailed seismic, geological, soil, and groundwater conditions at each construction site and develop recommendations to prevent or abate any identified hazards **in accordance with the requirements of the California Building Code applicable at the time of construction. Recommendations from the site-specific geotechnical study shall be included in the grading plans and/or building design specifications for each project.** The study shall follow applicable recommendations of CGS Special Publication 117 and shall include, but not necessarily be limited to: • Determination of the locations of any suspected fault traces and anticipated ground acceleration at the building site; • Potential for displacement caused by seismically induced shaking, fault/ground surface rupture, liquefaction, differential soil settlement, expansive and compressible soils, landsliding, or other earth movements or soil constraints; • Evaluation of depth to groundwater.	
PP 4.5-1(b)	The campus shall continue to implement its current seismic upgrade program.	
PP 4.5-1(c)	The campus shall continue to comply with the University Policy on Seismic Safety adopted on January 17, 1995 or with any subsequent revision to the policy that provides an equivalent or higher level of protection with respect to seismic hazards.	
PP 4.5-1(d)	Development projects under the LRDP Amendment shall continue to be subject to structural peer review; **following this review, any site-specific geotechnical study recommendations, including any recommendations added as a result of the peer review, shall be incorporated in the project design.**	
Impact 4.5-1: Implementation of the proposed Project would not expose people and/or structures to potentially substantial adverse effects from rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (i.e., liquefaction), or landsliding. **(LS)**	Applicable PPs: PP 4.5-1(a), PP 4.5-1(b), PP 4.5-1(c), PP 4.5-1(d). No mitigation measures are required.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.5-2: Construction and operation of the proposed Project would not result in substantial soil erosion or the loss of topsoil. **(LS)**	Applicable PPs: PP 4.7-1. Although mitigation measures are not required, implementation of MM 4.7-1 from Section 4.7, Hydrology, would further reduce this impact.	Less than Significant
Impact 4.5-3: Construction in areas underlain by soils of varying stability would not subject people and structures to hazards associated with landsliding, lateral spreading, subsidence, liquefaction, collapse, or differential settlement. **(LS)**	Applicable PPs: PP 4.5-1(a), PP 4.5-1(c), PP 4.5-1(d). No mitigation measures are required.	Less than Significant
Impact 4.5-4: Implementation of the proposed Project would not result in construction of facilities on expansive soils, and would not create a substantial risk to people and structures. **(LS)**	Applicable PPs/MMs: PP 4.5-1(a), PP 4.5-1(c) and PP 4.5-1(d). No mitigation measures are required.	Less than Significant
Hazards and Hazardous Materials (Section 4.6)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.6-1	The campus shall continue to implement the same (or equivalent) health and safety plans, programs, practices, and procedures related to the use, storage, disposal, or transportation of hazardous materials during the LRDP Amendment planning horizon, including, but not necessarily limited to, the Business Plan, Hazardous Materials Management Program, Hazard Communication Program, Injury and Illness Prevention Program, Chemical Exposure Monitoring Program, Asbestos Management Program, Respiratory Protection Program, EH&S procedures for decommissioning and demolishing buildings that may contain hazardous materials, and the Broadscope Radioactive Materials License. These programs may be subject to modification as more stringent standards are developed or if the programs become obsolete through replacement by other programs that incorporate similar health and safety protection measures.	
PP 4.6-4	While not expected to occur on-campus, if contaminated soil and/or groundwater is encountered during the removal of on-site debris or during excavation and/or grading activities, the construction contractor(s) shall stop work and immediately inform the EH&S. An on-site assessment shall be conducted to determine if the discovered materials pose a significant risk to the public or construction workers. If the materials are determined to pose such a risk, a remediation plan shall be prepared and submitted to the EH&S to comply with all federal and State regulations necessary to clean and/or remove the contaminated soil and/or groundwater. Soil remediation methods could include, but are not necessarily limited to, excavation and on-site treatment, excavation and off-site treatment or disposal, and/or treatment without excavation. Remediation alternatives for cleanup of contaminated groundwater could include, but are not necessarily limited to, on-site treatment, extraction and off-site treatment, and/or disposal. The construction schedule shall be modified or delayed to ensure that construction will not inhibit remediation activities and will not expose the public or construction workers to significant risks associated with hazardous conditions.	

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.6-1: Implementation of the proposed Project would not expose campus occupants or the nearby public to a significant hazard due to the routine transport, use, disposal, or storage of hazardous materials (including chemical, radioactive, and biohazardous waste). **(LS)**	Applicable PPs: PP 4.6-1. Mitigation measures are not required.	Less than Significant
Impact 4.6-2: Implementation of the proposed Project would not expose construction workers and campus occupants to a significant hazard through the renovation or demolition of buildings or relocation of underground utilities that contain hazardous materials. **(LS)**	Applicable PPs: PP 4.6-1. Mitigation measures are not required.	Less than Significant
Impact 4.6-3: Implementation of the proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(LS)**	Applicable PPs: PP 4.6-1. Mitigation measures are not required.	Less than Significant
Impact 4.6-4: Implementation of the proposed Project would not create a significant risk of exposure of campus occupants and construction workers to contaminated soil or groundwater. **(LS)**	Applicable PPs: PP 4.6-1, PP 4.6-4. Mitigation measures are not required.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.6-5: Implementation of the proposed Project would not result in hazardous emissions, but could require the handling of hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school. **(LS)**	Applicable PPs: PP 4.6-1. Mitigation measures are not required.	Less than Significant
Impact 4.6-6b: Buildout of the proposed Project would not result in construction of facilities on sites containing hazardous materials, and thus would not create a significant hazard to the public or environment. **(LS)**	Applicable PPs: PP 4.6-1. Mitigation measures are not required.	Less than Significant
Impact 4.6-7: Implementation of the proposed Project would not result in a safety hazard for an increased number of people residing or working on campus due to its proximity to the UCLA Medical Center helipad. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.6-8: Implementation of the proposed Project would not impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan. **(LS)**	Applicable PPs: PP 4.13-5 and PP 4.13-8 from Section 4.13, Transportation/Traffic. Mitigation measures are not required.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Hydrology and Water Quality (Section 4.7)		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
PP 4.7-5 **Site-specific hydrologic evaluation shall be conducted for each proposed development project based on the project-specific grading plan and site design of each individual project. This evaluation shall include, but not be limited to: (1) an assessment of runoff quality, volume and flow rate from the proposed project site; (2) identification of project-specific BMPs (structural and non-structural) to reduce the runoff rate and volume to appropriate levels; and (3) identification of the need for new or upgraded storm drain infrastructure (on and off campus) to serve the project.** Project design shall include measures to upgrade and expand campus storm drain capacity where necessary**, as identified through the project-specific hydrologic evaluation**. Design of future projects shall include measures to reduce runoff, including, **but not limited to,** the provision of permeable landscaped areas adjacent to structures to absorb runoff and the use of pervious or semi-pervious paving materials.		
New Campus Program, Practice, and Procedure		
PP 4.7-1 Construction and operation of projects on campus shall comply with requirements and water quality standards set forth within current NPDES Permit regulations (Phase I and Phase II) at the time of project approval. Pursuant to Phase I permit requirements, UCLA shall develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices (BMPs) for reducing or eliminating construction-related and post-construction pollutants in site runoff.		
Impact 4.7-1: Implementation of the proposed Project would not violate existing water quality standards or waste discharge requirements. **(LS)**	Applicable PPs: PP 4.7-1. ***New Mitigation Measure*** **MM 4.7-1 Best Management Practices (BMPs) shall be implemented for individual development projects, as required by State law, to ensure compliance is maintained with all NPDES requirements existing at the time of project approval. UCLA shall utilize BMPs as appropriate and feasible to comply with and/or exceed the current requirements under the NPDES program. BMPs that may be implemented include, but are not limited to, the following:** **Non-Structural/Structural** • **Landscape Maintenance** • **Catch Basin Stenciling and Clean-out** • **Efficient Irrigation Practices** • **Litter Control** • **Fertilizer Management** • **Public Education** • **Efficient Irrigation** • **Permanent Vegetative Controls** • **Runoff – Minimizing Landscape Design**	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
	Treatment Control BMPs (to minimize storm water pollutants of concern for Ballona Creek - Sediment, Bacteria/Viruses, Toxicity, Trash, and Metals): • **Vegetated Swale(s) – An open, shallow channel with vegetation covering side slopes and the bottom.** • **Bioretention – A basin that functions as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes.** • **Turf Block – A grass area that has a structural component which allows it to be used in drive aisles and parking lots.** • **Drain Inserts – A manufactured filter placed in a drop inlet to remove sediment and debris.**	
Impact 4.7-2: Implementation of the proposed Project would not substantially deplete groundwater supplies or interfere with groundwater recharge. **(LS)**	No mitigation measures are required.	Less than Significant
Impact 4.7-3: Implementation of the proposed Project would not substantially alter site drainage patterns and would not result in substantial erosion or siltation on or off site. **(LS)**	Applicable PPs: PP 4.7-1, PP 4.7-5. Although mitigation measures are not required, implementation of MMs 4.7-1 would further reduce this impact.	Less than Significant
Impact 4.7-4b: Implementation of the proposed Project would not increase the rate or amount of surface runoff and result in flooding either on or off site. **(LS)**	Applicable PPs: PP 4.7-5. Although impacts are less than significant, implementation of MM 4.7-1 would further reduce this impact.	Less than Significant
Impact 4.7-5: Implementation of the proposed Project would not result in runoff that exceeds the capacity of existing storm drain systems or provide substantial additional sources of polluted runoff. **(LS)**	Applicable PPs: PP 4.7-5. Although impacts are less than significant, implementation of MM 4.7-1 would further reduce this impact.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Land Use and Planning (Section 4.8)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.8-1(a)	Development of the southern edge of the main campus shall be designed to enhance the campus interface with Westwood Village.	
PP 4.8-1(b)	The existing recreational fields in the Central zone of campus shall be maintained and will continue to provide a buffer between campus development and the residential uses north of Sunset Boulevard.	
PP 4.8-1(c)	Infill development of the campus shall be continued, which reduces vehicle miles traveled and energy consumption.	
PP 4.8-1(d)	New building projects shall be sited to ensure compatibility with existing uses and the height and massing of adjacent facilities.	
PP 4.8-1(e)	Facilities shall be sited and designed to enhance spatial development of the campus while maximizing use of limited land resources.	
Impact 4.8-1: Implementation of the proposed Project would not result in incompatibilities between campus development and adjacent land uses. **(LS)**	Applicable PPs: PPs 4.8-1(a) through 4.8-1(e), and PP 4.1-1(a), PP 4.1-2(d) (from Section 4.1, Aesthetics). Mitigation measures are not required.	Less than Significant
Impact 4.8-2: Implementation of the proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. **(LS)**	Mitigation measures are not required.	Less than Significant
Noise and Vibration (Section 4.9)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.9-1	The campus shall continue to evaluate ambient noise conditions when placing new student housing near regular sources of noise such as roadways**, the on campus helistop,** and stationary equipment and design the new buildings to ensure that interior noise levels would be less than 45 dBA CNEL.	
PP 4.9-2	The campus shall continue to notify research facilities located near approved construction sites of the planned schedule of vibration causing activities so that the researchers can take necessary precautionary measures to avoid negative effects to their research.	
PP 4.9-6(a)	The campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses.	
PP 4.9-6(b)	The campus shall continue to provide a landscaped buffer along the western, northern, and eastern edges of the main campus in order to maximize the distance between the roadways and new buildings and provide an acoustically soft environment. At a minimum, this environment can be provided by planting grass and other low landscaping.	

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
PP 4.9-7(a)	To the extent feasible, construction activities shall be limited to 7:00 A.M. to 9:00 P.M. Monday through Friday, 8:00 A.M. to 6:00 P.M. on Saturday, and no construction on Sunday and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise.	
PP 4.9-7(b)	The campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers.	
PP 4.9-7(c)	The campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors.	
PP 4.9-7(d)	The campus shall continue to conduct regular meetings with on-campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed.	
PP 4.9-8	The campus shall continue to conduct meetings, as needed, with off-campus constituents that are affected by campus construction to provide advance notice of construction activities and ensure that the mutual needs of the particular construction project and of those impacted by construction noise are met, to the extent feasible.	
Impact 4.9-1: Implementation of the proposed Project would not expose new on-campus student residential uses to noise levels in excess of the State's 45 dBA CNEL interior noise standard. **(LS)**	Applicable PPs: PP 4.9-1 and PP 4.9-7(a).	Less than Significant
Impact 4.9-2: Construction activities associated with the proposed Project could generate and expose person on campus, including residents, to excessive groundborne vibration levels. **(PS)**	Applicable PPs: PP 4.9-2, PP 4.9-7(a) and PP 4.9-7(d). ***New Mitigation Measure*** **MM 4.9-2** **The campus shall require by contract specifications that, ~~as~~ <u>to the extent</u> feasible, large bulldozers, large heavy trucks, and other similar equipment not be used within 43 feet of the occupied residence halls, within 34 feet of non-residential/non-sensitive buildings, and within 135 feet of buildings that house sensitive instrumentation or similar vibration-sensitive equipment or activities. The work shall be done with medium-sized equipment or smaller within ~~this distance~~ <u>these prescribed distances to the extent practicable</u>.**	Significant and Unavoidable
Impact 4.9-3: Construction activities associated with the proposed Project would not generate and expose persons off campus to excessive groundborne vibration levels from heavy construction trucks. **(LS)**	Mitigation measures are not required.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.9-4: Operation (post-construction) of the proposed Project would not generate and expose persons on or off campus to excessive long-term groundborne vibration levels. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.9-5: Implementation of the proposed Project would not cause a substantial permanent on- or off-campus increase in ambient roadway noise levels in the project vicinity. **(LS)**	Although impacts are less than significant, implementation of PP 4.13-1(c) and PP 4.13-1(d) from Section 4.13, Transportation/Traffic would further reduce impacts.	Less than Significant
Impact 4.9-6: Implementation of the proposed Project could add new stationary sources of noise, but would not cause a substantial permanent on- or off-campus increase in ambient noise levels. **(LS)**	Applicable PPs: PP 4.9-6(a), PP 4.9-6(b).	Less than Significant
Impact 4.9-7: Construction of the proposed Project would result in substantial temporary or periodic increases in ambient noise levels at on-campus locations. **(PS)**	Applicable PPs: PP 4.9-7(a), PP 4.9-7(b), PP 4.9-7(c), PP 4.9-7(d). ***New Mitigation Measure*** **MM 4.9-7** **A solid noise barrier that would break the line of sight between the construction site and a sensitive use area would reduce construction noise by at least 5 dBA. Therefore, when detailed construction plans are complete, the campus shall review the locations of sensitive receptor areas in relation to the construction site. If it is determined that a 12-foot-high barrier would break the line of sight between an 11-foot-high noise source and adjacent sensitive use areas, a temporary barrier shall be erected <u>to the extent practicable</u>. The barrier shall be solid from the ground to the top, with no openings, and shall have a weight of at least 3 pounds per square foot, such as plywood that is ½-inch thick.**	Significant and Unavoidable

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.9-8: Construction activities associated with the proposed Project could result in substantial temporary or periodic increases in ambient noise levels at off-campus locations. **(PS)**	Applicable PPs: PP 4.9-7(a), PP 4.9-7(b), PP 4.9-7(c), PP 4.9-7(d), PP 4.9-8 and MM 4.9-7. No additional feasible mitigation measures are available beyond those identified.	Significant and Unavoidable
Impact 4.9-9: Implementation of the proposed Project would not result in substantial temporary or periodic increases in ambient noise levels due to special events. **(LS)**	Mitigation measures are not required.	Less than Significant
Impact 4.9-10: Implementation of the proposed Project would not expose additional students, faculty, and visitors within the UCLA campus to excessive noise levels generated by helicopter operations. **(LS)**	Mitigation measures are not required.	Less than Significant
Population and Housing (Section 4.10)		
Impact 4.10-1: Implementation of the proposed Project would not result in substantial population growth, either directly or indirectly. **(LS)**	Mitigation measures are not required.	Less than Significant
Public Services (Section 4.11)		
Fire Protection		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
PP 4.11-1 Fire alarm connections to the University Police Command Center shall continue to be provided in all new and renovated buildings to provide immediate location information to the Los Angeles Fire Department to reduce response times in emergency situations.		

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.11-1: Implementation of the proposed Project could increase the demand for fire protection services, but would not require the construction of new or physically altered facilities to accommodate the increased demand and to maintain acceptable response times and fire flows. **(LS)**	Applicable PPs: PP 4.11-1. Mitigation measures are not required.	Less than Significant
Police Protection		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.11-2(a) Police staffing levels and equipment needs shall continue to be assessed on an ongoing basis as individual development projects are proposed and on an annual basis during the campus budgeting process to ensure that the appropriate service levels will be maintained to protect an increased campus population and an increased level of development.		
PP 4.11-2(b) Annual meetings shall continue to be attended by the Director of UCLA Housing and the UCPD to evaluate the adequacy of police protection service for University-owned housing, assess institutional priorities and budgetary requirements, and identify and implement appropriate actions to ensure the continued adequacy of police protection services for resident students.		
Impact 4.11-2: Implementation of the proposed Project could increase the demand for police services, but would not require new or physically altered facilities to maintain acceptable service ratios for police protection services. **(LS)**	Applicable PPs: PP 4.11-2(a) and PP 4.11-2(b). Mitigation measures are not required.	Less than Significant
Schools		
Impact 4.11-3: Implementation of the proposed Project would not require new or physically altered facilities to accommodate additional students in LAUSD schools. **(LS)**	Mitigation measures are not required.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Recreation (Section 4.12)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.12-1(a) The campus shall continue to provide, operate, and maintain recreational facilities for students, faculty, and staff on campus.		
PP 4.12-1(b) The campus shall continue to integrate landscaped open space (including plazas, courts, gardens, walkways, and recreational areas) with development to encourage use through placement and design.		
Impact 4.12-1: Implementation of the proposed Project would increase the campus population, but would not result in the increased use of parks and recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. **(LS)**	Applicable PPs: PP 4.12-1(a), PP 4.12-1(b). Mitigation measures are not required.	Less than Significant
Impact 4.12-2: Impacts resulting from construction of recreation facilities are addressed in the following sections: 4.2, Air Quality, 4.9, Noise, and 4.13, Transportation/Traffic.	Refer to Section 4.2, Air Quality; Section 4.9, Noise: and Section 4.13, Transportation/Traffic.	Not Applicable
Transportation/Traffic (Section 4.13)		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.13-1(a) The campus shall continue to maintain the 1990 LRDP vehicle trip cap of 139,500 average daily trips.		
PP 4.13-1(b) The campus shall continue to maintain the 1990 LRDP parking cap of 25,169 spaces.		
PP 4.13-1(c) The campus shall continue to provide on-campus housing to continue the evolution of UCLA from a commuter to a residential campus.		
PP 4.13-1(d) The campus shall continue to implement a TDM program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.		
PP 4.13-2 UCLA Capital Programs will assess construction schedules of major projects to determine the potential for overlapping construction activities to result in periods of heavy construction vehicle traffic on individual roadway segments, and adjust construction schedules, work hours, or access routes to the extent feasible to reduce construction-related traffic congestion.		

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
PP 4.13-5	To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the campus shall provide appropriate signage indicating alternative routes.	
PP 4.13-6	For any construction-related closure of pedestrian routes, the campus shall provide appropriate signage indicating alternative route and provide curb cuts and street crossings to assure alternate routes are accessible.	
PP 4.13-8	To ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, UCLA shall consult with the UCPD, EH&S, and the LAFD to disclose temporary lane or roadway closures and alternative travel routes.	
Impact 4.13-1b: Implementation of the proposed Project would result in additional vehicular trips which would result in a substantial degradation in intersection levels of service. **(PS)** Impacts to freeway mainline segments would be less than significant. **(LS)**	Applicable PPs: 4.13-1(d). No feasible mitigation measures are available.	Intersections: Significant and Unavoidable Freeway mainline segments: Less than Significant
Impact 4.13-2: Construction of the proposed Project would result in the generation of construction-related vehicle trips, which could impact traffic conditions along roadway segments and at individual intersections. **(PS)**	Applicable PPs: 4.13-2. No feasible mitigation measures are available.	Significant and Unavoidable
Impact 4.13-3b: Implementation of the proposed Project would exceed established service levels on roadways designated by the Los Angeles Congestion Management Program. **(PS)** Services levels on CMP freeway facilities would be not be exceeded. **(LS)**	Applicable PPs: 4.13-1(a) through 4.13-1(d). CMP Intersection: no feasible mitigation measures are available. CMP Mainline Freeway: no mitigation measures are required.	CMP Intersection: Significant and Unavoidable CMP Mainline Freeway: Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.13-4: Implementation of the proposed Project would not substantially increase vehicular hazards due to design features or incompatible uses during operation (long-term). **(LS)**	No mitigation measures are required.	Less than Significant
Impact 4.13-5: Construction of the proposed Project would not substantially increase vehicular hazards due to closure of traffic lanes or roadway segments. **(LS)**	Applicable PPs: PP 4.13-5. No mitigation measures are required.	Less than Significant
Impact 4.13-6: Construction of the proposed Project would not substantially increase pedestrian hazards due to closure of sidewalks or paths. **(LS)**	Applicable PPs: PP 4.13-6. No mitigation measures are required.	Less than Significant
Impact 4.13-7: Operation of the proposed Project would not result in inadequate emergency access. **(LS)**	No mitigation measures are required.	Less than Significant
Impact 4.13-8: Construction of the proposed Project would not result in inadequate emergency access. **(LS)**	Applicable PPs: PP 4.13-8.	Less than Significant
Impact 4.13-9: Implementation of the proposed Project would not result in inadequate parking capacity on campus. **(LS)**	No mitigation measures are required.	Less than Significant
Impact 4.13-10: Implementation of the proposed Project would not result in inadequate parking capacity off campus. **(LS)**	No mitigation measures are required.	Less than Significant
Impact 4.13-11: Construction of the proposed Project could result in the temporary elimination of on-campus parking spaces and could require additional temporary parking for construction workers. **(PS)**	***Mitigation Measure Carried Forward from the 2002 LRDP Final EIR*** MM 4.13-11 To the extent that construction worker parking demand exceeds historical levels or available supply, off-site construction worker parking shall be provided with shuttle service to the remote parking location.	Less than Significant

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.13-12: Implementation of the proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation. **(LS)**	Applicable PPs: PP 4.13-1(c), PP 4.13-1(d). No mitigation measures are required.	Less than Significant
Utilities and Service Systems (Section 4.14)		
Water Supply		
Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR		
PP 4.14-2(a)	New facilities and renovations (except for patient care facilities in the Medical Center) shall be equipped with low-flow showers, toilets, and urinals.	
PP 4.14-2(b)	Measures to reduce landscaping irrigation needs shall be used, such as automatic timing systems to apply irrigation water during times of the day when evaporation rates are low, installing drip irrigation systems, using mulch for landscaping, subscribing to the California Irrigation Management Information System Network for current information on weather and evaporation rates, and incorporating drought-resistant plants as appropriate.	
PP 4.14-2(c)	The campus shall promptly detect and repair leaks in water and irrigation pipes.	
PP 4.14-2(d)	The campus shall minimize the use of water to clean sidewalks, walkways, driveways and parking areas.	
PP 4.14-2(e)	The campus shall avoid serving water at UCLA food service facilities except upon request.	
PP 4.14-2(f)	The campus shall provide ongoing water treatment programs for campus cooling equipment by adding biodegradable chemicals to achieve reductions in water usage.	
PP 4.14-2(g)	The campus shall educate the campus community on the importance of water conservation measures.	
PP 4.15-1	The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices.	
Impact 4.14-1: Implementation of the proposed Project would not require the construction of new water facilities. Potential impacts from construction are addressed in Sections 4.2, Air Quality): 4.9, Noise and Vibration; and 4.13, Transportation/Traffic.	Refer to Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.	Not Applicable

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Impact 4.14-2: Implementation of the proposed Project would generate an additional demand for water, but would not require water supplies in excess of existing entitlements and resources or result in the need for new or expanded entitlements. **(LS)**	Applicable PPs: PP 4.14-2(a) through PP 4.14-2(g), and PP 4.15-1 (Section 4.15, Climate Change). No mitigation measures are required.	Less than Significant
Solid Waste		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
PP 4.14-3 The campus shall continue to implement a solid waste reduction and recycling program designed to limit the total quantity of campus solid waste that is disposed of in landfills during the LRDP plan horizon.		
Impact 4.14-3: Implementation of the proposed Project would not generate solid waste that exceeds the permitted capacity of landfills serving the campus. **(LS)**	Applicable PPs: PP 4.14-3, and PP 4.15-1 (Section 4.15, Climate Change). No mitigation measures are required.	Less than Significant
Impact 4.14-4: Implementation of the proposed Project would comply with all applicable federal, State, and local statutes and regulations related to solid waste. **(NI)**	Applicable PPs: PP 4.14-3, PP 4.15-1(Section 4.15, Climate Change). No mitigation measures are required.	No Impact
Wastewater		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
PP 4.14-5 As part of the design process for proposed projects, an evaluation of the on-campus sewer conveyance capacity shall be undertaken, and improvements provided if necessary in order to ensure that connections are adequate and capacity is available to accommodate estimated flows.		
Impact 4.14-5: Implementation of the proposed Project would increase the amount of wastewater generated on campus, but would not require the construction of new or expanded wastewater conveyance systems beyond lines to connect to existing facilities. Potential impacts from construction are addressed in	Applicable PPs: PP 4.14-5. Refer to Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.	Not Applicable

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
the following sections: 4.2, Air Quality, 4.9, Noise, and 4.13, Transportation/ Traffic.		
Impact 4.14-6: Implementation of the proposed Project would not increase wastewater generation such that treatment facilities would be inadequate to serve the project's projected demand in addition to the provider's existing commitments. **(LS)**	No mitigation measures are required.	Less than Significant
Energy		
Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR		
PP 4.14-9 The campus shall continue to implement energy conservation measures (such as energy-efficient lighting and microprocessor-controlled HVAC equipment) to reduce the demand for electricity and natural gas. The energy conservation measures may be subject to modification as new technologies are developed or if current technologies become obsolete through replacement.		
Impact 4.14-7: Implementation of the proposed Project would increase the demand for electricity, but would not require the construction of new or expanded electric facilities beyond lines to connect to existing facilities. Potential impacts from construction are addressed in the following sections: 4.2, Air Quality, 4.9, Noise, and 4.13, Transportation/Traffic.	Refer to Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.	Not Applicable
Impact 4.14-8: Implementation of the proposed Project could increase the demand for natural gas but would not require the construction of new or expanded natural gas facilities beyond lines to connect to existing facilities. Potential impacts from construction are addressed in the following sections: 4.2, Air	Refer to Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.	Not Applicable

TABLE 1-2 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM
PROPOSED PROJECT (2002 LRDP AS AMENDED)

Summary of Impacts Prior to Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Quality, 4.9, Noise, and 4.13, Transportation/Traffic.		
Impact 4.14-9: Implementation of the proposed Project would not result in the wasteful or inefficient use of energy by UCLA. **(LS)**	Applicable PPs: PP 4.14-9, and PP 4.15-1 (Section 4.15, Climate Change)	Less than Significant
Climate Change (Section 4.15)		
New Campus Program, Practice, and Procedure		
PP 4.15-1 **The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices; and provisions of the applicable UCLA Climate Action Plan.**		
Impact 4.15-1: Implementation of the proposed Project would not impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32. **(LS)**	Applicable PPs: PP 4.15-1. No mitigation measures are required.	Less than Significant

[a] **NI:** No Impact; **LS:** Less than Significant Impact; **PS:** Potentially Significant Impact

SECTION 2.0 INTRODUCTION

2.1 PURPOSE OF THE EIR

The University of California, Los Angeles (UCLA) is proposing to construct additional undergraduate student housing in its Northwest zone to meet the continued unmet demand. Because this additional undergraduate student housing was not contemplated under the 2002 Long Range Development Plan (LRDP), UCLA proposes to amend the 2002 LRDP (referred to as the "LRDP Amendment") to accommodate the proposed Northwest Housing Infill Project (2008 NHIP). A detailed description of the proposed 2008 NHIP and proposed LRDP Amendment (collectively referred to herein as the "proposed Project") is provided in Section 3, Project Description.

This Environmental Impact Report (EIR) has been prepared to evaluate the potential environmental impacts associated with implementation of the proposed Project. This EIR been prepared in conformance with the California Environmental Quality Act (CEQA, *California Public Resources Code,* Section 21000 et seq.), the CEQA Guidelines (Title 14, *California Code of Regulations,* Chapter 3, Section 15000 et seq.), and the University of California procedures for implementing CEQA. The University of California Board of Regents (The Regents) is the Lead Agency under CEQA and is responsible for preparing the EIR. The determination that The Regents is the "lead agency" is made in accordance with Sections 15051 and 15367 of the CEQA Guidelines, which define the lead agency as the public agency that has the principal responsibility for carrying out or approving a project. Further, preparation of this EIR is subject to Section 21080.09(d) of the *Public Resources Code,* which requires that public higher education institutions consider the environmental impacts of academic and enrollment plans.

UCLA, as directed by the University of California (UC), has prepared this EIR for the following purposes:

- To satisfy the requirements of CEQA.
- To inform the general public, the local community, responsible and interested public agencies, and The Regents of the scope of the proposed 2008 NHIP and proposed LRDP Amendment and to communicate the potential environmental effects, possible measures to mitigate those effects, and alternatives to the proposed 2008 NHIP.
- To enable The Regents to consider environmental consequences when deciding whether to approve the 2008 NHIP and adopt the proposed LRDP Amendment.
- To provide a basis for the preparation of subsequent environmental documentation for future campus development proposals.
- To serve as a source document for responsible agencies to issue permits and approvals, as required, for specific development that may occur under the 2002 LRDP, as amended.

2.2 TYPE OF EIR

The proposed Project consists of the proposed 2008 NHIP and an accompanying amendment to the LRDP to accommodate the proposed 2008 NHIP. Environmental analysis for both components of the proposed Project will be considered in this EIR.

The proposed 2008 NHIP is being evaluated in this EIR at a "project level". Pursuant to Section 15161 of the State CEQA Guidelines, a Project EIR examines the environmental impacts of a specific development project. This type of environmental analysis focuses primarily on the changes in the environment that would result from the development of the undergraduate student housing project. The environmental analysis examines all phases of the project including planning, construction and operation, and feasible alternatives to the project.

The proposed amendment to the 2002 LRDP is appropriately being evaluated at a "program level" because an LRDP is a land use plan that guides the physical development of the campus; it is not an implementation plan. A LRDP describes the entire development program for the campus through an anticipated horizon year. Adoption of an LRDP or amendments to an LRDP do not constitute a commitment to any specific project, construction schedule, or funding priority. Rather, each specific development proposal under an LRDP (such as the 2008 NHIP) must be approved individually by the relevant decision making body. In this case, the Chancellor (after consultation and review by the Academic Senate and other appropriate segments of the campus community), the UC Office of the President, and/or The Regents of the University of California, as appropriate, in compliance with CEQA. As such, this EIR addresses at a "program level" the potential environmental impacts associated with implementation of the remaining development allocation (also referred to "buildout") of the 2002 LRDP, as amended.

This EIR updates the impact analysis and conclusions of the 2002 LRDP Final EIR (SCH #2002031115, February 2003) to reflect new baseline conditions, examine the remaining future development allocation under the 2002 LRDP together with the proposed addition of 550,000 gross square feet (gsf) for the proposed 2008 NHIP, and consider an extension of the planning horizon from 2010 to 2013 (refer to Section 3.6 for a description of the planning horizon year). However, each future building proposal undertaken during the LRDP planning horizon will require project-specific environmental review in accordance with CEQA. If adopted, the campus may tier future project-level CEQA analysis from this updated program-level analysis, as appropriate.

2.2.1 REVIEW OF AN EIR

The Regents—who have the principal responsibility for processing and approving the proposed Project—and other public agencies (i.e., responsible and trustee agencies) that may use this EIR in their decision-making or permitting processes will consider the information in this EIR along with other information that may be presented during the CEQA process.

Upon certification of the Final EIR, The Regents will consider whether to approve the proposed Project. As a part of their consideration for Project approval, The Regents must approve Findings of Fact, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program (MMRP). Where feasible mitigations are not available to reduce significant environmental impacts to a less than significant level, impacts are considered significant and unavoidable. Written findings will be prepared for each significant adverse environmental effect identified in the Final EIR, as required by Section 15091 of the CEQA Guidelines. If The Regents certify a Final EIR for a project that has significant and unavoidable impacts, The Regents shall also state, in writing, the specific reasons for approving the project based on the Final EIR and any other information in the public record. This is called a "Statement of Overriding Considerations" and is used to explain the specific reasons that the benefits of a proposed project make its unavoidable environmental effects acceptable. The Statement of Overriding Considerations is adopted after the Final EIR is certified and before action to approve the proposed Project has been taken. Additionally, The Regents must adopt the MMRP in order to ensure compliance with mitigation measures that have been incorporated into the

proposed Project so as to reduce or avoid significant effects on the environment during construction and/or implementation.

The actions that may be involved in implementing the proposed 2008 NHIP are described in Section 3.7 of this EIR, Intended Uses of the EIR. Other agencies that may have discretionary approval over the proposed 2008 NHIP, or components thereof, including responsible and trustee agencies, are also listed in Section 3.7.

2.3 EIR FOCUS AND EFFECTS FOUND NOT TO BE SIGNIFICANT

2.3.1 SCOPING PROCESS

In compliance with Section 15201 of the CEQA Guidelines, UCLA has taken steps to provide opportunities for public participation in the environmental process. An Initial Study and Notice of Preparation (NOP) were distributed on May 28, 2008, to federal, State, regional, and local government agencies and interested parties for a 30-day public review period in order to solicit comments and to inform agencies and the public of the proposed project. The proposed 2008 NHIP and amendment to the 2002 LRDP were described; potential environmental effects associated with project implementation were identified; and agencies and the public were invited to review and comment on the Initial Study and NOP. A copy of the NOP/Initial Study and responses received are included in Appendix A. In summary, comments on the NOP/Initial Study were received from the California Department of Transportation (Caltrans), the City of Los Angeles Bureau of Sanitation, and two individuals.

Additionally, UCLA held a Community Information and EIR scoping meeting on June 10, 2008, at the UCLA Faculty Center. The meeting was attended by approximately nine community members. There were a number of questions raised about the project description (additional development anticipated on campus; the need/goal for additional on campus housing; and the anticipated design for 2008 NHIP buildings). A complete description of the proposed 2008 NHIP is provided in Section 3.5 of this EIR and a description of the components of the proposed LRDP Amendment are provided in Section 3.6 of this EIR. The following environmental issues were raised at the Community Information and EIR Scoping Meeting (the sections where these topics are discussed can be found in parentheses):

- The removal of trees along Gayley Avenue to accommodate the proposed 2008 NHIP would not maintain the buffer required. Tree replacement would be needed (Section 4.1, Aesthetics).

- The buildings should be “green” (Section 4.15, Climate Change).

- Water supply needs to be considered (Section 4.14, Utilities and Service Systems).

- Undergraduate housing is not compatible with off-campus residential uses; students pass through the neighborhood and are disruptive (Section 4.8, Land Use and Planning; Section 4.11, Public Services).

- Consistency of the proposed 2008 NHIP with the existing Benign Use Agreement (Section 4.8, Land Use and Planning).

- The proposed 2008 NHIP’s effect on traffic circulation on Gayley Avenue (Section 4.13, Transportation/Traffic).

- Alternative locations for housing—specifically the proposed De Neve buildings for the 2008 NHIP—should be considered, including but not limited to: Parking Lot 36, below Rieber Hall, and/or where basketball courts are currently planned (Section 5, Alternatives).

The Initial Study responses, NOP comments, and the comments received from the public at the scoping meeting were used to establish the scope of the issues addressed in this EIR. UCLA identified potential impacts associated with the implementation of the proposed Project in the following environmental issue areas that are addressed in this EIR:

- Aesthetics (Section 4.1),
- Air Quality (Section 4.2),
- Biological Resources (Section 4.3),
- Cultural Resources (Section 4.4),
- Geology and Soils (Section 4.5),
- Hazards and Hazardous Materials (Section 4.6),
- Hydrology and Water Quality (Section 4.7),
- Land Use and Planning (Section 4.8),
- Noise and Vibration (Section 4.9),
- Population and Housing (Section 4.10),
- Public Services (Section 4.11),
- Recreation (Section 4.12),
- Transportation/Traffic (Section 4.13),
- Utilities and Service Systems (Section 4.14), and
- Climate Change (Section 4.15).

2.3.2 EFFECTS FOUND NOT TO BE SIGNIFICANT

Through the preparation of the Initial Study (included in Appendix A), UCLA determined that an EIR was required to evaluate the potentially significant environmental effects of the proposed Project. Potential impacts identified in the Initial Study that would result in no impacts, less than significant impacts, or less than significant impacts with the implementation of the previously adopted 2002 LRDP campus programs, practices, and procedures (PPs) identified in the Initial Study are summarized below and are not discussed further in this EIR. These issues and reference documents are discussed in more detail in the Initial Study included in Appendix A.

- ***Aesthetics – Affect Scenic Resources Within a State Scenic Highway.*** There are no State scenic highways in the vicinity of the proposed 2008 NHIP site; however, Sunset Boulevard is identified as a scenic highway in the Transportation Element of the *Los Angeles Citywide General Plan.* Development of the proposed Project would not conflict with the Scenic Highways Guidelines for Sunset Boulevard. Additionally, there are existing campus PPs which require that landscaping be provided with future projects. Therefore, no impact would occur.

- ***Agricultural Resources – Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; Agricultural Zoning or a Williamson Act Contract; Farmland Conversion.*** The campus is not located on or near designated agricultural land, nor is it currently in agricultural use. Property within the UCLA campus is not under a Williamson Act Contract. Therefore, no impact would occur.

- ***Air Quality – Create Objectionable Odors.*** The odors generated by the proposed 2008 NHIP and potential future projects under the LRDP Amendment, would be typical of urbanized environments and would be consistent with odors generated by existing campus development. The proposed Project would not result in unusual or objectionable odors that would affect on-site or off-site land uses. Therefore, no impact would occur.

- ***Biological Resources – Impact Federally Protected Wetlands; Conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or Other Habitat Conservation Plan.*** The campus does not contain any jurisdictional wetlands and is not located within an area designated for an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved habitat conservation plan. Therefore, no impact would occur.

- ***Cultural Resources – Disturbance of Human Remains.*** The campus is not known to have been used for religious or sacred purposes, nor is there other evidence to suggest the site has been used for human burials. State regulations (*California Health and Safety Code,* Section 7050.5), which are mandatory for all development projects, dictate that if human remains are encountered, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to the *Public Resources Code* (Section 5097.98). With these mandatory requirements in place, compliance with PP 4.4-5 from the 2002 LRDP Final EIR and the unlikely potential of encountering human remains on the site, no impacts would occur.

- ***Geology and Soils – Rupture of a Known Earthquake Fault; Use of Alternative Wastewater Disposal Systems.*** The campus is not located within a State-designated Alquist-Priolo Fault Zone. The proposed 2008 NHIP and future projects to be developed on campus with buildout of the 2002 LRDP, as amended, would not involve the use of septic tanks or alternative wastewater disposal systems since all projects would use the campus sewer lines and wastewater disposal systems. Therefore, no impacts would occur.

- ***Hazards and Hazardous Materials – Located within an Airport Land Use Plan; Expose People or Structures to Threat of Wildland Fires.*** The campus is not located within two miles of a public airport or public use airport and has not been included in an airport land use plan. The campus would not be subject to wildland fires. Therefore, no impacts would occur.

- ***Hydrology and Water Quality – Place Housing within a 100-year Flood Hazard Area; Place Structures within 100-year Flood Hazard Area that would Impede or Redirect Flood Flows; Expose Citizens to Risk Involving Flooding; Cause Inundation by Seiche, Tsunami, or Mudflow.*** With the exception of a linear area along Stone Canyon Creek, there are no areas on campus within a 100-year floodplain; no housing would be located in this area with the proposed Project. Given the relatively small and linear area designated within a 100-year flood hazard area on campus and its location adjacent to Sunset Boulevard and existing development, it is not anticipated that structures would be constructed in the future that would impede or redirect flood flows.

Stone Canyon Reservoir Dam is located north of the campus; however, the Los Angeles Department of Water and Power (LADWP) considers the possibility of failure due to seismic or other factors to be extremely remote and speculative. The dam structure has been designed to withstand the maximum credible earthquake. There are no water bodies proximate to the project site that would subject the site to seiches or tsunamis. Therefore, no impacts would occur.

- ***Land Use and Planning – Physically Divide an Established Community; Conflict with Habitat Conservation Plans.*** The community surrounding the campus is fully developed and established, and development outside the campus boundaries would not occur or be governed by the LRDP. Therefore, the proposed Project would not physically divide an established community. The campus is not within the boundaries of or adjacent to an adopted habitat conservation plan or natural community conservation plan. Therefore, no impacts would occur.

- ***Mineral Resources – Loss of Availability of Known Mineral Resource of Value; Loss of Availability of Locally Important Mineral Resource.*** The campus is not in an area classified as having locally important or known mineral resources and would not result in the loss of availability of a known mineral resource. Therefore, no impacts would occur.

- ***Noise – Located within an Airport Land Use Plan; Expose People to Excessive Noise Levels.*** The campus is not located within two miles of a public airport or public use airport and has not been included in an airport land use plan. Development of the proposed Project would not result in the exposure of people to excessive noise from a public airport or public use airport. Therefore, no impacts would occur.

- ***Population and Housing – Displace Substantial Numbers of Existing Housing or People Necessitating Replacement Housing.*** Development of the proposed Project would not displace existing housing or people; rather, it would add housing capacity to the campus. Therefore, no impacts would occur.

- ***Transportation/Traffic – Change in Air Traffic Patterns.*** The campus is currently developed, and future development would not increase air traffic levels or result in a change in the location of air traffic patterns resulting in substantial safety risks. Therefore, no impacts would occur.

- ***Utilities and Service Systems – Exceed Wastewater Treatment Requirements.*** Wastewater originating from the proposed 2008 NHIP and future buildings with buildout of the 2002 LRDP, as amended, would be generated by academic, laboratory, and residential uses and would ultimately be treated by the Hyperion Treatment Plant (HTP), which is owned and operated by the City of Los Angeles, Bureau of Sanitation. The wastewater treatment requirements issued by the Los Angeles Regional Water Quality Control Board (RWQCB) for the treatment plant were developed to ensure that adequate treatment levels would be provided for the wastewater flows emanating from all land uses within its service area, including the UCLA Campus. The wastewater generated from the proposed land uses would not cause the treatment plant to exceed these treatment requirements. Therefore, no impacts would occur.

2.4 PUBLIC REVIEW OF THE DRAFT EIR

This EIR is being circulated for review and comment to the public and other interested parties, agencies, and organizations for a 45-day period. The comment period will begin on

December 5, 2008 and end on January 19, 2009. A public hearing on the Draft EIR, where oral comments may be presented, will also be held during the public review period. During the review period, the Draft EIR will be available on the UCLA website at www.capital.ucla.edu and at two on-campus libraries: the Charles E. Young Research Library and the Biomedical Library. In addition, the Draft EIR will be available at the off-campus libraries listed below.

Donald Bruce Kaufman/
Brentwood Branch Library
11820 San Vicente Boulevard
Los Angeles, CA 90049

West Los Angeles Regional Branch Library
11360 Santa Monica Boulevard
Los Angeles, CA 90025

Westwood Branch Library
1246 Glendon Avenue
Los Angeles, CA 90024

This Draft EIR will also be available for review at the Capital Programs building located at 1060 Veteran Avenue (third floor) from 8:00 AM to 5:00 PM, Monday through Friday. Written comments on the EIR should be addressed to:

Ms. Tova Lelah, Assistant Director
UCLA Capital Programs
1060 Veteran Avenue, Box 951365
Los Angeles, CA 90095-1365
Fax: (310) 206-1510

Following the Draft EIR's public review period, responses to written comments received will be prepared and published in a Final EIR. The Final EIR—which will consist of the Draft EIR, comments on the Draft EIR, and written responses to those comments—will be considered for certification by The Regents, consistent with Section 15090 of the CEQA Guidelines. All responses to agencies' comments submitted for this EIR will be provided to those agencies at least ten days prior to final action on the proposed Project. The Regents must consider the Final EIR prior to any decision to approve or reject the proposed Project; these actions can only be approved if this EIR is certified.

SECTION 3.0 PROJECT DESCRIPTION

3.1 BACKGROUND

A Long Range Development Plan (LRDP) is defined by statute (*Public Resources Code,* Section 21080.09[2]) as a "physical development and land use plan to meet the academic and institutional objectives for a particular campus or medical center of public higher education." It defines the campus goals, program needs and physical development guidelines, while retaining flexibility to respond to unanticipated circumstances. The 2002 LRDP is the operative LRDP for the campus and was an update to the 1990 LRDP (which had a planning horizon of 2005). The 2002 LRDP, following certification of an accompanying Final EIR in accordance with the California Environmental Quality Act (CEQA), was adopted by the UC Board of Regents in February 2003. The 2002 LRDP updated the 1990 LRDP to accommodate an increased student enrollment of 4,000 full-time-equivalent students and associated staff and faculty. The 2002 LRDP also extended the 1990 LRDP planning horizon from 2005 to 2010, while at the same time retaining the new development square footage, parking, and traffic generation limits of the 1990 LRDP.

While the 1990 LRDP included provision for 2,000 beds for *graduate student* housing (a portion of which has been completed), a significant component of the 2002 LRDP update was to provide 2000 beds of *undergraduate student housing*. This level of undergraduate housing was achieved in 2005 with the completion of the Hedrick North, Rieber North and Rieber West undergraduate housing projects, which The UC Regents approved in February 2003.

Due to continuing unmet demand for on-campus undergraduate student housing (described in Section 3.2 below), UCLA is currently proposing to construct an additional 1,525 beds of undergraduate student housing in the Northwest zone as part of the proposed new Northwest Campus Student Housing Infill Project (herein referred to as the "2008 NHIP"); the Northwest zone is the only zone on campus designated for undergraduate housing. The proposed housing is needed to accommodate demand from existing undergraduate enrollment identified in the 2002 LRDP update. The proposed 2008 NHIP includes four buildings totaling approximately 550,000 gross square feet (gsf) on three infill sites in the Northwest campus zone, with an anticipated completion by 2013.

Because this additional undergraduate student housing was not contemplated under the 2002 LRDP, UCLA proposes to amend the 2002 LRDP (referred to as the "LRDP Amendment") to allocate an additional 550,000 gross square feet (gsf) of new development in the Northwest campus zone necessary to accommodate the proposed 2008 NHIP square footage. In addition, because the proposed 2008 NHIP has an anticipated completion date of 2013, , the projected campus population in 2013 has been estimated to account for growth beyond the 2010 population projections provided in the 2002 LRDP for purposes of this environmental impact analysis. The proposed LRDP Amendment would update remaining square footage development allocations for each campus zone totaling 1.32 million gsf, and maintain the same 2002 LRDP average daily vehicle trip and parking inventory limits from 2010 (the current LRDP horizon year) to 2013. Therefore, the maximum additional building space that could be developed under the 2002 LRDP as amended would be 1.87 million gsf.

A detailed description of the proposed 2008 NHIP and associated proposed amendment to the 2002 LRDP (collectively the 2008 NHIP and the LRDP Amendment are referred to herein as the "proposed Project") is provided in the following sections.

3.2 HOUSING PROGRAM DESCRIPTION AND NEED FOR PROJECT

In 2008, UCLA currently has an unmet need of housing inventory for undergraduate students of approximately 1,305 beds, and it is anticipated that this demand will be increased to 2,281 beds by 2012–2013 (Student Housing Master Plan 2007-17 [SHMP]). In order to meet the continuing demand for on-campus housing for undergraduate students with guaranteed housing, the campus has converted some double-occupancy rooms to triple-occupancy rooms. This situation compromises the quality of the residential experience and places considerable strain on the residential facilities. Based on these conditions, the campus has determined that the number of triple-occupancy rooms should be reduced.

A fundamental tenet underlying the SHMP, and an existing objective of the 2002 LRDP, is the aspiration to continue the progress made to date in transforming UCLA from a commuter to a residential campus. Important benefits of university-owned housing are the cohesive nature of the community formed by groups of students living in close proximity and the associated environmental benefit of reducing vehicle trips to and from campus. Students who live in the residential community benefit from the resources offered to them through various on-campus housing programs, such as academic, social, and learning programs. Based on these and other principles articulated in the SHMP 2007–2017 and the 2002 LRDP, the 2008 NHIP is proposed to address the following goals:

- On-campus housing guaranteed to all freshmen who desire such housing for four consecutive years.
- On-campus housing guaranteed to all new transfer students for two years.
- University housing guaranteed to new single graduate and professional students for a period of two years and for students with families for up to seven years.
- University housing available to new, single, post-doctoral scholars for a period of two years, as supply is available.

The 2008 NHIP proposes to provide 1,525 additional bed spaces in the Northwest zone to address the SHMP housing goals. With completion of the proposed 1,525 beds, the on-campus undergraduate bed space inventory would increase to approximately 12,000 spaces. Proposals for additional beds in other northwest campus locations would be evaluated following approval and completion of the proposed 2008 NHIP if it is determined at that time that an unmet need still exists. A detailed description of the proposed 2008 NHIP is provided below in Section 3.4, Project Characteristics.

3.3 PROJECT OBJECTIVES

The objectives of the proposed Project are to:

1. Provide approximately 1,525 undergraduate beds in on-campus housing to address current and anticipated demand and housing guarantees for new, entering first year and transfer students, in order to meet projected demand identified in, and the undergraduate housing objectives of, the *Student Housing Master Plan 2007–2017.*
2. Continue the transformation of UCLA from a commuter to residential campus, thereby improving the quality of student life and academic experience and reducing the number of students who commute to campus.

3. Continue the development of on-campus housing in the Northwest zone to maintain a supportive and cohesive student community that is well integrated with all aspects of campus life.

4. Provide sufficient support space (dining, meeting, assembly, and study rooms) to accommodate the proposed new undergraduate housing beds and to enhance meeting facility accommodations for the campus as a whole.

5. Provide additional recreational opportunities to support the anticipated increase in the student resident population.

6. Provide new undergraduate housing within the Northwest zone to take advantage of programmatic synergies with the existing undergraduate housing community, recreation, dining, and support services.

7. Provide undergraduate housing facilities that are similar (in size, configuration, and program operational efficiency) to existing housing facilities while maintaining the spatial development, massing and density of the Northwest campus zone to the extent feasible.

8. Provide new undergraduate housing facilities that are designed to optimize security, safety, accessibility and convenience for student residents.

9. Improve pedestrian and vehicular access and circulation in the Northwest zone proximate to the proposed NHIP and strengthen the pedestrian linkage with Bruin Walk.

10. Plan, design, and implement the proposed 2008 NHIP within the practical constraints of available funding sources, including the need to maintain affordable housing fees.

11. Plan, design, and implement the proposed 2008 NHIP in a manner consistent with the UC Policy on Sustainable Practices and the Climate Action Plan required thereunder.

12. Meet the foregoing objectives to provide additional on-campus undergraduate student housing (550,000 gsf), while reserving the campus-wide remaining new development allocation of 1.32 million gsf previously approved under the 2002 LRDP to address the needs of the academic, research and community service mission of UCLA, for a maximum development of 1.87 million gsf of additional building space by 2013.

13. Carry forward the academic, physical and operational objectives identified in the 2002 LRDP, except as modified by Project Objective 12, above.

3.4 PROJECT LOCATION AND SETTING

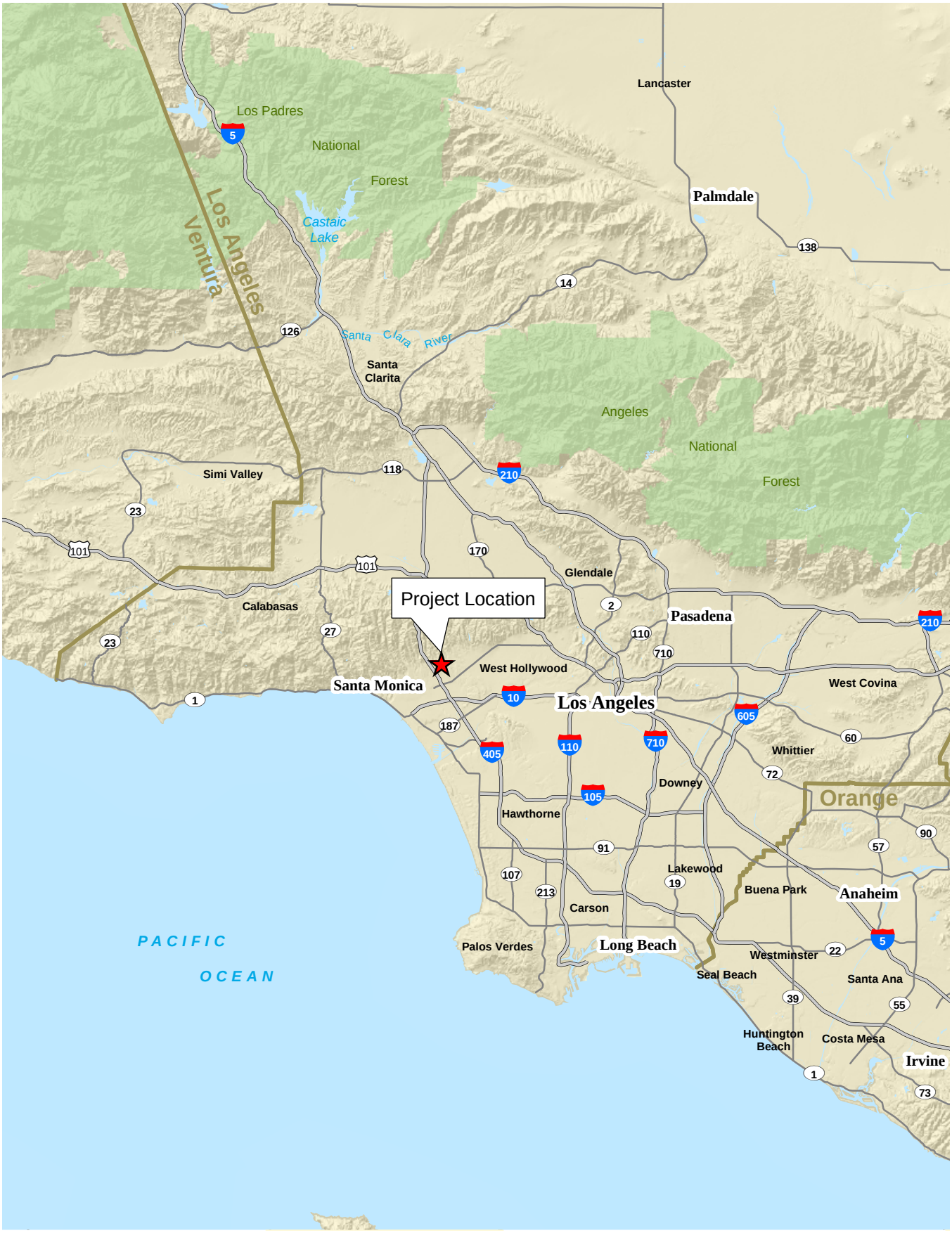
The 419-acre UCLA campus is located in the Westwood Community in the City of Los Angeles, approximately 12 miles from Downtown Los Angeles and 6 miles from the Pacific Ocean. Figure 3-1 depicts the regional location of the campus and Figure 3-2 depicts the local vicinity. Figure 3-3 provides a map of the UCLA campus and specifically shows the location of the proposed 2008 NHIP sites. As shown on Figure 3-4 the proposed 2008 NHIP site is located in the Northwest zone, which constitutes approximately 90.5 acres of the 419-acre UCLA campus. The Northwest zone is bound by Sunset Boulevard to the north, Veteran Avenue to the west, Gayley Avenue to the south, and Charles E. Young Drive West to the east. The proposed Upper and Lower De Neve structures are generally located north of Gayley Avenue, west of the existing De Neve Plaza, and south of De Neve Drive. The proposed Sproul structures are located north of De Neve Drive adjacent to the existing Sproul Hall structures.

The campus edge along Sunset Boulevard and Veteran Avenue in the Northwest zone is heavily landscaped with mature trees and foliage, which visually buffer campus uses from the surrounding area. North and west of the Northwest zone are single-family residential neighborhoods, which are separated from the campus by Sunset Boulevard and Veteran Avenue. South of the Northwest zone are multi-family residences that are separated from the campus by Gayley Avenue.

Topographically, the Northwest zone consists of hilly terrain characterized by slopes between the existing buildings. The elevation range is between 320 and 560 feet above mean sea level. Figure 3-4 depicts existing land use conditions in the Northwest zone, which is primarily residential and recreational in nature. The zone's residential component is defined by a series of distinct neighborhoods distinguished by the following features: (1) the upper Northwest zone includes Hitch and Saxon Residential Suites and Hedrick Court (Hedrick Hall and Hedrick Summit) and Rieber Court (Rieber Hall, Rieber Terrace, and Rieber Vista) residence halls; (2) Sunset Village includes Courtside, Canyon Point, Delta Terrace, and Sproul residence halls; and (3) De Neve Plaza housing and Dykstra residence hall. The first grouping occupies the northernmost residential region, situated on the highest elevation of the Northwest zone. The second residential neighborhood, Sunset Village, sits at the foot of the slope from the first neighborhood to the south and east and has a more urban, village-like character. De Neve Plaza is situated south of De Neve Drive, adjacent to Dykstra Hall, which together create an urban enclave in the southern area of the Northwest zone.

Both within and among the communities, buildings vary from one another in their housing capacity, density, height, amenities, and architectural character (refer to the description of these buildings and their functions provided in Section 4.8, Land Use and Planning). The Northwest zone also accommodates other functions that support housing and the greater academic community. These uses are further described in Section 4.8, Land Use and Planning, and are shown on Figure 3-4. Buildings and offices supporting residential life in the Northwest zone area include the Housing Administration office in Sproul Hall, the Residential Life Building, Bradley International Hall, and Covel Commons. Uses that support the academic community include the Southern Regional Library and the Krieger Child Care Center. The Northwest zone also includes campus-wide recreational facilities, such as the Sunset Canyon Recreation Center, Sunset Canyon Tennis Courts, Sycamore Tennis Courts, Easton Stadium, and the Spieker Aquatic Center (under construction). Campus Facilities Management includes a storage yard and also operates a green waste and recycling yard in the Northwest zone. Circulation within the Northwest zone consists primarily of an internal campus loop road, De Neve Drive, which connects at two locations to Charles E. Young Drive West as illustrated in Figure 3-4. Bellagio Drive, a second campus roadway off De Neve Drive, connects to Sunset Boulevard. Bruin Walk is the major pedestrian pathway linking the residential community to the academic core. Drake Stadium, the Intramural Field, and the Los Angeles Tennis Center provide a transition between the Northwest zone and the remaining eastern and southern portions of campus.

There are various parking facilities that support the housing, administration, academic, and recreational uses in the Northwest zone. A parking structure serves Sunset Canyon Recreation Center (RC structure) while the majority of parking in the Northwest zone is accommodated by Dykstra Hall (DH structure); Sunset Village Parking Structure (PS SV) surface lots 10, 11, 13, 15, 17, and on-street parking along portions of Charles E. Young Drive West; De Neve Drive; and Sproul Circle Drive.



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Regional Location

Figure 3-1

2008 NHIP and LRDP Amendment

N W E S

10 5 0 10 Miles

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Local Vicinity

Figure 3-2

2008 NHIP and LRDP Amendment

N
W E
S

1,500 750 0 1,500
Feet

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Proposed 2008 NHIP Buildings

Source: UCLA 2008

Campus Map

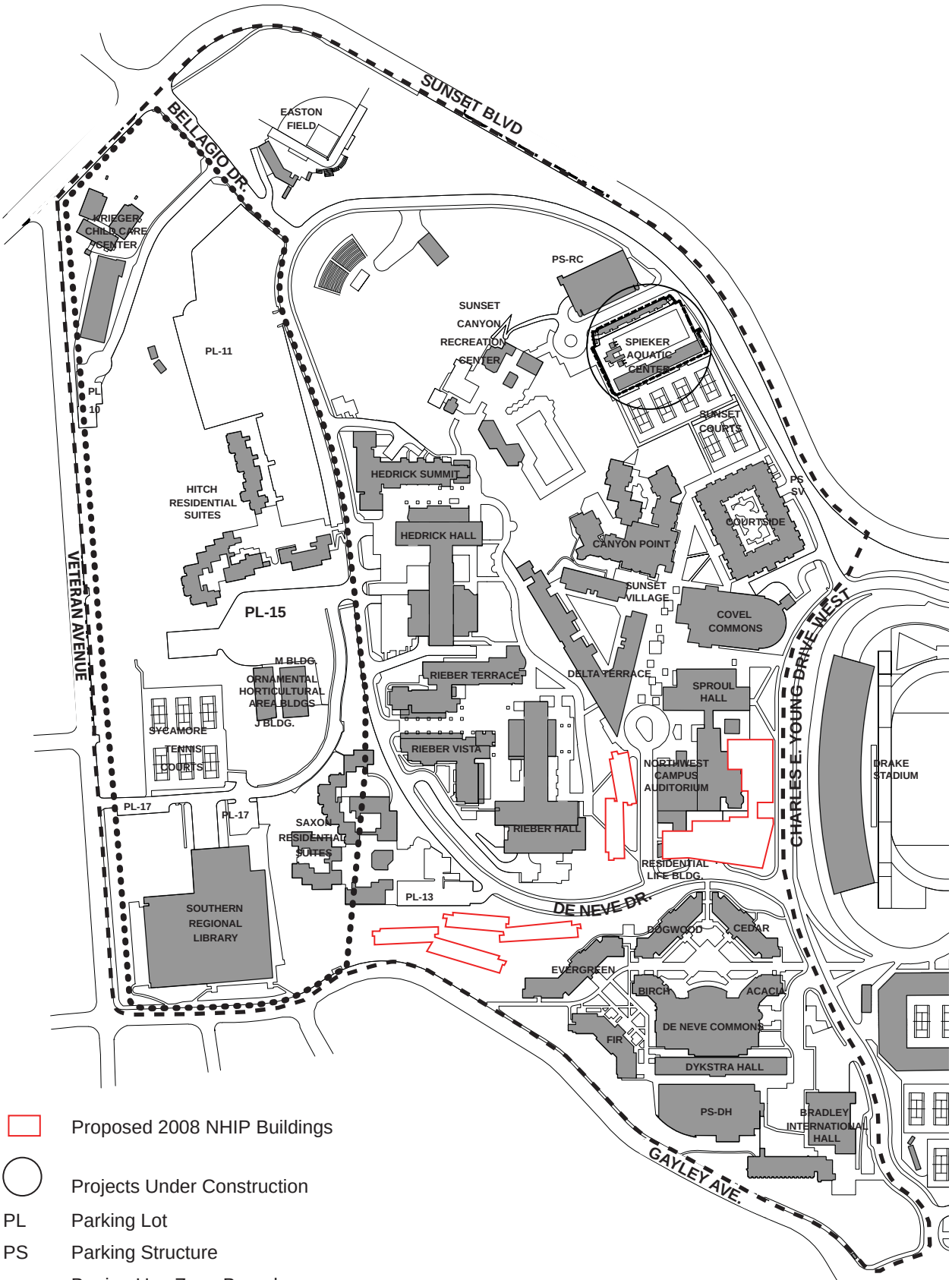
Figure 3-3

2008 NHIP and LRDP Amendment

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Proposed 2008 NHIP Buildings

Projects Under Construction

PL Parking Lot

PS Parking Structure

Benign Use Zone Boundary

Northwest Zone Boundary

Exhibit not to scale

Northwest Zone

Figure 3-4

2008 NHIP and LRDP Amendment

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3.5 2008 NORTHWEST HOUSING INFILL PROJECT CHARACTERISTICS

3.5.1 PROJECT OVERVIEW

UCLA proposes to design and construct infill housing in the Northwest zone, consisting of 1,525 beds, a Dining Commons, a Fitness Center, a Multi-Purpose Room, and a renovated/expanded Housing Maintenance space (which will replace the existing space with a larger space). The campus' Northwest zone (the only zone on campus designated for undergraduate housing) does not offer a single, large site that can accommodate 1,525 bed spaces and the related support facilities. As a result, the 2008 NHIP proposes an infill development strategy for the needed residential, support, and recreational facilities. The new housing would be accommodated in four new buildings (known as Sproul South/Complex, Sproul West, Upper De Neve, and Lower De Neve) at three locations. Potential building sites suitable for infill residential development include one site adjacent to Sproul Hall, one east of Rieber Hall, and another west of De Neve Plaza (refer to Figure 3-4).

The proposed 2008 NHIP would total approximately 550,000 gross square feet (gsf) of new building space as shown in Table 3-1, 2008 NHIP New Square Footage Summary.

TABLE 3-1
2008 NHIP NEW SQUARE FOOTAGE SUMMARY

Use	Gross Square Feet
New Residence Halls	
Sproul South [a]	85,000
Sproul West	115,000
Upper De Neve	125,000
Lower De Neve	90,000
Subtotal	*415,000*
Sproul Complex	
(Dining, Multi-Purpose Room, Maintenance and support)	*135,000*
Total	**550,000**

[a] Includes the estimated 6,000 gsf fitness center
Source: UCLA, Capital Programs July 2008.

Development of the 2008 NHIP would require demolition of the small Office of Residential Life Building and a portion of Sproul Hall (Rooms Division and Maintenance) totaling approximately 10,000 gsf. The conceptual site plan for the 2008 NHIP is presented in Figure 3-5, Conceptual Site Plan. As discussed above, the 2008 NHIP includes an amendment to the 2002 LRDP to allocate an additional 550,000 gsf of new development in the Northwest campus zone. The proposed 2008 NHIP is consistent with the campus-wide academic, physical and operational objectives and land use policies identified in the 2002 LRDP for the Northwest campus zone.

3.5.2 2008 NHIP PROJECT COMPONENTS

The 2008 NHIP consists of the following components, which are discussed further below:

- Residential, Dining and Support
- Recreation
- Pedestrian Circulation
- Vehicular Circulation

- Parking
- Utilities
- Fire Access
- Landscape and Tree Replacement
- Sustainable Features
- Housing Maintenance Space Renovation and Expansion
- Population (project staff)

Residential, Dining and Support

Given site constraints, the new residence halls would be multi-level buildings, ranging from six- to nine-stories in height, accommodating up to 1,525 beds, dining, fitness and support space. Two of the new residential buildings would flank the existing Sproul Hall: Sproul West (all residential) and Sproul South (residential and fitness) that sits above Sproul Complex (residential, dining, multipurpose space, maintenance and support). The Lower and Upper De Neve buildings are proposed to be located on the landscaped hillside west of the existing De Neve Plaza housing facilities. These buildings are further described below.

Sproul South, Sproul Complex, and Sproul West Buildings

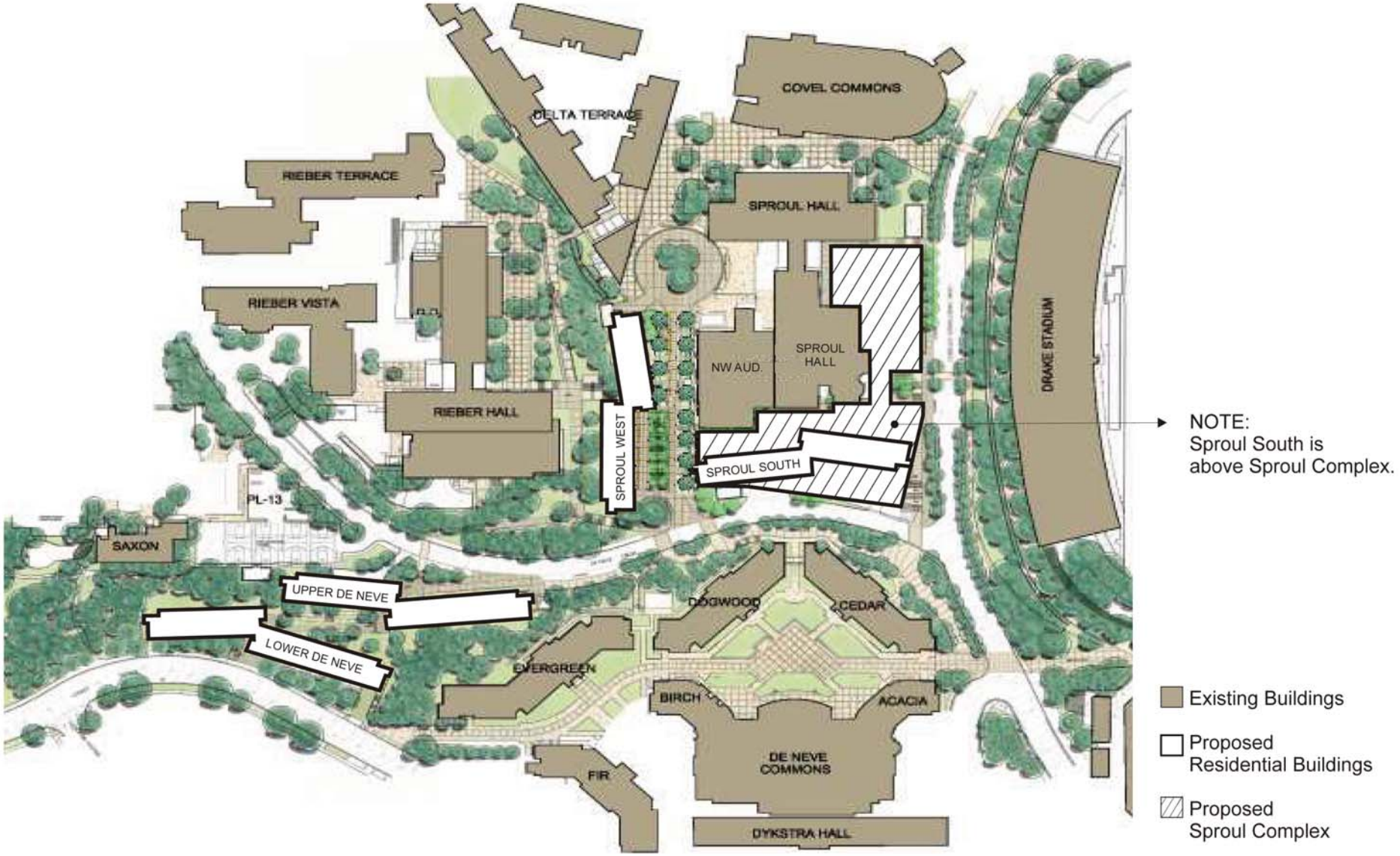
The proposed Sproul South (85,000 gsf) would be a six-story residence hall constructed on top of the new three-story Sproul Complex (135,000 gsf), which would be located on the northwest corner of De Neve Drive and Charles E Young Drive West. Figures 3-6 and 3-7 provide site sections for these proposed buildings. An approximate 6,000 gsf fitness center would be included in Sproul South. The Sproul Complex would consist of support services including a 750-seat Dining Commons, a 425-seat Multi-Purpose Room, and replacement and expansion of the Housing Maintenance space (described further below). Sproul West (115,000 gsf) would be a nine-story building located on the northwestern corner of De Neve Drive and Sproul Circle Drive.

Sproul South and Sproul West would provide approximately 715 beds in double-occupancy bedrooms. For every cluster of 50 students, single student Resident Assistant (RA) rooms would be integrated within each floor, and two apartments for professional staff and faculty-in-residence would be constructed in the Sproul West residence hall. Each of the residence halls would provide lounges (for each cluster of 50 residents), 1 multi-purpose room, 1 study room, and 1 laundry room. Additionally, each residence hall would dedicate space to housekeeping services and trash and recycling collections.

Site clearance for Sproul South and the Sproul Complex would involve demolition of the small Office of Residential Life Building (ORL) and a portion of Sproul Hall (Rooms Division and Maintenance) totaling approximately 10,000 gsf. The ORL functions would be relocated to Bradley Hall; rooms division administrative space would be accommodated in adjacent buildings; and housing maintenance would be temporarily relocated (as described below) during construction.

Upper and Lower De Neve Buildings

Upper De Neve (125,000 gsf) and Lower De Neve (90,000 gsf) would be 9 and 7 stories in height (respectively) and located west of the existing De Neve Plaza (refer to site sections provided in Figure 3-8). These residence halls would provide 810 beds in double-occupancy bedrooms and would also provide single student RA rooms. In addition, Upper and Lower De Neve would have four apartments each (eight total) for professional staff and faculty-in-



Source: UCLA 2008

2008 NHIP Conceptual Site Plan

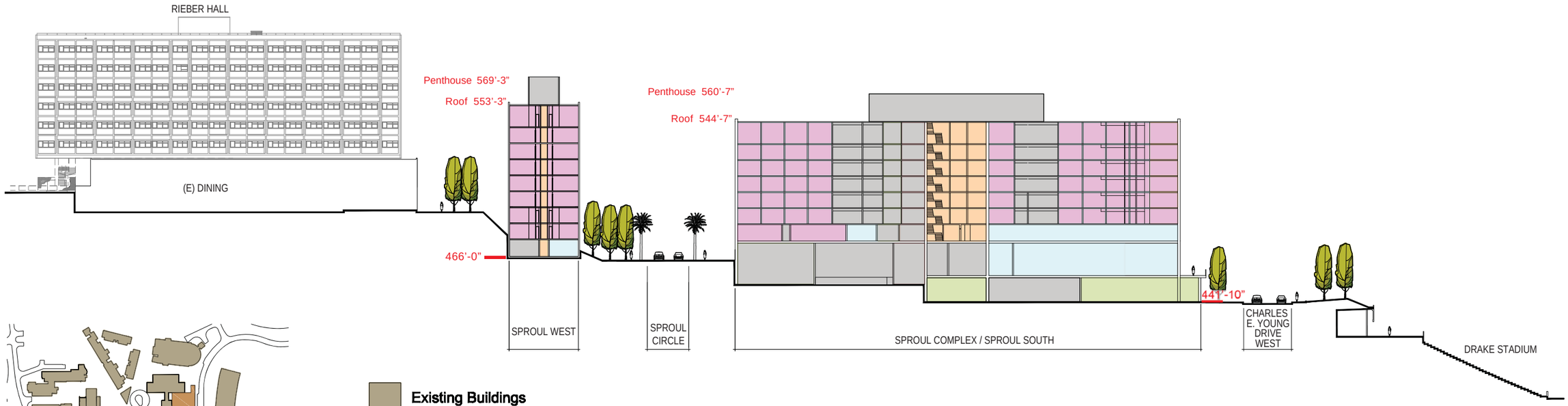
Exhibit 3-5

2008 NHIP and LRDP Amendment

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0 64' 128' 192'

- Existing Buildings
- Proposed Buildings
- Multi Purpose Rooms
- Dining
- Service
- Circulation
- Housing Maintenance

** Note: Penthouse, roof, and grade elevations (mean sea level) are shown in red.*

Source: UCLA Capital Programs June 2008

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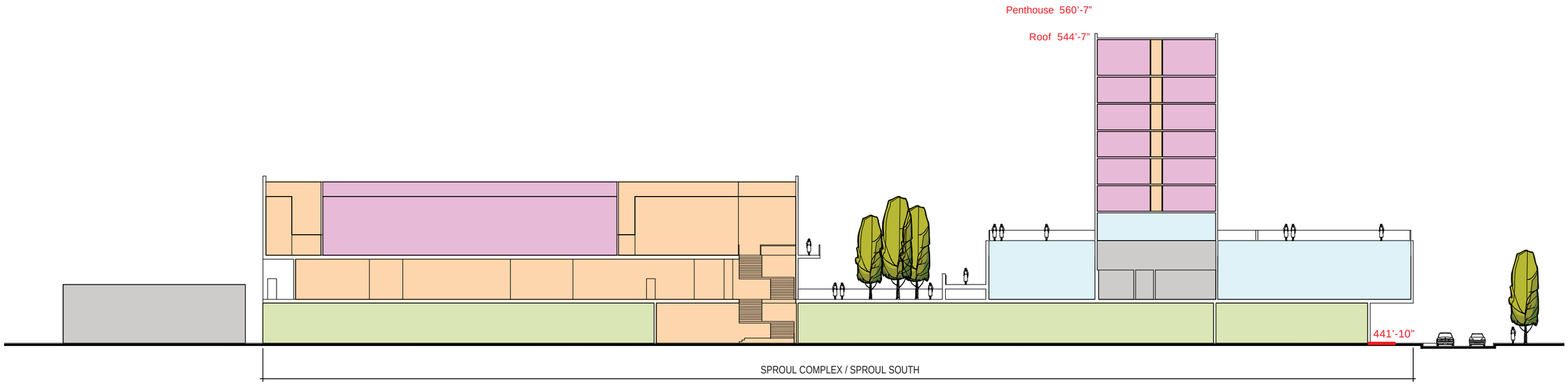
Site Section – Sproul West and Sproul Complex

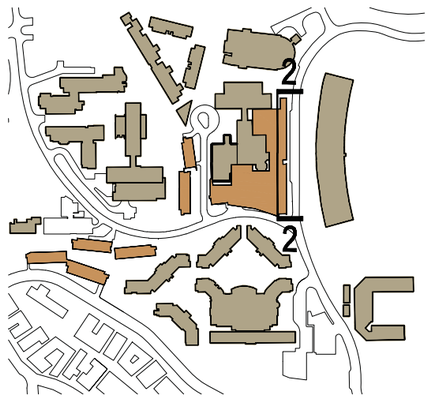
Figure 3-6

2008 NHIP and LRDP Amendment

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- Existing Buildings
- Proposed Buildings
- Multi Purpose Rooms
- Dining
- Housing Maintenance
- Service
- Circulation

** Note: Penthouse, roof, and grade elevations (mean sea level) are shown in red.*

Source: UCLA Capital Programs June 2008

Site Section – Sproul Complex

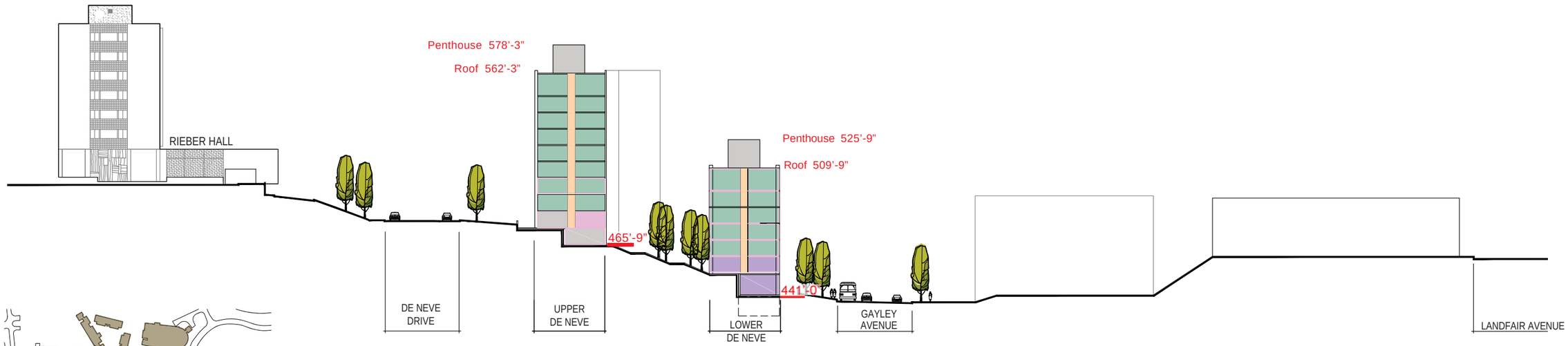
Figure 3-7

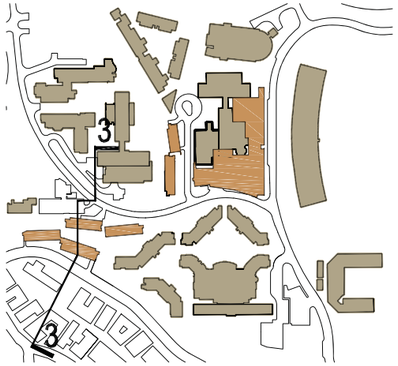
2008 NHIP and LRDP Amendment

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0 64' 128' 192'

- Existing Buildings
- Proposed Buildings
- Faculty Apartments
- Student Rooms
- Common Rooms
- Circulation
- Service

** Note: Penthouse, roof, and grade elevations (mean sea level) are shown in red.*

Source: UCLA Capital Programs June 2008

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Site Section – Upper and Lower De Neve

Figure 3-8

2008 NHIP and LRDP Amendment

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residence. Similar to the Sproul buildings, Upper and Lower De Neve would provide support uses/facilities in each building (multi-purpose room, study room, laundry facility).

Recreation

The proposed fitness center (approximately 6,000 gsf) would be located within Sproul South (above Sproul Complex) and would provide stationary cardiovascular and strength-conditioning equipment. All residential students would have access to the facility.

Pedestrian Circulation

New pedestrian pathways would support a pedestrian-friendly campus with visual links to new and existing spaces and buildings. Each new building would be integrated into the larger complex of residence halls, forming a visual relationship within the surrounding uses. Pedestrian pathways would create linkages that would draw people among residence halls, community spaces, and the rest of campus while enhancing the indoor/outdoor relationships among the proposed and existing residence halls. Figure 3-5, Conceptual Site Plan, illustrates the proposed pedestrian circulation system.

Pedestrian circulation improvements as a part of the 2008 NHIP would include the creation of a new pedestrian walkway that would begin at the entrance to the new Upper De Neve residence hall, extend parallel to the southern side of De Neve Drive, and curve south and parallel down Charles E. Young Drive West to connect with Bruin Walk (the major pedestrian access to the campus core). This walkway would accommodate the increased pedestrian flow as a result of the proposed Project and would help resolve pedestrian/vehicular conflict at the intersection of De Neve Drive and Charles Young Drive West. To accommodate the redirection of all pedestrian traffic from the existing sidewalk to the proposed pedestrian walkway, the existing sidewalk on the northern side of De Neve Drive from Charles E. Young Drive West to Sunset Village Drive would be removed.

To clear the site for the Sproul West building, two existing paths that lead from Sunset Village Drive to Rieber Hall and Rieber Dining would be removed. These paths would be replaced with one path between the two wings of the residence hall and one path on the southern side of the building. In addition, the main path that currently parallels the eastern side of Rieber Hall would be extended to the south past Rieber Dining and a new path would lead students southwest to a crosswalk on De Neve Drive that leads to the entrance of the Upper De Neve residence hall.

In addition, a new access path (ADA-compliant) would be created to connect the Upper and Lower De Neve residence halls with De Neve Drive and the pathways to the existing Rieber Dining. This access path would enhance the path of travel to the existing and proposed facilities and activities in the Northwest zone of campus.

Vehicular Circulation

Vehicular access to Sproul West would be gained from Sproul Hall Circle Drive while access to Sproul South and Sproul Complex would be gained via De Neve Drive. Vehicular circulation improvements would include (1) a new driveway for Housing Maintenance service vehicles into the Sproul Complex (from De Neve Drive), and (2) expansion of the existing Sproul Hall loading dock off De Neve Drive from two bays to three. For the new Upper De Neve building, a vehicular drop-off with two to three short-term parking spaces would be provided adjacent to De Neve Drive.

As shown in Figure 3-5, the Lower De Neve residence hall component of the 2008 NHIP would include modifications to the northern side of Gayley Avenue adjacent to the project boundary that would remove approximately eight on-street parking spaces, to provide two new service access driveways, a new fire hydrant and two short-term loading spaces. The eastern driveway would be approximately 20 feet wide and it would be used for maintenance vehicles and fire department access. The western driveway would be approximately 12 feet wide and would be used to access refuse containers for curbside loading. Between the two driveways there would be a new fire hydrant and short-term loading zone for two vehicles. Modifications to provide driveways, fire hydrant and loading zones along the Gayley Avenue project boundary would require permits from the City of Los Angeles Department of Transportation (LADOT).

Parking

Implementation of the proposed 2008 NHIP would include the removal/reconfiguration of some parking spaces (on-campus metered, permit and loading) along Charles Young Drive, Sproul Hall Circle Drive, De Neve Drive, and Gayley Avenue. The majority of these parking spaces would be replaced after completion of construction so that housing maintenance and service operations in this area are accommodated. Additionally, as described above it is anticipated that approximately eight public on-street (off-campus) spaces would be removed on the north side of Gayley Avenue for the lower De Neve building access.

Refer to Section 3.5.3, 2008 NHIP Construction Activities, below for a discussion of parking during construction.

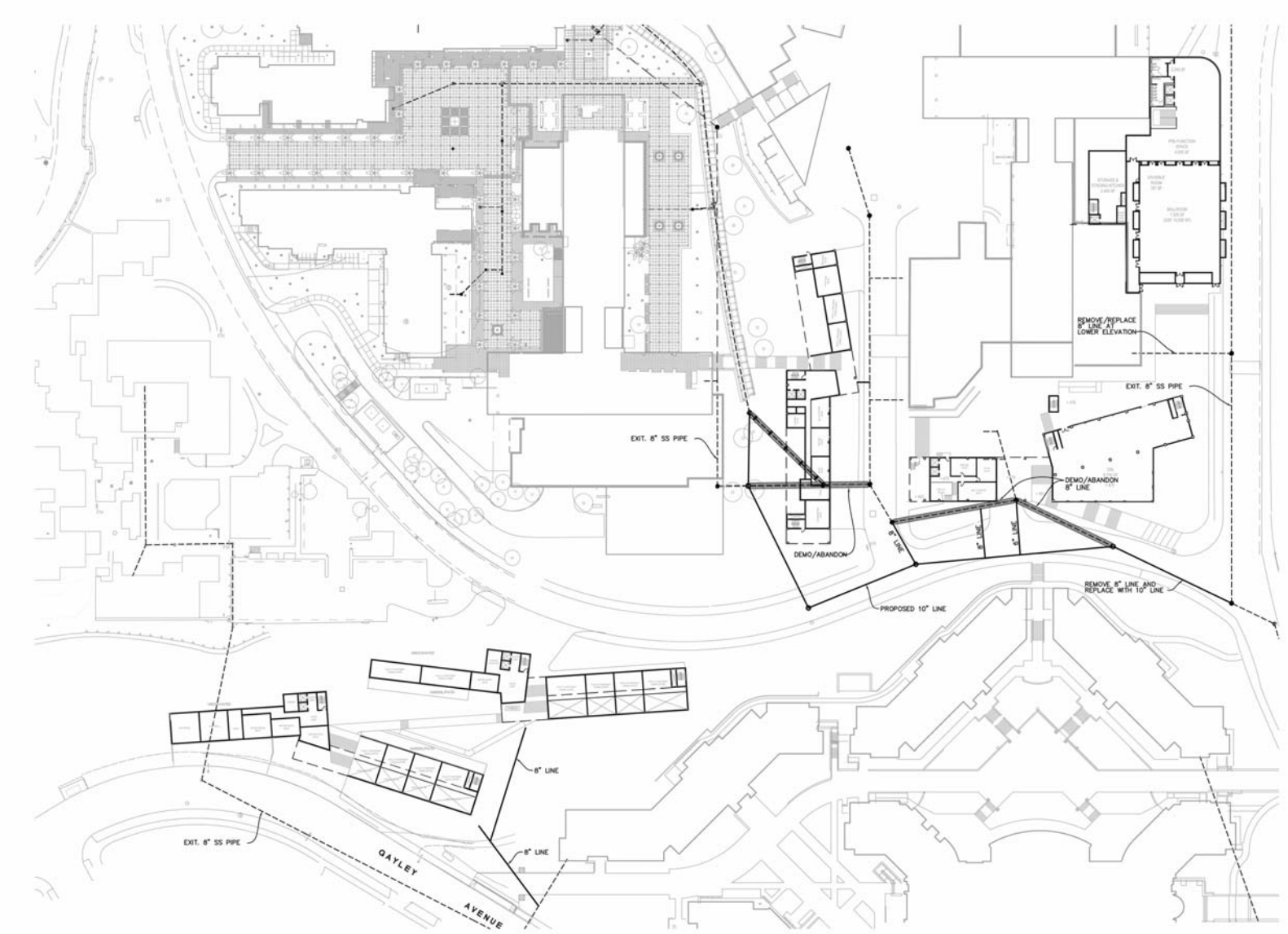
Utilities

The proposed 2008 NHIP would require (1) upgrades to the existing Northwest campus sewer, storm drain and water conveyance systems, and (2) installation of new and/or replacement connections to existing utilities to serve the proposed residential and support uses. The proposed utility system includes:

- ***Sewer.*** Development of Sproul West would abandon/demolish two existing lines and two new eight-inch lines would connect to a new ten-inch line in De Neve Drive. Sproul South would abandon/demolish two lines to be replaced by new six- and eight-inch lines that would connect to the new ten-inch line in De Neve Drive. To accommodate Upper and Lower De Neve, two new eight-inch lines (one for each building) would connect to an existing 8-inch lateral that currently connects De Neve Commons to an existing 8-inch sewer line in Gayley Avenue. The sewer line in Gayley Avenue is owned and maintained by the City of Los Angeles, Bureau of Sanitation. Figure 3-9 depicts the conceptual sewer plan.

- ***Water.*** A new four- and six-inch lateral would be installed for Sproul West and would be connected to an existing eight-inch water line in Sunset Village Drive. Sproul South and Sproul Complex would be connected to existing pipes and laterals. Upper and Lower De Neve would be serviced by one new four-inch and two new six-inch laterals that would draw water from the existing six-inch water line in De Neve Drive. Figure 3-10 depicts the conceptual water plan.

- ***Storm Drains/Water Quality Features.*** Existing storm drain lines within the Sproul West and Sproul Complex sites would be removed and replaced with new storm drain lines to serve the 2008 NHIP. Storm water from Sproul West would sheet-flow into Sproul Circle and drain to a grated inlet within Sproul Circle. Runoff would be collected via an area drain system connected to the 24-inch storm drain in De Neve Drive. For the



Source: RBF Consulting, 2008

2008 NHIP Conceptual Sewer Plan

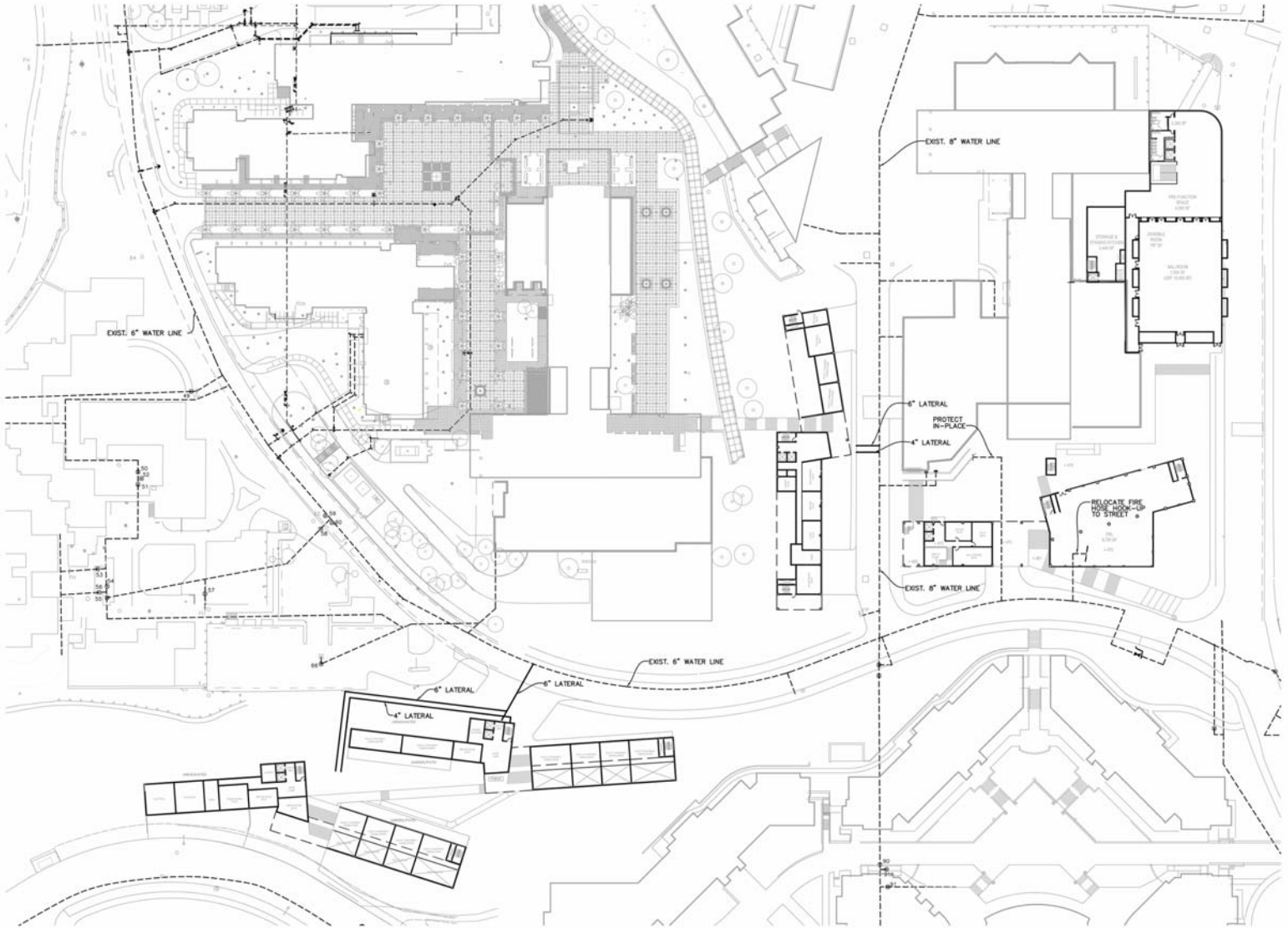
Figure 3-9

2008 NHIP and LRDP Amendment

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Source: RBF Consulting, 2008

2008 NHIP Conceptual Domestic Water Plan

Figure 3-10

2008 NHIP and LRDP Amendment

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Sproul South and Sproul Complex, a 10-inch storm drain line would be removed and replaced at a lower elevation to reconnect to the existing 33-inch storm drain in Charles E. Young Drive West. Stormwater runoff from the proposed Upper De Neve residence hall would flow into existing storm and curb drain outlets, then to a 3.5-foot catch basin in De Neve Drive, which connects to an existing 24-inch storm drain in De Neve Drive. Stormwater runoff from the proposed Lower De Neve building would drain to Gayley Avenue via existing area drains that connect beneath the sidewalk into four existing 4-inch curb drain outlets. Figure 3-11 illustrates the conceptual storm drain plan.

The proposed 2008 NHIP would include non-structural and structural Best Management Practices (BMPs) to minimize storm water pollutants of concern in compliance with respective water quality regulations (refer to Section 4.7, Hydrology and Water Quality). Non-structural BMPs would include, but not be limited to: landscape maintenance, catch basin stenciling and clean-out, efficient irrigation practices, litter control, fertilizer management, and public education. Structural BMPs may include, but not be limited to: vegetated swales, bioretention, turf block, drain inserts, wet vaults, and cisterns or storage tanks.

- ***Electrical.*** Development of Upper and Lower De Neve would include the installation of new electrical conduit encased in a minimum 3-inch concrete envelope that would tie into an existing manhole on the south side of De Neve Drive. For Sproul West, a second 3-inch concrete envelope would encase new conduit that would extend from the southern end of an existing electrical line under Sunset Village Drive and connect to an existing manhole on the south side of De Neve Drive. This new connection would continue underneath the proposed sidewalk south of De Neve Drive and connect to a new manhole in Charles Young Drive West, just east of De Neve Commons. Existing electrical lines for Sproul South/Commons will be relocated from underneath the landscaped area east of the existing Sproul Residence Hall and placed into a 3-inch concrete envelope under Charles Young Drive West. This replacement line would run underneath Charles Young Drive West from Covel Commons, south to De Neve Commons.

- ***Gas.*** Two portions of an existing 4-inch gas line would be abandoned to develop the 2008 NHIP. One section extends from De Neve Drive, continues south of Rieber Hall and runs eastward underneath Sproul Hall. The second section is underneath the landscaped area east of the existing Sproul Residence Hall and extends from Covel Commons to the intersection of Charles Young Drive West and De Neve Drive. These sections would be replaced with a 4-inch line that connects to an existing line in De Neve Drive, south of Rieber Vista Hall and would follow De Neve Drive east to Charles Young Drive West, continuing north underneath Charles Young Drive West up to Charles Young Drive North. Sproul West, South, and Complex would be connected to the new gas line via a 4-inch lateral that would extend from the line in De Neve Drive, north under Sunset Village Drive. Upper and Lower De Neve would also connect to the new gas line under De Neve Drive via a 4-inch lateral.

Fire Access

The proposed 2008 NHIP is designed in accordance with fire safety regulations to allow for fire truck access within 150 feet of all new perimeter-building walls. De Neve Drive provides this access for Upper De Neve, Sproul West, Sproul South, and Sproul Complex. Access to Sproul West can also be gained via Sproul Hall Circle Drive and Sproul South and Sproul Complex could also be accessed via Charles E. Young Drive West. Access to Lower De Neve would be via Gayley Avenue. The project design would be approved by the Campus State Fire Marshall

to insure regulatory compliance for fire safety. Fire hydrants would be provided in accordance with the *California Code of Regulations.*

Landscaping and Tree Replacement

Each of the proposed 2008 NHIP structures requires the removal of existing trees and mature landscaping (refer to the discussion provided in Section 4.3, Biological Resources). The proposed Project would involve the provision of one new tree for every one mature tree removed, and the provision of two trees for each protected tree removed (consistent with the City of Los Angeles Protected Tree Ordinance No. 177404). Relocating and/or protecting mature trees in place as part of the proposed 2008 NHIP would also occur to the extent feasible in order to retain the aesthetic value of the larger mature trees.

While the project landscape design remains in conceptual phase, the landscape plan would incorporate tree replacement as described above as well as installation of shrubs and ground cover around all the proposed new buildings and adjacent areas. Landscape design would ensure continuance of the vegetated buffer UCLA maintains on its western, northern, and eastern boundaries. Specifically, development of the Lower De Neve building would temporarily remove the existing vegetated buffer during construction; however, it would be replaced with a substantial number of trees, shrubs and ground cover to provide an attractive landscape perimeter buffer consistent with adjacent campus landscaping (e.g. Southern Regional Library and De Neve Plaza Housing complex). Areas that are generally expected to be landscaped are shown in green in Figure 3-12.

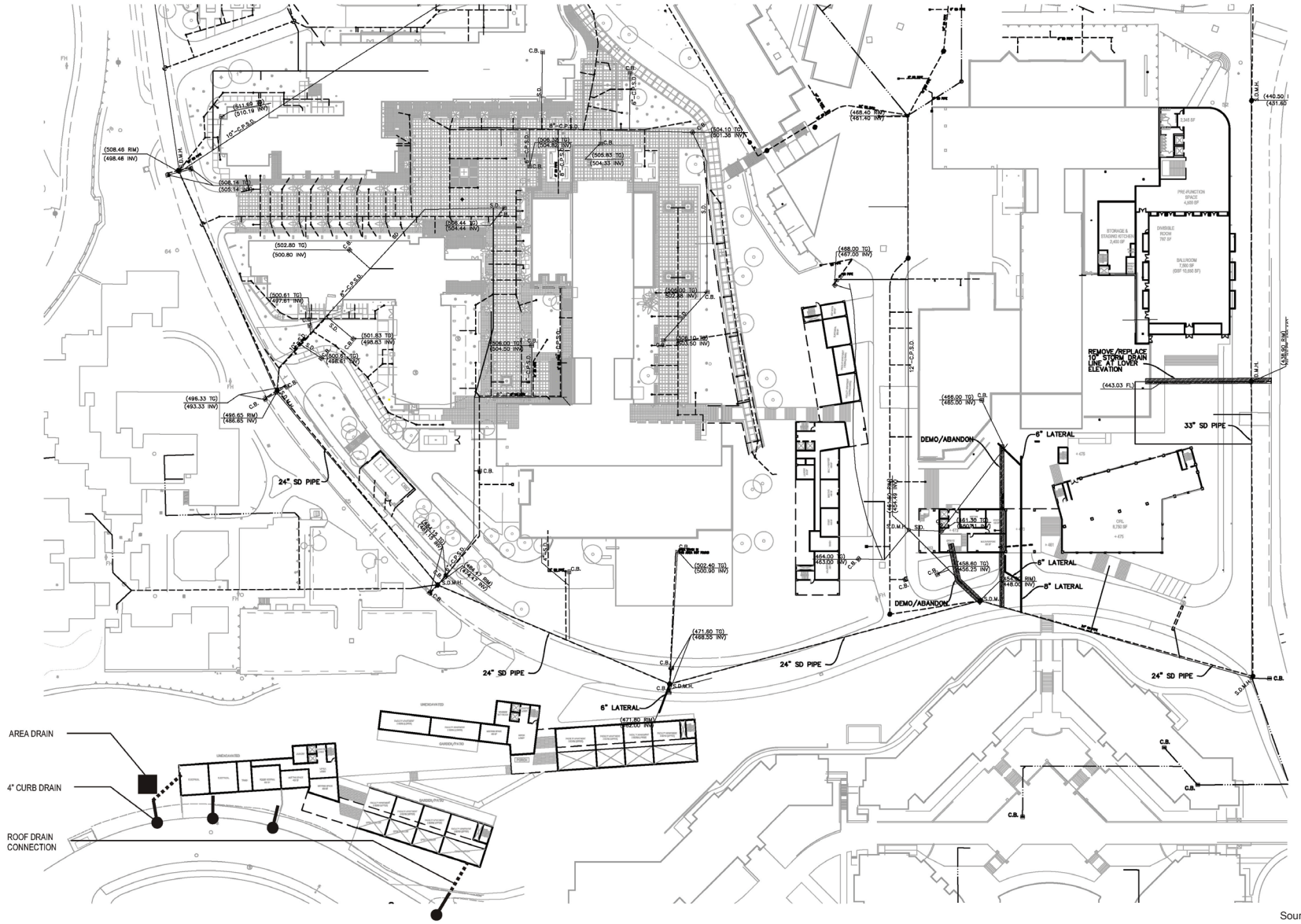
Sustainable Design Features

In an effort to reduce campus energy use and lessen the environmental impact of campus buildings, the University of California has implemented a Policy on Sustainable Practices that requires all campus buildings to follow the protocols of the US Green Building Council LEED™ for New Construction and Commercial Interiors programs. LEED™, Leadership in Energy and Environmental design, is a green building rating system which contains prerequisites and credits in five areas: environmentally sensitive site planning, water conservation, energy efficiency, conservation of materials and resources, and indoor air quality. A minimum standard equivalent to a LEED™ "Certified" rating" has been established for all UCLA projects with a goal to strive for a "Silver" rating.

To achieve these green building requirements, the design, construction and management of the proposed 2008 NHIP incorporates a series of green building strategies including, but not limited to the following:

Sustainable Sites

- Reduce the pollution to our waterways and atmosphere from construction activities and storm water runoff.
- Protect undeveloped land by developing in an urban area with existing infrastructure.
- Reduce pollution from automobiles by encouraging the use of mass transit, alternative fuel vehicles and bicycles.
- Reduce energy needs of the building by incorporating strategies to reduce the thermal properties (i.e., heat gain and loss) of the site.
- Protect the nocturnal ecosystem around the site by reducing the light that escapes from the interior of the building and the exterior lighting that is required to illuminate the site.



Source: RBF Consulting, 2008

2008 NHIP Conceptual Storm Drain Plan

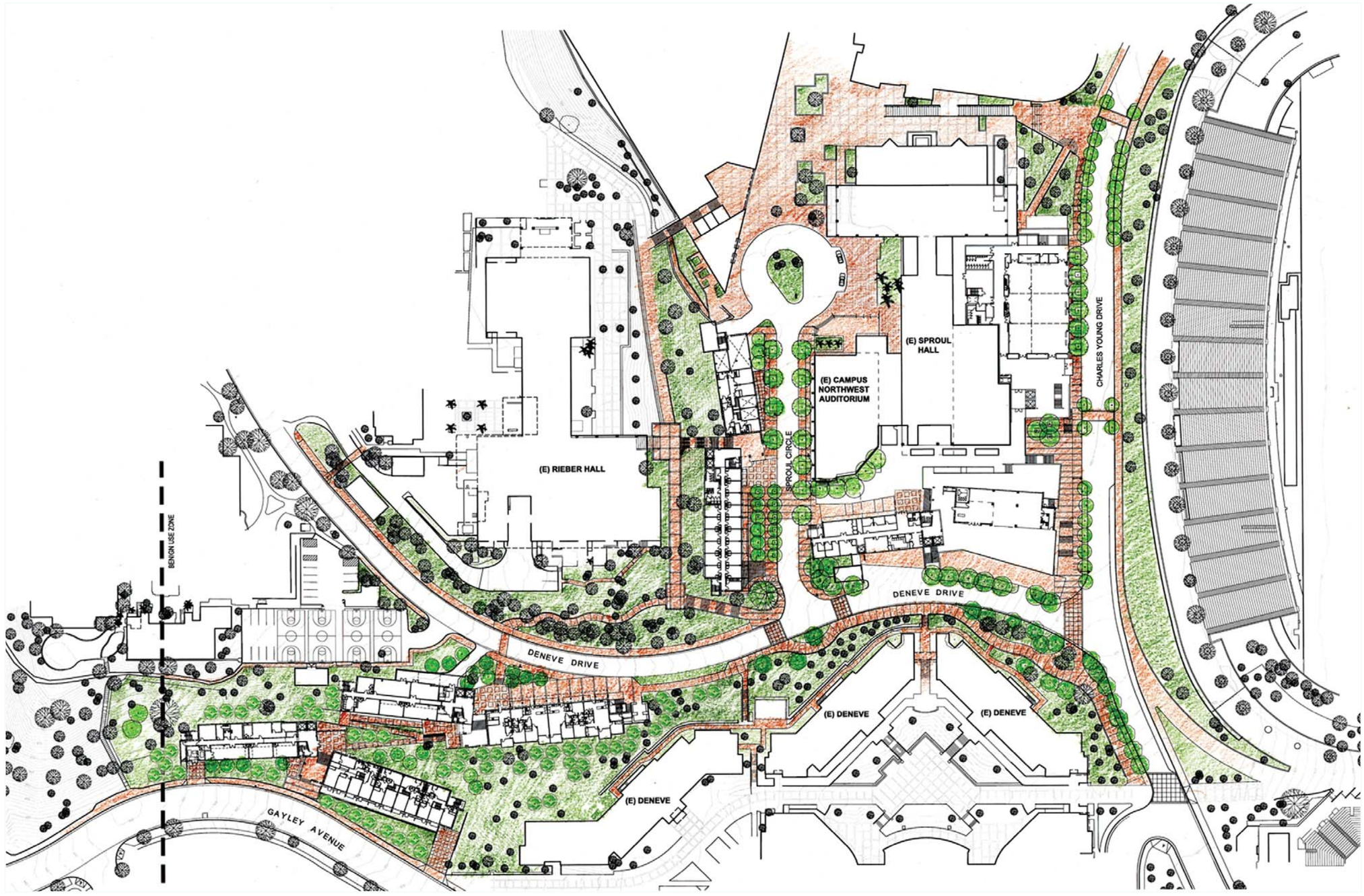
Figure 3-11

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

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Source: UCLA 2008

2008 NHIP Conceptual Landscaped Areas

Figure 3-12

2008 NHIP and LRDP Amendment

Bonterra CONSULTING

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Water Efficiency

- Employ water saving techniques to reduce the overall use of water for the proposed 2008 NHIP and the surrounding landscape.

Energy and Atmosphere

- Reduce energy use by installing, calibrating and monitoring the buildings energy related systems.
- Design buildings to outperform California Building Code (Title 24) energy efficiency standards by a minimum of 20 percent.
- Reduce ozone depletion by specifying and replacing equipment with CFC free equipment.
- Reduce use of non-renewable energy through connecting with the campus Cogeneration facility.

Materials and Resources

- Reduce construction waste and building occupant waste that is disposed of in landfills by establishing and managing recycling programs.
- Divert a minimum of 75 percent of construction waste from landfills.
- Reduce the environmental impact to the land and support the local economy by using building materials that are manufactured locally or regionally.
- Encourage socially responsible forest management by specifying that wood products are certified in accordance with the Forest Stewardship Council's (FSC) principles and criteria.

Indoor Air Quality

- Protect health and improve the comfort and well being of occupants by increasing fresh air ventilation, reducing indoor air contaminants and providing more daylight and views to the outdoors with occupant controls.
- Utilize "low-emitting" materials such as adhesives, sealants, paints, carpet, and wood to minimize occupant exposure to volatile organic compounds and formaldehyde resins.

Replacement Housing Maintenance Space

The Housing Maintenance functions currently are housed in the Sproul Hall below grade levels. This function would be temporarily relocated during construction while the area is renovated and expanded as part of the Sproul Complex. The expanded area would provide administrative, storage and shop space, as well as covered parking for electric carts and other maintenance and visitor vehicles. During construction of Sproul Complex, Housing Maintenance would be relocated to the existing "J" Building, and the Ornamental Horticulture Building south of Parking Lot 15, that are currently being used for storage. In addition temporary trailers on Lot 15 would be used to accommodate Housing Maintenance administrative functions. Temporary parking for the existing Housing Maintenance vehicles would be accommodated in Parking Lot 11 and would utilize approximately 30 parking spaces during construction of the 2008 NHIP.

Population (Project Staff)

Implementation of the proposed 2008 NHIP would allow the campus to move closer to the goals of the 2007–2017 SHMP to offer a four-year guarantee of housing to all first-year undergraduate students and a two-year guarantee for all new transfer students while reducing the number of triple accommodations closer to the actual demand. The 2008 NHIP would create housing to accommodate 1,525 existing students (who are either commuting to campus or are currently housed in triple-room accommodations); no increase in student enrollment would result from the proposed housing project.

However, additional staff would be required to serve the additional housing and students. Approximately 151 new staff members (or approximately 131 full-time-equivalent employees) would be employed on campus by 2013 to provide administrative, housing maintenance, information technology, and dining services to the expanded residential population.

3.5.3 2008 NHIP CONSTRUCTION ACTIVITIES

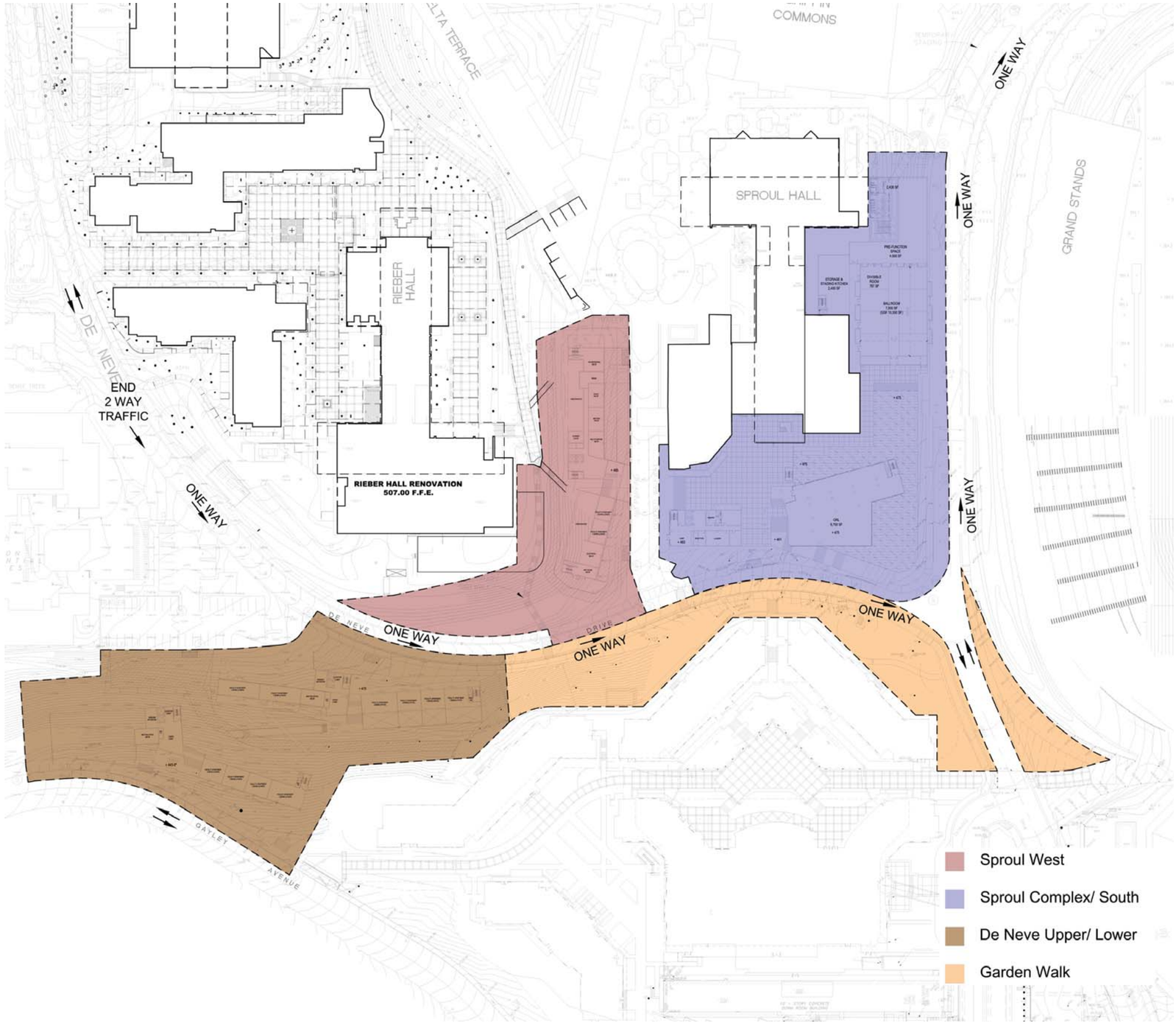
Construction of the proposed 2008 NHIP is expected to begin approximately May 2009 with an anticipated completion by December 2012. The following outlines the major project construction components, some of which would occur concurrently:

- New utility connections or modification of existing utilities for connection to the new residence halls.
- New pedestrian walkways.
- Upper and Lower De Neve.
- Sproul West, Sproul South, and Sproul Complex.

Figure 3-13 illustrates the approximate boundaries of the areas affected by construction as analyzed in this Draft EIR. In addition to the areas occupied by new buildings, a staging area is needed to receive, laydown, and prepare materials for use during construction. These staging or laydown areas are typically adjacent to the construction sites. It is anticipated that the staging area for construction of Upper and Lower De Neve would be within the construction site with the main site access provided from Gayley Avenue. The laydown area for Upper and Lower De Neve would have access from both De Neve Drive and Gayley Avenue. In addition, a portion of the south lane of De Neve Drive would be temporarily closed for construction of the Upper De Neve building to accommodate trailers, construction deliveries, and construction vehicle staging. For Lower De Neve, construction activities would require use of a portion of the parking lane on the east side of Gayley Avenue—from the De Neve Plaza traffic light up to the intersection of Gayley Avenue and Landfair Avenue—for staging of construction deliveries and vehicles. Construction activities affecting Gayley Avenue would require permits from the LADOT.

The contractor's laydown for Sproul South, Sproul Complex, and Sproul West would be within the construction site, which would include the temporary closure of Sproul Circle Drive to regular traffic (emergency vehicle access would be maintained) for dedicated use by construction activities. In addition, portions of the north lane of De Neve Drive and the west lane of Charles E. Young Drive West would be used for contractor trailers, construction deliveries, and concrete trucks.

To facilitate flow of traffic along De Neve Drive and Charles E. Young Drive West, portions of those roadways would be restricted to one-way traffic during various phases of construction.



Source: UCLA 2008

2008 NHIP Limits of Construction

Figure 3-13

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

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However, two-way vehicular access would be maintained from Bellagio Drive to De Neve Drive to maintain access to Parking Lot 11 and the Sunset Canyon Recreation Center. Flag persons and signage would be utilized to facilitate vehicular and pedestrian traffic and ensure safety during construction. Construction worker parking would be provided in Parking Lot 11 and the Dykstra Parking Structure.

Specific phasing for construction of the 2008 NHIP components is under development. However, for the purposes of this environmental analysis, which assesses construction effects, the following phased schedule is assumed:

- Phase 1: Site Utilities to begin in May 2009 and to be completed in 5 to 7 months.
- Phase 2: Upper and Lower De Neve would begin construction in October 2009 with an anticipated completion in 25 months.
- Phase 3: Sproul West and Sproul South/Complex would collectively begin construction in December 2009 with anticipated completion in 32 months.

The construction scenarios are hypothetical and represent a "worst-case" formulated solely for the purpose of evaluating construction-related impacts. The analysis of construction-related impacts also assumes that, during the peak construction period, all four residence halls and the Sproul Complex would be under construction at the same time.

The proposed construction vehicle haul route is described below.

Sproul West, Sproul South/Complex, and Upper De Neve

Approach: Construction vehicles would exit Interstate 405 Freeway at Wilshire Boulevard, head northbound on Veteran Avenue, eastbound on Weyburn Avenue, northbound on Gayley Avenue, turn eastbound onto Strathmore Drive campus entrance, northbound onto Charles Young Drive West, staying on Charles Young Drive West or continuing onto De Neve Drive to the project sites.

Departure: Construction vehicles would head southbound onto Charles Young Drive West, westbound on Strathmore Drive, southbound on Gayley Avenue, westbound on Weyburn Avenue, southbound on Veteran Avenue, and westbound onto Wilshire Boulevard to the Interstate 405.

Lower De Neve

Approach**:** Construction vehicles would exit Interstate 405 Freeway at Wilshire Boulevard, head northbound on Veteran Avenue, eastbound on Weyburn Avenue, and northbound on Gayley Avenue to the project site.

Departure: Construction vehicles would depart the site heading westbound on Gayley Avenue, turning southbound onto Veteran Avenue and westbound on Wilshire Boulevard to the Interstate 405 Freeway.

3.6 COMPONENTS OF THE AMENDMENT TO THE 2002 LRDP

As previously described, because the proposed 2008 NHIP was not contemplated in the 2002 LRDP, an amendment to the 2002 LRDP to add 550,000 gsf to the Northwest campus zone is proposed to accommodate the 2008 NHIP. In addition, because the proposed 2008 NHIP has a completion date of 2013, , the 2013 campus population is estimated to account for potential growth beyond the 2010 population projections provided in the 2002 LRDP for purposes of the environmental impact analysis. The proposed LRDP Amendment would maintain and extend from 2010 (the 2002 LRDP horizon year) to 2013 (LRDP Amendment horizon year) the average daily vehicle trip and parking space inventory. The proposed LRDP Amendment identifies the existing developed campus square footage and parking spaces and the remaining development allocation under the 2002 LRDP available for future campus development. This proposed 2002 LRDP Amendment also updates the currently remaining 2002 LRDP development allocations by zone in order to account for changes in planning assumptions related to previously proposed projects and demolition of existing buildings that have not yet been undertaken as previously assumed in the 2002 LRDP and analyzed in the 2002 LRDP Final EIR.

3.6.1 EXISTING SQUARE FOOTAGE BASELINE

UCLA currently has approximately 16.8 million gross square feet of occupied space and 7.6 million gsf of parking structures that provide 24,074 parking spaces on the main campus. The existing campus square footage of approximately 16.8 million gsf reflects the total square footage of occupied space on the campus as of 2008, the baseline year for purposes of this EIR analysis.

The 16.8 million gsf of existing campus space includes certain buildings that were previously proposed to be demolished by the 2002 LRDP's 2010 planning horizon (i.e., portions of the Center for the Health Sciences [CHS] and Warren Hall). However, these buildings remain on the ground and wholly or partially occupied with no set date for future demolition due to changed planning assumptions and budget and schedule uncertainties. As such, these buildings are part of, and would remain in the campus space inventory, for planning purposes. The 16.8 million gsf also includes buildings that have been constructed and occupied pursuant to the new development allocations established in the 1990 and 2002 LRDPs (although there are several, the major projects include the Reagan-UCLA Medical Center, Southwest and Northwest student housing, medical research laboratory buildings, student services and other academic and research buildings). Refer to Appendix B, 2002 LRDP Amendment Revised Tables, for detailed lists of all campus buildings by land use zone.

3.6.2 REMAINING 2002 LRDP DEVELOPMENT ALLOCATION – SQUARE FOOTAGE UPDATES

The 2002 LRDP re-allocated approximately 1.71 million gsf of future development remaining under the 1990 LRDP among the eight campus land use zones as summarized in Table 8, Proposed Development Re-allocation by LRDP zone, of the 2002 LRDP (UCLA 2003a, page 31), and shown in detail by zone in the 2002 LRDP Tables 9–16 (UCLA 2003a, pages 34–48).

In addition, the 2002 LRDP included Appendix B, List of Buildings by LRDP Zone as of 2001-02, that listed all existing campus buildings and provided the existing total square footage for each zone. The square footage totals by zone in Appendix B of the 2002 LRDP included projects that were under construction, as well as proposed projects for which an EIR had been prepared but that had not yet been undertaken (e.g., in-fill projects requiring demolition of existing building(s) followed by new construction). Based on planning assumptions reflected in approved CEQA

documents at the time the 2002 LRDP was prepared, the total campus square footage was identified as 15,387,130 gsf and included projects that were under construction, projects that had received approval but were not yet under construction, and all phases of multi-phased projects analyzed in an adopted CEQA document even if all phases had not yet been approved.

The 2002 LRDP assumed that projects for which an EIR had been prepared but that had not yet been undertaken would proceed as originally planned and therefore the square footage for those projects (e.g., Southwest Graduate Housing Phase 2 and Seismic Replacement Building 3) was included as part of the 2002 LRDP baseline square footage for purposes of those previous environmental analyses. Since that time, changes to planning assumptions for these projects have occurred and are due to several factors including: funding availability and schedule uncertainties; changes in program needs; construction delays and increased construction costs; new seismic ratings; and availability of new construction technology related to seismic retrofits.

Accordingly, the proposed LRDP Amendment updates the remaining 2002 LRDP square footage allocations by zone to reflect existing conditions and to account for the square footage of new construction and associated demolition projects that have been completed pursuant to the 1990 and 2002 LRDPs. Appendix B of this EIR provides detailed tables that reflect the changed planning assumptions for those projects that have not proceeded as originally planned and the associated square footage revisions for each campus land-use zone. Specifically, Appendix B provides the 2002 LRDP square footage tables revised by the Project's proposed LRDP Amendment, which include: (1) 2002 LRDP Appendix B (Revised) – List of Buildings by LRDP Zone as of 2008, (2) 2002 LRDP Table 8 (Revised) – Proposed Development Re-allocation by LRDP Zone, and (3) 2002 LRDP Tables 9–16 (Revised), which display the changes and remaining development allocation by campus land-use zone. As indicated in Revised 2002 LRDP Table 8 in Appendix B, the remaining development allocation under the 2002 LRDP is 1.32 million square feet. The proposed LRDP Amendment updates the zone allocations, but does not change the overall remaining development allocation under the 2002 LRDP except for the addition of 550,000 gsf in the Northwest zone necessary to accommodate the proposed 2008 NHIP.

3.6.3 2002 LRDP IMPLEMENTATION STATUS

As approved in February 2003, the 2002 LRDP provided for development of approximately 1.71 million gsf that remained from the 3.71 million gsf, which was adopted in November 1990 under the 1990 LRDP. In addition, the 2002 LRDP maintained the same vehicle trip generation and parking space limits adopted in the 1990 LRDP while accommodating an increase in student enrollment.

To provide the campus context for the proposed LRDP Amendment, Table 3-2 identifies the major parameters of the 2002 LRDP compared with their current implementation status; it also shows the anticipated effects of the proposed LRDP Amendment on the square footage, vehicle trip, and parking limits of the 2002 LRDP.

As previously described above, and shown in Table 3-2, there is approximately 1.32 million square feet of previously allocated (i.e., through the 1990 LRDP) development remaining under the 2002 LRDP. The proposed LRDP Amendment would retain the remaining 1.32 million square feet to address vital needs for educational and research programs identified in the 2002 LRDP, through the 2013 planning horizon. The proposed LRDP Amendment proposes an addition of 550,000 gsf to accommodate the 2008 NHIP in the Northwest zone. Therefore, the development allocation under the proposed LRDP Amendment including the 2008 NHIP would total 1.87 million square feet.

TABLE 3-2
2002 LONG RANGE DEVELOPMENT PLAN IMPLEMENTATION STATUS AS OF 2008 AND PROPOSED LRDP AMENDMENT

	Planning Horizon Year	Development Allocation (square feet)	Vehicle Trips	Parking Spaces
2002 LRDP	2010	1.71 million	139,500 limit	25,169 limit
2002 LRDP Implementation Status (2008)	2010	1.32 million remaining	119,269	24,074
Proposed LRDP Amendment	2013	1.87 million remaining (including additional 550,000 gsf for the LRDP Amendment to accommodate the 2008 NHIP)	139,500	25,169

Table 3-2 also reflects that the campus is well within the vehicle trip generation and parking space limits of the 2002 LRDP that were adopted in 1990, and the amendment would not modify those limits through 2013.

3.6.4 POPULATION ESTIMATES

As previously described, the 2002 LRDP updated the 1990 LRDP to accommodate an increase in student enrollment from 33,829 full-time equivalent (FTE) in 1999-00 to a projected 37,829 FTE in 2010-11, or a total of 4,000 FTE. Associated growth in academic employees and staff employees was also projected for 2010-11. The overall regular session average weekday campus population (i.e., students, employees, and visitors) was estimated to increase from 56,668 in 2001-02 to 61,541 in 2010-11. The 2002 LRDP included "Table 6, Regular Session On-Campus Population" 2002 LRDP, Page 26, which presented the 2010–2011 three-quarter average population projections for students, faculty, staff, and visitors as just described. The current 2007-08 average weekday campus population is approximately 59,711.

For analytical purposes in this Draft EIR, the proposed LRDP Amendment provides campus population estimates for 2013 (the anticipated horizon year for the proposed Project). The proposed LRDP Amendment includes an update of Table 6 of the 2002 LRDP, which is provided in Section 4.10 Population (Table 4.10-4). As shown in Table 4.10-4, the average weekday on-campus population is estimated to increase from approximately 59,711 in 2007–2008 to approximately 62,490 in 2013; an estimated growth of approximately 4.65 percent (or approximately 2,780 individuals). The increase includes approximately 1,638 students and academic/staff employees, and 1,142 other individuals (e.g., visitors, medical center patients, volunteers, vendors and contractors).

3.6.5 SUMMARY OF THE PROPOSED LRDP AMENDMENT

In summary, based upon the information provided above, the proposed 2002 LRDP Amendment includes the following:

- ***Adds square footage for student housing.*** The proposed amendment to the 2002 LRDP includes provision of an additional 550,000 gsf for the 2008 NHIP in the Northwest campus zone. 2002 LRDP **Table 8 (Proposed Development Re-Allocation by LRDP Zone)** and **Table 15 (Northwest Zone)** are revised to reflect this proposed additional square footage. (Revised Table 8 and Table 15 are provided in Appendix B of this EIR.)

- ***Updates 2002 LRDP existing square footage and remaining development allocation by zone.*** The proposed amendment to the 2002 LRDP includes updates to the 2002 LRDP existing square footage and remaining development allocation to (1) reflect changes in planning assumptions related to previously proposed projects and demolition of existing buildings that have not yet occurred, and (2) to account for new development and demolition that has occurred pursuant to the 1990 and 2002 LRDPs. **2002 LRDP Appendix B (List of Buildings)** and **Tables 8–16** are revised to reflect these updates. (Revised 2002 LRDP Appendix B and Tables 8-16 are provided in Appendix B of this EIR.

- ***Estimates campus population growth through 2013.*** The proposed amendment to the 2002 LRDP includes estimated campus population growth through 2013. **2002 LRDP Table 6 (Regular Session On-Campus Population)** is revised to reflect estimated campus population growth through 2013 (Revised Table 6 is provided as Table 4.10-4 in Section 4.10, Population and Housing.)

The updated LRDP Amendment tables that are provided in Appendix B of this EIR indicate that as a result of the proposed Project (i.e., 2008 NHIP and associated LRDP Amendment) the campus space inventory could increase from 16.8 million gsf in 2007-08 to 18.9 million gsf in 2013 assuming that the projects currently under construction or pending demolition (138,000 gsf), and the remaining 2002 LRDP development allocation of 1.32 million gsf and the proposed 550,000 gsf for the proposed 2008 NHIP are built-out.

3.7 INTENDED USES OF THE EIR

The Regents and the responsible agencies identified below are expected to use the information contained in this EIR for consideration of approvals related to and involved in the implementation of the proposed 2008 NHIP. This EIR has been prepared to address all State, regional, and local government approvals needed for construction and/or operation of the proposed NHIP, whether or not such actions are known or are explicitly listed in this EIR. Anticipated approvals required to implement the proposed NHIP include, but are not limited to:

3.7.1 UNIVERSITY OF CALIFORNIA BOARD OF REGENTS

- Certification of the EIR
- Adoption of the Statement of Overriding Considerations
- Approval of the 2008 Northwest Campus Student Housing Infill Project and LRDP Amendment
- Adoption of the Findings of Fact
- Adoption of the MMRP

3.7.2 RESPONSIBLE AGENCIES

State of California Water Resources Control Board (SWRCB)

- UCLA, or its designee, will file a Notice of Intent with the SWRCB, Division of Water Quality for coverage under the State Construction General NPDES permit.

South Coast Air Quality Management District

- Permits to Construct and/or Permits to Operate (for any new or relocated stationary sources of equipment that emit or control air contaminants, such as heating, ventilation, and air conditioning [HVAC] units).

City of Los Angeles, Department of Transportation

- City street encroachment permit for temporary construction access.

- Street improvement plans for modifications to Gayley Avenue (removal of parking, provision of loading zone, and Lower De Neve driveway access).

3.8 REFERENCES

California, State of. 2006 (as amended). *California Public Resources Code* (Section §21000 et seq). Environmental Quality. Sacramento, CA: the State. http://info.sen.ca.gov/cgi-bin/displaycode?section=prc&group=21001-22000&file=21080-21098.

University of California, Los Angeles (UCLA). 2007 (October). *UCLA Student Housing Master Plan 2007-2017*. Los Angeles, CA: UCLA.

———. 2003a (February). *2002 Long Range Development Plan and Final EIR.* Los Angeles, CA: UCLA.

———. 2003b (February). *University of California, Los Angeles 2002 Long Range Development Plan Final Environmental Impact Report* (SCH No. 89072618) (prepared by EIP Associates). Los Angeles, CA: EIP Associates.

University of California Regents. 2007 (March). University of California Policy Guidelines for Sustainable Practices. Oakland, CA: the University of California Regents.

SECTION 4.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

4.0.1 INTRODUCTION AND PROJECT TERMINOLOGY

Sections 4.1 through 4.15 of this EIR contain a discussion of the potential environmental effects of implementing the proposed Project and include information related to existing site conditions, analyses of the type and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts.

This "Introduction to the Environmental Analysis Section" is provided to assist the reader in understanding the terminology, format, content, and overall approach to the environmental analysis. The proposed Project has a number of components, and the terminology used in this section to identify these components varies. For reference, the proposed Project components are herein referred to as:

- ***Proposed 2008 NHIP*** refers to the proposed undergraduate student Northwest Housing Infill Project (NHIP), which is evaluated at a project-specific level in this EIR.

- ***Proposed LRDP Amendment*** refers to the proposed amendment to the 2002 LRDP as described in Section 3, Project Description. This includes the amendment to the 2002 LRDP to accommodate the proposed 2008 NHIP and proposed updates to the 2002 LRDP development assumptions and population estimates from 2010 to 2013.

- ***Buildout of the 2002 LRDP, as amended*** refers to full implementation of the remaining development allocation (square footage, parking spaces, vehicle trips) under the 2002 LRDP, as proposed for amendment herein, including the proposed 2008 NHIP. This terminology (i.e., "buildout of the 2002 LRDP, as amended") is the basis for the programmatic analysis presented in this EIR.

4.0.2 FORMAT OF THE ENVIRONMENTAL ANALYSIS

Sections 4.1 through 4.15 are formatted to include the subheadings listed below.

Environmental Setting

According to Section 15125 of the CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the "baseline condition" against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the Notice of Preparation (NOP) is published. The NOP for this Draft EIR was published in May 2008. However, the CEQA Guidelines recognize that the date for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time periods, the use of environmental baselines that differ from the NOP date is reasonable and appropriate when doing so results in a more accurate or conservative environmental analysis. Where the baseline differs from the when the NOP was published, this is explained in the respective technical sections in Section 4 of this EIR.

For analytical purposes, impacts associated with the proposed Project are derived from two fundamental components of the existing baseline environmental setting—the average weekday campus population during the regular session (nine months between October and June) and the built environment. With respect to population, the baseline year is academic year 2007–2008, the academic year during which the NOP was published. For purposes of evaluating impacts

related to physical development, the baseline condition for the environmental setting includes all existing development and projects that are under construction[1] as of academic year 2007–2008.

Regulatory Framework

The Regulatory Framework provides a summary of federal, State, and/or local regulations, plans, policies, and laws that are relevant to each issue area and the proposed Project. It should be noted that UCLA is part of the University of California, a constitutionally created entity of the State of California. As a constitutional entity, the University of California is not subject to municipal regulations, such as the County and City General Plans. However, for some technical issues UCLA has determined that use of municipal regulations is appropriate. These instances are specifically identified in the respective technical sections.

Project Impacts and Mitigation

This section is further divided into the following subsections.

Analytic Method

This subsection identifies the methodology used to analyze potential environmental impacts.

Thresholds of Significance

Thresholds of significance are criteria used to determine whether potential environmental effects are significant. The thresholds of significance used in this analysis were primarily based upon Appendix G of the CEQA Guidelines; however, in some cases, standards were developed specifically for this analysis or reflect those used by the University in other environmental analyses. This subsection defines the type, amount, and/or extent of impact that would be considered a significant adverse change in the environment. Some thresholds (e.g., air quality, traffic, and noise) are quantitative, while others (e.g., visual quality) are qualitative. The thresholds are intended to assist the reader in understanding how and why the EIR reaches a conclusion that an impact is significant or less than significant.

Impact Analysis

This section contains the detailed analysis of potential environmental impacts based on the established thresholds of significance. The following information is provided for each topical issue:

- ***Campus Programs, Practices, and Procedures.*** These refer to the ongoing established programs, practices, and procedures (PPs) from the 2002 LRDP Final EIR that the campus regularly recognizes and follows and are considered part of the Project description (assumed to be in place for purposes of analysis). New PPs that have been developed by UCLA since adoption of the 2002 LRDP Final EIR are also identified.

- ***Impact Analysis for each Threshold of Significance.*** The Initial Study identified potentially significant impacts resulting from the proposed 2008 NHIP and/or LRDP Amendment; this section addresses those impacts. Thresholds that were determined not to require further review are also identified. Following the identification of each threshold, the analysis of the proposed 2008 NHIP (project-level) and remaining buildout of the

[1] Projects under construction include the Spieker Aquatic Center, Engineering 1 Unit A Demolition, Life Sciences Replacement Building, and the Police Department Replacement Building.

2002 LRDP, as amended (program-level), is provided. As required by Section 15126.2(a) of the CEQA Guidelines, direct, indirect, short-term (construction-related), and long-term (operational) impacts are addressed, as appropriate, for the environmental issue area being analyzed. Impacts on campus and off campus are addressed as appropriate. At the end of the impact analysis, numbered impact statements are presented which summarize the impact conclusion. Where the impact conclusion is different for the proposed 2008 NHIP and the remaining buildout of the 2002 LRDP, as amended, separate impact statements are provided. It should also be noted that there may be multiple impact statements under each threshold. Each impact statement identifies the level of significance after mitigation (no impact, less than significant, or significant and unavoidable).

- ***Project-level and Program-level Environmental Review.*** The EIR includes "Project-level" analysis of the environmental impacts of the proposed 2008 NHIP and "Program-level" environmental review of the remaining buildout of the 2002 LRDP, as amended, which includes the updated gross square feet (gsf) and population levels through 2013. A "Program-level" review is broader than a "Project-level" review in that its focus is on the LRDP, a land use plan that guides the physical development of the campus. The LRDP is not an implementation plan and does not constitute a commitment to any specific project. Therefore, the environmental analysis for buildout of the 2002 LRDP, as amended, is programmatic, rather than project-specific, as the actual sites and design of future buildings are undetermined (with the exception of the proposed 2008 NHIP). This EIR updates the impact analysis and conclusions of the 2002 LRDP Final EIR (SCH # 2002031115, February 2003) to reflect new baseline conditions, examine the remaining future development allocation under the 2002 LRDP together with the proposed addition of 550,000 gsf for the proposed 2008 NHIP, and consider an extension of the planning horizon from 2010 to 2013 (refer to Section 3.6 for a description of the planning horizon year). However, each future building proposal undertaken during the LRDP planning horizon will require project-specific environmental review in accordance with CEQA. If adopted, the campus may tier future project-level CEQA analysis from this updated program-level analysis, as appropriate.

  This subsection also includes feasible mitigation measures that could reduce the severity of an identified potentially significant impact. These include mitigation measures carried forward from the 2002 LRDP Final EIR, as appropriate, and new mitigation measures that have been identified in this EIR.

Cumulative Impacts

CEQA requires that EIRs discuss cumulative impacts in addition to project-specific impacts. In accordance with Section 15130(b) of the CEQA Guidelines, "the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone". Further, the discussion is guided by the standards of practicality and reasonableness. According to Section 15355 of the CEQA Guidelines:

> "Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
>
> (a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130(a) of the CEQA Guidelines also requires that EIRs discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, it need not consider the effect significant but shall briefly describe the basis for its conclusion. As further clarified by Section 15065 of the CEQA Guidelines, "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. If the combined cumulative impact associated with the project's incremental effects and the effects of other projects is not significant, 15130(a)(2) of the CEQA Guidelines requires a brief discussion in the EIR of why the cumulative impact is not significant and is not discussed in further detail. Section 15130(a)(3) of the CEQA Guidelines requires supporting analysis in the EIR if a determination is made that a project's contribution to a significant cumulative impact is rendered less than cumulatively considerable and, therefore, is not significant. To support each significance conclusion, this EIR provides a detailed cumulative impact analysis, and where project-specific impacts have been identified that, together with the effects of other pending projects, could result in cumulatively significant impacts, these potential impacts are documented.

The CEQA Guidelines (Section 15130[b][1]) states that the information used in an analysis of cumulative impacts should come from one of two sources, either:

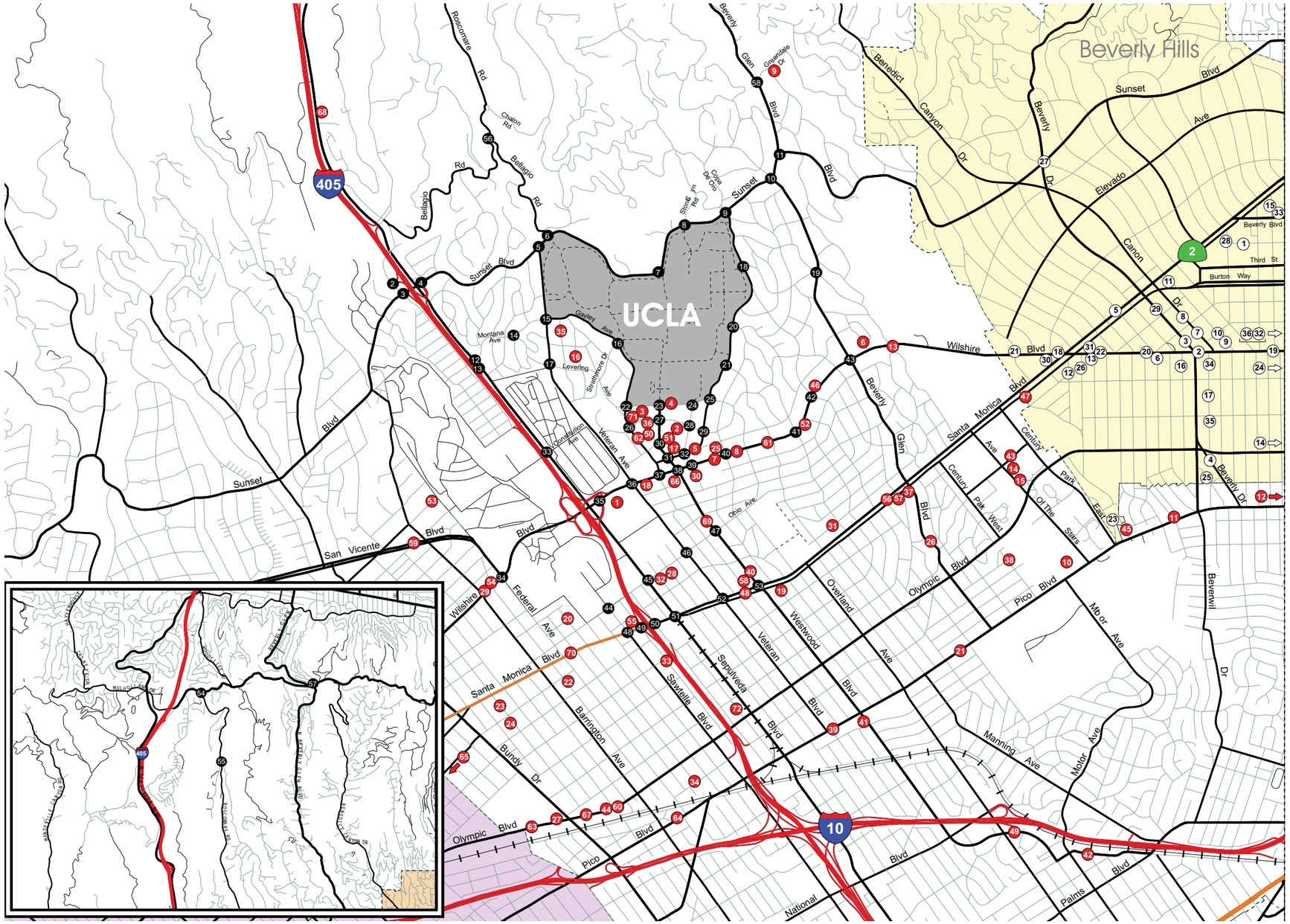
1. A list of past, present, and probable future projects producing related cumulative impacts, including if necessary, those projects outside the control of the agency, or

2. A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or areawide conditions.

The cumulative impacts analyses contained in this EIR use both methods. As appropriate, the cumulative impact analyses provided in this EIR uses the *City of Los Angeles General Plan Framework* study area. These cumulative impact analyses take into consideration the demographic projections and land use buildout assumptions outlined in the *General Plan Framework Final EIR* that were approved by the City of Los Angeles in 1996.

In addition to the *City of Los Angeles General Plan Framework* study area, the cumulative analysis for individual topical issues may consider specific cumulative study areas designated by respective agencies for regional or areawide conditions. Topic-specific cumulative study areas have been developed for traffic and air quality (e.g., South Coast Air Basin). Also, this EIR considers regional programs directed at mitigating cumulative impacts of development such as those instituted for urban runoff. A description of the basis for the cumulative impact analysis for individual topical issues is provided within each cumulative analysis discussion in Sections 4.1 through 4.15 of this EIR.

Finally and where appropriate to the analysis in question, cumulative impacts are assessed with reference to a list of off-campus "related projects", as described by Section 15130(b) of the CEQA Guidelines. A variety of off-campus, related projects within a two and one-half-mile radius of campus are reflected in Table 4-1 and shown in Figure 4-1, and include those projects that



Legend

- 1 — Study Intersection
- 1 — Related Project (Los Angeles)
- 1 — Related Project (Beverly Hills)

NOT TO SCALE

Source: Iteris Inc. 2008

Related Project Locations

Figure 4-1

2008 NHIP and LRDP Amendment

Bonterra CONSULTING

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are (1) completed but not fully occupied; (2) currently under construction or beginning construction; (3) proposed with applications on file at the City of Los Angeles; or (4) reasonably foreseeable. The 2.5-mile radius is intended to capture all of the study area intersections considered in the traffic analysis for the proposed Project.

References

This section identifies sources relied upon for each environmental topic area analyzed in this document (Sections 4.1 through 4.15).

TABLE 4-1
RELATED PROJECTS

Project	Description/Location[a]	Land Use	Size	
City of Los Angeles				
1	FBI Office- 11000 Wilshire Boulevard, [2] [49]	Phase I- Existing Tower Renovation (Non-FBI)	1,085	Employees
		Phase II- New Office (FBI Use)	1,000	Employees
2	Palazzo Westwood- 1001 Tiverton Avenue, [3]	Shopping Center	61,000	sf
		Supermarket	54,000	sf
		Apartment	350	DU
		Existing Theater	(652)	Seats
		Existing Retail	(24,000)	sf
		Existing Apartment	(42)	DU
3	Mixed-Use- S/E Corner of Broxton Ave/Le Conte Ave, [1]	Retail	15,000	sf
		High-Turnover Restaurant	2,993	sf
		Medical Office	74,000	sf
		Theater	1,135	Seats
4	Theater Expansion-10886 Le Conte Avenue, [4]	Theater Expansion	106	Seats
5	Mixed-Use- 10852 Lindbrook Avenue, [5] [6] [6]	Apartment	19	DU
		Specialty Retail	6,100	sf
		Existing Specialty Retail	(16,100)	sf
6	Apartments- 860 S. Devon Avenue, [5]	Apartment	19	DU
7	Condominiums- 10804 Wilshire Boulevard, [7]	Condominium	93	DU
8	Condominiums- 10776 Wilshire Boulevard, [8]	Condominium	119	DU
		Existing Hotel	(66)	Rooms
9	Private School Expansion- 700 N. Faring Road, [1]	Private School Expansion	122,200	sf
10	Fox Studio Expansion- 10201 W. Pico Boulevard , [1]	Fox Studio Expansion	360,000	sf
11	High School Expansion- 9760 W. Pico Boulevard, [9]	High School Expansion	14,800	sf
12	Private School- 9051 Pico Boulevard, [1]	Private School	360	Students
13	Wilshire/Comstock Condominium Project- 10250 W. Wilshire Boulevard, [9]	Condominium	35	DU

TABLE 4-1 (Continued)
RELATED PROJECTS

Project	Description/Location[a]	Land Use	Size	
14	ABC Entertainment Center- 2000 Avenue of the Stars, [10]	Office	763,900	sf
		High-Turnover Restaurant	16,012	sf
		Quality Restaurant	16,011	sf
		Retail	19,214	sf
		Cultural Center	10,675	sf
		Existing Office	(332,856)	sf
		Existing Cinema	(1,751)	Seats
		Existing Shubert Theater	(2,250)	Seats
		Existing High-Turnover Restaurant	(117,212)	sf
		Existing Quality Restaurant	(39,071)	sf
		Existing Retail	(61,970)	sf
		Existing Health Club	(44,277)	sf
15	St. Regis Redevelopment Project- 2055 Avenue of the Stars, [1]	Condominium	147	DU
		Quality Restaurant	7,000	sf
		Private Club	43,000	sf
		Existing Hotel	(297)	Rooms
16	Condominiums- 527 S. Midvale Street, [7]	Condominium	166	DU
17	Residential Hotel- 10844 W. Wilshire Boulevard, [11]	Residential Hotel	42	Rooms
18	Health/Fitness Center- 10960 W. Wilshire Boulevard, [12]	Health/Fitness Center	36,052	sf
		Existing Office	(36,052)	sf
19	Condominiums- 1826 S. Glendon Avenue, [7]	Condominium	16	DU
20	Condominiums- 1417 S. Butler Avenue, [7]	Condominium	16	DU
21	New Car Sales- 10534 W. Pico Boulevard, [13]	New Car Sales	2,750	sf
22	Condominiums- 1625 S. Barry Avenue, [7]	Condominium	18	DU
23	Condominiums- 1525 S. Armacost Avenue, [7]	Condominium	18	DU
24	Condominiums- 1633 S. Armacost Avenue, [7]	Condominium	16	DU
25	Condominiums- 10763 W. Wilshire Boulevard, [7]	Condominium	60	DU
26	Condominiums- 2037 S. Beverly Glen Boulevard, [7]	Condominium	16	DU
27	Office- 12233 Olympic Boulevard, [2]	Office	330,000	gsf
		Existing Office	(41,000)	sf
		Existing Specialty Retail	(6,000)	sf

TABLE 4-1 (Continued)
RELATED PROJECTS

Project	Description/Location[a]	Land Use	Size	
		Existing Gas Station	(16)	Pumps
28	Condominiums- 1511 S. Camden Avenue, [7]	Condominium	16	DU
29	Mixed-Use- 11663 Wilshire Boulevard, [7] [14] [15]	Condominium	49	DU
		Office	41,000	sf
		Specialty Retail	8,000	sf
30	Mausoleum Building- 1218 S. Glendon Avenue, [16]	Mausoleum Building	3	Acres
31	Condominiums- 10617 W. Eastborne Avenue, [7]	Condominium	16	DU
32	Condominiums- Bentley Avenue, [7]	Condominium	22	DU
33	Apartments- 1817 S. Beloit Avenue, [5]	Apartment	15	DU
34	Live/Work- 11500 W. Tennessee Avenue, [5]	Live/Work	84	DU
35	Condominiums- 430 S. Kelton Avenue, [7]	Condominium	40	DU
36	Restaurant- 10935 W. Weyburn Avenue, [17]	Restaurant	129	Seats
37	Condominiums- 1807 S. Beverly Glen Boulevard, [7]	Condominium	16	DU
38	Condominiums- 2263 S. Fox Hills Drive, [7]	Condominium	15	DU
39	Cooking School- 10955 W. Pico Boulevard, [18]	Cooking School	1,858	sf
40	Bank- 1762 Westwood Boulevard, [19] [14]	Bank	4,422	sf
		Existing Office	(4,422)	sf
41	Westside Pavilion Renovation- 10850 Pico Boulevard, [20] [49]	Theater	2,340	Seats
		Retail	723,466	sf
42	Le Lycee Francais High School- 10309 W. National Boulevard, [21]	Private High School	340	Students
43	Condominiums- 10131 Constellation Boulevard, [1]	Condominium	483	DU
		Existing Bank	(9,150)	sf
		Existing Office	(6,700)	sf
		Existing Restaurant	(19,754)	sf
44	Discounted Store- 11840 Olympic Boulevard, [23]	Discounted Store	86,600	sf
		Existing Warehouse/Office/Retail	(37,000)	sf
45	Condominiums- 1333 S. Beverly Green Drive, [7]	Condominium	5	DU
46	Belmont Village- Wilshire Boulevard/Warner Street, [24]	Independent Living	62	DU
		Assisted Living	118	DU
47	Apartments- 10000 W. Santa Monica Boulevard, [2]	Apartment	350	DU
		Existing Office	(129,851)	gsf

TABLE 4-1 (Continued)
RELATED PROJECTS

Project	Description/Location[a]	Land Use	Size	
48	Mixed-Use- 10901 S anta Monica Boulevard, [5] [6]	Apartment	36	DU
		Retail	8,485	sf
49	Mixed-Use- 10604-10612 National Boulevard, [7] [14] [6] [5]	Condominium	29	DU
		Office	2,072	sf
		Retail	1,248	sf
		Existing Apartment	(10)	DU
50	Regent Westwood Mixed-Use- 1015 Broxton Avenue (336 Net New Seats), [2]	Theater	1,668	Seats
51	Office- 1100 Westwood Boulevard, [14]	Office	34,641	gsf
52	Del Capri Hotel- Wilshire Boulevard and Westholme Avenue, [2]	Apartment	88	DU
53	Condominium- 11611 Montana Avenue, [2]	Condominium	20	DU
54	Office- 11677 Wilshire Boulevard, [2]	Office	146,708	gsf
55	Retail- 11305 Santa Monica Boulevard, [2]	Retail	1,140	GLSF
56	Auto Service- 10461 Santa Monica Boulevard, [2]	Auto Service	2,074	GLSF
57	Office- Southwest Corner of Santa Monica Boulevard/Beverly Glen Avenue, [2]	Office	25,000	gsf
58	Fast-food Restaurant- 10867 Santa Monica Boulevard, [2]	Fast Food Restaurant and Snack Shop	2,070	sf
59	Brentwood Retail Center Project- 1171 Gorham Avenue, [25]	Retail	21,340	GLSF
60	Olympic- Stoner Retail Center- 11785 Olympic Boulevard, [22]	Retail (Less Existing)	28,000	GLSF
61	Condominium- 10710 Wilshire Boulevard, [7]	Condominium	64	DU
62	Whole Foods Market- 1050 S. Gayley Avenue, [36] [49]	Retail	26,015	sf
63	Westside Media Center (Health Club)- 12232 Olympic Boulevard, [37]	Fitness Club	34,000	sf
64	New West Middle School- 11625 Pico Boulevard, [38]	School	250	Students
65	City of Santa Monica Apartment Project- 2834 E. Colorado Avenue, [39]	Apartment	145	DU
66	Union Bank of California-Office to Walk-in Bank- 10900 Wilshire Boulevard, [40]	Walk-In Bank	3,652	sf
67	Bed, Bath & Beyond- 11854 Olympic Boulevard, [41] [49]	Retail	90,000	sf
68	Leo Baeck Temple Expansion- 1300 N. Sepulveda Boulevard, [42] [43]	Synagogue	168	Students
		Synagogue	70,000	sf
69	Convenience Store- 1465 Westwood Boulevard, [44]	Retail	3,750	sf
70	Mixed-Use- 11567 Santa Monica Boulevard, [45]	Condominium	72	DU
71	Westwood Village Mart Convenience Store- 900 S. Gayley Avenue, [46]	Retail	2,750	sf
72	Office Building- 2142 S. Pontius Avenue, [47]	Office	17,619	sf

TABLE 4-1 (Continued)
RELATED PROJECTS

Project	Description/Location[a]	Land Use	Size	
73	Hekmat Mixed Use Project- Corner of Wilshire Boulevard and Gayley Avenue, [50]	Hotel	134	Rooms
		Condominium	10	DU
		Retail	7,520	gsf
City of Beverly Hills				
B1	Young Israel- 9261 Alden Drive, [1] [26]	Sanctuary	14,811	sf
		Multi-Purpose Room	1,254	sf
B2	Beverly Hills Gardens and Montage Hotel- 202-240 N. Beverly Drive, [1]	Hotel	214	Rooms
		Condominium	35	DU
		Restaurant	13,500	sf
		Commercial	13,500	sf
B3	Mixed-Use- 265 N. Beverly Drive, [1]	General Office/Restaurant	45,000	sf
B4	Church Expansion- 432-436 S. Beverly Drive, [1]	Church Expansion	932	sf
B5	Retail Expansion- 456 N. Camden Drive, [1]	Retail Expansion	1,750	sf
B6	Condominiums- 125 S. Camden Drive, [1]	Condominium	40	DU
B7	Medical Plaza- 245-257 N. Canon Drive, [1]	Medical Office	23,139	sf
		Surgery Center	13,609	sf
		Retail	8,148	sf
B8	Commercial/Retail- 338 N. Canon Drive, [1]	Commercial/Retail	11,900	sf
B9	Mixed-Use- 131-191 N. Crescent Drive, [1]	Residential	88	DU
		Office/Retail	40,000	sf
B10	Assisted Care Facility- 201 N. Crescent Drive, [1]	Assisted Care Facility	80	DU
B11	Cultural Central Center- 469 N. Crescent Drive, [1]	Cultural Central Center	34,000	sf
B12	Hotel- 150 Lasky Drive, [1]	Hotel	42	Rooms
B13	Senior Congregate Care- 129 S. Linden Drive, [1]	Senior Congregate Care	76	DU
B14	Synagogue/Private School- 9090 Olympic Boulevard, [1]	Synagogue	9,000	sf
		Private School	10,000	sf
B15	Condominiums- 437-443 N. Palm Drive, [1]	Condominium	13	DU
B16	Screening Room- 150 EL Camino, [1]	Screening Room	66	Seats

TABLE 4-1 (Continued)
RELATED PROJECTS

Project	Description/Location[a]	Land Use	Size	
B17	Condominiums- 261-283 S. Reeves Drive, [1]	Condominium	23	DU
		Existing Condominium	(24)	DU
B18	Beverly Hills Gateway- 9844 Wilshire Boulevard, [1]	General Office	95,000	sf
		Existing Retail	(9,633)	sf
B19	Mixed-Use- 9200 Wilshire Boulevard, [27]	Retail	8,400	sf
		Restaurant	5,600	sf
		Condominium	54	DU
B20	Mixed-Use- 9590 Wilshire Boulevard, [1]	Retail	12,000	sf
		Condominium	60	DU
B21	Robinson's May- 9900 Wilshire Boulevard, [28]	Condominium	252	DU
		Retail	15,656	sf
		Quality Restaurant	4,800	sf
		Existing Department Store	(220,000)	sf
B22	Hotel- 9730 Wilshire Boulevard, [1]	Hotel	204	Rooms
B23	Condominiums-552-558 N. Hillgreen Drive, [1]	Condominium	9	DU
B24	Condominiums- 140-144 S. Oakhurst Drive, [1]	Condominium	11	DU
B25	Apartments- 428-430 Smithwood Drive, [1]	Apartment	1	DU
B26	Condominiums- 133 Spalding Drive, [1]	Condominium	4	DU
B27	Health Spa- 9641 Sunset Boulevard, [1]	Health Spa	2,000	sf
B28	Service Facility- 400 Foothill Road, [29]	Service Facility	53,000	sf
B29	Mixed-Use- 421-427 N. Beverly Drive, [31] [34]	Shopping Center	15,000	sf
		Office	15,000	sf
B30	The Beverly Hilton- Southwest Corner of Wilshire Bl/Santa Monica Bl, [32] [32] [35]	Condominium	96	DU
		Condominium/Hotel	104	DU
		Hotel	96	DU
B31	Office/Medical Office- 9754 Wilshire Boulevard, [34] [30] [34]	Office	24,566	sf
		Medical Office	7,977	sf
		Existing Office	(26,000)	sf
B32	Condominiums- 156-168 N. La Peer Drive, [32]	Condominium	16	DU
B33	Condominiums- 432 N. Oakhurst Drive, [32]	Condominium	34	DU

TABLE 4-1 (Continued)
RELATED PROJECTS

Project	Description/Location[a]	Land Use	Size	
B34	Condominiums- 144 Reeves Drive, [32]	Condominium	3	DU
B35	Condominiums- 313-317 Reeves Drive, [32]	Condominium	10	DU
B36	Condominiums- 115 N. Swall Drive, [32]	Condominium	3	DU

sf = square feet; DU = dwelling units; gsf = gross square feet; GLSF = gross leasable square feet

[a] Numbers in brackets correspond to notes in the Traffic Report, which is Appendix I of this EIR.

4.1 AESTHETICS

This section describes the visual setting of the UCLA campus and evaluates the potential for changes in visual character due to development of the proposed 2008 NHIP and future projects on campus assuming full buildout of the remaining development allocation of the 2002 LRDP, as amended.

This section analyzes the project-specific visual quality effects of development of the proposed 2008 NHIP and program-level visual quality effects of remaining buildout of the 2002 LRDP, as amended. Visual changes include, but are not limited to: the potential loss of existing visual resources (such as landscaping and mature trees), effects on views, compatibility with visual characteristics of surrounding land uses, and the likelihood that adjacent uses (i.e., sensitive receptors) would be disturbed by light and glare generated or reflected by new structures. Data used to prepare this section was taken from various sources, including site visits, review of project site sections, and previous environmental documentation prepared for the UCLA campus. Full bibliographic entries for all reference material are provided in Section 4.1.5 (References) of this section.

Two private individuals submitted comments in response to the Notice of Preparation addressing aesthetics issues. Both individuals requested that the EIR address how removal of existing vegetation combined with construction of proposed multi-story 2008 NHIP structures, particularly the Lower De Neve structures, would impact views, specifically from higher elevations in Westwood Hills and locally from Gayley Street (refer to Impacts 4.1-1 and 4.1-2). In addition, one individual requested that nighttime light and glare generated by the proposed 2008 NHIP project be addressed (Impact 4.1-3).

4.1.1 ENVIRONMENTAL SETTING

The campus is located at the base of the foothills of the Santa Monica Mountains in a highly developed urban environment. As discussed in the Initial Study included in Appendix A, panoramic views from campus are fully or partially obstructed by existing development and mature landscaping. Following is a description of the existing visual setting supported by site photographs.

Visual Characteristics of the Proposed 2008 NHIP Sites (UCLA Northwest Zone)

The existing topography in the Northwest zone (the proposed location of the 2008 NHIP) consists of hilly terrain that includes the highest elevations on the campus. Elevations range from 320 feet above mean sea level (msl) to approximately 560 feet above msl, with a general downward slope from northwest to southeast. The highest point on campus is Hedrick Hall, which is located in the central portion of the Northwest zone. The hilly terrain that includes large stands of trees provides long-range views from several vantage points, internal and external to campus.

The zone's residential component is defined by a series of distinct neighborhoods distinguished by the following features: (1) the upper Northwest zone includes the Hitch and Saxon Residential Suites, Hedrick Court (Hedrick Hall and Hedrick Summit), and Rieber Court (Rieber Hall, Rieber Terrace, and Rieber Vista) residence halls; (2) Sunset Village includes the Courtside, Canyon Point, Delta Terrace, and Sproul residence halls; and (3) De Neve Plaza housing and the Dykstra Residence Hall. The first grouping occupies the northernmost residential region, situated on the highest elevation of the Northwest zone. The second residential neighborhood, Sunset Village, sits at the foot of the slope from the first neighborhood to the south and east and has a more urban, village-like character. De Neve Plaza is situated

south of De Neve Drive, adjacent to Dykstra Hall, which together create an urban enclave in the southern area of the Northwest zone. These communities are delineated by their location and character; with buildings separated from one another by landscaped slopes and mature trees.

Both within and among the communities, buildings vary from one another in their density and architectural character. Rieber, Sproul, and Hedrick Halls all represent late-1950s/early-1960s modern architecture and are seven- to ten-story buildings with angular configurations, seated on a one-story base. Opened in 2005, Rieber Terrace, Rieber Vista, and Hedrick Summit are the newest residence halls in the Northwest zone and, at nine-stories each, they are similar to the heights of Rieber Hall and Hedrick Hall. The Hitch and Saxon Residential Suites are of an interpretative shingle style. They are primarily three-story buildings located within an informal landscaped setting. Sunset Village contains groupings of three- to four-story modern-style buildings covered with stucco. Hardscape pathways and landscaped plazas separate these groupings from one another. De Neve also contains a grouping of four- to six-story buildings that surround a common landscaped plaza. These buildings represent a neo-traditional style, consisting of stucco-covered exterior walls.

Common themes among the communities are visible as well. The residential towers have consistent architectural styles, building heights, and axial[1] relationships. Newer facilities, such as the collection of buildings within Sunset Village, De Neve or Rieber, have many design features that support a harmonious architectural community. These structures maintain the common soft color palette of residential facades and frame cross views through campus with a distinctive series of archways and covered walkways. The variation of flat and slightly sloped pads and steep slopes between structures adds visual interest to the natural terrain.

Buildings are complemented by an array of plazas and courtyards that help define building edges and soften the transition from interior to exterior. The landscape has both a formal and informal character, consisting of tree clusters, shaded grassy areas and flowering plants, while paved pedestrian connections, asphalt circulation hubs, and streetscape treatments emphasize its urban nature.

The Lower and Upper De Neve components of the proposed 2008 NHIP are located on a landscaped slope adjacent to Gayley Avenue in the Northwest zone (refer to Figure 3-5 in Section 3, Project Description). This slope is landscaped with ornamental vegetation and horticultural (non-native) trees.

Northern Perimeter Visual Characteristics

The campus edge along Sunset Boulevard is extensively landscaped with stands of trees and foliage along with a pedestrian path. This landscaping serves to buffer the campus both visually and spatially from the neighborhoods across Sunset Boulevard. Together, the terrain and trees screen most of the Northwest campus uses and buildings from view.

Due to existing landscaping and topography, single-family residences at the lower elevations north of Sunset Boulevard have very limited views, if any, of the campus structures and uses. Ascending to higher elevations in the Bel Air neighborhood, views of the campus are limited by the homes' orientations, elevation, and landscaping. The campus' landscaped buffer and extensive stands of trees in the zone provide visual separation between the campus and the residential land uses to the north.

[1] Situated in or on an axis (www.dictionary.com).

Eastern Perimeter Visual Characteristics

Views of the Eastern Perimeter of the Northwest zone are internal to the campus from the Janss Steps, one of the elevated locations on campus, and are shown in Figure 4.1-1. For purposes of this section, the "eastern side" of the Northwest zone is defined as the portion of the Northwest zone south of Parking Structure SV and north of De Neve Drive.

The Northwest zone's stands of trees and hilly terrain are the dominant visual characteristics, as shown in Figure 4.1-1 in the long-range view. Sproul Hall is visible on the left side while Hedrick Hall and Hedrick Summit are both visible to the right of Sproul Hall. Mid-range views are of Drake Stadium, Marshall Field, and portions of Wooden Center North. Short-range views from this vantage point include Wilson Plaza, framed by trees and the walkway leading to Janss Steps.

Southern Perimeter Visual Characteristics

The southern portion of the Northwest zone, south of De Neve Drive, is bordered on the east by Charles E. Young Drive West and on the west by Gayley Avenue. Views from the south include views of De Neve housing and Dykstra Hall. Immediately adjacent to Dykstra Hall is the surface parking lot serving this area. Just below the parking lot is a landscaped slope that is primarily covered with grass and trees. This slope is found in the mid-range view and continues into the short-range view from this location. Land uses across Gayley Avenue from this view location are multi-family residential apartments.

Short-range views from the multi-family residential neighborhoods along Gayley Avenue consist of grassy slopes with scattered trees surrounding Tom Bradley International Hall. Traveling west on Gayley Avenue, the easternmost buildings of De Neve Plaza and the apartment complexes across Gayley Avenue are the focus of the short-range view, as shown in Figure 4.1-2. Further west, a fairly steep, ivy- and tree-covered hillside blocks the views of campus buildings from the street as shown in Figure 4.1-2. Curving around toward Veteran Avenue on Gayley Avenue, the Southern Regional Library is the subject of the short-range view, as landscaping and trees partially obscure the structure. The Saxon Residential Suites, near the top of the hillside, are not visible from the residences across Gayley Avenue due to the intervening landscape. The topography of the Northwest zone blocks long-range views to the east from these neighborhoods.

Western Perimeter Visual Characteristics

The western perimeter of the Northwest zone is bound by Veteran Avenue between Gayley Avenue and Sunset Boulevard. The views from Veteran Avenue are primarily of the landscaped buffer along the western perimeter of the Northwest zone. The primary visual characteristic in this location is the stands of trees on hilly terrain. Long-range views include portions of Hedrick Hall and Hitch Residential Suites, all of which are partially obscured by trees and landscaping. Portions of Saxon Residential Suites are partially visible but mostly obscured by trees. The short-range view consists primarily of trees, with the landscaped, ivy-covered wall and the pedestrian path along Veteran Avenue. Views of the project site are obscured from Veteran Avenue.

Views of the campus from the residential neighborhood of Westwood Hills, to the west across Veteran Avenue, are essentially obscured by the landscaping, as well as a vine-covered fence provided along Veteran Avenue. This provides a visual and spatial buffer between the campus and the Westwood Hills neighborhood. Mid-range views across Veteran Avenue toward the

campus consist of tree-covered slopes and partial views of the residential buildings. Views of the project site are obscured from the Westwood Hills neighborhood.

Existing Lighting and/or Glare

With the exception of parking lots, parking structures, and internal campus roadways, illumination in the Northwest zone is generally characterized by low-level lighting, including building accents, lights along pathways and at the entrances of buildings, and security lighting adjacent to buildings and building entrances. Lighted tennis courts (Sunset Courts) are located in the northern portion of the Northwest zone along De Neve Drive and on the eastern portion of the Los Angeles Tennis Center (LATC) along Charles E. Young Drive West. There are also street lights along Gayley Avenue which produce nighttime light under existing conditions, in addition to light from vehicles traveling on Gayley Avenue.

Existing daytime glare could reflect from residence halls windows; however, buildings are finished with nonreflective stucco or wood shingles and do not provide a significant source of daytime glare. The landscaping around and between buildings, consisting of stands of trees as well as other foliage, serves as a visual screen that further reduces glare from the existing buildings. Nighttime illumination in the Northwest zone is generally less intense than on the rest of the campus, due to the residential and recreational nature of the land uses. Large areas of the site are minimally illuminated and landscaping screens the potential illumination spillover into adjacent areas.

Visual Characteristics of the Area Surrounding the Campus

As discussed in Section 4.8, Land Use and Planning, the neighborhoods surrounding the campus include Bel Air to the north and Holmby-Westwood to the east; these neighborhoods primarily consist of single-family residences. Westwood Hills and the North Village are located to the west, with multi-family residences in the North Village across Gayley Avenue from the proposed 2008 NHIP sites. The multi-family housing area of the North Village that is closest to UCLA accommodates the housing needs of many UCLA students in apartment buildings and fraternities. The North Village area is characterized by dense, low- to mid-rise multi-family buildings of varying heights and masses, on land with varying topography, and some mature urban/ornamental landscaping.

The North Village area, as photographed from atop the RRUCLAMC, is shown in Figure 4.1-3 and shows that the area is highly developed with buildings of various heights and massing and has an urban visual character. It should be noted that the actual height of buildings is not specifically relevant for addressing visual character in this area given the varied topography. The portion of the Northwest zone to be developed with the proposed 2008 NHIP and areas south of Gayley Avenue (off campus) are unique because of the varied topography in which both sides adjacent to Gayley Avenue slope upward and away from Gayley Avenue with considerable elevation changes. The area to the south of Gayley Avenue (off campus) rises approximately 60 feet above msl between Gayley Avenue and Landfair Avenue, while area north of Gayley Avenue (on campus) rises approximately 40 feet from the Lower De Neve building to De Neve Drive. Therefore, shorter buildings at a higher elevation (such as the Southern Regional Library) appear similar in height to larger buildings at lower elevations (such as the proposed Lower De Neve Building). When considering off-campus buildings in the area, the same effect occurs.

Marymount High School is adjacent to the campus on the north. To the south of the campus are Westwood Village and the Wilshire Corridor, which primarily consist of retail stores and businesses in mid- to high-rise office buildings, with low- to mid-rise multi-family residences



View from east (Janss Steps).

Existing Photographs – View from East

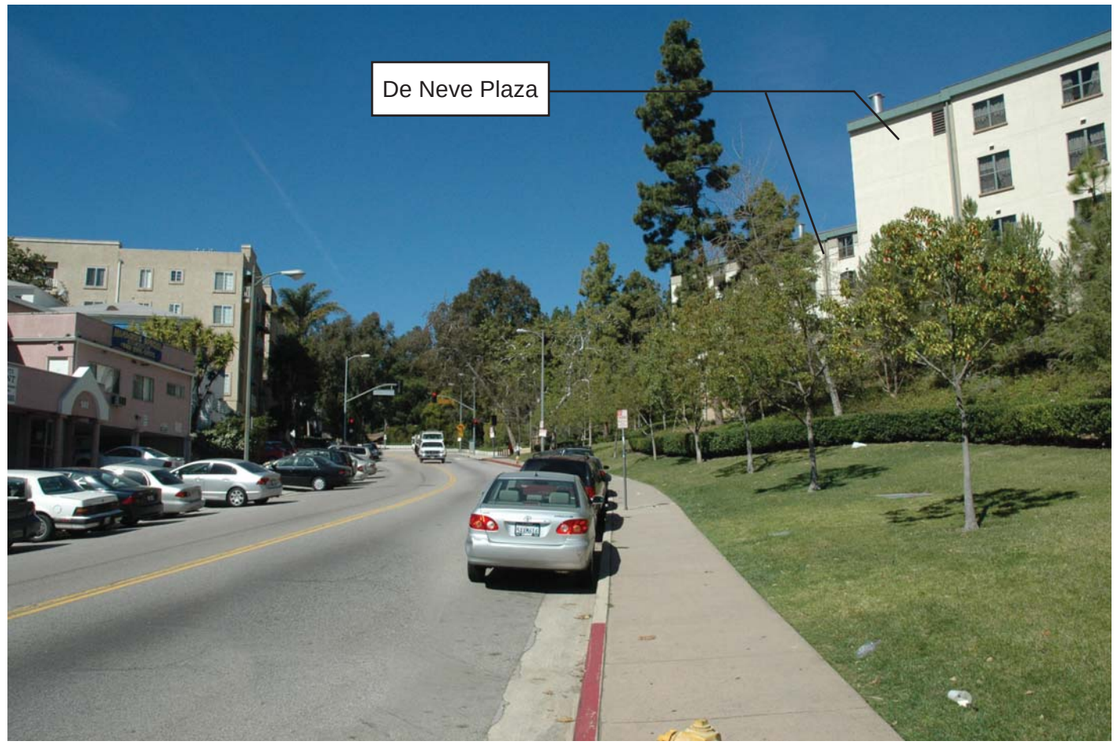
Figure 4.1-1

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View from Gayley Avenue looking west.



View from Gayley Avenue looking east.

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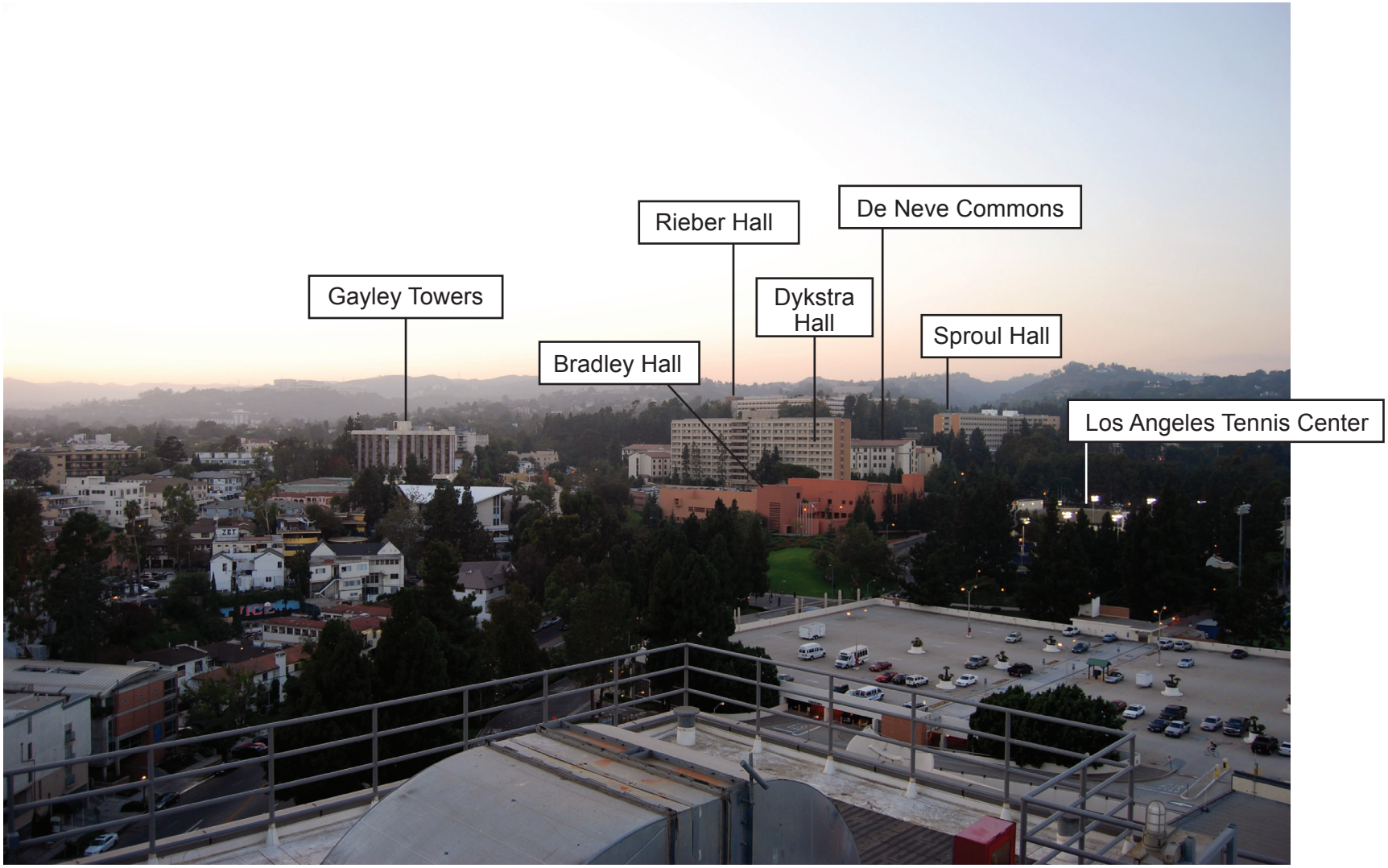
Existing Photographs – Views from South

Figure 4.1-2

2008 NHIP and LRDP Amendment

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Existing Photographs – View of Surrounding Area

Figure 4.1-3

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located south of Wilshire Boulevard. The Wilshire Corridor primarily consists of high-rise, mixed-use, and office building uses. To the west is the Los Angeles National Cemetery. The campus is visible from the adjacent residential neighborhoods to the north, east, and west; from several major roadways, including the San Diego Freeway and Sunset Boulevard; and from Westwood Village to the south. Figure 4.8-1, Surrounding Land Uses, in Section 4.8, Land Use and Planning, illustrates land uses immediately surrounding the campus.

Visual Characteristics of the Campus

While the northern Core Campus zone, which includes the historic core, consists of academic buildings and landscaped open areas, the southern portion of the core campus accommodating many science and medical buildings is considerably more dense and urban in appearance. A majority of the campus is organized around a series of squares and courtyards linked by pedestrian walkways. The original site plan for the campus shows buildings arranged in the shape of a cross along the east-west and north-south axes, which formed the original basis for the orientation of landscaped open areas. Most of the campus edges are heavily landscaped with mature trees and shrubs that screen views of campus buildings. A detailed description of the land uses within each campus zone is provided in Section 4.8, Land Use and Planning.

Campus Landscaping

The site of the UCLA campus originally included a variety of native and non-native plant communities that have been described in prior LRDPs as “a treeless chaparral”; some plants associated with those communities still persist in the vicinity of Stone Canyon Creek and in the Northwest zone, as described in Section 4.3, Biological Resources. Landscaping of the campus began in 1925, with approximately 3,600 trees planted by 1928. Professor J.W. Gregg originally designed the landscape to create what was referred to as the “California look”. Ralph D. Cornell was appointed Campus Landscape Architect in 1937 and continued to serve UCLA as a consultant until 1972. His firm (Cornell, Bridgers, Troller, and Hazlett) designed many of the major landscape projects on campus, including numerous basic features that provide a unifying landscape motif, although most of the initial plantings have been modified over the last seven decades as the campus evolved from its beginnings to the internationally recognized teaching, research, and public service institution it is today. Along with pedestrian pathways and open areas, the ornamental landscaping continues to complement the different architectural styles found on campus. Several areas of lush landscaping are found within the University’s grounds; however, the majority of the plant life on the campus is ornamental rather than native, and most vegetation has been introduced coincident with the development of buildings.

Open Areas on Campus

Open spaces at UCLA—which primarily consist of plazas, courts, gardens, walkways, recreational areas, campus entries, and other visual resources—are essential components of the aesthetic and social life of the campus. Figure 4.1-4, Open Space and Pedestrian Pathways, illustrates various significant open spaces located throughout the campus. This figure provides numbers and/or letters to correspond to the preserves, recreational open areas, formal open areas, and campus entries described below. Section 4.8, Land Use and Planning, of this document provides a full description of these open areas. In addition, numerous pedestrian pathways serve as important linkages between all campus zones and buildings.

Preserves

Several campus open spaces have been developed to an exceptional level of spatial and aesthetic excellence or hold cherished places in campus history and tradition. The 2002 LRDP,

as amended, maintains these as open space preserves through the planning horizon. They include the following:

- ***Mildred E. Mathias Botanical Garden.*** Located in the southeastern corner of campus, the garden contains approximately 5,000 species of exotic and native plants and provides a unique aesthetic, teaching, and research resource, which is available to the public. This area also provides an important buffer zone between the campus and the residential area to the east.

- ***The Franklin D. Murphy Sculpture Garden.*** This area contains one of the world's premier collections of sculptures, located in an idyllic setting the northern Core Campus zone.

- ***Dickson Plaza.*** Located in the heart of the campus, Dickson Plaza forms the east/west axis of the original Kelham campus plan. It is bordered by some of the oldest and grandest campus buildings, including Powell Library, Haines Hall, Humanities Building (previously Kinsey Hall), and Royce Hall.

- ***Janss Steps.*** The Janss Steps are east/west connection between the north/central entrance to the campus (Sunset Boulevard and Westwood Boulevard) and Dickson Plaza.

- ***Stone Canyon Creek Area.*** Stone Canyon Creek is a flood-control channel west of the Anderson School that contains numerous native and exotic tree species.

- ***Meyerhoff Park.*** Meyerhoff Park is a large sloping lawn area that borders Janss Steps and is located in the central portion of the main campus, west of Powell Library.

- ***Wilson Plaza.*** This plaza is the open area above the subterranean parking between Glorya Kaufman Hall and the Men's Gymnasium (Student Activities Center).

- ***Bruin Plaza.*** Bruin Plaza serves as a pedestrian gathering space and accommodates outdoor concerts. The plaza anchors the northern reach of Westwood Plaza and features the bronze "Bruin Bear" sculpture.

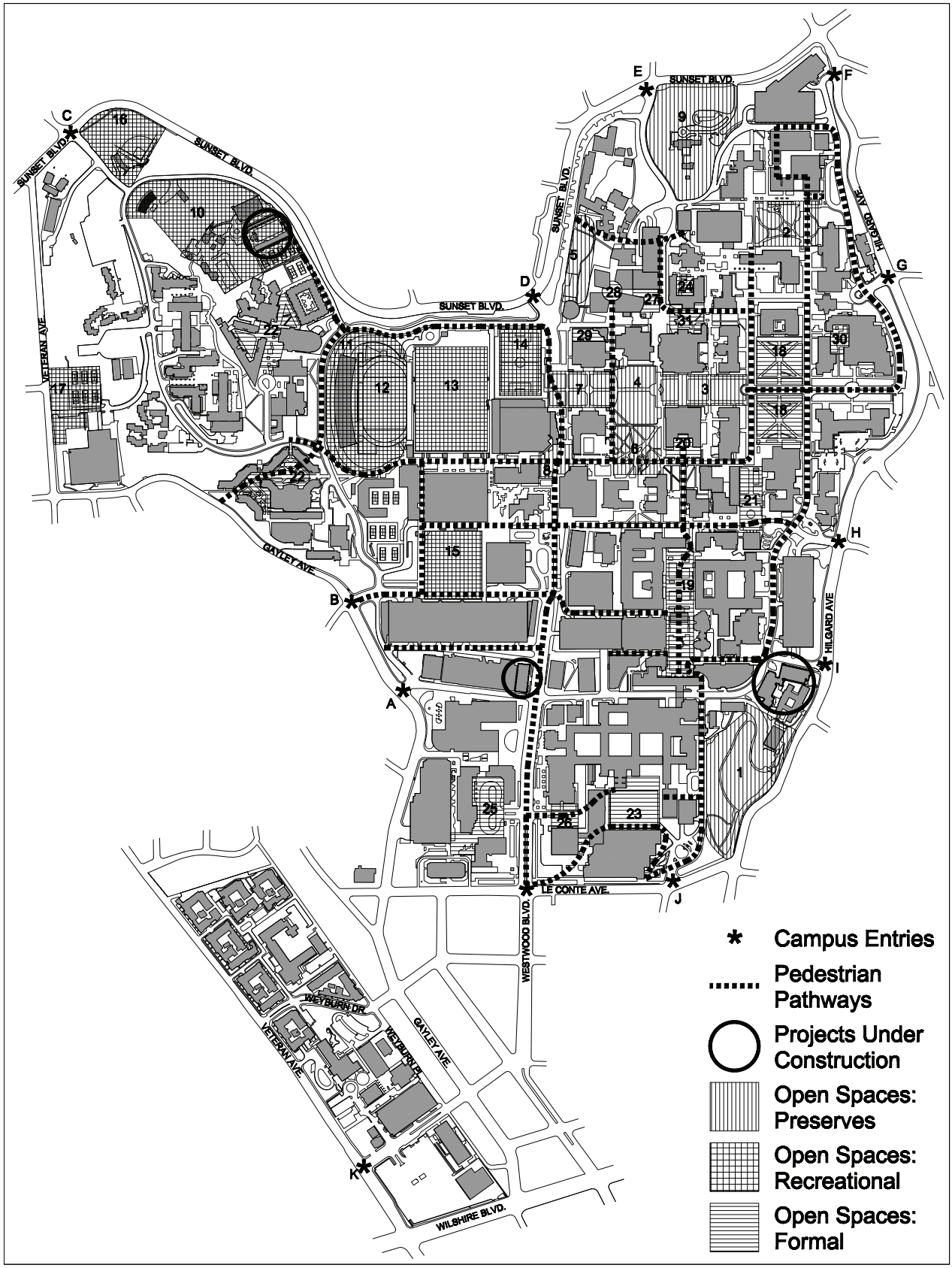
- ***University Residence.*** Built and landscaped in 1929, the University Residence is home to the UCLA Chancellor.

Figures 4.1-5 and 4.1-6, Open Space Preserves, depict examples of the open preserves, including Janss Steps/Meyerhoff Park, the Franklin D. Murphy Sculpture Garden, Wilson Plaza, and Bruin Plaza.

Recreational Open Areas

Recreational open areas are important to the health and quality of life of the campus community. Major recreational spaces located in the Central and Northwest zones include:

- ***Sunset Canyon Recreation Area.*** This area provides two pools, picnic/barbecue areas, sand volleyball courts, tennis courts, informal playing fields, and an outdoor amphitheater in a rolling landscape edged with trees. Construction of the Spieker Aquatic Center has been initiated and will include a 50-meter competition size pool and



Source: UCLA 2008

Open Space and Pedestrian Pathways — Figure 4.1-4

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Janss Steps/Meyerhoff Park



Franklin D. Murphy Sculpture Garden

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Open Space Preserves

Figure 4.1-5

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Wilson Plaza



Bruin Plaza

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Open Space Preserves

Figure 4.1-6

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diving facility to accommodate Athletics and Recreation departments' aquatics programs.

- ***Drake Track & Field Stadium.*** The Drake Track & Field Stadium provides an arena for intramural and intercollegiate athletics and a 400-meter, 9-lane running track.

- ***Marshall Field.*** Marshall Field is the turf area located at Drake Track & Field Stadium and is used for various field sports.

- ***Intramural Field.*** The Intramural Field is the largest contiguous open recreational area located on campus. This 8.5-acre field is located between Drake Stadium and the North Athletic Field above subterranean Parking Structure 7.

- ***North Athletic Field.*** The North Atlantic Field is located above subterranean Parking Structure 4 and is used for intramural and intercollegiate field activities.

- ***Spaulding Field.*** Spaulding Field serves as an important athletic practice field and is located north of Strathmore Drive.

- ***Easton Stadium.*** Easton Stadium serves as an important field for Women's softball practice and competitive events and is located in the Northwest zone.

- ***Sycamore Park.*** Sycamore Park includes tennis courts, a pitch and putt golf course, and lawn areas available for daytime use. It is located north of the Southern Regional Library Facility.

The photographs in Figure 4.1-7, Recreational Open Areas, illustrate the Sunset Canyon Recreation Center and Spaulding Field, which is one of the many athletic fields on campus.

Formal Open Areas

Some formal courtyards, plazas, and open spaces also provide valuable open areas. These include the following:

- ***Dickson Court.*** This lawn area is located in the Core Campus zone with Perloff Hall to the north and Schoenberg Hall to the south.

- ***Court of Sciences.*** This paved and landscaped area is located in the southern portion of the Core Campus zone and is surrounded by science and engineering buildings.

- ***Courtyard South of Powell Library.*** This courtyard, situated between the southern wings of Powell Library, provides a quiet landscaped reading area.

- ***Inverted Fountain.*** The inverted fountain is the prominent feature in a large open plaza located in the Core Campus zone, north of Franz Hall.

- ***Sunset Village Plaza and De Neve Plaza.*** These plazas are internal courtyards that provide pedestrian linkages between the individual residential halls in the Northwest zone.

- ***UCLA Medical Center Plazas.*** The Center for the Health Sciences (CHS) Plaza (above the CHS parking structure) and other courtyards are located within the Health Sciences zone.

- ***Rolfe Sculpture Courtyard.*** This courtyard, located near the northern side of Rolfe Hall, features 11 works in bronze by Robert Graham, an internationally renowned Los Angeles-based sculptor.

- ***UCLA Medical Plaza.*** The UCLA Medical Plaza is located amidst the outpatient medical care facilities near the Westwood Plaza and the Le Conte Avenue campus entrance in the Health Sciences zone.

- ***Stein Plaza.*** The Stein Plaza is a formal entry plaza that serves the Jules and Doris Stein Eye Institute buildings in the Health Sciences zone.

- ***Alumni Plaza.*** The Alumni Plaza is a formal hardscape area located on the top level of Parking Structure 5, which provides a connection to the Anderson Graduate School of Management in the Core Campus zone.

- ***Marian Anderson Court.*** This formal courtyard is located within the Anderson School complex in the Core Campus zone and is dedicated to Marian Anderson.

- ***Kaufman Garden Theater.*** This outdoor theater with lawn seating is north of Kaufman Hall in the Core Campus zone.

- ***Law School Courtyard.*** An outdoor landscaped area with seating for informal gatherings and quiet reading in the Core Campus zone.

- ***Court of Humanities.*** A newly created landscape and hardscape area north of Royce Hall in the Core Campus zone.

Figures 4.1-8 and 4.1-9, Formal Open Areas, provide examples of some of the numerous formal courtyards and plazas provided on campus.

Campus Entries

Campus entries function as areas of interface with off-campus uses. The major entry to the campus is the “Gateway”, which is located at the intersection of Le Conte Avenue and Westwood Plaza. Figure 4.1-10, Campus Entries, depicts campus entrances from Sunset Boulevard and the Gateway at Westwood Plaza/Le Conte Avenue. Other campus entries include:

A. Charles E. Young Drive South at Gayley Avenue,
B. Strathmore Drive at Gayley Avenue,
C. Bellagio Drive at Sunset Boulevard,
D. Westwood Boulevard at Sunset Boulevard,
E. Royce Drive at Sunset Boulevard,
F. Comstock Avenue at Hilgard Avenue,
G. Wyton Drive at Hilgard Avenue,
H. Westholme Avenue at Hilgard Avenue,
I. Manning Avenue at Hilgard Avenue,
J. Tiverton Drive at Le Conte Avenue,
K. Kinross Plaza at Veteran Avenue.



Sunset Canyon Recreation Center



Spaulding Field

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Recreational Open Areas — Figure 4.1-7

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Court of Sciences



Inverted Fountain

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Formal Open Areas

Figure 4.1-8

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Rolfe Sculpture Garden



Marian Anderson Court

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Formal Open Areas

Figure 4.1-9

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Edge Conditions

Most of the main campus edges are heavily landscaped with mature trees and shrubs. These landscaped buffers screen campus buildings from adjacent streets and complement the adjacent residential areas, as illustrated in Figures 4.1-11 through 4.1-14, Campus Edges. The edges of the campus are planted with mature eucalyptus, Canary Island pines, camphor trees, or other landscaping that enhance the visual quality of the campus borders. As previously noted, the Lower and Upper De Neve components of the proposed 2008 NHIP are located adjacent to Gayley Avenue on a landscaped slope.

Campus Design Policies

Prior to approval, the UCLA campus utilizes a design review process for all proposed campus development projects. This design process is performed through various campus committees and includes evaluation of factors such as the proposed site, compatibility with adjacent uses, building mass and form, roof profile, architectural details and fenestration,[2] texture, color, quality of building materials, landscaping, and focal views that could be affected by each proposed project. Figure 4.1-15, Romanesque Architecture (Core Campus), Figure 4.1-16, Sculpture and Water Features, and Figure 4.1-17, Landscaping and Pedestrian Pathways, illustrate examples of campus architecture in the historic core of campus, the integration of building and site, the incorporation of sculpture and landscaping and pedestrian linkages, which are all essential or unique elements of campus design. The campus design review process ensures that the physical planning objectives described in detail in Section 3.3 (Project Objectives) of this EIR are incorporated into each project proposal to the maximum extent feasible.

4.1.2 REGULATORY FRAMEWORK

There are no federal or State aesthetics regulations applicable to full buildout of the remaining development allocation of the 2002 LRDP, as amended, which includes the proposed 2008 NHIP.

4.1.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

The analysis of visual impacts focuses on the nature and magnitude of changes in the visual character of the campus due to full buildout of the remaining development allocation of the 2002 LRDP, as amended, which includes the proposed 2008 NHIP, including the visual compatibility of on-campus and adjacent uses; public vantage points where visual changes would be evident; and the introduction of sources of light and glare. Site visits by BonTerra Consulting personnel on July 22, 2008, documented the existing visual character and context of the campus. Visual change that is compatible with existing patterns of development would not constitute a significant impact.

For views of the 2008 NHIP from the south, visual simulations are prepared to demonstrate the anticipated visual change that would result from project implementation (including the proposed landscape concept) based on current design description information. The visual simulation process uses computer technology (CADD/digital photo simulation) to translate the two-dimensional engineering plans and the landscape concept into a composite three-dimensional image in order to depict the conceptual overall appearance of the proposed 2008 NHIP from off-site locations. The purpose of the simulations is to evaluate grading

[2] The design and disposition of windows and other exterior openings of a building (www.dictionary.com).

concepts and character, terracing, juxtaposition of building heights, and softening of building massing with landscaping. It should be noted that design details, landscaping, materials, and colors shown in these figures are conceptual and will be refined during preparation of final engineering and construction documents.

A computer-generated shade and shadow analysis for the Upper De Neve and Lower De Neve was prepared for analysis purposes. ESRI's 3D Analysts software extension and Google's Sketchup Pro software package were used to prepare the analysis. This process consists of inputting building heights, setbacks and street dimensions, as well as geographic location and orientation, day of year, and time of day. Calculation and interpretation of this information provided the exact location of the sun over the earth, producing an accurate angle of the sun as well as the resulting shadows. The results of the shade and shadow analysis are presented below.

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed 2008 NHIP and 2002 LRDP, as amended, would not have a significant impact for the following thresholds and no further analysis of these issues is presented in this section.

- Would the project have a substantial adverse effect on a scenic vista (panoramic views)?
- Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Aesthetics.

- Would the project have a substantial adverse effect on a scenic vista (focal views) *(Impact 4.1-1)*?
- Would the project substantially degrade the existing visual character or quality of the site and its surroundings *(Impact 4.1-2)*?
- Would the project create a new source of substantial light or glare on campus or in the immediate vicinity that would adversely affect day or nighttime views in the area *(Impact 4.1-3)*?

Additionally, the Regents do not have an established threshold for shade and shadow effects. For purposes of this analysis, the following threshold applies:

- Would the project cause shade and/or a shadow on currently un-shaded, shadow-sensitive uses off-campus *(Impact 4.1-4)*?

Impact Analysis

Campus Programs, Practices and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures (PPs) were adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. They are therefore considered part of the proposed Project and assumed in the analysis presented in this section.



Campus entry along Sunset Boulevard



"Gateway" at Westwood Plaza/Le Conte Avenue

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Campus Entries

Figure 4.1-10

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Campus edge looking south along Veteran Avenue



Campus edge looking north along Veteran Avenue

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Campus Edges

Figure 4.1-11

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Looking west at north edge of campus with pedestrian path adjacent to Sunset Boulevard



Campus edge looking east along Sunset Boulevard

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Campus Edges

Figure 4.1-12

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Campus edge looking north along Hilgard Avenue



Campus edge looking south along Hilgard Avenue

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Campus Edges

Figure 4.1-13

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Campus edge looking south along Gayley Avenue
(UCLA campus on the left)



Campus edge looking north along Veteran Avenue
(UCLA campus on the right)

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Campus Edges

Figure 4.1-14

2008 NHIP and LRDP Amendment

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Royce Hall



Royce Hall

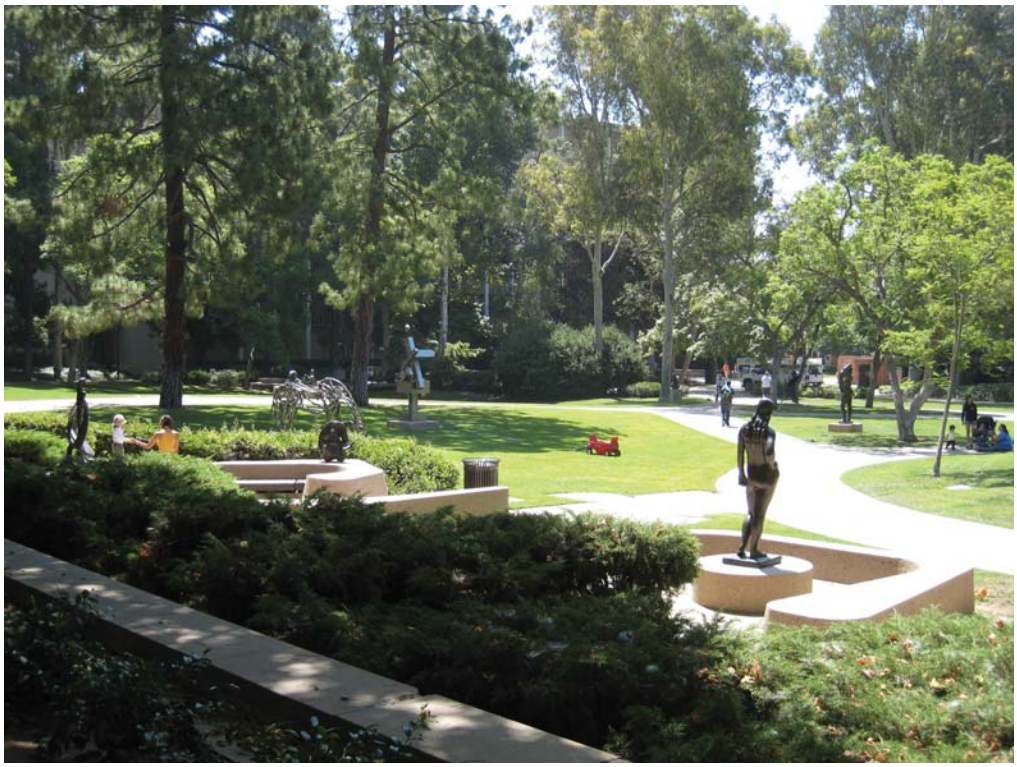
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Romanesque Architecture (Core Campus) Figure 4.1-15

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Franklin D. Murphy Sculpture Garden



Shirley and Ralph Shapiro Fountain
(at the top of Janss Steps)

Source: 2008 UCLA Regents

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Sculpture and Water Features

Figure 4.1-16

2008 NHIP and LRDP Amendment

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Bruin Walk

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Landscaping and Pedestrian Pathways — Figure 4.1-17

2008 NHIP and LRDP Amendment

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PP 4.1-1(a)	*The design process shall evaluate and incorporate, where appropriate, factors including, but not necessarily limited to, building mass and form, building proportion, roof profile, architectural detail and fenestration, the texture, color, and quality of building materials, focal views, pedestrian and vehicular circulation and access, and the landscape setting to ensure preservation and enhancement of the visual character and quality of the campus and the surrounding area. Landscaped open space (including plazas, courts, gardens, walkways, and recreational areas) shall be integrated with development to encourage use through placement and design.*
PP 4.1-1(b)	*The Mildred E. Mathias Botanical Garden, Franklin D. Murphy Sculpture Garden, Dickson Plaza, Janss Steps, Stone Canyon Creek area, Meyerhoff Park, Wilson Plaza, Bruin Plaza, and the University Residence shall be maintained as open space preserves during the 2002 LRDP planning horizon.*
PP 4.1-2(a)	*Additions to, or expansions of, existing structures shall be designed to complement the existing architectural character of the buildings.*
PP 4.1-2(b)	*The architectural and landscape traditions that give the campus its unique character shall be respected and reinforced.*
PP 4.1-2(c)	*Projects proposed under 2002 LRDP shall include landscaping*.
PP 4.1-2(d)	*The western, northern, and eastern edges of the main campus shall include a landscaped buffer to complement the residential uses of the surrounding community and to provide an attractive perimeter that effectively screens and enhances future development.*

Threshold	Would the project have a substantial adverse effect on a scenic vista?

Views of scenic vistas may be generally described in two ways: panoramic views (visual access to a large geographic area for which the field of view can be wide and extend into the distance) and focal views (visual access to a particular object, scene, setting, or feature of interest). Through the Initial Study process, UCLA determined that the proposed Project would not affect panoramic views. Accordingly, this topic of potential impact is not discussed further.

Potential impacts to focal views are discussed below. For purposes of this analysis, focal views include views of natural landforms, public art/signs and visually important structures, such as historic buildings. Focal views on campus would include views of outdoor public art spaces (including the Franklin D. Murphy Sculpture Garden and the Rolfe Sculpture Courtyard) and historic buildings (such as Royce Hall, Powell Library, Haines Hall, Kinsey Hall, and other structures located in the campus historic core of the Core Campus zone). There are no significant natural landforms on campus.

Proposed 2008 NHIP

Though the hilly terrain of the Northwest zone includes large stands of trees that create long-range views both internal and external to campus, there are no open space preserves (e.g., Dickson Plaza, Wilson Plaza, Mildred E. Mathias Botanical Garden) and no focal views in

the Northwest zone. Therefore, no focal views would be impacted by development of the 2008 NHIP and no mitigation is required.

There are views of the Northwest zone from various locations on campus, including Janss Steps/Meyerhoff Park (which is considered a preserve area). Potential visual changes to the views from Janss Steps/Meyerhoff Park and other vantage points are discussed under Impact 4.1-2.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact would occur.

Impact 4.1-1a Implementation of the proposed 2008 NHIP would not impact any scenic vistas (focal views). No impact would occur and no mitigation is necessary.

Remaining Buildout of the 2002 LRDP as Amended

PP 4.1-1(b) was previously adopted as part of the 2002 LRDP Final EIR. It requires that certain open spaces that are integral to the fabric of the campus be maintained as preserves during the planning horizon of the 2002 LRDP and would apply to future projects developed under the LRDP Amendment. As previously noted, with the exception of the proposed 2008 NHIP, the proposed LRDP Amendment does not identify specific building locations for future development. Remaining development allocation under the 2002 LRDP, as amended, would require project-level discretionary actions in accordance with CEQA. If future projects are proposed adjacent to focal areas (e.g., the Franklin D. Murphy Sculpture Garden or other public art spaces such as the Rolfe Sculpture Courtyard) or near the campus historic core, the design process required by 2002 LRDP Final EIR PP 4.1-1(a) shall ensure that (1) impacts of the proposed structure(s) on views of these spaces are considered in the siting and design of building and (2) design features are incorporated into individual projects so that focal views are preserved and/or enhanced. Implementation of PP 4.1-1(a) would also ensure that a less than significant impact would occur. In addition, Land Use PP 4.8-1(d) in Section 4.8, Land Use and Planning carried forward from the 2002 LRDP Final EIR, provides that new building projects shall be sited to ensure compatibility (e.g., height, massing, architecture) with adjacent uses (which may include outdoor public art areas and/or historic buildings).

While some of the allocated development potential under the 2002 LRDP, as amended, could occur in the Core Campus zone, which contains the campus historic core, Cultural Resources 2002 LRDP Final EIR PP 4.4-1(b) in Section 4.4, Cultural Resources, requires that the integrity of the campus historic core shall be maintained (primarily related to preservation of historic resources and their setting as discussed in Section 4.4, thereby ensuring that impacts on views of historic buildings in this area would remain less than significant.

Following 2002 LRDP Final EIR PPs 4.1-1(a) and 4.1-1(b) identified above, Land Use PP 4.8-1(d), and Cultural Resources PP 4.4-1(b), would ensure that impacts to focal views remain less than significant through project design parameters for individual projects implementing the 2002 LRDP, as amended, by focusing on (1) preserving and enhancing the visual character and quality of the campus and surrounding area; (2) preserving open space preserves and the campus historic core; and (3) evaluating site-specific impacts of individual

development on focal views. There are no focal views off-site; therefore, no impacts would occur. No mitigation is required with implementation of the identified PPs.

Mitigation Measures

With continued implementation of 2002 LRDP Final EIR PPs 4.1-1(a) and 4.1-1(b), PP 4.8-1(d) (from Section 4.8, Land Use and Planning) and PP 4.4-1(b), no mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.1-1b ***Continued implementation of PPs 4.1-1(a), 4.1-1(b), 4.8-1(d) from Section 4.8, Land Use and Planning, and 4.4-1(b) from 4.4, Cultural Resources, would ensure that the proposed Project would not have a substantial adverse effect on scenic vistas (focal views). This is considered a less than significant impact and no mitigation is required.***

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

Proposed 2008 NHIP

Visual Character/Quality of the 2008 NHIP Site

As discussed in Section 3, Project Description, the proposed 2008 NHIP consists of infill undergraduate housing in the Northwest zone. The Northwest zone does not offer a single, large site that can accommodate 1,525 bed spaces and the necessary related support facilities. As previously mentioned, the terrain in the Northwest zone is hilly with slopes between existing structures. While there is a larger landscaped area between Veteran Avenue and the Saxon and Hitch Residential Suites, development in this area is restricted to nonresidential uses, based upon the Stipulated Use Agreement between The Regents and the Westwood Hills Property Owners Association (refer to Section 4.8, Land Use and Planning, for a discussion of the Stipulated Use Agreement as it pertains to the 2008 NHIP). As a result, the 2008 NHIP proposes an infill development strategy using three separate sites generally north of Gayley Avenue and west of the existing De Neve housing.

As described in the "Environmental Setting" discussion, the visual character of the Northwest zone's western portion is dominated by existing undergraduate residential development with buildings of varying heights and scale. Existing development in the Northwest zone is visually compatible with existing off-campus development across Gayley Avenue. While the proposed 2008 NHIP is currently in the design phase, the architectural details of the new structures would be consistent with existing and adjacent structures. As provided by 2002 LRDP Final EIR PP 4.1-1(a) and through the design process, architectural details would preserve and enhance the visual character and quality of the campus. Each of the new buildings to be developed as part of the 2008 NHIP would be integrated into the existing spatial development within the Northwest zone. As shown on Figures 3-6 through 3-8, the elevation of the new buildings would not exceed the elevation of the existing and adjacent structures (e.g., Rieber Hall, Sproul Hall) on campus, which would preserve architectural unity and limit visual impacts from on- and off-campus locations. Specifically, as shown on Figure 4.1-3, the proposed buildings are also

consistent with the mass and scale of buildings in the adjacent off-campus community (e.g., Gayley Towers and apartment buildings across Gayley Avenue).

Implementation of the 2008 NHIP would involve removal of approximately 131 mature trees and 1 native tree within the project site boundaries; a summary of trees to be removed is provided in Table 4.3-1 in Section 4.3, Biological Resources. Furthermore, an additional 13 trees may be potentially impacted as they are at the edge of the identified construction impact area. Implementation of 2002 LRDP Final EIR Mitigation Measure (MM) 4.3-1(c) requires mature tree replacement at a 1:1 ratio while MM 4.3-4 requires a 2:1 ratio replacement for protected trees. The required replacement trees and proposed landscaping would provide (1) vegetation around the new structures and (2) relief from off-campus views of the new structures on site. In addition, the replacement trees would be planted to screen the new structures, as feasible, from off-campus views. Potential visual changes associated with the 2008 NHIP, as seen from surrounding vantage points, are described below.

Open spaces created by the positioning of the proposed new buildings would be enhanced by existing mature trees, the provision of limited lighting for security purposes, pathways, site furnishings, and provision of new replacement landscaping. Spatial diversity would be maintained by balancing the structured landscaping of courtyards and plazas with informal, naturalized landscape in the areas between the buildings, forming links with the natural areas at the perimeter of the site.

In summary, continued implementation of PP 4.1-1(a), PP 4.1-2(a) and PP 4.1-2(b), which would be carried forward as part of the proposed LRDP Amendment ensures that the proposed 2008 NHIP would be visually consistent with adjacent development in the Northwest zone of the campus from both building (height and design) and landscaping perspectives. The introduction of additional undergraduate residential structures adjacent to similar buildings on and off campus would not substantially degrade the existing visual character or quality of the site and surrounding area. While existing landscaping, primarily along the landscaped slope along Gayley Avenue, would be removed, consistent with PP 4.1-2(d), substantial landscaping would be installed with the proposed 2008 NHIP primarily in the form of replacement trees positioned to visually screen new buildings, to the extent feasible. Groundcover and shrubs would also be planted to complement existing landscape patterns in this area. While there would certainly be a visual change as a result of the 2008 NHIP, this change would not substantially degrade the visual character or quality of the site and surrounding area. Therefore, a less than significant impact would occur with respect to the visual character and quality of proposed development with 2008 NHIP in relation to the site and its surroundings. No project-specific mitigation is required.

Views of the Proposed 2008 NHIP from Surrounding Off-campus Vantage Points

The following discussion addresses the change in aesthetics/visual character of the 2008 NHIP as seen from surrounding vantage points described under the existing conditions discussion.

Views from the North

Under existing conditions, due to topography, landscaping and trees, no portion of the 2008 NHIP sites are visible from Sunset Boulevard. Therefore, views along the northern perimeter of the Northwest zone (Sunset Boulevard) would not be altered with implementation of the 2008 NHIP.

Single-family residences at lower elevations north of Sunset Boulevard would continue to have limited views of the Northwest zone. At higher elevations in the Bel Air neighborhood, views

could include the Sproul West and Sproul Hall buildings. However, as shown in Figures 3-6 through 3-8 found in Section 3 (Project Description), the elevations of the proposed buildings would not exceed the elevations of surrounding existing buildings (e.g., Rieber Hall). The Upper and Lower De Neve buildings may also be visible but would not exceed the elevation of existing buildings.

Upper and Lower De Neve, for the most part, would be screened from the views to the north by existing buildings such as Rieber Hall and the Hedrick residential buildings. In addition, existing mature landscaping and trees along the northern edge of the campus and trees that would be planted as part of the project on the northern side of Upper and Lower De Neve would also serve to obscure any remaining views from the north. Ongoing compliance with PP 4.1-2(d) would ensure that the landscape buffer along the northern edge of campus would be maintained. Because Sproul Complex would be integrated into Sproul Hall, views from the north would be obstructed by Sproul Hall. Sproul West would be partially visible, although existing structures and mature landscaping would also screen views from the north. The proposed 2008 NHIP buildings would be lower in elevation than Rieber Hall, as shown in Figures 3-6 through 3-8. Overall, the elevations of the proposed 2008 NHIP structures are consistent with the elevations of existing buildings in the Northwest zone. Because the landscape view of the Northwest zone, as seen from the Bel Air neighborhood, would be maintained, a less than significant impact would occur with respect to the visual quality of this viewshed.

Views from the West

Views from Veteran Avenue of the higher elevation areas of the Northwest zone would not be altered with implementation of the 2008 NHIP. Existing views (as seen from higher elevations in the Westwood Hills neighborhood west of Veteran Avenue) primarily consist of mature trees and landscaping with intermittent views of Rieber Terrace, Rieber Vista and Rieber Hall. The top of the proposed Sproul West and Sproul Hall buildings would be lower than Rieber Hall, and long range views from the west would not be altered. Views of the Upper and Lower De Neve buildings would be obstructed by existing mature trees. From lower elevations, particularly along Veteran Avenue, the campus residential structures and other development in the Northwest zone are obstructed by topography or landscaping and are not visible. The visual change resulting from implementation of the 2008 NHIP, as seen from vantage points immediately to the west, would not degrade the visual quality or character of the site with continued implementation of 2002 LRDP Final EIR PPs 4.1-1(a), 4.1-2(a), 4.1-2(b), 4.1-2(c), 4.1-2(d), 4.8-1(d) (Section 4.8, Land Use and Planning) which requires siting of buildings to ensure compatibility with existing uses, and new MM 4.3-1(c) in Section 4.3, Biological Resources (which requires tree replacement). This impact would be less than significant and no project-specific mitigation is required.

Views from the East

Figure 4.1-1 provided in the Environmental Setting discussion shows the existing view from the east. The changes associated with the proposed 2008 NHIP would not substantially alter the existing view from the east. As shown in Figures 3-6 through 3-8 in Section 3, Project Description, the elevations of the proposed buildings would be consistent with the elevation of existing Rieber Hall. From this view, changes associated with the Sproul Complex would be visible; however, as shown in Figure 3-6, the elevation of Sproul Complex would not exceed the elevation of Rieber Hall. In addition, as required in 2002 LRDP Final EIR PP 4.1-1(a), through the design process, the proposed buildings would be consistent with the existing buildings and surrounding visual character and quality of the campus. Changes associated with Sproul Hall (i.e., addition of Sproul Complex) would not change the existing elevations of the building. In this view, Sproul West would be located behind Sproul Hall and would not be visible. Additionally, it

is important to note that much of the mature landscaping and trees shown in Figure 4.1-1 that partially obstruct views of existing residential buildings in the Northwest zone would remain.

From elevated vantage points to the east (as shown on Figure 4.1-1), the Upper and Lower De Neve buildings would be visible to the left of Sproul Hall; however, the elevations of the buildings would be consistent with and would not exceed the elevations of Sproul Hall or Rieber Hall (refer to Figures 3-6 through 3-8). The existing and mature trees shown in the long-range views would also obstruct views of the Upper and Lower De Neve buildings. Continued implementation of PP 4.1-1(a), PP 4.1-2(a), PP 4.1-2(b), PP 4.1-2(c), and PP 4.1-2(d) provided above, and PP 4.8-1(d) in Section 4.8 (Land Use and Planning), as well as new MM 4.3-1(c) in Section 4.3 (Biological Resources) would ensure a limited visual change resulting from implementation of the 2008 NHIP. As seen from distant vantage points to the east the proposed 2008 NHIP would not degrade the visual quality or character of the site or area. This impact would be less than significant and no project-specific mitigation is required.

Views from the South

Changes to views of the 2008 NHIP site from off-campus vantage points to the south and southwest (across and along Gayley Avenue) would be the most notable compared to vantage points from other directions. Figures 4.1-18 and 4.1-19 provide visual simulations of the 2008 NHIP site from vantage points along Gayley Avenue. In both views, the landscaped slope along Gayley Avenue proposed to be developed with the Upper and Lower De Neve Buildings is shown. As shown in Figure 4.1-18 both the Upper and Lower De Neve buildings are visible and are relatively consistent in height with the existing De Neve Plaza. From the vantage point simulated in Figure 4.1-19, Lower De Neve is primarily visible.

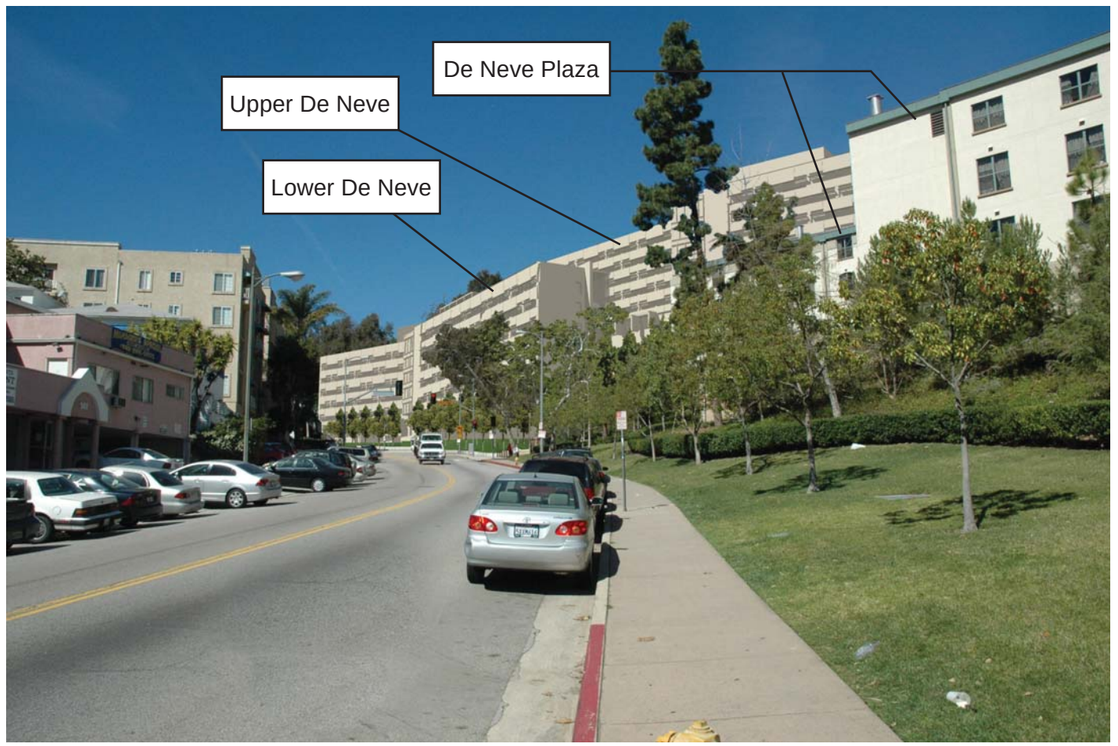
A setback ranging between 15 and 50 feet between the sidewalk and the proposed Lower De Neve building, with landscaping (trees, shrubs, and ground cover) would be provided along Gayley Avenue to ensure an attractive perimeter buffer consistent with campus landscaping for adjacent areas/structures (e.g., Southern Regional Library and De Neve Plaza Housing Complex) consistent with 2002 LRDP Final EIR PP 4.1-2(d). While the proposed trees and landscaping would not initially or totally screen the views of the Lower De Neve building from views along and across Gayley Avenue, the visual impact to these views would be considered less than significant in accordance with CEQA in that the change would not substantially degrade the visual quality of the site or surrounding areas.

The rooftop elevations of the proposed 2008 NHIP buildings, including Lower and Upper De Neve, would be consistent with the elevations of existing buildings on campus. Figures 3-6 and 3-8 (in Section 3, Project Description) show the elevations of the proposed 2008 NHIP structures compared to existing adjacent buildings on campus (e.g., Rieber Hall). As shown, although the height of the proposed buildings would be taller than the existing Rieber Hall (which has the highest rooftop elevation in this area), the rooftop elevations of the proposed structures are lower than Rieber Hall.

The proposed Upper and Lower De Neve buildings would be taller than the multi-family buildings located directly across Gayley Avenue; however, because the buildings in the North Village are situated at higher base elevations than Gayley Avenue, the height differential between the Lower and Upper De Neve buildings and existing development would not be as apparent from the perspective of a motorist or pedestrian along Gayley Avenue. As shown in Figure 4.1-3, there is a varied mix of building types and heights in this area, including the Gayley Towers that appears to be similar height to existing on campus structures. The scale, massing, and overall development intensity of the proposed project would be relatively consistent with the scale and massing of existing on-site and adjacent land uses. This is



Existing photograph.



Visual simulation.

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Visual Simulation – View from South

Figure 4.1-18

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

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Existing photograph.



Visual simulation.

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Visual Simulation – View from South

Figure 4.1-19

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

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ensured through continued implementation of PP 4.1-1(a) (building design, mass, form and landscaping), PP 4.1-2(b) (respect and reinforce architectural and landscape traditions), PP 4.1-2(c) (provide landscaping), and PP 4.1-2(d) (maintain landscape perimeter along the western edge of campus). With implementation of the PPs and considering that the UCLA campus and surrounding areas are considered a highly urbanized environment, implementation of the proposed 2008 NHIP would not substantially degrade the visual character or quality of the project site or surrounding areas as viewed from vantage points to the south. This would be a less than significant impact, and no mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Implementation of the remaining development allocation of the 2002 LRDP, as amended, would allow up to approximately 1.87 million gsf of new development and could occur on other infill sites (such as the Upper and Lower De Neve components of the proposed 2008 NHIP) or as a result of demolition of existing buildings. Therefore, visual quality impacts, related to the general character of future project sites and the visual compatibility between proposed campus uses and adjacent land uses, could occur. Determining the significance of visual impacts is inherently subjective because individuals respond differently to changes in the visual characteristics of an area.

Development under the 2002 LRDP, as amended, would intensify land use in some areas of campus and would result in visual changes, depending upon the location, mass, and height of new structures relative to off-campus and/or adjacent land uses. However, the campus is located in an urban area that is developed with dense multi-family residential, urban or commercial uses, and the types of development allowed under the 2002 LRDP, as amended, would be consistent with existing uses (on and off campus) and would not substantially degrade the visual quality or character of the area. Additionally, the physical planning objectives embodied by 2002 LRDP Final EIR PP 4.1-1(a), PP 4.1-1(b), PP 4.1-2(a) through PP 4.1-2(d), as previously described, would ensure that the existing visual quality of the campus is maintained to the extent practicable. Furthermore, PP 4.1-2(a) and PP 4.1-2(b) require that new development be designed to complement existing development, thereby creating a visually compatible environment. PP 4.8-1(d) in Section 4.8, Land Use and Planning, also specifically requires that development on the southern edge of campus be designed to enhance the campus interface with Westwood Village.

The LRDP is a land use plan that guides the physical development of the campus. It is not an implementation plan and does not constitute a commitment to any specific project. Therefore, the environmental analysis for the 2002 LRDP, as amended, is programmatic, rather than project-specific, as the actual sites and design of future buildings are undetermined. However, each major building proposal undertaken during the 2002 LRDP Amendment's planning horizon (e.g., the proposed 2008 NHIP) will require project-specific environmental review in accordance with CEQA.

Future development on campus could also remove or alter landscaping or open areas to accommodate new or expanded buildings, improve infrastructure, or allow for construction activities. Specifically, the proposed NHIP would result in the removal of mature trees and other landscaping on the slope adjacent to Gayley Avenue. New MM 4.3-1(c) (see Section 4.3, Biological Resources) requires that removed trees be replaced at a 1:1 ratio as necessary. PP 4.1-2(c) requires the inclusion of landscaping in all on-campus development projects and PP 4.1-2(d) specifically requires the provision of a landscaped buffer along the western, northern, and eastern edges of the campus to complement the residential uses of the surrounding community and to provide an attractive perimeter that effectively screens and enhances future development. Landscaping affected by construction would be replaced as

required by PP 4.1-2(c), and the campus would continue to respect and reinforce its landscape traditions, as required by PP 4.1-2(b).

In addition and as required by PP 4.1-1(b), the 2002 LRDP, as amended, including the proposed 2008 NHIP, preserves certain open spaces that hold cherished places in campus history and tradition or that have been developed to an exceptional level of spatial and aesthetic excellence. As listed above, these designated preserves include the Mildred E. Mathias Botanical Garden, the Franklin D. Murphy Sculpture Garden, Dickson Plaza, Janss Steps, the Stone Canyon Creek area, Meyerhoff Park, Wilson Plaza, Bruin Plaza, and the University Residence.

While the campus is located in an urban developed area (as further described in Section 4.8, Land Use and Planning), the identified PPs serve to preserve and enhance the visual character and quality of the campus and surrounding area by retaining, replacing, and/or improving the features and spaces that are accepted as valuable visual elements of the campus and would thereby ensure that a less than significant impact occurs. Preserving open spaces and integrating landscaping with development is also intended to enhance campus linkages by seamlessly integrating hardscape and landscape. Therefore, implementation of the proposed would not substantially degrade the visual character or quality of the area. This impact is less than significant.

Mitigation Measures

With continued implementation of the identified PPs carried forward from the 2002 LRDP Final EIR, no additional mitigation is required.

Level of Significance After Mitigation

Less than significant.

Impact 4.1-2 ***Continued compliance with 2002 LRDP Final EIR PPs 4.1-1(a), 4.1-1(b), 4.1-2(a) through 4.1-2(d) and implementation of new MM 4.3-1(c) in Section 4.3, Biological Resources, would ensure that the proposed Project would not substantially degrade the visual character or quality of the campus and the immediately surrounding area. This impact is less than significant and no further mitigation is required.***

Threshold	Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Proposed 2008 NHIP

The proposed 2008 NHIP includes buildings, pedestrian paths, and other uses that would result in additional lighting for security purposes and could result in increased glare if reflective building materials are used; this is a potentially significant impact. MM 4.1-3(a) adopted as part of the 2002 LRDP Final EIR, requires building design to incorporate the use of non-reflective exterior surfaces and non-reflective glass to minimize glare impacts on adjacent uses. Final EIR MM 4.1-3(b) requires all 2008 NHIP project components to provide lighting that is shielded and focused downward to minimize stray light spillover onto adjacent uses either on or off campus.

The heavily landscaped buffers provided along Veteran Avenue and Sunset Boulevard, bordering the Northwest zone, as well as intervening development limit outside views of proposed buildings and would further ensure that potential increases in glare from the proposed 2008 NHIP would represent a less than significant impact to the residential neighborhoods north and west of the project site. While an increase in ambient lighting would occur on the 2008 NHIP sites, existing sources of light are currently provided throughout the Northwest zone and are intended to provide a safe environment for travel to and from the residence halls. The type and amount of lighting that would be implemented with the 2008 NHIP would be similar to existing development in this area.

The Lower De Neve building is located adjacent to Gayley Avenue and across the street from residential uses. There are light standards along Gayley Avenue as well as lighting associated with existing development and vehicles traveling on Gayley Avenue. Although the Lower De Neve building would introduce a new source of light in this area, it would not affect nighttime views beyond that experienced by existing lighting in this urban environment. The design of Lower De Neve and other residential buildings proposed with the 2008 NHIP include the provision of occupancy sensor type light switches to control the lights in the student rooms and study/lounge rooms. The study/lounge rooms would also have day-light sensors for controlling the lights so use of natural daylight is maximized whenever possible depending on weather. All exterior light fixtures would be controlled by daylight sensors. Interior light fixtures would meet the LEED™ light pollution requirement that the maximum candela value from these interior fixtures adjacent to windows/building openings would not be directed towards the window. Therefore, impacts from the proposed 2008 NHIP related to introduction of new light sources would be less than significant.

Although no significant impacts are anticipated due to the introduction of new light sources on the 2008 NHIP sites, impacts would remain less than significant through continued compliance with 2002 LRDP Final EIR PP 4.1-2(d) (provision of landscaping along the edge of campus), as well as continued implementation of 2002 LRDP Final EIR MMs 4.1-3(a) through 4.1-3(c) below.

Remaining Buildout of the 2002 LRDP as Amended

New development under the 2002 LRDP, as amended, includes the proposed 2008 NHIP at the perimeter of the campus along Gayley Avenue and could include future development in other perimeter locations and in areas that are currently landscaped. Future development under the 2002 LRDP, as amended, could create new sources of light from exterior building illumination, lighted recreation/athletic facilities, and parking lots or structures, as well as glare from reflective building surfaces and/or the headlights of vehicular traffic. These new sources of light or glare could affect day or nighttime views of adjacent sensitive land uses, resulting in a potentially significant impact.

The campus is located in an urban area; therefore, there is currently substantial nighttime lighting on campus and in much of the area surrounding the campus; the addition of new sources of light and glare as a result of implementation of the LRDP would increase ambient lighting on campus and at the periphery. However, due to the highly developed urban nature of the Westwood community, there is a significant existing amount of ambient light both on campus and in the immediately surrounding area. Therefore, potential impacts of substantial light and glare would be anticipated to occur only on campus or in the immediate vicinity. Lighting for new development projects would be designed, as part of the campus design review process, in such a way as to limit spillover onto adjacent residential land uses by focusing additional light only on the area to be illuminated. By incorporating the design features required by 2002 LRDP Final EIR MM 4.1-3(a) (e.g., the use of non-reflective textured surfaces on building exteriors, avoidance of the use of reflective glass), impacts resulting from glare from

new development would be reduced to a less than significant level. In addition, 2002 LRDP Final EIR MM 4.1-3(b) requires that lighting be specifically directed to the intended illumination site to prevent spill onto adjacent residential areas. Continued implementation of 2002 LRDP Final EIR MM 4.1-3(c) would also ensure that light and/or glare from vehicles entering or exiting parking structures that face on- or off-campus sensitive uses (such as residences) is shielded by providing barriers so that headlights from vehicles would be shielded from these off-campus uses. Finally, with incorporation of energy conservation and exterior lighting fixtures with full-cut off features (which is part of the Green Building Design component of the UC Policy on Sustainable Practices and Guidelines, refer to Section 4.15, Climate Change), light and glare impacts would be further reduced.

Mitigation Measures Carried Forward from the 2002 LRDP Final EIR

The following mitigation measures were adopted as part of the 2002 LRDP Final EIR and shall continue to be implemented as part of the proposed Project, including the proposed 2008 NHIP.

MM 4.1-3(a) *Design for specific projects shall provide for the use of textured non-reflective exterior surfaces and non-reflective glass.*

MM 4.1-3(b) *All outdoor lighting shall be directed to the specific location intended for illumination (e.g., roads, walkways, or recreation fields) to limit stray light spillover onto adjacent residential areas. In addition, all lighting shall be shielded to minimize the production of glare and light spill onto adjacent uses.*

MM 4.1-3(c) *Ingress and egress from parking areas shall be designed and situated so the vehicle headlights are shielded from adjacent uses. If necessary, walls or other light barriers will be provided.*

Level of Significance After Mitigation

Less than Significant.

Impact 4.1-3 ***Implementation of the proposed Project could create a new source of glare on campus or in the vicinity that would adversely affect day or nighttime views in the area. This potentially significant impact would be reduced to a less than significant level with continued implementation of 2002 LRDP Final EIR MMs 4.1-3(a), 4.1-3(b), and 4.1-3(c). It should be noted that the proposed Project would have less than significant impacts related to introduction of new light sources; however, the identified MMs would still apply.***

Threshold	Would the project cause shade and/or a shadow on currently un-shaded, shadow-sensitive uses off-campus?

The following analysis has been prepared to specifically address impacts resulting from the proposed 2008 NHIP. This level of site-specific analysis cannot be completed for future projects that may be developed under the 2002 LRDP, as amended, due to the lack of information on building locations, heights, and orientation, among other design features. However, future projects that occur along the perimeter of the campus would be subject to this type of detailed analysis as part of the project-specific environmental review.

Proposed 2008 NHIP

A 2008 NHIP shade and shadow analysis was conducted for the Upper and Lower De Neve buildings to determine if the off-campus uses south of Gayley Avenue would be impacted by shade or shadow effects with implementation of these buildings. The shade and shadow analysis addresses conditions on the following days: June 21 (summer solstice) and December 21 (winter solstice), which represent the days of the year with the longest and shortest periods of daylight, respectively, and, September 22 (autumnal equinox) and March 20 (spring equinox), which are halfway between the summer and winter solstices. For each of these days, the conditions at 9:00 AM, 12:00 PM, and 3:00 PM were simulated. Figures 4.1-20a and 4.1-20b display the results of the shade and shadow analysis.

The analysis demonstrates that, with the exception of the 9:00 AM timeframe during the summer solstice (June 21st), the shadows cast by the proposed new Upper and Lower De Neve buildings extend to the north, east, or west of the buildings onto the adjacent landscaped areas. As shown in Figures 4.1-20a and 4.1-20b, in the morning during the summer solstice the shadows would extend slightly to the south, but would not reach Gayley Avenue. Additionally, it should be noted that the existing mature trees on the proposed site of the Upper and Lower De Neve buildings are sufficiently dense to create shadows under existing conditions. Therefore, the proposed 2008 NHIP would not cause a new shade/shadow effect that would impact off campus uses; no impact would occur.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact would occur.

Impact 4.1-3 Implementation of the proposed 2008 NHIP would not cause shade and/or a shadow on currently unshaded, shadow-sensitive uses off campus. No impact would occur and no mitigation is required.

4.1.4 CUMULATIVE IMPACTS

The geographic context for the analysis of cumulative aesthetic impacts includes areas with views of the UCLA campus, which occur in certain portions of the Westwood, West Los Angeles, Bel Air–Beverly Crest, and Brentwood–Pacific Palisades Community Plan areas. The analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of allowed development under the *City of Los Angeles General Plan Framework* (see Section 4.8, Land Use and Planning, for definition and discussion) and development of the related projects provided in Table 4-1, Off-Campus Related Projects, in Section 4, Introduction to the Environmental Analysis.

Cumulative development associated with the implementation of allowed development under the General Plan Framework (including the related projects) may have a substantial cumulative adverse effect on focal views of a scenic vista. The major natural landform existing within the geographic area for this analysis is the Santa Monica Mountains. Future development within the Santa Monica Mountains is not anticipated to be extensive; however, it is possible that certain focal views of natural landforms and scenic resources (such as trees, rock outcroppings, or scenic highways) within the Santa Monica Mountains and elsewhere in the City of Los Angeles

could generally be affected by such development on a site-by-site basis. It is anticipated that the protections afforded to natural scenic resources through the CEQA review process, scenic highway protection requirements, and local design review procedures would be applied, resulting in a less than significant cumulative impact; although it is possible that future loss of individual scenic natural resources could be regarded by some as significant on a cumulative basis. However, as discussed above, the UCLA campus does not contain any rock outcroppings and would not conflict with City of Los Angeles Scenic Highway Guidelines applicable to the Sunset Boulevard corridor; it should also be noted that the campus is not adjacent to the portion of Wilshire Boulevard that the City of Los Angeles has designated as a scenic corridor. It should be noted that the Initial Study concluded that the project would have no visual impact to Sunset Boulevard or views from this roadway (see Appendix A). Moreover, pursuant to PP 4.1-2(b), the landscape plantings (including trees) that give the campus its unique character will be respected and reinforced. Accordingly, the contribution of the 2002 LRDP, as amended, to cumulative impacts on focal views of natural scenic resources or scenic highways are not cumulatively considerable. This is considered to be a less than significant impact.

Focal views of urban features (i.e., public art and signs) or visually important or historic structures are protected from adverse impact by (1) City of Los Angeles ordinances, (2) the CEQA review process, and (3) through the application of guidelines for preserving visual integrity, which are contained in planning documents such as the General Plan Framework, the Westwood Community Plan, and the Westwood Village Specific Plan. The focal views on campus were identified in the Environmental Setting discussion of this section. There are no focal views in the area adjacent to the campus (off campus). Cumulative impacts on historic buildings as a cultural resource are analyzed in Section 4.4 of this EIR, and are less than significant. However, although future development is anticipated to comply to the extent feasible with these ordinances and guidelines, significant impacts could occur to these unique focal views as a result of a specific development project, and thus contribute to a cumulative impact that could be regarded as significant. As discussed above under Impact 4.1-1, the 2008 NHIP and 2002 LRDP, as amended, will continue to implement programs and practices to preserve the existing architectural character of the campus and to maintain existing areas of special interest and aesthetic quality on campus. Moreover, as discussed in Section 4.4, Cultural Resources, development of the 2008 NHIP and future development under the 2002 LRDP, as amended, would not have a significant impact on on-campus historic resources. As a result, the contribution of the 2002 LRDP, as amended, to impacts on focal views of urban features, including historic buildings, is not cumulatively considerable. This is considered to be a less than significant impact.

Full implementation of allowed development under the General Plan Framework and the table of proposed projects in the subject area are not likely to result in a cumulatively significant impact in terms of a substantial degradation of the visual character or quality of the area. The campus and surrounding areas are in a built out, urban environment. Much of the future campus development under the 2002 LRDP, as amended, would occur on infill sites on the main Campus Core zone, which is largely screened from view from the surrounding neighborhoods in large part by other on-campus development and landscaping. Development in the remaining zones (such as the Northwest, Bridge, Health Sciences, and Southwest zones) would occur adjacent to areas that are fully developed, dense, multi-family residential, urban, or commercial in nature. The 2002 LRDP, as amended, includes many campus practices and procedures regarding the planning and design of development; this would ensure that the contribution of the 2008 NHIP and 2002 LRDP, as amended, to degradation of visual quality/character is less than significant. Future development in the City of Los Angeles will continue to be guided by the General Plan Framework. Consequently, changes in the nature or land use of Los Angeles neighborhoods that would substantially degrade the area would not be permitted to occur under the General Plan Framework and CEQA requirements; the visual character of these areas



9:00am - March 20th, 2013



12:00pm - March 20th, 2013



3:00pm - March 20th, 2013



9:00am - June 21st, 2013



12:00pm - June 21st, 2013



3:00pm - June 21st, 2013

Proposed Buildings
Shadows of Proposed Buildings
Existing Building Footprint

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Shade and Shadow – Upper and Lower De Neve Buildings

Figure 4.1-20a

2008 NHIP and LRDP Amendment

Bonterra CONSULTING

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9:00am - September 22nd, 2013



12:00pm - September 22nd, 2013



3:00pm - September 22nd, 2013



9:00am - December 21st, 2013



12:00pm - December 21st, 2013



3:00pm - December 21st, 2013

Proposed Buildings
Shadows of Proposed Buildings
Existing Building Footprint

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Shade and Shadow – Upper and Lower De Neve Buildings

Figure 4.1–20b

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

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would, therefore, be protected. Additionally, the *Westwood Community Plan* ensures that development occurs consistent with its surroundings in terms of massing, building heights, and aesthetics. Therefore, none of the projects proposed to occur in the area, including the Wilshire Gayley Project, would be expected to result in the substantial degradation of the visual quality of the area; thus, cumulative impacts in this regard would be less than significant. Even if it were determined that future projects would result in a future cumulative impact, the contribution of the 2008 NHIP and 2002 LRDP, as amended, would not be cumulatively considerable for the reasons stated in the analysis presented in this section. This is considered to be a less than significant impact.

Much of the subject geographic area is composed of single- and multi-family residential neighborhoods that could be sensitive to increases in light or glare. Consequently, growth representing full implementation of the General Plan Framework and off-campus related projects outlined in Table 4-1 in Section 4 (Introduction to the Environmental Analysis) could result in the creation of new sources of substantial light or glare that could affect day or nighttime views. With regard to nighttime views, most development in the area would likely be concentrated in areas that already contain higher densities and commercial development, such as along Wilshire Boulevard or in Westwood Village. As with typical urban environments, these areas are already subject to nighttime light sources (from existing development, street lights, motor vehicles, etc.) so added light would not substantially penetrate into residential communities beyond existing conditions. However, additional development may substantially increase daytime glare due to an increase in the number of windows and uncertainty as to the type of building materials that future development would use. Consequently, a cumulatively significant impact could occur. However, the contribution of the 2008 NHIP and 2002 LRDP, as amended, would not be cumulatively considerable with regard to a substantial new source of light and glare. Development of the 2008 NHIP and 2002 LRDP, as amended, would occur on the UCLA campus, which is largely shielded from surrounding land uses by landscaping and buffers and is already a source of nighttime illumination. For development occurring on the edge of campus and next to other land uses, shielding of light fixtures, in combination with buffers and landscaping, would reduce impacts to off-campus land uses from nighttime lighting and vehicle headlights. With regard to glare impacts, the campus practice that requires the use of non-reflective glass and textured materials would also reduce glare. Consequently, potential light and glare impacts of the 2002 LRDP, as amended, would be reduced and would not be cumulatively considerable. This is regarded to be a less than significant impact.

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4.2 AIR QUALITY

This section evaluates the potential impacts on air quality resulting from implementation of the proposed Project and the potential for a significant increase in the risks of carcinogenic and noncarcinogenic health effects from airborne emissions.

Data used to prepare this section were taken from various sources, including the South Coast Air Quality Management District (SCAQMD) *Air Quality Guidance Handbook* web site and the 1997, 2003, and 2007 versions of the Air Quality Management Plan (AQMP), as amended; the *University of California, Los Angeles Northwest Housing Infill Project and Long Range Development Plan Amendment Traffic Impact Study* (included as Appendix I); and the *Health Risk Assessment in Support of the 2002 LRDP Amendment for the 2013 Horizon Year for the University of California, Los Angeles* (HRA, included as Appendix C2). Supporting air quality data and calculations are included in Appendix C1. Full bibliographic entries for all reference materials are provided in Section 4.2.5, References, of this section.

The projected greenhouse gas emissions associated with buildout of the proposed Project and the potential contribution to global climate change is discussed in Section 4.15, Climate Change.

One private individual submitted comments in response to the Notice of Preparation addressing air quality issues. Specifically, the individual requested that the EIR address the effect of construction-related air pollutant emissions on the health of nearby sensitive receptors, both from the project and in combination with other campus emissions sources (refer to Impacts 4.2-2 through 4.2-7).

4.2.1 ENVIRONMENTAL SETTING

Climate

The campus is located within the South Coast Air Basin (Basin), which was named as such since its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys or basins below. This area includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The regional climate within the Basin is semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity.

The campus is located in the City of Los Angeles's Westside. The annual average temperature at the campus ranges from 47 to 75 degrees Fahrenheit (°F), although temperatures can exceed 100°F on an occasional basis. The area also experiences a typical daily wind pattern that is a daytime onshore sea breeze (from the west) and a nighttime land breeze. This regime is broken by occasional winter storms and infrequent strong Santa Ana winds from the northeast that travel from the mountains and deserts north of the Basin. On practically all spring and early summer days, the daily wind patterns flush much of the Basin of its high levels of air pollutants. From late summer through the winter months, the flushing is less pronounced because of lighter wind speeds.

Air Quality Background

Air pollutant emissions within the Basin are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point sources and area sources. Point sources are usually subject to a permit to operate from the SCAQMD; occur at a specific identified location; and are usually associated with manufacturing and industry.

Examples of point sources are boilers or combustion equipment that produce electricity or generate heat, such as heating, ventilation, and air conditioning (HVAC) units. Area sources are widely distributed, produce many small emissions, and do not require permits from the SCAQMD to operate. Examples of area sources include residential and commercial water heaters, painting operations, portable generators, lawn mowers, agricultural fields, landfills, and consumer products (such as barbeque lighter fluid and hair spray), the areawide use of which contributes to regional air pollution. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road sources. On-road sources are those that are legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, racecars, and construction vehicles. Mobile sources account for the majority of the air pollutant emissions within the Basin. Air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and are suspended in the air during high winds.

Both the federal and State governments have established ambient air quality standards for outdoor concentrations of specific pollutants, referred to as "criteria pollutants", in order to protect public health. The national and State ambient air quality standards have been set at concentration levels to protect the most sensitive persons from illness or discomfort; these levels are given with a margin of safety. Applicable ambient air quality standards are identified later in this EIR section. The SCAQMD is responsible for ensuring the Basin meets the national and State ambient air quality attainment standards.

The criteria pollutants for which federal and State standards have been promulgated and that are most relevant to air quality planning and regulation in the Basin are ozone, carbon monoxide, nitrogen dioxide, and particulate matter. In addition, toxic air contaminants are of concern in the Basin. Each of these is briefly described below.

Ozone (O_3) is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Thus, VOC and NOx are precursors of ozone. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

Carbon Monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter mornings, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO, unlike O_3, is emitted directly from internal combustion engines and motor vehicles operating at slow speeds (and are therefore the primary sources of CO in the Basin), the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

Nitrogen Dioxide (NO_2) is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2. Gases containing NO, NO_2, and other compounds containing nitrogen and oxygen are identified as "NOx".

Particulate Matter (PM10 and PM2.5) consists of extremely small, suspended particles or droplets. Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM10. PM10 consists of particulate matter emitted directly into the air, such as fugitive dust; soot; natural windblown dust; and exhaust from mobile and stationary sources, construction operations, and fires. Fine particulate matter (PM2.5) is a subgroup of PM10 that consists of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less.

Sources of PM2.5 include exhaust from mobile and stationary sources, fires, and particulate matter formed in the atmosphere by condensation and/or transformation of Sulfur dioxide (SO_2) and VOCs.

Sulfur dioxide (SO_2) is an extremely irritating colorless gas. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes that occur at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Together, these pollutants are referred to as sulfur oxides (SOx).

Lead occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles so most such combustion emissions are associated with off-road vehicles such as racecars. Other sources of lead include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

Toxic air contaminants (TACs) are a diverse group of air pollutants that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACS are different than the “criteria” pollutants previously discussed in that ambient air quality standards have not been established for them.

Existing Air Quality

On a national level, the entire Basin is designated as a “severe 17” nonattainment area for the 8-hour O_3 standard, meaning that national ambient air quality standards are not expected to be met for more than 17 years after the year of designation; the Basin is designated as a serious nonattainment area for PM10 and a nonattainment area for PM2.5. The Basin is classified as a federal attainment/maintenance area for CO and NO_2. The Basin is classified as a State attainment area for CO and NO_2; it currently meets the federal and State standards for SO_2 and lead, and is classified as an attainment area for these pollutants.

The SCAQMD has divided the region into 38 source receptor areas (SRAs) in which 36 air monitoring stations operate. The UCLA campus is located within SRA 2, which covers the northwest coastal Los Angeles County area. Ambient air pollutant concentrations within SRA 2 are monitored at the Veterans Administration building in West Los Angeles, approximately ½ mile southwest of the UCLA campus. Of the air pollutants discussed previously, only ambient concentrations of O_3, CO, and NO_2 are monitored in SRA 2. Table 4.2-1, Summary of Ambient Air Quality in the Project Vicinity, identifies the national and State ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured within SRA 2 between 2005 and 2007. As shown, the State one-hour O_3standard was exceeded in SRA 2 between two and seven days over the last three years. The national eight-hour O_3standard was exceeded once each in 2005 and 2007; the State standard was exceeded on multiple days over the last three years. No national or State standards for CO or NO_2 have been exceeded within SRA 2 during this time.

TABLE 4.2-1
SUMMARY OF AMBIENT AIR QUALITY IN THE PROJECT VICINITY

Air Pollutants Monitored Within SRA 2—Northwest Coastal Los Angeles County[a]	Year		
	2005	2006	2007
O_3			
Maximum 1-hour concentration measured	0.11 ppm[b]	0.10 ppm	0.12 ppm
Number of days exceeding State 0.09 ppm 1-hour standard	7	3	2
Maximum 8-hour concentration measured	0.09 ppm	0.07 ppm	0.09 ppm
Number of days exceeding national 0.075 ppm 8-hour standard	1	0	1
Number of days exceeding State 0.070 ppm 8-hour standard	12	2	2
CO			
Maximum 1-hour concentration measured	3 ppm	3 ppm	3 ppm
Number of days exceeding national 35.0 ppm 1-hour standard	0	0	0
Number of days exceeding State 20.0 ppm 1-hour standard	0	0	0
Maximum 8-hour concentration measured	2.11 ppm	2.00 ppm	1.96 ppm
Number of days exceeding national 9 ppm 8-hour standard	0	0	0
Number of days exceeding State 9.0 ppm 8-hour standard	0	0	0
NO_2			
Maximum 1-hour concentration measured	0.075 ppm	0.078 ppm	0.082 ppm
Number of days exceeding State 0.18 ppm 1-hour standard	0	0	0

[a] Ambient concentrations of PM10, PM2.5, SO_2, and lead are not monitored in SRA 2.
[b] ppm = parts by volume per million of air.

Source: CARB 2008a.

Existing Local Pollutant Sources

Land uses in the vicinity of the UCLA campus are described in Section 4.8, Land Use and Planning, and include commercial, institutional, and residential uses. Local emissions sources include stationary activities (such as space and water heating), landscape maintenance, and consumer products; mobile sources primarily include automobile and truck traffic. Motor vehicles are the primary source of pollutants in the campus vicinity. Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or State standards for CO are termed CO "hotspots".

CO concentration is a direct function of motor vehicle activity (e.g., idling time and traffic flow conditions)—particularly during peak commute hours—and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses such as residential areas, schools, and hospitals. As a result, the SCAQMD recommends analysis of CO emissions at both a local and a regional level.

Maximum existing CO concentrations are shown in Table 4.2-1. These concentrations were measured at the monitoring station located at the Veterans Administration building in West Los Angeles. The monitoring station is located less than a mile from the campus; therefore concentrations measured at the station would be representative of the background CO concentrations at the campus. As shown in Table 4.2-1, existing CO concentrations do not exceed the national 9 parts per million (ppm) and State 9.0 ppm 8-hour ambient air quality standards. The 1-hour federal and State standards, 35 ppm and 20 ppm respectively, are not exceeded at the monitoring station. In SRA 2, existing 8-hour background concentrations of CO

are less than 2.5 ppm. Similarly, existing 1-hour background concentrations of CO were at 3 ppm for the last 3 years. Analysis of the project's contribution to localized CO concentrations is included in Section 4.2.3, below.

Existing Campus Emissions

The UCLA campus has been developed with a variety of academic and related uses, with facilities dedicated to instruction, research, patient care, support functions, recreation, and housing. Existing air emissions from the campus are generated by stationary sources, such as the chiller/cogeneration facility and back-up generators; area sources, such as landscape maintenance equipment, natural gas used for heating, and consumer products; and mobile sources. Mobile sources are the vehicle trips generated by on-site uses. The existing average daily emissions generated by the uses and activities at the campus are presented in Table 4.2-2. Existing emissions were calculated using the URBEMIS 2007 model and AP-42 emission factors (USEPA 2008a). As shown, motor vehicles are the primary source of air pollutant emissions associated with the UCLA campus.

TABLE 4.2-2
EXISTING DAILY OPERATIONAL CAMPUS EMISSIONS

Emissions Source	Emissions in Pounds per Day				
	VOC	NO_X	CO	PM10	PM2.5
Stationary Sources	43	249	653	59	59
Area Source	231	53	46	<1	<1
Mobile Source	1,335	1,934	15,336	2,082	406
Total Emissions	***1,609***	***2,236***	***16,035***	***2,141***	***465***

Refer to Appendix C1 for detailed assumptions and modeling output files.
Existing area source emissions are based on the current average daily student population.

Source: Iteris 2008; UCLA 2006; Data modeled by EDAW 2008.

The average daily emissions identified in Table 4.2-2 would be substantially higher were it not for numerous programs that the campus implements to reduce air pollutants, energy demand (thereby reducing associated energy-generation emissions), and motor vehicle trips (through use of transportation demand management [TDM] features). All stationary sources of emissions constructed and operated within the UCLA campus incorporate Best Available Control Technology (BACT) as part of the SCAQMD permit requirements to control the overall amount of emissions that these sources emit. Under SCAQMD rules, BACT is defined as the most stringent emissions control which, for a given class of air pollutant source, has been achieved in practice, identified in a State Implementation Plan, or has been found by the SCAQMD to be technologically achievable and cost-effective. A primary source of the stationary source emissions generated at the UCLA campus is the Energy System (cogeneration) Facility (ESF), which simultaneously produces electricity, steam (to heat campus buildings), and chilled water (for air conditioning and cooling). Other in-building and auxiliary stand-alone chillers are located within the campus to produce additional chilled water for air conditioning and cooling needs.

Energy conservation measures are described in Section 4.14, Utilities and Service Systems. Alternative transportation and TDM measures are described in Section 4.13, Transportation/Traffic. The use of alternative fuel vehicles is discussed in Section 4.15, Climate Change. Another campus-wide development objective articulated in the 2002 LRDP relates to the provision of on-campus housing, in part, as a component of transportation management.

Existing Sensitive Receptors

The SCAQMD defines typical sensitive receptors as residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors on campus include, but are not limited to, residence halls, hospitals, and schools. Sensitive receptors off campus are single and multi-family residences and schools in the surrounding neighborhoods. The closest sensitive receptors to the proposed 2008 NHIP sites are the existing on campus residence buildings, including De Neve Housing, Dykstra Hall, Rieber Hall, Saxon Housing, and Sproul Hall; at the closest point, existing sensitive receptors would be adjacent to 2008 NHIP construction activities. In addition, there are residential uses off campus south of Gayley Avenue; however, they are not the closest receptors to the 2008 NHIP sites for analysis purposes.

Existing Toxic Air Contaminants Emissions

A health risk assessment (HRA) was prepared to estimate the potential health risks associated with TACs generated by current and projected campus-wide operations related to the implementation of the proposed Project, and is included as Appendix C2 of this EIR. The health effect categories evaluated in the HRA include:

- Lifetime risk of developing cancer for potentially exposed individuals;
- Population-wide potential for developing cancer (cancer burden);
- Potential for chronic or long-term noncarcinogenic effects;
- Potential for acute or short-term noncarcinogenic effects.

The HRA evaluates on- and off-campus receptors. The evaluated on-campus receptors are those within the campus boundaries that could be characterized as sensitive receptors, such as hospitals, nursing homes, day care centers, and primary and secondary schools. The potential health effects were quantified for the specific location of each individual on-campus sensitive receptor. Off-campus receptors are represented using various grid-spacing locations around the campus boundary. The potential health effects were quantified for each grid location. The purpose of the on- and off-campus health effect quantification process was to identify the maximally exposed individual (MEI). This represents the singular on- and off-campus location where health effects associated with campus emissions would be highest. The health effects at all other analyzed locations would be lower. The MEI can change for each potential health effect depending on the type of pollutant being evaluated and the location of its source within the campus. Please refer to the HRA included in Appendix C2 of this EIR for a detailed description of the methodology employed for the HRA.

Existing Sources of Toxic Air Contaminants

The UCLA campus conducts routine operations that generate State-regulated emissions. The emissions sources include cogeneration gas turbines, gasoline dispensing operations; boilers; standby generators driven by internal combustion engines; painting operations; and laboratory chemical usage. The HRA evaluates the toxic emissions associated with these sources based on fuel, material, and chemical usage considered representative of the current year-to-year routine campus-wide operations.

Existing Lifetime Cancer Risk

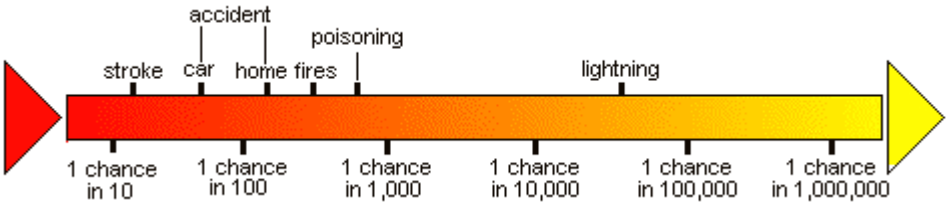
Lifetime cancer risk is defined as the increased chance of contracting cancer over a 70-year period as a result of exposure to a toxic substance or substances. It is the product of the estimated daily exposure of each suspected carcinogen by its respective cancer unit risk. The end result represents a worst-case estimate of cancer risk by assuming that an individual would be exposed to the same toxic substance at the same location continually for 70 years.

Risk characterization combines the results of the exposure and dose-response assessments to estimate the potential for adverse health effects, as represented by the probability for an individual to contract cancer beyond the normal background likelihood. Risk analysts describe risks numerically in scientific notation; for example, 1×10^{-6} means that there is 1 chance in 1,000,000 of an event occurring. The SCAQMD has established a significance criterion of 10 in 1 million for acceptable risk. Cancer risk is defined as the worst-case probability of an individual developing cancer over a lifetime as a result of an exposure to potential carcinogens. The cancer risk level is intended to ensure a sufficient safety margin to prevent a single project or activity from causing a substantial contribution to the overall number of cancer cases in an area. It is not intended or designed to serve as a means to evaluate cumulative risk associated with multiple activities not associated with the project in question or to assess risk posed by ambient background conditions.

The conclusions of an HRA must be considered in context. As a general matter, the background probability of an individual contracting cancer in one's lifetime is four in ten (Ries et al. 2007). This overall probability of contracting cancer can be influenced by diet, smoking, heredity, chemicals in the environment and the workplace, and other factors. An individual source of toxic air contaminants that would result in less than ten excess cancer cases in one million is unlikely to cause a substantial increase in the overall number of cancer cases that would otherwise occur.

It should be recognized that when small populations are exposed, population risk estimates may be very small. For example, if 100 people are exposed to an individual lifetime cancer risk of 1 in 100,000 (or 1×10^{-5}), the expected number of additional cases due to that source is 0.001. For risk assessment purposes, a lifetime of exposure is considered to be 70 years, 365 days a year, 24 hours per day. It should further be recognized that an HRA does not calculate the exact risk for all individuals, but a hypothetical risk assuming that all of a series of "worst-case scenario" exposure assumptions apply (i.e., the MEI does not move from the specific worst-case location and worst-case wind conditions do not change). The chance that an individual would be exposed to any one of these exposure assumptions is small, and is even smaller for all assumptions to occur simultaneously (e.g., 70 years of continuously breathing air at the location of maximum impact). Thus, an individual's actual risk is likely to be substantially over-estimated by the recommended methodology of an HRA.

It is also important to place health risk and the assessment of probability in the context of daily activity. To provide an idea of the size of risks from environmental hazards, the continuum below provides risk statistics for some familiar events (USEPA 2007a).



Comparative Risk Probabilities

The cancer risk as a result of a lifetime exposure to emissions from the routine campus-wide operation of all existing sources at the UCLA campus was estimated to be 6.3 in 1 million (6.3×10^{-6}) for the off-campus MEI and 0.9 in 1 million (0.9×10^{-6}) for the on-campus MEI. The off-campus MEI was calculated to be located east of the campus along Hilgard Avenue as shown Figure ES-1 in the Health Risk Assessment (Appendix C2). The on-campus MEI was calculated to be located in the southern portion of the campus near Franz Hall. Potential risks at all other locations within the campus and surrounding vicinity would be lower. The estimated values are below the SCAQMD-established ten in one million threshold for acceptable incremental cancer health risk.

Neither the on-campus nor the off-campus MEI is close to the Northwest zone. Potential risks at all other locations within the campus and surrounding vicinity would be lower. Therefore, existing levels of toxic air contaminants also do not exceed established standards at the proposed 2008 NHIP sites.

Existing Cancer Burden

Cancer burden is another measure of cancer risk and represents a worst-case estimate of the increased number of cancer cases that might occur in the exposed population as a result of emissions from routine campus-wide operations. An acceptable cancer burden threshold is 1.0 or less, meaning that the project would result in less than 1 additional case of cancer in the affected population. Burden is estimated by multiplying the cancer risk determined at a specific location by the population residing in that location, repeating the calculation for each risk/population group in the area of interest and adding those results for all populated areas within the carcinogenic one in a million isopleth.[1] From census data contained in the modeling software, the population within the one in a million isopleth was 16,936 people.

For the purpose of this analysis, the population was multiplied by the associated cancer risk at each census block location and totaled to determine the cancer burden for the 2007 Baseline Scenario. The cancer burden was determined to be 0.04, which suggests emissions from routine campus-wide operations have minimal impact on the exposed population.

Existing Noncancer Health Effects

The potential for emissions from routine campus-wide operations to cause both chronic and acute noncancer health effects was also assessed in the HRA. Guidance published by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) specifies which substances are to be evaluated in the noncancer effects assessment and which organ systems within the body are affected (e.g., liver, kidney, respiratory system, and central nervous system).

[1] A line drawn on a map through all points having the same numerical value, as of a population figure or geographic measurement (www.dictionary.com).

Results of the chronic noncancer health effects assessment indicate that all the hazard index (HI) values for each organ system are less than 1.0. Chronic HI values less than 1.0 indicate that noncancer effects from chronic exposure to emissions from routine campus-wide operations are unlikely. The maximum chronic HI for an organ system was 0.08 at the off-campus MEI and 0.10 at the on-campus MEI. As with the lifetime cancer risk assessment, the off-campus MEI was calculated to be located east of the campus along Hilgard Avenue and the on-campus MEI was calculated to be located in the southern portion of the campus, near Franz Hall. Potential health effects at all other locations within the campus and surrounding vicinity would be lower.

Results of the acute noncancer health effects assessment indicate that all HI values for each organ system are also less than 1.0. Acute HI values less than 1.0 indicate that noncancer effects from acute exposure to emissions from routine campus-wide operations are unlikely. The maximum acute HI for an organ system was 0.07 at the off-campus MEI and 0.10 at the on-campus MEI. The off-campus MEI was calculated to be located on the northwest campus fence line across from Sunset Boulevard. The on-campus MEI was calculated to be located at the northwest housing complex. These locations are different from the chronic noncancer health effects assessment due to the different locations within the campus where the associated emissions would be generated. Potential health effects at all other locations within the campus and surrounding vicinity would be lower.

4.2.2 REGULATORY FRAMEWORK

Air quality within the Basin is addressed through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality within the Basin are discussed below.

Federal and State

U.S. Environmental Protection Agency

The United States Environmental Protection Agency (USEPA) is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The standards are shown in Table 4.2-3. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives.

The USEPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments made by Congress were in 1990. As part of its enforcement responsibilities, the USEPA requires each State with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain and maintain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution by using a combination of performance standards and market-based programs within the timeframe identified in the SIP.

California Air Resources Board

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (Cal-EPA), is responsible for the coordination and administration of both federal and State air pollution control programs in California. In this capacity, the CARB conducts research; sets the California Ambient Air Quality Standards (CAAQS) shown in Table 4.2-3; compiles

emission inventories; develops suggested control measures; provides oversight of local programs; and prepares the SIP. The CARB establishes emissions standards for motor vehicles sold in California, consumer products (e.g., hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

Regional

South Coast Air Quality Management District

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), County transportation commissions and local governments and cooperates actively with all federal and State government agencies. The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary.

The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs. Two versions (2003 and 2007) of the AQMP are in different stages of approval. The 2003 AQMP is an update to the 1997 AQMP. The 2003 AQMP employs up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources, and area sources. The 2003 AQMP proposes policies and measures to achieve federal and State standards for healthy air quality in the Basin. The 2003 AQMP updates the demonstration of attainment with the federal standards for O_3 and PM10; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a future CO maintenance plan; and updates the maintenance plan for the federal NO_2 standard, which the Basin has met since 1992. The 2003 AQMP was adopted by the SCAQMD in August 2003 and approved, with modifications, by the CARB in October 2003 (SCAQMD 2008a). The CARB submitted the South Coast SIP to the USEPA on January 9, 2004. However, this SIP has not been approved so the 1997 AQMP with 1999 amendments remains the federally approved AQMP.

The SCAQMD Governing Board adopted the 2007 AQMP on June 1, 2007. The purpose of the 2007 AQMP for the Basin is to set forth a comprehensive program that will lead the region into compliance with federal 8-hour O_3 and PM2.5 air quality standards. Federal and State 8-hour O_3 and PM2.5 standards were implemented subsequent to 2003. The CARB adopted the State Strategy for the 2007 SIP, and the 2007 AQMP as part of the SIP on September 27, 2007. On November 28, 2007, the CARB submitted a SIP revision to the USEPA for O_3, PM2.5, CO, and NO_2 in the Basin; this revision is identified as the “2007 South Coast SIP”. The 2007 AQMP/2007 South Coast SIP demonstrates attainment of the federal PM2.5 standard in the Basin by 2014 and attainment of the federal 8-hour O_3 standard by 2023. The SIP also includes a request of reclassification of the O_3 attainment designation from “severe” to “extreme” (CARB 2007). On February 1, 2008, CARB submitted additional technical information relative to the 2007 South Coast SIP to the USEPA (CARB 2008c).

TABLE 4.2-3
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	NAAQS[a]		CAAQS[b]
		Primary[c]	Secondary[d]	Concentration[e]
O_3[f]	1-Hour	–	Same as Primary Standard	0.09 ppm (180 µg/m^3)
	8-Hour	0.075 ppm (147 µg/m^3)		0.070 ppm (137 µg/m^3)[i]
CO	8-Hour	9 ppm (10 mg/m^3)	None	9.0 ppm (10 mg/m^3)
	1-Hour	35 ppm (40 mg/m^3)		20 ppm (23 mg/m^3)
	8-Hour (Lake Tahoe)	–	–	6 ppm (7 mg/m^3)
NO_2	Annual Average	0.053 ppm (100 µg/m^3)	Same as Primary Standard	0.030 ppm (57 µg/m^3)[j]
	1-Hour	—		0.18 ppm (339 µg/m^3)[j]
SO_2	Annual Average	0.030 ppm (80 µg/m^3)	–	–
	24-Hour	0.14 ppm (365 µg/m^3)	–	0.04 ppm (105 µg/m^3)
	3-Hour	–	0.5 ppm (1,300 µg/m^3)	–
	1-Hour	–	–	0.25 ppm (655 µg/m^3)
PM10[g]	24-Hour	150 µg/m^3	Same as Primary Standard	50 µg/m^3
	Annual Arithmetic Mean	Revoked		20 µg/m^3 [g]
PM2.5[h]	24-Hour	35 µg/m^3	Same as Primary Standard	–
	Annual Arithmetic Mean	15 µg/m^3		12 µg/m^3
Lead	30-Day Average	–	–	1.5 µg/m^3
	Rolling 3-Month Average[k]	0.15 µg/m^3	Same as Primary Standard	–
Hydrogen Sulfide (H_2S)	1-Hour	No Federal Standards		0.03 ppm (42 µg/m^3)
SO_4	24-Hour			25 µg/m^3
Visibility Reducing Particles	8-Hour (10 AM to 6 PM, PST)			Extinction coefficient of 0.23 per km-visibility of 10 miles or more (0.07/ 30 miles for Lake Tahoe) due to particles when the relative humidity is less than 70%.
Vinyl chloride[i]	24-Hour			0.01 ppm (26 µg/m^3)

[a] NAAQS (other than O_3, PM, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For PM2.5, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years are equal to or less than the standard. Contact the USEPA for further clarification and current federal policies.

[b] CAAQS for O_3, CO (except Lake Tahoe), SO_2 (1- and 24-hour), NO_2, PM10, PM2.5 and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

[c] National Primary Standards: The levels of air quality necessary with an adequate margin of safety to protect the public health.

[d] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[e] Concentration is expressed first in the units in which it was promulgated. Ppm in this table refers to ppm by volume or micromoles of pollutant per mole of gas.

[f] On June 15, 2005, the 1-hour O_3standard was revoked for all areas except the 8-hour O_3nonattainment Early Action Compact Areas (those areas do not yet have an effective date for their 8-hour designations). See USEPA 2008b for additional information on federal O_3standards.

[g] Due to a lack of evidence linking health problems to long-term exposure to coarse particle pollution, the USEPA revoked the annual PM10 standard on December 17, 2006.

[h] Effective December 17, 2006, the USEPA lowered the PM2.5 24-hour standard from 65 µg/m^3 to 35 µg/m^3.

[i] The CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[j] The NO_2 ambient air quality standard was amended to lower the 1-hr standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. These changes became effective March 20, 2008.

[k] Effective October 15, 2008.

ppm = parts per million; µg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; km = kilometers; PST = Pacific Standard Time

Source: CARB 2008b; USEPA 2008c.

The PM2.5 strategy outlined in the AQMP is of interest. Since PM2.5 in the Basin is overwhelmingly formed secondarily, the overall draft control strategy focuses on reducing precursor emissions of sulfur oxides (SOx) and directly emitted PM2.5, NOx, and VOCs instead of fugitive dust, which has typically been the major concern for particulate matter emissions (SCAQMD 2008a). Based on the SCAQMD's modeling sensitivity analysis, SOx reductions, followed by directly emitted PM2.5 and NOx reductions, provide the greatest benefits in terms of reducing the ambient PM2.5 concentrations.

As a result of State and local control strategies, the Basin has not exceeded the federal CO standard since 2002. On February 24, 2006, the CARB transmitted the Redesignation Request and Maintenance Plan to the USEPA for approval. On June 11, 2007, the USEPA redesignated the Basin as being in attainment for the federal CO standard and approved the maintenance plan amendment to the SIP for the Basin (USEPA 2007b).

As mentioned earlier, the SCAQMD adopts rules and regulations. All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction of the proposed project include, but are not limited to:

- ***Rule 401 – Visible Emissions.*** A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

- ***Rule 402 – Nuisance.*** A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- ***Rule 403 – Fugitive Dust.*** This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions. Rule 403 applies to any activity or man-made condition capable of generating fugitive dust.

- ***Rule 1113 – Architectural Coatings.*** No person shall apply or solicit the application of any architectural coating within the SCAQMD, with a volatile organic compound (VOC) content in excess of the values specified in a table incorporated in the Rule.

4.2.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

The analysis in this section focuses on the nature and magnitude of the change in the air quality environment due to implementation of the proposed Project. Air pollutant emissions would result from increased building space, student population, and campus-related traffic volumes. Construction activities would also continue to generate emissions at the campus. Short-term construction-related and long-term operational (regional and local) impacts were assessed in accordance with SCAQMD-recommended methodologies. Determinations of significance for construction-related and operational emissions were based on the comparison of project-generated emissions to applicable SCAQMD thresholds.

Construction Emissions

Construction emissions have been analyzed for the proposed 2008 NHIP. Results are expressed in terms of peak daily emissions for comparison with SCAQMD significance criteria. With the exception of the 2008 NHIP, the 2002 LRDP, as amended, does not identify any specific development project. However, the estimated emissions from construction of the 2008 NHIP are representative of, and likely overstate, potential construction-related emissions from other projects that may be developed under the 2002 LRDP, as amended.

Project-generated construction-related emissions from the 2008 NHIP were modeled using the CARB-approved URBEMIS 2007 Version 9.2.4 (URBEMIS) computer program as recommended by SCAQMD. URBEMIS incorporates CARB's EMFAC2007 model for on-road vehicle emissions and the OFFROAD2007 model for off-road vehicle emissions. URBEMIS is designed to model construction emissions for land development projects and allows for the input of project-specific information. The URBEMIS calculations were supplemented by manual calculations where the limitations of the URBEMIS program prevent appropriate representation of the construction sequence. Project-generated emissions were modeled based on general information provided in the project description (refer to Section 3, Project Description) and default URBEMIS settings in order to estimate reasonable worst-case conditions. Model output data sheets and calculations are included in Appendix C1 of this EIR.

Operational Emissions

Project-generated, long-term regional area- and mobile-source emissions of criteria air pollutants and O_3 precursors were also modeled using URBEMIS. URBEMIS allows land use selections that include project location specifics and trip generation rates. Area sources include the combustion of natural gas for heating and hot water, engine emissions from landscape maintenance equipment, and VOC emissions from consumer products and repainting of buildings. URBEMIS accounts for mobile source emissions associated with vehicle trip generation. Project-generated emissions were modeled based on general information provided in the project description and trip generation from the traffic impact analysis prepared for this project (Iteris 2008).

Stationary Source Emissions

The principal source of existing and future stationary source emissions is the cogeneration plant. Because the cogeneration plant is currently operating at capacity, the plant emissions would not increase with implementation of the 2002 LRDP as amended or the 2008 NHIP. Stationary source emissions would be generated by new boilers used to provide space heating and hot water and backup generators tested periodically and used to provide power in the event of an emergency. Emissions of boilers providing heat and hot water are included in the area sources calculations. Emergency generators would be permitted by the SCAQMD; permitting implies that emissions would be less than significant.

Localized CO Concentrations

CO concentration is a direct function of meteorological conditions and motor vehicle activity (e.g., idling time and traffic flow conditions), particularly during peak commute hours. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses such as residential areas, schools, and hospitals. As a result, SCAQMD recommends analysis of CO emissions at a local level.

An appropriate qualitative screening procedure is provided in the procedures and guidelines contained in *Transportation Project-Level Carbon Monoxide Protocol* (the Protocol) to determine whether a project poses the potential for a CO hotspot (UCD ITS 1997). A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. According to the Protocol, projects may worsen air quality if they increase the percentage of vehicles in cold start modes by two percent or more; significantly increase traffic volumes (by five percent or more) over existing volumes; or worsen traffic flow, defined for signalized intersections as increasing average delay at intersections operating at Level of Service (LOS) E or F or causing an intersection that would operate at LOS D or better without the project, to operate at LOS E or F.

Localized Significance Threshold Analysis

The SCAQMD has promulgated standards and methodology for calculating local impacts based on Localized Significance Thresholds (LST) (SCAQMD 2003b, 2006). Calculation of LST is a voluntary procedure but has more importance when sensitive receptors are close to sources of emissions. As existing residence halls are located next to the 2008 NHIP project sites, the LST calculations are included in this air quality analysis. To minimize efforts for detailed dispersion modeling, the SCAQMD developed screening (lookup) tables to assist lead agencies with a simple tool for evaluating impacts from small typical projects. The use of LST lookup tables is limited to projects that are five acres or smaller in size, limited to eight hours of operations during the day, and with emissions distributed evenly across the proposed site.

Toxic Air Contaminants

The health risk assessment process uses the emission estimates derived in the initial steps of the risk assessment and predicts the potential dose of each chemical to individuals in the surrounding population. Air dispersion modeling was conducted to determine the pollutant ground-level concentrations at off- and on-campus locations. The emissions at UCLA are released into the atmosphere through point, area, and volume sources. The methods used in modeling TACs from these sources are consistent with procedures outlined in the OEHHA guidelines. Additionally, the modeling methodology meets the USEPA and CARB requirements for air quality modeling. The exposure assessment model—the Hotspots Analysis and Reporting Program (HARP)—was developed specifically for conducting risk assessments in compliance with Assembly Bill (AB) 2588. The HARP model was used to estimate adverse health effects in this HRA. The HARP model incorporates the Industrial Source Complex Short Term (ISCST3) model to compute downwind dispersion and the USEPA-approved Building Profile Input Program (BPIP) to evaluate downwash impacts of buildings and structures.

Off- and on-campus receptor locations were used in the modeling. The off-campus receptor locations were identified by using grid spacing from the approximate center of the UCLA campus (i.e., Bruin Plaza). According to the SCAQMD's Supplemental Guidelines, a grid spacing of 100 meters must be used in order to locate the off-campus maximum impacted receptors. The off- and on-campus discrete receptor locations evaluated were those characterized as sensitive receptors such as hospitals, day care centers, schools, and residential dormitories. The census block receptors were generated from census data contained in the HARP software.

In identifying pathways that could potentially lead to exposure, the type of pollutants emitted, land use in the area, and lifestyle (i.e., urban versus rural or agricultural) must be considered. Consistent with the SCAQMD's Supplemental Guidelines, the following pathways have been identified as potential exposure routes for routine campus-wide emissions:

- Inhalation,
- Home grown produce,
- Dermal absorption,
- Soil ingestion,
- Mother's milk.

Other pathways listed in the OEHHA guidelines for consideration (such as water ingestion, dairy and beef, and poultry and eggs) were not viable exposure routes for UCLA due to the types of substances emitted and surrounding land use.

At this time, the SCAQMD has not adopted a methodology for analyzing short-term construction-related emissions of TACs and/or the exposure thereof. Therefore, project-generated, construction-related emissions of TACs were assessed in a qualitative manner.

Thresholds of Significance

As previously discussed in 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed Project would not have a significant impact for the following threshold from the CEQA Checklist and no further analysis of this issue is presented in this section.

- Would the project create objectionable odors affecting a substantial number of people?

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Air Quality.

- Would the project conflict with or obstruct implementation of the applicable air quality plan *(Impact 4.2-1)*?

- Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation *(Impacts 4.2-2 and 4.2-3)*?

- Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors) *(Impact 4.2-4)*?

- Would the project expose sensitive receptors to substantial pollutant concentrations (caused by criteria pollutant emissions) *(Impact 4.2-5 and 4.2-6)*?

- Would the project expose sensitive receptors to substantial pollutant concentrations (caused by toxic air emissions) *(Impact 4.2-7)*?

Emissions Thresholds

As the agency principally responsible for comprehensive air pollution control in the Basin, the SCAQMD recommends that projects should be evaluated in terms of air pollution control thresholds established by the SCAQMD and published in the *CEQA Air Quality Handbook*. The SCAQMD has established significance thresholds to assess the regional and localized impacts of project-related air pollutant emissions.

The significance thresholds are updated as needed to appropriately represent current ambient air quality standards and attainment status. The campus utilizes the SCAQMD-recommended thresholds that are in place at the time development projects are proposed in order to assess the significance of quantifiable impacts. Table 4.2-4 presents the current significance thresholds (SCAQMD 2008b), including regional daily thresholds for short-term construction and long-term operational emissions; maximum incremental cancer risk and hazard index for TACs; and maximum ambient concentrations for evaluating local exposures. A project with daily emission rates, risk values, or concentrations below these thresholds is generally considered to have a less than significant effect.

TABLE 4.2-4
SCAQMD THRESHOLDS OF SIGNIFICANCE

Mass Daily Thresholds[a]		
Pollutant	**Construction**	**Operation**
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants		
TACs[b]	Maximum Incremental Cancer Risk ≥ 10 in 1 million Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to Rule 402[c]	
Ambient Air Quality For Criteria Pollutants[d]		
NO_2	1-hour average ≥ 0.18 ppm Annual average ≥ 0.03 ppm	
PM10	24-hour average ≥ 10.4 µg/m^3 (construction) 24-hour average ≥ 2.5 µg/m^3 (operation) Annual average ≥ 1.0 µg/m^3	
PM2.5	24-hour average ≥ 10.4 µg/m^3 (construction) 24-hour average ≥ 2.5 µg/m^3 (operation)	
Sulfate	24-hour average ≥ 1.0 µg/m^3	
CO	1-hour average ≥ 20.0 ppm (State) 8-hour average ≥ 9.0 ppm (State/federal)	

lbs/day = pounds per day
[a] Source: SCAQMD 2008
[b] TACs (carcinogenic and noncarcinogenic)
[c] Rule 402 states that a project shall not "discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."
[d] Ambient air quality threshold based on SCAQMD Rule 403.

Impact Analysis

Campus Programs, Practices and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures (PPs) were adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. They are therefore considered part of the proposed Project and assumed in the analysis presented in this section. Deletions and additions to the PPs from the 2002 LRDP Final EIR are shown with ~~strike-out~~ and **bold-faced** type, respectively. These changes reflect updated information and additional measures that could be implemented to reduce emissions. In addition, PP 4.13-1(d) in Section 4.13, Transportation/Traffic, which requires implementation of a Transportation Demand Management (TDM) Program, would reduce mobile source air emissions.

PP 4.2-2(a) *The campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified ~~by the SCAQMD~~* ***in the URBEMIS program*** *as being able to reduce dust generation between ~~30 and 85~~* ***5 and 84*** *percent depending on the ~~source of the dust generation~~* ***measure or combination of measures used from the list below****:*

- ***Minimize land disturbance to the extent feasible****.*
- *Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)*
- ***Apply water three times daily to all active disturbed areas****.*
- *Replace ground cover in disturbed areas as quickly as possible.*
- *Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content.*
- *Water active grading sites at least twice daily.*
- *Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period.*
- *All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.*
- *Sweep streets at the end of the day if visible soil material is carried over to adjacent roads.*

- *Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.*
- *Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces.*
- *Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads.*

PP 4.2-2(b) *The campus shall continue to require by contract specifications that construction equipment engines will be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction.*

PP 4.2-2(c) *The campus shall continue to require by contract specifications that construction operations rely on the campus' existing electricity infrastructure rather than electrical generators powered by internal combustion engines to the extent feasible.*

New Campus Program, Practice, and Procedure

The following new campus PP addresses compliance with SCAQMD Rule 1113 to reduce potential construction-related air quality impacts of remaining buildout of the 2002 LRDP, as amended, and has been assumed in the analysis presented in this section.

PP 4.2-2(d) *The campus shall purchase and apply architectural coatings in accordance with SCAQMD Rule 1113, thereby ensuring the limitation of VOCs during construction.*

Threshold	Would the project conflict with or obstruct implementation of the applicable air quality plan?

Remaining Buildout of the 2002 LRDP as Amended Including the Proposed 2008 NHIP

The 1997, 2003, and 2007 AQMPs, discussed previously, were prepared to accommodate growth; to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD; to return clean air to the region; and to minimize the impact on the economy. Projects that are considered to be consistent with the AQMP would not interfere with attainment because this growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP may not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds.

Projects that are consistent with the projections of employment and population forecasts identified in the Growth Management Chapter of the *Regional Comprehensive Plan and Guide* (RCPG), prepared by SCAG, are considered consistent with the AQMP growth projections, since the Growth Management Chapter forms the basis of the land use and transportation control portions of the AQMP.

As discussed in Section 4.8, Land Use and Planning, Impact 4.8-2, under the consistency analysis for Policy 3.01 of the RCPG, the projected growth in campus population by 2013 is consistent with SCAG projections. Consequently, the proposed Project does not provide for population, housing, or employment growth that exceeds the SCAG forecast. Consequently, implementation of the proposed Project would be consistent with AQMP attainment forecasts.

Another measurement tool in determining consistency with the AQMP is to determine how a project accommodates the expected increase in population or employment. Generally, if a project is planned in a way that results in the minimization of vehicle miles traveled (VMT) both on the project site and within the community in which it is located and consequently the minimization of air pollutant emissions, that aspect of the project is consistent with the AQMP.

The proposed 2008 NHIP and future projects that may be developed under buildout of the 2002 LRDP, as amended, include infill development on a highly developed campus, utilizing existing infrastructure and public service systems. The 2008 NHIP includes residence facilities for 1,525 students, thereby reducing the VMT that would occur if those students would commute from off campus. The campus is centrally located to activity centers throughout the Southern California region, connected by an extensive transportation network.

As discussed in Section 4.13, Transportation/Traffic, in compliance with 2002 LRDP Final EIR PP 4.13-1(d), the UCLA campus has successfully implemented a comprehensive TDM Program since 1984 that offers a broad range of services to encourage and assist UCLA commuters in utilizing alternatives to the single-occupancy vehicle. As part of its ongoing TDM Program, UCLA actively provides and promotes vanpools; carpool matching and parking incentive programs; financial incentives for carpool and vanpool participants; accommodation of the use of other modes of transit, including bicycles, motorcycles, and scooters; alternative work schedules and telecommuting; annual distribution of the UCLA Commuter's Guide; management of parking; and access restricted access to main campus parking facilities for on-campus housing residents. The 2002 LRDP also contains specific planning objectives aimed at reducing vehicle miles traveled; providing alternative methods of transportation; integrating walkways with building design to encourage pedestrian use through placement and design. The proposed Project would retain the planning principles of the 2002 LRDP and provides for additional on-campus student housing (per 2002 LRDP Final EIR PP 4.13-1[c]), thereby reducing transportation impacts. These planning principles would serve to encourage the use of transit, reduce the number of vehicle trips and miles traveled, and create further opportunities for campus students, faculty, and staff to walk and bike to campus. These programs are consistent with the goals of the AQMP for reducing the emissions associated with new development.

Based on this information, the proposed Project is consistent with the current AQMPs. Therefore, the project would neither conflict with nor obstruct implementation of the AQMP, and this impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.2-1 ***Implementation of the proposed Project would not conflict with or obstruct implementation of the Air***

Quality Management Plan. This is considered a less than significant impact and no mitigation is required.

Threshold	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction-Related Impacts

Construction-related emissions are described as "short-term" or temporary in duration and have the potential to represent a significant impact with respect to air quality. Construction-related activities associated with the proposed Project would result in: (1) emissions of criteria air pollutants (i.e., PM10 and PM2.5, and the O_3 precursors VOC and NOx from construction equipment performing excavation, grading, and clearing); (2) material handling and transport; (3) providing compressed air and power; and (4) other miscellaneous activities. Other sources of exhaust and direct VOC emissions include worker commute vehicles; paving; and application of architectural coatings.

Emissions of fugitive particulate matter dust (e.g., PM10 and PM2.5) are associated primarily with ground disturbance and spoils removal activities during site preparation and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and VMT on site and off site.

Proposed 2008 NHIP

For the analysis of regional construction-related air quality emissions, it is assumed that the proposed undergraduate student housing and associated facilities would be constructed over a period of four years. Construction would begin in 2009 and would continue until end of 2012. Construction at the three sites—Sproul West, Sproul South/Complex, and Upper/Lower De Neve—would occur concurrently during portions of the four-year period. Construction activities would occur in stages with potential overlap between stages. For modeling purposes, the first stage would be the installation of utility infrastructure to support the proposed development. Grading activities at the three sites would begin after the infrastructure installation is complete. As part of the proposed 2008 NHIP, the Office of Residential Life (ORL) and a portion of the Housing Maintenance space would be demolished. Demolition would occur for one month at the end of 2009, concurrent with grading activities. Construction activities at each site would begin after grading at the corresponding site is complete. The project would entail minimal paving operations (e.g., for repair of trenching areas), which would occur for one week during the infrastructure installation phase. The architectural coating phase is assumed to occur simultaneously with the construction phase during the last nine weeks at each of the residence halls.

Project-generated construction emissions were modeled based on the construction assumptions described above and further described in Section 3, Project Description. Where specific information was not known, engineering judgment and default URBEMIS settings and parameters were used. Compliance with SCAQMD Rules is required; specifically, it is assumed that the construction would be performed in accordance with Rule 403, Fugitive Dust (refer to 2002 LRDP Final EIR PP 4.2-2[a]), and Rule 1113, Architectural Coatings (refer to new PP 4.2-2[d]). Therefore, emissions reductions consistent with those rules have been included in the estimate of construction emissions. Additionally, continued compliance with 2002 LRDP Final EIR PPs 4.4-2(b), which requires maintenance of construction equipment, and 4.2-2(c) addressing use of alternative fuel construction equipment further reduces emissions during construction activities.

Table 4.2-5 summarizes the modeled emissions for the proposed 2008 NHIP construction phases. Construction-related regional air quality effects were determined by comparing these modeling results with applicable SCAQMD significance thresholds.

TABLE 4.2-5
ESTIMATED PEAK DAILY CONSTRUCTION REGIONAL EMISSIONS OF CRITERIA POLLUTANTS AND PRECURSORS FOR THE 2008 NHIP

Phase (Year)	Emissions in Pounds per Day				
	VOC	NOx	CO	PM10	PM2.5
2009					
Infrastructure and Utilities	3	16	11	2	1
Paving Repair	<1	4	3	<1	<1
Demolition	3	26	13	6	2
Upper/Lower De Neve Grading	3	29	13	8	3
Sproul West and South/Complex Grading	4	48	21	12	4
Worst Case Total Daily Emissions (Unmitigated)	*10*	***103***	*47*	*26*	*9*
2010					
Upper/Lower De Neve Grading	3	27	12	8	3
Sproul West and South/Complex Grading	4	44	19	12	4
Upper/Lower De Neve Construction	11	64	73	4	3
Sproul South/Complex Construction	9	53	68	3	3
Sproul West Construction	8	47	64	3	3
Worst Case Total Daily Emissions (Unmitigated)	*28*	***164***	*205*	*20*	*9*
2011					
Upper/Lower De Neve Construction	10	60	70	4	3
Sproul South/Complex Construction	8	49	64	3	3
Sproul West Construction	8	44	61	3	2
Worst Case Total Daily Emissions (Unmitigated)	*26*	***153***	*195*	*10*	*8*
2012					
Upper/Lower De Neve Construction	9	56	66	3	3
Sproul South/Complex Construction	8	46	61	3	3
Sproul West Construction	7	41	57	3	2
Architectural Coating	47	<1	3	<1	<1
Worst Case Total Daily Emissions (Unmitigated)	*71*	***143***	*185*	*9*	*8*
SCAQMD Significance Threshold	75	100	550	150	55

Bold indicates an exceedance of SCAQMD CEQA significance thresholds.
Worst-case totals are the sums of all concurrent phases, and often do not include all of the phases shown.
Calculations assume compliance with SCAQMD Rules 403 and 1113; see PP 4.2-2(a) and PP 4.2-2(d).
Worst-case NOx and CO emissions would occur on the days when construction activities at all three sites occur simultaneously.
Worst-case PM10 and PM2.5 emissions would occur on the days when grading activities overlap. It should be noted that the PM10 and PM2.5 emissions reflect the incorporation of stringent dust-control measures pursuant with Rule 403.

Source: Data modeled by EDAW 2008 and BonTerra Consulting.

Based on the modeling conducted, construction-related activities for the 2008 NHIP during each year of construction would result in NOx pollutant emissions that would exceed SCAQMD's significance thresholds. Thus, project-generated construction-related emissions of O_3 precursor

emissions could violate or contribute substantially to an existing or projected air quality violation. As a result, construction-generated regional emissions would be significant. Continued implementation of 2002 LRDP Final EIR MMs 4.2-2(a) and 4.2-2(b) ensures that construction-related regional air quality impacts are reduced but the reduction would not be to a less than significant level. Implementation of new MM 4.2-2(c) would further reduce NOx emissions due to construction equipment/vehicle exhaust. However, based on inquiries conducted by UCLA of contractors in the Los Angeles region, implementation of this measure may not be initially feasible until older construction equipment/vehicles are retired and more contractors utilize new equipment that meets USEPA Tier III certification requirements. Therefore, due to the uncertainty of the ability to implement MM 4.2-2(c) to an extent that would reduce emissions to a less than significant level, this impact would remain significant and unavoidable.

Remaining Buildout of the 2002 LRDP as Amended

As previously noted, the 2002 LRDP is a land use plan that guides the physical development of the campus. It is not an implementation plan and does not constitute a commitment to any specific project. Therefore, the environmental analysis for buildout of the 2002 LRDP, as amended, is programmatic, rather than project-specific, since the actual sites and design of future buildings are undetermined. Therefore, it is not possible to conduct a detailed quantitative construction-related impact analysis for buildout of the 2002 LRDP, as amended.

Each major building proposal undertaken during the planning horizon of the 2002 LRDP, as amended, will require project-specific environmental review in accordance with CEQA. However, it is expected that the maximum daily regional construction emissions from implementation of the proposed 2008 NHIP (described above) are representative, and likely overstate, potential emissions that would result from future development projects on campus. Based on this analysis, even with implementation of the identified PPs, future construction would likely result in NOx pollutant emissions that would exceed SCAQMD's significance thresholds, resulting in a potential significant and unavoidable impact.

2002 LRDP Mitigation Measures Carried Forward from the 2002 LRDP Final EIR

The following mitigation measures were adopted as part of the 2002 LRDP Final EIR and shall continue to be implemented as part of the proposed Project, including the proposed 2008 NHIP. Deletions and additions to the 2002 LRDP Final EIR MMs are shown with ~~strikeout~~ and **bold-faced** type, respectively; these changes have been made to clarify the implementation requirements.

MM 4.2-2(a) *The campus shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.*

MM 4.2-2(b) *The campus shall encourage contractors to utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and ~~unleaded gasoline) and low-emission diesel construction equipment~~* ***low-NOx fuel)*** *to the extent that the equipment is ~~readily~~* ***reasonably commercially*** *available and cost effective.*

New Mitigation Measure

The following new mitigation measure is required to further reduce NOx emissions due to equipment exhaust. This measure applies to remaining buildout of the 2002 LRDP, as amended, including the proposed 2008 NHIP.

MM 4.2-2(c) *The campus shall require by contract specifications that construction-related equipment used on site and for on-road export of soil meet USEPA Tier III certification requirements, as feasible.*

Level of Significance After Mitigation

Significant and Unavoidable.

Impact 4.2-2 ***Regional construction emissions from the proposed Project would exceed SCAQMD standards for NOx even with continued compliance with PPs 4.2-2(a) through 4.2-2(c) and compliance with new PP 4.2-2(d). These exceedances would contribute substantially to an existing or projected air quality violation. While implementation of 2002 LRDP Final EIR MMs 4.2-2(a) and 4.2-2(b), and new MM 4.2-2(c) would reduce these impacts, they would not be reduced to a less than significant level. This impact remains significant and unavoidable.***

Operational Impacts

Proposed 2008 NHIP

Regional operational emissions are comprised of area source and mobile source emissions. The 2008 NHIP is one element of remaining buildout of the 2002 LRDP, as amended, which includes the 2008 NHIP. As discussed under Impact 4.2-3b below, the emissions of all pollutants except NOx would be less than the SCAQMD CEQA thresholds. The NOx emissions as a result of the 2002 LRDP, as amended, are almost entirely from mobile source emissions (that is, new vehicle trips and VMT). The proposed 2008 NHIP would not increase VMT. There would be relatively few new trips for the additional non-student staff; these new trips and VMT would be offset by the reduction in VMT caused by the student population moving from off campus to the new residence halls. The result would be at most, a small increase in emissions, and perhaps a net decrease in emissions. The operational impact of the 2008 NHIP on regional emissions would, therefore, be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.2-3a ***Implementation of the proposed 2008 NHIP would result in daily operational regional emissions of***

criteria pollutants and O_3 precursors that would not contribute substantially to an existing or projected air quality violation. This impact is less than significant.

Remaining Buildout of the 2002 LRDP as Amended

Regional area and mobile source emissions of criteria air pollutants associated with remaining buildout of the 2002 LRDP, as amended, were modeled using URBEMIS, which accounts for area emissions from the use of natural gas, landscape maintenance equipment, and consumer products and mobile source emissions associated with vehicle trip generation. Regional area- and mobile-source emissions were modeled based on proposed land use types assumed for buildout of the 2002 LRDP, as amended, and the associated trip generation data described in the project traffic report (Iteris 2008).

Table 4.2-6 summarizes the modeled operational related emissions of criteria air pollutants and precursors. The table includes the existing area source emissions in order to yield the net area source emissions estimated for buildout of the 2002 LRDP, as amended, including the proposed 2008 NHIP. The mobile source emissions are based on the increased trip generation due to the implementation of future development. As previously noted, the proposed 2008 NHIP would not increase total trips. Operational air quality impacts were determined by comparing these modeling results with applicable SCAQMD thresholds.

TABLE 4.2-6
ESTIMATED PROPOSED PROJECT GENERATED OPERATIONS EMISSIONS

Emissions Source	Emissions in Pounds per Day				
	VOC	NOx	CO	PM10	PM2.5
2013					
Area Sources – LRDP Total	260	56	48	<1	<1
Mobile Sources – Project Increase Only	44	70	539	112	22
Total Emissions	*304*	*126*	*587*	*112*	*22*
Less Existing Area Source Emissions (Table 4.2-2)	231	53	46	<1	<1
Net Project Emissions	**73**	**73**	541	112	22
SCAQMD Significance Threshold	***55***	***55***	***550***	***150***	***55***

Bold indicates an exceedance of SCAQMD CEQA significance thresholds.
Maximum daily emissions of VOC and NOx occur in winter; maximum daily emissions of CO, PM10, and PM2.5 occur in summer.

Source: Data modeled by EDAW 2008.

Operational activities associated with remaining buildout of the 2002 LRDP, as amended, would result in project-generated emissions of VOC and NOx that exceed SCAQMD's applicable threshold. As a result, long-term operational emissions would be significant. The exceedance of the VOC threshold would be principally due to (1) additional vehicle trips resulting from increased students, staff, and visitors and (2) increased on-campus residents using consumer products containing VOC. The NOx exceedance is almost entirely due to the additional vehicle trips.

Continued compliance with 2002 LRDP Final EIR PPs 4.13-1(a) and 4.13-1(b), which require the campus to maintain existing vehicle and parking caps, respectively, PP 4.13-1(c), which requires continued provision of on-campus housing, and PP 4.13-1(d), which requires

implementation of a TDM program, would reduce operations emissions of all criteria pollutants (these PPs are identified in Section 4.13, Transportation/Traffic). However, the results of implementing these measures cannot be reasonably quantified and may not reduce VOC and NOx emissions to levels below the SCAQMD thresholds. Therefore, the impact would be significant and unavoidable.

Mitigation Measures

No feasible mitigation measures are available.

Level of Significance After Mitigation

Significant and Unavoidable.

Impact 4.2-3b ***Implementation of remaining buildout of the 2002 LRDP, as amended, would result in daily operational emissions of VOC and NOx that could contribute substantially to an existing or projected air quality violation. While implementation of 2002 LRDP Final EIR PPs 4.13-1(a) through 4.13-1(c) would reduce this impact, they would not reduce it to below a level of significance. This is considered a significant and unavoidable impact.***

Threshold	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Proposed 2008 NHIP

Construction-related Impacts

The Basin is in nonattainment for O_3, PM10, and PM2.5. Short-term construction emissions of VOC, PM10, and PM2.5 would be less than SCAQMD thresholds, but NOx emissions may exceed the threshold limit, even with all feasible mitigation. In addition, while other projects in the project area may have emissions less than the SCAQMD thresholds, the magnitude and timing of future projects within and near the campus during the proposed 2008 NHIP construction period is not known. Some future projects may have emissions that exceed the threshold, and concurrent emissions of the proposed 2008 NHIP construction could then be considered cumulatively considerable. Therefore, the potential direct significant impact of NOx emissions, plus the potential for cumulative construction emissions on and near the campus result in the conclusion that there would be a cumulatively considerable net increase of O_3 precursors; this is a significant impact. Continued implementation of 2002 LRDP Final EIR PPs 4.2-2(a) through 4.2-2(c) and MMs 4.2-2(a) and 4.2-2(b), and implementation of new PP 4.2-2(c) and MM 4.2-2(d) would reduce this impact, but not to a less than significant level.

Mitigation Measures

No additional feasible mitigation measures are available beyond those identified.

Level of Significance After Mitigation

Significant and Unavoidable.

Impact 4.2-4a ***Implementation of the proposed 2008 NHIP could result in a short-term cumulatively considerable net increase of a criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. This is considered a potentially significant impact. PPs 4.2 2(a) through 4.2-.2(d), and MMs 4.2-.2(a) through 4.2-2(c) would reduce this impact, but this impact would remain significant and unavoidable.***

Operational Impacts

The Basin is in nonattainment for O_3, PM10, and PM2.5. As described above in Impact 4.2-3(a) long-term operational emissions for the proposed 2008 NHIP would be very small or perhaps result in a net reduction in emissions compared with existing emissions for the same population. Therefore, the proposed 2008 NHIP would not cause a cumulatively considerable increase in regional emissions of criteria pollutants. The impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.2-4b ***Operation of the proposed 2008 NHIP would not result in a long-term cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. This would be a less than significant impact.***

Remaining Buildout of the 2002 LRDP as Amended

Because the Basin is currently in nonattainment for O_3, PM10 and PM2.5, cumulative development could lead to a net increase in criteria pollutant concentrations and a potentially significant cumulative impact. Individual projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would be considered to cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment. While all projects undertaken as part of the 2002 LRDP, as amended, could have emissions of criteria pollutants less than the SCAQMD thresholds, the magnitude and timing of future projects near the campus during the proposed 2008 NHIP construction period is not known. Some future projects may have emissions that exceed the threshold, and concurrent emissions of the 2002 LRDP, as amended, may be considered cumulatively considerable during construction. If so, there would be a significant impact.

With regard to long-term operational emissions and the cumulative net increase of any criteria pollutant for which the region is in nonattainment, there would be a significant cumulative impact

due to nonattainment of O_3 standards in the Basin. Remaining buildout of the 2002 LRDP, as amended, which includes the proposed 2008 NHIP, would result in direct significant and unavoidable long-term regional air quality impacts because the forecast daily emissions of NOx, an O_3 precursor, would exceed the SCAQMD's significance threshold. Because there would be a direct significant impact that cannot be feasibly mitigated to a less than significant level, there would also be a considerable contribution to cumulative impacts. Thus, buildout of the 2002 LRDP, as amended, would contribute to a significant and unavoidable cumulative air quality impact under this threshold.

Mitigation Measures

No additional feasible mitigation measures are available beyond those identified.

Level of Significance After Mitigation

Significant and Unavoidable.

Impact 4.2-4c ***Construction and operation of the 2002 LRDP, as amended, would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. PPs 4.2-2(a) through 4.2-2(d) and MMs 4.2-.2(a) through 4.2-2(c) would reduce this impact, but this impact would remain significant and unavoidable.***

Threshold	Would the project expose sensitive receptors to substantial pollutant concentrations (caused by criteria pollutant emissions)?

Local CO Impacts

Proposed 2008 NHIP

As previously discussed, the proposed 2008 NHIP would not generate an increase in traffic; therefore, it would not contribute to CO impacts at study area intersections. No impact would occur and no mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.2-5a ***Implementation of the proposed 2008 NHIP would not expose sensitive receptors near roadway intersections to substantial pollutant concentrations due to carbon monoxide hotspots. No impact would occur and no mitigation is required.***

Remaining Buildout of the 2002 LRDP as Amended

The project's traffic analysis (Iteris 2008) indicates that some of the signalized intersections that were analyzed would operate at LOS E or LOS F under cumulative conditions with buildout of the 2002 LRDP, as amended (Year 2013), including the proposed 2008 NHIP. The Protocol prescribes a quantitative screening analysis to determine a project's CO impacts. However, the Protocol screening analysis has become obsolete because it uses emission factors from an older version of CARB's EMFAC model. As a substitute, various air quality agencies in California have developed conservative screening methods. The SCAQMD has not developed quantitative CO screening criteria; therefore, the methods of the Sacramento Metropolitan AQMD (SMAQMD) are used (SMAQMD 2004). The method is based on background CO concentrations and project trip generation and is not dependent on the traffic volumes or geometry for a specific intersection. The screening is based on the background concentration of CO and a conservative estimate of project-related CO as a function of peak hour trip generation. The screening analysis for potential CO impacts at a generalized intersection with buildout of the 2002 LRDP, as amended, is shown in Table 4.2-7.

TABLE 4.2-7
SUMMARY OF CARBON MONOXIDE HOT SPOT
SCREENING LEVEL ANALYSIS

Concentration (ppm)	1-Hour	8-Hour
Background[a]	3	N/A
Project Related[b]	1.95	N/A
Anticipated Total[c]	4.95	3.47
NAAQS	35	9.0
CAAQS	20	9.0
Exceed Standards?	No	No

[a] Highest 1-hour concentration from the last 3 years.
[b] Peak hour trip generation due to the implementation of the NHIP and amended LRDP is 590 vehicles in the evening peak hour. CO concentration is interpolated from SMAQMD table as 1.95 ppm.
[c] 8-hour concentration assumed to be 0.7 times the 1-hour concentration.

As shown in Table 4.2-7, long-term operational related local CO mobile-source emissions from remaining buildout of the 2002 LRDP, as amended, would not violate or substantially contribute to a violation of the CAAQS or NAAQS, nor would they expose sensitive receptors to substantial pollutant concentrations. As a result, this impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.2-5b ***Implementation of remaining buildout of the 2002 LRDP, as amendment, would not expose sensitive receptors near roadway intersections to substantial pollutant concentrations due to carbon monoxide hotspots. This impact is less than significant impact and no mitigation is required.***

Localized Significance Thresholds (LST) Impact Analysis

Proposed 2008 NHIP

LST Analysis – Construction

Limits of construction for both Upper and Lower De Neve are approximately 2.9 acres, Sproul West is approximately 1.7 acres, and Sproul South and Sproul Complex is approximately 2.1 acres. Thus, the three proposed 2008 NHIP construction sites meet the criteria for use of the "lookup tables" in the analysis of local impacts. The screening tables require the following information:

- ***The area of the project site.*** The lookup tables provide data for 1-, 2-, and 5-acre sites. The thresholds were interpolated based on the size of each site.

- ***Maximum daily emissions of CO, NOX, PM10, and PM2.5, in pounds per day.*** These data were calculated with the URBEMIS 2007, version 9.2.4 model, as described above. In the LST analysis, only on-site emissions are considered; thus, off-site emissions such as haul trucks and worker commuting are not included. The maximum daily emissions for each site were used.

- ***Distance from the boundary of the project to the nearest receptor.*** The lookup tables analyze distances of 25, 50, 100, 200, and 500 meters (82, 164, 328, 656, and 1,640 feet) from the boundary of the project to the nearest off-site receptor. The proposed NHIP sites are located next to existing residence halls with a separation of less than 25 meters; the SCAQMD methodology prescribes the use of the 25-meter factor for all receptors within 25 meters.

- ***Geographic location of the construction site in terms of district source/receptor area (SRA).*** These data are required because emissions thresholds are based on local pollutant measurements and meteorology. The proposed project is located in SRA 2 – Northwest Coastal Los Angeles County.

Construction emissions for the LST analysis were calculated in accordance with the methodology described previously; results for Upper/Lower De Neve, Sproul West, and Sproul South/Complex are shown in Tables 4.2-8, 4.2-9, and 4.2-10, respectively.

TABLE 4.2-8
LOCAL PROJECT EMISSIONS – CONSTRUCTION UPPER/LOWER DE NEVE

Pollutant	Maximum Daily Emissions[a] (lbs/day)	LST Threshold[b] (lbs/day)	Exceed Threshold?
NOx	56.14	189/100[c]	No
CO	32.23	1,023/550[c]	No
PM10	6.69	8	No
PM2.5	1.70	5	No

[a] See URBEMIS data sheets, Appendix C1.
[b] LST thresholds from SCAQMD.
[c] LST thresholds for NOx and CO are higher than SCAQMD mass emissions thresholds; therefore, the lower numbers, which are the mass emissions thresholds, apply.

TABLE 4.2-9
LOCAL PROJECT EMISSIONS – CONSTRUCTION SPROUL WEST

Pollutant	Maximum Daily Emissions[a] lbs/day	LST Threshold[b] lbs/day	Exceed Threshold?
NOx	44.80	149/100[c]	No
CO	26.66	737/550[c]	No
PM10	4.51	5	No
PM2.5	1.08	4	No

[a] See URBEMIS data sheets, Appendix C1.
[b] LST thresholds from SCAQMD.
[c] LST thresholds for NO_X and CO are higher than SCAQMD mass emissions thresholds; therefore, the lower numbers, which are the mass emissions thresholds, apply.

TABLE 4.2-10
LOCAL PROJECT EMISSIONS – CONSTRUCTION SPROUL SOUTH/COMPLEX

Pollutant	Maximum Daily Emissions[a] lbs/day	LST Threshold[b] lbs/day	Exceed Threshold?
NOx	38.51	167/100[c]	No
CO	22.93	838/550[c]	No
PM10	5.57	6	No
PM2.5	1.33	4	No

[a] See URBEMIS data sheets, Appendix C1.
[b] LST thresholds from SCAQMD.
[c] LST thresholds for NOx and CO are higher than SCAQMD mass emissions thresholds; therefore, the lower numbers, which are the mass emissions thresholds, apply.

According to the SCAQMD methodology, "if the calculated emissions for the proposed construction or operational activities are below the LST emission found on the LST lookup tables, then the proposed construction or operation activity is not significant" (SCAQMD 2003b). As shown in Tables 4.2-8, 4.2-9 and 4.2-10, maximum daily emissions of NOx, CO, PM10, and PM2.5 for each site would not exceed the LST thresholds. Therefore the proposed 2008 NHIP would not result in significant impacts to adjacent sensitive receptors (nearest existing residence halls) and this impact would be less than significant.

The three construction sites for Upper/Lower De Neve, Sproul West, and Sproul South/Complex are located close to each other and it is possible that the local emissions from two or all three sites could be additive at some receptors during concurrent construction activities. The local emissions of NOx and CO are well below the LST thresholds for all three sites and would not cause an additive significant impact to sensitive receptors. The LST analysis was based on a conservative receptor distance of 25 meters (82 feet). The allowable local PM10 and PM2.5 emissions increase rapidly as the receptor distance increases. This is because a portion of the PM emissions is lost due to dissipation and deposition processes as the natural movement of air transports it. Thus, the PM10 and PM2.5 emissions from concurrent grading activities at the three sites would not likely affect a particular sensitive receptor in an additive manner. Therefore, concurrent construction of the proposed residence halls would not result in a significant local impact to adjacent sensitive receptors and this impact would be less than significant.

LST Analysis – Operations

The LST analysis for operational emissions from the proposed 2008 NHIP was performed using the same methodology as the construction emissions LST analysis. In the LST analysis, only on-site emissions are considered; thus, off-site emissions (such as vehicular emissions due to the operation of the project) are not included. Only area source emissions, such as emissions from the use of natural gas, landscape maintenance equipment, and consumer products (as shown in Table 4.2-11) are included in the analysis. It was conservatively assumed that all the area source emissions would occur at a single site. The site with the least area—Sproul West—was used for the analysis since the LST thresholds are most stringent for the smallest site. The URBEMIS data sheets and detailed LST calculations are included in Appendix C1.

Results of the LST analysis for operational emissions for the 2008 NHIP are shown in Table 4.2-11.

TABLE 4.2-11
LOCAL PROJECT EMISSIONS – 2008 NHIP OPERATIONS

Pollutant	Maximum Daily Emissions[a] lbs/day	LST Threshold[b] lbs/day	Exceed Threshold?
NOx	3	149/55[c]	No
CO	2	737/550[c]	No
PM10	<1	2	No
PM2.5	<1	1	No

[a] See URBEMIS data sheets in Appendix C1. The on-site emissions from all sites are considered in the operations LST analysis.
[b] LST thresholds from SCAQMD. The worst-case thresholds based on the size of the site are used.
[c] LST thresholds for NOx and CO are higher than SCAQMD mass emissions thresholds; therefore, the lower numbers, which are the mass emissions thresholds, apply.

As shown in Table 4.2-11, all emissions values from operation of the proposed 2008 NHIP would fall below the LST thresholds. Accordingly, operational impacts from local emissions of the proposed 2008 NHIP to sensitive receptors would be less than significant.

Remaining Buildout of the 2002 LRDP as Amended

Neither construction nor operation of individual projects under the 2002 LRDP, as amended, are anticipated to have on-site emissions significantly greater than those calculated for the proposed 2008 NHIP (identified above). Further, the LST impacts of the proposed 2008 NHIP were calculated for the minimum receptor distance. Therefore, it is concluded that construction and operational local impacts from future construction of the remaining buildout under the 2002 LRDP, as amended, would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.2-6 ***Implementation of the proposed Project would not expose sensitive receptors to substantial criteria pollutant concentrations from emissions generated on the project site based on the SCAQMD LST. This impact is less than significant and no mitigation is required.***

Threshold	Would the project expose sensitive receptors to substantial pollutant concentrations (caused by toxic air emissions)?

Remaining Buildout of the 2002 LRDP as Amended Including the Proposed 2008 NHIP

Year 2013 Cancer Burden

Toxic air contaminants (TACs) are airborne substances that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities.

The theoretical incremental cancer risk as a result of a lifetime exposure to emissions from the routine campus-wide operation of all sources under the 2002 LRDP, as amended, including the proposed 2008 NHIP, was estimated in the HRA to be 6.4 in 1 million (6.4×10^{-6}) at the off-campus MEI (calculated to be east of the campus along Hilgard Avenue) and 0.9 in 1 million (0.9×10^{-6}) at the on-campus MEI (calculated to be in the southern portion of the campus, near Franz Hall). The locations are presented on Exhibit ES-2 in Appendix C2. Potential risks at all other locations within the campus and surrounding vicinity would be lower. Because these risks are less than the SCAQMD threshold of 10 in 1 million, implementation of the 2002 LRDP, as amended, which includes the 2008 NHIP, would not generate toxic air emissions that result in excess human cancer risk from stationary sources, and the potential impacts would be less than significant. No mitigation is required.

Year 2013 Non-cancer Health Effects

The maximum chronic Hazard Index (HI) for an organ system was 0.09 at the off-campus MEI and 0.10 at the on-campus MEI. The maximum chronic HI at all other locations within the campus and surrounding vicinity would be lower.

The maximum acute HI for an organ system was 0.08 at the off-campus MEI and 0.11 at the on-campus MEI. The off-campus MEI was calculated to be located approximately 200 meters west of the campus boundary, and the on-campus MEI was calculated to be located at the UCLA Medical Center. The maximum acute HI at all other locations within the campus and surrounding vicinity would be lower.

Because these health effects are substantially less than an HI of 1.0, implementation of the 2002 LRDP, as amended, including the 2008 NHIP, would not generate toxic air emissions that result in a cumulative acute or chronic noncarcinogenic HI of 1.0 or greater. The new residents of the proposed 2008 NHIP would also not be exposed to a cumulative acute or chronic noncarcinogenic HI of 1.0 or greater. Therefore, this impact is less than significant, and no project-specific mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.2-7 ***Implementation of the proposed Project would not expose sensitive receptors on or off campus to substantial pollutant concentrations due to campus-generated toxic air emissions. This impact is less than significant and no mitigation is required.***

4.2.4 CUMULATIVE IMPACTS

Cumulative development is not expected to result in a significant impact in terms of conflicting with, or obstructing implementation of, the AQMP. The AQMP was prepared to accommodate growth; to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD; to return clean air to the region; and to minimize the impact on the economy. Growth considered to be consistent with the AQMP would not interfere with attainment because this growth is included in the projections utilized in the formulation of the AQMP. Consequently, as long as growth in the Basin is within the projections for growth identified in the Growth Management Chapter of the RCPG, implementation of the AQMP will not be obstructed by such growth. As growth in the Basin has not exceeded these projections, this is considered to be a less than significant cumulative impact. Additionally, since growth under the 2002 LRDP, as amended is consistent with growth under the RCPG (see discussion of Impact 4.8-2 in Section 4.8, Land Use and Planning) and because of the continuing and extensive implementation of campus TDM measures, the impact of the 2002 LRDP, as amended would be cumulatively less than significant. This is considered a less than significant impact.

Because the Basin is currently in nonattainment for O_3, PM10 and PM2.5, if cumulative development would violate an air quality standard or contribute to an existing or projected air quality violation, it would be considered a significant cumulative impact. With regard to determining the significance of the project contribution, the SCAQMD neither recommends quantified analyses of cumulative construction emissions nor provides methodologies or thresholds of significance to be used to assess cumulative construction impacts. For the purposes of this EIR, individual construction projects that exceed the SCAQMD recommended daily mass emission thresholds for project-specific impacts would be considered to cause a cumulatively considerable increase in regional emissions for those pollutants for which the Basin is in nonattainment. As discussed previously under Impacts 4.2-4a and 4.2-4c, although the proposed 2008 NHIP construction and all projects undertaken as part of the 2002 LRDP, as amended, could have emissions of criteria pollutants less than the SCAQMD thresholds, it is possible that feasible mitigation measures may not reduce proposed 2008 NHIP NOx emissions to a less than significant level. Further, the magnitude and timing of future projects near the campus during the proposed 2008 NHIP construction period is not known. Some future projects may have emissions that exceed the threshold, and concurrent emissions during construction of the proposed 2002 LRDP, as amended, including the 2008 NHIP, may be considered cumulatively considerable. In either case, there would be a significant and unavoidable cumulative short-term regional impact.

As discussed in Impact 4.2-4c the buildout of the 2002 LRDP, as amended, would result in direct significant and unavoidable long-term regional air quality impacts because the forecasted

daily emissions of NOx, an O_3 precursor, would exceed the SCAQMD significance threshold. Emissions attributable to the project area, along with emissions from other reasonably foreseeable future projects in the Basin as a whole, would continue to contribute to long-term increases in emissions that would exacerbate existing and projected nonattainment conditions. Thus, the project would contribute to a significant and unavoidable cumulative long-term regional air quality impact.

Cumulative development is not expected to expose sensitive receptors to substantial pollutant concentrations. Impacts 4.2-5a and 4.2-5b analyze future exposure of sensitive receptors to substantial CO concentrations at congested area intersections. Table 4.2-7 shows that projected future localized CO levels, including future cumulative projects, would not exceed national or State standards. Consequently, no significant cumulative impact would occur. As Impact 4.2-6 took into account emissions from the remaining buildout of the 2002 LRDP, as amended (which includes the proposed 2008 NHIP), the contribution of the 2002 LRDP, as amended, to this cumulative impact would be less than significant. This is considered to be a less than significant impact.

Impact 4.2-6 addresses direct impacts from on-site emissions to nearby sensitive receptors. Because these impacts were assessed within a the shortest distance used in the methodology and because the potential for local impacts decreases with distance, it is unlikely that there would be cumulative projects occurring concurrently and within a close enough distance to be cumulatively significant. For LST emissions, the cumulative impact would be less than significant.

With regard to operations of cumulative development resulting in the exposure of sensitive receptors to substantial toxic pollutant concentrations, it is not expected that there would be a cumulatively significant impact. Cumulative development expected in the Westwood area is expected to mainly consist of office, commercial and residential uses, which do not result in toxic emissions at levels that can be considered substantial. In addition, regulations and laws relating to toxic air pollutants would also protect sensitive receptors from substantial concentrations. Consequently, it is expected that future operations would result in a less than significant cumulative impact. Buildout of the proposed Project would also result in a less than significant contribution because analysis of operational impacts showed that the campus would result in an extremely small theoretical increment in cancer risk due to operational emissions, well below the SCAQMD standard of 10 in 1 million to the maximally exposed individual, and also because acute and chronic noncancer health risks from operation of the 2002 LRDP, as amended, would have a hazard index of less than 1.0. This impact is less than significant.

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4.3 BIOLOGICAL RESOURCES

This section of the EIR evaluates the potential for biological impacts associated with implementation of the proposed Project. Impacts related to the visual quality of campus landscaping are presented in Section 4.1, Aesthetics. The term "biological resources" designates both botanical and wildlife communities and species on the UCLA campus. For the purposes of this document, "special status" species include those species that have been recognized by either federal, State, or private resource management agencies or conservation organizations as having special management needs due to limited distribution, limited numbers, or significant population declines associated with natural or manmade causes. Special status species include those designated as Endangered, Threatened, Rare, Protected, Sensitive, or Species of Special Concern according to the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), the California Native Plant Society (CNPS), the California Environmental Quality Act (CEQA), or any applicable regional plans, policies, or regulations.

Data used to prepare this section came from various sources, including previous environmental documentation prepared for the UCLA campus; biological resources reports prepared for areas on or in the vicinity of the UCLA campus; and field reconnaissance surveys conducted by BonTerra Consulting. BonTerra Consulting's Regulatory Specialist conducted a jurisdictional determination of Stone Canyon Creek, the NHIP sites, and a 4-acre undeveloped parcel in the Northwest zone on May 7, 2008. A BonTerra Consulting Biologist visited these sites on October 17, 2008, to collect data on plant and wildlife species present in each of these areas. BonTerra Consulting's Certified Arborist performed a tree survey of the proposed 2008 NHIP impact area with a 100-foot buffer in April 2008 (the tree survey is included in Appendix D1). Full bibliographic entries for all reference materials appear in Section 4.3.5, References, of this section.

The CDFG's California Natural Diversity Database (CNDDB) and California Native Plant Society's (CNPS's) Electronic Inventory of Rare and Endangered Vascular Plants of California were searched to determine which special status plant and wildlife species have been reported in the vicinity of the campus (defined as the U.S. Geological Survey [USGS] Beverly Hills 7.5-minute quadrangle). Additionally, using the results of previous biological studies conducted for the 2002 LRDP Final EIR, previous project-specific biological studies for projects on the UCLA campus, and 2008 field data collected by BonTerra Consulting Biologists, a list of plant and animal species that have been observed within the Northwest zone was compiled (Appendix D2).

Two private individuals submitted comments in response to the Notice of Preparation addressing biological resources issues. Both individuals requested that the EIR address the removal and replacement of trees with implementation of the proposed Project, especially on the proposed 2008 NHIP site (landscaped slope north of Gayley Avenue) (refer to Impacts 4.3-1 and 4.3-4). In addition, one individual requested that the change in habitat value on the proposed 2008 NHIP site be addressed (refer to Impacts 4.3-1, 4.3-2, and 4.3-5).

4.3.1 ENVIRONMENTAL SETTING

Vegetation

Using the results of previous biological studies conducted for the 2002 LRDP Final EIR, previous project-specific biological studies for projects on the UCLA campus, and 2008 field data, BonTerra Consulting compiled a list of plant species that have been observed or that have potential to occur on the UCLA campus (refer to Appendix D2).

UCLA Campus

The UCLA campus consists of developed areas with landscaped courtyards, gardens, lawns, and planted hillsides. The majority of the vegetation on the UCLA campus consists of non-native species planted for ornamental purposes. Common ornamental trees and shrubs include sweet gum (*Liquidambar* sp.), gum (*Eucalyptus* spp.), pine (*Pinus* spp.), oleander (*Nerium oleander*), bottlebrush (*Callistemon* sp.), olive (*Olea europaea*), India hawthorn (*Rhaphiolepis indica*), and ivy (*Hedera* spp.). A few native trees have also been planted on campus, such as western sycamore (*Platanus racemosa*) and coast live oak (*Quercus agrifolia*), though the habitat value of these trees is limited within highly developed areas on campus.

The Mildred E. Mathias Botanical Garden is located in the southeastern portion of the campus. The focus of the garden is the cultivation of tropical and subtropical plant species, but it also serves as both a research center and an area accessible to the public to observe the numerous species cultivated there. The Botanical Garden consists of non-native ornamental species and, as such, it will generally be combined with discussions of other landscaped areas on the campus.

There is an undeveloped 4-acre area in the Northwest zone between Veteran Avenue and Parking Lot 11 (hereafter referred to as the "4-acre parcel"). This area contains a mix of chaparral, coastal sage scrub, and ruderal species. The northern half of the parcel consists of non-native grasses (*Avena* and *Bromus* spp.) with scattered native species such as toyon (*Heteromeles arbutifolia*), laurel sumac (*Malosma laurina*), coyote brush (*Baccharis pilularis*), and California sagebrush (*Artemisia californica*). The southern half of the parcel is dominated by laurel sumac with scattered mule fat (*Baccharis salicifolia*), coastal prickly pear (*Opuntia littoralis*), and Mexican elderberry (*Sambucus mexicana*); sweet fennel (*Foeniculum vulgare*) and castor bean (*Ricinus communis*) are also prevalent in the southern half of the 4-acre parcel. UCLA maintains the campus storm water drainage system. The major drainage course from the north is from the upstream Stone Canyon Watershed that conveys flows through a combination of below grade and surface storm drain channels to an underground box culvert that is located immediately above the Sunset Boulevard boundary of the campus. From that box culvert, the storm water flows through an open channel (commonly referred to as "Stone Canyon Creek") for a small section in the northeastern corner of the campus from Sunset Boulevard/Royce Drive adjacent to the Corinne A. Seeds University Elementary School to the Andersen School, Collins Executive Education Center. At the Collins Executive Education Center, the storm water enters a 66-inch underground pipe that runs northwest to southwest. References to the "Stone Canyon Creek" in this EIR mean the aboveground portion of the storm drain channel on campus. The area surrounding the aboveground portion of Stone Canyon Creek on campus consists of bare ground with ornamental trees such as Canary Island pines (*Pinus canariensis*) and Montezuma cypress (*Taxodium mucronatum*). The banks of the creek are primarily unvegetated, but there is a small patch of about 6–10 red willow (*Salix laevigata*) saplings that are about 10 feet tall near a grated culvert at the downstream end of the creek. A small patch of knotweed (*Polygonum* sp.), a riparian herb species, is also located near the culvert. Open water was observed in the creek during the April and October 2008 visits. The aboveground portion of the creek is subject to high flows during storm events, which periodically scour the banks and remove vegetation.

2008 NHIP Sites

The 2008 NHIP project sites consist of developed areas with landscaped courtyards, gardens, lawns, and planted hillsides, similar to other areas on the UCLA campus described above. Common ornamental species in this area include jacaranda (*Jacaranda mimosifolia*), pine, gum, olive, oleander, and bottlebrush.

Wildlife

Using the results of previous biological studies conducted for the 2002 LRDP Final EIR, previous project-specific biological studies for projects on the UCLA campus, and 2008 field data, BonTerra Consulting compiled a list of wildlife species that have been observed or have potential to occur on the UCLA campus (refer to Appendix D2).

UCLA Campus

Wildlife associated with the UCLA campus consist primarily of native and non-native species that are tolerant of a high amount of human activity and commonly occur in urban areas. Amphibian and reptile species observed or expected to occur on campus include California treefrog (*Pseudacris cadaverina*), Pacific treefrog (*Pseudacris regilla*), western fence lizard (*Sceloporus occidentalis*), and side-blotched lizard (*Uta stansburiana*). Common bird species observed or expected to occur on campus include northern mockingbird (*Mimus polyglottos*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura)*, black phoebe (*Sayornis nigricans*), bushtit (*Psaltriparus minimus*), and yellow-rumped warbler (*Dendroica coronata*). Common mammal species observed or expected to occur on the campus include Virginia opossum (*Didephius virginiana*), common raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), California ground squirrel (*Spermophilus beecheyi*), and the introduced fox squirrel (*Sciurus niger*).

Although mature ornamental trees on the UCLA campus provide foraging, roosting, and nesting opportunities for bird species, including raptors,[1] there are three primary areas of the campus with mature native or ornamental vegetation. These areas were generally described above, but more detail on the mature trees within each of these areas is provided below:

- ***Mildred E. Mathias Botanical Garden.*** This area contains densely planted trees and shrubs surrounding a research center. Many of the trees and shrubs within this area are tropical or subtropical.

- ***Northwest Zone/4-Acre Parcel.*** This area contains densely planted ornamental trees surrounding the campus student residential facilities. It also includes the 4-acre parcel. Mature pine and gum trees occur along the top of the slope of the 4-acre parcel; a few coast live oak trees are also present in this parcel.

- ***Stone Canyon Creek.*** Tree species in this area occur in the upland area surrounding the aboveground portion of the creek; common species include Canary Island pine and Montezuma cypress. There are no mature native riparian tree species located along the creek at this time; however, willow saplings were observed.

2008 NHIP Sites

Because of the developed nature of the sites, wildlife expected to occur on the 2008 NHIP sites consist of native and non-native species that are tolerant of a high amount of human activity and that commonly occur in urban areas. Common wildlife species would be similar to those described above for the UCLA campus. Mature trees within the 2008 NHIP sites provide foraging, roosting, and nesting opportunities for bird species, including raptors.

[1] birds of prey

Trees

UCLA Campus

A tree survey was not conducted throughout the entire UCLA campus as part of the proposed Project. Tree surveys are typically conducted in the context of project-specific CEQA documentation in accordance with provisions of the 2002 LRDP EIR. A tree survey was conducted for the 2008 NHIP sites, as discussed below.

2008 NHIP Sites

A tree survey was conducted within the proposed 2008 NHIP impact areas and within a 100-foot buffer surrounding the proposed impact area (BonTerra Consulting 2008). During the survey, an Arborist assessed the size, height, canopy width, aesthetic value, and overall health of existing native trees that have a diameter at breast height (dbh) greater than four inches and all other trees with a dbh of 12 inches or greater; the location of each tree was also mapped (Figure 4.3-1). A total of 244 native or mature ornamental trees were identified in the survey area. In addition, there are 142 trees that have a dbh of less than 12 inches that were not recorded in the tree survey but are identified on Figure 4.3-1.

Two native tree species occur within the proposed 2008 NHIP project sites or in the immediate vicinity: western sycamore and coast live oak. The remainder of trees in the 2008 NHIP sites were horticultural (i.e., ornamental) tree species.

Special Status Biological Resources

Special Status Vegetation Types

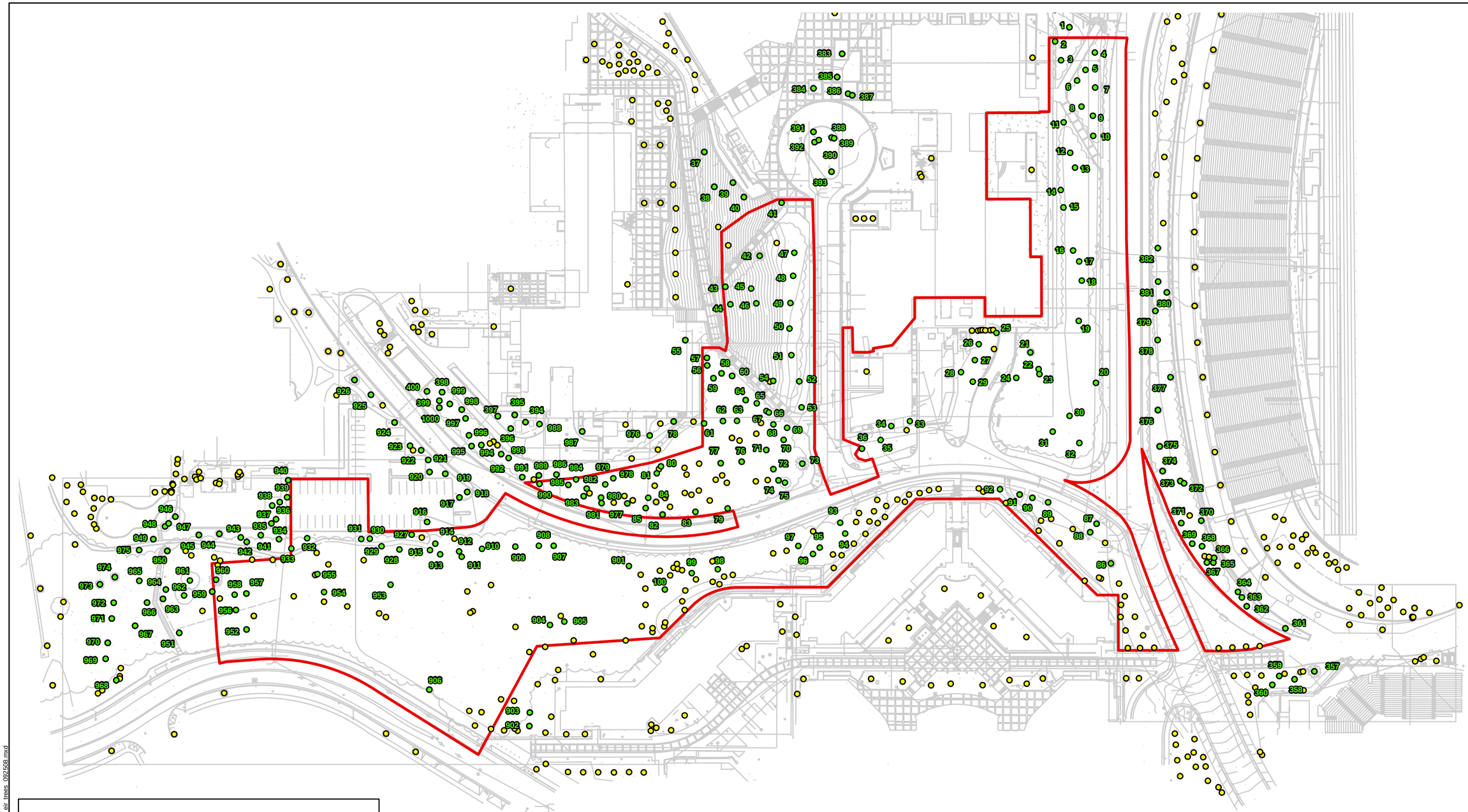
In addition to providing an inventory of special status plant and wildlife species, the CNDDB also provides an inventory of vegetation types that are considered special status by State and federal resource agencies, academic institutions, and various conservation groups (such as the CNPS).

UCLA Campus

Although some native plant species are interspersed among non-native ornamental species on campus (e.g., coast live oak), the presence of scattered native plant species does not indicate a special status vegetation type. Rather, the species reflect the urban nature of the region. There are no special status vegetation types located within developed portions of the campus.

The 4-acre parcel in the Northwest zone consists primarily of chaparral species with some coastal sage scrub species interspersed. There are also scattered non-native invasive species, such as pampas grass (*Cortaderia selloana*), castor bean (*Ricinus communis*), and black mustard (*Brassica nigra*). The limited extent of coastal sage scrub in this parcel, the lack of contiguous off-site habitat, and the high amount of invasive species scattered within this parcel reduce the overall habitat quality of the patch.

Although the aboveground portion of Stone Canyon Creek on campus includes a few individual willow saplings because of this small area and the number, size, canopy cover and density of saplings, it is too limited to be considered riparian habitat. However, this area would be covered by the Clean Water Act (CWA); jurisdictional issues for this area are discussed below.



Source: BonTerra Consulting 2008
UCLA 2008

2008 NHIP Tree Locations

Figure 4.3-1

2008 NHIP and LRDP Amendment

Map Not to Scale

BonTerra CONSULTING

R:/Projects/UCLA/J011/Graphics/LRDP/ex4.3-1_trees_120208.pdf

D:/Projects/UCLA/J011/Ex_eir_trees_092508.mxd

2008 NHIP Sites

As described above for the campus, the 2008 NHIP sites consist of developed and ornamental areas. There are no special status vegetation types within the 2008 NHIP sites.

Jurisdictional Resources

Drainages, which may include "waters of the U.S.", are protected under Section 404 of the Federal Clean Water Act (CWA) (discussed below in Section 4.3.2, Regulatory Framework) and are under the jurisdiction of the U.S. Army Corps of Engineers (USACE). Waters of the U.S. include navigable coastal and inland waters, lakes, rivers, streams and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce.

Under Section 401 of the Federal CWA, an activity involving discharge into a water body must obtain a federal permit and a State Water Quality Certification to ensure that the activity will not violate established water quality standards. The State Water Resources Control Board (SWRCB), in conjunction with the nine Regional Water Quality Control Boards (RWQCBs) administers the Water Quality Certification (401) program. In addition, the CDFG, under Section 1600 of the *California Fish and Game Code*, regulates work that will (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) 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. Permit authorizations from the USACE, the RWQCB, and the CDFG are required prior to the initiation of any construction-related project activity that involves impacts to areas determined to be under the jurisdiction of the USACE or CDFG through activities including filling; stockpiling; converting to a storm drain; modifying an existing storm drain or channel; creating a channel; stabilizing a bank; modifying road or utility transmission line crossings; or completing other modifications of an existing drainage, stream, or wetland. Also, both permanent and temporary impacts to jurisdictional resources are regulated activities that require permit authorization from these agencies.

UCLA Campus

The majority of Stone Canyon Creek on the campus is in an underground box culvert as part of the campus drainage system. The underground box culvert would not be under the jurisdiction of the USACE and/or the CDFG because underground flood-control facilities are not jurisdictional—as defined by the provisions of Section 404(b)(1) guidelines of the CWA—because they no longer contain waters of the U.S., which includes all waters that have, are, or may be used in interstate or foreign commerce. Also, these underground flood-control facilities would not be considered jurisdictional by the CDFG because they no longer have a definable streambed, stream bank, or stream course. The aboveground portion of Stone Canyon Creek adjacent to UES would be considered jurisdictional by the USACE because it has a definable stream course and flow characteristics with biological and chemical values and functions of a stream course. The limits of this jurisdictional resource area were defined by the "Ordinary High Water Mark", a clear, natural line impressed on the bank created by the erosive forces of the creek flows. It would also be considered jurisdictional by CDFG because it has a definable streambed, stream bank, or stream course. This area is approximately 500 feet in length; however, the actual extent of the jurisdictional area has not been determined at this time because the proposed 2002 LRDP, as amended, does not include any projects that would impact this portion of Stone Canyon Creek. If a future proposed development would impact this area, a jurisdictional delineation would be required to determine the extent of jurisdictional areas and permit authorizations from the USACE, the RWQCB, and the CDFG that may be required. If

no future developments are proposed that would impact this area, then the jurisdictional delineation would not be required and no permit authorizations from USACE, RWQCB, or CDFG would be required.

2008 NHIP Sites

There are no jurisdictional areas located within or adjacent to the 2008 NHIP sites.

Special Status Plant Species

According to a search of the CNDDB and the CNPS, 11 special status plant species have been reported to occur within the vicinity of the campus, defined as the USGS Beverly Hills 7.5-minute topographical quadrangle (CDFG 2008; CNPS 2008). Of these, four species are listed as Threatened or Endangered: Braunton's milk-vetch (*Astragalus brauntonii*), Ventura Marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), coastal dunes milk-vetch (*Astragalus tener* var. *titi*), and salt marsh bird's-beak (*Cordylanthus maritimus* ssp. *maritimus*). In addition, several CNPS List 1B and 2 species have been reported to occur in the vicinity of the campus.

UCLA Campus

No special status plant species have potential to occur within developed or ornamental areas on the UCLA campus due to lack of suitable habitat.

The 4-acre parcel and Stone Canyon Creek provide marginally suitable habitat for special status plant species. The 4-acre parcel provides potential habitat for Braunton's milk-vetch (Endangered), Parish's brittlescale (CNPS List 1B.1), and Plummer's mariposa lily (CNPS List 1B.2). Stone Canyon Creek provides potential habitat for southern tarplant (CNPS List 1B.1) (Impact Sciences 2004). Since focused surveys have not been conducted in these areas, it is unknown if any special status plant species occur. The proposed Project does not propose any development that would impact these areas; therefore, no focused surveys would be required at this time. If a future proposed development would impact this area, focused surveys may be required following an updated literature search and habitat assessment.

Ventura Marsh milk-vetch, coastal dunes milk-vetch, and salt marsh bird's-beak are not expected to occur on the campus due to the absence of suitable habitat for these species.

2008 NHIP Sites

No special status plant species have potential to occur within developed or ornamental areas on the NHIP sites due to lack of suitable habitat.

Special Status Wildlife Species

According to a search of the CNDDB, 12 special status wildlife species have been reported in the vicinity of the campus, defined as the USGS Beverly Hills 7.5-minute topographical quadrangle) (CDFG 2008). Of these, the coastal California gnatcatcher (*Polioptila californica californica*) is listed as a federally Threatened species. In addition, several Species of Special Concern or Special Animals have been reported to occur in the campus vicinity.

UCLA Campus

No special status wildlife species have potential to occur within developed or ornamental areas on the UCLA campus due to lack of suitable habitat.

The 4-acre parcel provides a limited amount of marginally suitable coastal sage scrub habitat for the coastal California gnatcatcher. Focused surveys for this species have not been conducted in this area; therefore, it is unknown if this species occurs there. This area also provides potentially suitable habitat for several other Species of Special Concern and Special Animals. The proposed Project does not propose any development that would impact this area; therefore, no focused surveys would be required at this time. If a future proposed development would impact this area, focused surveys for the coastal California gnatcatcher may be required following an updated habitat assessment.

Common and special status raptor species have potential to nest in the mature trees throughout campus, within the 4-acre parcel, and surrounding Stone Canyon Creek. Raptors with potential to nest in trees or on building crevices/ledges on the campus include red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*), American kestrel (*Falco sparverius*), great-horned owl (*Bubo virginianus*), barn owl (*Tyto alba*), and western screech owl (*Megascops kennicottii*). Nests of these species are protected by *California Fish and Game Code.*

2008 NHIP Sites

No special status wildlife species have potential to occur within developed or ornamental areas on the 2008 NHIP sites due to lack of suitable habitat.

Common and special status raptor species have potential to nest in the mature trees on the 2008 NHIP sites. Raptors with potential to nest in trees or building crevices/ledges on the NHIP sites are similar to those described above for the campus; nests of these species are protected by the *California Fish and Game Code.*

4.3.2 REGULATORY FRAMEWORK

Federal

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) protects plants and animals that the government has listed as "Endangered" or "Threatened". The FESA is implemented by enforcing Sections 7 and 9 of the Act. A federally listed species is protected from unauthorized "take" pursuant to Section 9 of the FESA. "Take", as the FESA defines it, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or attempt to engage in any such conduct. All persons are presently prohibited from taking a federally listed species unless and until: (1) the appropriate Section 10(a) permit has been issued by the U.S. Fish and Wildlife Service (USFWS) or (2) an Incidental Take Statement is obtained as a result of formal consultation between a federal agency and the USFWS pursuant to Section 7 of the FESA and the implementing regulations that pertain to it (50 *Code of Federal* Regulations [CFR] 402). "Person" is defined in the FESA as an individual, corporation, partnership, trust, association, or any private entity; any officer, employee, agent, department or instrument of the federal government; any State, Municipality, or political subdivision of the state; or any other entity subject to the jurisdiction of the United States.

Clean Water Act

The USACE Regulatory Branch regulates activities that discharge dredged or fill materials into the waters of the U.S. under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all waters of the U.S. where the material has the effect of: (1) replacing any portion of waters of the U.S. with dry land or (2) changing the bottom elevation of any portion of waters of the U.S. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in these waters of the U.S. The selection of disposal sites for dredged or fill material is done in accordance with the Section 404(b)(1) guidelines, which were developed by the U.S. Environmental Protection Agency (USEPA).

Section 401 of the CWA provides the RWQCB with the authority to regulate, through a Water Quality Certification, any proposed federally permitted activity that may affect water quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide "certification that there is reasonable assurance that an activity which may result in the discharge to 'waters of the U.S.' will not violate water quality standards." Water Quality Certification must be based on a finding that the proposed discharge would comply with water quality standards, which contain numeric and narrative objectives that can be found in each of the nine Regional Boards' Basin Plans.

Migratory Bird Treaty Act

Pursuant to the Migratory Bird Treaty Act (MBTA) of 1918, as amended in 1972, federal law prohibits the taking of migratory birds, their nests, or their eggs (16 *United States Code* [U.S.C.] Section 703), except as allowed by permit (pursuant to 50 CFR, 21). The statute states:

> Unless and except as permitted by regulations made…it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions...

State

California Endangered Species Act

Pursuant to the California Endangered Species Act (CESA) and Section 2081 of the *California Fish and Game Code,* an Incidental Take Permit from the CDFG is required for projects that could result in the take of a State-listed Threatened or Endangered species. Under CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include "harm" or "harass", as the federal act does. As a result, the threshold for a take under the CESA is higher than that under the FESA. A CDFG-authorized Incidental Take Permit under Section 2081(b) would be required where a project could result in the take of a State-listed Threatened or Endangered Species. The application for an Incidental Take Permit under Section 2081(b) has a number of requirements, including the preparation of a conservation plan, generally referred to as a Habitat Conservation Plan.

Unlawful Take or Destruction of Nests or Eggs

Section 3503.5 of the *California Fish and Game Code* specifically protects birds of prey. The Code states:

> It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

Section 3513 of the *California Fish and Game Code* duplicates the federal protection of migratory birds (i.e., the MBTA). The Code states:

> It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.

California Environmental Quality Act—Treatment of Listed Plant and Animal Species

The Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) protect only those species formally listed as Threatened or Endangered (or Rare in the case of the State list). However, Section 15380 of the CEQA Guidelines independently defines "Endangered" species of plants or animals as those whose survival and reproduction in the wild are in immediate jeopardy and "Rare" species as those who are in such low numbers that they could become endangered if their environment worsens.

Porter-Cologne Act

The Porter-Cologne Act provides the State with very broad authority to regulate "waters of the State" (which are defined as any surface water or groundwater, including saline waters). Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a "Report of Waste Discharge" when there is no federal nexus, such as under Section 404(b)(1) of the Clean Water Act. Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB interprets this to include fill discharge into water bodies.

California Fish and Game Code

Sections 1600–1616 of the *California Fish and Game Code* protect waters of the State. Activities of State and local agencies as well as public utilities that are project proponents are regulated by the CDFG under Section 1602 of the Code; this section regulates any work that will: (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) 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. For project activities that may affect stream channels and/or riparian vegetation regulated under Sections 1600 through 1603 (these activities have been described above), CDFG authorization is required in the form of a Streambed Alteration Agreement. Such activities associated with buildout of the 2002 LRDP, as amended, would be limited to the unchannelized area within Stone Canyon Creek on campus.

4.3.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

Assessing potential impacts on biological resources resulting from the implementation of the proposed Project began with a review of the available literature to determine the potential presence of special status biological resources on the UCLA campus and 2008 NHIP sites. Sources used in this review included:

- Data collected for other projects/studies within the campus and adjacent areas, including the 2002 LRDP Final EIR (UCLA 2003a, 2003b; Impact Sciences 2004);
- The California Natural Diversity Data Base;
- The California Native Plant Society's Electronic Inventory;
- Federal and State agency lists of special status species; and
- Federal, State, and local regulations/policies that apply to the project site.

Upon completion of the literature review, BonTerra Consulting compiled a list of species that may occur on campus using previous documentation. This included data collected by EIP Associates in 2001 and 2002 for the 2002 LRDP Final EIR; surveys focused on the Northwest zone, the aboveground portion of Stone Canyon Creek, and the Botanical Garden. Other previous surveys included a report prepared by Keane Biological Consulting (UCLA 2003b) for the Northwest Campus Development (De Neve) Revised Phase II SEIR; a biological survey of portions of the Northwest zone that was conducted by Longcore et al. in winter 1995–1996 (UCLA 2003b); and biological surveys for the Krieger Child Care Center Expansion Project EIR (Impact Sciences 2004). BonTerra Consulting conducted reconnaissance surveys to assess the current habitat quality on the campus, specifically the 2008 NHIP sites, the 4-acre parcel (in the Northwestern zone), and Stone Canyon Creek. A species list was compiled using all previous documentation (UCLA 2003a, 2003b; Impact Sciences 2004) and the results of the current surveys. Using this comprehensive species list, published habitat preferences and general aerial maps of the campus area, the potential impacts on biological resources that would occur from implementation of the LRDP Amendment were assessed using the thresholds of significance outlined below.

Additionally, native and non-native trees provide potential habitat (foraging, roosting, and nesting) for bird species observed on campus. The University of California is a constitutionally created unit of the State of California. As a State entity, UCLA is not subject to local zoning and planning ordinances, including the City of Los Angeles Native Tree Protection Ordinance (No. 177404). However, UCLA has historically met or exceeded the City of Los Angeles tree replacement requirements.

The City of Los Angeles Tree Ordinance generally defines "mature" trees as being healthy trees measuring 12 inches or greater in diameter at breast height (dbh) while "protected" trees are generally defined as any of the following Southern California native tree species whose dbh is measured four inches or greater:

- Oak trees, including valley oak (*Quercus lobata*) and California live oak, or any other tree of the oak genus indigenous to California but excluding the scrub oak (*Quercus dumosa*).
- Southern California black walnut (*Juglans californica* var. *californica*).
- Western sycamore.
- California bay (*Umbellularia californica*).

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed Project would not have a significant impact for the following thresholds from the CEQA Checklist and no further analysis of these issues is presented in this section.

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

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

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Biological Resources.

- Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service *(Impacts 4.3-1 and 4.3-2)*?

- Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites *(Impact 4.3-3)*?

- Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance *(Impact 4.3-4)*?

- Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service *(Impact 4.3-5)*?

Impact Analysis

Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures (PPs) were adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. They are therefore considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.3-1(a) *Mature trees to be retained and protected in place during construction, shall be fenced at the drip-line, and maintained by the contractor in accordance with landscape specifications contained in the construction contract.*

PP 4.3-1(b) *Trees shall be examined by an arborist and trimmed, if appropriate, prior to the start of construction.*

PP 4.3-1(c) *Construction contract specifications shall include the provision for temporary irrigation/watering and feeding of these trees during construction, as recommended by the designated arborist.*

PP 4.3-1(d) *Construction contract specifications shall require that no building material, parked equipment, or vehicles shall be stored within the fence line of any tree.*

PP 4.3-1(e) *Examination of these trees by an arborist shall be performed monthly during construction to ensure that they are being adequately maintained.*

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

Nesting Birds/Raptors

Proposed 2008 NHIP

Development of the proposed 2008 NHIP would include the removal and/or disturbance of trees and shrubs located within the proposed impact area. Common species of birds and raptors that occur on the 2008 NHIP project sites may nest on site in these trees and shrubs. Nesting birds and raptors are protected by the MBTA; raptors are also protected by *California Fish and Game Code.* The removal or pruning of trees and shrubs on the 2008 NHIP sites to allow for construction of the proposed structures could directly impact nesting birds, including nesting raptors. In addition, the dust, noise, and/or increased human presence associated with project construction could indirectly impact nesting birds, including nesting raptors. The loss of an occupied nest as a result of construction or demolition activities would constitute a substantial adverse effect ("take" or "destruction" under Section 3513 of the *California Fish and Game Code*) and, in the case of raptors, would constitute the "take" or "destruction" of the nest or egg (under Section 3503.5 of the *California Fish and Game Code*). The 2002 LRDP incorporates mitigation measure (MM) 4.3-1(a) from the 2002 LRDP EIR, as amended, which requires a pre-construction survey during the breeding season to determine whether birds or raptor species are nesting within a construction site, and 2002 LRDP Final EIR MM 4.3-1(b), which requires the provision of a buffer zone if occupied nests are found; development of additional protective measures, determined in consultation with CDFG, may also be required to respond to the specific circumstances observed. With continued implementation of these mitigation measures, impacts on nesting birds and raptors would be reduced to a less than significant level.

Additionally, the loss of ornamental vegetation (including trees and shrubs) as a result of project implementation could result in a reduction in potential foraging, roosting, and nesting opportunities for birds, including raptors. Ornamental vegetation would be impacted by the 2008 NHIP; a total of 131 mature trees and 1 native protected tree would be impacted. The loss of habitat would be considered a potentially significant impact. The 2002 LRDP incorporated Final EIR MM 4.3-1(c), which requires replacement of mature trees that would be removed for each project proposed under the 2002 LRDP, and continued implementation of this MM is included as

part of the proposed Project. MM 4.3-4 also requires replacement of protected trees that would be removed for each project proposed. With continued implementation of these mitigation measures as part of the proposed Project, impacts on mature and protected trees and the habitat they provide for birds, including raptors, would be reduced to less than significant levels.

The proposed 2008 NHIP does not involve the retention or relocation of any mature trees within the identified construction impact limit. However, should it be determined based on final construction plans that retention of mature trees is feasible, the 2002 LRDP Final PP 4.3-1(a) through PP 4.3-1(e), which provide protection and maintenance measures for mature trees, would also apply.

Remaining Buildout of the 2002 LRDP as Amended

The potential impacts identified above for the proposed 2008 NHIP would be applicable to any future development assumed under buildout conditions of the 2002 LRDP, as amended, and referenced 2002 LRDP Final EIR MMs and PPs would continue to apply.

Mitigation Measures Carried Forward from the 2002 LRDP EIR

The following mitigation measures were adopted as part of the 2002 LRDP Final EIR and shall continue to be implemented as part of the proposed Project, including the proposed 2008 NHIP. Also, continued implementation of PP 4.3-1(a) through PP 4.3-1(e) provides protective and maintenance measures for mature trees that would be retained or relocated. Changes to the 2002 LRDP Final EIR MMs are shown in **bold-faced** type; these changes have been made to clarify the implementation requirements.

MM 4.3-1(a) *Prior to the onset of construction activities that occur between March and mid-August **(February 1 through June 30 for raptors)**, surveys for nesting special status avian species and raptors shall be conducted on the affected portion of the campus following USFWS and/or CDFG guidelines. If no active avian nests are identified on or within 250 feet of the construction site, no further mitigation is necessary.*

MM 4.3-1(b) *If active nests for avian species of concern or raptor nests are found within the construction footprint or **within** a 250-foot buffer zone **around the construction site**, exterior construction activities shall be delayed within the construction footprint and buffer zone until the young have fledged or appropriate mitigation measures responding to the specific situation have been developed and implemented in consultation with CDFG.*

MM 4.3-1(c) *In conjunction with CEQA documentation required for each project proposal under the 2002 LRDP**, as amended,** that would result in the removal of one or more mature trees, the project will include a tree replacement plan with a 1:1 tree replacement ratio at the development site where feasible and/or elsewhere within the campus boundaries where feasible. If it is not feasible to plant replacement trees at a 1:1 ratio within the campus boundaries, the tree replacement plan will include the planting of native shrubs in ecologically appropriate areas within the campus boundaries that would provide nesting, foraging or roosting habitat for birds so that*

the replacement number of trees and shrubs will result in a 1:1 replacement ratio.

Level of Significance After Mitigation

Less than Significant.

Impact 4.3-1 ***Continued implementation of PP 4.3-1(a) through PP 4.3-1(e) provides protective and maintenance measures for mature trees that would be retained or relocated. However, implementation of the proposed Project could have a substantial adverse effect on nesting birds, including nesting raptors, which are protected by federal and State regulations, if trees are removed during the breeding season. This potentially significant impact would be reduced to a less than significant level with continued implementation of MM 4.3-1(a), 4.3-1(b) and 4.3-1(c).***

Special Status Plant and Wildlife Species

Proposed 2008 NHIP

The proposed 2008 NHIP does not involve any development within the 4-acre parcel or Stone Canyon Creek; therefore, it does not have the potential to impact special status plant species that may occur in these areas.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact would occur.

Impact 4.3-2a ***Implementation of the proposed 2008 NHIP would not have a substantial adverse effect on special status plant or wildlife species. No impact would occur and no mitigation is required.***

Remaining Buildout of the 2002 LRDP as Amended

Only two limited areas of natural open space occur on the UCLA campus: the 4-acre parcel and the aboveground portion of Stone Canyon Creek in the northeastern portion of the campus. Both of these areas provide potential habitat for special status plant species. The 4-acre parcel provides potential habitat for Braunton's milk-vetch (Endangered), Parish's brittlescale (CNPS List 1B.1), and Plummer's mariposa lily (CNPS List 1B.2). Stone Canyon Creek provides potential habitat for the southern tarplant (CNPS List 1B.1). Although future development is not anticipated, should development be proposed within the 4-acre parcel or Stone Canyon Creek under the 2002 LRDP, as amended, impacts on the special status plant species would be considered potentially significant if these species are present within that project's impact footprint. Accordingly, mitigation measures in addition to those approved as part of the 2002 LRDP Final EIR are proposed. Specifically, MM 4.3-2(a) requires a focused survey to determine the presence of these plant species within these areas. If the focused survey determines that any of these species are present within the proposed impact area, implementation of

MM 4.3-2(b), which requires implementation of mitigation plan, would reduce this impact to a less than significant level.

Only one limited area of disturbed coastal sage scrub (i.e., invaded by exotic species) occurs on the UCLA campus: the 4-acre parcel. This area provides potentially suitable habitat for special status wildlife species, including a limited potential to support the coastal California gnatcatcher (Threatened). Although future development is not anticipated, should development be proposed within the 4-acre parcel under the 2002 LRDP, as amended, impacts on the coastal California gnatcatcher would be considered potentially significant if this species is present within or adjacent to the project's impact footprint. Accordingly, mitigation measures in addition to those approved as part of the 2002 LRDP Final EIR are proposed. Specifically, MM 4.3-2(c) requires a focused survey to determine the presence of the coastal California gnatcatcher within or adjacent to this area. If the focused survey determines that this species is present within an impact area, implementation of MM 4.3-2(d) which requires development of a mitigation plan to replace coastal sage scrub habitat and MM 4.3-2(e), which requires that a permit be obtained from the USFWS authorizing impacts on this species, would be required. Implementation of these mitigation measures would reduce the potential impact on coastal California gnatcatcher to a less than significant level. Impacts on other special status wildlife species would be considered adverse but less than significant based on the limited amount of habitat that would be removed versus the amount of habitat available in the region for these species.

New Mitigation Measures

The following new mitigation measures have been identified to reduce potential impacts of remaining buildout of the 2002 LRDP, as amended. These MMs do not apply to the proposed 2008 NHIP, which does not include activities that would impact the 4-acre parcel or the aboveground portion of Stone Canyon Creek.

MM 4.3-2(a) *In conjunction with CEQA documentation required for any future project proposal within the 4-acre parcel or the aboveground portion of Stone Canyon Creek, surveys for special status plant species shall be conducted during the appropriate blooming period for each species, as determined by reference populations, to determine the presence or absence of these species. If no special status plant species are identified within the impact area, no further mitigation are necessary and the results of the survey shall be included in the CEQA documentation.*

MM 4.3-2(b) *If special status plant species are observed during focused surveys and if the status of the species and the size of the population warrant a finding of significance pursuant to CEQA, then appropriate mitigation measures shall be developed and included in the project-specific CEQA documentation. A detailed Mitigation Plan shall be prepared and approved prior to grading and may include, but not be limited to, one or more of the following actions:*

- *Avoiding impacts to the species to the extent possible through project planning;*
- *Minimizing impacts to the species to the extent possible through project planning;*
- *Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;*

- *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the project;*
- *Compensating for the impact by replacing or providing substitute resources or environments.*

As appropriate, the Mitigation Plan may include, but not be limited to:

- *Details for a salvage program;*
- *Replacement ratios;*
- *Performance criteria for the relocated population;*
- *Site-selection parameters to ensure there are no secondary impacts from mitigation;*
- *Program implementation methods within one year of grading;*
- *Methods to maintain the site for 5 years;*
- *Long-term preservation in dedicated open space.*

MM 4.3-2(c) *In conjunction with CEQA documentation required for any future project proposal within the 4-acre parcel, focused surveys for the coastal California gnatcatcher and other special status wildlife species that could occur in coastal sage scrub shall be conducted. Surveys shall follow the USFWS protocol to determine the presence or absence of this species. If no coastal California gnatcatchers or other special status species are identified in the impact area, no further mitigation are necessary and the results of the survey shall be included in the CEQA documentation.*

MM 4.3-2(d) *In conjunction with CEQA documentation required for any future project proposal within the 4-acre parcel, a Coastal Sage Scrub Mitigation Plan shall be prepared and approved by the USFWS prior to grading. In addition, grading of coastal sage scrub shall not occur during the coastal California gnatcatcher nesting season (February 15 to August 15). The Mitigation Plan may include, but not be limited to, one or more of the following actions:*

- *Avoiding impacts to coastal sage scrub to the extent possible through project planning;*
- *Minimizing impacts to coastal sage scrub to the extent possible through project planning;*
- *Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;*
- *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the project;*
- *Compensating for the impact by replacing or providing substitute resources or environments.*

As appropriate, the Mitigation Plan may include, but not be limited to:

- *Replacement ratios;*
- *Performance criteria;*

- *Site-selection parameters to ensure there are no secondary impacts from mitigation;*
- *Program implementation methods within one year of grading;*
- *Methods to maintain the site for 5 years;*
- *Long-term preservation in dedicated open space.*

MM 4.3-2(e) *If coastal California gnatcatcher or other special status species is observed within or immediately adjacent to the impact footprint during focused surveys, construction will not proceed until authorization is granted by the U.S. Fish and Wildlife Service via a Section 7 Permit or a 10a Permit. All conditions of such permits will be complied with in order to avoid or minimize impacts on the coastal California gnatcatcher.*

Level of Significance After Mitigation

Less than Significant.

Impact 4.3-2b ***Implementation of future projects that would impact the 4-acre parcel or aboveground portion of Stone Canyon Creek could have a substantial adverse effect on special status plant species. Additionally, implementation of a future project that would impact the 4-acre parcel could have a substantial adverse effect on the coastal California gnatcatcher and other special status wildlife species that occur in coastal sage scrub. This potentially significant impact would be reduced to a less than significant level with implementation of new MMs 4.3-2(a) through 4.3-2(e).***

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

Remaining Buildout of the 2002 LRDP as Amended including the Proposed 2008 NHIP

The UCLA campus, including the 2008 NHIP sites consists of developed and ornamental areas that are surrounded by developed and ornamental areas; the campus does not provide a connection between two areas of open space. Therefore, the campus does not contain suitable habitat that would be used as a wildlife corridor and does not facilitate regional connectivity to core wildlife habitat. There are no established wildlife corridors on the campus. The campus also does not include any marshes, wetland margins, or tidal zones that could function as wildlife nursery sites. No impacts would result from the proposed Project, and therefore, no mitigation would be required. Refer to Impact 4.3-1 for a discussion of impacts on nesting bird species.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact would occur.

Impact 4.3-3 ***Implementation of the proposed Project would not have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species, established wildlife corridors, or native wildlife nursery sites. No impact would occur and no mitigation is required.***

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

The University of California is not subject to local zoning and planning ordinances, including the City of Los Angeles Native Tree Protection Ordinance (No. 177404). Therefore, UCLA mitigates the loss of trees at its own discretion. The City of Los Angeles Native Tree Protection Ordinance requires the replacement of "protected species", defined as coast live oak, valley oak, western sycamore, Southern California black walnut, and California bay laurel. Tree replacement mitigation is determined on a case-by-case basis by the Urban Forestry Division of the Bureau of Street Services (City of Los Angeles), typically at a ratio of 2:1. Although not required, UCLA has historically met or exceeded the City of Los Angeles tree replacement requirements.

Proposed 2008 NHIP

The proposed 2008 NHIP would result in the direct removal of approximately 131 mature trees and 1 native tree (a coast live oak); a summary of the trees to be removed is provided in Table 4.3-1. The remaining trees to be removed are less than 12-inches dbh and do not include any native trees. The proposed 2008 NHIP does not involve the protection or relocation of any mature trees within the identified construction impact area.

TABLE 4.3-1
SUMMARY OF QUANTITY AND SIZE FOR TREES WITHIN THE 2008 NHIP CONSTRUCTION IMPACT AREA

Species		Tree Size (dbh)					
Common Name	**Scientific Name**	**4″–12″**	**12″–20″**	**20″–30″**	**30″–40″**	**>40″**	**Total**
deodar cedar	*Cedrus deodara*	–	2	–	–	–	2
coral tree	*Erythrina* sp.	–	–	–	–	1	1
lemon-scented gum	*Eucalyptus citriodora*	–	21	10	1	–	32
gum	*Eucalyptus* sp.	–	4	2	1	–	7
ash	*Fraxinus* sp.	–	–	1	–	–	1
magnolia	*Magnolia* sp.	–	1	–	–	1	2
olive	*Olea europea*	–	–	2	1	–	3
Canary Island pine	*Pinus canariensis*	–	40	25	–	–	65
Monterey pine	*Pinus radiate*	–	–	2	–	–	2
unidentified pines	*Pinus* spp.	–	2	2	–	1	5
Victorian box	*Pittosporum undulatum*	–	2	1	–	–	3
coast live oak[a]	*Quercus agrifolia*	1	–	–	–	–	1
Brazilian pepper	*Schinus terebinthefolius*	–	–	–	2	–	2
unknown ornamental		–	1	5	–	–	6
						Total	**132**

[a] Coast live oak is a native species. The minimum threshold for inclusion of native species in this report was is 4 inches, as opposed to 12 inches for all other tree species.

Additionally, several trees are located immediately adjacent to the limits of construction and may be impacted by the proposed 2008 NHIP project, either directly through impacts to the root zone or indirectly due to more shade cast by structures to be built. A total of 13 potentially impacted trees (tree numbers 1, 902, 903, 916, 934–940, 986, and 989) are located adjacent to the project site, all of which are Canary Island pines. Should these trees be impacted during or after construction, replacement requirements under MM 4.3-1(c) would apply.

Pursuant to MM 4.3-1(c), adopted as part of the 2002 LRDP Final EIR, the 131 mature trees directly impacted by the project and the additional 13 mature trees located adjacent to the identified impact area would be replaced at a 1:1 ratio. In addition, new MM 4.3-4 is proposed below and requires the replacement of the protected tree (i.e., the 1 coast live oak) at a 2:1 ratio. Trees would be replaced within the 2008 NHIP project sites and/or elsewhere within the campus boundaries where feasible. If it is not feasible to plant replacement trees at a 1:1 ratio within the campus boundaries, the Tree Replacement Plan that MM 4.3-1(c) requires would include the planting of native shrubs in ecologically appropriate areas within the campus boundaries that would provide nesting, foraging or roosting habitat for birds so that the replacement number of trees and shrubs would result in a 1:1 replacement ratio. Figure 3-5 in Section 3, Project Description, depicts the areas within the 2008 NHIP project sites that would be landscaped and could accommodate the replacement trees and/or native shrubs.

The required tree replacement for the proposed 2008 NHIP would reduce potential impacts to a level considered less than significant.

Remaining Buildout of the 2002 LRDP as Amended

Implementation of the 2002 LRDP, as amended, could result in the removal of protected and/or mature trees; this would be considered a potentially significant impact. Any impacts from removal of protected trees associated with future development projects would be mitigated with continued implementation of MM 4.3-1(c) and implementation of new MM 4.3-4. In addition, continued implementation of campus programs, practices, and procedures identified previously (PP 4.3-1[a] through PP 4.3-1[e] from the 2002 LRDP Final EIR) would reduce impacts on mature trees to be retained or relocated. Impacts from buildout of the 2002 LRDP, as amended, would be reduced to less than significant with implementation of the identified PPs and MMs.

New Mitigation Measure

In addition to the continued implementation of 2002 LRDP Final EIR MM 4.3-1(c) identified previously, the following new mitigation measure shall be implemented for the proposed Project.

MM 4.3-4 *UCLA shall replace protected trees removed for construction of projects under the 2002 LRDP, as amended, with protected trees of the same species at a 2:1 ratio as presented in the City of Los Angeles Protected Tree Ordinance (Ordinance Number 177404). Protected trees are defined as coast live oak, valley oak, western sycamore, Southern California black walnut, and California bay laurel.*

Level of Significance After Mitigation

Less than Significant.

Impact 4.3-4 ***Implementation of the proposed Project would impact mature and protected tree species. This potentially significant impact***

would be reduced to a less than significant level with continued implementation of MM 4.3-1(c), implementation of new MM 4.3-4, and continued compliance with PP 4.3-1(a) through PP 4.3-1(e) from the 2002 LRDP Final EIR.

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

Proposed 2008 NHIP

The proposed 2008 NHIP does not involve any development within the 4-acre parcel or Stone Canyon Creek; therefore, it does not have the potential to impact riparian habitat or other sensitive nature communities that may occur in these areas.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact would occur.

Impact 4.3-5a ***Implementation of the proposed 2008 NHIP would not impact the area along Stone Canyon Creek or coastal sage scrub within the 4-acre parcel. No impact would occur and no mitigation is required.***

Remaining Buildout of the 2002 LRDP as Amended

Any future activity under the 2002 LRDP, as amended, that involves disturbance to the bed, bank, or stream and any impact on riparian tree species whose dripline occurs over the creek may require authorization from the USACE under Section 401 of the Clean Water Act and the CDFG under a Streambed Alteration Agreement in accordance with Section 1601 of the *California Fish and Game Code.* Future development that would impact the aboveground portion of Stone Canyon Creek would comply with new MM 4.3-5(a) to determine the extent of the impacted resource. If jurisdictional resources are present, new MM 4.3-5(b) would also be required.

In addition, any future activity that involves disturbance to the coastal sage scrub within the 4-acre parcel would be considered potentially significant and would follow new MM 4.3-2(a), MM 4.3-2(b), and MM 4.3-2(c) as described above.

New Mitigation Measures

The following new mitigation measures have been identified to reduce potential impacts from remaining buildout of the 2002 LRDP, as amended. These measures do not apply to the proposed 2008 NHIP.

MM 4.3-5(a) *In conjunction with CEQA documentation required for any future project proposal in proximity to Stone Canyon Creek, a jurisdictional delineation shall be conducted to describe and map*

the extent of resources under the jurisdiction of the USACE and/or the CDFG following the guidelines presented in the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2006). The results of the delineation shall be included in the CEQA documentation.

MM 4.3-5(b) *Prior to any direct or indirect impacts to jurisdictional areas within Stone Canyon Creek, permits/agreements from the USACE, the RWQCB, and/or the CDFG shall be required. Acquisition and implementation of the permit/agreement may constrain proposed activities; impacts on jurisdictional resources should be minimized to the extent practicable. Mitigation for impacts on jurisdictional resources may include avoidance or minimization of impacts, compensation in the form of habitat restoration, or compensation through participation in a mitigation bank. The exact requirements of any special permit conditions established for impacts on the creek would be determined by the USACE (Section 404) and/or the CDFG (Streambed Alteration Agreement) following review of the formally submitted project application after completion of the CEQA process.*

Level of Significance After Mitigation

Less than Significant.

Impact 4.3-5b ***Implementation of remaining development allocation under the 2002 LRDP, as amended, may impact the aboveground portion of Stone Canyon Creek on campus which has riparian tree species and coastal sage scrub within the 4-acre parcel. Potentially significant impacts to riparian tree species would be reduced to a less than significant level with implementation of new MMs 4.3-5(a) and 4.3-5(b). Potentially significant impacts to coastal sage scrub habitat would reduced to a less than significant level with implementation of new MMs 4.3-2(a), 4.3-2(b), and 4.3-2(c).***

4.3.4 CUMULATIVE IMPACTS

The geographical context for the analysis of cumulative biological impacts includes the West Los Angeles Community Plan area (which includes the UCLA campus), as well as the Bel Air–Beverly Crest and Brentwood–Pacific Palisades Community Plan areas, which cover the largest portion of the Santa Monica Mountains within the City of Los Angeles. This analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of the *Los Angeles Citywide General Plan Framework* and development of the related projects in Table 4-1, Off-Campus Related Projects, in Section 4.0, Introduction to the Environmental Analysis.

Cumulative development is not likely to have a substantial adverse effect, either directly or through habitat modifications, on sensitive species. As is the case with the campus itself, land uses adjacent to the campus and in the surrounding region are generally established urban communities. Little additional development is expected to occur in the residential areas to the immediate north, west and east of the campus, and Westwood Village, to the south of the campus, is largely developed with commercial uses. Additionally, because the Community Plan

Areas that surround that campus are highly developed or are precluded from development (such as certain areas within the Santa Monica Mountains), projects that would occur are most likely to consist of the conversion of vacant land and low-density uses to higher-density uses, and would not involve significant habitat alteration or impacts on special status species. Within the geographical area of cumulative analysis, opportunities for foraging and roosting by avian species during migratory stop-over periods would typically be limited to more densely vegetated areas, such as parks; large-lot residences with extensive landscaping (such as those to the north, east, and west of campus); and other sites with large expanses of vegetated open space, such as the Los Angeles National Cemetery or the Veterans Administration property near the campus. Further, the Santa Monica Mountains (which include protected areas of habitat) and contiguous natural areas would continue to provide higher quality habitat than is available in the more highly developed urban areas. These areas are not anticipated for extensive development within the planning horizon of the 2002 LRDP, as amended. For all of these reasons, cumulative impacts on special status species and habitat would be less than significant.

Even in the event that cumulative impacts on special status species or their habitat could occur on a regional basis as a result of growth in areas adjacent to natural open spaces, development of the proposed Project would not make a significant contribution to these cumulative impacts. As discussed above, with implementation of the mitigation measures and the continuation of existing programs, policies and practices, habitat values on the campus would be maintained, including the more vegetated areas such as the area adjacent to the aboveground portion of Stone Canyon Creek, Mathias Botanical Garden, and the 4-acre parcel. As a result, the proposed Project's contribution to direct or indirect impacts on special status species or habitat, when considered in conjunction with the cumulative projects in the area, would not be cumulatively considerable and are less than significant.

Cumulative impacts of development on migratory wildlife species (including raptors and other avian species) or the movement of these species is not likely to be significant. Due to the general lack of habitat for migratory species at the various sites proposed for development by the related projects, cumulative development is not likely to affect migratory species or to impede their movement or migration. In addition, it is anticipated that future development would be subject to the Migratory Bird Treaty Act and, where applicable, the Federal and State Endangered Species Acts, which would either preclude disturbance of occupied nests or would require appropriate measures to ensure the safety and preservation of affected species. Even if the effects of cumulative development were to combine in a way that significantly affects migratory species, the proposed Project's contribution to this impact would be less than significant. As discussed above under Impact 4.3-1, Mitigation Measures 4.3-1(a) and 4.3-1(b) would mitigate, to a less than significant level, direct impacts upon nesting activities of raptors or other bird species by surveying for and actively protecting occupied nests.

Implementation of MM 4.3-4 which requires the replacement of protected tree species and MM 4.3-1(c), which requires the replacement of mature trees for the proposed Project, would reduce impacts associated with tree removal to a level considered less than significant. Off-campus Related Projects would be subject to the City of Los Angeles Tree Ordinance, which requires the replacement of protected trees at a 2:1 ratio. As a result, the proposed Project's contribution to cumulative impacts associated with tree removal would not be cumulatively considerable. This is considered to be a less than significant impact.

4.3.5 REFERENCES

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4.4 CULTURAL RESOURCES

This section describes the cultural (historical, archaeological, and paleontological) resources that are present or potentially present on the UCLA campus and evaluates the potential effects on those resources from development of the proposed Project during the planning horizon. Significant cultural resources on the campus include structures that may be eligible for the National Register of Historic Places (NRHP) and/or the California Register of Historical Resources (CRHR).

Preparation of this section used data from various sources, including:

- The 2002 LRDP Final EIR;
- A list of existing campus structures provided by UCLA Capital Programs, Campus Environmental Planning;
- The 1990 LRDP and 2002 LRDP Mitigation Monitoring Program 2007 Status Report;
- A Paleontological Resource Assessment of the UCLA Campus, Los Angeles County, California, prepared by Hugh M. Wagner, Ph.D. in December 2001;
- A standard cultural resources records check from the California Historic Resources Information System's (CHRIS) South Central Coastal Information Center, completed in June 2008; and
- Sacred Lands File check from the Native American Heritage Commission (NAHC), completed in April 2008.

Full bibliographic entries for all reference materials are provided in Section 4.4.5 (References).

4.4.1 ENVIRONMENTAL SETTING

Historical Resources

Overview of Campus History

The first structure built on campus was the bridge over the arroyo, completed in 1927. The first four major buildings (Haines Hall, Kinsey Hall, Powell Library, and Royce Hall) were sited on a mesa that is now called Dickson Plaza. George W. Kelham of San Francisco designed the Powell Library and the original Chemistry Building (now known as Haines Hall); and Allison and Allison of Los Angeles designed Royce Hall and the original Physics-Biology Building (Kinsey Hall). Royce Hall is considered to be one of the best examples of the Lombardian Romanesque style. The design for this building was inspired by the Basilica of St. Ambrogio in Milan, Italy. The Lombardian style, with Romanesque antecedents, is reflected in the architectural design and materials of the four original buildings and has been incorporated in many of the later campus buildings.

Under Kelham's direction, other structures were built in the 1930s. They include Moore Hall, the University Residence, Mira Hershey Residence Hall, and the Janss Steps. Soon thereafter, Kerckhoff Hall, the Men's Gym (now called the Student Activities Center), and the Dance Building (now called Glorya Kaufman Hall) were constructed.

Allison and Allison were appointed as UCLA's Supervising Architects, replacing Kelham upon his retirement in 1935. Buildings constructed under the direction of David R. Allison include Franz Hall and the first wing of the Administration Building (Murphy Hall). The arroyo was filled in on either side of the bridge over the arroyo during the tenure of Allison and Allison.

Dodd Hall was constructed in 1948, which created a boundary to the Dickson Court quadrangle. The Corinne A. Seeds University Elementary School (UES), which is of more recent construction (1950–1958), was designed by Richard Neutra and Robert Alexander and became a prototype for post-World War II school design. Other buildings constructed in the 1950s include Engineering I (1950), the Law Building (1951), the Botanical Garden Lathhouse (1952), the Geology Building (1952), Perloff Hall (1952), Young Hall (1952), Vivarium (1954), the Life Sciences Building (1954), the Health Sciences Building (1954), the Clinical Research Building (1954), Campbell Hall (1954), Schoenberg Hall (1955), Rolfe Hall (1956), the Math Science Building (1957), Fernald School (1957), the Public Affairs Building (1958), Ornamental Horticulture Building J (1958), the Faculty Center (1959), Dykstra Hall (1959), the Botany Building (1959), and Boelter Hall (1959).

Definitions of Historical Resources

The National Historic Preservation Act established the NRHP to recognize resources associated with the country's history and heritage. Typically, structures and features must be at least 50 years old to be considered for listing in the NRHP, barring exceptional circumstances. Criteria for listing, which are set forth in Title 36, the *Code of Federal Regulations* (36 CFR Part 60.4), require that a resource exhibit integrity and demonstrate its relationship to similar resources, its association with significant individuals or events, and/or its potential to contribute important information to scholarly research.

The CRHR was created to identify resources deemed worthy of preservation on a State level and was modeled closely after the NRHP. The criteria are nearly identical to those of the NRHP, but focus upon resources of statewide, rather than national, significance. The CRHR automatically includes resources listed on the NRHP.

See Section 4.4.2, Regulatory Framework, for details on the NRHP and CRHR.

Identification of Historical Resources on Campus

There are no structures eligible for the NRHP or CRHR within the Northwest zone, including the proposed 2008 NHIP sites.

Table 4.4-1, Campus Structures Determined NRHP or CRHR Eligible, lists campus facilities that have been determined significant at the time that the Notice of Preparation of this Draft EIR was circulated for public review. Many of the structures listed have previously been determined to be eligible for the NRHP or CRHR as part of a historic district (i.e., the Campus Historic Core) by the State Historic Preservation Office. The University Residence has also previously been determined to be eligible for listing on the NRHP.

TABLE 4.4-1
CAMPUS STRUCTURES DETERMINED NRHP OR CRHR ELIGIBLE

Structure	Date of Construction	Age	NRHP or CRHR Eligibility
Bridge under Dickson Plaza	1927	75	Eligible[a]
Haines Hall	1929	73	Eligible[a]
Hershey Hall	1931	71	Eligible
Janss Steps	1929	73	Eligible[a]
Glorya Kaufman Hall (formerly Dance Building)	1932	70	Eligible[a]
Kerckhoff Hall	1930	72	Eligible[a]
Kinsey Hall	1929	73	Eligible[a]
Men's Gymnasium	1932	70	Eligible[a]
Moore Hall	1930	72	Eligible[a]
Murphy Hall (portions)	1937	65	Eligible[a]
Powell Library	1930	72	Eligible[a]
Royce Hall	1929	73	Eligible[a]
University Residence	1930	72	Eligible[b]

[a] Previously identified as part of the Historic Campus Core
[b] Previously determined eligible by Lead Agency

Source: UCLA 2003b.

The Campus Historic Core

According to the State Historic Building Code Board (1990), the campus historic core is formed by Royce Hall (1929), along with Powell Library (1929) across Dickson Plaza (including the bridge) to its south; with Haines Hall (1929) to its east; Kinsey (1929) to its southeast; and its linkages to Moore Hall (1930), Kerckhoff Hall (1931), the Men's Gym (1932), and Glorya Kaufman Hall (1932) at the foot of Janss Steps. Murphy Hall (1937) is also considered to be part of the Historic Campus Core. In addition to the oldest and grandest campus structures, the historic core includes urban design elements, such as decorative sidewalks, landscape design, and the ornamental lights of Dickson Plaza and Janss Steps.

Previous Surveys

On December 17, 2001, and January 13, 2002, EIP Associates conducted reconnaissance-level surveys of the campus structures that had turned 50 since 1990 (i.e., constructed after 1940) to evaluate which structures may be eligible for the NRHP or the CRHR. Additionally, the State Historic Preservation Office (SHPO) designation (UCLA 2003b) was consulted for additional information on the NRHP status of these structures.

Since the time of those surveys, additional campus structures have turned 50 years old; however, since it is not known how and when future projects will affect structures, they cannot be specifically considered in this EIR. Each future development project must consider historic resources in accordance with CEQA. It should be noted that the proposed 2008 NHIP would not effect historic resources (refer to discussion provided in the Initial Study included in Appendix A).

Archaeology

Prehistoric Context

Prehistoric settlement in the Los Angeles Basin appears to have been shaped by an environment that favored subsistence practices and may have consisted of either villages or temporary/seasonal camps of special functions. Native American sites used in the harvest of marine foods formed a band along the Los Angeles Basin coast north from the Ballona Wetlands. Inland sites often appeared near springs or seeps or in proximity to oak groves. Other sites, many undocumented, were located to take advantage of desirable faunal, mineral, wild plant, and seed resources.

The Sacred Lands File (SLF) check that the NAHC completed for the project (Singleton 2008) did indicate the presence of Native American cultural resources in the vicinity of the campus. Although not required, informational letters were sent to all individuals listed on the NAHC contacts list that was provided with the SLF search. They are as follows:

- William Gonzales – Fernandeño Tataviam Band of Mission Indians
- Ron Andrade, Director – City/County Native American Indian Committee
- Cindi Alvitre – Ti'At Society
- John Tommy Rosas, Tribal Administrator – Tongva Ancestral Territorial Tribal Nation
- Anthony Morales, Chairperson – Gabrielino/Tongva San Gabriel Band of Mission Indians
- Charlie Cook
- Beverly Folkes
- Randy Guzman-Folkes

As of this writing, two responses were received by telephone, from Mr. Anthony Morales and Ms. Angie Behrens. Mr. Morales discussed his limited knowledge of the area, and was unaware of a sacred site existing on campus, but agreed that buried cultural resources may exist in areas of the campus built prior to the cultural resources identification requirements of CEQA. Mr. Morales recommended retaining a Native American Monitor as well as a qualified Archaeologist during ground-disturbing activities in native sediments[1] on campus. Ms. Behrens of the Gabrielino/Tongva San Gabriel Band of Mission Indians does not appear on the NAHC contact list, but her name was provided by Wendy Teeter, Curator of Archaeology at the Fowler Museum at UCLA. Ms. Behrens stated that there were indigenous people living in the UCLA area since there were several springs located on the property. She would like to be informed about what occurs on the campus. If cultural items and/or human remains are discovered, the Gabrielino should be contacted to assist in deciding on the disposition of find (Behrens 2008).

Archaeological Resources on the Campus including the 2008 NHIP Sites

The 1990 and 2002 LRDP Final EIRs estimate a low probability that archaeological remains are present on the campus, and no archaeological remains have been found during excavations for projects on campus (UCLA 2003b). Further, no archaeological remains have ever been recovered or recorded on campus.

An updated literature review was conducted in June 2008 by Wendy Teeter, Curator of Archaeology, Fowler Museum, UCLA, at the South Central Coastal Information Center at California State University, Fullerton. The results revealed that no archaeological sites or historic resources have been documented within the campus boundaries or within a one-mile

[1] Geologic reference to subsurface sediments or features that are in an undisturbed or relatively undisturbed state.

radius of the campus. There is one known archaeological site (CA-LAN-382) approximately two miles from the campus.

Thirty-six previous cultural studies have been conducted within one mile of the campus, including three adjacent to the campus. No cultural resources were identified as a result of these studies. This conclusion is consistent with the literature/records reviews conducted in 2001 for the 2002 LRDP Final EIR (UCLA 2003b).

The possibility of discovering archaeological remains during excavation for future campus projects cannot be discounted because, although no archaeological remains have been recovered or recorded on campus, much of the campus was constructed prior to the cultural resources identification requirements of CEQA. Therefore, it is possible that intact archaeological sites remain under existing buildings, structures, parking lots, and other development.

Paleontology

Paleontological resources include fossil remains, fossil localities, and formations that have produced fossil material in other nearby areas. Paleontological resources are limited, nonrenewable, sensitive, scientific and educational resources protected by State and federal environmental laws and regulations. As recognized here, paleontological resources include fossils preserved either as impressions of soft (fleshy) or hard (skeletal) parts, mineralized remains of skeletons, tracks, or burrows; other trace fossils; coprolites (fossilized excrement); seeds or pollen; and other microfossils from terrestrial, aquatic, or aerial organisms. No unique geological feature is known to exist on the campus (UCLA 2003b).

As discussed in Section 4.5, Geology and Soils, a geotechnical investigation of the proposed 2008 NHIP project area found that the proposed Lower and Upper De Neve buildings are located on an undeveloped slope that is overlain by unconsolidated fill (Geotechnologies 2008). Older Alluvium, deposited by fluvial[2] actions, underlies the fill at various depths between 0.5 and 30 feet. The presence of cultural material is less common in Older Alluvial sediments, especially those of Pleistocene age, since they typically predate human presence in the area. The Sproul buildings associated with the 2008 NHIP are located on previously disturbed/developed areas.

During preparation of the 2002 LRDP Final EIR, Dr. Hugh M. Wagner, Collections Manager for Fossil Vertebrates at the San Diego County Museum of Natural History, assessed the probability and nature of potential fossil remains on the UCLA campus. His assessment included research to determine which rock units underlie the campus and a literature survey to assess whether these rock units are fossil-bearing. Dr. Wagner identified three rock units beneath the UCLA campus: Upper Miocene Marine, Quaternary Older Alluvium, and Quaternary Alluvium. The literature survey and record searches at the Natural History Museum of Los Angeles County and the Museum of Paleontology at University of California, Berkeley, indicate that no fossils have been reported from any of the deposits located within the campus boundaries. Further, no paleontological resources have ever been found on campus. However, the same rock units have, in nearby contexts, yielded fossils of substantial number and importance, and Dr. Wagner's assessment concluded that the potential exists for the rock units underlying the campus to yield fossils (UCLA 2003b).

[2] Produced by or found in a river (www.dictionary.com).

4.4.2 REGULATORY FRAMEWORK

The treatment of cultural resources is governed by federal, State, and local laws and guidelines. There are specific criteria for determining whether prehistoric and historic sites or objects are significant and/or protected by law. Federal and State significance criteria generally focus on a resource's integrity and uniqueness, its relationship to similar resources, its association with significant individuals or events, and/or its potential to contribute important information to scholarly research. Some resources that do not meet federal significance criteria may be considered significant by State criteria. The laws and regulations seek to mitigate impacts on significant prehistoric or historic resources. The federal, State, and local laws and guidelines for protecting historic resources are summarized below.

Federal

The National Historic Preservation Act of 1966

The National Historic Preservation Act (NHPA) of 1966 (as amended) established the NRHP as the official federal list of cultural resources that have been nominated by State Offices for their historical significance at the local, State, or national level. Cultural resources are considered during federal undertakings chiefly under Section 106 of the NHPA (16 *United States Code* [U.S.C.] 470f) through its implementing regulation (36 CFR 800, Protection of Historic Properties) and through the National Environmental Policy Act (NEPA). Section 106 requires federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings (36 CFR 800.1).

Properties listed in the NRHP or that are "determined eligible" for listing must meet certain criteria for historical significance and possess integrity. Significance is determined by four aspects of American history or prehistory recognized by the NRHP Criteria, which are promulgated in 36 CFR 60.4 and listed below. Eligible properties must meet at least one of the criteria and exhibit "integrity", which measured by (1) the degree to which the resource retains its historical properties and conveys its historical character; (2) the degree to which the original fabric has been retained; and (3) the reversibility of changes to the property.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

(a) that are associated with events that have made a significant contribution to the broad patterns of our history; or

(b) that are associated with the lives of persons significant in our past; or

(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) that have yielded, or may be likely to yield, information important in prehistory or history.

Secretary of the Interior's Standards for Treatment of Historic Properties

The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings and *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings,* Weeks and Grimmer, 1995 (Secretary's Standards) are promulgated pursuant to the National Historic Preservation Act, as amended, 16 U.S.C. 470 et seq. The Secretary's Standards provide general guidance on appropriate treatments for historical resources. CEQA utilizes the Secretary's Standards as a means of evaluating proposed projects and potential impacts on historical resources. The Secretary's Standards are not prescriptive or technical, but "are intended to promote responsible preservation practices" and "provide philosophical consistency" to treatments for historical resources (Weeks and Grimmer 1995, Introduction). The following are brief descriptions of four possible treatment approaches:

- **Preservation** places a high premium on the retention of all historic fabric through conservation, maintenance and repair, including the building's historic form, features and detailing as they have evolved over time, through successive occupancies.
- **Rehabilitation** emphasizes the retention and repair of historic materials, but more latitude is provided for replacement because it is assumed the property is more deteriorated prior to work. (Both preservation and rehabilitation standards focus attention on the preservation of those materials, features, finishes, spaces, and spatial relationships that, together, give a property its historic character.)
- **Restoration** focuses on the retention of materials from the most significant time in a property's history, while permitting the removal of materials from other periods.
- **Reconstruction** establishes limited opportunities to re-create a non-surviving site, landscape, building, structure, or object in all new materials, primarily for interpretive purposes.

State

The California Register of Historic Resources (P.R.C. Section 5020 et seq.)

State law also protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. These criteria are nearly identical to those for the NRHP, but focus on resources of California statewide significance. A lead agency may consider a resource to be "historically significant" under CEQA if the resource:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) 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

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

Section 21083.2(g) of the *Public Resources Code* describes a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that,

without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required including, but not limited to: (1) deeding sites to conservation easements; (2) capping or covering sites with stable soils before building on them; (3) planning parks or green space to incorporate sites; and (4) data recovery excavation, among other measures (see Section 21083.2[a], [b] and [c]).

The SHPO maintains the CRHR. Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the CRHR, as are State Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Senate Bill 297 (1982)

This bill addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. A portion of the provisions regarding the discovery of human remains has been incorporated into Section 15064.5(e) of the State CEQA Guidelines.

The disposition of burials falls first under the general prohibition on disturbing or removing human remains under Section 7050.5 of the *California Health and Safety Code*. More specifically, remains suspected to be Native American are treated under the *California Code of Regulations* (CCR) Sections 15064.5(d) and 15064.5(e); and language found at *Public Resources Code* Section 5097.98 describes the process to be followed in the event that remains are discovered.

As identified in the Initial Study prepared for the project and included in Appendix A, in the event that a burial, human bone, or suspected human bone are discovered during NHIP construction activities, the campus program, practice, and procedure (PP) 4.4-5 would be implemented. PP 4.4-5 requires halting of excavation and grading, protection of the find, notification of the Los Angeles County Coroner, and compliance with *Public Resources Code* Section 5097.

4.4.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

Historical Resources

Significant effects upon historic structures or features are evaluated by determining the presence or absence of historic status with respect to the feature in question, and then determining the potential for development to affect the structure or feature if it possesses historic status. While the proposed Project is not anticipated to require the demolition of historic structures, new construction or modification could affect a historic resource or its setting (when the setting contributes to historic significance) by introducing incompatible elements.

Archaeological Resources

While only a small portion of the campus has been subjected to systematic archaeological survey, extensive excavation associated with campus development has occurred and continues to occur. This analysis is based on review of existing literature, and results of previous studies and excavations.

Paleontological Resources

Surface examination often cannot reveal whether paleontological resources are present at a specific project location. However, as described above, extensive excavation associated with campus development has occurred and continues to occur. Under CEQA Appendix G(5c), an impact would be considered potentially significant if it would "directly or indirectly destroy a unique paleontological resource or site". For the purposes of this EIR, since no other guidance for paleontological resources exists in CEQA, impacts on paleontological resources are assessed in terms of significance based upon whether these resources meet the definition of a "unique archaeological resource" found in Section 21083.2(g) or a "historical resource" found in Section 15064.5 of CEQA, and by general guidelines developed by the Society of Vertebrate Paleontology (UCLA 2003b). Specifically, a fossil is considered significant if it, according to Criterion 1 of 21083.2(g), "[c]ontains information needed to answer important scientific research questions…" and/or according to Criterion D of 15064.5(a)(3), "has yielded, or may be likely to yield, information important to prehistory".

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed Project would not have a significant impact for the following threshold from the CEQA Checklist and no further analysis of this issue is presented in this section.

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

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Cultural Resources.

- Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines *(Impact 4.4-1)*?

- Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines *(Impact 4.4-2)*?

- Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature *(Impact 4.4-3)*?

Impact Analysis

New Campus Programs, Practices, and Procedures

The following new campus program, practice, and procedure (PP) has been developed to address projects outside the Campus Historic Core that have the potential to impact historic structures and shall be continued throughout the planning horizon for the proposed Project.

PP 4.4-1(a) ***~~Structures over 45 years old that have not yet been evaluated for potential historic significance and may be directly or indirectly impacted by a proposed development project shall be evaluated for eligibility for listing on the California Register of Historic Resources.~~*** *~~The campus shall continue to implement all modifications to historic structures in compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995).~~*

Structures outside the campus Historic Core that appear to have historic significance, or are over 45 years old, that may be directly or indirectly impacted by a proposed development project shall be reviewed by the campus and a qualified architectural historian or historic architect for eligibility for listing on the California Register of Historical Resources. If a structure is identified as eligible for listing in the California Register of Historical Resources, and it is determined that the project could have a significant adverse impact on the structure, the campus and a qualified historic architect shall consider design modifications, mitigation measures and/or alternatives that could minimize, avoid or substantially reduce the impacts, and consider whether and to what extent the project could comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995).

Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus PP~~s were~~ was adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. ~~They are~~ It is therefore considered part of the proposed Project and assumed in the analysis presented in this section. Note that a change to the 2002 LRDP PP is shown in **bold-faced type**; this change has been made to clarify the campus practice for projects proposed in the Campus Historic Core, and to ensure that structures over 45 years old that could be potentially affected by future development are evaluated for historical significance. It should be noted that the 2008 NHIP is outside the Historic Core, and does not involve demolition or modifications to any structures determined to

be eligible for listing on the California Register of Historic Resources. Therefore, PP 4.4-1(a) is not applicable to the proposed 2008 NHIP.

PP 4.4-1(b) *The integrity of the Campus Historic Core shall be maintained.* ***Structures over 45 years old within the Campus Historic Core that have not yet been evaluated for potential historic significance and may be directly or indirectly impacted by a proposed development project shall be reviewed by the campus and a qualified architectural historian or historic architect for eligibility for listing in the California Register of Historical Resources. The campus shall continue to implement all modifications to historic structures within the Historic Core in compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995).***

Threshold	Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines?

Proposed 2008 NHIP

As identified in Section 5.a of the Initial Study included in Appendix A, there are no historic resources within the 2008 NHIP project sites. Therefore, no impacts to historic resources would result with implementation of the 2008 NHIP and no mitigation is required.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No impact would occur.

Impact 4.4-1a ***Implementation of the proposed 2008 NHIP would have no impact on the significance of structures that have been designated as eligible or potentially eligible for listing on the NRHP or CRHR. No mitigation is necessary.***

Remaining Buildout of the 2002 LRDP as Amended

As described above in Section 4.4.1, several structures on campus are eligible for listing on the NRHP and/or CRHR and, therefore, meet the definition of historical resources under Section 15064.5(a) of the CEQA Guidelines. Section 15064.5(b) states that substantially adverse changes to the significance of a historical resource are significant impacts on the environment.

Implementation of the 2002 LRDP, as amended, could include seismic or life safety systems retrofits, or upgrades to or reconfiguration of, historic structures, or structures considered eligible for listing on the California Register. However, the University has, as a matter of policy (refer to PP 4.4-1[~~a~~b]), implemented all such projects, either in consultation with the SHPO and/or in compliance with the *Secretary of the Interior's Standards for Treatment of Historic*

Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Secretary's Standards, Weeks and Grimmer 1995). According to Section 15064.5(b)(3) of the CEQA Guidelines, a project that follows these standards and guidelines shall generally be considered to have mitigated the impact on a historic structure to a less than significant level. At the same time, however, a failure to precisely conform to the Secretary's Standards in all respects does not necessarily mean that a project necessarily has a significant adverse impact on historical resources. There are circumstances where a project impacting historical resources may fail to conform to the Secretary's Standards, and yet the lead agency can conclude based on substantial evidence that the overall impact is less than significant because the project does not "materially impair" the historical resource within the meaning of Section 15064.5(b).

The campus will continue this policy, when necessary, during the planning horizon for the 2002 LRDP, as amended, and modifications to historic structures would, therefore, be designed in a manner that is sensitive to the character of a historic resource and the qualities of the structure that convey historic significance. Significant effort and care has been taken in the seismic and life safety renovation of all of the original campus buildings over the past two decades. Furthermore, in several instances (for example the south facade of Powell Library and the main lecture hall in Moore Hall), the rehabilitation work restored elements of these original buildings that had been compromised in prior renovation projects undertaken in the 1960s and 1970s. Based on the demonstrated campus practice of rehabilitating and restoring historic resources, no substantial adverse change to the historic campus buildings would occur with implementation of the 2002 LRDP, as amended, and this impact would be less than significant.

In addition to the form of a historic structure, setting is one of the qualities that conveys the historic significance of a structure (e.g., the original, bi-axial design of the Historic Campus Core by Kelham and the spatial relationships of the buildings). Construction of a building of inappropriate scale or architectural style or construction of a building that is too close to a historic structure could represent a substantial compromise of the setting of the historic structure, which would represent a significant impact. However, the campus has maintained the integrity of the setting of the historic core by avoiding development within Dickson Plaza and the other connecting open spaces, preserving the landscape elements of the core (such as pathways and planting areas), and maintaining the integrity of the historic structures within the zone. Also, although new development is proposed in the Core Campus Zone (within which the Historic Core is located), the 2002 LRDP, as amended, carries forward an important planning objective to ensure that the integrity of the Campus Historic Core is maintained. Continuation of this practice, as required by PP 4.4-1(b), would further ensure that the integrity of the Historic Campus Core's setting is maintained by reinforcing the architectural and landscape traditions of the campus. Therefore, a less than significant impact would occur with implementation of the 2002 LRDP, as amended.

In the course of campus planning efforts, UCLA has preserved, protected, and restored its historic structures, particularly those located in the Historic Core of the Core Campus, and no projects are foreseen under the 2002 LRDP, as amended, that would result in the demolition of historic structures. However, as previously noted, the environmental analysis for the proposed LRDP Amendment is programmatic rather than project-specific (with the exception of the 2008 NHIP), as the actual sites and design of future buildings have not been identified, their potential direct or indirect impact to historic structures cannot be determined. Although demolition of historic or potentially historic structures on campus is not planned, all appropriate CEQA analyses will be undertaken should demolition or other modification of such structures be proposed as part of implementation of future development under the 2002 LRDP, as amended.

PPs 4.4-1(a) and 4.4-1(b) require that the campus evaluate structures over 45 years old that would be directly or indirectly affected by a proposed development project to determine whether the structure is eligible for listing on the~~ National or State~~ California Register. If a historic structures evaluation determines that the particular structure is eligible for listing, as described above, the campus would continue its policy of undertaking renovations and/or new development that could affect such structures, in accordance with the Secretary's ~~of the Interior~~ Standards, or consider design modifications, mitigation measures and/or alternatives that could minimize, avoid or substantially reduce the impacts.

As provided by Section 15064.5(b)(3) of the CEQA Guidelines, following PP 4.4-1(a) and PP 4.4-1(b) would ensure that potential impacts to historic structures would remain less than significant by the continuation of the established campus practice of adherence to the Secretary of the Interior's standards and guidelines and ensuring that no incompatible development occurs within the Historic Campus Zone.

Mitigation Measures

With continued implementation of PP 4.4-1(a) and PP 4.4-1(b), no significant impacts would occur and no mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.4.1b ***Continued implementation of PP 4.4-1(a) and PP 4.4-1(b) would ensure that implementation of the proposed Project would not result in a substantial adverse change in the significance of structures that have been designated as eligible or potentially eligible for listing on the NRHP or CRHR. This is considered a less than significant impact and no mitigation is required.***

Threshold	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?

Proposed 2008 NHIP

As described in the environmental setting, no archaeological materials have been recovered or recorded on the campus to date; the majority of the campus is developed; and exposed ground consists of fill material or other earth that has been subject to previous disturbance for construction of existing structures and/or infrastructure.

The proposed 2008 NHIP's Sproul South, Sproul Complex, and Sproul West structures are located on previously developed or otherwise disturbed sites, and excavation activities would not occur in native sediment/soils. However, as discussed in Section 4.5, Geology and Soils, the proposed Upper and Lower De Neve buildings are located on an undeveloped slope that is overlain by unconsolidated fill. Older Alluvium (Pleistocene age) underlies the fill at various depths between 0.5 and 30 feet. It is not anticipated that the proposed 2008 NHIP would disturb areas with native sediments/soils that have the potential to contain cultural resources; therefore, monitoring of construction activities is not required. However, implementation of the Upper and Lower De Neve buildings would require excavation in previously undisturbed areas, and there is a potential that grading and excavation activities associated with these projects may encounter

previously unidentified archaeological resources. Although the likelihood of encountering archaeological resources on the site is considered low, this impact is potentially significant. Therefore, continued implementation of the 2002 LRDP Final EIR Mitigation Measure (MM) 4.4-2(a), which requires an instructional program to assist construction personnel in identifying archaeological resources, and 2002 LRDP Final EIR MM 4.4-2(b), which describes procedures to be followed in the event that cultural resources are discovered, are required. These MMs provided below would reduce this potentially significant impact to a less than significant impact.

Remaining Buildout of the 2002 LRDP as Amended

There is a potential that future projects to be developed under the 2002 LRDP, as amended, may occur in areas containing native sediments/soils, and grading and excavation activities associated with these projects may encounter previously unidentified archaeological resources. Although the likelihood of encountering archaeological resources on the campus is considered low, this impact is potentially significant. Therefore, continued implementation of 2002 LRDP Final EIR MM 4.4-2(a) and MM 4.4-2(b) would be required. Additionally, new MM 4.4-2(c) requires that future projects that would occur on a site with native sediments/soils have a qualified Archaeological Monitor present during earth-disturbing activities, and that additional provisions be made for any project where archaeological resources are identified. These MMs would reduce this potentially significant impact to a less than significant impact.

Mitigation Measures

Mitigation Measure Carried Forward from the 2002 LRDP Final EIR

The following mitigation measures were adopted as part of the 2002 LRDP Final EIR and shall continue to be implemented as part of the proposed Project, including the proposed 2008 NHIP.

MM 4.4-2(a) *Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering unique archaeological resources and taught how to identify these resources if encountered. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified, non-University archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of archaeological resources is prohibited.*

MM 4.4-2(b) *Should archaeological resources be found during ground-disturbing activities for any project, a qualified Archaeologist shall first determine whether an archaeological resource uncovered during construction is a "unique archaeological resource" pursuant to Section 21083.2(g) of the Public Resources Code or a "historical resource" pursuant to Section 15064.5(a) of the CEQA Guidelines. If the archaeological resource is determined to be a "unique archaeological resource" or a "historical resource," the Archaeologist shall formulate a mitigation plan in consultation with the campus that satisfies the requirements of Section 21083.2 and 15064.5.*

If the Archaeologist determines that the archaeological resource is not a "unique archaeological resource" or "historical resource," s/he may record the site and submit the recordation form to the California Historic Resources Information System at the South Central Coastal Information Center.

The Archaeologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the University and to the California Historic Resources Information System at the South Central Coastal Information Center.

New Mitigation Measure

The following new mitigation measure has been identified to reduce potential impacts of remaining buildout of the 2002 LRDP, as amended, but is not applicable to the 2008 NHIP.

MM 4.4-2(c) *Prior to initiation of construction activities for projects that require disturbance of native sediments/soils (as identified through site-specific geotechnical analyses), the campus shall retain a qualified non-University Archaeologist to observe grading activities and recover, catalogue, analyze, and report archaeological resources as necessary. The qualified Archaeologist shall submit to the Capital Programs University Representative, a written plan with procedures for archaeological resource monitoring. This plan shall include procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the resources as appropriate.*

Level of Significance After Mitigation

Less than Significant.

Impact 4.4-2 ***Construction associated with the proposed Project may cause a substantial adverse change in the significance of an archaeological resource. This potentially significant impact would be reduced to a less than significant level with continued implementation of MMs 4.4-2(a), MM 4.4-2(b) and implementation of new MM 4.4-2(c). MM 4.4-2(c) does not apply to the 2008 NHIP.***

Threshold	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Proposed 2008 NHIP

Development of the proposed Sproul South, Sproul Complex and Sproul West structures would occur on sites that have been previously excavated and developed and, therefore, no impacts to paleontological resources is expected.

No unique geological feature is known to exist and no fossils have been documented on the campus. However, nearby area rock units identical to those that underlie the campus have yielded significant paleontological specimens that contributed to scientific understanding of the

distant past. Therefore, fossils from these units could be considered unique resources due to the resource's potential to yield information important in history or prehistory (Criterion D of the NRHP and D of the CRHR). Accordingly, the rock units underlying the campus are considered paleontologically sensitive. Further, as described above in Section 4.4.1 (Environmental Setting), the Paleontological Resources Assessment prepared for the 2002 LRDP EIR concluded that the potential exists for the rock units underlying the campus to yield fossils (UCLA 2003b). Therefore, construction-related excavation, grading, or other earth-disturbing activities resulting from implementation of the Upper and Lower De Neve sites which have not been previously excavated could damage or destroy fossils in these rock units. This is a potentially significant impact.

MM 4.4-3(a) carried forward for the 2002 LRDP Final EIR requires an educational program to assist construction personnel in identifying paleontological resources, and MM 4.4-3(b) also carried forward requires additional provisional measures if paleontological resources are identified. Continued implementation of these measures would reduce this potentially significant impact to a level considered less than significant.

Remaining Buildout of the 2002 LRDP as Amended

The topography of the campus has been substantially altered by development and the accompanying grading and fill placement; additionally, as described above in the environmental setting, no fossils have been documented on the campus. As discussed above for the 2008 NHIP, the rock units underlying the campus are considered paleontologically sensitive and have the potential to yield fossils. Therefore, construction-related, earth-disturbing activities resulting from implementation of future projects under buildout of the remaining development allocation under the 2002 LRDP, as amended, could damage or destroy fossils in these rock units resulting in a potentially significant impact. Implementation of MMs 4.4-3(a) and 4.4-3(b) carried forward from the 2002 LRDP Final EIR would reduce this potentially significant impact to a level considered less than significant.

Mitigation Measures

Mitigation Measures Carried forward from the 2002 LRDP Final EIR

The following mitigation measures were adopted as part of the 2002 LRDP Final EIR and shall continue to be implemented as part of the proposed Project, specifically the Upper and Lower De Neve buildings of the proposed 2008 NHIP (not the Sproul buildings) and future development under the buildout of the remaining development allocation under the 2002 LRDP, as amended.

MM 4.4-3(a) *Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering paleontological resources and taught how to identify these resources if encountered. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected; the type of activities that may result in impacts; and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified, non-University Paleontologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed*

that unauthorized collection of paleontological resources is prohibited.

MM 4.4-3(b) *A qualified Paleontologist shall first determine whether a paleontological resource uncovered during construction meets the definition of a "unique archaeological resource" under Public Resources Code, Section 21083.2(g) or a "historical resource" under Section 15064.5 of the CEQA Guidelines. If the paleontological resource is determined to be a "unique archaeological resource" or a "historical resource", the Paleontologist shall formulate a Mitigation Plan in consultation with the campus that satisfies the requirements of Section 21083.2 of the CEQA Statutes.*

If the Paleontologist determines that the paleontological resource is not a unique resource, s/he may record the site and submit the recordation form to the Natural History Museum of Los Angeles County.

The Paleontologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the University and to the Natural History Museum of Los Angeles County.

Level of Significance After Mitigation

Less than Significant.

Impact 4.4-3 ***Construction of the proposed Project could directly or indirectly result in damage to, or the destruction of, unique paleontological resources on site or unique geologic features. This potentially significant impact would be reduced to a less than significant level with continued implementation of MMs 4.4-3(a) and 4.4-3(b).***

4.4.4 CUMULATIVE IMPACTS

The geographic context for the analysis of cumulative cultural resources impacts is the City of Los Angeles, which includes all cumulative growth within the City and development of the related projects provided in Table 4-1, Off-Campus Related Projects, in Section 4.0, Introduction to the Analysis.

It is possible that cumulative development in the City of Los Angeles could result in the adverse modification or destruction of historic buildings, which could contribute to the erosion of the historic and architectural fabric of the City. However, it is anticipated that future development in the City of Los Angeles that could potentially affect historic resources or structures will be subject to the requirements of CEQA and City of Los Angeles historic resource protection ordinances. It is further anticipated that the effects of cumulative development on historic resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. As a result, cumulative impacts on historic resources as a result of future development throughout the City of Los Angeles are expected to be less than significant.

The proposed 2008 NHIP would not impact historical resources and would not contribute to cumulative impacts to historic resources. As indicated above, modification of historic structures on campus that may occur with buildout of remaining development allocation under the 2002 LRDP, as amended, would continue to comply with the Secretary of the Interior's Standards and Guidelines and would occur under consultation with SHPO, as required by campus PP 4.4-1(a), which would retain the historic qualities of the structures. Further, it is not foreseeable that historic structures would be demolished as a result of implementation of the LRDP Amendment and, although some structures have been determined eligible for the CRHR and NRHP, none of the structures on campus have been designated as City of Los Angeles Historic Landmarks. Therefore, the potential impacts of future development under the 2002 LRDP, as amended, when considered in conjunction with the cumulative projects in the City of Los Angeles, would not be cumulatively considerable with respect to potential impacts to historic structures. It is noted that the City of Los Angeles's *Citywide General Plan Framework* regards the "loss of known and unknown historic structures and/or sites" to be cumulatively significant. However, for the reasons discussed above, the contribution of development under the 2002 LRDP, as amended, to this impact would not be cumulatively considerable and is thus less than significant. No mitigation is required.

Development in the Los Angeles area would also require grading and excavation that could potentially affect archaeological or paleontological resources or human remains. The cumulative effect of these projects would contribute to the continued loss of subsurface cultural resources if these resources are not protected upon discovery. CEQA requirements for protecting archaeological and paleontological resources and human remains are applicable to development in the City of Los Angeles, as are local cultural resource protection ordinances. If subsurface cultural resources are protected upon discovery as required by law, impacts to those resources would be less than significant. As indicated above, given the extremely low likelihood of encountering paleontological or archaeological deposits or human remains on the campus and the mitigation measures that will be imposed and enforced throughout construction, the contribution of potential impacts from campus development, including the 2008 NHIP, to the cumulative destruction of subsurface cultural resources throughout Los Angeles would be less than significant. It is noted that the City of Los Angeles's *Citywide General Plan Framework* concludes that "loss and/or disturbance of known or unknown archaeological sites" throughout the City of Los Angeles is considered to be cumulatively significant (City of Los Angeles 2001). However, for the reasons discussed above, the contribution of the proposed Project to this impact is not cumulatively considerable and is thus less than significant.

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4.5 GEOLOGY AND SOILS

This section of the EIR describes the existing geology, soils, and seismic conditions on campus and analyzes the potential physical environmental effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, and excavation from the proposed 2008 Northwest Housing Infill Project (NHIP) and buildout of the 2002 LRDP, as amended. Data used to prepare this section was obtained primarily from the *Geotechnical Engineering Investigation for the Proposed UCLA Northwest Student Housing Infill Project* (Geotechnologies 2008) (included in Appendix E) and the UCLA 2002 Long Range Development Plan Final EIR (UCLA 2003a). Full bibliographic entries for all reference material are provided in Section 4.5.5 (References) of this section.

No comment letters related to geology, soils, or seismicity were received in response to the Notice of Preparation circulated for the project.

4.5.1 ENVIRONMENTAL SETTING

Geology and Soils

Regional and Local Geology

The macro-geology of Southern California is composed of several large plates moving relative to each other. The primary line of contact between these plates is the San Andreas Fault zone, which lies about 41 miles northeast of the UCLA campus.

The geologic formations in the Los Angeles Basin belong to two geomorphic provinces: the Transverse Ranges and the Peninsular Ranges. Regionally, the UCLA campus is located in the northern portion of the Peninsular Ranges Geomorphic Province, along the northern boundary with the Transverse Ranges Geomorphic Province. The Peninsular Ranges are characterized by northwest-trending blocks of mountain ridges and sediment-floored valleys. The dominant geologic structural features are northwest-trending fault zones that terminate either to the northwest or at east-trending reverse faults that form the southern margin of the Transverse Ranges.

The Transverse Ranges are characterized by roughly east-west trending mountains, and the northern and southern boundaries are formed by reverse fault scarps.[1] Plate tectonics caused the Transverse Ranges to converge creating north-south shortening (i.e., compression) resulting in local folding and uplift of the mountains, and the propagation of thrust faults (including blind thrusts). The intervening valleys have been filled with sediment derived from the bordering mountains.

The campus is located on the southern alluvial plain of the Santa Monica Mountains in the Los Angeles Basin, which is at the northern end of the Peninsular Ranges Geomorphic Province. The Los Angeles Basin is bound to the north by the Santa Monica Mountains and the Repetto Hills, Elysian Hills, and Puente Hills, and to the south-southeast by the Santa Ana Mountains and the San Joaquin Hills.

Over 22 million years ago, the Los Angeles Basin was a deep marine basin formed by tectonic forces between the North American and Pacific plates. Since that time, over five miles of marine

[1] A line of cliffs formed by the faulting or fracturing of the earth's crust (www.dictionary.com).

and non-marine sedimentary rock as well as intrusive and extrusive[2] igneous rocks have filled the Basin. During the last two million years (i.e., the Pleistocene and Holocene epochs), the Basin and its surrounding mountain ranges have been uplifted to form the present day landscape. Erosion of the surrounding mountains has resulted in deposition of unconsolidated and normally consolidated sediments in low-lying areas near rivers (such as the Los Angeles River). Areas that have experienced subtle uplift have been eroded with gullies. The UCLA campus is underlain by unconsolidated and normally consolidated alluvial sediments (which are deposited by flowing water) that are in excess of 200 feet thick (Geotechnologies 2008).

Campus Geologic Materials

UCLA lies on the gently rolling terrain of older alluvial deposits, which were originally deposited as alluvial fan material that resulted from erosion of the Santa Monica Mountain's southern slopes from sediment-loaded streams. Flows from higher elevations of the Santa Monica Mountains moved in a southerly direction into the Los Angeles Basin and incised the elevated alluvial terrace surfaces in the campus vicinity (UCLA 2003b).

Prior to urban development, the UCLA campus traversed two different soil mapping units; these soil mapping units are named by the major soil series occurring within each unit. The two major soil series are defined as the Pleasanton-Ojai and Hanford Associations. Soils of these associations occur on gently sloping to moderately sloping alluvial fans and terraces between elevations from near sea level to 3,500 feet above mean sea level (msl) (UCLA 2003b).

Extensive grading and fill for campus development and landscaping has resulted in extensive alteration to surface and near-surface natural geologic features. Except for the area under the Arroyo Bridge, the large Stone Canyon arroyo has been completely filled through the east-central portion of the Core Campus. Earth used to fill this area was taken from hilltops that adjoin both sides of the arroyo. In fact, man-made fill covers much of the campus to varying depths. Because borrow sites were often near the areas filled, it is sometimes difficult to distinguish between fill and natural soils (UCLA 2003b). Figure 4.5-1 (General Soils Map) shows the soil patterns on campus as they were presumed to exist before urbanization occurred.

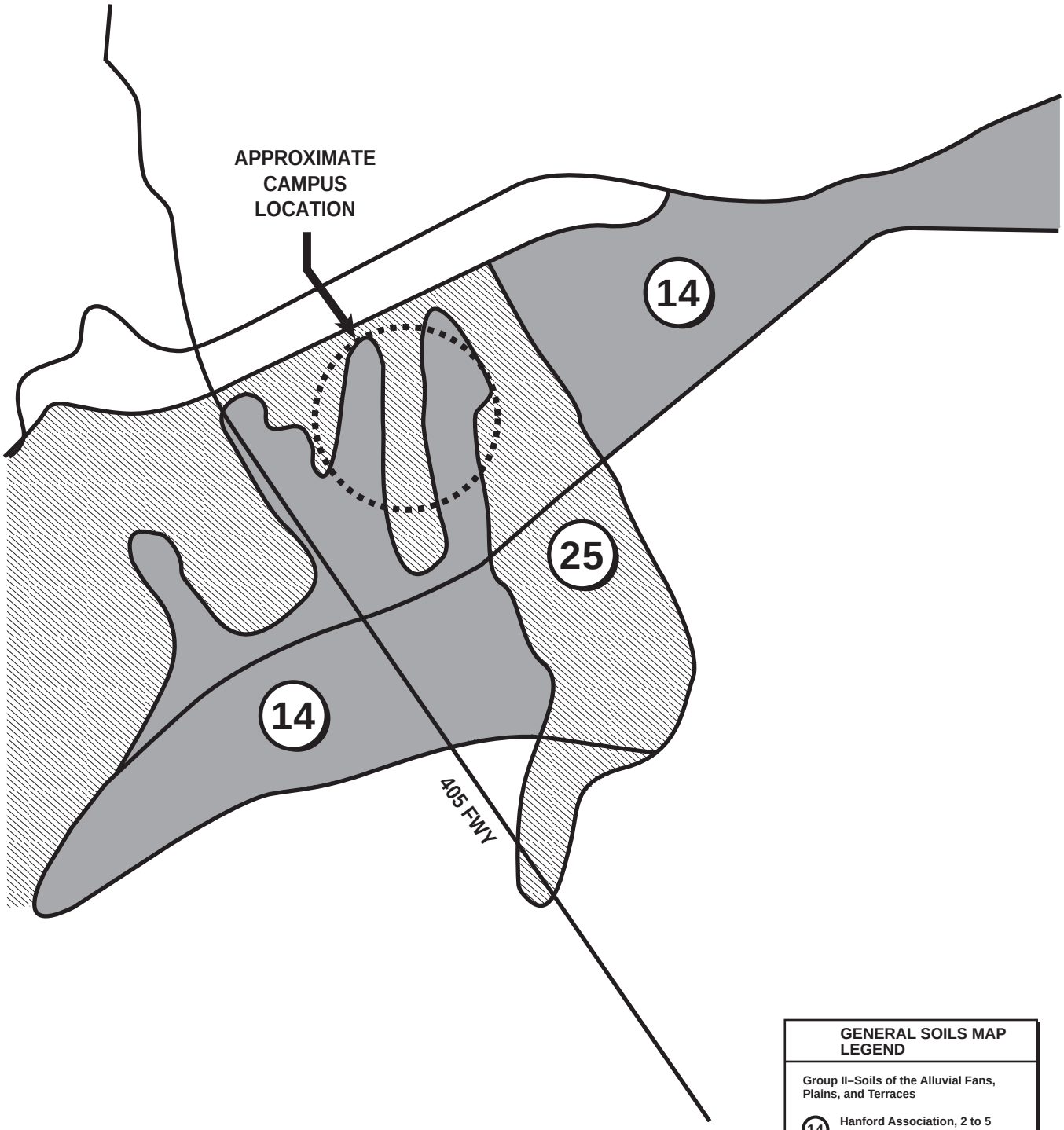
2008 NHIP Site Geologic Materials

The proposed 2008 NHIP sites are within a hillside area with approximately 50 feet of total elevation change across the sites. Based on Geotechnologies' field exploration (consisting of test pits and borings), the geologic materials encountered in the proposed 2008 NHIP sites consist of existing fill materials that overlie Older Alluvium, which was deposited by river and stream action.

Existing, uncertified (i.e., poorly compacted) fill blankets the sites, with thickness ranging from 0.5 foot to as much as 27.5 feet. The fill consists of interfingered (i.e., interlocking) layers of silty to clayey sand and silty to sandy clay and some gravel. The fill is generally mottled yellow-brown and brown, moist, and medium dense to firm. Deeper fills may occur in other areas of the proposed 2008 NHIP sites.

Older Alluvium was observed to underlie the existing fill materials. The Older Alluvium is generally yellowish-brown or gray-brown to brown, moist, and dense to very dense, and stiff and consists of interfingered layers of silty sand, sandy clay, sandy silt, and sand with gravel. The Older Alluvium extended to the termination of all borings conducted as part of the NHIP

[2] Noting or pertaining to a class of igneous rocks that have been forced out in a molten or plastic condition upon the surface of the earth (www.dictionary.com).



GENERAL SOILS MAP LEGEND

Group II–Soils of the Alluvial Fans, Plains, and Terraces

- (14) **Hanford Association, 2 to 5 Percent Slopes**
- (25) **Pleasanton–Association, 2 to 9 Percent Slopes**

Source: U.S. Department of Agriculture, Soils Conservation Service, 1969

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General Soils Map

Figure 4.5-1

2008 NHIP and LRDP Amendment

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Geotechnical Investigation, which extended to a maximum depth of 50 feet below the existing ground surface (bgs).

Regional and Local Faulting

Based on criteria established by the California Geologic Survey (CGS), faults may be categorized as active, potentially active, or inactive. Active faults are those that show evidence of surface displacement within the last 11,000 years (Holocene age). Potentially active faults are those that show evidence of most recent surface displacement during the last 1.6 million years (Quaternary age). Faults showing no evidence of displacement within the last 1.6 million years are considered inactive for most purposes (Geotechnologies 2008).

In addition, buried thrust faults are faults without a surface expression but are a significant source of seismic activity. They are typically broadly defined based on the analysis of seismic wave recordings for hundreds of small and large earthquakes in the Southern California area. Due to the buried nature of these thrust faults, their existence is usually not known until they produce an earthquake. The surface rupture potential of these buried thrust faults is inferred to be low. However, the seismic risk of these buried structures, in terms of recurrence and maximum potential magnitude, is not well established. Therefore, the potential for surface rupture on buried thrust faults at magnitudes higher than 6.0 cannot be ruled out (Geotechnologies 2008).

Geologic studies have found that the Los Angeles Basin is a geologically complex area with over one hundred active faults. Studies completed since the 1994 Northridge Earthquake indicate that the six major fault systems in the Los Angeles area are capable of generating large earthquakes, and many of the faults that traverse the Southern California area have the potential of generating strong ground motion in the Los Angeles Basin (UCLA 2003b).

Regionally, the UCLA campus lies within a seismically active area bound by two important faults in the Santa Monica Fault Zone, which contains the active Malibu Coast/Santa Monica/ Raymond/Sierra Madre/Cucamonga Fault Zone and the active Newport-Inglewood Fault. The closest known active fault to the campus is the Hollywood Fault, and the proposed 2008 NHIP sites are located approximately 200 to 500 feet southeast of this fault. However, there are no known active or potentially active faults that underlie the campus, nor is the campus located in an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act of 1994. Figure 4.5-2 (Regional Fault Map) shows the approximate location of the campus and the proposed 2008 NHIP in relation to these major fault systems (UCLA 2003b).

Seismicity

As with most areas of Southern California, the UCLA campus has experience moderate to occasionally high-intensity ground shaking from a major earthquake on the faults described below (Table 4.5-1) or from other active regional faults in the Southern California area. The historic seismic record indicates that sixty-three earthquakes of magnitude 5.0 and greater have occurred within 60 miles of the campus between the years 1800 and 2008, according to the CGS website (CGS 2008a). The strongest earthquake event in recent history near the campus was the January 1994 Northridge Earthquake (Richter magnitude 6.7). The epicenter of this event was approximately 12 miles north of the campus. The October 1987 Whittier Narrows Earthquake (Richter magnitude 5.9) occurred approximately 21 miles east of the campus on a buried thrust fault located beneath the Elysian Park-Montebello Hills area of Los Angeles County. As with the Northridge Earthquake, no surface fault ruptures were observed (UCLA 2003b).

Based on 2007 California Building Code (2007 CBC) requirements, seismic exposure of a site may be quantitatively investigated using two methods: the deterministic method and the probabilistic method. Both methods were applied for the proposed 2008 NHIP. The CGS database of faults and historical earthquakes is used for both methods. Because seismicity is a regional phenomenon, the potential seismic exposure would be similar across the entire campus. Therefore, the discussion in the Impact Analysis section below applies to all future development on campus, including the proposed 2008 NHIP. A detailed discussion of the deterministic and probabilistic methods is provided in Appendix E.

Table 4.5-1 lists major active and potentially active faults within a 20-mile radius of the site based on the current understanding of regional seismo-tectonics; the faults are listed in order of increasing distance, and the estimated maximum earthquake magnitude and resulting peak site acceleration at the site for each fault was calculated using the deterministic method (Geotechnologies 2008).

TABLE 4.5-1
MAJOR FAULTS WITHIN 20 MILES OF CAMPUS

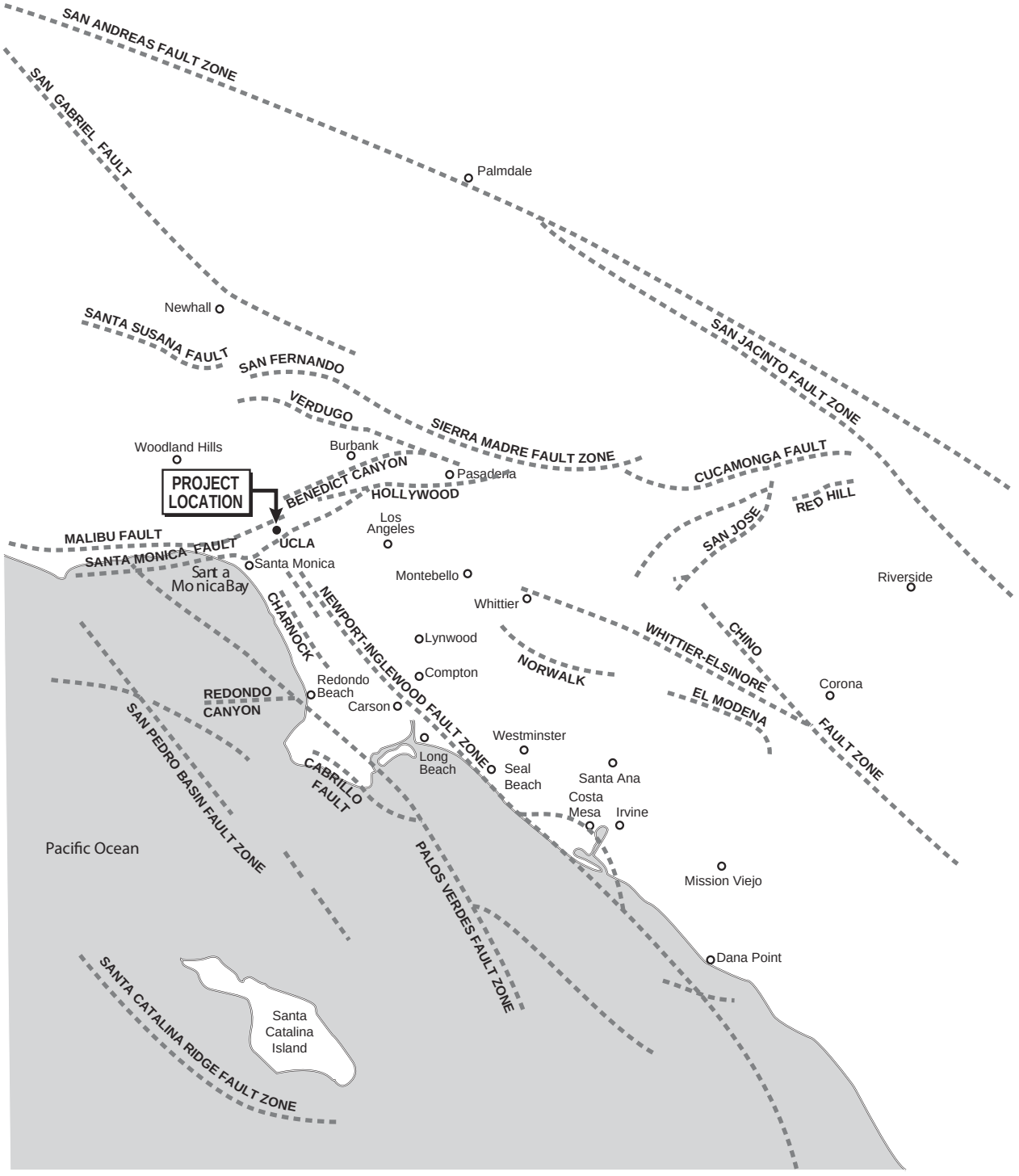
Fault	Magnitude (M on Richter Scale)	Peak Site Acceleration (g)
Santa Monica	6.6	1.02
Hollywood	6.4	0.76
Newport-Inglewood (Los Angeles Basin)	7.1	0.78
Malibu Coast	6.7	0.72
Northridge (East Oak Ridge)	7.0	0.76
Puente Hills Blind Thrust	7.1	0.60
Upper Elysian Park Blind Thrust	6.4	0.40
Palos Verdes	7.3	0.47
Verdugo	6.9	0.45
Raymond	6.5	0.32
Anacapa-Dume	7.5	0.51
Sierra Madre (San Fernando)	6.7	0.33
Santa Susana	6.7	0.31
Sierra Madre	7.2	0.40
San Gabriel	7.2	0.29
g = proportion of gravity Source: Geotechnologies 2008 (Table 1).		

Using the deterministic methodology, the maximum earthquake that would result in the largest estimated peak site acceleration at the site would be a magnitude 6.6 event on the Santa Monica Fault. Such an event would be expected to generate peak horizontal accelerations at the site of 1.02g (Geotechnologies 2008).

Seismic Hazard Zone Report

The CGS has published Seismic Hazard Zone Report 023, Seismic Hazard Zone Report for the Beverly Hills 7.5-Minute Quadrangle, Los Angeles County, California (Geotechnologies 2008). The Seismic Hazard Zone Report indicates that the PGA_{DBE}[3] for this area of Los Angeles is

[3] Ground motion considered under the design basis earthquake (DBE) is expressed as Peak Ground Acceleration (PGA_{DBE}).



SOURCE: CDMG OFR 92-03 (1992), USGS MFI-512 (1965)

Regional Fault Map

Figure 4.5-2

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0.48g and that an earthquake with a magnitude of 6.6 as the Design-Basis Earthquake (DBE) ground motion for this area of Los Angeles.

Campus Seismic Upgrade Programs

A comprehensive campus-wide seismic structural correction program has been underway since the mid-1980s and was accelerated when the 1994 Northridge Earthquake caused significant damage to a number of campus structures. Since the mid-1980s, the campus has completed seismic corrections to 36 structures that total approximately 4.3 million gross square feet (gsf) and currently has seismic work in progress on 6 structures, which total approximately 420,000 gsf. Sixteen on-campus structures, totaling approximately 2.7 million gsf (primarily in the Center for Health Sciences) still need seismic work. This seismic upgrade and building renovation program will continue throughout the planning horizon of the 2002 LRDP, as amended. Existing buildings that are rated “Very Poor” or “Poor” require seismic upgrades in order to address contemporary seismic and life safety standards (i.e., California Building Code) that are in effect at the time the seismic upgrade project is being designed. Current requirements are derived from the 2007 CBC and the UC Policy on Seismic Safety as described in Section 4.5.2, Regulatory Framework.

Seismic Hazards

Primary hazards associated with seismicity include ground shaking and surface rupture. As stated above, no faults have been identified that would result in surface rupture on campus. However, in addition to possible strong ground motion on campus, other secondary effects of a strong nearby earthquake include liquefaction; landslides; flooding (i.e., inundation) due to seismic-related dam failure; and seismically induced settlement. The primary seismic hazard anticipated at the proposed 2008 NHIP is limited to moderate to strong seismic ground shaking.

Areas on or near campus that the CGS has designated as being subject to liquefaction or landslide hazards are shown in Figure 4.5-3, Potential Seismic Hazard Zones. It should be noted that the maps showing Potential Seismic Hazard Zones are prepared for large land areas and do not provide a level of accuracy sufficient to determine a definite seismic hazard at a specific site. Therefore, geotechnical studies are undertaken to obtain site-specific seismic hazard information (UCLA 2003b).

Liquefaction

Liquefaction involves a sudden loss in strength of a saturated, cohesionless soil; it is typically caused by ground shaking activities associated with shock or strain and results in temporary transformation of the soil to a fluid mass. In extremely rare instances, groundborne vibrations could also cause liquefaction from activities such as pile driving or tunnel boring. If the liquefying layer is near the surface, the effects may resemble those of quicksand; if the layer is below the ground surface, it may provide a sliding surface for the material above it and/or cause differential settlement of the ground surface, which may damage building foundations by altering weight-bearing characteristics.

Liquefaction typically occurs in areas where the groundwater is less than 50 feet from the surface and where the soils are composed of poorly consolidated, fine- to medium-grained, younger alluvial sands. In addition to these necessary soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to initiate liquefaction. Due to the generally very dense to hard nature of the older alluvial soils that underlie the campus, the potential for liquefaction to occur beneath the majority of the campus is considered to be remote to nonexistent. However, according to CGS maps, a small area in the extreme northwestern

portion of the campus has been designated as a liquefaction hazard zone. Additionally, the CGS has also designated the areas that underlie the Medical Plaza and a portion of the campus's Southwest zone as liquefaction hazard areas, as illustrated in Figure 4.5-3 (UCLA 2003b).

The proposed 2008 NHIP sites are not identified on the CGS Seismic Hazard Zone Map as liquefaction hazard zones and, since the proposed 2008 NHIP sites are underlain by Older Alluvium they would not be prone to liquefaction due to soil density (described as dense to very dense) (Geotechnologies 2008).

Landslides

Landslides that occur in both rock and soil have been classified on the basis of distinctions in movement, internal disruption, and geologic environments. Of these, the most common are rock falls, disrupted soil slides, and rock slides. The next most common are lateral soil spreads, soil slumps, soil block slides, and soil avalanches. Soil falls, rapid soil flows, and rock slumps are considered "moderately common" (UCLA 2003b). According to the CGS, a small area in the northwest portion of the campus is designated as susceptible to seismic-induced landslides. This area is shown in Figure 4.5-3 (UCLA 2003b).

The proposed 2008 NHIP sites are not identified on the CGS Seismic Hazard Zone Map as landslide hazard zones (Geotechnologies 2008).

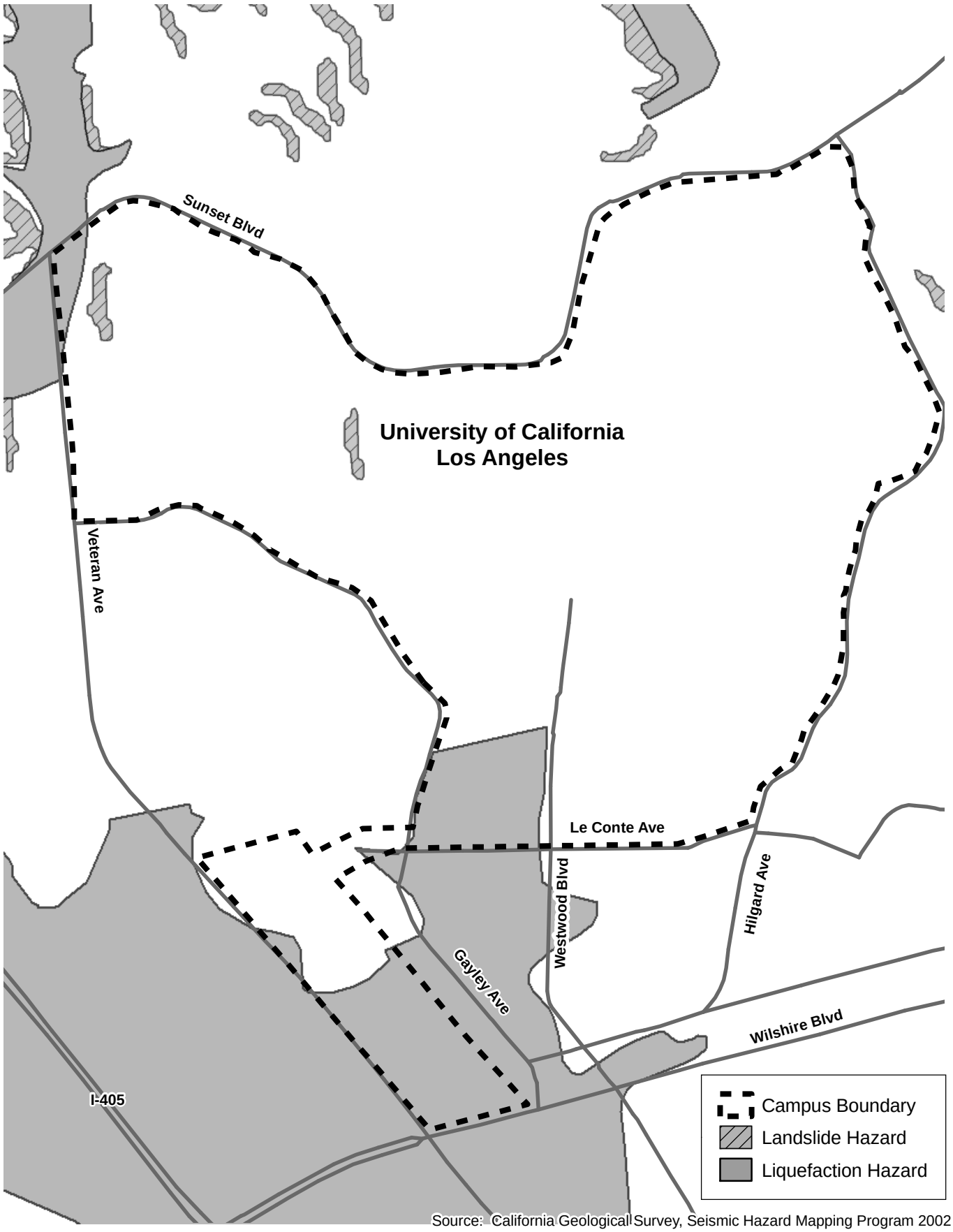
Earthquake-Induced Flooding

Earthquake-induced flooding is flooding caused by failure of dams or other water-retaining structures due to earthquakes. The Stone Canyon Reservoir is located north of the campus and is operated by the City of Los Angeles Department of Water and Power (LADWP). The UCLA campus, including the proposed 2008 NHIP sites, is located in the hypothetical inundation path of a catastrophic failure of the reservoir, and significant seismic activity could potentially result in the failure of this earth dam, which would compound any adverse condition or damage that the campus already experiences as a result of the seismic event (UCLA 2003b; Geotechnologies 2008).

A catastrophic failure of the Stone Canyon Reservoir's dam structure could result in flooding in central areas of the campus, which primarily consist of open playing fields, including the Intramural Field, the North Athletic Soccer Field, and Drake Track and Field Stadium. As discussed in Section 8.i of the Initial Study (included in Appendix A), the LADWP considers the possibility of such failure due to seismic or other factors to be extremely remote and speculative.

Seismically Induced Settlement

Seismically induced settlement or compaction of dry or moist, cohesionless soils can be an effect related to earthquake ground motion. Such settlements are typically most damaging when they are differential in nature across the length of structures. Due to the generally very dense to hard nature of the soils that underlie the campus, the possibility of seismically induced settlement affecting the campus is considered remote to nonexistent (UCLA 2003b).



Source: California Geological Survey, Seismic Hazard Mapping Program 2002

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Potential Seismic Hazard Zones

Figure 4.5-3

2008 NHIP and LRDP Amendment

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4.5.2 REGULATORY FRAMEWORK

Federal

International Building Code

The International Building Code (IBC) is a national model building code. National model codes are incorporated by reference into the building codes of local municipalities, such as the California Building Code. The 2006 IBC is the most recent edition of the International Building Code, which was adopted by the State of California in February 2007 to become the basis for the 2007 California Building Code, described below.

State

California Building Code

The State of California provides a minimum standard for building design through the California Building Code (CBC), which includes structural and seismic safety requirements. The California Building Code (CBC) is promulgated under *California Code of Regulations* (CCR), Title 24, Parts 1 through 12 (also known as the "California Building Standards Code") and is administered by the California Building Standards Commission (BSC). The national model code standards (IBC) adopted into Title 24 applies to all occupancies in California except for modifications adopted by State agencies and local governing bodies. The current version of the CBC is the 2007 triennial edition (2007 CBC), which incorporates the 2006 IBC. The 2007 CBC became effective January 1, 2008. As a constitutionally established public entity of the State of California, the University of California is subject to the requirements of the 2007 California Building Code.

Seismic Hazards Mapping Act

CGS also provides guidance with regard to seismic hazards. Under CGS's Seismic Hazards Mapping Act, seismic hazard zones are to be identified and mapped to assist local governments in land use planning. The intent of this act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. In addition, CGS's Special Publications 117, "Guidelines for Evaluating and Mitigating Seismic Hazards in California" (CGS 2008b), provides guidance for the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations. As discussed previously, there are two CGS-designated areas on campus within designated zones: a liquefaction hazard zone and a landslide hazard zone.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo (AP) Earthquake Fault Zoning Act (AP Act) was adopted by the State of California in 1972 after the 1971 San Fernando Earthquake in order to mitigate the hazard of surface fault rupture along known active faults (*Public Resources Code* [PRC], Chapter 7.5, Section 2621 et. seq.). Ground rupture is defined as surface displacement that occurs along the surface trace of the causative fault during an earthquake.

The purpose of the AP Act is to reduce the threat to life and property, specifically from surface fault rupture, by preventing the construction of buildings used for human occupancy on the surface trace of active faults. Under this Act, the State has defined an "active" fault as having had surface displacement during the past 11,000 years (Holocene time). This law directs the State Geologist to establish Earthquake Fault Zones (known as "Special Studies Zones" prior to

January 1, 1994) in order to regulate development within designated hazard areas. City and County jurisdictions must require a geologic investigation to demonstrate that a proposed development project which includes structures for human occupancy is adequately set back (usually at least 50 feet) from an active fault prior to permitting. In accordance with the AP Act, the State has delineated "Earthquake Fault Zones" along identified active faults throughout the state. There are no Alquist-Priolo Earthquake Fault Zones on the UCLA campus.

University Policy on Seismic Safety

The University of California has adopted an updated "Policy on Seismic Safety". This establishes that University policy is "to acquire, build, maintain, and rehabilitate buildings and other facilities which provide an acceptable level of earthquake safety". The level of safety is also defined in the University policy. The policy articulates five primary points:

- *Program for Abatement of Seismic Hazards*. Develop a program for the identification and temporary and permanent abatement of seismic hazards in existing buildings and other facilities.

- *Consulting Structural Engineer*. Engage Structural Engineers to examine existing buildings and other facilities and submit reports on the adequacy of resistance to seismic forces of University facilities, based on Chapter 23 of the California Building Code and upon the engineers' professional evaluations with respect to Appendix A of the policy.

- *Standards for Seismic Rehabilitation Projects*. Correctional programs for structures that do not provide adequate safety shall provide, at a minimum, an acceptable level of earthquake safety equivalent to the current seismic provisions of Chapter 23 of the California Building Code or local seismic requirements—whichever is more stringent—with respect to life safety and prevention of personal injury. Preliminary plans for all seismic rehabilitation shall be reviewed by the Consulting Structural Engineer, whose recommendations shall be incorporated into the project plans by the Design Engineer.

- *Repair of Buildings and Other Facilities Damaged by Earthquakes*. This section sets standards for University buildings and facilities that are damaged by earthquakes, based on the reduction in lateral load of the structure in question.

- *New Buildings and Other Facilities*. The design of new buildings shall, at a minimum, comply with the current provisions of Chapter 23 of the California Building Code or local seismic requirements, whichever is more stringent. Provisions shall also be made for adequate anchoring of nonstructural building elements. No new University structures may be constructed on the trace of a known active fault. The Consulting Structural Engineer shall review the plans and, prior to release of funds, certify that the structure complies with the University Policy on Seismic Safety (UCLA 2003b).

4.5.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

The geotechnical information presented in Section 4.5, Geology and Soils, of the 2002 LRDP Final EIR was based on widely available data from various sources, including the Soil Conservation Service Soil Survey of Los Angeles County; geologic and topographic maps; previous environmental documentation and geotechnical reports prepared for the UCLA campus, including the Northwest Campus Development (De Neve) Revised Phase II EIR (De Neve housing), the Southwest Campus Housing and Parking Project EIR, the Intramural Field

Parking Structure EIR, and the Academic Health Center Facilities Reconstruction Plan EIR; and various data from the California Department of Conservation, and the CGS (formerly California Division of Mines and Geology). Information from the 2002 LRDP Final EIR that remains applicable has been used in preparation of the impact analysis presented in this section. Where potential geological hazards are identified for a particular campus zone, such hazards are expected to affect any potential development in that campus zone.

Data was also obtained from the *Geotechnical Engineering Investigation for the Proposed UCLA Northwest Student Housing Infill Project* (Geotechnologies 2008), a project-level geotechnical investigation prepared for the proposed 2008 NHIP. The 2008 NHIP Geotechnical Report was based on data derived from exploratory excavations (test pits and borings); collection of representative samples; laboratory testing; engineering analysis; review of published geologic data; and review of available previously prepared geotechnical engineering reports that cover projects in the vicinity of the proposed 2008 NHIP sites.

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed project would not have a significant impact for the following thresholds from the CEQA Checklist and no further analysis of these issues is presented in this section.

- Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

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

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Geology and Soils.

- Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Strong seismic ground shaking?
    - Seismic-related ground failure, including liquefaction?
    - Landslides *(Impact 4.5-1)*?

- Would the project result in substantial soil erosion or the loss of topsoil *(Impact 4.5-2)*?
- Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse *(Impact 4.5-3)*?

- Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property *(Impact 4.5-4)*?

Impact Analysis

Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures (PPs) were adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. They are therefore considered part of the proposed Project and assumed in the analysis presented in this section. Note that changes to the 2002 LRDP PPs are shown in **bold-faced type**; these changes have been made to clarify the current practice to ensure that recommendations are included in individual project designs.

PP 4.5-1(a) *During project-specific building design, a site-specific geotechnical study shall be conducted under the direct supervision of a California Registered Engineering Geologist or licensed Geotechnical Engineer to assess detailed seismic, geological, soil, and groundwater conditions at each construction site and develop recommendations to prevent or abate any identified hazards in accordance with the requirements of the 2007 California Building Code.* ***Recommendations from the site-specific geotechnical study shall be included in the grading plans and/or building design specifications for each project.*** *The study shall follow applicable recommendations of CGS Special Publication 117 and shall include, but not necessarily be limited to:*

- *Determination of the locations of any suspected fault traces and anticipated ground acceleration at the building site;*
- *Potential for displacement caused by seismically induced shaking, fault/ground surface rupture, liquefaction, differential soil settlement, expansive and compressible soils, landsliding, or other earth movements or soil constraints;*
- *Evaluation of depth to groundwater.*

PP 4.5-1(b) *The campus shall continue to implement its current seismic upgrade program.*

PP 4.5-1(c) *The campus shall continue to comply with the University Policy on Seismic Safety adopted on January 17, 1995 or with any subsequent revision to the policy that provides an equivalent or higher level of protection with respect to seismic hazards.*

PP 4.5-1(d) *Development projects under the LRDP Amendment shall continue to be subject to structural peer review;* ***following this review, any site-specific geotechnical study recommendations, including any recommendations added as a result of the peer review, shall be incorporated in the project design as appropriate.***

Threshold	Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: › Strong seismic ground shaking? › Seismic-related ground failure, including liquefaction? › Landslides?

Proposed 2008 NHIP

Pursuant to the requirements of PP 4.5-1(a), a project-specific geotechnical report has been conducted for the 2008 NHIP. The *Geotechnical Engineering Investigation for the Proposed UCLA Northwest Student Housing Infill Project* (Geotechnologies 2008) is included in Appendix E. As discussed above, the campus, which includes the proposed 2008 NHIP, lies within a seismically active area with local and regional faults that could produce maximum earthquake magnitudes of 6.0 or greater. Therefore, the proposed 2008 NHIP structures would be susceptible to moderate to strong, seismically induced ground shaking during the life of the project. This potential impact would be reduced to a less than significant level with implementation of (1) recommendations from the geotechnical investigation (refer to MM 4.5-1); (2) compliance with the 2007 CBC (required by PP 4.5-1[a]); (3) implementation of PP 4.5-1(c), which requires compliance with the University Policy on Seismic Safety; and (4) implementation of PP 4.5-1(d), which requires structural peer review (i.e., project-specific structural designs prepared by licensed Structural Engineers are subject to additional review by another independent licensed Structural Engineer to confirm and validate design appropriateness in accordance with regulatory requirements) and incorporation of peer review recommendations into project design.

The 2008 NHIP Geotechnical Report concludes that the potential for liquefaction and seismically induced landslides at the proposed 2008 NHIP sites is low. Additionally, the sites are not identified on the CGS Seismic Hazard Zone Map as a liquefaction or landslide hazard zone, and the proposed 2008 NHIP sites are underlain by Older Alluvium, which would not be prone to liquefaction or landsliding due to its density (described as dense to very dense). The 2008 NHIP Geotechnical Report also concludes that, due to the uniform nature of the underlying earth materials, excessive differential settlements are not expected to occur (Geotechnologies 2008). Therefore, the proposed 2008 NHIP would not be subject to secondary seismic hazards related to liquefaction, landslides, and inundation from dam failure. No significant impacts would result and no mitigation is necessary beyond implementation of the previously identified PPs.

The Geotechnical Report concluded that the proposed 2008 NHIP is feasible from a geotechnical engineering perspective, provided all recommendations for site preparation and seismic design are incorporated, including, but not limited to recommendations addressing grading, temporary excavations, seismic design considerations, foundation design, retaining wall design, slabs on grade, pavements, site drainage, and construction monitoring and geotechnical testing. Although impacts would be less than significant with implementation of the identified PPs, new 2008 MM 4.5-1 requires that recommendations from the *Geotechnical Engineering Investigation for the Proposed UCLA Northwest Student Housing Infill Project* (Geotechnologies 2008) (summarized in new MM 4.5-1) be included in the final building designs for the proposed 2008 NHIP structures which would be reviewed by a qualified Geotechnical Engineer. This impact would be less than significant and no additional mitigation is necessary.

New Mitigation Measure

The following new mitigation measure (MM) has been identified to ensure that potential impacts resulting from implementation of the 2008 NHIP remain less than significant. In compliance with

PP 4.5-1(a), this project-specific mitigation measure would be required for the 2008 NHIP to ensure that recommendations from the site-specific geotechnical report are included in the project design.

MM 4.5-1 *Prior to approval of final building designs for the 2008 Northwest Housing Infill Project, a qualified Engineer shall review the final designs to verify that all geotechnical recommendations provided in the Geotechnical Engineering Investigation, Proposed UCLA Northwest Student Housing Infill Project (dated May 8, 2008 and prepared by Geotechnologies, Inc.) have been fully and appropriately incorporated. These recommendations shall include, but not be limited to, the following areas of concern:*

- *Grading Guidelines (removal of unsuitable soils, hillside grading, compaction).*
- *Temporary Excavations (shoring, soldier piles and lagging, anchors, monitoring).*
- *Seismic Design Considerations (2007 California Building Code Seismic Parameters).*
- *Foundation Design (reinforcement, settlement, friction piles, retaining wall setbacks).*
- *Retaining Wall Design (cantilever and restrained walls, waterproofing, drainage, backfill).*
- *Slabs on Grade (concrete, waterproofing, reinforcement).*
- *Pavements (moisture, thickness, weight management).*
- *Site Drainage.*
- *Construction Monitoring and Geotechnical Testing (geotechnical observation and laboratory testing of soils).*

Level of Significance after Mitigation

Less than Significant.

Remaining Buildout of the 2002 LRDP as Amended

As with the proposed 2008 NHIP structures discussed above, structures developed under the 2002 LRDP, as amended, would be susceptible to moderate to strong, seismically induced ground shaking. This potential impact would be reduced to less than significant with continued implementation of the following PPs from the 2002 LRDP Final EIR: (1) PP 4.5-1(a), which requires design and construction in compliance with the 2007 CBC, preparation of site-specific/ project-specific geotechnical studies, and implementation of recommendations of these studies; (2) PP 4.5-1(b), which requires continued implementation of the campus seismic upgrade program; (3) PP 4.5-1(c), which requires compliance with the University Policy on Seismic Safety; and (4) PP 4.5-1(d), which requires structural peer review (i.e., project-specific structural designs prepared by licensed Structural Engineers are subject to additional review by another independent licensed Structural Engineer to confirm and validate design appropriateness in accordance with regulatory requirements) and incorporation of peer review recommendations into project design.

Due to the very dense to hard nature of the older alluvial soils that underlie the campus, the potential for liquefaction occurring beneath the majority of the campus is considered to be remote to nonexistent. However, as previously discussed and shown on Figure 4.5-3, the CGS

has designated a small area in the extreme northwestern portion of the campus, areas underlying the Medical Plaza, and a portion of the Southwest zone as liquefaction hazard areas. Additionally, a small area in the Northwest zone is designated as susceptible to seismically induced landslides. Any future development under the 2002 LRDP, as amended, that may occur in these areas could be subject to secondary seismic hazards related to liquefaction and/or landslides. These potential impacts would be less than significant with continued implementation of the PPs identified above. Based on underlying soil characteristics, the potential for future development under the 2002 LRDP, as amended, to be subject to seismically induced settlement is remote to nonexistent.

In summary, the campus shall incorporate into each project implemented under the 2002 LRDP, as amended, the recommendations for the prevention and abatement of any identified hazards, including landslides and liquefaction, as necessary, to ensure the maximum feasible seismic and soil stability during project construction and operation. Impacts related to seismic shaking and secondary seismic hazards would, therefore, be considered less than significant and no mitigation is required.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.5-1 ***Continued compliance with PPs 4.5-1(a) through 4.5-1(d) would ensure that implementation of the proposed Project would not expose people and/or structures to potentially substantial adverse effects from rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (i.e., liquefaction), or landsliding resulting in a less than significant impact. MM 4.5-1 would ensure that potential impacts remain less than significant for the 2008 NHIP.***

Threshold	Would the project result in substantial soil erosion or the loss of topsoil?

Remaining Buildout of the 2002 LRDP as Amended including the Proposed 2008 NHIP

During construction activities of the proposed Project, which includes the 2008 NHIP, soil would be exposed and there would be an increased potential for soil erosion compared to existing conditions. Erosion can occur as a result of, and can be accelerated by, site-preparation activities associated with development. Vegetation removal in landscaped (pervious) areas could reduce soil cohesion and reduce the protection from wind, water, and surface disturbance which could render exposed soils more susceptible to erosive forces. Additionally, excavation or grading for any proposed subterranean building or parking structures may result in erosion during construction activities, regardless of whether hardscape previously existed at the construction site, since exposed bare soils could be more easily eroded by wind or water. Additionally, during a storm event, soil erosion could occur at an accelerated rate.

Earth-disturbing activities associated with construction of the proposed Project would be temporary, and erosion effects would depend largely on (1) the areas excavated; (2) the

quantity of excavation; and (3) the length of time soils are subject to conditions that that affect erosion processes. Earth-disturbance associated with construction of the proposed 2008 NHIP would include the removing vegetation and excavating up to 12 feet deep for the planned subterranean levels, while removing and recompacting existing unsuitable fill materials may require excavations on the order of 25 to 27 feet deep (Geotechnologies 2008). Construction activities would comply with all provisions of the 2007 CBC related to excavation activities, grading activities, erosion control, and construction of foundations and retaining walls to minimize or eliminate soil erosion or loss of topsoil.

In addition to compliance with the 2007 CBC, the Project would also minimize or eliminate soil erosion through preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) (as required by new PP 4.7-1). Although the SWPPP is specifically focused on water quality, as opposed to geology or geotechnical issues, it will specifically incorporate erosion-control best management practices (BMPs). When these construction-level BMPs are applied, they significantly reduce the erosion potential of any project development (i.e., 2008 NHIP or a future project under the 2002 LRDP, as amended) to negligible amounts. Erosion-control BMPs are designed to prevent erosion and include, but are not limited to slope stabilization using rock or revegetation, revegetation, and hydroseeding. Further, implementation of new PP 4.7-1 and new MM 4.7-1 identified in Section 4.7, Hydrology and Water Quality would ensure that potential erosion impacts remain less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.5-2 ***With implementation of PP 4.7-1 and MM 4.7-1 (Section 4.7, Hydrology and Water Quality), construction and operation of the proposed Project would not result in substantial soil erosion or the loss of topsoil. This impact is less than significant and no additional mitigation is required.***

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

Proposed 2008 NHIP

Pursuant to 2002 LRDP Final EIR PP 4.5-1(a), a site-specific geotechnical investigation was prepared for the proposed 2008 NHIP. As described above under Impact 4.5-1, the proposed 2008 NHIP sites are not identified within CGS-designated liquefaction and landslide hazard zones, and the site-specific Geotechnical Report indicates that the project site is not considered susceptible to seismically induced landslides or liquefaction due to the dense to very dense nature of the alluvial soils that underlie the proposed 2008 NHIP sites. The Geotechnical Report also concluded that, while some seismically induced settlement is expected across the site, because of the uniform nature of underlying alluvial materials excessive differential settlements from seismic ground shaking are not anticipated. Such settlements are most damaging when

the settlements are differential (i.e., varying amounts of settlement) across the length of structures. Finally, the Geotechnical Report does not indicate that the site would be subject to lateral spreading or subsidence hazards. This impact would be less than significant and no mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

As previously noted, according to the CGS, a small area in the Northwest campus zone has been designated as a potential landslide hazard area, and areas in the Northwest and Southwest campus zones have been designated as potential liquefaction hazard areas (refer to Figure 4.5-3). Since CGS maps are approximations of areas that may be subject to such hazards and since the hazards do not always exist at every location that is included within a designated hazard area, the potential for these hazards must be considered to exist in these areas. Even though not all specific soil characteristics of possible campus development sites are known, following 2002 LRDP Final EIR PP 4.5-1(a)(revised) and PP 4.5-1(c) described above would require a site-specific evaluation of seismic, geological, and soils characteristics for all future development projects under the 2002 LRDP, as amended, to determine appropriate project design measures to address any identified constraints or hazards, including compliance with all applicable provisions of the 2007 CBC and the University Policy on Seismic Safety. In addition, in accordance with current geotechnical engineering standards, all new structures proposed under the LRDP Amendment would (1) include appropriate measures to withstand or eliminate soil characteristics or constraints on the project site and (2) be subject to structural peer review, as required by 2002 LRDP Final EIR PP 4.5-1(d), as revised.

Compliance with the identified PPs would ensure that impacts related to potential soil instabilities during implementation of future development under the 2002 LRDP, as amended, are less than significant by ensuring that (1) geological or soils hazards on each development site are identified and (2) that foundations and structures are designed according to current seismic and geotechnical engineering practices in order to provide adequate safety levels. No mitigation is required.

Mitigation Measures

No mitigation measures are necessary.

Level of Significance After Mitigation

Less than Significant.

Impact 4.5-3 ***Continued implementation of PPs 4.5-1(a) through 4.5-1(d) would ensure that construction in areas underlain by soils of varying stability would not subject people and structures to hazards associated with landsliding, lateral spreading, subsidence, liquefaction, collapse, or differential settlement. The impact is less than significant and no mitigation is required.***

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

Proposed 2008 NHIP

Expansive soils expand in the presence of water and contract when water is removed due to the sediment composition of the underlying geologic unit. Soil expansion can affect structures that are constructed on such soils since water uptake after rainfall could cause soils to expand and damage building foundations, which may compromise the stability of the structures on these foundations. Pursuant to 2002 LRDP Final EIR PP 4.5-1(a), a site-specific geotechnical report was prepared for the proposed 2008 NHIP, and all recommendations from the Geotechnical Report would be incorporated into the project to ensure that impacts are less than significant. The Geotechnical Report prepared for the proposed 2008 NHIP determined that the expansion characteristics of earth materials across the proposed 2008 NHIP sites vary from the very low to the high expansion range. The recommendations outlined in the Geotechnical Report related to foundation design (e.g., reinforcement, settlement, friction piles, and retain wall setbacks) and slabs on grade (e.g., concrete, waterproofing, and reinforcement) would address this geotechnical issue. Continued Implementation of 2002 LRDP Final EIR PP 4.5-1(a) and new MM 4.5-1, discussed above, would ensure that the recommendations are incorporated into project design; this impact remains less than significant.

Remaining Buildout of the 2002 LRDP as Amended

As illustrated by Figure 4.5-1, the UCLA campus contains two major soil series, both of which underlie extensive residential and industrial development in the Los Angeles Basin. Although specific soils characteristics, such as expansiveness, are not known for the entire campus, previous geotechnical investigations in the Northwest, Southwest, Central, Core Campus, and Health Sciences zones (UCLA 2003b) determined that the soils in the investigated areas ranged from having a very low to moderate expansion potential. Additionally, as noted above, the Geotechnical Report prepared for the proposed 2008 NHIP determines that the expansion characteristics of on-site earth materials varies from the very low to the high expansion range. Therefore, the potential for expansive soils varies across the campus.

In accordance with 2002 LRDP Final EIR PP 4.5-1(a), site-specific geotechnical investigations would be performed for projects proposed in the future to be developed under the 2002 LRDP, as amended. These site-specific reports would address the potential for expansive soils at individual development sites and would identify recommendations to address site-specific issues related to expansive soils, should they exist. Such recommendations could include design features (such as expansion joints in structures, mounting foundations on concrete piles, or replacing existing soils on a project site with stable fill material) and would either result in a structure that could withstand soils expansion or contain a building pad substrate that would not be subject to expansiveness. Identification of expansive soils before construction and implementation of appropriate design measures would ensure that foundations and structures would provide an adequate level of protection (according to current seismic and geotechnical engineering practice) to provide adequate safety levels.

In addition, 2002 LRDP Final EIR PP 4.5-1(c) and PP 4.5-1(d) require the campus to continue to implement the University Policy on Seismic Safety, which requires, in part, that all new structures comply with California Building Code or local seismic requirements, whichever is more stringent, and undergo a structural peer review. Implementation of these ongoing PPs shall ensure that the final site preparation and project design accommodate potentially

expansive soils, thereby eliminating substantial risks to people and/or structures. Therefore, no substantial risk to people or structures with respect to expansive soils would result. This impact would, therefore, be considered less than significant and no mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.5-4 ***Implementation of the proposed Project would not result in construction of facilities on expansive soils and would not create a substantial risk to people and structures. Continued implementation of 2002 LRDP Final EIR PPs 4.5-1(a), 4.5-1(c), and 4.5-1(d) would ensure that this impact is less than significant and no mitigation is required.***

4.5.4 CUMULATIVE IMPACTS

The geographic context for the analysis of impacts resulting from seismic ground shaking is generally site-specific, rather than cumulative, in nature because each development site has unique geologic considerations that would be subject to uniform site development and construction standards. In this way, potential cumulative impacts resulting from geological, seismic, and soil conditions would be minimized on a site-by-site basis to the extent that current engineering and construction methods and 2007 CBC requirements provide. Nevertheless, the *City of Los Angeles General Plan Framework Final EIR* indicates that, even though adequate study, design and construction measures can be taken to reduce potential impacts, cumulative development allowed under the General Plan Framework "would contribute to the cumulative increase in the number of persons exposed to these hazards (e.g., the general seismic risk that exists throughout Southern California), this is considered significant."

Cumulative impacts resulting from seismic ground shaking were thus regarded in the General Plan Framework EIR as significant. As described above, all development on campus, including the proposed 2008 NHIP, would continue to comply with PP 4.5-1(a) through PP 4.5-1(d), which require (1) the preparation of a site-specific geotechnical study for each development project that incorporates all 2007 CBC requirements; (2) implementation of site-specific recommendations; (3) continued compliance with the University Policy on Seismic Safety; (4) peer structural review of all development plans; and (5) continuance of the existing campus seismic upgrade program of older structures to current seismic safety standards. Therefore, the contribution of the future development under the 2002 LRDP, as amended, to cumulative impacts associated with exposing people and property to ground shaking effects would be less than significant and no mitigation would be required. This is considered to be a less than significant impact.

Impacts from erosion and loss of topsoil from site development and operation can be cumulative in effect within a watershed. The Ballona Creek Watershed (of which the Stone Canyon Watershed is a part) forms the geographic context of cumulative erosion impacts. This analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of development allowed under the City of Los Angeles General Plan Framework and the related projects provided by Table 4-1, Off-Campus Related Projects, in Section 4.0,

Introduction to the Environmental Analysis. Development throughout the City of Los Angeles is subject to State and local runoff- and erosion-prevention requirements, including the applicable provisions of the NPDES General Construction Permit and associated BMPs. These measures are implemented as project development conditions of approval and are subject to continuing enforcement. As a result, it is anticipated that cumulative impacts on the Ballona Creek Watershed due to runoff and erosion from cumulative development activity would be less than significant and no mitigation would be required. The contribution of the proposed Project is also less than significant due to the limited extent of ground disturbance that would occur on campus and the implementation of measures to reduce erosion and to safeguard water quality, as discussed under Impact 4.5-2 above. This is considered to be a less than significant impact.

As with seismic ground shaking impacts, the geographic context for analysis of impacts on development from unstable soil (including landslides, liquefaction, subsidence, and/or expansive soil) is generally site specific. Because all development in the City of Los Angeles is required to undergo analysis of geological and soil conditions applicable to the development site in question and because restrictions on development would be applied in the event that geological or soil conditions pose a risk to safety, it is anticipated that cumulative impacts from development on soil subject to landslides, soil instability, liquefaction, subsidence and expansive soils would be less than significant. As discussed under Impacts 4.5-3 and 4.5-4, site-specific evaluation of geological conditions and soil characteristics would precede any development under the 2002 LRDP, as amended, and appropriate design measures would be implemented to address any of the identified constraints or hazards in compliance with the 2007 CBC. As a result, the contribution of the proposed Project to impacts associated with situating development on soil subject to instability would be less than significant and no mitigation would be required. This is considered to be a less than significant impact.

4.5.5 REFERENCES

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4.6 HAZARDS AND HAZARDOUS MATERIALS

This section describes the potential adverse impacts to human health and the environment resulting from exposure to hazardous materials on campus from the proposed 2008 NHIP and buildout of the 2002 LRDP, as amended, and the University's ongoing programs to reduce those impacts. The University uses many materials on campus that may generate hazardous by-products that are handled and disposed of as hazardous wastes.

Data and information used in this section were provided by the UCLA Office of Environment, Health, and Safety (EH&S); the California Department of Toxic Substances Control (DTSC); the County of Los Angeles Sanitation Districts; and Environmental Data Resources, Inc. Full bibliographic entries for all reference materials are provided in Section 4.6.5, References, of this section.

The University received no comment letters related to hazards or hazardous materials in response to the Notice of Preparation circulated for the project.

4.6.1 ENVIRONMENTAL SETTING

Definitions

This EIR uses the definition given in Section 25501(o) of the *California Health and Safety Code,* which defines a "hazardous material" as:

> Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous Materials" include, but are not limited to, hazardous substances, hazardous wastes, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.

"Hazardous waste" is any hazardous material that is abandoned, discarded or recycled, as defined by Sections 25117 and 25124 of the *California Health and Safety Code.* In addition, hazardous waste may occasionally be generated by actions that change the composition of previously nonhazardous materials. The criteria used to characterize a material as hazardous include ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity.

Northwest Zone

The presence of potential hazardous materials is limited in the Northwest zone, as this zone is occupied primarily by dormitories and other residential uses, recreation facilities, parking lots, and structures. The Northwest zone does not routinely handle, use, or dispose of hazardous materials, with the limited exception of standard cleaning products, chlorine used in the Sunset Canyon Recreation Center aquatic facilities, and pesticides or herbicides used in association with standard campus landscaping and maintenance practices.

Older buildings in the Northwest zone may include substances such as asbestos, polychlorinated biphenyls (PCBs), lead, and mercury. These hazardous materials are further described below with a discussion of applicable State and federally mandated procedures relating to hazardous materials that may be present in campus buildings or other infrastructure.

4.6.2 HAZARDOUS MATERIALS USED ON CAMPUS AND REGULATORY SETTING

Hazardous materials used by UCLA for medical treatment, research, and teaching laboratories, include:

- Solvents used for cleaning, extraction, or other laboratory activities;
- Chemical reagents (chemical starting materials);
- Chemical reaction products, which may have unknown compositions;
- Radioisotopes (radioactive elements used to stimulate or trace chemical reactions);
- Infectious agents, including bacteria, viruses, and other medical wastes;
- Test samples (e.g., specimens such as blood, tissue, soil, or water), prior to use in a testing procedure;
- Compressed gases; and
- Mercury and other materials described below.

Campus maintenance and construction activities including vehicle, grounds, utility, and building maintenance include:

- Fuels (gasoline and compressed natural gas [CNG]);
- Oils and lubricants;
- Antifreeze;
- Cleaners, which may include solvents and corrosives in addition to soaps and detergents;
- Paints and paint thinners;
- Hydrochlorofluorocarbons (HCFCs) (refrigerants);
- Pesticides and herbicides;
- Aqueous Urea, acids, and caustics used in the Cogeneration Plant (also known as the Energy Services Facility). In addition, several bottles of anhydrous ammonia are stored for use in case the urea system fails; and
- Hazardous waste, stored at campus Environmental Services Facility building.

The Fine Arts programs uses small amounts of the following:

- Solvents
- Paints
- Acids

In February 2008, Environmental Data Resources, Inc. (EDR) performed a records check of federal, State, and County hazardous waste databases compiled pursuant to Section 65962.5 of the *Government Code,* as required by *Public Resources Code,* Section 21092.6 including, but not limited to the Leaking Underground Storage Tanks (LUST) List, the Hazardous Waste Substance List (Cortese List), the Emergency Response Notification System, and registered small or large hazardous waste generators within a one-mile radius of the intersection of Charles E. Young Drive West and Strathmore Place. The 2008 EDR Report searched various databases and identified numerous sites on and off campus with potential contamination. However, a comparison of the EDR data with current campus records found several discrepancies with respect to the location and/or status of underground storage tanks (USTs) and hazardous materials storage sites on the UCLA campus. Appendix F1 provides the 2008 EDR Report, while Appendix F2 provides updated information on the location and/or status of USTs and hazardous materials located on campus. This information is based on current campus records and corrects the EDR database results.

More detailed descriptions of the hazardous materials currently located or potentially located on campus are presented below and organized into specific categories. Information on federal, State and local (County and City) regulations, as well as internal UCLA policies and procedures to manage on-campus hazardous materials are also presented.

General Chemicals

Many chemical materials, some hazardous, are routinely used for instructional and research activities, and facilities maintenance during the course of campus operations. Virtually all buildings on the UCLA campus, including the Northwest zone, contain commercial products (e.g., cleaners, copier toners) that could qualify as "hazardous materials" under regulatory definitions. Non-household-type hazardous materials used in teaching and research laboratories include chemical reagents, solvents, radioisotopes, and biohazardous substances. Facilities Management units (including grounds, custodian services, pest management, and craft shops) use a wide variety of commercial products formulated with hazardous materials. These include fuels, cleaners and degreasers, solvents, paints, lubricants, pesticides and herbicides, adhesives, and sealers. The Environmental Services Facility stores chemical hazardous waste collected from campus maintenance and laboratory operations. The Cogeneration plant uses aqueous urea, sulfuric acid, sodium hydroxide, and other chemicals.

Laboratories and maintenance shops on the UCLA campus are classified by the type of hazardous material and the quantity stored, as classified by the State of California Hazardous Materials Release Response Plan and Inventory Law (*California Health and Safety Code,* Sections 25500–25520), which became effective January 1, 1990. Copies of the lab classifications are maintained in the University of California Police Department Communications Center, Hazmat Response Unit, and the EH&S.

To reduce the potential for exposure to airborne chemicals, workers take standard precautions (such as working under fume hoods when using chemicals that could present exposure hazards under the provisions of the Chemical Exposure Monitoring Program and Respiratory Protection Program), which are discussed further below. Proper use of fume hoods keeps indoor laboratory toxic air contaminants below the suggested guidelines of the American Conference of Governmental Industrial Hygienists (Threshold Limit Values) and Occupational Safety and Health Agency (OSHA) legal limits (Permissible Exposure Levels). EH&S has established a program to inspect and certify on an annual basis the more than 1,500 campus laboratory fume hoods.

To prevent exposure through skin contact, UCLA requires that protective clothing (such as laboratory coats, gloves, and safety glasses) be worn while handling hazardous materials. In addition, proper washing after handling chemicals is required. Eating, drinking, and smoking are prohibited in laboratories and other areas where hazardous materials are used. Should an accident occur that could cause an individual to be exposed to a hazardous material, required emergency equipment, including fire extinguishers, eyewashes, and safety showers, are available within the laboratories.

Underground Storage Tanks /Hazardous Materials Sites

Underground storage tanks (USTs) in use on campus are permitted by the City of Los Angeles Fire Department and are subject to Uniform Fire Code requirements that reduce or eliminate the potential for fire and explosion and hazardous materials leaks through secondary containment, release detection, corrosion protection, and testing. In accordance with applicable federal, State, and local regulations and standards, all USTs are double-walled and equipped with leak-detection devices and anti-corrosion features. All UST locations where spills or leaks

previously occurred have received regulatory closure, and no further action at those locations has been required.

Infrastructure (Asbestos/Lead/PCBs/Mercury)

Substances such as asbestos, lead, PCBs, and mercury could be present in some buildings on campus (dependent on the age of the structure), including the Northwest zone. Underground utility tunnels may also contain asbestos. All State and federally mandated procedures relating to hazardous materials that may be present in campus buildings or other infrastructure are implemented during renovation or demolition activities.

Asbestos

Any activity that involves cutting, grinding, or drilling during building renovation or demolition, or that involves relocation of underground utilities could release friable asbestos fibers, if present, unless proper precautions are taken.

The Clean Air Act regulates asbestos as a hazardous air pollutant, which subjects it to regulation by the South Coast Air Quality Management District (SCAQMD) under its Rule 1403. OSHA also regulates asbestos as a potential worker safety hazard. On campus, the Asbestos Management Program is an ongoing activity of coordinating construction and maintenance activities with safe work practices involving asbestos. In accordance with Sections 25915 through 25916 of the *California Health and Safety Code,* EH&S maintains an inventory of on-campus buildings that could contain asbestos and provides annual campus-wide notification of these locations. Prior to disturbance, materials that are suspected of containing asbestos are tested for asbestos content. Inspection and sample collection is performed by EH&S or outside environmental consultants, and samples are analyzed by accredited laboratories. All asbestos-containing materials are removed by licensed Asbestos Abatement Contractors or by trained UCLA Facilities Management staff using work practices and engineering controls that have been designed to reduce the potential for fiber release.

Lead

Lead, a naturally occurring metallic element, can be found in various building materials and products, such as paint (referred to as lead-based paint), water pipes, and solder in plumbing systems. Because of its toxic properties, lead is regulated as a hazardous material. Lead is also regulated as a toxic air contaminant. Lead in these materials may pose a hazard if it is disturbed during demolition or other construction activities and not properly contained or removed.

State-certified contractors must perform the inspection, testing, and removal (abatement) of lead-containing building materials in compliance with applicable health and safety and hazardous materials regulations. The Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X) requires disclosure of the presence of lead paint in residential structures.

On campus, UCLA has instituted a Lead Compliance Program. This program is directed at reducing lead exposure to members of the UCLA community. Painted surfaces are tested for lead content and hazard is assessed prior to disturbance. Inspection and sample collection is performed by EH&S or outside environmental consultants. EH&S maintains a database and construction documentation with respect to buildings painted with lead-based paint. Those materials identified with high lead content are removed using work practices and engineering controls that have been designed to reduce environmental exposure to lead dust.

PCBs

PCBs were widely used as a coolant in electrical equipment (like transformers) from the 1920s to the 1970s. Some equipment containing PCBs may still be present in research labs, but all on-campus electrical transformers containing PCBs have been removed. Each lab or department is responsible for removing hazardous waste, including PCB-containing materials, prior to vacating a work area. The On-campus Project Manager assigned to each construction or renovation project would verify that those removals take place.

Mercury

Elemental mercury, an insoluble liquid metal, is commonly used in laboratory and medical equipment, such as thermometers and manometers (used for measuring pressure), electrical equipment, and some water pumps. Mercury may pose a hazard if it is not properly contained and removed prior to the initiation of construction activities that may disturb mercury-containing equipment. Each lab or department is responsible for removing hazardous waste, including mercury-containing materials, prior to vacating a work area. The On-campus Project Manager assigned to each construction or renovation project would verify that those removals take place.

Radioactive Materials

Because radioactive materials emit ionizing radiation, and their presence can be detected easily, researchers and health care professionals use radioactive materials to study various biochemical functions in animals and humans. Drugs containing radioisotopes are also used in medicine and research. Limited types and quantities of radioisotopes are also used in research laboratories. There are no radioactive materials used in the Northwest zone.

Exposure to ionizing radiation can result in adverse human health effects that range from short-term mild symptoms (such as sunburn) to serious illness or death, depending upon the amount and concentration of the radioactive source and the duration of the exposure. The extent to which exposure would result in any adverse effects depends on the radioisotope and the amount and duration of exposure. Like all hazardous materials, the effects of the routine use of radioactive materials are limited to areas where exposure may occur and they decrease substantially with distance. For this reason, the individuals most at risk would be those specially trained in the use of radioactive materials, which would reduce the likelihood for accidental exposure of the general public through improper handling techniques. Furthermore, individuals who handle radioactive material above certain procedural limits are required to wear a personal monitor that determines their cumulative exposure to radiation.

The Atomic Energy Act (42 U.S.C. Sections 2011–2259) (AEA) ensures the proper management of source, special nuclear, and by-product material. The AEA, and the statutes that amended it, delegate the control of nuclear energy primarily to the Department of Energy, the Nuclear Regulatory Commission, and the United States Environmental Protection Agency (USEPA). The California Radiation Control Law (*California Health and Safety Code,* Sections 114960–114985) is a regulatory program designed to provide for compatibility with the federal standards and regulatory programs and to integrate an effective system of regulation within the state.

The use of radioactive materials on campus is specifically subject to the conditions of a Broadscope Radioactive Materials License issued and administered by the Radiologic Health Branch of the California Department of Health Services. All radioisotopes used on campus are listed in the campus Broadscope Radioactive Materials License and are stored in sealed containers designed to prevent release of radioactive materials to the environment. The

Radiation Safety Division of EH&S administers and monitors campus compliance with the Broadscope licensing requirements, which include routine inspection and monitoring of areas where radioactive materials are used to ensure that surfaces are not contaminated with radioactivity above regulatory levels. Under the Broadscope License, renovation or demolition of facilities using radioactive material requires decommissioning of the facilities. This involves radiation testing and conducting decontamination and waste handling activities in accordance with applicable regulations.

The responsibility of ensuring the safe operation of a radiation safety program is through the programs, practices, and procedures of radiation safety committees. At UCLA, the Radiation Safety Committee and Medical Radiation Safety Committee are responsible for the use of radioactive materials and radiation-producing machines for nonhuman and human uses, respectively. The UCLA Radiation Safety Division ensures that the University is in compliance with the programs, practices, and procedures of the two committees, as well as Title 17 of the *California Code of Regulations* and conditions of the UCLA Broadscope Radioactive Materials License. The Radiation Safety Division manages various programs to demonstrate to the California Department of Health Services that the University can control and monitor the receipt, use, and disposal of any source of radiation. These programs include routine monthly and specialized training, isotope receipts/inventory, external and internal radiation monitoring, audit/decommissioning, calibration, radioactive waste and effluent monitoring, and database management.

Like chemical hazardous wastes, low-level radioactive waste (LLRW) from on-campus teaching, research, and health sciences-related activities are collected and managed by the Radiation Safety Division of EH&S. UCLA normally collects dry and liquid LLRW directly from its sources (researcher or clinical users). In accordance with strict regulatory guidelines and procedures, the Radiation Safety Division transports the waste to the Environmental Services Facility (ESF), which is designed to safely store and contain materials that present a moderate explosion hazard (H-2), high fire or physical hazard (H-3), or health hazards (H-7).[1] In accordance with these guidelines, the Radiation Safety Division prepares and packages the waste for shipment and disposal, or for decay-in-storage within the ESF.

The federal Nuclear Regulatory Commission regulations divide LLRW into Classes A, B, and C, depending on the concentration of isotopes and the half-life of the material. Class A is waste that is usually segregated from other waste classes at the disposal site; Class B is waste that must meet more rigorous requirements on waste form to ensure stability after disposal; and Class C is waste that must not only meet more rigorous requirements on waste form to ensure stability, but also requires additional measures at the disposal facility to protect against inadvertent intrusion (*Code of Federal Regulations,* Title 10, Volume 2, revised January 1, 2001:171–173).

For the last three years, all UCLA's radioactive waste has been LLRW Class A. UCLA contracts with radioactive waste brokers to remove radioactive waste from the campus, and the waste brokers take the waste to approved radioactive waste facilities, all of which are out of state. While the campus has produced no Class B or C waste during the past three years, the potential exists for the generation of some Class B waste in the future due to changes in medical or research activities. It is not anticipated that Class C waste would be generated on campus. However, even if the campus generated Class B and/or Class C waste in the same levels as in previous years, it would represent only 0.1 percent of the total radioactive waste volume generated on campus.

[1] Levels H-2, H-3, and H-7 are designations of the California Building Code that describe allowed occupancies in a structure.

Dry and liquid radioactive waste volumes generated in 2007 were incinerated by licensed and permitted contractors off site to further reduce the volume before final disposal, and these efforts will continue to reduce all radioactive waste stream volumes. Campus radioactive waste generation volumes in 2007 are shown in Table 4.6-1, UCLA Radioactive Waste Generation, 2007 (In ft^3). As noted above, all of this waste was Class A.

TABLE 4.6-1
RADIOACTIVE WASTE GENERATION, 2007 (IN FT^3)

Dry	Liquid	Crushed Scintillation Vials	Animal Waste
279	102	112	0

[a] All bulk liquids are dry-packed in absorptive material and incinerated at an out-of-state facility.
[b] All scintillation vials are sent to approved out-of-state facilities.

Source: UCLA EH&S 2008.

Biohazardous Materials

By statutory definition, biohazardous materials include biohazardous laboratory wastes and biologic specimens such as human or animal tissue, as defined by Section 117635 of the *California Health and Safety Code.* Medical wastes must be managed as biohazardous material. There are no biohazardous materials located within the Northwest zone.

The United States Department of Health and Human Services (DHHS), the Centers for Disease Control and Prevention, and the National Institutes of Health prescribe containment and handling practices for use in microbiological, biomedical, and animal laboratories. Biohazardous medical waste is generally regulated in the same manner as hazardous waste, except that special provisions apply to storage, disinfection, containment, and transportation. The California Department of Public Health Medical Waste Management Program enforces the Medical Waste Management Act and related regulations.

All UCLA laboratories follow mandated hygienic practices, and UCLA has developed programs, practices, and procedures (PPs) for monitoring, routinely inspecting, reporting, and managing waste to reduce community and worker exposure to potential hazards associated with medical wastes and biological hazards. UCLA follows guidelines promulgated by the USDHHS, which determine the level of safety precautions that must be used for four tiers of relative hazards. Biosafety Level 1 is for the least hazardous biological agents and Biosafety Level 4 is for the most hazardous biological agents. UCLA performs no Biosafety Level 4 activities, but does perform Biosafety Levels 1, 2, and 3 activities. Activities that could create biohazardous aerosols are conducted in biosafety cabinets, which filter all released air to remove biohazardous materials. EH&S uses and tests biosafety cabinets and equipment with special filters to remove biological agents regularly. Regulations specify that medical wastes are stored in refrigerated facilities for not more than 90 days and that such wastes are properly packaged and labeled. Medical waste may also be rendered noninfectious through steam sterilization. UCLA uses a licensed medical waste transporter (e.g., Stericycle) to transport and treat all medical wastes, which are subsequently disposed of in municipal landfills. In 2007, the campus shipped approximately 23,000 pounds of medical waste for off-site treatment and disposal (UCLA EH&S 2008).

Handling and Disposal of Hazardous Materials and Hazardous Waste Generated On Campus

The California Environmental Protection Agency (Cal-EPA) and the DTSC regulate the generation, transportation, treatment, storage, and disposal of hazardous waste under the Resource Conservation and Recovery Act (RCRA) and the California Hazardous Waste Control Law. Both laws impose "cradle-to-grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment.

The campus is registered with the Cal-EPA as a generator of hazardous waste. UCLA disposes of hazardous wastes in compliance with Titles 8, 14, 17, and 22 of the *California Code of Regulations.* The campus does not treat, store (for longer than 90 days), or dispose of hazardous chemical waste on site. EH&S manages the collection of waste from campus generator sites and oversees the storage, packaging, and disposal of these materials. Small amounts of spent hazardous materials generated on a regular basis in laboratories and maintenance facilities are placed in special containers and are kept in ventilated accumulation areas. Special projects may require a department to contract directly with an approved and audited waste disposal vendor. In addition, UCLA must file reports with the State detailing waste disposal and recycling activities in addition to paying annual hazardous waste taxes based on volumes of waste disposed.

Hazardous waste is disposed of at licensed disposal facilities in California and other states. While municipal landfills were once the most common destination for hazardous waste, federal law (1984 Amendments to the RCRA) and the State (Hazardous Waste Control) now ban the use of landfills for many of the most commonly generated hazardous wastes. Alternative treatment and disposal technologies, including incineration and recycling, are now more common methods of disposing hazardous wastes and the campus has developed hazardous waste minimization and recycling programs as well.

Table 4.6-2, Hazardous Waste Shipped to Licensed Disposal Sites in 2007, shows the annual volume of hazardous waste that UCLA shipped to licensed disposal sites in 2007. The information provided in this table includes routine disposal of chemicals from campus operations, such as research and teaching, as well as non-routine or one-time disposal of materials, such as PCBs in equipment or asbestos.

TABLE 4.6-2
HAZARDOUS WASTE SHIPPED TO LICENSED DISPOSAL SITES IN 2007
(WASTE GENERATED IN TONS)

Asbestos	PCBs	Remediation Waste[a]	Lab/Operations[b]	Mixed Radioactive/ Chemical[c]	Total
37.9	1.4	1.8	325.9	3.1	370

[a] Represents non-routinely generated hazardous waste.
[b] Includes chemical materials associated with teaching and research labs and facilities management; it does not include radioactive or biohazardous materials.
[c] Includes a mix of radioactive and chemical materials associated with research labs; it does not include biohazardous materials.

Source: UCLA EH&S 2008.

Hazardous Materials Transportation

Hazardous materials are routinely transported in the region by truck or rail. The U.S. Department of Transportation (USDOT), Office of Hazardous Materials Safety prescribes strict

regulations for the safe transportation of hazardous materials, as outlined in Title 49 of the *Code of Federal Regulations* and implemented by Title 13 of the *California Code of Regulations.* Transportation of hazardous materials along any City or State roadways within or near the campus is also subject to all hazardous materials transportation regulations established by the California Highway Patrol pursuant to the *California Vehicle Code* and the City of Los Angeles Fire Department (LAFD) pursuant to the City of Los Angeles Fire Code (Article 7 of Chapter V of the Los Angeles Municipal Code). Additionally, the City of Los Angeles Hazardous Materials Environmental Crimes Unit is actively involved in enforcing USDOT hazardous materials transportation regulations. The campus uses only licensed hazardous waste transporters and Cal-EPA-licensed treatment, disposal, and recycling facilities. All facilities are audited by the University of California prior to use.

It should be noted that there are no hazardous materials transportation routes that travel through the Northwest zone, and there are no designated hazardous materials storage sites in the Northwest zone.

Campus Hazardous Materials Emergency Response Plans

Under the Hazardous Materials Release Response Plan and Inventory Law (*California Health and Safety Code,* Sections 25500–25520), which became effective for the University of California and other public agencies on January 1, 1990, UCLA has prepared a Business Plan that contains information about the location of, and emergency procedures for, campus buildings in which hazardous materials are handled. The LAFD administers the Business Plan requirements for UCLA and other private and public entities subject to this law. UCLA and the LAFD agreed upon the format and contents of the UCLA Business Plan in June 1989.

In addition to the Business Plan, UCLA has also prepared a Campus Emergency Response Plan, which is disseminated campus-wide and outlines emergency response procedures. The Campus Emergency Response Plan covers a broad range of emergency situations related to both human-made and natural disasters. Specific procedures for campus emergency response workers are provided in the Disaster Response Manual, which includes procedures for the Disaster Initial Response Team (DIRT) and the Hazardous Materials Response Team (Haz Mat Team), both organized groups of EH&S and Facilities Management personnel. Members of the Haz Mat Team receive and maintain specialized training in hazardous materials response. The LAFD also provides hazardous materials incident emergency response services to UCLA. The Haz Mat Team provides a consulting and support function to the LAFD during incidents that involve both fire and hazardous materials.

Campus Hazardous Materials and Safety Programs

The programs outlined below are not exhaustive, but instead represent the other major safety programs implemented on campus relating to hazardous materials management that were not discussed above.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal-OSHA) and the Federal Occupational Safety and Health Administration (OSHA) are the agencies responsible for ensuring worker safety in the handling and use of chemicals in the workplace. In California, Cal-OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices.

Cal-OSHA requires all institutions that use hazardous materials to implement a Hazard Communication Program and train employees that use hazardous chemicals in the safe use of those materials. EH&S offers training for campus departments that includes, for example, a review of the Cal-OSHA regulations, information contained in Material Safety Data Sheets (MSDS), and the proper use of personal protective equipment. EH&S implements all safety procedures and conducts safety programs to ensure that these procedures are consistently followed. Title 8 of the *California Code of Regulations* (Section 3203 of the General Industry Safety Orders) also requires every California employer to have a written Injury and Illness Prevention Program to provide a safe and healthful workplace. OSHA mandates methods of documenting, investigating, and controlling accidents that result in skin penetration.

Environmental Compliance Program

The Environmental Compliance Program, also overseen by the EH&S, ensures that all operations at UCLA that involve the use of hazardous materials minimize impacts to human health and the environment. As part of this program, a team is deployed to act as a liaison between campus departments and environmental regulatory agencies to ensure compliance with applicable federal, State, and local laws and regulations. All environmental permits for the campus, including SCAQMD permits, industrial wastewater permits, storm water permits, underground storage tank permits and treatment permits, are managed through the EH&S.

Hazardous Materials Management Program

The campus has instituted a Hazardous Materials Management Program that identifies strategies for reducing hazardous wastes and managing hazardous materials in a research setting. The EH&S provides campus users with various guidelines concerning waste minimization strategies and proper disposal of hazardous waste at UCLA. The EH&S Occupational Safety and Employee Health Division consults on matters of health and safety related to the recognition, evaluation, and control of potentially harmful substances and physical agents in the workplace.

Respiratory Protection Program

The Respiratory Protection Program is a vital part of many campus activities at UCLA. Respiratory hazards are materials that pose a threat to the individual through inhalation of an airborne contaminant. Respiratory hazards are encountered in emergency situations (fires or hazardous materials spills), construction or renovation activities, laboratory experiments, or tasks that require the use of chemicals. These situations can involve dangers such as gases and vapors, particulates (such as asbestos), and oxygen deficiency. When engineering or administrative controls cannot decrease contaminants to safe levels, respiratory protection is required. The Respiratory Protection Program also includes training and fit testing of respirators.

Chemical Exposure Monitoring Program

The Chemical Exposure Monitoring Program evaluates potential personal exposures to hazardous substances. The program consists of a variety of activities implemented to evaluate a person's exposure, including observation of job routine, evaluation of workplace control measures, and environmental sampling. Several types of sampling are performed by EH&S, depending on the nature of the chemical hazard, the frequency of chemical use, and the way the chemical is handled. Some of the typical chemicals monitored at UCLA include asbestos, lead particulate (lead-based paint), formaldehyde, hazardous laboratory chemicals, solvent-based materials and cleaning products, and chemical carcinogens or extremely toxic substances. The Guidelines for Chemical Disposal provide detailed information concerning use

and handling of incompatible chemicals. A Chemical Hygiene Plan establishes the various safety procedures and chemical handling rules for the laboratory, including detailed procedures to be followed in the event of a chemical spill.

4.6.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

The analysis in this section focuses on the use, generation, disposal, transport, and/or management of hazardous or potentially hazardous materials on campus. The volume of hazardous waste generated by various campus activities is quantified, as described in Table 4.6-1, Table 4.6-2, and in the discussion of medical waste generated on campus. Disposal options, the probability for risk of upset, and the severity of consequences to people or property associated with the increased use, handling, transport, and/or disposal of hazardous materials associated with implementation of the proposed 2008 NHIP and buildout of the 2002 LRDP, as amended, are also analyzed.

It should be noted that, with the exception of the proposed 2008 NHIP, the 2002 LRDP, as amended, does not involve the implementation of specific development projects beyond those anticipated under the 2002 LRDP Final EIR. However, for purposes of this analysis, the environmental impacts previously provided in the 2002 LRDP Final EIR are restated and/or updated to address changes due to the extended planning horizon from 2010 to 2013 and additional development square footage associated with the proposed LRDP Amendment.

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed project would not have a significant impact for the following thresholds from the CEQA Checklist and no further analysis of these issues is presented in this section.

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

- Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Hazards and Hazardous Materials.

- Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials *(Impacts 4.6-1 and 4.6-2)*?

- Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment *(Impacts 4.6-3 and 4.6-4)*?

- Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school *(Impact 4.6-5)*?

- Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment *(Impact 4.6-6)*?

- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area *(Impact 4.6-7)*?

- Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan *(Impact 4.6-8)*?

Impact Analysis

Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures (PPs) were adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. Therefore, they are considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.6-1 *The campus shall continue to implement the same (or equivalent) health and safety plans, programs, practices, and procedures related to the use, storage, disposal, or transportation of hazardous materials during the LRDP Amendment planning horizon, including, but not necessarily limited to, the Business Plan, Hazardous Materials Management Program, Hazard Communication Program, Injury and Illness Prevention Program, Chemical Exposure Monitoring Program, Asbestos Management Program, Respiratory Protection Program, EH&S procedures for decommissioning and demolishing buildings that may contain hazardous materials, and the Broadscope Radioactive Materials License. These programs may be subject to modification as more stringent standards are developed or if the programs become obsolete through replacement by other programs that incorporate similar health and safety protection measures.*

PP 4.6-4 *While not expected to occur on-campus, if contaminated soil and/or groundwater is encountered during the removal of on-site debris or during excavation and/or grading activities, the construction contractor(s) shall stop work and immediately inform the EH&S. An on-site assessment shall be conducted to determine if the discovered materials pose a significant risk to the public or construction workers. If the materials are determined to pose such a risk, a remediation plan shall be prepared and submitted to the EH&S to comply with all federal and State regulations necessary to clean and/or remove the contaminated soil and/or groundwater. Soil remediation methods could include, but are not necessarily limited to, excavation and on-site treatment, excavation and off-site treatment or disposal, and/or treatment without excavation. Remediation alternatives for cleanup of contaminated groundwater could include, but are not necessarily limited to, on-site treatment, extraction and off-site treatment, and/or disposal. The construction schedule shall be modified or delayed to ensure that construction will not inhibit remediation activities and will not expose the public or construction workers to significant risks associated with hazardous conditions.*

Threshold	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Operational Hazards

Off-site exposure to hazardous materials used on-campus would only reasonably occur through limited circumstances, such as accident during transport or use. The risks associated with the transport of hazardous materials, both to and from campus and internally, are addressed below in Impact 4.6-3. Potential air toxic impacts resulting from air emissions from fume hoods and other building vents are discussed in Impact 4.2-7 of Section 4.2, Air Quality, of this EIR.

Proposed 2008 NHIP

The Northwest zone, including the proposed 2008 NHIP sites, does not include any research laboratory or medical uses, which are the primary facilities that routinely handle, use, or dispose of hazardous materials on campus. The proposed NHIP would be composed solely of residential and associated support uses. As discussed above, routine operations throughout the Northwest zone include largely building and landscape maintenance that use materials, some of which are considered hazardous, such as: standard cleaning products, chlorine used in the Sunset Canyon Recreation Center aquatic facilities, and pesticides or herbicides.

The types of hazardous materials that could be used in association with the proposed NHIP would not require disposal. Cleaning products would be disposed of either through the wastewater system (i.e., sinks, laundry) or evaporation. Neither chlorine nor standard cleaning products (i.e., degreasers, window cleaning products) are used in quantities that would result in adverse health effects either through direct exposure to the skin or inhalation. Pesticides and herbicides are directly applied to affected areas using methods that follow State and County laws and/or guidelines.

Compliance with applicable federal, State, and local laws and regulations as well as the continuation of existing (or equivalent) UCLA programs, practices, and procedures required by 2002 LRDP Final EIR PP 4.6-1 identified above (and described in detail in Section 4.6.1, Environmental Setting), would ensure that the use, transport, or disposal of hazardous materials would not expose campus occupants or the nearby public to significant health or safety risks. All applicable federal, State, and local regulations as well as all existing (or equivalent) UCLA programs and procedures for handling hazardous materials, would be extended to all new structures developed as part of the proposed NHIP. Therefore, the impact of potential increased hazardous material use associated with the proposed NHIP would be less than significant and no mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Remaining buildout of the 2002 LRDP, as amended, could result in the development of additional laboratories and other research facilities that would use, store, or require the transportation and disposal of hazardous materials as described above. While the amount and type of hazardous materials may vary over time with changes in research and additions to hazardous materials lists, the general range and type of hazardous materials used on campus is not expected to substantially change upon implementation of future development on campus. UCLA would continue to use materials, some of which are considered hazardous, in laboratory research, building and grounds maintenance, vehicle maintenance, and fine arts. In addition, buildout of the 2002 LRDP, as amended, would be expected to increase the average weekday

campus population (students, faculty, staff, and visitors) by approximately 2,780 individuals during the regular session, which would increase the number of individuals potentially exposed to hazardous materials located on campus.

Possible development in each of the campus zones is identified in Impact 4.8-1 in Section 4.8, Land Use and Planning, of this EIR. The proposed uses (and areas of campus) that could involve the routine use, handling, or disposal of hazardous materials would not differ from existing locations on campus that involve the routine use of these materials for teaching, research, medical and maintenance activities.

The individuals most at risk due to increased hazardous materials use associated with implementation of the proposed Project would be those individuals (including students, campus staff, and construction employees) who work with and/or are at locations where hazardous materials are found on campus, such as laboratories, medical facilities, or construction sites. Whether a person exposed to a hazardous substance at one of these locations would suffer adverse health effects depends upon a complex interaction of factors: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form (e.g., liquid, vapor) and characteristics (e.g., toxicity) of the material; the frequency and duration of exposure; and the individual's unique biological characteristics (such as age, gender, weight, and general health). Adverse health effects from exposure to hazardous materials may be short term (acute) or long term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic effects, which may result from long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer.

While the implementation of the remaining building under the 2002 LRDP, as amended, would result in the potential development of additional laboratories and other research facilities that would use, store, and/or require the transportation and disposal of hazardous materials, as well as a limited increase in the average weekday on-campus population that could be exposed to hazardous materials risks, compliance with applicable federal, State, and local laws and regulations as well as the continuation of existing (or equivalent) UCLA programs, practices, and procedures required by PP 4.6-1 identified above (and described in detail in Section 4.6.1, Environmental Setting), would ensure that the use, transport, or disposal of hazardous materials would not expose campus occupants or the nearby public to significant health or safety risks. All applicable federal, State, and local regulations as well as all existing (or equivalent) UCLA programs and procedures for handling hazardous materials, would be extended to all new facilities developed on campus in the future. Therefore, the impact of potential increased hazardous chemical, radioactive, and biohazardous material use at UCLA would be less than significant.

Off-site exposure to hazardous materials used on-campus would only reasonably occur through limited circumstances such as an accident during transport or use. The risks associated with the transport of hazardous materials, both to and from campus and internally, are addressed below in Impact 4.6-3. Potential air toxic impacts resulting from air emissions from fume hoods and other building vents are discussed in Impact 4.2-7 of Section 4.2, Air Quality, of this EIR.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.6-1 ***Continued implementation of PP 4.6-1 would ensure that the proposed Project would not expose campus occupants or the nearby public to a significant hazard due to the routine transport, use, disposal, or storage of hazardous materials (including chemical, radioactive, and biohazardous waste). This impact is less than significant and no mitigation is required.***

Construction-related Hazards

Proposed 2008 NHIP

As part of the proposed 2008 NHIP, the Office of Residential Life Building would be demolished and the space that accommodates the Housing Maintenance Division located in the covered parking area south of Sproul Hall would be renovated. Demolition and renovation of existing buildings could release hazardous materials if asbestos-containing materials, lead-based paint, PCBs, and/or mercury-containing equipment or are present in the structure(s). In particular, any activity that involves cutting, grinding, or drilling during building renovation or demolition or relocation of underground utilities could release friable asbestos fibers and/or lead dust unless proper precautions are taken. As described above in Section 4.6.1, Environmental Setting, all applicable federal, State, and local regulations as well as UCLA's Asbestos Management Program, Lead Compliance Program, and policies for management and disposal of PCBs and mercury would be implemented during construction or renovation activities.

Compliance with federal and State health and safety laws and regulations, as well as continued implementation of existing (or equivalent) campus programs, practices, and procedures, as required by the 2002 LRDP Final EIR PP 4.6-1, would ensure that this impact remains less than significant. No project-specific mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Demolition of existing buildings could release hazardous materials if asbestos-containing materials, lead-based paint, PCBs, and/or mercury-containing equipment are present in the structure(s). In particular, any activity that involves cutting, grinding, or drilling during building renovation or demolition or relocation of underground utilities could release friable asbestos fibers and/or lead dust unless proper precautions are taken. As described above in Section 4.6.1, Environmental Setting, all applicable federal, State, and local regulations as well as UCLA's Asbestos Management Program, Lead Compliance Program, and policies for management and disposal of PCBs and mercury would be implemented during construction or renovation activities. Buildings demolished during construction activities could also contain biohazardous materials, including medical wastes. UCLA EH&S programs, practices, and procedures and current State testing, monitoring, and disposal regulations pertaining to the management of biohazardous materials (including medical waste) reduce the potential for biohazardous substances to be present in fixtures or building materials removed during demolition to the maximum extent feasible. In addition, UCLA's Broadscope Radioactive Materials License requires testing and implementation of decontamination and waste handling activities in accordance with applicable regulations when facilities using radioactive materials are decommissioned for renovation or demolition purposes.

Therefore, continued compliance with federal, State, and local regulations, as well as following existing (or equivalent) campus programs, practices, and procedures, as required by 2002 LRDP Final EIR PP 4.6-1, defined above, would ensure that demolition or construction activities that may involve hazardous materials would not expose campus occupants or the nearby public to significant health or safety risks. Therefore, this impact would be less than significant and no mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.6-2 ***Implementation of the proposed Project would not expose construction workers and campus occupants to a significant hazard through the renovation or demolition of buildings or relocation of underground utilities that contain hazardous materials. This impact is less than significant and no mitigation is required.***

Threshold	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Hazardous Materials Release

Proposed 2008 NHIP

The only hazardous materials handled, used, transported, or disposed of in connection with the 2008 NHIP would include standard cleaning products and pesticides and/or herbicides used in association with standard campus landscaping and maintenance practices. The amount of hazardous materials that are handled at any one time is relatively small, reducing the potential consequences of an accident during handling. Further, UCLA would continue to comply with federal and State laws and existing campus programs, practices, and procedures to eliminate or reduce the consequence of hazardous materials accidents. For example, staff and students who work around routinely used hazardous materials will continue to wear appropriate protective equipment, if necessary, and safety equipment is available in all areas where hazardous materials are used. Further, the routinely used materials are stored or transported in limited quantities. Typically, the materials are stored in gallon containers, with 30 gallons or less stored or transported for use at each building. This procedure limits the potential for a significant hazard to occur to the public or the environment through reasonably foreseeable upset and accident conditions.

The campus would continue to comply with all applicable federal, State, and local laws and regulations pertaining to the use, transportation, and storage of hazardous materials, including 2002 LRDP Final EIR PP 4.6-1. Compliance with applicable federal and State regulations, along with continued implementation of 2002 LRDP Final EIR PP 4.6-1, would ensure that impacts associated with upset or accident conditions remain less than significant. No project-specific mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

The precise increase in the amount of hazardous materials transported to or from the campus as a result of implementation of the remaining entitlement under the LRDP Amendment cannot be definitively predicted due to varying research needs over time, which cannot be anticipated as part of this programmatic document and changes in the classification of hazardous materials. Therefore, the following discussion focuses on the potential nature and magnitude of risks associated with the accidental release of hazardous materials typically used on campus.

Off-Campus Transportation of Hazardous Materials

UCLA currently ships hazardous chemical waste for disposal approximately every two weeks, biohazardous waste once a week, and radioactive waste approximately once a month. Therefore, hazardous waste shipments could occur as frequently as several times per week, barring unusual circumstances, such as laboratory demolition. The transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion.

As described above in Section 4.6.1, Environmental Setting, USDOT, CHP, and LAFD regulations and requirements govern the transit and license of hazardous material transporters in the UCLA area. Licensed vendors bring hazardous materials to and from the campus, and manifests are completed and maintained by EH&S for all hazardous waste that is transported in connection with campus activities. The DHS also maintains copies of UCLA's waste manifests. In conformance with legal requirements, incoming radioactive material is routed through the Radiation Safety Division of the EH&S for monitoring and recording of each acquisition, except for large sources and clinical isotopes, which are delivered directly to authorized users.

The UCLA Business Plan describes procedures to follow in the event of an accidental release of hazardous materials. Some hazardous materials emergencies may require the further assistance of the LAFD if they are significant (in terms of volume or area affected) or where incidents involve both fire and hazardous materials (for which assistance would be provided, if needed) under the mutual aid agreement.

Continued compliance with all applicable federal, State, and local regulations, as well as following existing (or equivalent) campus programs and procedures related to the transportation of hazardous materials to and from campus, as required by 2002 LRDP Final EIR PP 4.6-1, defined above, would continue to reduce the likelihood and severity of potential accidents during transit and would ensure that hazardous material transit would not expose campus occupants or the nearby public to significant health or safety risks. Therefore, there would be a less than significant impact and no mitigation would be required.

On-Campus Transportation of Hazardous Waste

In addition to transport of hazardous materials to and from campus, the transport of hazardous materials also occurs among campus facilities (between and within buildings, from room to room, within hallways, and up and down stairwells and elevators). Accidents could occur as these materials are moved about the campus, and exposure of site occupants could occur through fire or explosion. Hazardous materials transported between UCLA facilities are sealed in break-resistant containers with secondary containment (such as buckets or carts) to reduce the risk of exposure. Further, all individuals who handle hazardous materials receive specialized training from the campus and are also given a copy of the Materials Safety Data Sheets (MSDS), which outline procedures to follow in the event of an emergency. If a spill occurs, the DIRT or Haz Mat Team would be immediately notified. If required, the area of potential affect would be isolated (through the use of temporary and/or permanent barriers) and evacuated to

reduce the potential for human exposure and to allow for prompt and effective cleanup by the campus DIRT, Haz Mat Team, and/or the LAFD.

The consequences of spills as a result of a fall or dropping a container would depend on whether the hazardous material was released, the specific hazards associated with the material, the facility design, and the availability of emergency response equipment. In addition to health impacts associated with direct contact from an accidental spill, indirect impacts could also occur. Spills that occur on permeable surfaces may be difficult to decontaminate and may require complete removal of the surface. In areas without adequate ventilation, including partially enclosed outdoor areas (such as walkways, stairwells, or courtyards), vapors from released volatile materials could be trapped in stagnant air pockets, and persons entering these areas after such a spill could be subject to health hazards associated with such vapors. In these instances, all individuals would be evacuated from the affected area until the vapors dissipate to safe levels as determined by the Haz Mat Team and/or EH&S staff.

Continued compliance with all applicable federal, State, and local regulations, as well as well as following existing (or equivalent) campus programs and procedures related to the transportation or cleanup of on-campus hazardous materials in the event of an accidental release, as required by 2002 LRDP Final EIR PP 4.6-1, defined above, would continue to reduce the likelihood and severity of potential accidents during on-campus transit and would ensure that hazardous material transit would not expose campus occupants or the nearby public to significant health or safety risks. Therefore, there would be a less than significant impact and no mitigation would be required.

On-Campus Hazardous Materials Storage and Use

Most hazardous materials stored on campus present little risk of upset. Hazardous materials are stored in laboratories and at the ESF in designated secured areas designed to prevent accidental release to the environment. As a facility, the ESF has been designed pursuant to California Building Code requirements to safely accommodate materials that present a moderate explosion hazard (H-2), high fire or physical hazard (H-3), or health hazard (H-7).

Hazardous materials for research and academic use are generally stored in laboratories in small, individual containers. In the unlikely event of an accidental release, these small storage volumes limit potential consequences to the individual laboratory in which they are stored.

Hazardous materials use would present a slightly greater risk of accident than hazardous materials storage. However, for those employees and students that work with hazardous materials (such as researchers and/or medical personnel), the amount of hazardous materials that are handled at any one time is relatively small, reducing the potential consequences of an accident during handling.

Major hazardous materials accidents are extremely infrequent, and additional emergency response capabilities are not anticipated to be necessary to respond to the potential incremental increase in the number of incidents that could result from implementation of the 2002 LRDP, as amended.

Continued compliance with all applicable federal, State, and local regulations, as well as following existing (or equivalent) campus programs and procedures related to the transportation or cleanup of on-campus hazardous materials in the event of an accidental release, as required by 2002 LRDP Final EIR PP 4.6-1, defined above, would maximize containment; would provide for prompt and effective clean-up; and would ensure that hazardous material transit would not

expose campus occupants or the nearby public to significant health or safety risks. Therefore, there would be a less than significant impact and no mitigation would be required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant

Impact 4.6-3 ***Implementation of the proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. This impact is less than significant and no mitigation is required.***

Contaminated Soil and/or Groundwater

Proposed 2008 NHIP

Based upon a review of documented hazardous materials sites (EDR 2008), a site-specific geological study (Geotechnologies 2008) and current campus records, there is no known contaminated soil or groundwater on the 2008 NHIP sites. Although the campus has never had a documented instance of contaminated soil and/or groundwater caused by construction or operational activities, there is always the potential for previously undiscovered underground storage tanks or other undetected soil or groundwater contamination to be exposed as a result of construction activities.

In the event that USTs are uncovered or disturbed, they would be closed in place or removed in accordance with applicable regulations. While removal could pose health and safety risks (such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors), the potential risks, if any, would be reduced by managing the tank according to the Los Angeles Regional Water Quality Board's Underground Storage Tank Program (USTP), which has established guidelines for investigating and closing USTs, as well as cleaning up sites contaminated by leaking USTs, to ensure that a less than significant impact would occur.

While there are no known locations of soil or groundwater contamination on campus, and the campus has not historically participated in activities or provided services that could likely result in soil and/or groundwater contamination (i.e., oil refineries, landfills, manufacturing plants, or other industrial facilities), it is possible that contamination could exist in localized areas as the result of pesticide or herbicide use during routine landscape/turf maintenance practices or in association with the removal or disturbance of older underground utilities or unidentified buried debris. As required by 2002 LRDP Final EIR PP 4.6-4, if any contaminated soil and/or groundwater is discovered, all construction activities shall stop and an assessment shall be made of the nature and extent of contamination and the type (if any) of remediation that is required. The primary purpose of PP 4.6-4 is to ensure that the exposure of contaminated soil and/or groundwater or the remediation activities, if necessary, would not expose the public or construction workers to hazardous conditions. Continued compliance with all applicable federal, State, and local laws and regulations, as well as following 2002 LRDP Final EIR PPs 4.6-1 and 4.6-4, would ensure that impacts associated with the exposure of contaminated soil or groundwater is less than significant. No project-specific mitigation is required.

The use of pesticides is governed by the State Department of Pesticide Regulation and is overseen by a Licensed Pest Control Advisor on campus. The campus reviews local agricultural guidelines in determining herbicide and pesticide use.

If required during construction activities, dewatering could result in the withdrawal of contaminated groundwater. If the groundwater contains contaminants above regulatory levels, the water could present a hazard to people or the environment unless properly managed. However, UCLA requires that contractors implement best management practices during construction dewatering to avoid exposing campus occupants or construction workers to potentially contaminated groundwater (such as during groundwater testing, containment of contaminated groundwater in storage tanks for subsequent treatment and/or disposal, and/or the provision of release response information). In addition, subject to Section 13263 of the *California Water Code,* the Regional Water Quality Control Board issues Waste Discharge Requirements to control discharges (including groundwater) to land or water, and PP 4.6-4 requires specific procedures that the campus would follow in the unlikely event that contaminated groundwater is discovered during construction activities to ensure that the risk of exposure to campus occupants or construction workers remains less than significant.

Following PP 4.6-4 identified previously would ensure that this impact remains less than significant by providing specific procedures to follow in the event that contaminated soil and/or groundwater is discovered. No mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Some campus facilities are included on selected databases compiled by applicable federal, State, and local agencies; these sites consist of registered underground storage tanks and hazardous materials storage locations, rather than contaminated sites (e.g., soil or groundwater). While there have been localized areas of soil contamination in connection with leaking USTs (LUSTs), all such sites on campus have been remediated and properly closed. All remaining USTs on campus conform to applicable federal, State, and local regulations and are registered and permitted by the LAFD.

Potential impacts related to the discovery of previously unidentified hazardous materials, contaminated soils and/or groundwater discussed above for the proposed 2008 NHIP would also apply to future development projects on campus under the 2002 LRDP, as amended. Compliance with all applicable federal, State, and local laws and regulations, as well as following 2002 LRDP Final EIR PPs 4.6-1 and 4.6-4 would ensure that impacts associated with the exposure of contaminated soil or groundwater is less than significant. No mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.6-4 ***Implementation of the proposed Project would not create a significant risk of exposure of campus occupants and construction workers to contaminated soil or groundwater. Although this impact is less than significant and no mitigation is required, continued***

implementation of PP 4.6-4 would further reduce this impact.

Threshold	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Existing schools within or in proximity to the campus include the Corinne A. Seeds University Elementary School, which is located in the Core Campus zone, and Marymount High School, which is located off campus just north of Sunset Boulevard (just north of the Core Campus zone). The Krieger Childcare Center is also located on campus in the Northwest zone.

Proposed 2008 NHIP

Proposed 2008 NHIP structures would be located approximately $^1/_3$ mile from the nearest structure, which is the Krieger Childcare Center at Veteran Avenue and Sunset Boulevard; there are no proposed 2008 NHIP structures within ¼ mile of the nearest school. In addition, the proposed 2008 NHIP consists of residential, recreational and parking uses, which would not handle acutely hazardous materials, substances, or waste. As discussed under Impacts 4.6-1 and 4.6-3, the proposed 2008 NHIP would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, including reasonably foreseeable upset and accident conditions. When hazardous materials are handled, used, transported, or disposed of as a result of construction or operation of the 2008 NHIP, the campus would continue to comply with all applicable federal, State, and local laws and regulations pertaining to hazardous materials, including following PP 4.6-1. A less than significant impact would occur, and no project-specific mitigation is required.

Toxic air emissions would be generated by the new heating, ventilation, air conditioning, and emergency generator equipment associated with the new residence halls. These emissions were included in the Health Risk Assessment (HRA) prepared for the LRDP Amendment and are fully evaluated in Impact 4.2-7 (Section 4.2, Air Quality) of this document. The HRA indicates that implementation of the proposed Project would not generate toxic air emissions that result in excess human cancer risk from stationary sources. Therefore, potential impacts associated with toxic air contaminants would be less than significant, and no project-specific mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Additional laboratories could be constructed in the Core Campus zone, which could expose children at the Corinne A. Seeds University Elementary School and Marymount High School to increased risks associated with hazardous material handling or transport. No laboratories or other facilities that generate or use hazardous materials would be constructed in the Northwest zone, which is the primary designated residential and childcare area of campus.

While hazardous materials and waste could be handled within ¼ mile of an existing or proposed school as a result of implementation of the remaining buildout under the LRDP Amendment, these materials would not exist in quantities significant enough to pose a risk to occupants of the school or the campus community, as established by Impact 4.6-1 through Impact 4.6-4 and Impact 4.6-6 through Impact 4.6-8.

Section 15186 of the CEQA Guidelines establishes requirements for school projects and projects near schools, to ensure that potential health impacts resulting from exposure to

hazardous materials, wastes, and substances are examined and disclosed in the environmental document. Section 15186 of the CEQA Guidelines states that hazardous materials are considered a risk are those which may impose a health or safety hazard to persons who would attend or would be employed at the school. Specifically, when a project located within ¼ mile of a school involves the construction or alteration of a facility that is anticipated to emit hazardous air emissions, to emit acutely hazardous air emissions, handle acutely hazardous materials, or handle a mixture containing acutely hazardous materials in a quantity equal to or greater than that specified in Section 25536(a) of the *Health and Safety Code,* the Lead Agency must (1) consult with the affected school district regarding the potential impact of the project when circulating the environmental document and (2) notify the affected school district in writing prior to approval and certification of the environmental document. These requirements would only pertain to Marymount High School and the Corinne A. Seeds University Elementary School, which are the only schools located on campus or within ¼ mile of campus, if a specific project is proposed in the northern portion of the Core Campus zone. While the proposed Project does not include specific proposals for new development that might involve the use or transport of hazardous materials, this EIR will be sent to all relevant school administrations for review and comment, and UCLA would continue to comply with the provisions of Section 15186 of the CEQA Guidelines, as it applies to any future development.

Section 15186 of the CEQA Guidelines also establishes notification and disclosure provisions if a project involves the purchase of a school site or the construction of secondary or elementary schools. The LRDP Amendment does not propose the construction or expansion of the Corinne A. Seeds University Elementary School, which is the only elementary or secondary school located on campus.

As discussed above, impacts associated with toxic air contaminants would be less than significant. Compliance with federal, State, and local regulations pertaining to hazardous materials, including the CEQA Guidelines section specified above, and with existing (or equivalent) campus programs and procedures required by 2002 LRDP Final EIR PP 4.6-1 would ensure that risks associated with hazardous emissions or materials to existing or proposed schools located within ¼ mile of campus would remain less than significant. Short-term air quality impacts to sensitive receptors are addressed in Impact 4.2-6 of Section 4.2 (Air Quality) of this EIR, and were found to be less than significant. No mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.6-5 ***Implementation of the proposed Project would not result in hazardous emissions, but could require the handling of hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school. With continued implementation of PP 4.6-1 this impact is less than significant and no mitigation is required.***

Threshold	Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?

Proposed 2008 NHIP

Appendix F1 identifies the locations of known hazardous materials sites on and near campus based upon a review of federal, State, and County hazardous waste lists and databases pursuant to *Government Code,* Section 65962.5 (EDR 2008). As identified in the Initial Study included in Appendix A, there are no known hazardous materials sites within the proposed 2008 NHIP project sites and no further analysis of this threshold is required for the proposed 2008 NHIP.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Impact 4.6-6a ***There are no known hazardous materials sites within the proposed 2008 NHIP project site and no impact would result.***

Remaining Buildout of the 2002 LRDP as Amended

The hazardous waste lists and databases include, but are not limited to, the Department of Toxic Substances Control Hazardous Waste and Substances Site List (Cortese List), the Resource Conservation and Recovery Act database, and the California Hazardous Material Incident Report System. These lists and databases contain information about dry cleaners; asbestos waste; underground storage tanks at gas stations and other locations; photo-processing chemicals; PCBs; unspecified solvent and organic mixture wastes; unspecified aqueous solution; metal sludge; other hazardous materials monitored by statute or regulation; known releases of hazardous substances; small and large quantity hazardous waste generators; and locations where radioactive or other hazardous materials are stored or used. As identified under Section 4.6.1 previously, there are hazardous materials sites identified on campus.

As discussed under Impact 4.6-4 above, the campus has never had a documented instance of contaminated soil and/or groundwater caused by construction or operational activities. While there have been localized areas of soil contamination in connection with LUSTs, all such sites on campus have been remediated and properly closed. All remaining USTs on campus conform to applicable federal, State, and local regulations and are registered and permitted by the LAFD. If future UST-related cleanup were determined to be necessary, all work would be performed in accordance with the guidelines of the Los Angeles Regional Water Quality Board's Underground Storage Tank Program. All non-UST hazardous waste storage locations are managed in accordance with all applicable federal and State laws, such as RCRA and the California Hazardous Waste Control Law, as well as with all existing (or equivalent) campus programs and procedures described in Section 4.6.1, Environmental Setting. Continued

compliance with PP 4.6-1 identified previously would ensure that this impact remains less than significant. No mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.6-6b ***Implementation of the proposed Project would not result in construction of facilities on sites containing hazardous materials, and thus would not create a significant hazard to the public or environment. This impact is less than significant and no mitigation is required.***

Threshold	Would the project be located within the vicinity of a private airstrip, resulting in a safety hazard for people residing or working in the project area?

Remaining Buildout of the 2002 LRDP as Amended Including the Proposed 2008 NHIP

The Ronald Reagan UCLA Medical Center (RRUCLAMC) (opened in June 2008) operates a helistop (with two helipads) located on top of the ten-story medical center facility. The RRUCLAMC helistop is anticipated to receive a very limited number flights (average of two flights per day). In addition, as a condition of the Caltrans Aeronautics Heliport Permit for each pad, two helicopters cannot arrive and/or depart simultaneously (Wright 2008). Operations are further limited to emergency patient transport and support of the organ transplant program. Non-emergency flights are not allowed. Implementation of the proposed Project would not directly increase the number or frequency of medical helicopter operations at the RRUCLAMC. The Caltrans Aeronautics Heliport Permit also requires the RRUCLAMC to contact the Caltrans Division of Aeronautics should structures be proposed that would penetrate the established 8:1 approach/departure surface (eight feet horizontal to one foot vertical) as depicted on the Helistop Layout Plan included with the permit. Note that this does not prohibit taller structures; it only requires notification to Caltrans if they would impact the approach/departure surface. Under these circumstances, the affected portion of the approach/departure path arc for the helistop would be closed. The proposed 2008 NHIP which is approximately 0.4 mile from the helistop does not include any structures that would penetrate the established 8:1 approach/departure surface. The provisions of the existing permit ensure that potential safety hazards associated with operations of the helistop are less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.6-7 ***Implementation of the proposed Project would not result in a safety hazard related to helistop operations***

for people residing or working on campus. This impact is less than significant and no mitigation is required.

Threshold	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The campus has developed and implemented a number of emergency response plans, as previously identified in Section 4.6.1. In addition, both the City and County of Los Angeles have Emergency Contingency Plans that address emergency situations that could occur on the UCLA campus. Following is a discussion of potential interference with emergency response or emergency evacuation plans resulting from implementation of the proposed Project.

Proposed 2008 NHIP

The proposed 2008 NHIP provides 1,525 beds and associated support facilities. UCLA estimates that 70 percent (1,068 beds) of the 1,525 beds would be used by students that would otherwise have to live off campus, and the remaining 30 percent (457 beds) would be used by students that currently reside in triple accommodations (3 beds in 1 room) on campus. Therefore, development of additional housing with implementation of the 2008 NHIP would accommodate an approximate increase in resident population of 1,068 persons. Additionally, there would be 151 new employees generated by the proposed 2008 NHIP. However, as discussed in Section 4.13, Transportation/Traffic, this increase in population would not result in an increase in traffic; rather, the total amount of traffic would decrease as a result of the proposed 2008 NHIP.

As described in Section 3, Project Description, construction associated with the 2008 NHIP may require temporary construction barricades or rerouting of traffic within the Northwest zone. This could affect emergency access on campus. However, as required by 2002 LRDP Final EIR PP 4.13-6 in Section 4.13, Transportation/Traffic, multiple emergency access or evacuation routes are provided on campus to ensure that, in the event one roadway or travel lane is temporarily blocked, another may be utilized. In addition, 2002 LRDP Final EIR PP 4.13-5 establishes specific construction practices to properly control traffic and to inform the public of alternate transportation routes during construction activities. Furthermore, ongoing coordination between the UCPD, LAFD, and UCLA pursuant to 2002 LRDP Final EIR PP 4.13-8 ensures that roadway or travel lane closures are coordinated with emergency response personnel to ensure that construction of the proposed 2008 NHIP would not impair implementation of, or physically interfere with, emergency response and evacuation efforts. Further, the emergency evacuation location for all buildings in the Northwest zone is the Sunset Canyon Recreation area, which would not be affected by construction activities associated with the proposed 2008 NHIP. Therefore, the impact of construction and operation of the 2008 NHIP on emergency response and emergency evacuation plans (including the Campus Emergency Response Plan, the Disaster Response Plan, the Disaster Initial Response Plan, or the Hazardous Materials Response Plan) would be less than significant. No project-specific mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

As with the proposed 2008 NHIP, construction and operation activities associated with remaining buildout of the 2002 LRDP, as amended, could potentially affect emergency response or evacuation plans due to temporary construction barricades or other obstructions that could impede emergency access on campus. However, as required by 2002 LRDP Final EIR PP 4.13-6, multiple emergency access or evacuation routes are provided on-campus to ensure that, in the event one roadway or travel lane is temporarily blocked, another may be utilized.

Furthermore, ongoing coordination between the UCPD, LAFD, and UCLA pursuant to 2002 LRDP Final EIR PP 4.13-8 ensures that roadway or travel lane closures would be coordinated with emergency response personnel to ensure that individual development projects under the LRDP Amendment would not impair implementation of, or physically interfere with, emergency response and evacuation efforts.

Continued compliance with 2002 LRDP Final EIR PPs 4.13-5, 4.13-6, and 4.13-8 (presented in Section 4.13, Transportation/Traffic) ensures that impacts associated with emergency response or evacuation would remain less than significant by providing multiple emergency access or evacuation routes and coordinating roadway or travel lane closures with emergency response personnel. No mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.6-8 ***Implementation of the proposed Project would not impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan. This impact is less than significant and no mitigation is required.***

4.6.4 CUMULATIVE IMPACTS

The geographical context for the analysis of cumulative impacts from hazardous materials use, transport, and disposal is the City of Los Angeles, unless otherwise specified in the discussion below for context. This analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of the City of Los Angeles General Plan Framework and development of the related projects in Table 4-1, Off-Campus Related Projects, in Section 4.0, Introduction to the Environmental Analysis.

It is anticipated that future growth in the Los Angeles area will result in an incremental increase in the amount of hazardous materials used, treated, transported, and disposed area-wide. Although each development site has potentially unique hazardous materials considerations, it is expected that future growth would comply with the range of federal, State, and local statutes and regulations applicable to hazardous materials, and would be subject to existing and future enforcement by the appropriate regulatory agencies. For these reasons, cumulative impacts resulting from the use, transport, and disposal of hazardous materials or risk of upset from a release of hazardous materials, would be less than significant.

As discussed above under Impacts 4.6-1 and 4.6-3, the proposed 2008 NHIP and buildout of the 2002 LRDP, as amended, would not result in significant public hazards as a result of (1) hazardous materials use, transport, or disposal or (2) accidental release of hazardous materials. While the UCLA campus will continue to use varying amounts and types of hazardous materials (including chemical and bio-hazardous materials) in day-to-day activities and operations, the campus would continue to comply with all applicable laws and regulations concerning the use, storage, transportation, and/or exposure of hazardous materials, as well as with existing on-campus programs, practices, and procedures as required by PP 4.6-1, to reduce potential impacts for each project under the 2002 LRDP, as amended. Consequently,

the contribution of the proposed Project to cumulative impacts is also less than significant. This is considered to be a less than significant impact.

Cumulative effects of hazardous waste disposal (and the geographical area of impact) vary based upon the type of waste in question. Nonradioactive hazardous waste materials are disposed into readily available, locally permitted hazardous waste facilities, while radioactive waste is disposed of in facilities that accept radioactive waste generated nationwide. (Cumulative impacts from disposal of solid waste are evaluated in Section 4.14, Utilities.) Disposal facilities that accept nonradioactive hazardous waste are not currently in short supply and are not anticipated to be in short supply in the future; thus, cumulative impacts for nonradioactive hazardous waste would be less than significant. UCLA generates less than 0.01 percent of the total amount of nonradioactive hazardous waste generated in Los Angeles County. Therefore, the contribution of the proposed Project to cumulative impacts associated with the use, storage, transportation, and/or exposure of nonradioactive hazardous materials would also be less than significant. This is considered to be a less than significant impact.

Low-level radioactive waste (LLRW) must be disposed of in authorized facilities, which accept LLRW from a wide array of sources in addition to UCLA. As discussed above, UCLA currently generates only Class A waste. UCLA contracts with radioactive waste brokers to remove radioactive waste from the campus, and the waste brokers take the waste to approved radioactive waste facilities, all of which are out of state. The capacity of available approved radioactive waste facilities is not anticipated to close within the planning horizon of the 2002 LRDP, as amended, and thus cumulative impacts associated with the disposal of Class A waste are expected to be less than significant. It should be noted that the 2008 NHIP would not involve the use of LLRW and would not contribute to cumulative impacts.

While LLRW that is classified as Class B or Class C is not currently generated on campus, the potential exists for the generation of some Class B waste in the future due to changes in medical or research activities. It is not anticipated that Class C waste would be generated on campus. However, even if the campus generated Class B and/or Class C waste in the same levels as in previous years, it would represent only 0.1 percent (0.5 cubic feet) of the total radioactive waste volume generated on campus, which in 2007 was 493 cubic feet (refer to Table 4.6-1 above). Although specific disposal sites are currently undefined, as UCLA has not previously needed to dispose of Class B and Class C LLRW, the nominal amount of waste generated would not be expected to represent an incrementally significant disposal volume that would cumulatively impact a disposal site, which could be selected from facilities across the United States. As a result, cumulative impacts associated with the LLRW disposal nationwide are anticipated to be less than significant.

However, with respect to the UCLA campus under the 2002 LRDP, as amended, in the event that no disposal options for Class B and Class C LLRW are available, the ESF provides secure storage space for long-term (seven to ten years or more) storage of Class B and Class C wastes. Based on the estimated 0.1 percent (0.5 cubic feet) of total radioactive waste volume that would include Class B and Class C LLRW, the ESF has the capacity to accommodate all LLRW Class B and Class C waste volumes potentially produced by the campus through the planning horizon of the 2002 LRDP, as amended. Because the amount of Class B and Class C waste that is or could be produced on campus is extremely small and because the campus has the capacity to store Class B and C waste, the contribution of the 2002 LRDP, as amended, to potential impacts associated with the cumulative disposal of radioactive waste, both at present and in the future, is not cumulatively considerable. This is considered to be a less than significant impact.

It is possible that a number of the related projects and other future development in the City of Los Angeles would involve significant renovation demolition activity, which could subject construction workers to health or safety risks through exposure to hazardous materials, although the individual workers potentially affected would vary from project to project. It is anticipated that future development projects would adhere to the applicable federal, State and local requirements that regulate worker safety and exposure. As a result, cumulative impacts would be less than significant. As discussed under Impact 4.6-2, UCLA would continue to adhere to these applicable regulations, as well as established campus programs and practices, including the Asbestos Management Program and Lead Compliance program. As a result, the contribution of the proposed Project, to cumulative impacts associated with potential exposure of construction workers to hazardous materials would be less than significant. This is considered to be a less than significant impact.

It is further possible that a number of the related projects and other future development in the City of Los Angeles could expose residents and construction workers to contaminated soil or groundwater. It is anticipated that future development projects would adhere to the applicable federal, State, and local laws and regulations that govern underground storage tanks and pesticide use, as well as requirements applicable to disposal and cleanup of contaminants. As a result, cumulative impacts would be less than significant. This is considered to be a less than significant impact.

Although there is no known soil or groundwater contamination on the campus, in the event that soil or groundwater contamination is discovered, UCLA would continue to adhere to these regulations, as well as established campus programs and practices (see PP 4.6-4). As a result, the contribution of the proposed Project to cumulative impacts associated with exposure to contaminated soil or groundwater would be less than significant. This is considered to be a less than significant impact.

Future development in the City of Los Angeles, may involve hazardous emissions or the handling of acutely hazardous materials, substances, or wastes within ¼ mile of an existing or proposed school. It is anticipated that future development would comply with applicable laws and regulations pertaining to hazardous wastes, and that risks associated with hazardous emissions or materials to existing or proposed schools located within ¼ mile of future development would be eliminated or reduced through proper handling, disposal practices, and/or clean-up procedures. Accordingly, cumulative impacts on schools associated with hazardous emissions or handling of hazardous materials are less than significant. As discussed under Impact 4.6-5, UCLA would comply with applicable hazardous materials and disclosure requirements and, in addition, will continue to implement the measures identified in PP 4.6-1. As a result, the contribution of the proposed project to cumulative impacts on schools associated with hazardous emissions or handling of hazardous materials within a quarter mile of an existing or proposed school would be less than significant. This is considered to be a less than significant impact.

Future development in the City of Los Angeles may be located on or near a site included on a list of hazardous materials sites compiled pursuant to *Government Code,* Section 65962.5. It is anticipated that future development would comply with applicable laws and regulations pertaining to hazardous wastes, and that risks associated with identified hazardous materials sites would be eliminated or reduced through proper handling, disposal practices, and/or clean-up procedures. In many cases, development applications for projects affected by hazardous materials on identified sites would be denied by the City of Los Angeles if adequate cleanup or treatment is not feasible. Accordingly, cumulative impacts on the public or environment associated with development on or near hazardous materials sites would be less than significant. As discussed under Impact 4.6-6, there are no listed contaminated soil or

groundwater sites, as listed pursuant to *California Government Code,* Section 65962.5 within the 2008 NHIP sites. Additionally, all previous LUSTs on campus have been remediated and properly closed. All remaining USTs on campus conform to applicable laws and regulations and are registered and permitted by the LAFD. If future UST-related cleanup were determined to be necessary, all work would be performed in accordance with the guidelines of the Los Angeles Regional Water Quality Board Underground Storage Tank Program. All non-UST hazardous waste storage locations are managed in accordance with all applicable federal and State laws, such as RCRA and the California Hazardous Waste Control Law, as well as all existing campus programs, practices, and procedures described in Section 4.6.1 (Environmental Setting, Hazardous Materials Used On Campus) and Section 4.6.2 (Regulatory Framework). As a result, the contribution of future development under buildout of the 2002 LRDP, as amended, to cumulative impacts associated with development on or near hazardous material sites would be less than significant. This is considered to be a less than significant impact.

Future development in the City of Los Angeles, including the related projects, may be located in the vicinity of a private airstrip, although most future projects would not be so located. The risk to each future development project posed by a private airstrip is based upon location, and is therefore unique. It is also likely that such risk, if sufficiently high, would be a factor in any decision to approve or deny future development proposals. As a result, cumulative risks to future development associated with proximity to private airstrips would be less than significant. As discussed under Impact 4.6-7, the RRUCLAMC operates a helistop for emergency transport. The proposed Project would not increase the limited number of flights currently associated with this helistop and future development on campus would not result in a safety hazard associated with the helistop. This is considered to be a less than significant impact.

Finally, construction and operation associated with the related projects and other future development in the City of Los Angeles could result in activities that could interfere with adopted emergency response or evacuation plans, primarily by temporary construction barricades or other obstructions that could impede emergency access. It is anticipated that future development projects would undergo CEQA review of potential impacts on adopted emergency response or evacuation plans and would be required to implement measures necessary to mitigate potential impacts. As a result, cumulative impacts relating to interference with adopted emergency response or evacuation plans would be less than significant. Construction and operation activities associated with the 2008 NHIP and buildout of the 2002 LRDP, as amended, with respect to emergency response or evacuation plans due to temporary construction barricades or other obstructions that could impede emergency access on campus are less than significant with implementation of PP 4.13-6. Multiple emergency access or evacuation routes are provided on campus to ensure that, in the event one roadway or travel lane is temporarily blocked, another may be utilized. Furthermore, ongoing coordination between the UCPD, the LAFD, and UCLA pursuant to 2002 LRDP Final EIR PP 4.13-8 ensures that roadway or travel lane closures will be coordinated with emergency response personnel to ensure that individual development projects under the 2002 LRDP, as amended, would not impair implementation of, or physically interfere with, emergency response and evacuation efforts. As a result, the contribution of the proposed 2008 NHIP and future development under buildout of the 2002 LRDP, as amended, to cumulative impacts associated with interference with adopted emergency response or evacuation plans would be less than significant. This is considered to be a less than significant impact.

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4.7 HYDROLOGY AND WATER QUALITY

This section addresses the baseline environmental setting and potential hydrology and water quality impacts resulting from the proposed Project. The environmental setting for these resources is summarized for the UCLA campus and the 2008 NHIP site. The impact analysis addresses effects from project implementation on the hydrologic and water quality parameters related to flooding, drainage, groundwater dewatering, and groundwater and surface water quality. Impacts from the proposed Project on existing and future water supply sources and wastewater treatment are described in Section 4.14, Utilities and Service Systems. Issues related to potential exposure of construction workers to groundwater contamination are described in Section 4.6, Hazards and Hazardous Materials.

The environmental setting for this section describes the features of the campus environment that influence drainage, runoff, and the impacts of site development. Data used to prepare this section were taken from various sources, including prior project environmental documentation, the Los Angeles County Department of Public Works web site, the Basin Plan for Coastal Watersheds of Los Angeles and Ventura Counties, flood hazard zone mapping information from the Federal Emergency Management Agency, and a site-specific hydrology report prepared for the 2008 NHIP project site (*Hydrology Report for UCLA-Campus Housing Infill)* prepared by RBF Consulting (2008)(included as Appendix G). Full reference information for all sources cited within this section is provided in Section 4.7.5, References, of this section.

4.7.1 ENVIRONMENTAL SETTING

Rainfall

The 30-year average annual rainfall at UCLA is 18.67 inches. However, because of large year-to-year differences in precipitation, the median rainfall amount of 15.75 inches best reflects annual expected rainfall (UCLA 2003b).

Surface Water Drainage

UCLA Campus

Approximately 64 percent of the 419-acre UCLA campus consists of impervious surfaces (e.g., buildings, parking lots, roadways, and other paved areas). As the majority of the runoff through the campus originates upstream of the campus in the Stone Canyon Watershed (a sub-watershed of the Ballona Creek Watershed), storm water runoff in campus storm drains is not substantially affected by slight increases in the percentage of impermeable surface area on the campus. An extensive campus storm drain system controls surface runoff as it enters the Los Angeles County storm drainage system.

As illustrated by Figure 4.7-1, drainage within the campus generally flows from the northeast and northwest sections of the campus to the south towards Le Conte Avenue. Runoff is collected by an existing campus storm water drainage system that the University maintains. The major drainage course from the north is from the upstream Stone Canyon Watershed that conveys flows through a combination of below grade and surface storm drain channels to an underground box culvert that is located at the Sunset Boulevard boundary of the campus. From that box culvert, the storm water drainage flows through an open channel (commonly named Stone Canyon Creek) for a small section from Sunset Boulevard/Royce Drive adjacent to the Corinne A. Seeds University Elementary School to the Andersen School, Collins Executive Education Center. At the Collins Executive Education Center, the storm water drainage enters a 66-inch underground pipe that runs northwest to southwest.

All campus storm water enters the Los Angeles City system via concrete structures at three locations: Gayley Avenue, Westwood Boulevard, and Hilgard Avenue. In the northwest and southwest portions of campus, some flows are also received by the City system on Veteran Avenue (Figure 4.7-2). The campus storm drains adequately handle runoff for the majority of rainfall events; however, at times, some locations on campus (e.g., Westwood Plaza and Stone Canyon Creek) experience temporary, limited shallow ponding and surface flow during major storm events, though this is primarily due to localized topography and drainage (UCLA 2003b).

The City storm drain system, after carrying runoff from the campus and contributing upland areas, connects to the Los Angeles County system near Wilshire Boulevard. These flows are ultimately released into Ballona Creek in the vicinity of Culver Boulevard. Ballona Creek is a nine-mile-long flood-protection channel that drains the Ballona Watershed portion of the Los Angeles Basin. The watershed is bound by the Santa Monica Mountains on the north, the Harbor Freeway (State Route 110) on the east, and Baldwin Hills to the south, and discharges into the Santa Monica Bay. The watershed encompasses about 130 square miles and consists of 64 percent residential uses, 8 percent commercial uses, 4 percent industrial uses, 17 percent open space, and 7 percent other uses. In addition to numerous storm drains, Centinela Creek, Sepulveda Canyon Channel, and Benedict Canyon Channel discharge into Ballona Creek (LADPW 2008).

2008 NHIP Sites

The existing 2008 NHIP project sites consist of built areas (e.g., the Office of Residential Life Building and portions of Sproul Hall loading area that would be demolished, concrete walkways and driveways, roadways and landscaped areas. Charles E. Young Drive West and De Neve Drive intersect the project site. The site is located within the Los Angeles County Coastal Watershed. For the purposes of this analysis, seven subareas have been defined, as shown in the Subarea Figure for existing Conditions (Figure 4.7-3). These subarea designations have been developed to support the project-level impact analysis for the NHIP:

- ***Subarea One: Lower De Neve.*** Subarea one is located along Gayley Avenue, immediately west of the existing De Neve Commons complex. It consists primarily of a landscaped area, generally sloping to the street at a grade of approximately three to one (3:1). This area sheet flows down the slope to area drains. These drains are connected to the street gutter via curb drains and outlets. The street gutter flows southerly to a catch basin in Gayley Avenue located approximately 1,300 feet south of the project site which, in turn, connects to a 63-inch storm drain arch within Gayley Avenue. The storm drain has an approximate capacity of 825 cubic feet per second (cfs).

- ***Subarea Two: Upper De Neve.*** The Upper De Neve subarea is located along De Neve Drive and consists primarily of a parking lot that has recently been converted to basketball courts, a concrete pedestrian sidewalk, and the street itself. This area drains into a 3.5-foot catch basin in De Neve Drive, which connects to the 24-inch storm drain also within De Neve Drive.

- ***Subarea Three: Sproul West.*** This subarea area is located west of existing Sproul Circle and consists almost entirely of landscaping that generally slopes at a 3:1 grade to the existing roadway. Also in this area are two concrete pedestrian stairways that connect the lower area of this portion of the campus to the Rieber Precinct above. The area sheet flows into Sproul Circle and drains to a grated inlet within the Circle. This inlet eventually connects to the 24-inch storm drain in De Neve Drive.



Surface Runoff

Figure 4.7-1

2008 NHIP and LRDP Amendment

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Source: RBF Consutling 2008

Existing Storm Drain Locations

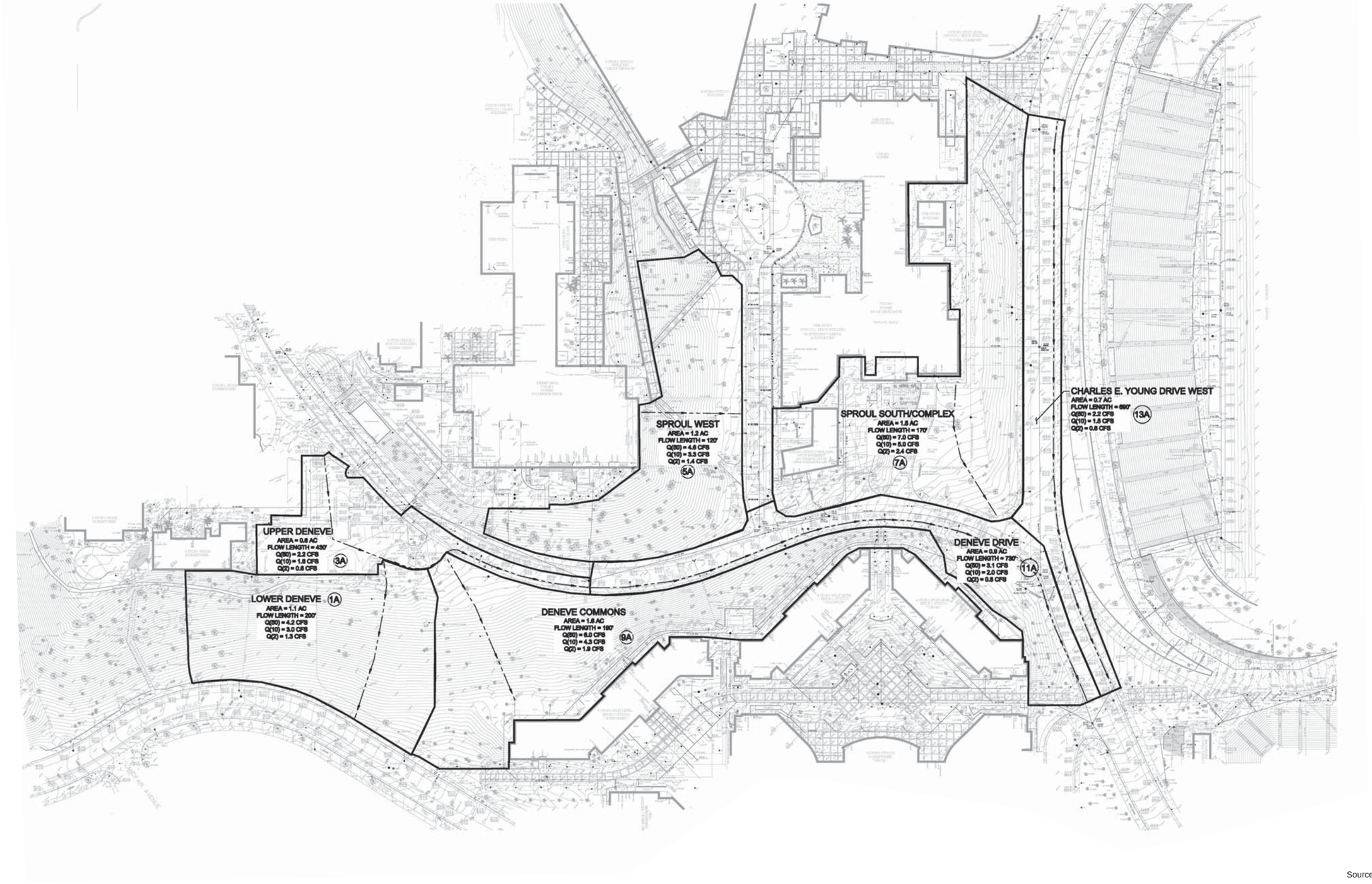
Figure 4.7-2

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

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Source: RBF Consulting 2008

Existing Conditions – Subarea Watershed Map

Figure 4.7-3

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

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- ***Subarea Four: Sproul South Complex.*** Subarea Four consists of a driveway/loading dock; a three-story building and a one-story building, which will both be removed; concrete walks; a stairway to Sproul Hall; and a landscape area along Charles E. Young Drive West. This area generally sheet flows to De Neve Drive and Charles E. Young Drive West.

- ***Subarea Five: De Neve Commons.*** This subarea is primarily landscape that generally slopes at a 3:1 grade. In addition, it includes concrete pedestrian walks in support of De Neve Commons and a transformer enclosure. This subarea drains into an area drain system that connects to the 42-inch storm drain in Charles E. Young Drive West.

- ***Subarea Six: De Neve Drive.*** This subarea is primarily a street with concrete sidewalks and landscaped slopes that vary from approximately 10 to 30 percent. This subarea drains in a southerly direction to a catch basin within Charles Young E. Drive West, which then connects to a 42-inch storm drain also within Charles Young E. Drive West.

- ***Subarea Seven: Charles E. Young Drive West.*** Subarea Seven is a street (Charles Young E. Drive West) that drains in a southerly direction to a catch basin within the street, which then connects to a 42-inch storm drain also within Charles Young E. Drive West.

Storm Water Quality

Constituents found in typical urban runoff vary as a result of differences in rainfall intensity and occurrence; geographic features; the land use of a site; vehicle traffic; and percentage of impervious surface. The U.S. Environmental Protection Agency (USEPA) estimates that, without adequate erosion- and runoff-control measures, short-term runoff from construction sites can add more sediment to receiving waters than that deposited by natural processes over a period of several decades.

Campus storm water quality is typical of most urban areas in that it includes a variety of common contaminants. These pollutants consist primarily of suspended sediments; limited fertilizers and pesticides used in grounds maintenance; and contaminants that are commonly associated with automobiles (e.g., oil, grease, and hydrocarbons) (UCLA 2003b).

Flood Hazards

As discussed in the Initial Study included in Appendix A, flood hazard zone mapping information from the Federal Emergency Management Agency (FEMA 1995) indicates that the majority of the campus is within Zone X (an area that is determined to be outside the 100- and 500-year floodplains). A linear area along Sunset Boulevard following Stone Canyon Creek is within Zone A (Figure 4.7-4). Zone A represents areas inundated by 100-year flooding, for which no base flood elevations[1] have been determined. The majority of the housing on campus is located in the Northwest zone (Zone X), and additional development of residential uses such as the proposed 2008 NHIP, would occur there. Therefore, as no housing would be placed in a 100-year flood zone, and as identified in the Initial Study, no further analysis of this issue is required in this section for the proposed Project.

The Stone Canyon Reservoir, located approximately two miles north of the campus, is operated by the City of Los Angeles Department of Water and Power (LADWP). As reported in the 2002

[1] The base flood elevation (BFE) is the elevation associated with a flood that has a one percent annual chance of being equaled or exceeded in any given year. It is shown on the Flood Insurance Rate Map.

LRDP Final EIR, a study that URS completed in April 2002 evaluates the seismic stability of the Stone Canyon Dam. This study (approved by the State Department of Water Resources, Division of Safety of Dams in 2003) concludes that a seismic-related or sudden accidental breach of the dam structure is considered remote and speculative. Therefore, as identified in the Initial Study, this issue will not be addressed further in this section (UCLA 2008).

Groundwater

The campus overlies the Santa Monica Groundwater Basin, which is located within the Santa Monica Plain (an alluvial apron formed at the southern edge of the Santa Monica Mountains) (DWR 2004). Generally, the Santa Monica Plain is underlain by water-bearing sediments of considerable thickness, and depth to groundwater measured for UCLA construction projects has ranged from approximately 28 to 53 feet below grade, with flow in a generally southerly direction. Primary sources of groundwater recharge into the Santa Monica Basin are (1) direct infiltration from precipitation; (2) subsurface flow from the Santa Monica Mountains; and (3) direct infiltration into the basin from irrigation (MWD 2007).

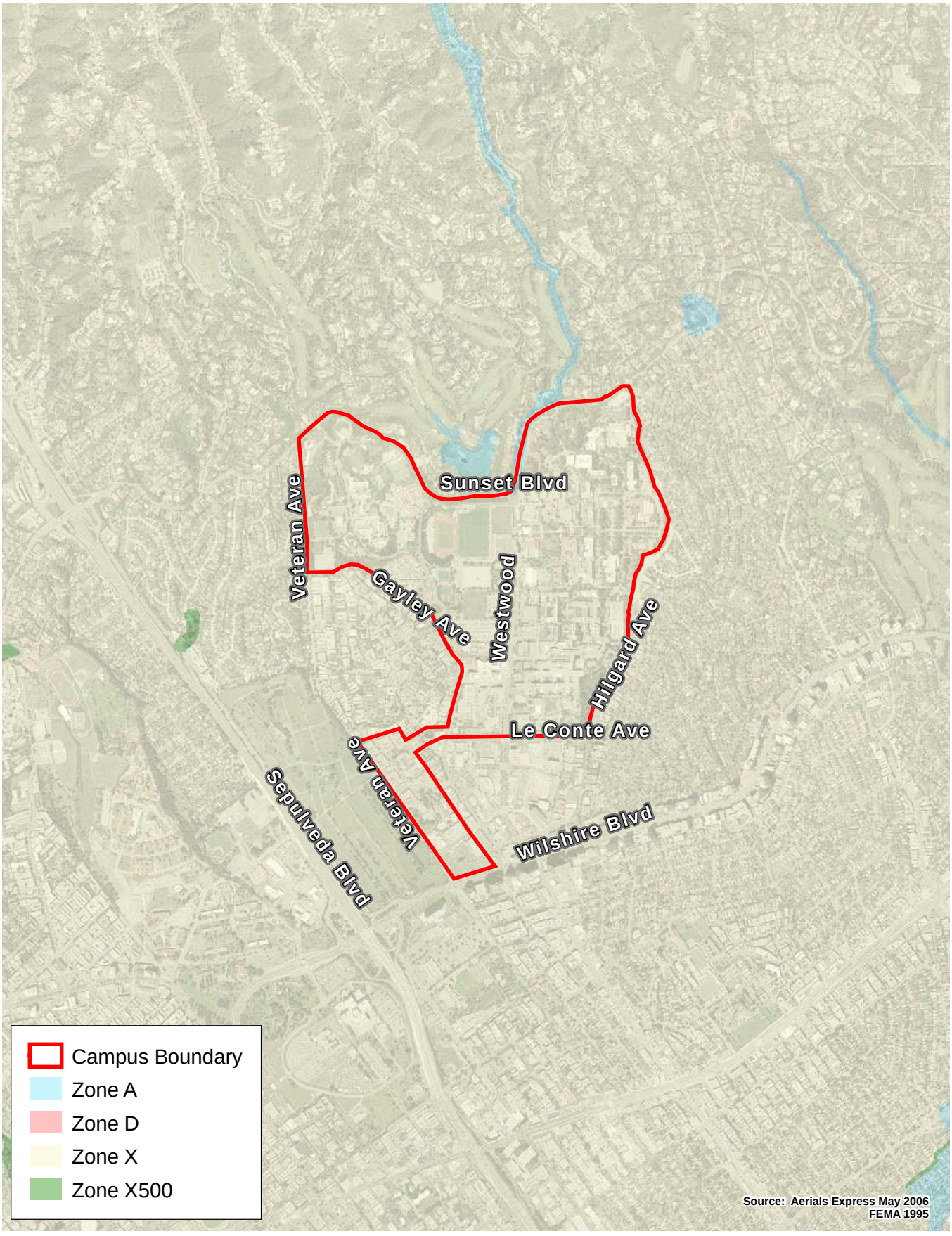
Elevated levels of salinity and volatile organic compounds (VOCs) have been identified in the western portion of the Santa Monica Groundwater Basin. The degradation of water quality from either salt-water intrusion or the introduction of VOCs limits or affects the ability to use the groundwater resources available in the Santa Monica Basin (MWD 2007). An investigation by the City of Santa Monica determined that historical land uses in the area, including industrial uses and municipal, commercial, and industrial dumps have contributed to substantial volatile organic compound (VOC) contamination throughout the Santa Monica Groundwater Basin (UCLA 2003b). Although VOCs or other contaminants could be present in groundwater in the vicinity of the campus, no existing groundwater contamination within the campus area is known, and no existing cleanup work is necessary or now occurs. The only recorded instance of discovered contaminated soils on campus was from an underground storage tank (LUST); however, corrective action was performed and completed on the release from the UST regulatory closure has been received (refer to Impact 4.6-4 in Section 4.6.3, Hazards and Hazardous Materials).

4.7.2 REGULATORY FRAMEWORK

Federal

Clean Water Act

The Clean Water Act (CWA) was designed to restore and maintain the chemical, physical, and biological integrity of United States waters. The CWA also directs states to establish water quality standards for all waters of the United States and to review and update such standards on a triennial basis. In 1972, the CWA was amended to prohibit discharges of pollutants to waters of the United States from any point source, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, the CWA was again amended to require that the USEPA establish regulations for permitting of storm water discharges (as a point source) by municipal facilities, industrial facilities, and construction activities under the NPDES permit program. The regulations require that municipal separate storm sewer system (MS4) discharges to surface waters must be regulated by an NPDES permit. The USEPA has delegated responsibility for implementation of portions of the CWA to the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB), including water quality control planning and control programs such as the NPDES Program.



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FEMA Flood Zone Designations

Figure 4.7-4

2008 NHIP and LRDP Amendment

N W E S

2,000 1,000 0 2,000 Feet

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Section 303 of the CWA requires States to adopt water quality standards for all surface waters of the United States. Section 303(c)(2)(b) of the CWA requires states to adopt numerical water quality standards for toxic pollutants for which the USEPA has published water quality criteria and which reasonably could be expected to interfere with designated uses in a water body. Section 304(a) requires the USEPA to publish water quality criteria that accurately reflects the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards.

The CWA also requires States to adopt water quality standards for water bodies that have designated beneficial uses (e.g., municipal, agricultural supply, recreational), along with the water quality criteria necessary to support those uses. These water quality criteria are set concentrations of pollutants (e.g., suspended sediment, chloride, heavy metals) or narrative statements that represent the quality of water that is necessary to support a beneficial use. If the designated beneficial uses of a water body are compromised by pollutants, Section 303(d) of the CWA requires that the water body be listed as "impaired". Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each water quality pollutant that is causing the impairment. The USEPA defines a TMDL as "a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and non-point sources". Ballona Creek is an impaired water body that would receive storm water runoff from the campus; pollutants of concern for Ballona Creek include sediment, bacteria/viruses, toxicity, trash and metals (CCC 2006).

All projects resulting in discharges, whether to land or water, are subject to Section 13263 of the *California Water Code* and are required to obtain approval of Waste Discharge Requirements (WDRs) by the RWQCBs. Land- and groundwater-related WDRs (i.e., non-NPDES WDRs) regulate discharges of process and wash-down wastewater and privately or publicly treated domestic wastewater. WDRs for discharges to surface waters also serve as NPDES permits, which are further described below. The campus is not considered a point-source for regulatory purposes and, therefore, is not subject to non-NPDES WDRs.

State

Responsibility for the protection of water quality in California rests with the SWRCB and the nine RWQCBs; the campus is within the Los Angeles RWQCB (LARWQCB). The SWRCB establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and State water quality statutes and regulations. The RWQCBs develop and implement Water Quality Control Plans (Basin Plans) that consider regional beneficial uses, water quality characteristics, and water quality problems. The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) is discussed below and implements a number of federal and State laws for the proposed project area, the most important of which are the State Porter-Cologne Water Quality Control Act and the Federal CWA.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (*California Water Code*) was enacted by the State of California in 1969 and became effective on January 1, 1970. The legislation has served

as a model for subsequent water quality legislation by the federal government and other State governments. The *California Water Code* authorizes the SWRCB to adopt, review, and revise policies for all waters of the State (including both surface waters and groundwaters) and directs the nine RWQCBs to develop regional Basin Plans. Section 13170 of the *California Water Code* also authorizes the SWRCB to adopt water quality control plans on its own initiative. In the event of inconsistencies among various SWRCB and Regional Board plans, the more stringent provisions apply (LARWQCB 1994).

Basin Plan for Coastal Watersheds of Los Angeles and Ventura Counties

The LARWQCB Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties covers the UCLA campus and is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan: (1) designates beneficial uses for surface and ground waters; (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and to conform to the State's anti-degradation policy; and (3) describes implementation programs to protect all waters in the region. The Basin Plan incorporates by reference all applicable State and Regional Board plans and policies along with other pertinent water quality policies and regulations (LARWQCB 1994).

"Beneficial uses" form the cornerstone of water quality protection under the Basin Plan. Once beneficial uses are designated, appropriate water quality objectives can be established and programs that maintain or enhance water quality can be implemented to ensure the protection of beneficial uses. The designated beneficial uses, together with water quality objectives (referred to as "water quality criteria" in federal regulations), form water quality standards.

Water quality standards must be developed and submitted to the USEPA for approval. Narrative or numerical water quality objectives have been developed for the following factors and apply to all inland surface waters and enclosed bays and estuaries: ammonia; bacteria; bioaccumulation; biochemical oxygen demand (BOD); biostimulatory substances; chemical constituents; chlorine; color; exotic vegetation; floating materials; methylene blue activated substances; mineral quality; nitrogen; oil and grease; dissolved oxygen; pesticides; potential of Hydrogen (pH); polychlorinated biphenyls (PCBs); radioactive substances; solid, suspended, or settleable materials; taste and odor; temperature; toxicity; and turbidity. Water quality objectives are the allowable limits of the water quality constituents (listed above) that are established to protect the beneficial uses of the water or to prevent nuisance.

NPDES Permits

Following is a discussion of the existing Phase 1 and Phase 2 NPDES Permits currently in effect. Additionally, to provide a comprehensive discussion of the regulatory framework, the Draft Phase I NPDES General Construction Permit under consideration by the SWRCB is discussed.

Phase 1

As authorized by the Clean Water Act, the NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches; individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit. Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. In most cases, the NPDES permit program is administered by authorized states (USEPA 2007).

Phase 1 of the NPDES Program began in November 1990 and required NPDES permits for storm water discharge from a large number of priority sources, including MS4s serving populations of over 100,000; several categories of industrial activity; and construction activity that disturbed five or more acres of land. In March 2003 new regulations came into effect essentially extending coverage to construction sites disturbing one acre or more.

The SWRCB's Division of Water Quality issues NPDES storm water permits for general construction activities. The LARWQCB enforces the NPDES program for the State of California within its jurisdiction (including all of Los Angeles and Ventura Counties), which includes the UCLA campus. A project that disturbs one or more acres of soil is required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (NPDES No. CAS000002, California Water Resources Control Board Resolution No. 2001-046; Modification of Water Quality Order 99-08-DWQ, SWRCB, NPDES, General Permit for Storm water Discharges Associated with Construction Activity [adopted by the SWRCB on April 26, 2001]).

Coverage under the General Construction Permit is accomplished by completing and filing a Notice of Intent with the SWRCB and by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) prior to grading. The primary objective of the SWPPP is to identify, construct, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants in storm water discharges from the construction site. Required elements of a SWPPP include: (1) a site description that addresses the elements and characteristics specific to the site; (2) descriptions of BMPs for erosion and sediment control; (3) BMPs for construction waste handling and disposal; (4) a description of how approved local plans will be implemented; (5) proposed post-construction controls; and (6) non-storm water management. The proposed Project is required to comply with applicable Phase I NPDES General Construction permit requirements. The existing General Construction Permit does not include numeric effluent limitations (NELs) or volumetric discharge restrictions.

Phase 2

The NPDES program was subsequently expanded to include Phase 2, which regulates storm water discharges from small MS4s (such as schools and universities) and construction sites of one to five acres (USEPA 2000). As part of Phase 2, the SWRCB adopted a General Permit for the Discharge of Storm Water from Small MS4s (WQ Order No. 2003-0005-DWQ) to provide permit coverage for smaller municipalities, including non-traditional Small MS4s, which include public campuses. Currently, the UCLA campus is not enrolled under the Phase 2 MS4 permit program and is not required to implement requirements under this program. The SWRCB is expected to release a new Phase 2 MS4 permit for which UCLA will enroll and implement applicable requirements. As these requirements are not currently known, specific compliance requirements cannot be identified at this time. It is anticipated that the new permit will include requirements on treatment BMPs and site design requirements.

Pending Draft Regulatory Framework, Phase 1 NPDES General Construction

On March 18, 2008, the SWRCB issued a Preliminary Draft General NPDES Permit for Construction Activities (Draft Permit). The Draft Permit has not been adopted by the SWRCB at the time this Draft EIR is being prepared and is not currently applicable to the proposed Project; however, it may become affected prior to initiation of the construction activities and is therefore discussed herein. If adopted, this permit would:

- Establish site-specific Numeric Action Levels (NAL) for turbidity and pH shall be calculated prior to submittal of the SWPPP and shall remain the same for the life of the project;

- Establish a threshold for Numeric Effluent Limitations (NELs);

- Provide for Erosion Control Measures;

- Provide for Runon and Runoff Controls;

- Provide for Sediment Controls;

- Provide for Non-Storm water Management BMPs;

- Establish New and Redevelopment Storm Water Performance Standards;

- Require Inspection, Maintenance and Repair of BMPs;

- Define SWPPP Preparation, Implementation, and Oversight;

- Establish a Rain Event Action Plan (REAP).

4.7.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

Project-level analysis of the impacts to hydrology and water quality from implementation of the 2008 NHIP includes the development of site-specific hydrology for the project site. This site hydrology was developed using the methodology described in the Los Angeles County Hydrology Manual (dated 2006). The Hydrologic Map for Beverly Hills, excerpted from the Los Angeles County Hydrology Manual, is provided in Appendix B – Map 17 of the technical report included in Appendix G and indicates that the soils over the site are classified as Soil Number 13. The Modified Rational Method was then used to calculate the storm water runoff rates, which is based on the Rational Formula. Design discharges were computed using the computer program "TC Calculator", by the Los Angeles County Department of Public Works. Hydrologic calculations were generated to determine the 2-year runoff volumes for water quality impact purposes, and the 50-year and 10-year runoff rates from the 2008 NHIP site for storm water management purposes.

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed project would not have a significant impact for the following thresholds from the CEQA Checklist and no further analysis of these issues is presented in this section.

- Would the project 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?

- Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?

- Would the project 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?

- Would the project cause inundation by seiche, tsunami, or mudflow?

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Hydrology and Water Quality.

- Would the project violate any water quality standards or waste discharge requirements *(Impact 4.7-1)*?

- Would the project otherwise substantially degrade water quality *(Impact 4.7-1)*?

- Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted) *(Impact 4.7-2)*?

- Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site *(Impact 4.7-3)*?

- Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site *(Impact 4.7-4)*?

- Would the project create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff *(Impact 4.7-5)*?

- Would the project 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 *(Impact 4.7-5)*?[2]

Impact Analysis

New Campus Program, Practice and Procedure

The following new campus program, practice, and procedure (PP) shall be implemented throughout the planning horizon for the proposed Project and has been introduced to identify the campus practices related to compliance with applicable water quality regulations. It is therefore considered part of the proposed Project and assumed in the analysis presented in this section.

[2] While this threshold of significance appears in Section XVI (Utilities and Service Systems) of Appendix G of the CEQA Guidelines, all impacts associated with storm drain capacity or storm water quantity are presented in this section of the EIR.

PP 4.7-1 *Construction and operation of projects on campus shall comply with requirements and water quality standards set forth within current NPDES Permit regulations (Phase I and Phase II) at the time of project approval. Pursuant to Phase I permit requirements, UCLA shall develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices (BMPs) for reducing or eliminating construction-related and post-construction pollutants in site runoff.*

Campus Programs, Practices and Procedure Carried Forward from the 2002 LRDP Final EIR

The following campus PP shall be continued throughout the planning horizon for the proposed Project. It is therefore considered part of the proposed Project and assumed in the analysis presented in this section. Note that changes to the 2002 LRDP PP are shown in **bold-faced type**; these changes have been made to clarify the current practice to evaluate the potential hydrologic and water quality effects of each individual project to ensure that appropriate infrastructure and BMPs are included in individual project designs.

PP 4.7-5 ***Site-specific hydrologic evaluation shall be conducted for each proposed development project based on the project-specific grading plan and site design of each individual project. This evaluation shall include, but not be limited to: (1) an assessment of runoff quality, volume and flow rate from the proposed project site; (2) identification of project-specific BMPs (structural and non-structural) to reduce the runoff rate and volume to appropriate levels; and (3) identification of the need for new or upgraded storm drain infrastructure (on and off campus) to serve the project.*** *Project design shall include measures to upgrade and expand campus storm drain capacity where necessary**, as identified through the project-specific hydrologic evaluation**. Design of future projects shall include measures to reduce runoff, including, **but not limited to,** the provision of permeable landscaped areas adjacent to structures to absorb runoff and the use of pervious or semi-pervious paving materials.*

Threshold	Would the project violate any water quality standards or waste discharge requirements? Would the project otherwise substantially degrade water quality?

Remaining Buildout of the 2002 LRDP as Amended Including the Proposed 2008 NHIP

Construction-related Impacts

As stated previously, the UCLA campus is not considered a point source for regulatory purposes and is not subject to waste discharge requirements (WDRs). While the campus has an industrial wastewater permit for wastewater discharge associated with the food service and laboratory uses on campus, no hazardous waste is discharged into the sewer or storm drain system on campus.

Implementation of the proposed Project would result in runoff exiting the site during project construction, project operation, and maintenance. Storm water runoff from the project site during construction could contain pollutants such as soils and sediments released during grading and excavation activities as well as petroleum-related pollutants due to spills or leaks from heavy

equipment and machinery. Other common pollutants that may result from construction activities include solid or liquid chemical spills; concrete and related cutting or curing residues; wastes from paints, stains, sealants, solvents, detergents, glues, acids, lime, plaster, and cleaning agents; and heavy metals from equipment.

The storm water runoff from the project site would discharge into the local drainage system operated by the City of Los Angeles, through which flows eventually pass into the Los Angeles County drainage system. The CWA establishes a framework for regulating potential water quality impacts from construction activities through the NPDES program. Construction activities that involve more than one acre (such as the 2008 NHIP) are required to file a notice of intent with the SWRCB, Division of Water Quality for coverage under the State Construction General NPDES permit. A SWPPP is also required and typically includes both source-control and treatment-control BMPs to reduce water quality impacts.

The BMPs that are most often used during construction include watering exposed soils; covering stockpiles of soil; installing sand bags to minimize off-site runoff; creating temporary desilting basins; and timing grading to avoid the rainy season (November through April). Provisions of the 2007 California Building Code's grading permit requirements and conditions require the reduction of erosion and sedimentation impacts. As required by new PP 4.7-1, compliance with the latest NPDES General Permit for Storm Water Discharges Associated with Construction Activity is required and a SWPPP that incorporates BMPs for reducing or eliminating construction-related pollutants in the site runoff would be prepared. As a result, compliance with the requirements of the SWPPP would reduce short-term general construction-related water quality impacts to levels considered less than significant.

Although the Preliminary Draft General NPDES Permit for Construction Activities has not been adopted by the SWRCB, it could be adopted prior to construction of the 2008 NHIP. Therefore, UCLA has reviewed the physical design features/BMPs that may need to be incorporated into the 2008 NHIP to comply with the provisions of the Draft Permit (related to increased runoff volume), should it be adopted and therefore, applicable to the proposed 2008 NHIP. It should be noted that these physical BMPs are not currently incorporated into the project design; however, based on review of the proposed site plan for the proposed 2008 NHIP and existing site conditions they are physically feasible and could be accommodated within the construction site impact footprint addressed in this EIR for the 2008 NHIP. In other words, no additional physical environmental impacts would occur with implementation of these BMPs beyond that addressed in the technical analyses presented in this EIR.

- ***Vegetated Swales.*** These strips would be approximately 100 feet long and 2 feet wide at their lowest point, with gently sloping grades to each side. They would be located within landscape areas already defined as part of the project (refer to Figure 3-5, 2008 NHIP Conceptual Site Plan).

- ***Wet Vault(s).*** Vaults with a permanent water pool, generally 3 to 5 feet deep, would be located under sidewalks, roadways, or access drives to allow for maintenance access.

- ***Cisterns or Storage Tanks.*** The cisterns for volume reduction would have a capacity of approximately 0.42 acre-feet or 137,000 gallons (to accommodate the increase in volume during a 2-year storm event from the 2008 NHIP site [refer to Table 3 in Appendix G of this EIR]). The feasibility of incorporating storage tanks into the proposed lower levels of one or more of the new residence halls (within existing proposed building footprints) is being studied.

Implementation of the remaining buildout of the 2002 LRDP, as amended, would involve additional construction projects that would have the potential for similar water quality impacts as described above for the 2008 NHIP. Compliance with new PP 4.7-1 identified above would ensure that construction-related water quality impacts for future construction projects under the 2002 LRDP, as amended, remain less than significant.

Operational Impacts

Development under the proposed Project would result in an increase of impermeable surface area associated with new buildings and additional pavement, which would result in additional runoff (e.g., storm water). Project-specific information regarding increased storm water rates and flows for the 2008 NHIP is discussed under Threshold 4.7-4. The constituent pollutants entering the campus and City and County storm drain systems as a result of development allowed under the 2002 LRDP, as amended, which includes the 2008 NHIP, would not change in character as a result of implementation of the proposed Project. Potential pollutants that could be generated by the operation of campus uses include but are not limited to: fuels, oils, lubricants and hydraulic fluids, radiator or battery fluids from automobile use; pesticides, herbicides, fertilizers; floatable wastes and trash; and wastes from street cleaning. Under the 2002 LRDP, as amended, the campus may develop additional academic, residential, and support uses that are substantially similar to existing campus uses and that would not contribute different types of pollutants than those now generated. Impacts resulting from the use of hazardous materials are separately addressed in Impacts 4.6-1 and 4.6-3 provided in Section 4.6, Hazards and Hazardous Materials.

In summary, the campus currently complies with, and would continue to comply with, applicable NPDES Permits adopted by the SWRCB (per new PP 4.7-1 identified above). Compliance with these statutes and regulations would ensure that storm water quality standards would not be violated by requiring discharges to meet the requirements of the SWRCB and RWQCB, which would reduce the discharge of pollutants from the campus. This impact would, therefore, be less than significant. However, new Mitigation Measure (MM) 4.7-1 is required for the 2008 NHIP and future development on campus with remaining buildout of the 2002 LRDP, as amended, to ensure that construction-related and post-construction pollutants in the runoff remain less than significant.

New Mitigation Measure

Although implementation of new PP 4.7-1 would ensure no significant water quality impacts would occur with implementation of the proposed Project, the following new mitigation measure has been identified to specifically address BMPs that shall be implemented for individual development projects (including the 2008 NHIP).

MM 4.7-1 *Best Management Practices (BMPs) shall be implemented for individual development projects, to the extent required by State law, to ensure compliance is maintained with all applicable NPDES requirements at the time of project construction. UCLA shall utilize BMPs as appropriate and feasible to comply with and/or exceed the current requirements under the NPDES program. BMPs that may be implemented include, but are not limited to, the following:*

Non-Structural/Structural

- *Landscape Maintenance*
- *Catch Basin Stenciling and Clean-out*
- *Efficient Irrigation Practices*
- *Litter Control*

- *Fertilizer Management*
- *Public Education*
- *Efficient Irrigation*
- *Permanent Vegetative Controls*
- *Runoff – Minimizing Landscape Design*

Treatment Control BMPs (to minimize storm water pollutants of concern for Ballona Creek – Sediment, Bacteria/Viruses, Toxicity, Trash, and Metals):

- *Vegetated Swale(s) – An open, shallow channel with vegetation covering side slopes and the bottom.*
- *Bioretention – A basin that functions as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes.*
- *Turf Block – A grass area that has a structural component which allows it to be used in drive aisles and parking lots.*
- *Drain Inserts – A manufactured filter placed in a drop inlet to remove sediment and debris.*

Level of Significance After Mitigation

Less than Significant.

Impact 4.7-1 ***With implementation of new PP 4.7-1, the proposed Project would not violate existing water quality standards or waste discharge requirements. This impact is less than significant impact; however, MM 4.7-1 is required to ensure that water quality impacts remain less than significant.***

Threshold	Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Proposed 2008 NHIP

Currently, the UCLA campus utilizes water from the LADWP, which relies on local groundwater supplies as a component of their potable water sources. As discussed further in Section 4.14, Utilities and Service Systems (Impact 4.14-2), it is anticipated that implementation of the proposed 2008 NHIP would require an additional 117,012 gpd of water for project operation; however, not all of this additional requirement would be met by increased groundwater drawdown. This additional water usage would be within the established demand projections of the LADWP as outlined in the 2005 Urban Water Management Plan (UWMP). Dewatering would not be required as a result of construction of any element of the 2008 NHIP.

The UCLA campus is not a designated groundwater recharge area for the 4,800-acre Santa Monica Groundwater Basin. Although implementation of the 2008 NHIP would increase the pervious surfaces within the project impact area, MM 4.7-1 provides for the construction of swales and vegetated areas that would largely retain the site's recharge capability. Accordingly,

impacts from implementation of the 2008 NHIP on groundwater recharge and groundwater supplies are less than significant.

Remaining Buildout of the 2002 LRDP as Amended

As discussed in Section 4.14, Utilities and Service Systems, buildout of the 2002 LRDP, as amended (including the 2008 NHIP) would increase water demand by 278,979 gpd. This could indirectly require increased use of groundwater through the provision of potable water (by LADWP) to the campus. However, the provision of water, including increased use of groundwater supplies, if any, as a result of implementation of the proposed Project would fall within the 2005 UWMP's projected water supplies for normal, single-dry, and multiple dry years through the Year 2030 and within the 2005 UWMP's 25-year water demand growth projections (refer to the Water Supply Analysis presented in Appendix J for additional information regarding water supplies). Therefore, groundwater resources would not be substantially depleted as a result of implementation of the proposed Project.

Implementation of the 2002 LRDP, as amended, could reduce the amount of pervious surfaces within the Santa Monica Groundwater Basin, which is partially overlain by the campus, through the addition of new buildings and paved areas. However, as the campus is not designated as a groundwater recharge area, nor does the campus serve as a primary source of groundwater recharge within the Basin, impacts are expected to be less than significant. Construction activities for future projects proposed under the 2002 LRDP, as amended, could require temporary dewatering of sites, but in such an event the campus would be required to obtain and comply with the conditions of a Construction Dewatering Permit from the RWQCB, and operational dewatering is not anticipated for any project proposed under the 2002 LRDP, as amended. Even in this instance, however, such a disturbance would not constitute a substantial interference with groundwater recharge, as the campus does not serve as a primary source of groundwater recharge. As with the 2008 NHIP, BMPs would be applied to future projects under the 2002 LRDP, as amended, to maintain recharge to the maximum extent possible at the project site. Accordingly, impacts relating to a reduction in groundwater recharge would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.7-2 ***Implementation of the proposed Project would not substantially deplete groundwater supplies or interfere with groundwater recharge. This impact is less than significant and no mitigation is required.***

Threshold	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site?

Proposed 2008 NHIP

There are no major streams or rivers that traverse the 2008 NHIP site and implementation of this residential project would not result in a significant impact to large regional drainage features. Stone Canyon Creek, the only drainage feature which does cross campus, conveys flows originating from the north, but is not within the Northwest zone or in proximity to the 2008 NHIP; therefore, it would not be altered from implementation of the 2008 NHIP. Construction activities and grading alterations associated with implementation of the 2008 NHIP could alter site drainage patterns and associated erosion or siltation patterns during and after construction; a description of drainage subareas at the 2008 NHIP site (Figure 4.7-5) under proposed project conditions are as follows:

- ***Subarea One: Lower De Neve.*** Subarea One would be developed with the Lower De Neve residence hall, along with supporting pedestrian concrete walks, access drives with porous pavement, and a series of gently sloping concrete/brick ramps and stairs. A portion of the existing slope and landscape would remain. This area would continue to drain to Gayley Avenue utilizing storm drains connecting beneath the sidewalks into existing curb drain outlets.

- ***Subarea Two: Upper De Neve.*** This subarea would be developed to include the Upper De Neve Residence Hall, with supporting concrete pedestrian walks and a service drive. This area would utilize storm drains and curb drain outlets, draining into a 3.5-inch catch basin in De Neve Drive, which connects to the 24-inch storm drain pipe within De Neve Drive.

- ***Subarea Three: Sproul West.*** Subarea Three would be developed to include the Sproul West Residence Hall and supporting concrete walks, ramps and stairs; the existing stairs up to Rieber Hall would be replaced, and a portion of the existing slope would remain. In addition, a new landscaped court would be created along Sproul Circle. This area would both sheet flow into Sproul Circle and drain to a grated inlet within Sproul Circle to be collected via an area drain system connected to the 24-inch storm drain in De Neve Drive.

- ***Subarea Four: Sproul South Complex.*** This subarea would be developed to include the Sproul South Complex as well as concrete pedestrian walks, ramps, stairs, and a small plaza. This area would connect, by storm drain, to the 33-inch storm drain in Charles E. Young Drive West.

- ***Subarea Five: De Neve Commons.*** Subarea Five would be reduced due to the construction of the Upper De Neve Residence Hall and the Garden Walk. The Garden Walk would replace existing sidewalks in this area with a new concrete pedestrian walk combined with landscaped areas. The remaining area would be primarily landscaped and would retain the concrete walks in support of De Neve Commons and the transformer enclosure. This area drains into an area drain system that connects to the 42-inch storm drain pipe in Charles E. Young Drive West.

- ***Subarea Six: De Neve Drive.*** This area would be enlarged to include the area of the Garden Walk. It would remain primarily a street with some new landscaped areas. This subarea drains in a southerly direction to a catch basin within Charles Young E. Drive West, which then connects to a 42-inch storm drain also within Charles Young E. Drive West.

- ***Subarea Seven: Charles E. Young Drive West.*** This area would remain similar to the existing condition and would continue to drain in a southerly direction to a catch basin within Charles E. Young Drive West, which connects to the 42-inch storm drain within Charles Young E. Drive West.

As discussed above for Impact 4.7-1, the 2008 NHIP would comply with requirements of the applicable general construction NPDES permit and with Phase 2 NPDES requirements once the updated Phase 2 permit has been finalized (refer to new PP 4.7-1). In addition, BMPs would be implemented (refer to new MM 4.7-1) to ensure that runoff leaving the site during construction and post-project operation continues to meet or exceed water quality discharge requirements established by the existing NPDES permit over the life of the project. These BMPs would minimize on- and off-site erosion and siltation as an element of compliance with NPDES permit requirements. Aggregate post-project runoff rates exiting the site are slightly lower than those under existing conditions (refer to Tables 4.7-1 and 4.7-2 under Impact 4.7-4), and this difference is not expected to substantially create siltation issues on or off site over those experienced under existing conditions. Accordingly, impacts to drainage patterns and associated effects on erosion and siltation with implementation of the proposed 2008 NHIP would be less than significant.

Remaining Buildout of the 2002 LRDP as Amended

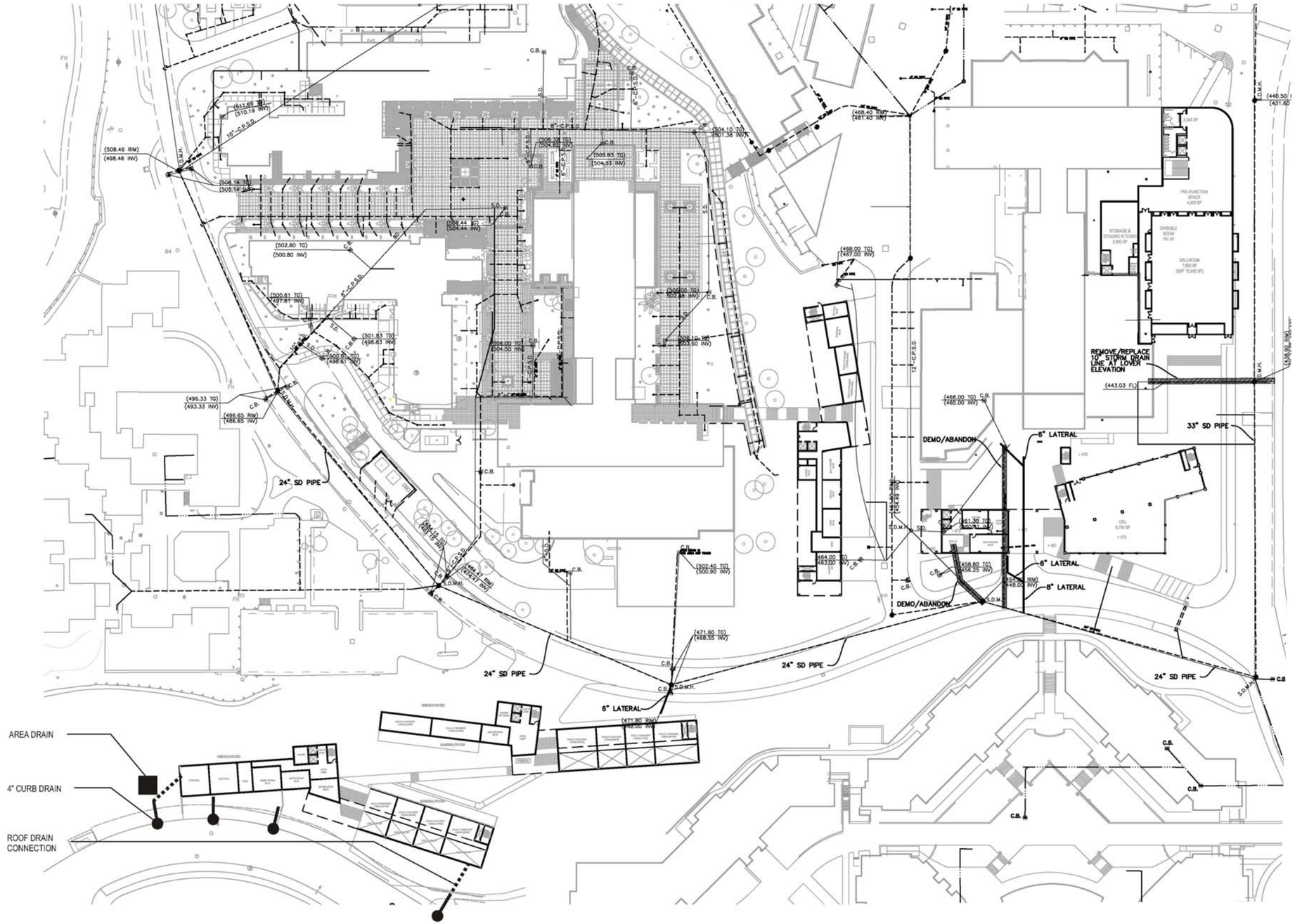
Implementation of the 2002 LRDP, as amended, could result in new buildings, landscaping, and/or other features on the campus that could result in minor alterations to existing drainage patterns of individual sites. Information on the extent of these alterations is not currently available as no specific projects other than the 2008 NHIP have been identified. Consistent with the 2008 NHIP discussed above, new development under the 2002 LRDP, as amended, would also be required to comply with NPDES permit requirements existing at the time of project approval. 2002 Final EIR PP 4.7-5 (as modified) requires that each project be subject to site-specific technical studies of hydrologic project effects; this information would be used to determine future project-specific features required to maintain compliance with NPDES requirements existing at the time of project approval. The 2002 LRDP Final EIR PP 4.7-5 provides measures to be implemented to reduce runoff from the specific project site, and new MM 4.7-1 requires the utilization of appropriate BMPs for NPDES compliance that would also apply to all future projects with remaining buildout of the 2002 LRDP, as amended. These PPs and MMs would be supplemented with good housekeeping procedures such as those listed below.

- ***Contain waste.*** Dispose of all construction waste in designated areas and keep storm water from flowing onto or off of these areas.

- ***Minimize disturbed areas.*** Clear land that will only be actively under construction in the near term, minimize new land disturbance during the rainy season, and avoid disturbing sensitive areas or areas that would not be affected by construction.

- ***Stabilize disturbed areas.*** Provide temporary stabilization of disturbed soils whenever active construction is not occurring on a portion of the site and provide permanent stabilization by finish grading and landscaping.

- ***Protect slopes and channels.*** Outside of the approved grading plan area, avoid disturbing steep or unstable slopes, safely convey runoff from slopes, avoid disturbing natural channels, stabilize crossings, and ensure that increases in runoff velocity caused by the project do not erode the channel.



Source: RBF Consulting 2008

Proposed Conditions – Subarea Watershed Map

Figure 4.7-5

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

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- ***Controlling the site perimeter.*** Upstream runoff should be diverted around or safely conveyed through the project site and should be free of excessive sediment and other constituents.

- ***Controlling internal erosion.*** Detain sediment-laden waters from disturbed, active areas within the site.

Accordingly, with the application of the PPs, MMs, and good housekeeping practices listed above, impacts from implementation of the proposed Project related to erosion or siltation will be less than significant.

Mitigation Measures

No additional mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.7-3 ***Implementation of new MM 4.7-1, compliance with new PP 4.7-1 and 2002 LRDP Final EIR PP 4.7-5 would ensure that the proposed Project would not substantially alter site drainage patterns and would not result in substantial erosion or siltation on or off site. This impact is less than significant and no additional mitigation is required.***

Threshold	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?

Proposed 2008 NHIP

Runoff from the 2008 NHIP site would follow the same flow paths as existing conditions once flows leave the site. Figure 4.7-5 illustrates the location of the post-project subarea drainages on the 2008 NHIP site. Tables 4.7-1 and 4.7-2 illustrate the results of the analysis of post-project runoff volumes based on these subarea drainages.

TABLE 4.7-1
SUMMARY OF PEAK FLOWS FOR A 50-YEAR STORM

Area	Existing Condition Peak Flow (cfs)	Proposed Condition Peak Flow (cfs)	Delta (cfs)
Lower De Neve	4.2	3.9	-0.3
Upper De Neve	2.2	4.3	2.1
Sproul West	4.6	4.6	0
Sproul South/Complex	7.0	7.0	0
De Neve Commons	6.0	3.6	-2.4
De Neve Drive	3.1	3.6	0.5
Charles E. Young Drive West	2.2	2.2	0
Total	**29.2**	**29.1**	**-0.1**

Note: Totals may not add due to rounding.

Source: RBF Consulting 2008.

TABLE 4.7-2
SUMMARY OF PEAK FLOWS FOR A 10-YEAR STORM

Area	Existing Condition Peak Flow (cfs)	Proposed Condition Peak Flow (cfs)	Delta (cfs)
Lower De Neve	3.0	2.8	-0.2
Upper De Neve	1.6	3.1	1.5
Sproul West	3.3	3.3	0
Sproul South/Complex	5.0	5.0	0
De Neve Commons	4.3	2.6	-1.7
De Neve Drive	2.0	2.4	0.4
Charles E. Young Drive West	1.5	1.5	0
Total	**20.7**	**20.6**	**-0.1**

Note: Totals may not add due to rounding.

Source: RBF Consulting 2008

As shown in the tables, the rate of post-construction peak flows from the 2008 NHIP project site would remain largely unchanged from existing levels during 10-year and 50-year events. The one exception is Subarea Two: Upper De Neve, which is calculated to have an increase of 2.1 cfs during a 50-year storm event and 1.5 cfs during a 10-year storm event. Under post-construction conditions, De Neve Drive would have a flood depth of 0.29 foot during a 50-year storm event. Given the existing street design of a 6-inch curb face and a 2 percent sidewalk, this falls within acceptable City of Los Angeles levels, which typically allow for a flood depth of up to 0.60 foot within the street right-of-way (RBF Consulting 2008). Accordingly, the increase in flows would not result in significant flooding problems within the street and this impact is less than significant.

In addition, 2002 LRDP Final EIR PP 4.7-5 requires the implementation of BMPs to further reduce off-site runoff volumes. As previously discussed, the proposed 2008 NHIP would include non-structural and structural BMPs. Non-structural BMPs that address runoff volumes, but not be limited to: landscape maintenance, efficient irrigation practices, and public education. Structural BMPs may include, but not be limited to: vegetated swales, bioretention, turf block, drain inserts, wet vaults, and cisterns or storage tanks (to be determined based on applicable regulation at the time the project is constructed). Accordingly, potential impacts from the 2008

NHIP associated with increased runoff and potential flooding on or off site would remain less than significant.

Mitigation Measures

No mitigation measures are necessary.

Level of Significance After Mitigation

Less than Significant.

Impact 4.7-4a ***Implementation of the proposed 2008 NHIP would not substantially alter site drainage patterns or substantially increase the rate or amount of surface runoff and would not result in flooding either on or off site. This impact would be less than significant and no mitigation is required. However, PP 4.7-5 would further reduce this less than significant impact.***

Remaining Buildout of the 2002 LRDP as Amended

Implementation of the 2002 LRDP, as amended, which includes the 2008 NHIP, could result in localized alterations of drainage patterns that might result in temporary ponding of runoff during storm events on or off site. Existing campus drainage patterns are not expected to change with implementation of the proposed Project. However, there would be new buildings, landscaping, and/or other features on the campus that could result in minor alterations to existing drainage patterns of individual sites or increase the rate or flow of surface runoff that could result in flooding on or off site. Continued compliance with 2002 LRDP Final EIR PP 4.7-5 (as modified) requires that projects be designed to reduce runoff and upgrade and expand campus storm drain capacity where necessary (as determined by project-specific hydrologic evaluation) resulting in a less than significant impact.

With the exception of the proposed 2008 NHIP, there are no specific projects identified that would be developed with the proposed Project. However, 2002 LRDP Final EIR PP 4.7-5 (as modified) requires that each project proposed under the 2002 LRDP, as amended, be subject to site-specific technical studies of hydrologic project effects as part of project-specific CEQA review (as done with the proposed 2008 NHIP). This information would be used to determine the project-specific measures required per PP 4.7-5 to ensure that no impacts related to increased rate and/or amount of runoff and associated flooding occur.

Mitigation Measures

No mitigation measures are necessary.

Level of Significance After Mitigation

Less than Significant.

Impact 4.7-4b ***Implementation of the proposed Project could increase the rate or amount of surface runoff and result in flooding either on or off site. With implementation of 2002 LRDP Final EIR PP 4.7-5 (as modified), this impact is less than significant and no mitigation is required.***

Threshold	Would the project create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? Would the project 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?

Potential water quality impacts resulting from additional sources of polluted runoff are discussed under Impact 4.7-1.

With respect to storm water runoff, flows generally run from the northwest and northeast portions of campus to the south, and an extensive campus storm drain system controls surface runoff as it enters the downstream Los Angeles City storm drainage system and, ultimately, the County storm drainage system near Wilshire Boulevard (refer to Figure 4.7-1). The campus storm drains have adequate capacity for the majority of rainfall events; however, at times, some locations on campus (Westwood Plaza and Stone Canyon Creek) experience temporary, limited shallow ponding during major storm events, though this is primarily due to localized topography and drainage issues (UCLA 2003b).

Proposed 2008 NHIP

Implementation of the proposed 2008 NHIP would result in runoff exiting the site during construction and project operation and maintenance, as occurs under existing conditions. As discussed above for Impacts 4.7-3 and 4.7-4, although runoff volumes from the project site after construction of the 2008 NHIP would increase, runoff flow rates (Tables 4.7-1 and 4.7-2) for 10- and 50-year events would decrease upon completion of project construction. With the reduced runoff flow rates post-construction and the implementation of new PP 4.7-1 and 2002 LRDP Final ER PP 4.7-5, there is no anticipated effect on existing storm drain capacities. Accordingly, impacts from the 2008 NHIP on the existing on and off campus storm drain system or storm drain capacity are less than significant and no mitigation is required.

The proposed 2008 NHIP does involve the installation of new storm drain lines on campus to serve the new residential structures; these lines would connect to existing facilities. The new storm drain lines are within the impact area for the proposed 2008 NHIP and accordingly the potential environmental impacts of construction have been addressed in the respective sections of this EIR (e.g., Section 4.2, Air Quality; Section 4.3, Biological Resources; Section 4.4, Cultural Resources; and Section 4.9, Noise and Vibration).

Remaining Buildout of the 2002 LRDP as Amended

Development of remaining buildout of the 2002 LRDP, as amended, would result in the construction of structures, streets, and other impermeable surfaces that could increase runoff to the storm drain system on and off campus. However, because the location of future projects is not known it cannot be determined what storm drains may be used. Similarly, without project-specific information on existing and future runoff (rate and volume), it cannot be determined what, if any, new or upgraded storm drain facilities would be needed. Although additional runoff from development of future projects under buildout of the remaining development allocation under the 2002 LRDP, as amended, cannot be identified at this time, 2002 LRDP Final EIR PP 4.7-5 requires project-specific studies to quantify these future effects and implement measures as needed to reduce impacts to a less than significant level. Implementation of MM 4.7-1 would ensure that the BMPs needed to meet or exceed NPDES

permit requirements applicable at the time of project construction are implemented, and 2002 LRDP Final EIR PP 4.7-5 would ensure that upgraded storm drain facilities are installed, as needed, once final project design is known. Continued compliance with PP 4.7-5 (as modified) ensures that potential impacts are less than significant.

Although no expansion of the capacity of campus storm water conveyance systems is currently anticipated to be required, any extension of a portion of the system to serve a specific project or the construction of a new conveyance facility would be evaluated as part of the future environmental review process required under CEQA.

Mitigation Measures

No mitigation measures are necessary.

Level of Significance After Mitigation

Less than Significant.

Impact 4.7-5 Continued compliance with PP 4.7-5 (as modified) would ensure that implementation of the proposed Project would not result in runoff that exceeds the capacity of existing storm drain systems; this impact is less than significant. With implementation of new MM 4.7-1, this impact remains less than significant.

4.7.4 CUMULATIVE IMPACTS

The geographic context for the Hydrology and Water Quality cumulative impact analysis is the Ballona Creek Watershed. This watershed consists of 130 square miles between the Santa Monica Mountains, the Harbor Freeway (State Route 110), and the Baldwin Hills. The geographic context also includes the Santa Monica Groundwater Basin, which underlies the project area and its vicinity. The analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of the *City of Los Angeles General Plan Framework* and development of the related projects provided in Table 4-1, Off-Campus Related Projects, in Section 4, Introduction to the Environmental Analysis.

Cumulative development would not violate water quality standards or waste discharge requirements, and thereby would not result in a significant cumulative impact. The area that comprises the geographic context for this analysis consists of only 17 percent open space, with the remainder being used for urban land uses. In addition, much of the open space area is composed of parks, golf courses, and natural areas in the Santa Monica Mountains. Consequently, it is not expected that full implementation of the General Plan Framework would result in the conversion of large amounts of open space to urban uses, and it is therefore not expected that there would be a significant increase in runoff. Implementation of NPDES Phase 1 and 2 requirements would ensure that cumulative development does not result in higher than allowed concentrations of pollutants in storm water discharges. Additionally, future development would be required to comply with sewage discharge laws and to obtain the proper permits. No significant cumulative impact is expected with regard to this potential impact. The proposed Project's contribution is also less than significant since only a very small amount of permeable surface is being removed; the type of pollutants contained in campus runoff would not change; the amount from surface parking lots could decrease; and the campus would implement Phase 1 and 2 requirements related to water quality. This is considered to be a less than significant impact.

Continued development in the campus vicinity would not 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. The campus sits atop the Santa Monica Groundwater Basin. The LADWP, which supplies water to the City, does not pump water from this basin. Consequently, cumulative development in the City of Los Angeles would not adversely affect water levels or supplies in the Santa Monica Groundwater Basin. The LADWP does pump water from the San Fernando, Sylmar, and Central Basins. All three of these basins have been adjudicated by the courts and have binding court orders that administer their usage. These court orders have been designed to maintain adequate water supplies and to protect their integrity. LADWP pumping practices would be in conformity with these court orders and consequently would not result in substantial depletion in supplies and thus no cumulative significant impact is expected. The contribution of the 2002 LRDP, as amended, would also be less than significant since the campus does not pump its own groundwater, but rather only receives water from the LADWP, whose pumping practices are sustainable. Additionally, the campus is not designated as a recharge area and is not a primary area for recharge via natural percolation. This is therefore considered to be a less than significant impact.

It is not expected that cumulative development would substantially alter the existing drainage pattern of the area (including through the alteration of the course of a stream or river) in such a manner that would result in substantial erosion or siltation, flooding, or the exceedance of existing or planned storm water drainage systems. As mentioned previously, the Ballona Creek watershed is composed mainly of urban uses, with remaining open spaces being devoted to uses not likely to be developed. As a result, most of the drainage system in the watershed consists of engineered storm channels and is therefore expected to experience little change. Additionally, as extensive development is not expected in the remaining open spaces, it is unlikely that there would be substantial alteration of drainage systems and watercourses in those areas. This indicates that the amount of runoff would not substantially increase, thereby avoiding substantial increases in erosion, siltation, flooding and preventing the exceedance of the storm water drainage system. New development would also be required to comply with NPDES Phases 1 and 2, and to adopt BMPs in order to reduce the occurrence of erosion and siltation. As a consequence, it is not expected that there would be a cumulatively significant impact. The proposed Project would also have less than significant impacts because the campus would implement all necessary measures required by NPDES Phases 1 and 2 and because increases in the amount of runoff expected from the proposed Project would be minimal. This is considered to be a less than significant impact.

Additionally, cumulative development is not expected to result in or require the construction of new storm water drainage facilities or the expansion of existing facilities, resulting in significant environmental effects. Extensive future development is not expected to take place in previously undeveloped areas, thereby necessitating the expansion or creation of storm water drainage facilities. While future development may require that there be some localized modifications or additions to the existing storm water drainage system, it is expected that these modifications or additions would not be extensive. Consequently, it is not expected that there would be a significant cumulative impact. Implementation of the proposed Project would likely result in a minimal increase in runoff due to the already developed nature of the campus. While there may be some extensions of drainage systems to project sites under the propose Project, these extensions would be relatively minor and would not result in significant environmental effects. This is considered to be a less than significant impact.

It should be noted that the *City of Los Angeles General Plan Framework EIR* came to the conclusion that “[f]urther urbanization of Los Angeles County will result in a continuing increase in storm water runoff, water quality degradation and exposure of persons and property to floodplain hazards.” (City of Los Angeles 1995). However, for all the reasons stated above, the

contribution of the proposed Project would nevertheless not be cumulatively considerable and is less than significant.

4.7.5 REFERENCES

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4.8 LAND USE AND PLANNING

This section of the EIR describes existing land uses on campus and in the surrounding area and evaluates the potential for land use impacts associated with implementation of the proposed Project. The analysis focuses on the potential for the proposed Project to result in impacts on existing and planned campus and adjacent community land uses and the relationship of these changes to relevant planning policies that guide land use decisions.

Data used in preparing this section was obtained from various sources, including UCLA staff, previous environmental documentation prepared for UCLA, and site reconnaissance. Full bibliographic entries for all reference materials are provided in Section 4.8.5, References, of this section.

Two private individuals submitted comments in response to the Notice of Preparation addressing land use and planning issues. One individual requested that the EIR address whether the massing and scale of the proposed 2008 NHIP structures, particularly the Lower De Neve structure, is compatible with surrounding development and with City of Los Angeles development standards for the project area (refer to Impacts 4.8-1 and 4.8-2). Both individuals suggested that the Lower De Neve structures have a larger setback from Gayley Street and a landscaping buffer (refer to Impact 4.8-1).

4.8.1 ENVIRONMENTAL SETTING

Surrounding Land Uses

UCLA Campus

Figure 4.8-1, Surrounding Land Uses, conceptually illustrates the campus and its surroundings. Immediate land uses surrounding the campus are as follows:

- ***North.*** North of the campus is the Bel Air single-family residential neighborhood and Marymount High School.
- ***South.*** South of Le Conte Avenue is the commercial district of Westwood Village, which consists of retail shops, movie theaters, restaurants, and office buildings.
- ***East.*** East of Hilgard Avenue are sorority houses, apartment buildings, and the Holmby-Westwood single-family residential neighborhood.
- ***West.*** Gayley Avenue runs in a north and northwest direction along the western boundary of the campus. South and west of Gayley Avenue is the North Village multi-family residential neighborhood, which primarily consists of fraternity houses and apartment buildings. West of Veteran Avenue is the Westwood Hills single-family residential neighborhood and the Los Angeles National Cemetery.

The majority of new development expected in the area would likely be small in scale, unless parcels are assembled and existing buildings are demolished. The nearest large parcel in the Westwood area is the Veterans Administration grounds. While there has been discussion of various development proposals at the Veterans Administration property over the last few years, no specific development projects are currently being evaluated and including any additional development on this property on the cumulative projects list would be speculative at this time. Projects in the vicinity of the UCLA campus that are either under construction, currently approved, have applications pending with the City of Los Angeles Planning Department, or are

reasonably foreseeable are described in Table 4-1, Off-Campus Related Projects, in Section 4, Introduction to the Environmental Analysis.

Proposed 2008 NHIP

The proposed 2008 NHIP is located in the Northwest zone, which is approximately 90.5 acres of the 419-acre UCLA campus, and is bound by Sunset Boulevard to the north, Veteran Avenue to the west, Gayley Avenue to the south, and Charles E. Young Drive West to the east. The proposed Upper and Lower De Neve structures are generally located north of Gayley Avenue, west of the existing De Neve residence halls, and south of De Neve Drive. The proposed Sproul structures are located north of De Neve Drive adjacent to existing Sproul Hall structures. Land uses across Gayley Avenue include multi-family residences in the North Village. This area is comprised of low- to mid-rise multi-family buildings of varying heights and mass and several fraternities located along the west side of Gayley Avenue. A substantial portion of the multi-family housing units in the North Village area are occupied by UCLA students. Figure 4.8-2 provides an aerial photograph focusing on the Northwest zone and surrounding areas.

Existing Land Use

Northwest Zone

Topographically, the Northwest zone consists of hilly terrain characterized by slopes between the existing buildings. The elevation range is between 320 and 560 feet above mean sea level. Figure 3-2, Existing Conditions: Northwest Zone, depicts existing land use conditions in the Northwest zone, which is primarily residential and recreational in nature. The residential component of the zone is defined by a series of distinct neighborhoods that are separated by topography: (1) the upper Northwest zone includes the Hitch and Saxon Residential Suites and the Hedrick and Rieber residence halls; (2) Sunset Village includes Courtside, Canyon Point, Delta Terrace, and Sproul residence halls; and (3) De Neve housing and Dykstra residence hall. The first grouping occupies the northernmost residential region, situated on the highest elevation of the Northwest zone. The second residential neighborhood, Sunset Village, sits at the foot of the slope from the first neighborhood to the south and east and has a more urban, village-like character. Hedrick Summit, Rieber Terrace, and Rieber Vista are the newest residence halls on the UCLA campus and are east of De Neve Drive, adjacent to Hedrick Hall.

Both within and among the communities, buildings vary from one another in their housing capacity, density, height, amenities, and architectural character. Hedrick, Rieber, Sproul, and Dykstra Halls represent late-1950s/early-1960s modern architecture and are seven- to ten-story buildings. Hedrick Summit, Rieber Vista, and Rieber Terrace were completed in 2005, and are compatible in character with the earlier residence halls The Hitch and Saxon Residential Suites are three-story buildings with wood shingle exterior, while Courtside, Canyon Point, Delta Terrace, and De Neve Plaza are modern three- to four-story buildings covered with stucco.

The Northwest zone includes various functions that support housing and the greater academic community. Buildings and offices supporting residential life in the Northwest zone area include the Housing Administration office, Residential Life Building, Bradley International Hall, and Covel Commons. The Housing Administration office, located in Sproul Hall, accommodates the administrative support needs of UCLA's housing program. The Residential Life Building, located south of Sproul Hall, includes the offices of the Resident Directors, Area Directors, Judicial Affairs, Program Administrators, and other staff that support residential life. Bradley International Hall, located south of Dykstra Hall on Charles E. Young Drive West, houses the Rita and Stanley Dashew International Student Center, the Office of International Students and Scholars, and other support uses, such as a ballroom, a cafe, a dance studio, study rooms, and UCLA



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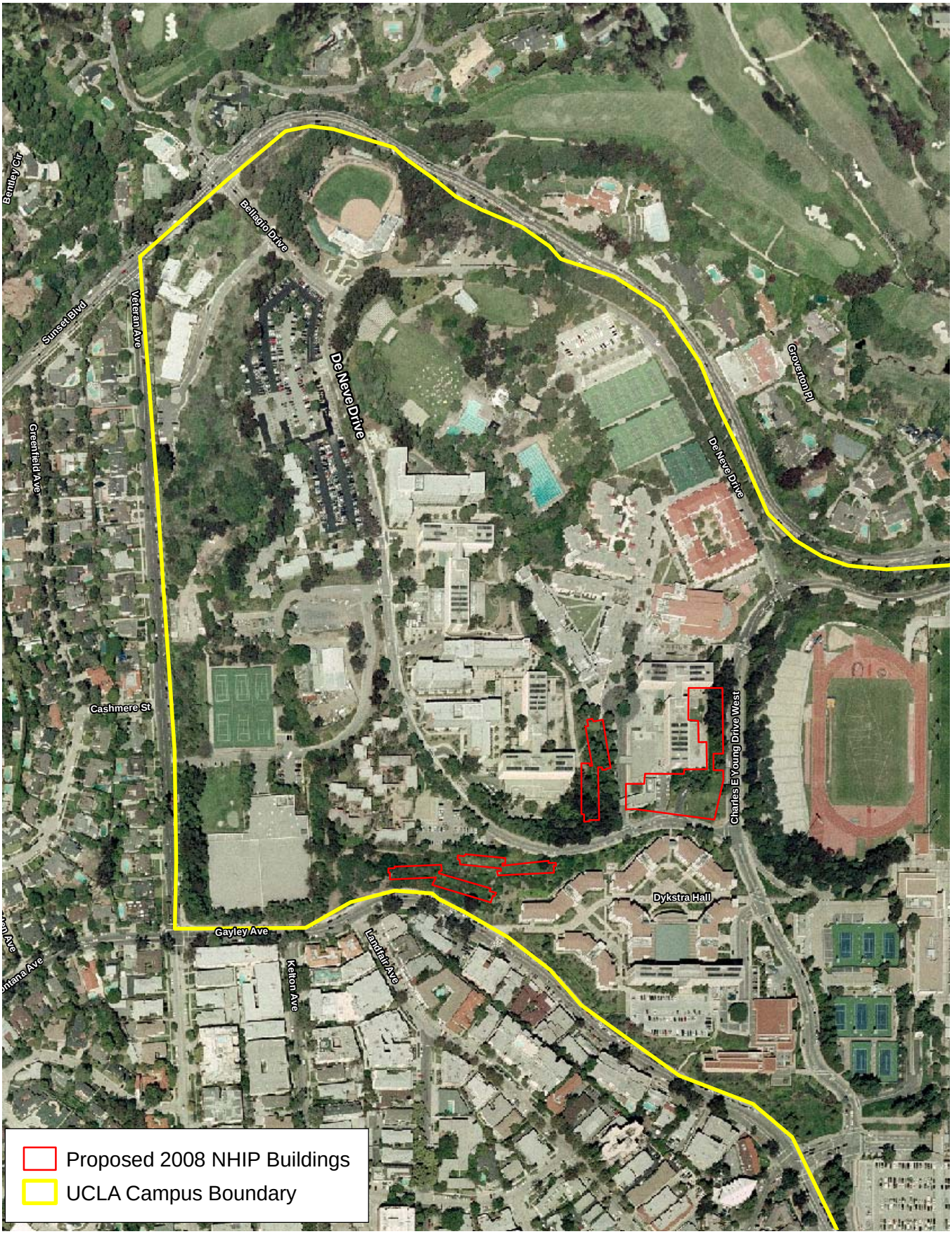
Surrounding Land Uses

Figure 4.8-1

2008 NHIP and LRDP Amendment

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Northwest Zone Surrounding Land Uses

Figure 4.8-2

2008 NHIP and LRDP Amendment

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catering. Covel Commons, located within Sunset Village, houses a dining facility, a computer lab, meeting rooms and administrative areas, and serves as a University-wide conference center.

Buildings and uses that support the greater academic community include the Southern Regional Library and the Krieger Child Care Center. The Southern Regional Library located west and down slope of the Saxon Residential Suites (and west of the proposed Upper and Lower De Neve buildings), includes space primarily used for lending books and materials University-wide and includes a small reading room. The Krieger Child Care Center, located off of Bellagio Drive near Veteran Avenue and Sunset Boulevard, provides child care services for University employees.

The Northwest zone also includes campus-wide recreational facilities, such as the Sunset Canyon Recreation Center, Sunset Canyon Tennis Courts, Sycamore Tennis Courts, and Easton Stadium. The Sunset Canyon Recreation Center, located south and west of De Neve Drive, offers year-round recreation featuring a 50-meter pool, a 25-meter family pool, picnic/barbecue areas, a sand volleyball court and large grass areas, an amphitheater, and various meeting rooms and lounges. The Sunset Canyon Tennis Courts, adjacent to the Sunset Canyon Recreation Center, includes eight lighted regulation courts, and the Sycamore Tennis Courts (located east of Veteran Avenue down slope from the Saxon Residential Suites near the Southern Regional Library) provide six courts for daytime use only. For practice and competitive softball events, Easton Stadium, located southeast of Veteran Avenue and Sunset Boulevard, is also within the northwestern portion of the campus. The newest addition to the Northwest zone will be the Spieker Aquatic Center, a 52-meter by 25-yard competition swimming pool and diving facility with associated uses, which is currently under construction within the Sunset Canyon Recreation Center and is expected to be complete by approximately August 2009.

Campus Facilities Management operates a green waste and recycling yard and storage facilities in the Northwest zone. These facilities are essential to daily operations within Facilities Management and provide services to the entire campus community. The storage facilities (OHJ and OHM) and adjacent waste yard are located south of surface Parking Lot 15, as shown in Figure 3-4, Northwest Zone. Other yard facilities are located between surface Parking Lot 15 and the Veteran Avenue edge of campus.

Circulation within the Northwest zone consists primarily of an internal campus loop road, De Neve Drive, which connects at two locations to Charles E. Young Drive West, as illustrated in Figure 3-4. Bellagio Drive, a second campus roadway off De Neve Drive, connects to Sunset Boulevard. Bruin Walk is the major pedestrian pathway and links the residential and academic communities. Drake Stadium, the Intramural Field, and the Los Angeles Tennis Center provide a transition between the Northwest zone and the remaining eastern and southern portions of campus.

There are various parking facilities that support the housing, administration, academic, and recreational uses in the Northwest zone. A parking structure serves Sunset Canyon Recreation Center (RC structure) while the majority of parking in the Northwest zone is accommodated by Dykstra Hall (DH structure); Sunset Village Parking Structure (PS SV), surface lots 10, 11, 13, 15, 17, and on-street parking along portions of Charles E. Young Drive West; De Neve Drive; and Sproul Circle Drive.

UCLA Campus

As shown in Figure 3-1, Regional Map, in Section 3, Project Description, the UCLA campus is located in the community of Westwood in the City of Los Angeles, approximately 12 miles

northwest of downtown Los Angeles and 6 miles east of the Pacific Ocean. The UCLA campus is bound by Le Conte Avenue and Gayley Avenue to the south, Veteran Avenue to the west, Sunset Boulevard to the north, and Hilgard Avenue to the east (see Figure 3-2, Local Vicinity). An additional area of the campus, known as the Southwest zone, is located immediately north of Wilshire Boulevard generally between Gayley Avenue and Veteran Avenue. The campus is primarily surrounded by residential land uses, with the exception of the Westwood Village commercial area to the south and a section of the Los Angeles National Cemetery to the west.

The approximate 419-acre campus has been developed with a variety of academic and related uses, with facilities dedicated to instruction, research, support, recreation, medical, and housing uses. Approximately 16.8 million gross square feet (gsf) of development exists on campus. A more detailed map that shows the campus land use zones in the context of the overall campus and the 2008 built environment is provided in Figure 4.8-3, Campus Land Use Zones. The existing built environment and land uses contained in each of the existing eight land use zones are described below.

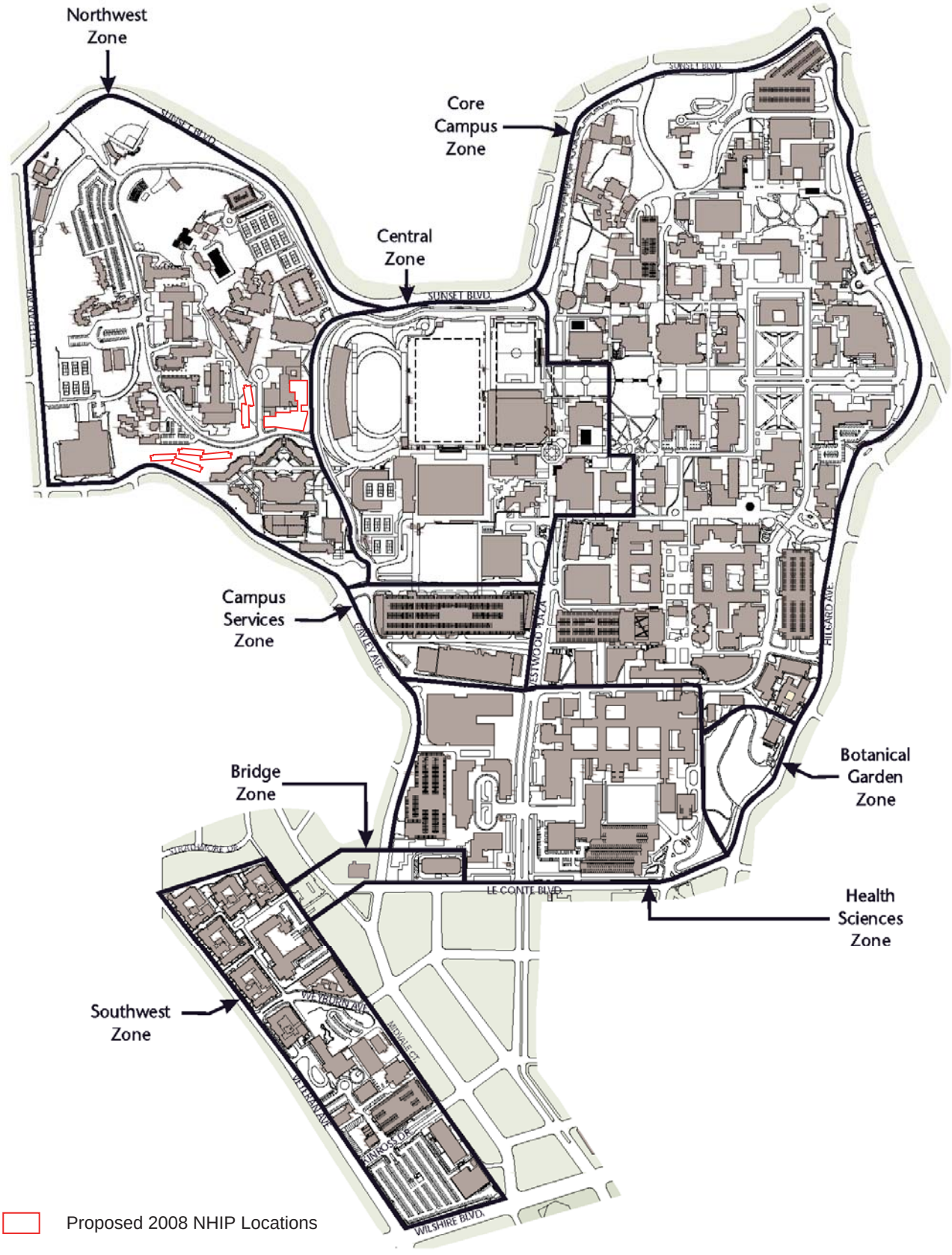
- ***Botanical Garden Zone.*** The seven-acre Botanical Garden zone is bound by Tiverton Drive to the west; the southern portion of the Core Campus zone to the north; Hilgard Avenue to the east; and Le Conte Avenue to the south. The Mildred E. Mathias Botanical Garden (Botanical Garden)—which is open to the public—and the Plant Growth Center are the primary land uses in the zone. There is currently approximately 19,100 gsf of development in the Botanical Garden zone. No future development is anticipated for the Botanical Garden zone.

- ***Bridge Zone.*** The five-acre Bridge zone forms a physical land connection between the main campus zones and the Southwest zone. The Bridge zone consists of two administrative/academic buildings, student and faculty apartments, and an open landscaped area. Existing development includes the Ueberroth Building (which accommodates Health Sciences administrative and research support units) on Le Conte Avenue; the University Extension Building; student and faculty apartments on Levering Avenue; and an open landscaped area on the corner of Gayley Avenue and Le Conte Avenue. There is currently approximately 330,568 gsf of development in the Bridge zone.

- ***Campus Services Zone.*** The Campus Services zone, which is approximately 15.3 acres, is bound by Westwood Plaza to the east, Strathmore Place to the north, Gayley Avenue to the west, and Charles E. Young Drive South to the south. Land uses in this zone include the Energy Systems Facility, parking, facilities management shops and offices, the Environmental Services Facility, the campus fleet services yard, the Strathmore Building, and the police station. There is currently approximately 411,072 gsf of development in the Campus Services zone. The Police Station Replacement Building is currently under construction.

- ***Central Zone.*** The 61.5-acre Central zone is located between the Core Campus zone and the Northwest zone; it is bound by Sunset Boulevard to the north and Strathmore Drive to the south. The Central zone contains most of the campus recreational and athletic facilities and playing fields; it also includes student activity centers and underground parking. There is currently approximately 1,077,075 gsf of development in the Central zone.

- ***Core Campus Zone.*** The Core Campus zone, which encompasses approximately 158 acres, is bound by the Central and Campus Services zones to the west; Sunset Boulevard to the north; Hilgard Avenue to the east; and Charles E. Young Drive South,



Campus Land Use Zones

Figure 4.8-3

2008 NHIP and LRDP Amendment

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the Botanical Garden zone, and the Health Sciences zone to the south. The Core Campus zone contains the campus historic core, which features the original campus buildings and associated open areas. It also accommodates the primary academic, research, library, and administrative facilities of the campus. Land uses in this zone include instructional and research programs, campus administration, cultural facilities, parking, and many plazas, courtyards, and gardens. There is currently approximately 6,954,702 gsf of development in the Core Campus zone. The Life Sciences Replacement Building is currently under construction.

- ***Health Sciences Zone.*** The Health Sciences zone, which is approximately 46.8 acres, is bound to the west by Gayley Avenue, to the north by Charles E. Young Drive South, to the east by the Botanical Garden and Core Campus zones, and to the south by Le Conte Avenue. Existing land uses within this zone include the Medical Center, the health sciences professional schools, medical laboratory and research facilities, the UCLA Medical Plaza outpatient facilities, and parking. There is currently approximately 4,294,494 gsf of development in the Health Sciences zone.

- ***Northwest Zone.*** The proposed 2008 NHIP sites are located in the Northwest Zone. The 90.5-acre zone is the primary residential area of campus. It is bound by Veteran Avenue to the west, Sunset Boulevard to the north, Charles E. Young Drive West to the east, and Gayley Avenue to the south. The Northwest zone primarily includes residential facilities and support functions for undergraduate students. Other land uses include a Child Care Center, the Southern Regional Library Facility (SRLF), Tom Bradley International Hall, the Sunset Canyon Recreation Center, and other recreational uses. There is currently approximately 2,645,079 gsf of development in the Northwest zone. The Spieker Aquatic Center is currently under construction in the Northwest zone.

- ***Southwest Zone.*** The 35.5-acre Southwest zone is bound by Veteran Avenue and the Los Angeles National Cemetery to the west, private residences to the north, Midvale Court (an alley) to the east, and Wilshire Boulevard to the south. This zone accommodates the Weyburn Terrace graduate student housing facilities, a large surface parking lot (Lot 36), and Parking Structure 32. In addition, this zone includes a variety of research, rehabilitation, medical and administrative buildings, as well as a steam plant. Specific development in this zone includes Warren Hall, the Rehabilitation Center, the West Medical Building, the Capital Programs Building, the Science and Technology Research Building, the Kinross Building, the Campus Transit Yard, and a steam plant. There is currently approximately 1,103,917 gsf of development in the Southwest zone.

4.8.2 REGULATORY FRAMEWORK

There are numerous regulatory programs/documents that guide development on the campus. These have been discussed for each related topical issue presented in Section 4 of this EIR. Following is a discussion of regulatory documents addressing land use development on campus.

State

UC Policy on Sustainable Practices

While not mandatory, the University of California has been encouraged to comply with the advisory provisions of Executive Order D-16-00 (which became effective August 2, 2000) which encourages establishment of a State sustainable building goal. On July 17, 2003, the University of California adopted policies on sustainable practices that were expanded in 2005 and again in

2006 to what is now formally known as the UC Policy on Sustainable Practices, adopted in March 2007. The UC Policy addresses sustainable practices in the following seven areas: Green Building Design, Clean Energy Standard, Climate Protection Practices, Sustainable Transportation Practices, Sustainable Operations, Recycling and Waste Management, and Environmental Preferable Purchasing Practices. These seven areas are further detailed in Section 4.15, Climate Change.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The region encompasses a population that exceeds 18 million persons in an area of more than 38,000 square miles. As the designated MPO, the federal government mandates SCAG to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. The leading activities SCAG undertakes include those listed below.

- To maintain a continuous, comprehensive, and coordinated planning process resulting in a Regional Transportation Plan (RTP) and a Regional Transportation Improvement Program (RTIP).

- To develop demographic projections plus the integrated land use, housing, employment, transportation programs, measures, and strategies portions of the South Coast Air Quality Management Plan (AQMP), as well as the responsibility as co-lead agency for air quality planning for the Central Coast and Southeast Desert air basin districts.

- To determine projects', plans', and programs' conformity with the applicable Air Plan (in this case, the AQMP), pursuant to the Federal Clean Air Act.

- To function as the authorized regional agency for intergovernmental review of programs proposed for federal financial assistance and direct development activities.

- For projects having regional significance, to review environmental impact reports for consistency with regional plans.

- To function as the authorized area-wide waste treatment management planning agency, pursuant to federal water pollution control statutes.

- In accordance with State law, to prepare the Regional Housing Needs Assessment.

- To prepare the Southern California Hazardous Waste Management Plan with the San Diego Association of Governments and the Santa Barbara County/Cities Area Planning Council, pursuant to the *California Health and Safety Code*.

SCAG has developed a number of plans to achieve the regional objectives. The most applicable to the proposed Project are the *Regional Comprehensive Plan and Guide* (RCPG), the Regional Transportation Plan (RTP), and the Compass Growth Vision Report (CGV).

Regional Comprehensive Plan and Guide

The SCAG RCPG includes core and ancillary regional policies that apply to development projects. The RCPG contains core policies that pertain to SCAG's statutory mandates (in the areas of transportation, air quality, housing, hazardous waste, and water quality) and ancillary policies that provide voluntary guidance on a broader range of topics including open space, energy, and water supply. The RCPG goals, policies, implementation strategies, and technical data support three overarching objectives for the region, including (1) improving the standard of living for all; (2) improving the quality of life for all; and (3) enhancing equity and access to government. Local governments are required to use the RCPG as the basis for their own plans and are required to discuss the consistency with the RCPG for all projects of "regional significance". Although SCAG did not comment on the NOP for this EIR and has not determined whether the project is of "regional significance", Impact 4.8-2 (Table 4.8-2 below) evaluates the consistency of the proposed 2002 LRDP, as amended, with relevant RCPG policies.

Regional Transportation Plan

Federal guidelines require all new regionally significant transportation projects to be included in the RTP before they can receive federal or State funds or approvals. The Metropolitan Transportation Authority (MTA) submits the Los Angeles County projects for inclusion in the RTP. The RTP must be updated and federally approved every four years. Federal approval requires a positive demonstration that the RTP projects will not generate travel emissions that exceed those assumed in the applicable Air Quality Management Plan; this requirement is known as "transportation conformity".

SCAG adopted the current RTP, *Making the Connections, 2008 Regional Transportation Plan* (2008 RTP), on May 8, 2008. The 2008 RTP contains a plan to provide adequate highway, transit, rail, aviation, and goods movement infrastructure to meet the region's needs by 2035. The 2008 RTP is a $531.5 billion plan that emphasizes the importance of system management, goods movement, and innovative transportation financing. It strives to provide a regional investment framework to address the region's transportation and related challenges, and looks to strategies that preserve and enhance the existing transportation system and integrate land use into transportation planning. The 2008 RTP is linked to Los Angeles County's and City of Los Angeles's transportation plans and models in the form of shared growth and travel projections. The 2008 RTP includes goals and policies applicable to transportation and, in some cases, land use projects. This EIR (see Table 4.8-2 in Impact 4.8-2) evaluates the consistency of the proposed Project with relevant 2008 RTP policies.

Compass Growth Vision Report

The Compass Growth Vision Report presents the comprehensive growth vision for the six-county SCAG region and presents the achievements of the Compass process. It details the evolution of the draft vision from the study of emerging growth trends to the effects of different growth patterns on transportation systems, land consumption, and other factors.

The Growth Vision Report concentrates on the physical aspects of regional growth—where people and jobs locate, the type and quantity of buildings that may be constructed, and how people and goods move in the region. To address all growth visioning principles, SCAG, sub-regions, and cities continue to refine the social, economic, and other components that are also crucial to the Vision's success, including: workforce housing, job training and education, prosperity that reaches everyone, and protection of key open spaces.

SCAG's Compass Blueprint 2% Strategy is a guideline for how and where SCAG can implement the growth vision for Southern California's future. It calls for modest changes to current land use and transportation trends that make up approximately two percent of the region's land area. SCAG's planning efforts and resources invested according to the 2% Strategy would help meet the SCAG region's goals of improved mobility, livability, prosperity, and sustainability for local neighborhoods and their residents.

The majority of UCLA is located within a Compass 2% Strategy Area, which traverses major arterial roadways through several jurisdictions, where development is intended to balance employment, housing, and services to reduce vehicle trips and emissions, enhance livability, expand prosperity, and increase sustainability. Table 4.8-2 in Impact 4.8-2 below evaluates the consistency of the proposed 2002 LRDP, as amended, with relevant Compass Growth Vision Report policies.

Local

UCLA is part of the University of California, a constitutionally created entity of the State of California. As a constitutional entity, the University of California is not subject to municipal regulations, such as the City General Plans. Westwood and other surrounding communities are part of the City of Los Angeles and although this jurisdictional separation provides no formal mechanism for joint planning or the exchange of ideas, UCLA may consider for coordination purposes aspects of local plans and policies for the communities surrounding the campus but is not bound by those plans and policies in its planning efforts.

The *City of Los Angeles General Plan Framework*, adopted December 1996 (re-adopted August 2001), provides general guidance on land use issues for the entire City. The General Plan consists of the Framework Element, a Land Use Element and 10 citywide elements. For purposes of developing, maintaining and implementing the land use portion of the General Plan, the City has been divided between 35 community plan areas, with collectively comprise the Land Use Element of the General Plan. The community plans are intended to implement the policies of the General Plan Framework. The UCLA campus is included in the *Westwood Community Plan,* and is identified as an "educational land use". Nonetheless, the University of California is not subject to the Westwood Community Plan.

The campus seeks to maintain an ongoing exchange of ideas and information and to pursue mutually acceptable solutions for issues that confront both the campus and the community. To foster this process, UCLA participates in, and communicates with, City and community organizations and sponsors various meetings and briefings to keep local organizations, associations, and elected representatives apprised of ongoing planning efforts. UCLA participated in the development of the *Westwood Community Plan* and the *Westwood Village Specific Plan* in an effort to coordinate planning efforts between the surrounding City of Los Angeles communities and the campus.

University of California Los Angeles

2002 Long-Range Development Plan

A Long Range Development Plan (LRDP) is defined by statute (*Public Resources Code,* Section 21080.09[2]) as a "physical development and land use plan to meet the academic and institutional objectives for a particular campus or medical center of public higher education." The 2002 LRDP, which was prepared in response to the need to accommodate increased student enrollment targets by 2010, is the current LRDP for the UCLA campus and was an update to the 1990 LRDP (which had a planning horizon of 2005). The 2002 LRDP and its accompanying

Final EIR were adopted by the UC Board of Regents in February 2003. The 2002 LRDP retained the same square footage, parking, and traffic generation limits of the 1990 LRDP while providing for an increased student enrollment and associated staff and faculty population increases with a planning horizon to 2010.

The LRDP guides the physical development of the campus to serve its teaching, research, and public service mission. In general, the 2002 LRDP (1) provides a land use map to guide the siting of future campus facilities; (2) estimates the net building space required to achieve the campus academic and research goals; and (3) articulates planning principles (or LRDP objectives) to guide the physical planning process.

The primary objective of the existing LRDP is to establish a land use plan that represents the best possible relationship among UCLA academic goals, faculty and student needs, site characteristics, and integration with the surrounding community; it remains the same as in the previous LRDPs approved by The Regents in 1963, 1983, and 1990. The proposed 2002 LRDP, as amended, retains the basic land use designations of the 1990 LRDP (including academic, recreational, residential, health sciences, and other land uses) contained in the same eight land use zones envisioned in the 1990 LRDP. Space allocations in the campus land use zones serve as "capacity envelopes" and are sized to accommodate projected needs within the planning horizon of the current LRDP. The use of these capacity envelopes is intended to provide future flexibility, accommodate changes in program space requirements, and to respond to needs and circumstances that are not anticipated in the current document.

The 2002 LRDP reallocated the approximate 1.71 million gsf of development entitlement remaining under the 1990 LRDP among the eight campus land use zones, as summarized in Table 4.8-1 later in this section.[1]

While the 2002 LRDP identifies the amount of development anticipated within each campus land use zone, the allocations are subject to forecasting uncertainty and other unforeseen circumstances. Therefore, in order to balance the specificity required for the planning and environmental analysis with the flexibility needed to accommodate future development, as approved by The Regents in 2003, each LRDP zone's proposed development allocations by are permitted to vary by up to 30,000 gsf over the LRDP planning horizon without requiring an amendment to the LRDP, so long as (1) additional square footage (up to 30,000 gsf) needed in a particular zone is balanced by a subtraction of the same amount of square footage from one or more of the other zones; (2) the Botanical Garden zone allocation would not change; and (3) any proposal would be consistent with LRDP development objectives and CEQA. For example, up to 30,000 gsf could be reallocated to the Core Campus zone by reducing the allocation from one or more other campus zones by an equivalent 30,000 gsf. By adhering to these conditions, the overall campus development will remain within the identified remaining development allocation for the duration of the LRDP planning horizon.

Stipulated Use Agreement with the Westwood Hills Property Owners' Association

A Stipulated Agreement of Compromise (Agreement) was filed February 6, 1978, pursuant to the case of *Westwood Hills Property Owners Association vs. The Regents of the University of California, et al.* (Los Angeles Superior Court Case No. C180760). This Agreement defines a Benign Use Zone in the campus's Northwest zone that will be reserved for uses that include, but

[1] This information is detailed in Table 8 of the 2002 LRDP, Proposed Development Re-allocation by LRDP zone (UCLA 2003a, page 31), and shown in detail by zone in Tables 9–16 of the 2002 LRDP (UCLA 2003a, pages 34–48). In addition, the 2002 LRDP includes Appendix B, List of Buildings by LRDP zone as of 2001–2002, that lists all existing campus buildings and provides the existing total square footage for each zone.

are not limited to: (1) open green space; (2) landscape buffer zones; (3) existing ornamental horticultural buildings and parking facilities; and (4) low-intensity, non-spectator, recreational and athletic space. Figure 3-4, in Section 3, Project Description, depicts the limits of the Benign Use Zone. The Benign Use Zone excludes, among other things, consideration of a baseball facility in this area. Lighting for this area will be provided only as appropriate to, and in keeping with, the benign uses. No access to the campus from existing City streets adjacent to the Benign Use Zone will be provided or permitted except for emergency purposes. The Benign Use Zone extends from Bellagio Drive and Sunset Boulevard to the north, De Neve Drive to the east (until Hedrick Hall where the eastern boundary extends due south to Gayley Avenue near Landfair Avenue), Gayley Avenue to the south, and Veteran Avenue to the west.

Further provisions of the Agreement call for the campus to examine the potential for construction noise and to take necessary steps, within practical technological capabilities and consistent with normal building practices, for wood frame construction to ensure compliance with local noise ordinances and regulations and to reduce construction noise to the maximum extent feasible. Noise-producing construction work is to be prohibited prior to 7:00 AM Monday through Friday, 8:00 AM on Saturday, and throughout the day on Sundays and national holidays, except for emergencies.

A discussion of the proposed 2008 NHIP's consistency with the provisions of this Agreement is provided in Impact 4.8-2 below.

Hillside Use Agreement

On December 11, 2003, The Regents entered into an agreement with The Urban Wildlands Group (Hillside Agreement), imposing certain limitations on the applicability and conclusions of the original 2002 LRDP Final EIR with respect to the hillside area between Veteran Avenue and Parking Lot 11 in the Northwest zone of campus and immediately adjacent area (Hillside Area). In connection with the Hillside Agreement, the wording of 2002 LRDP Final EIR MM 4.3-1(c) was clarified to more clearly reflect the campus' pre-existing practice. As so clarified, 2002 LRDP EIR MM 4.3-1(c) required that removal of mature trees will include a 1:1 tree replacement ratio at the development site where feasible, and if not so feasible, then replacement of native shrubs in ecologically appropriate areas within the campus boundaries that would provide nesting, foraging or roosting habitat for birds so that the replacement number of trees and shrubs will result in a 1:1 replacement ratio. The tree replacement mitigation measure from the 2002 LRDP Final EIR, as clarified pursuant to the Hillside Agreement, has been carried forward into this EIR as MM 4.3-1(c).

The Hillside Agreement also required environmental review of the impacts on any sensitive natural community (pursuant to Appendix G of the CEQA Guidelines) of any significant changes in then-existing land use on the Hillside Area. Since entering the Hillside Agreement, UCLA has prepared and certified a specific project EIR for an addition to the existing Krieger Child Care Center immediately west of the Hillside Area, and the project was completed in 2006. The EIR for the Child Care project studied the potential for the project to result in environmental impacts on any potential sensitive natural communities on the adjacent hillside and with incorporation of protective measures, found none.

4.8.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

The analysis in this section focuses on (1) the compatibility of land uses allowed under the 2002 LRDP, as amended, including the 2008 NHIP, with existing and planned land uses within and

adjacent to the campus and (2) the consistency of the proposed Project with any applicable land use plans, policies, or regulations.

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed Project would not have a significant impact for the following thresholds from the CEQA Checklist and no further analysis of these issues is presented in this section.

- Would the project physically divide an established community?
- Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Land Use and Planning.

- Would the project result in land use incompatibilities between campus development and adjacent community land uses *(Impact 4.8-1)?*[2]
- Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect *(Impact 4.8-2)*?

Impact Analysis

Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures were adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. They are therefore considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.8-1(a)	*Development of the southern edge of the main campus shall be designed to enhance the campus interface with Westwood Village.*
PP 4.8-1(b)	*The existing recreational fields in the Central zone of campus shall be maintained and will continue to provide a buffer between campus development and the residential uses north of Sunset Boulevard.*
PP 4.8-1(c)	*Infill development of the campus shall be continued, which reduces vehicle miles traveled and energy consumption.*
PP 4.8-1(d)	*New building projects shall be sited to ensure compatibility with existing uses and the height and massing of adjacent facilities.*

[2] This threshold is not included in Appendix G and was added to specifically address the 2002 LRDP's compatibility of land uses with adjacent land uses.

PP 4.8-1(e) *Facilities shall be sited and designed to enhance spatial development of the campus while maximizing use of limited land resources.*

Threshold	Would the proposed project result in land use incompatibilities between campus development and adjacent community land uses?

Proposed 2008 NHIP

Compatibility with On-campus Land Uses

As discussed in Section 3, Project Description, the proposed 2008 NHIP includes construction of infill housing in the Northwest zone, consisting of up to 1,525 beds, a dining commons, a fitness center, a multi-purpose room, and a renovated/expanded housing maintenance space (which would replace the existing space). The new housing would be accommodated in four new buildings (known as Sproul South, Sproul West, Upper De Neve, and Lower De Neve) at three locations. Potential building sites suitable for residential development include one site adjacent to Sproul Hall, one east of Rieber Hall, and another west of De Neve Plaza (refer to Figure 3-4, Northwest zone). The purpose of the proposed 2008 NHIP is to provide undergraduate housing and associated support facilities on campus to address unmet demand for undergraduate student housing, enhance the educational experience for students and to continue the evolution of UCLA from a commuter to a residential campus. The project is proposed in the Northwest zone, which provides residential and associated uses. The 2008 NHIP sites are surrounded to the east, north and west by existing undergraduate residence halls in the Northwest zone, and would be compatible with and consistent in land use type and function with these uses. As described further in Section 4.1, Aesthetics, and shown in Figures 3-6 through 3-8 in Section 3, Project Description, the elevation, scale and mass of the proposed 2008 NHIP buildings are similar to the height, scale and massing of the existing residence halls (such as Rieber Hall and Sproul Hall) located within the Northwest zone, as required by PP 4.8-1(d). Each of the proposed residential structures has been sited to function as an integral part of the larger residential community, rather than as isolated structures with little or no relationship to the existing development. This is demonstrated through not only the physical attributes of the building (heights, massing, architecture, etc.) and also through the comprehensive pedestrian circulation network that links the various buildings (refer to description of circulation provided in Section 3, Project Description). No impacts to on-campus land uses would occur with implementation of the proposed 2008 NHIP and no mitigation is necessary. It should be noted that potential indirect impacts to existing uses on campus are discussed in the respective technical sections of the EIR (e.g., aesthetics, air quality, noise).

The proposed 2008 NHIP would be located outside the Benign Use Zone. A discussion of consistency with the Benign Use Zone Stipulated Agreement is provided in Impact 4.8-2 below.

Compatibility with Off-campus Land Uses

With respect to off-campus land uses, as shown on Figures 4.8-1 and 4.8-2, the only portion of the proposed 2008 NHIP that would be "adjacent" to off-campus uses would be the Upper and Lower De Neve buildings that would be located north of Gayley Avenue. The land uses south of Gayley Avenue in this area are characterized by medium to high-density multi-family residential uses (refer to Figures 4.1-2 and 4.1-3 in Section 4.1, Aesthetics). The area is highly urbanized and consists of multi-story apartment buildings, including the six-story Gayley Towers apartment building. The proposed 2008 NHIP would introduce new residential uses in an area that is predominantly developed with multi-family residential uses (largely occupied by UCLA students)

and would represent a continuation of existing on-campus land uses. The proposed 2008 NHIP would not include any uses or functions that would conflict with existing residential uses off campus. It should also be noted that, pursuant to PP 4.1-2(d) in Section 4.1 (Aesthetics), a landscape buffer would be provided along Gayley Avenue in front of the Lower De Neve building to provide an attractive perimeter that provides a buffer between the existing off-campus residential community and the proposed 2008 NHIP. Potential indirect impacts to off-campus land uses are discussed in the respective technical sections of the EIR (e.g., aesthetics, air quality, noise).

With respect to physical compatibility, Figure 4.1-3 (in Section 4.1, Aesthetics) provides a photograph looking toward the proposed 2008 NHIP project sites and shows that the area is developed with buildings of various heights and massing. However, it should be noted that the actual height of buildings is not specifically relevant for addressing land use and visual consistency in this area given the varied topography. As discussed in Section 4.1, Aesthetics, the topography on the north and south sides of Gayley Avenue slope upwards away from the roadway with substantial elevation changes. Therefore, shorter buildings at a higher elevation (such as Southern Regional Library) appear just as tall as larger buildings at lower elevations (such as the proposed Lower De Neve Building). For example, Figures 3-6 and 3-8 (in Section 3, Project Description) show the elevations of the proposed 2008 NHIP structures compared to existing adjacent buildings on campus (e.g., Rieber Hall). As shown, although the height of the proposed buildings would be taller than the existing Rieber Hall (which has the highest rooftop elevation in this area), the rooftop elevations of the proposed structures are lower than Rieber Hall.

When considering off-campus buildings in the area, the same effect occurs. The proposed Upper and Lower De Neve buildings would be taller than the multi-family buildings located directly across Gayley Avenue; however, because the buildings in the North Village are situated at higher base elevations compared to Gayley Avenue, the height differential between the Lower and Upper De Neve buildings would not be as apparent. In addition, there are other multi-story buildings in the North Village area that are of similar height including Gayley Towers. As demonstrated in Figure 4.1-3, there is a varied mix of building types and heights in this area. The proposed 2008 NHIP buildings would not exceed the rooftop elevations of existing on-campus buildings, would be similar to the rooftop elevations of off campus residential structures to the south. Additionally, the proposed 2008 NHIP would have a landscaped buffer along Gayley Avenue to soften the transition at this campus edge, consistent with ongoing campus policies (refer to 2002 LRDP Final EIR PP 4.1-2 [d]). In summary, the proposed 2008 NHIP would not result in land use incompatibilities with off-campus land uses from a physical and operational perspective. Impacts to off-campus land uses would be less than significant and no mitigation is necessary.

Remaining Buildout of the 2002 LRDP as Amended

Compatibility with On-campus Land Uses

As previously discussed, the campus is divided into eight land use zones that serve as organizing land use elements. Each of these land use zones contains uses specific to that zone. For example, the Northwest zone consists of residential and supporting recreational uses, while the Core Campus zone contains a majority of the academic buildings on campus. The Health Sciences zone contains a new teaching and research hospital, the existing medical plaza, and other buildings related to health care.

With implementation of the proposed Project, the campus would maintain the eight existing land use zones and would continue to develop uses that are compatible with the existing uses in

each zone. 2002 LRDP Final EIR PP 4.8-1(c) requires that infill development be continued, and PP 4.8-1(e) requires that facilities be sited and designed to enhance spatial development of the campus while maximizing use of limited land resources. Appropriately sited infill development not only allows for the most efficient use of the remaining campus land, but also reduces vehicle miles traveled and energy consumption. Additionally 2002 LRDP Final EIR PP 4.8-1(d) requires that new building projects be sited to ensure compatibility with existing uses and the height and massing of adjacent facilities. Implementation of these PPs is accomplished through the design review process that UCLA uses for all campus development projects (see PP 4.1-1[a] in Section 4.1, Aesthetics). This design process is performed through various campus committees and includes evaluation of factors such as the proposed site and compatibility with adjacent uses, building mass and form, roof profile, and various aesthetic considerations (refer to the discussion provided in Section 4.1, Aesthetics). The campus design review process ensures that the physical planning objectives described in detail in Section 3.3 (Project Objectives) of this EIR are incorporated into each project proposal to the maximum extent feasible.

Since future development within each zone would consist of the same or similar uses currently within each zone and since siting of future development would be undertaken through implementation of the ongoing campus design review process, land uses implemented as part of the remaining development allocation under the proposed Project would continue to be internally compatible with other on-campus land uses.

Implementation of remaining buildout under the 2002 LRDP, as amended, would have less than significant impacts to on-campus land uses and no mitigation is necessary with implementation of the identified 2002 LRDP Final EIR PPs.

Compatibility with Off-campus Land Uses

While the infill development allowed under the proposed Project would provide compatible on-campus land uses without contributing to urban sprawl (which is beneficial from a regional perspective), the potential future development must also be considered in relation to off-campus and adjacent uses (which are primarily residential to the north, west and east, and commercial to the south in Westwood Village). Because each of the campus zones interfaces with off-campus land uses to varying degrees, development of additional buildings in each of the campus zones could result in a land use compatibility impact. Land use compatibility is primarily considered with respect to the type of land use. However, the location and physical characteristics of new structures and potential environmental impacts resulting from proposed development is also a consideration. Certain types of uses, if located within the campus boundaries, could be incompatible with surrounding neighborhoods because of an increase in noise, for example. Similarly, a parking structure built on the edge of the campus could increase activity and noise levels immediately adjacent to sensitive land uses if not properly sited and designed.

A summary of the type of development by campus land-use zone that could be anticipated under the 2002 LRDP, as amended, is provided below and includes a discussion of potential land use compatibility impacts for each zone based on the type of development proposed in each zone and each zone's relationship to adjacent off-campus land uses. Note that the remaining development allocation by zone is shown in Table 4.8-1 under the discussion of Impact 4.8-2.

- ***Botanical Garden Zone.*** No future development is proposed for this zone with the proposed Project. Since no development is proposed in the Botanical Garden zone, no land use compatibility impacts are anticipated.

- ***Bridge Zone.*** The remaining development allocation in the Bridge zone with the proposed Project could provide for potential growth in ambulatory patient care and

associated health sciences research facilities. The provision of medical-related uses would represent a new use in this already mixed-use zone. The Bridge zone is located adjacent to commercial and retail uses in Westwood Village and high-density, multi-family residential uses located just northeast of the Village. Development of the southern edge of the main campus has been, and would continue to be, designed to enhance the campus's interface with Westwood Village, as required by 2002 LRDP Final EIR PP 4.8-1(a) and as appropriate. Additionally, PP 4.8-1(d) requires that new buildings be sited to ensure compatibility with existing uses and the height and massing of adjacent facilities; PP 4.8-1(e) requires that spatial features of the campus continue to be considered in the design and development process to maximize the use of limited land resources; and PP 4.1-1(a) (in Section 4.1, Aesthetics) requires the evaluation and incorporation of design considerations (such as building height, location and massing, landscaping, and pedestrian/vehicular circulation and access) to ensure preservation and enhancement of the visual character and quality of the campus and surrounding area. Potential land use compatibility impacts resulting from future development in the Bridge zone would be less than significant.

- ***Campus Services Zone.*** The remaining development allocation in this zone with the proposed Project is anticipated to accommodate future needs for facilities management and/or community safety administrative services. Demolition and construction of a new police department building is currently underway. The western boundary of the Campus Services zone abuts Gayley Avenue, along which high-density, multi-family residential uses (including fraternity houses) are located. The western portion of this zone is fully developed, and it is anticipated that any future development in this zone would occur internal to the campus. Because future development would continue to comply with PP 4.8-1(d), PP 4.8-1(e), and PP 4.1-1(a) (from Section 4.1, Aesthetics), potential land use compatibility impacts resulting from future development in the Campus Services zone would be less than significant.

- ***Central Zone.*** The remaining development allocation in the Central zone with the proposed Project is anticipated to accommodate future facility requirements for the recreation and athletics programs. Consistent with existing campus operations, opportunities to enhance utilization of recreation facilities through operational improvements (such as lighting of additional field areas to permit extended hours of use in winter months) would continue to be explored. Existing recreational fields (e.g., Intramural Field, North Athletic Soccer Field, and Marshall Field) form the northern boundary of the campus in this zone and provide a visual and spatial buffer between on-campus development and the low-density, single-family residential development to the north of campus across Sunset Boulevard. With implementation of 2002 LRDP Final EIR PP 4.8-1(b), this spatial relationship would continue. Additionally, PP 4.8-1(d), PP 4.8-1(e) and 4.1-1(a) would apply to future development in the Central zone. Potential land use compatibility impacts resulting from future development in the Campus Services zone would be less than significant.

- ***Core Campus Zone.*** It is anticipated that the Core Campus zone's remaining development allocation with the proposed Project would accommodate the future facility requirements of the primary academic, research, library, and administrative uses in this zone and would meet the program needs associated with enrollment growth in the College of Letters and Science, libraries and professional school programs (including the arts, education, engineering, and public policy). The Life Sciences Replacement Building Project is currently under construction in this zone. The Core Campus zone shares a perimeter with Sunset Boulevard to the north and Hilgard Avenue to the east. Marymount High School and low-density, single-family residential uses are located just

north and east of the campus. Consistent with 2002 LRDP Final EIR PP 4.1-2(d) (see Section 4.1, Aesthetics), continued provision of a landscaped buffer along the western, northern, and eastern edges of the main campus would visually and spatially separate the campus from adjacent uses.

- ***Health Sciences Zone.*** The Health Sciences zone's remaining development allocation with the proposed Project could provide for potential expansion of existing health sciences programs and future flexibility to accommodate implementation of the Academic Health Center Facilities Reconstruction Plan.

  The Health Sciences zone forms part of the southern edge of the campus and provides a direct interface with land uses in Westwood Village. Development of the southern edge of the main campus has been, and would continue to be, designed to enhance the campus interface with Westwood Village, as required by 2002 LRDP Final EIR PP 4.8-1(a) and as appropriate.

- ***Northwest Zone.*** With the proposed LRDP Amendment the remaining development allocation in the Northwest zone would be, 654,000-gsf including 550,000 gsf of new development to accommodate additional student housing and support facilities associated with proposed 2008 NHIP, which was addressed above. The Spieker Aquatic Center is currently under construction and would provide for a competition swimming pool and related facilities at the Sunset Canyon Recreation Center (SCRC) in the Northwest zone. The remaining development allocation in the Northwest zone (104,000 gsf) could be used for other potential child care, library, and recreational uses.

  Land uses to the west of the Northwest zone primarily consist of low-density, single-family residential to the west of Veteran Avenue and high-density, multi-family residential apartment complexes and fraternity houses along Gayley Avenue. The proposed 2008 NHIP would provide up to 1,525 beds for undergraduate student housing in 4 new residence buildings on 3 infill sites; approximately 10 apartments for professional staff and faculty-in-residence; an approximate 750-seat dining commons; multipurpose assembly, study, and meeting rooms; a fitness center; and maintenance and support space. As described above, potential land use compatibility impacts associated with proposed undergraduate housing in relation to off-campus uses across Gayley Avenue would be less than significant.

  2002 LRDP Final EIR PP 4.8-1(d), PP 4.8-1(e), and PP 4.1-1(a) would apply to future development of potential child care and/or recreational uses in the Northwest zone. Potential land use compatibility impacts that would result from future development in the Northwest zone would be less than significant. Refer to the discussion of Impact 4.8-2 regarding development in the Northwest zone for a discussion of the existing Benign Use Agreement.

- ***Southwest Zone.*** The remaining development allocation in the Southwest zone could accommodate additional graduate student housing, commons facilities, and other academic research and administrative needs. Off-campus uses adjacent to the Southwest zone include the Los Angeles National Cemetery to the west; high-density, multi-family residences to the north; and commercial uses to the east and south. 2002 LRDP Final EIR PP 4.8-1(d), PP 4.8-1(e), and PP 4.1-1(a) would apply to future development in the Southwest zone, and potential land use compatibility impacts that would result from future development in the Southwest zone would be less than significant.

In summary, continued infill development focuses development within the campus boundaries rather than outside the campus boundaries, as required by PP 4.8-1(c), thereby limiting urban sprawl. The campus exists in the context of a developed urban environment, and the character and composition of the campus would be similar with buildout of allowed development under the 2002 LRDP, as amended, as under current conditions.

Continued implementation of PPs 4.8-1(a) through 4.8-1(e) identified above, and PP 4.1-1(a) (and the other related PPs provided in Section 4.1, Aesthetics), would ensure that land use compatibility impacts would remain less than significant by (1) analyzing and considering land use compatibility in the design phase of all proposed projects (including architectural and landscape considerations); (2) providing landscaped areas around the periphery of campus to provide a visual and spatial buffer for sensitive adjacent land uses; and (3) considering surrounding land uses when proposing projects on the periphery of campus. No mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.8-1 ***Continued compliance with PPs 4.8-1(a) through 4.8-1(e) and PP 4.1-1(a) would ensure that the proposed Project would not result in incompatibilities between campus development and adjacent land uses. This impact is less than significant and no mitigation is required.***

Threshold	Would the proposed project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

As previously noted, as a constitutional entity, the University of California is not subject to municipal regulations, such as the City of Los Angeles General Plan. *The Westwood Community Plan,* which includes the campus, has identified UCLA as an educational land use. Although UCLA is not subject to *The Westwood Community Plan,* the proposed Project is consistent with this land use designation.

As required by Section 15125(d) of the CEQA Guidelines, this document discusses any inconsistencies between the proposed Project and applicable general plans and regional plans. The plans relevant to the proposed Project and for which a consistency analysis is provided include the 2002 LRDP, the RCPG (SCAG 1996, 2002a, 2002b, 2002c,), and the RTP (SCAG 2008). A consistency analysis with relevant water quality control plans is provided in Section 4.7, Hydrology and Water Quality, and a consistency analysis with the South Coast Air Quality Management District's Air Quality Management Plan is provided in Section 4.2, Air Quality (Impact 4.2-1).

University of California Los Angeles

UCLA 2002 Long-Range Development Plan

The proposed Project includes an LRDP Amendment designed to:

- Increase the development allocation in the Northwest zone to accommodate the proposed 2008 NHIP student housing project which would be implemented as part of the proposed Project;
- Update the total existing square footage and remaining development allocation by campus land use zone; and
- Estimate potential population growth through the new plan horizon year of 2013.

The proposed Project retains the land use designations (including academic, recreational, residential, health sciences, and other land uses) contained in the same eight land use zones envisioned in the 2002 and 1990 LRDPs. The proposed Project is consistent with the 2002 LRDP planning principles (or LRDP objectives) that guide the physical planning process objectives. A detailed description of the proposed Project is provided in Section 3, Project Description.

Table 4.8-1 identifies (1) the existing baseline square footage on campus (2008); (2) the original 2002 LRDP development allocations as of 2002; (3) the remaining allocations under the 2002 LRDP; (4) the proposed amendment to the 2002 LRDP to accommodate the proposed 2008 NHIP in the Northwest zone; and (5) the resulting development allocation under the proposed 2002 LRDP, as amended.

TABLE 4.8-1
PROPOSED PROJECT – EXISTING AND PROPOSED DEVELOPMENT BY LRDP ZONE

LRDP Zone	Existing (2008) Square Footage	2002 LRDP Allocation (gsf)	2002 LRDP Current Remaining Allocation (gsf)	2008 Amendment to the 2002 LRDP	2002 LRDP Proposed Amended Allocation (gsf)
Botanical Garden	19,100	0	0	0	0
Bridge	330,568	175,000	175,000	0	175,000
Campus Services	411,072	20,000	11,000	0	11,000
Central	1,077,075	5,000	5,000	0	5,000
Core	6,954,702	457,465	305,165	0	305,165
Health Sciences	4,294,503	269,000	274,150[a]	0	274,150
Northwest	2,645,079	570,000	104,000[b]	550,000	654,000
Southwest	1,103,917	210,000	446,300[c]	0	446,300
Total	***16,836,016***	***1,706,465***	***1,320,615***	***550,000***	***1,870,615***

[a] 5,150 gsf was deducted from the 1990 LRDP allocation for the MP 200 project, which was never undertaken; thus, this square footage has been added back into the remaining allocation for the Health Sciences zone.

[b] 15,000 gsf recreation component of 2002 NHIP was deducted from 2002 LRDP allocation but never undertaken and SRLF Phase III (85,000 gsf) analyzed under 1983 LRDP and SRLF Phase II Supplemental EIR (Sept. 1992) was already deducted from 1990 and 2002 LRDP beginning allocation, but this project was deferred and remains in planning. Therefore, the square footage for these two projects (100,000 gsf) has been added back into the remaining allocation for the Northwest zone.

[c] SWH Phase II (243,500 gsf) analyzed under 1990 LRDP was already deducted from 2002 LRDP beginning allocation, but this project was deferred and remains in planning. Therefore, the square footage for this project has been added back into the remaining allocation for the Southwest zone.

As shown in Table 4.8-1, the resulting development allocation under the proposed 2002 LRDP, as amended, is approximately 1.87 million gsf, which includes the 1.32 million gsf remaining allocation under the 2002 LRDP and 550,000 gsf of proposed new development in the Northwest zone to accommodate the proposed 2008 NHIP. This represents an approximate 11.1 percent increase over the existing campus built environment of approximately 16.8 million gsf. The UCLA campus is located within the context of a developed urban area and has grown in a manner consistent with the region's general urbanization. Furthermore, development on the UCLA campus has used limited land resources wisely through the provision of conjunctive uses, such as the provision of underground parking structures with recreational fields above and by the provision of denser development and creative use of open areas to limit the overall development footprint. While the campus has experienced land use intensification within its borders, this type of development is fully consistent with the planning policies established by the campus and by other local and regional planning agencies, to discourage or curtail further urban sprawl.

The proposed Project is consistent with the planning policies of the 2002 LRDP, as amended; no impacts would result and no mitigation is required.

Stipulated Use Agreement with the Westwood Hills Property Owners' Association

This Agreement applies only to the Northwest zone. The 2008 NHIP would be consistent with the Stipulated Use Agreement between The Regents and the Westwood Hills Property Owners' Association. As described fully in the Environmental Setting discussion previously, under the terms of the Agreement, new development within the Benign Use Zone "will be reserved for benign uses, which include, but are not limited to, open green space, landscape buffer zones, existing ornamental horticultural buildings and parking facilities, and low-intensity, nonspectator, recreational and athletic space. Benign use excludes, among other things, consideration of a baseball facility in this area." All residential development proposed as part of the 2008 NHIP would be located outside the Benign Use Zone. Additionally, while the Agreement is in place, no future development under the 2002 LRDP, as amended, is contemplated in the Benign Use Zone that would not be consistent with the provisions of the agreement. Therefore, the proposed Project is consistent with the provisions of the Agreement.

Hillside Use Agreement

The Hillside Use Agreement requires specific evaluation, as a "substantial change", of the potential impact of any new permanent or long-term source of nighttime lighting or noise in the hillside area or reaching hillside area through the immediately adjacent area. The proposed 2008 NHIP is almost 0.25 mile from the Hillside Area and is separated from the Hillside Area not only by existing development but also topography. The proposed 2008 NHIP is of a sufficient distance from the Hillside Area that it would not result in indirect lighting or noise impacts.

The proposed LRDP Amendment also does not propose any specific facility within the Hillside Area. The proposed 2002 LRDP as amended, as a general land use plan, does allow for additional future development within the Northwest zone, which includes the Hillside Area. Consistent with the Hillside Area agreement, this EIR provides a programmatic study of the potential environmental impacts of the proposed 2002 LRDP, as amended, on any sensitive natural communities throughout the campus, including the Hillside Area's Northwest zone, as set forth in Section 4.3, Biology, and has included specific MMs to address potential future development on or in proximity to the hillside area. Remaining development under the 2002 LRDP, as amended, would be subject to project-specific CEQA documentation, which would include evaluation of potential direct and indirect impacts. Future development would be subject to the respective PPs and MMs identified throughout the technical analysis presented in

Section 4 of this EIR. Accordingly, the proposed Project would not conflict the provisions of the Hillside Use Agreement.

Southern California Association of Governments

Table 4.8-2 provides an assessment of the consistency of the proposed Project with relevant SCAG policies and applicable policies in the RCPG, the RTP, and the CGV. The majority of UCLA is within a designated 2% Strategy Opportunity Area identified in SCAG's CGV. Where one or more sections of the EIR provide further discussion relevant to the consistency analysis, these are included in parentheses in the table below.

TABLE 4.8-2
SCAG POLICY CONSISTENCY ANALYSIS

Policy		Consistency Analysis
Regional Comprehensive Plan and Guide		
Growth Management Chapter Policies		
3.01	The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.	The projected growth in average daytime campus population by 2013–2014 of 2,780 persons, including students, staff (including 151 new employees with the 2008 NHIP), and visitors, is accounted for in the SCAG projections, which estimate a population of 4 in 2015 for the City of Los Angeles Subregion. The proposed Project does not provide for population, housing, or employment growth that would exceed the SCAG forecast; therefore, implementation of the proposed Project would not interfere with SCAG's ability to utilize its regional population, housing, and jobs forecasts by proposing development that SCAG has not considered. The proposed Project is consistent with this policy.
3.03	The timing, financing, and location of public facilities, utility systems and transportation systems shall be used by SCAG to implement the region's growth policies.	The proposed Project would allow for development of 1.87 million gsf, which includes 1.32 million gsf of remaining development allocation under the 2002 LRDP and 550,000 gsf proposed with the 2008 NHIP. This development would occur entirely within the campus boundaries and would accommodate, in part, the anticipated regional growth in population, while addressing the increased demand for higher education services. UCLA is located in a highly developed urban environment, adjacent to major transportation centers, and the TDM Program implemented on campus promotes the use of local and regional transportation systems. The campus is further connected to a highly developed infrastructure grid that provides services to the campus and the City as a whole. The proposed Project would (1) provide additional housing and academic services without furthering urban sprawl and (2) would utilize existing regional and local infrastructure and other public services and utility systems to accommodate the increased development and associated population growth. Thus, the proposed Project, would not interfere with SCAG'S ability to implement regional growth policies.
3.05	Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.	The proposed Project allows for construction of 1.87 million gsf, which includes a 1.32 million gsf allocation that remains under the 2002 LRDP and 550,000 gsf proposed to accommodate the 2008 NHIP. These proposed uses would consist of academic, research, administrative, recreational, and residential

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy		Consistency Analysis
3.09	Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.	uses to support the purposes of the campus. Infrastructure systems are in place on campus and beyond to serve current and planned development. Regional infrastructure is adequate to serve the campus during the planning horizon of the 2002 LRDP, as amended, as established in Section 4.14 (Utilities and Service Systems) of this document. Limited expansion or renovation of campus infrastructure may be required as part of specific projects, but overall campus infrastructure is adequate to accommodate development under the 2002 LRDP, as amended. Localized infrastructure needs would be addressed on a project-specific basis (prior to project approval) to ensure that adequate conveyance capacity is provided. Construction of most campus facilities under the 2002 LRDP, as amended, including the 2008 NHIP, would require only basic service connections to the existing delivery infrastructure and would, therefore, minimize costs associated with infrastructure construction. Notable electricity-related infrastructure systems on campus are described in detail in Section 4.14 (Utilities and Service Systems), and include: (1) the Cogeneration Facility, which provides electricity to the campus with 2 combustion turbine generators that burn a combination of natural gas and methane gas from the nearby Mountaingate Landfill (refer to the description of this facility provided in Section 4.14, Utilities and Service Systems; (2) the TES, which is an extension of the campus ESF and stores chilled water produced during low-energy cost periods (nights) for use during high-energy cost periods (days); (3) the School of Engineering and Applied Sciences (SEAS) Chiller Plant, which consists of four aboveground chillers and associated cooling towers and is currently a back-up plant for the ESF. The campus has instituted lighting and other energy-conservation measures and has been replacing in-building lighting systems with up-to-date, energy-saving equipment. In addition, the campus shall continue its ongoing energy conservation measures and continue to implement all new development under the 2002 LRDP, as amended, including the 2008 NHIP, in accordance with the *UC Policy on Sustainable Practices,* which is described in Section 4.15, Climate Change. Through the efficient use of electricity on campus, the use of natural gas would also occur in an efficient manner, since the cogeneration facility on campus is fired by natural gas. Ongoing campus programs, practices, and procedures that improve and/or upgrade HVAC units will also allow more efficient use of natural gas for heating. Because the majority of the necessary natural gas infrastructure already exists on the campus, new development would require minimal investment in natural gas infrastructure. The proposed Project would also efficiently utilize existing land resources with continued implementation of existing

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy		Consistency Analysis
		energy conservation practices, LRDP objectives, and mitigation measures addressing energy conservation (described in Section 4.14, Utilities and Service Systems, and Section 4.15, Climate Change). The proposed Project would be consistent with this SCAG policy.
3.10	Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.	As noted above, UCLA is part of the University of California, a constitutionally created unit of the State of California and is, therefore, not subject to municipal policies such as the County and City General Plans. The campus seeks to maintain an ongoing exchange of ideas and information and to pursue mutually acceptable solutions for issues that confront both the campus and the community. To foster this process, UCLA participates in, and communicates with, City and community organizations, and sponsors various meetings and briefings to keep local organizations, associations, and elected representatives apprised of ongoing planning efforts. Implementation of the proposed Project would not interfere with the City of Los Angeles's ability to expedite the permitting process with regard to other projects within its jurisdiction. In fact, the proposed Project would enhance the economic vitality and competitiveness of the region by responding to the increased demand for academic services. Therefore, the proposed Project is consistent with this policy.
3.12	Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.	The UCLA campus is located adjacent to pedestrian-friendly Westwood Village, as well as major transportation corridors. The campus is located immediately adjacent to Interstate 405, a major north-south arterial in the Southern California region. The campus is within a few miles of both Interstate 10 and the 101 Freeway, which are both major east-west freeways. All these highways serve to connect the campus with the broader geographic region outside the Los Angeles area. The central location of the campus encourages transit use. Viable transit opportunities include public bus services provided by six outside operators and campus-operated shuttle bus services. These services not only offer an alternative means by which to commute to the campus, but also help to reduce the need for a car once at UCLA through the ability to utilize shuttles to get around the campus, travel into Westwood Village, or travel to other off-campus locations. UCLA has also implemented a TDM Program that facilitates and promotes the use of transit, carpools, vanpools, and bicycling. The transportation alternatives made available to the campus population through the various transit services and the campus trip-reduction program are discussed in greater detail in Section 4.13, Transportation/Traffic.

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy		Consistency Analysis
3.13	Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.	The proposed Project involves development entirely within the campus boundaries to accommodate the increased need for higher education services. This infill development maximizes the use of the existing campus and provides the benefit of curtailing urban sprawl. UCLA is located in a highly developed urban environment, adjacent to major transportation centers, and the campus TDM Program promotes the use of local and regional transportation systems, as described in Section 4.13, Transportation/Traffic. The campus is easily accessible from local and regional transportation systems that provide service to the campus, the City of Los Angeles, and the region. The infill development proposed by the proposed Project would, in fact, provide additional housing (as proposed with the 2008 NHIP) and academic services without furthering urban sprawl and would continue to utilize existing public transportation services to accommodate the increased development and associated population growth. The proposed Project would not require new or expanded transportation systems, and is, thus, consistent with this policy.
3.14	Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.	As noted above in the discussions of SCAG Policies 3.12 and 3.13, the UCLA campus is centrally located to regional activity centers connected by local and regional transportation systems. Adjacent activity centers (such as Downtown Los Angeles, beaches, and regional recreational, entertainment, and shopping facilities) are located on transit routes and are accessible from the campus. Therefore, the proposed Project is consistent with this policy.
3.16	Encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.	As noted above with regard to SCAG Policies 3.12, 3.13 and 3.14, the proposed Project represents infill development on a highly developed campus, utilizing existing infrastructure and public service systems. The campus is centrally located to activity centers throughout the Southern California region and is connected by an extensive transportation network. The proposed Project would not interfere with the City of Los Angeles's ability to direct non-campus development to areas with underutilized infrastructure systems or areas needing recycling or redevelopment. Therefore, the proposed Project is consistent with this policy.
3.18	Encourage planned development in locations least likely to cause environmental impact.	The UCLA campus is part of a highly developed urban environment. Development of 1.87 million gsf allocated under the 2002 LRDP, as amended, (which includes the proposed 2008 NHIP) would occur entirely within campus boundaries. Provision of additional housing, academic, research, administrative, and recreational facilities on campus would minimize potential adverse environmental impacts on adjacent land uses. In addition, all existing campus programs, practices, and procedures, as well as mitigation measures identified in this EIR, are designed to reduce environmental impacts to the maximum extent feasible.

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy		Consistency Analysis
3.21	Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	The SHPO has designated the campus historic core, located in the Core Campus zone, as eligible for listing on the NRHP, and the campus has continued to preserve and enhance these structures and connecting open spaces. The appearance, location, and setting of these and other historic buildings on campus remain generally similar to the time of construction, as the buildings were constructed as academic and support facilities for the University and serve these functions today. Royce Hall, one of the buildings in the historic core, serves as the signature structure for the campus and, along with the other campus buildings, has seen continuous use and maintenance since its construction and has not suffered adverse effects. The campus has conducted and will continue to conduct renovations (particularly seismic renovations) to historic structures. Seismic renovations to Moore Hall, Powell Library, Royce Hall, and Haines Hall, have been completed, and all such projects were completed in consultation with the SHPO and under the authoritative guidance provided in *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Illustrated Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Weeks and Grimmer 1995). Renovation projects that would occur during implementation of the 2002 LRDP, as amended, would be conducted with the same consultation and guidance, as required by PP 4.4-1(a). There are planning objectives contained in the 2002 LRDP, as amended, and/or campus programs, practices, and procedures identified in Section 4.4, Cultural Resources, to protect historic resources. Section 4.4 also includes PP 4.4-5 and MMs 4.4-3(a), 4.4-3(b), 4.4-4(a) and 4.4-4(b), which address avoidance and protection of historic and potentially historic structures, archaeological resources, and paleontological resources, as well as mitigation for impacts to such resources, if impacts occur. These procedures require the following: suspension of construction activities in an area where unique archaeological and paleontological resources are discovered (until they can be evaluated); avoidance of resources, where feasible, or scientific recovery and study; and compliance with Section 5097 of the *Public Resources Code,* which governs the treatment of human remains. With implementation of these measures and/or existing campus programs, practices, and procedures, proposed Project is consistent with this policy.
3.22	Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.	Implementation of the proposed Project would result in the construction of new development on campus, an area where seismic hazards could occur. However, PP 4.5-1(a) requires preparation of a site-specific geotechnical study (including engineering recommendations to mitigate potential seismic-related impacts) and continuation of PP 4.5-1(b) through PP 4.5-1(d) would further reduce this impact. Compliance with the 2007 CBC and the University Policy on Seismic

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy	Consistency Analysis
	Safety would also minimize the effects of strong groundshaking by designing new buildings to specified design requirements. Therefore, implementation of the proposed Project would be consistent with this policy as it relates to seismic hazards This is further described in Impact 4.5-1 in Section 4.5, Geology and Soils, of this document. There are no areas of high fire hazard on campus. This is further discussed in "Effects Found Not to be Significant" in Section 4.6, Hazards and Hazardous Materials. Based on FEMA flood hazard zone mapping information (FEMA 1995), the majority of the campus is within Zone X (an area that is determined to be outside the 100- and 500-year flood plains). A linear area along Sunset Blvd following Stone Canyon Creek is within Zone A. Zone A represents areas inundated by 100-year flooding, for which no base flood elevations have been determined. Therefore, the proposed Project would be consistent with this policy as it relates to flooding. Refer to Section 4.7, Hydrology and Water Quality, of this document. A small area of the campus in the Northwest zone is identified by Department of Conservation, California Geological Survey as a potential landslide hazard area. No documented landslides or mudflows have occurred on campus (which is likely a result of the extensive landscaping and hardscape) and all projects involving new construction and renovation include the provision of landscaping as part of the project. The natural topography in this area consists of gently sloping hillsides rather than steep slopes. Therefore, the potential for landslides or mudflows to occur would be considered remote. This is further discussed in Impact 4.5-3 of Section 4.5, Geology and Soils, of this document.
3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.	Implementation of the proposed Project is not expected to expose people to severe long-term noise levels, nor is it expected to cause a substantial increase in ambient noise levels (as discussed in Section 4.9, Noise). Following implementation of PPs identified in Section 4.9, Noise, potential noise impacts would be reduced to the maximum extent possible. Implementation of the proposed Project would result in new development within the campus that could affect biological resources. Following implementation of PPs and MMs identified in Section 4.3, Biological Resources, potential impacts to biological resources would be reduced to a level considered less than significant. Projects associated with implementation of the proposed Project would be constructed in accordance with 2007 CBC standards for seismic considerations and emergency requirements. In addition, as specified in PP 4.5-1(c), the campus shall continue to comply with the University Policy on Seismic Safety. Following implementation of PPs identified in Section 4.5, Geology and Soils, potential impacts to seismic hazard would be reduced to a level considered less than significant.

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy		Consistency Analysis
3.24	Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing.	The 2008 NHIP provides for new residential housing in the campus's Northwest zone. The 2008 NHIP would provide 1,525 beds for undergraduate housing, addressing an unmet need for on-campus housing and furthering the LRDP objective of continuing the evolution of UCLA from a commuter to a residential campus. The 2008 NHIP will, therefore, increase the supply of affordable student housing on campus, and is consistent with this policy.
3.27	Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.	On July 17, 2003, the University of California adopted policies on sustainable practices that were expanded in 2005 and again in 2006 to what is now formally known as the UC Policy on Sustainable Practices, which was adopted in March 2007. This UC Policy commits the 10 UC campuses to minimizing their individual impacts on the environment and reducing their independence on non-renewable energy. This UC Policy addresses sustainable practices in the following 7 areas: Green Building Design, Clean Energy Standards, Climate Protection Practices, Sustainable Transportation Practices, Sustainable Operations, Recycling and Waste Management, and Environmentally Preferable Purchasing Practices. Additional areas being explored for potential future inclusion relate to sustainable food systems and investment practices. UCLA's compliance with the UC Policy on Sustainable Practices is further discussed in Section 4.15, Climate Change. The Master Plan for Higher Education in California directs the University of California to provide (1) instruction in the liberal arts and sciences and (2) professional education in Law, Medicine, Veterinary Medicine, and Dentistry. It is also assigned exclusive responsibility for doctoral education in most disciplines and is designated as the primary State-supported academic agency for research. UCLA's mission within this context is to offer teaching, research, and service programs of the highest quality to serve the needs of the Los Angeles region, the State of California, and the nation. To support this mission, the campus provides associated housing facilities for students and faculty, health care services, social services, recreational facilities available to the general public (with purchase of a recreational card), and law enforcement and police protection on campus. LAFD Fire Station 37 is located in the Southwest zone of the campus and provides campus fire protection services. Therefore, the proposed Project would be consistent with this policy.

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy	Consistency Analysis
Air Quality Chapter Core Actions	
5.07 Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community based shuttle services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be assessed.	As noted above in the discussions of SCAG Policies 3.03 and 3.12, since 1984, the UCLA campus has successfully implemented a comprehensive TDM Program that offers a broad range of services to encourage and assist UCLA commuters in utilizing alternatives to the single-occupancy vehicle. As part of its ongoing TDM Program, UCLA actively provides and promotes: vanpools; carpool matching and parking incentive programs; financial incentives for carpool and vanpool participants; accommodation of the use of other modes of transit, including bicycles, motorcycles, and scooters; alternative work schedules and telecommuting; annual distribution of the UCLA Commuter's Guide; parking control management; and restriction of access to main campus parking facilities for on-campus housing residents. UCLA has also established BruinGo, a partnership with the Santa Monica Big Blue Bus system, Culver City Bus Los Angeles County Metro, LADOT, and Santa Clarita Transit to offer a pre-paid pilot transit pass program for students, faculty, and staff. The UCLA TDM Program is discussed in greater detail in Section 4.13, Transportation/Traffic. The 2002 LRDP contains specific planning objectives aimed at reducing vehicle miles traveled, providing alternative methods of transportation, and incorporating land use policies that integrate walkways with building design to encourage use through placement and design. These planning principles would serve to encourage use of transit, to reduce the number of vehicle trips and miles traveled, and to create further opportunities for campus students, faculty, and staff to walk and bike to class and work. Therefore, the proposed Project is consistent with this policy.
5.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.	This EIR fully addresses air quality, land use, and traffic and circulation impacts that result from construction and operation of the 2002 LRDP, as amended, which includes the 2008 NHIP and considers all relevant planning documents, such as the Air Quality Management Plan, the Congestion Management Program, and the current 2002 LRDP.
Water Quality Chapter	
11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.	The DWP has not extended reclaimed water infrastructure to the Westwood area, nor are plans currently in place for the provision of reclaimed water infrastructure to the area. Therefore, a reclaimed water system on campus is currently not feasible. If reclaimed water infrastructure becomes available during the planning horizon of the 2002 LRDP, as amended, the campus will evaluate its feasibility in terms of cost-effectiveness and environmental sustainability, and will endeavor to use reclaimed water where appropriate. The proposed Project is consistent with this policy.

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy	Consistency Analysis
Regional Transportation Plan Policies	
4.01 Transportation investments shall be based on SCAG's adopted Regional Performance Indicators.	This policy addresses transportation investments and is not applicable to the proposed Project.
RTP G1 Maximize mobility and accessibility for all people and goods in the region. RTP G2 Ensure travel safety and reliability of all people and goods in the region RTP G3 Preserve and ensure a sustainable regional transportation system RTP G4 Maximize the productivity of our transportation system. RTP G6 Encourage land use and growth patterns that complement our transportation investments.	As noted above in the discussions of SCAG Policies 3.03, 3.12 and 5.07, since 1984, the UCLA campus has successfully implemented a comprehensive TDM Program that offers a broad range of services to encourage and assist UCLA commuters in utilizing alternatives to the single-occupancy vehicle. Refer to Section 4.13, Transportation/Traffic, for a detailed discussion of the TDM Program. The central location of the campus encourages transit use. Viable transit opportunities include public bus services provided by 6 outside operators and campus-operated shuttle bus services. These services not only offer an alternative means by which to commute to the campus, but also help to reduce the need for a car once at UCLA through the ability to utilize shuttles to get around the campus, travel into Westwood Village, or travel to other off-campus locations. The proposed Project is, therefore, consistent with these goals.
Regional Growth Visioning Principles	
Principle 1: Improve mobility for all residents. • Encourage transportation investments and land use decisions that are mutually supportive. • Locate new housing near existing jobs and new jobs near existing housing. • Promote a variety of travel choices.	The proposed 2008 NHIP within the Northwest zone would provide additional housing within the campus boundaries to accommodate the need for undergraduate housing, as discussed in the SCAG Policy consistency analysis for Policy 3.24. As noted above in the discussions of SCAG Policies 3.03, 3.12 and 5.07, since 1984, the UCLA campus has successfully implemented a comprehensive TDM Program that offers a broad range of services to encourage and assist UCLA commuters in utilizing alternatives to the single-occupancy vehicle. Refer to Section 4.13, Transportation/Traffic, for a detailed discussion of the TDM Program. The proposed Project is consistent with this principle.
Principle 2: Foster livability in all communities. • Promote developments which provide a mix of uses. • Promote "people scaled, "walkable communities. • Support the preservation of stable, single-family neighborhoods.	Implementation of the proposed Project would involve construction of 1.87 million gsf which includes 1.32 million gsf of remaining allocation under the 2002 LRDP and 550,000 gsf for the proposed 2008 NHIP. These proposed uses would consist of academic, research, administrative, recreational, and residential uses to support the purposes of the campus. Development of the proposed Project would not preclude UCLA from continuing to be a walkable campus; rather future development would continue to provide for non-vehicular modes of transportation. Implementation of the proposed Project would occur entirely within campus boundaries and would not directly or indirectly impact existing single-family neighborhoods surrounding the campus (refer to the discussion of land use compatibility provided under Impact 4.8-1. Therefore, the proposed Project is consistent with this principle.

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy	Consistency Analysis
Principle 3: Enable prosperity for all people. • GV P3.1 Provide in each community a variety of housing types to meet the housing needs of all income levels. • GV P3.2 Support educational opportunities that promote balanced growth. • GV P3.3 Ensure environmental justice regardless of race, ethnicity, or income class. • GV P3.4 Support local and state fiscal policies that encourage balanced growth. • GV P3.5 Encourage civic engagement.	UCLA provides both on- and off-campus housing options with a range of pricing to meet the needs of all income levels. On campus options consist of residence halls, residence suites and plazas, which each offer single, double, and triple occupancy rates. In addition, there are five meal plans to choose from to meet dietary and budgetary needs. Off-campus University-owned housing consists of singles, studios, lofts, and one- to three-bedroom apartment units. In September 1998, then Chancellor Albert Carnesale appointed the Chancellor's Advisory Group on Diversity to help advance the effort to sustain and promote campus diversity. We consider this work essential to advancing the widely shared purposes of making UCLA a premier institution, noted for the quality, richness, and academic integrity of its program and its vibrancy as a campus community. UCLA is fundamentally committed to including and integrating within the campus community individuals from different groups as defined by such characteristics as race, ethnicity, gender, socioeconomic, background, religion, sexual orientation, age, disability and intellectual outlook. This commitment requires efforts to attract to the campus members of historically under-represented racial and ethnic groups. The University is commitment to devising strategies and programs to realize its benefits fully in education, research and service. UCLA promotes civic engagement through several academic and institutional programs. A Civic Engagement minor is offered through the UCLA Center of Community Learning and is designed to provide students with a core analytical and theoretical framework for community building, governance, and the use of civic resources. Students can also enroll in a one-unit course titled Civil Engagement 18, which is offered under the Bruin Leaders Project – a project of Student Affairs. The Bruin Leaders Project promotes community service that can be achieved through active participation and/or leadership in organizations, clubs, or community service projects (on or off campus). In addition, UCLA established the Center for Community Partnerships (CCP) In 2002. The first center of its kind to be a division of the Chancellors Office and directed by an Associate Vice Chancellor of Community Partnerships, CCP oversees the University's numerous community activities to ensure that a systematic and intentional approach is taken toward civic engagement. UCLA's mode of civic engagement is entrenched in its threefold mission: Research, Teaching, and Service. CCP's programs integrate the concept of service into UCLA's expertise in research and teaching through collaborative partnerships with the civic and community organizations in Greater Los Angeles. The Center creates targeted programs to link community expertise with academic expertise creating new knowledge to address important community issues throughout Los Angeles and enrich UCLA's curriculum and academic experience.

TABLE 4.8-2 (Continued)
SCAG POLICY CONSISTENCY ANALYSIS

Policy	Consistency Analysis
Principle 4: Promote sustainability for future generations. • GV P4.2 Focus development in urban centers and existing cities. • GV P4.3 Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste. • GV P4.4 Utilize "green" development techniques.	The UCLA campus is part of a highly developed urban environment. Development of the remaining 1.87 million gsf allocated under the proposed Project would occur entirely within campus boundaries. On July 17, 2003, the University of California adopted policies on sustainable practices that were expanded in 2005 and again in 2006 to what is now formally known as the "UC Policy on Sustainable Practices", which was adopted in March 2007. The UC Policy commits the 10 UC campuses to minimizing their individual impacts on the environment and reducing their independence on non-renewable energy. The UC Policy addresses sustainable practices in the following 7 areas: Green Building Design, Clean Energy Standard, Climate Protection Practices, Sustainable Transportation Practices, Sustainable Operations, Recycling and Waste Management, and Environmentally Preferable Purchasing Practices. Additional areas being explored for potential future inclusion relate to sustainable food systems and investment practices. UCLA's compliance with the UC Policy on Sustainable Practices is further discussed in Section 4.15, Climate Change.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.8-2 ***Implementation of the proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. This is considered a less than significant impact.***

4.8.4 CUMULATIVE IMPACTS

This section evaluates the potential for the proposed Project to result in a significant contribution to cumulative land use impacts resulting from potential incompatibilities between future development and existing land uses, and cumulative impacts associated with the approval of future development that is inconsistent with applicable land use plans or policies adopted for the protection of the environment. The geographic context for the analysis of cumulative land use and planning impacts includes that portion of the City of Los Angeles that is located west of Downtown Los Angeles, south of the Santa Monica Mountains, and north of the Interstate 10 Freeway, which acts as a natural boundary for land use considerations. This area encompasses the *Westwood Community Plan* area and parts of adjacent community plan areas and contains a mix of land uses, including commercial, residential, industrial, and institutional. The analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of the above-mentioned areas of Los Angeles and development of the related

projects provided by Table 4-1, Off-Campus Related Projects, in Section 4.0 (Introduction to the Environmental Analysis).

It is anticipated that development of the identified related projects and regional growth in general would result in changes to the existing land use environment in the area through the conversion of vacant land and low-density uses to higher density uses, or through conversions of existing land use (e.g., from residential to commercial). However, it is assumed that this future off-campus development would be (1) consistent with applicable City of Los Angeles General Plan and zoning requirements or subject to an allowable exception and (2) further subject to CEQA, mitigation requirements, and design review. Therefore, it can be assumed that through these requirements, future development would be compatible with existing land uses. For this reason, cumulative impacts on land use as a result of incompatibilities between existing and future development would be less than significant. However, it could be possible that significant impacts on land use compatibility might occur with respect to one or more of the related projects (or unknown future projects permitted in the area) due to specific issues associated with these projects or their location. Even if the cumulative impact of these projects would be significant, the proposed Project's contribution to such cumulative land use impacts is less than significant and is thus not cumulatively considerable because (1) development under the 2002 LRDP, as amended, would be compatible with the land uses that surround it, in light of the continuation of the existing educational land use, and (2) the architecture, design, and landscaping policies identified in PPs 4.8-1(a) through PP 4.8-1(e). This is considered to be a less than significant impact.

It is further anticipated that development of the identified related projects (off campus) and regional growth in general will be reviewed for consistency with adopted land use plans and policies by the City of Los Angeles, in accordance with the requirements of CEQA, the state Zoning and Planning Law, and the State Subdivision Map Act, all of which require findings of plan and policy consistency prior to approval of entitlements for development. For this reason, cumulative impacts associated with inconsistency of future development with adopted plans and policies would be less than significant. In addition, the proposed Project's contribution to such cumulative impacts is less than significant because, as noted above, development activity proposed is compatible with surrounding land uses and is also consistent with applicable plans, policies, and regulations. As a result, development under the 2002 LRDP, as amended, would not contribute to any cumulative impacts associated with plan or policy inconsistency. This is considered to be a less than significant impact.

4.8.5 REFERENCES

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4.9 NOISE AND VIBRATION

This section evaluates the potential noise and vibration impacts resulting from implementation of the proposed Project. This includes the potential to cause a substantial temporary and/or permanent increase in ambient noise levels within or around the UCLA campus, or to expose surrounding noise sensitive receptors to excessive noise levels or vibration levels. The purpose of this analysis is to ensure that the proposed new uses are located and designed appropriately from a noise perspective, and to evaluate the noise impacts of the proposed Project on the surrounding community.

Data used in the preparation of this section were taken from various sources, and included measuring and modeling existing and future noise levels at the campus and in the surrounding area. Full bibliographic entries for all reference materials are provided in Section 4.9.5, References, of this section.

Two private individuals submitted comments in response to the Notice of Preparation addressing noise issues. One individual requested that the EIR address construction noise, particularly the method of pile installation, if necessary (refer to Impacts 4.9-2 through 4.9-4, Impact 4.9-7, and Impact 4.9-8). Both individuals requested that the EIR address the potential for increased noise from student activities (refer to Impact 4.9-9). In addition, Section 4.11, Public Services, of this EIR describes the University of California Police Department's management of noise generated from student social activities, particularly events after dark.

4.9.1 ENVIRONMENTAL SETTING

Fundamentals of Sound and Environmental Noise

Sound is a vibratory disturbance that is created by a moving or vibrating source and is capable of being detected by the ear. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. In its most basic form, a continuous sound can be described by its frequency or wavelength (pitch) and its amplitude (loudness). Frequency is expressed in cycles per second, or hertz. Frequencies are heard as the pitch or tone of sound. High-pitched sounds produce high frequencies; low-pitched sounds produce low frequencies. Sound pressure levels are described in units called the decibel (dB).

The decibel scale (or dB scale) is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

A typical noise environment consists of a base of steady "background" noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Figure 4.9-1, Representative Environmental Noise Levels, illustrates representative noise levels for the environment.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two noise sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can

barely perceive changes of a 3 dBA increase or decrease; that a change of 5 dBA is readily perceptible; and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (Caltrans 1998).

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider the fact that the effect noise has upon people is largely dependent upon the total acoustical energy content of the noise and the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- ***L_{eq},*** the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. This rating scale does not vary, regardless of whether the noise occurs during the day or the night.

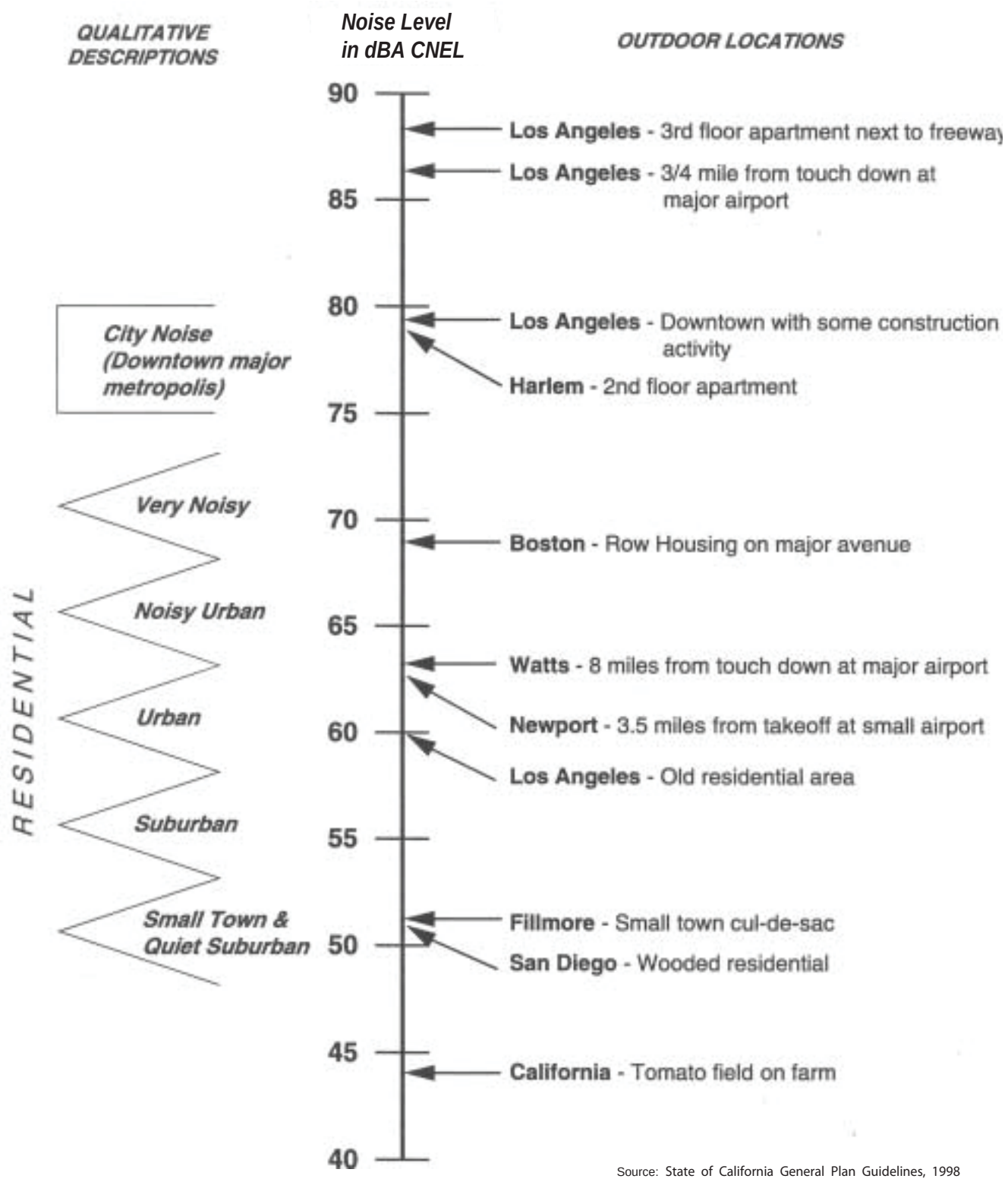
- ***CNEL,*** the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 10 dBA "weighting" added to the hours between 10:00 PM and 7:00 AM and an additional 5 dBA weighting added to hours between 7:00 PM and 10:00 PM to account for noise sensitivity in the nighttime and evening, respectively. The logarithmic effect of these additions is that a steady noise source over a 24-hour period would result in a CNEL measurement approximately 7 dBA higher than the L_{eq} over the same period. This is generally not the case with traffic noise, as traffic volumes may vary considerably depending on the hour. For typical urban and suburban traffic, it has been found that the average noise level for the peak hour is numerically equal to the CNEL; therefore for purposes of this analysis, the CNEL and peak hour traffic L_{eq} are assumed to be equal. CNEL is also used to describe aircraft noise.

- ***L_{min}*** is the minimum instantaneous noise level experienced during a given period of time.

- ***L_{max}*** is the maximum instantaneous noise level experienced during a given period of time.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 45 dBA, moderate in the 45- to 60-dBA range, and high above 60 dBA. Prolonged noise levels greater than 85 dBA can cause temporary or permanent hearing loss. Examples of low daytime levels are isolated natural settings that can provide noise levels as low as 20 dBA, and quiet suburban residential streets that can provide noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA CNEL) and commercial locations (typically 60 dBA CNEL). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60 to 75 dBA CNEL) or dense urban or industrial areas (65 to 80 dBA CNEL).

Noise levels from a particular source decline as distance to the receptor increases. Other factors, such as the weather and reflecting or shielding also help intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA at acoustically "hard" locations (i.e., the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically "soft" locations (i.e., the area between the source and receptor is normal earth or has vegetation,



Source: State of California General Plan Guidelines, 1998

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Representative Environmental Noise Levels — Figure 4.9-1

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including grass). Noise from stationary or point sources is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels 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 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.

Fundamentals of Environmental 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 and educational areas is usually around 50 VdB (FTA 2006). The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as 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 (FRA 2005).

The general human response to different levels of groundborne vibration velocity levels is described in Table 4.9-1, Human Response to Different Levels of Groundborne Vibration.

TABLE 4.9-1
HUMAN RESPONSE TO DIFFERENT LEVELS OF GROUNDBORNE VIBRATION

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.
Source: FRA 2005.	

Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Typically, groundborne noise is a concern that occurs with railroad and similar transit sources. As there are no railroad or transit noise and vibration sources within the campus area, the impact of groundborne noise is not addressed in this EIR.

Existing Ambient Daytime Noise Levels

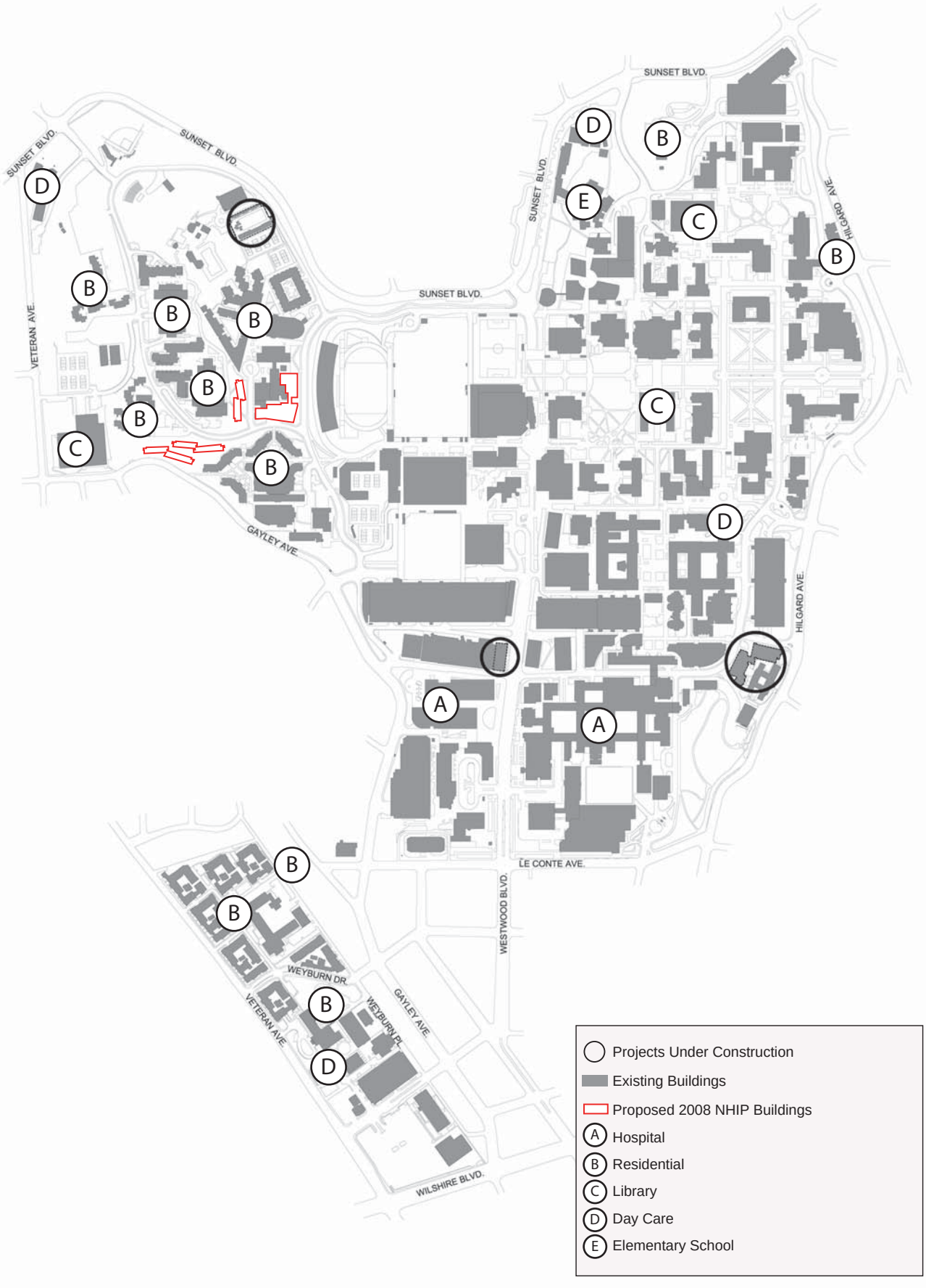
Land uses in the vicinity of the campus include commercial, institutional, and residential uses. Various uses within the campus that are sensitive to noise are illustrated in Figure 4.9-2,

On-Campus Sensitive Noise Receptors. The single-family residential neighborhood of Bel Air is located north of the campus. South of Le Conte Avenue is the commercial district of Westwood Village, comprised of retail shops, movie theaters, restaurants, and office buildings. East of Hilgard Avenue are sorority houses, apartment buildings, and the single-family residential Holmby-Westwood neighborhood. West of Gayley Avenue is the North Village multi-family residential neighborhood, primarily comprised of fraternity houses and apartment buildings. West of Veteran Avenue is the single-family Westwood Hills neighborhood and the Los Angeles National Cemetery. The campus itself presently includes institutional, office, student housing, and recreational uses. Although other noise sources occur in the vicinity, vehicular traffic is the primary source of noise within and around the campus.

Existing ambient daytime noise levels were measured at 17 key locations within and around the campus in order to identify representative noise levels in various areas during the regular school session. These locations are identified in Figure 4.9-3, Noise Measurement Locations, and are the same as those locations analyzed in the 2002 LRDP Final EIR. The noise levels were measured using a Larson-Davis Model 824 sound level meter, which satisfies the American National Standards Institute (ANSI) for general environmental noise measurement instrumentation. The average noise levels and sources of noise measured at each location are identified in Table 4.9-2, Existing Daytime Noise Levels at Selected On- and Off-Campus Locations. These daytime noise levels are characteristic of an urban and urban residential environment.

TABLE 4.9-2
EXISTING DAYTIME NOISE LEVELS AT SELECTED ON- AND OFF-CAMPUS LOCATIONS

Noise Measurement Location	Primary Noise Sources	Noise Level Statistics		
		L_{eq}	L_{min}	L_{max}
1. University Day Care Center—Northwest zone	Traffic on Sunset Blvd, children playing	62	53	73
2. University Elementary School—Core Campus zone	Traffic on Sunset Blvd	65	51	76
3. Hilgard Ave at Comstock Ave (single-family residence)	Traffic on Hilgard Ave	60	45	72
4. Hilgard Ave at Strathmore Ave (single-family residence)	Traffic on Hilgard Ave	60	46	73
5. UCLA campus—Health Sciences zone	Traffic on Le Conte Ave, pedestrians	64	55	78
6. UCLA Medical Center—Health Sciences zone	Traffic on Westwood Plaza, pedestrians	58	54	71
7. Gayley Ave at Landfair Ave (multi-family residence)	Traffic on Gayley Ave	66	55	80
8. Veteran Ave at Cashmere St (single-family residence)	Traffic on Veteran Ave	54	47	70
9. UCLA campus—Northwest zone	Traffic on Gayley Ave	60	48	77
10. UCLA campus—Bridge zone	Traffic on Gayley Ave and Le Conte Ave, pedestrians	65	54	80
11. Hilgard Ave at Manning Ave (multi-family residence)	Traffic on Hilgard Ave	70	54	81
12. UCLA campus—Northwest zone	Traffic on Sunset Blvd, Charles E. Young Dr North, and Charles E. Young Dr West	68	52	81



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On-Campus Sensitive Noise Receptors

Figure 4.9-2

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Noise Measurement Locations

Figure 4.9-3

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TABLE 4.9-2 (Continued)
EXISTING DAYTIME NOISE LEVELS AT SELECTED ON- AND OFF-CAMPUS LOCATIONS

Noise Measurement Location	Primary Noise Sources	Noise Level Statistics		
		L_{eq}	L_{min}	L_{max}
13. UCLA campus—Central zone (Bruin Walk)	Pedestrians	56	51	68
14. UCLA campus—Core Campus zone (Bunche Hall)	Automobiles and pedestrians	62	53	74
15. UCLA campus—Core Campus zone (Court of Sciences)	Pedestrians	63	52	71
16. UCLA campus—Campus Services zone	Traffic on Westwood Plaza and Charles E. Young Dr South, co-generation plant, pedestrians	68	62	77
17. UCLA campus—Southwest zone	Traffic on Wilshire Blvd, Veteran Avenue, parking lots,, pedestrians	68	55	82
Source: EDAW 2008.				

Existing Roadway Noise Levels on Campus

Existing 24-hour noise levels have been calculated for various roadways around and within the UCLA campus. This task was accomplished using the Federal Highway Administration's (FHWA's) Highway Noise Prediction Model (FHWA-RD-77-108) and peak hour traffic volumes from the *UCLA Northwest Housing Infill Project and Long Range Development Plan Amendment Traffic Impact Study* (Traffic Study) (Iteris 2008) (included as Appendix I). For purposes of analysis, it is assumed that the peak hour L_{eq} is equivalent to the CNEL. The FHWA Model calculates the hourly average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for California by the California Department of Transportation (Caltrans)(Hendriks 1985). The Caltrans data show that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels (Hendriks 1985).

The calculated existing roadway noise levels at 75 feet from the roadway center-line are presented in Table 4.9-3, Existing Roadway Noise Levels on Campus, along with the distances to various CNEL contours. Traffic data used to calculate these noise levels include truck and automotive traffic associated with existing operations and construction activities occurring at the UCLA campus.

TABLE 4.9-3
EXISTING ROADWAY NOISE LEVELS ON CAMPUS

Roadway Segment	Reference CNEL at 75 Feet[a]	Distance to Noise Contour[a]		
		70 CNEL	65 CNEL	60 CNEL
Sunset Blvd, Veteran Ave to Bellagio Rd	68	50	157	497
Sunset Blvd, Bellagio Rd to Westwood Blvd	67	41	129	409
Sunset Blvd, Westwood Blvd to Stone Canyon Rd	68	48	151	477
Sunset Blvd, Stone Canyon Rd to Copa de Oro Rd	68	43	135	427

TABLE 4.9-3 (Continued)
EXISTING ROADWAY NOISE LEVELS ON CAMPUS

Roadway Segment	Reference CNEL at 75 Feet[a]	Distance to Noise Contour[a]		
		70 CNEL	65 CNEL	60 CNEL
Hilgard Ave, Sunset Blvd to Wyton Dr	65	23	72	228
Hilgard Ave, Wyton Dr to Westholme Ave	66	30	95	300
Hilgard Ave, Westholme Ave to Manning Ave	67	34	106	336
Hilgard Ave, Manning Ave to Le Conte Ave	66	30	96	304
Le Conte Ave, Gayley Ave to Westwood Blvd	63	14	44	140
Le Conte Ave, Westwood Blvd to Tiverton Ave	63	15	48	152
Le Conte Ave, Tiverton Ave to Hilgard Ave	62	13	40	126
Gayley Ave, Le Conte Ave to Strathmore Pl	66	30	94	297
Gayley Ave, Strathmore Pl to Veteran Ave	63	17	52	166
Veteran Ave, Sunset Blvd to Gayley Ave	64	19	61	192
Westwood Plaza, north of Le Conte Ave	64	19	59	188
Westwood Blvd, south of Sunset Blvd	60	—[b]	25	79
Strathmore Pl, east of Gayley Ave	64	—[b]	57	181
Bellagio Rd, south of Sunset Blvd	60	—[b]	23	74
Stone Canyon Rd, south of Sunset Blvd	60	—[b]	26	83
Wyton Dr, west of Hilgard Ave	61	10	31	97
Westholme Ave, west of Hilgard Ave	62	13	41	130

[a] Distances are in feet from roadway centerline. The identified noise level at 75 feet from the roadway centerline is for reference purposes only as a point from which to calculate the noise contour distances. It does not reflect an actual building location or potential impact location.
[b] Noise contour is located within the roadway lanes.

Source: EDAW 2008 (Calculation data and results are provided in Appendix H).

Existing Roadway Noise Levels Off Campus

Existing roadway noise levels were also calculated for the roadway links in the vicinity of the campus that have noise-sensitive uses facing the roadways. As with on-campus noise levels, this was accomplished using the FHWA Model and traffic volumes from the Traffic Study (included in Appendix I). The average daily noise levels at the noise-sensitive uses along these roadway segments are presented in Table 4.9-4, Existing Roadway Noise Levels Off Campus.

TABLE 4.9-4
EXISTING ROADWAY NOISE LEVELS OFF CAMPUS

Roadway Segment	Noise-Sensitive Uses	dBA CNEL
Wilshire Blvd, Glendon Ave to Malcolm Ave	Multi-Family	70
Wilshire Blvd, Malcolm Ave to Westholme Ave	Multi-Family	70
Wilshire Blvd, Westholme Ave to Warner Ave	Multi-Family	70
	Church	70
Wilshire Blvd, Warner Ave to Beverly Glen Blvd	Multi-Family	70
	Church	70
Wilshire Blvd, east of Beverly Glen Blvd	Multi-Family	70
Sunset Blvd, west of Church St	Single Family	70

TABLE 4.9-4 (Continued)
EXISTING ROADWAY NOISE LEVELS OFF CAMPUS

Roadway Segment	Noise-Sensitive Uses	dBA CNEL
Sunset Blvd, Church St to Sepulveda Blvd	Single Family	69
Sunset Blvd, Sepulveda Blvd to Veteran Ave	Single Family	68
Sunset Blvd, Veteran Ave to Bellagio Rd	Single Family	69
Sunset Blvd, Bellagio Rd to Westwood Blvd	Single Family	68
Sunset Blvd, Westwood Blvd to Stone Canyon Rd	Single Family	68
	High School	66
	Elementary School/Day Care	67
Sunset Blvd, Stone Canyon Rd to Copa de Oro Rd	Single Family	69
Sunset Blvd, Copa de Oro Rd to Bel-Air Rd	Single Family	68
Sunset Blvd, Bel-Air Rd to Beverly Glen Blvd	Single Family	70
Sunset Blvd, east of Beverly Glen Blvd	Single Family	68
Hilgard Ave, Sunset Blvd to Wyton Dr	Single Family	65
Hilgard Ave, Wyton Dr to Westholme Ave	Single- and Multi-Family	66
Hilgard Ave, Westholme Ave to Manning Ave	Multi-Family	67
	Church	67
Hilgard Ave, Manning Ave to Le Conte Ave	Multi-Family	67
Hilgard Ave, Le Conte Ave to Weyburn Ave	Multi-Family	65
	Church	65
Hilgard Ave, Weyburn Ave to Lindbrook Dr	Multi-Family	66
Le Conte Ave, east of Hilgard Ave	Multi-Family	61
Gayley Ave, Weyburn Ave to Le Conte Ave	Multi-Family	64
Gayley Ave, Le Conte Ave to Strathmore Pl	Multi-Family	66
Gayley Ave, Strathmore Pl to Veteran Ave	Multi-Family	64
Strathmore Pl, west of Gayley Ave	Multi-Family	62
Levering Ave, Montana Ave to Veteran Ave	Multi-Family	61
Levering Ave, Veteran Ave to Le Conte Ave	Multi-Family	61
Levering Ave, Le Conte Ave to Weyburn Ave	Multi-Family	69
Veteran Ave, Sunset Blvd to Gayley Ave	Single and Multi-Family	67
Veteran Ave, Gayley Ave to Levering Ave	Multi-Family	66
Veteran Ave, Levering Ave to Wilshire Blvd	Multi-Family	73
Veteran Ave, Wilshire Blvd to Ohio Ave	Multi-Family	69
Veteran Ave, Ohio Ave to Santa Monica Blvd	Multi-Family	67
Montana Ave, Veteran Ave to Levering Ave	Multi-Family	65
Montana Ave, Levering Ave to Sepulveda Blvd	Single Family	68
Montana Ave, west of Sepulveda Blvd	Single Family	65
Sepulveda Blvd, Ovada Pl to Sunset Blvd	Single Family	71
Sepulveda Blvd, Sunset Blvd to Montana Ave	Multi-Family	67
Sepulveda Blvd, Wilshire Blvd to Ohio Ave	Multi-Family	70
Sawtelle Blvd, Ohio Ave to Santa Monica Blvd	Multi-Family	66
Sawtelle Blvd, south of Santa Monica Blvd	Multi-Family	69
Weyburn Ave, Glendon Ave to Westwood Blvd	Multi-Family	63
Weyburn Ave, Westwood Blvd to Gayley Ave	Multi-Family	65
Lindbrook Ave, Westwood Blvd to Gayley Ave	Multi-Family	62
Wyton Dr, east of Hilgard Ave	Single Family	59

TABLE 4.9-4 (Continued)
EXISTING ROADWAY NOISE LEVELS OFF CAMPUS

Roadway Segment	Noise-Sensitive Uses	dBA CNEL
Westholme Ave, east of Hilgard Ave	Single Family	61
Manning Ave, east of Hilgard Ave	Single Family	56
Beverly Glen Blvd, Wilshire Blvd to Comstock Ave	Single Family	65
Beverly Glen Blvd, Comstock Ave to Sunset Blvd	Single Family	66
Beverly Glen Blvd, Sunset Blvd to Greendale Dr	Single Family	68
Beverly Glen Blvd, Greendale Dr to Mulholland Dr	Single Family	66
Ohio Ave, Westwood Blvd to Veteran Ave	Multi-Family	68
Ohio Ave, Veteran Ave to Sepulveda Blvd	Multi-Family	68
Ohio Ave, Sepulveda Blvd to Beloit Ave	Multi-Family	68
Ohio Ave, Beloit Ave to Sawtelle Blvd	Multi-Family	68
Ohio Ave, west of Sawtelle Blvd	Multi-Family	68
Bellagio Rd, Chalon Rd to Sunset Blvd	Single Family	64
Bel-Air Rd, north of Sunset Blvd	Single Family	61
Source: EDAW 2008.		

Helicopter Noise

Noise is generated by helicopter operations serving the Ronald Reagan UCLA Medical Center (RRUCLAMC) that opened in June 2008. The helistop location on the roof of the RRUCLAMC (located southwest of Charles E. Young Drive South and Westwood Boulevard intersection) replaced the prior location at the old UCLA Medical Center Marian Davies Center rooftop. As with the prior location, the current helicopter operations are limited to emergency patient transport and to support the medical center's organ transplant program. Non-emergency flights are not allowed.

A noise analysis of the current helicopter operations was conducted by Harris Miller Miller & Hanson, Inc. (HMMH 2008). Using the current version of the Federal Aviation Administration (FAA) Integrated Noise Model (INM), Version 7.0a, the existing helicopter operations were modeled to develop the annual CNEL contour for the current operational scenarios. Model inputs were taken from existing helicopter operation logs and previous noise reports prepared for the previously operated helistop.

Federal and State aviation standards designate 65 dBA as the maximum noise level that is compatible with new residential development. The 65 dBA area of noise impact may be defined by measuring and calculating noise levels and plotting a contour line on a map or aerial photograph; the area outside the 65 dBA CNEL contour line is that area where noise-sensitive land uses are considered to be compatible with the aircraft noise environment associated with helistop operations such as that at the RRUCLAMC. Based on the modeling results, the estimated annual 65 dBA CNEL noise level contour for the helicopter operations is illustrated in Figure 4.9-4, Helicopter Noise Contours. As shown, the 65 dBA CNEL contour is primarily within the campus boundary. The extension of the contour to the west includes a portion of Gayley Avenue, but does not extend over or include any buildings that are off campus.


65 CNEL
Charles E Young Dr
Westwood Plz
Le Conte Ave
Manning Dr
Levering Ave
Gayley Ave
Strathmore Dr
Ophir Dr
Weyburn Pl
Weyburn Ave
Lindbrook Dr
Wilshire Blvd
Ashton Ave
Constitution Ave
Sepulveda Blvd
Eisenhower
Grant Ave
Bonsall Ave
Wathworth Ave
Middleton Ave
Glendon Ave
Rochester Ave
Ohio Ave
Wilkins Ave
Selby Ave
Tiverton Ave
Westwood Blvd
Broxton Ave
Kinross Ave
Roebling Ave
Glenrock Ave
Landfair Ave
Malcolm Ave
Westholme Ave
Veteran Ave
Tiverton Dr
Sunset Blvd
Charing Cross Rd
Comstock Ave
Dickson Ct
Circle Dr
Strathmore Dr
Edgeley Pl
Manning Ave
Glenmont Ave
Ellis Ave
Hilgard Ave
Westwood Plz
Gayley Ave
Ophir Dr
Levering Ave
Weyburn Ave
Lindbrook Dr
Wilshire Blvd
Ashton Ave
Rochester Ave
Ohio Ave
Wilkins Ave
Glendon Ave
Selby Ave
Tiverton Ave
Westwood Blvd
Broxton Ave
Kinross Ave
Roebling Ave
Glenrock

Construction Noise

Construction of several new facilities is presently occurring on campus in the Northwest (Spieker Aquatic Center), Core Campus (Engineering 1 Demolition and Life Sciences Replacement Building), and Campus Services (Police Station) zones. Noise is generated on a daily basis by these activities, although it is primarily isolated in the immediate vicinity of each construction site. The noise levels generated by construction vary by site and on a daily and hourly basis, depending on the activity that is occurring and the types and number of pieces of equipment that are operating.

For purposes of noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. Stationary equipment operates in one location for one or more days at a time, with either a fixed-power operation (such as pumps, generators, and compressors) or a variable noise operation (such as pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2006). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts for mobile construction equipment are assessed from the center of the equipment activity or construction site. For linear construction, such as a roadway or pipeline, construction noise is assessed from the centerline of the alignment.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting the noise level based on the duty cycle of the activity, i.e, the percentage of time that the equipment operates at full power, to determine the operation's L_{eq} (FTA 2006). Typical duty cycles and noise levels generated by representative pieces of equipment are listed in Table 4.9-5, Typical Maximum Noise Levels and Duty Cycles for Construction Equipment.

TABLE 4.9-5
TYPICAL MAXIMUM NOISE LEVELS AND DUTY CYCLES FOR CONSTRUCTION EQUIPMENT

Equipment	Noise Level (dBA) at 50 ft	Typical Duty Cycle
Auger Drill Rig	85	20%
Backhoe	80	40%
Chain Saw	85	20%
Compactor (ground)	80	20%
Compressor (air)	80	40%
Concrete Mixer Truck	85	40%
Concrete Pump	82	20%
Concrete Saw	90	20%
Crane (mobile or stationary)	85	20%
Dozer	85	40%
Dump Truck	84	40%
Excavator	85	40%
Front End Loader	80	40%
Generator (25 KVA or less)	70	50%
Generator (more than 25 KVA)	82	50%
Grader	85	40%

TABLE 4.9-5 (Continued)
TYPICAL MAXIMUM NOISE LEVELS AND DUTY CYCLES FOR CONSTRUCTION EQUIPMENT

Equipment	Noise Level (dBA) at 50 ft	Typical Duty Cycle
Jackhammer	85	20%
Mounted Jackhammer (hoe ram)	90	20%
Paver	85	50%
Pneumatic Tools	85	50%
Pumps	77	50%
Rock Drill	85	20%
Scraper	85	40%
Tractor	84	40%
Vacuum Excavator (vac-truck)	85	40%
Vibratory Concrete Mixer	80	20%

KVA = kilovolt amps
Note: Machinery equipped with noise-control devices or other noise-reducing design features do not generate the same level of noise emissions as that shown in this table.

Source: Thalheimer 2000.

Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some have higher continuous noise levels than others, and some have high-impact noise levels. The L_{eq} of each phase is determined by combining the L_{eq} contributions from each piece of equipment used in that phase (FTA 2006). In typical construction projects, grading activities typically generate the highest noise levels as grading involves the largest equipment. Using the identified duty cycles, a typical construction scenario involving two dozers, a loader, and a backhoe would generate a noise level of 86 dBA L_{eq} at 50 feet from the center of the activity with a maximum noise level of 88 dBA L_{max}. Activities such as pavement breaking or concrete saw cutting, which typically involve a mounted jackhammer/concrete saw and another piece of equipment such as a loader, would generate a noise level on the order of 85 dBA at 50 feet from the activity and a maximum noise level on the order of 90 dBA L_{max} at 50 feet.

Noise levels diminish or attenuate with distance from the construction site at a rate of approximately 6 dBA per doubling of distance (DD). For example, a noise level of 84 dBA measured at 50 feet from the noise source to the receptor would reduce to 78 dBA at 100 feet from the source to the receptor and reduce by another 6 dBA to 72 dBA at 200 feet from the source to the receptor. Noise levels over a soft (i.e., landscaped) site would attenuate at an approximately 7.5 dBA/DD. However, construction impacts analyzed in this EIR are based on a conservative 6 dBA/DD. The existing construction activities do not involve any actions such as pile driving or blasting that result in the generation of severe noise levels over a wide area.

Special Event Noise

Noise is also generated by occasional special events on campus. These include daytime special events, such as athletic meets at Drake Track & Field Stadium and the “Festival of Books” in the spring, and nighttime special events, such as outdoor concerts at the Sunset Canyon Recreation Center within the Northwest zone or at the Intramural Field in the Central zone. The loudest of these special events are the outdoor concerts. Specific noise levels for each concert event are difficult to define since (1) sound level expectations are different for various types of music; (2) each concert program provides its own sound equipment; and (3) each

concert/program positions the location of the speakers differently depending on the particular set-up. In general, country music is presented at average sound levels in audience areas of approximately 90 dBA L_{eq}, while rock music typically averages sound levels of approximately 105 dBA L_{eq}. The noise levels generated by the special events primarily affect the residential uses within the Northwest zone and could also be audible from residential neighborhoods to the north and west. The operating practice for events at the Sunset Canyon Recreation Center involves amplified sound not being permitted past 9:00 PM Sunday through Thursday or past 10:00 PM on Friday and Saturday.

Existing Campus Noise Control

The existing noise levels within the campus and surrounding vicinity, identified in Tables 4.9-2 through 4.9-4 could be substantially higher except that the UCLA campus implements numerous programs to reduce on-campus noise levels and motor vehicle trips (thereby reducing associated off-campus noise levels). These programs are discussed below.

Stationary Source Noise Controls

In order to provide a relatively quiet environment on the campus that is conducive to the educational process, all new stationary sources of noise (i.e., recently constructed and operated within the campus) have been shielded from nearby noise-sensitive uses (such as classrooms and faculty offices) as part of the new building design. Stationary sources that generate higher noise levels (such as the Energy System Facility [ESF]) have incorporated special noise-reducing measures in accordance with mitigation measures adopted in conjunction with individual project approval.

Land Use Buffering

The campus provides a landscaped buffer along the western, northern, and eastern edges of the main campus. These buffers increase the distance between on-campus uses and the surrounding area and provide an acoustically soft environment to further reduce noise levels. They also reduce the noise levels that are generated in the surrounding area (primarily roadway noise) that are heard from the main campus. Likewise, they reduce the noise levels that are generated on the main campus that are heard in the surrounding area.

Construction Noise Controls

The campus generally limits the hours of exterior construction activities from 7:00 AM to 9:00 PM Monday through Friday and 8:00 AM to 6:00 PM on Saturday, consistent with the City of Los Angeles Construction Noise Ordinance (City of Los Angeles 2008). Transportation routes are prescribed for all construction traffic to minimize the impact of this traffic (including noise impacts) on the surrounding community.

Vehicular Traffic Noise Controls

The campus is well served by several modes of alternative transportation, including public bus services and a campus-operated shuttle bus service. The campus also implements a Transportation Demand Management (TDM) Program that facilitates and promotes the use of transit, carpools, vanpools, and bicycling. While these conditions were not implemented to reduce noise levels, they do have the positive effect of reducing the number of motor vehicle trips that might otherwise be generated in association with the campus. By reducing the number of potential motor vehicle trips, the potential noise levels that could be experienced in the surrounding vicinity are, likewise, reduced.

Existing Vibration Environment

Aside from seismic events, the greatest regular sources of groundborne vibration on campus and in the immediate vicinity are construction activities and roadway truck traffic. At the time that this EIR was prepared, no construction activities likely to generate high groundborne vibration velocity levels (e.g., demolition, pile driving, or blasting) were occurring. Heavy trucks are currently transporting materials to and from the construction sites on campus. As a practical matter and because of the constrained nature of access to and from the campus (i.e., due to the presence of residential streets, a cemetery, the Santa Monica Mountains, and Westwood Village), Wilshire Boulevard, Sunset Boulevard, Gayley Avenue, Veteran Avenue, and Hilgard Avenue provide the primary access routes for construction vehicles. These trucks typically generate groundborne vibration velocity levels of around 63 VdB. These levels could reach 72 VdB where trucks pass over bumps in the road.

Construction contract specifications for on-campus construction projects include measures to ensure coordination between construction activities and the particular vibration sensitivities of adjacent/nearby uses. Existing campus facilities that accommodate sensitive research uses are carefully monitored to minimize adverse vibration effects.

4.9.2 REGULATORY FRAMEWORK

Federal

Federal agencies that have developed noise standards include the FHWA, the Department of Housing and Urban Development (HUD), the Federal Interagency Committee on Urban Noise (FICUN), and the Federal Aviation Administration (FAA). Of these, only the noise standards adopted by the FAA are applicable to the UCLA campus.

The FAA has prepared guidelines for acceptable noise exposure in its *Code of Federal Regulations* (CFR) Part 150 Noise Compatibility Planning program. According to the Part 150 guidelines, exterior aircraft exposures of 65 dBA CNEL or less and an interior exposure 45 dBA CNEL or less are considered acceptable for residential uses.[1] These standards apply to the operation of the helistop at the UCLA campus.

State

Title 24 of the *California Code of Regulations* codifies Sound Transmission Control requirements, which establish uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 24 states that interior noise levels attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room of new dwellings. Dwellings are to be designed so that interior noise levels will meet this standard for at least ten years from the time of building permit application. This standard applies to all new student housing developed within the UCLA campus.

The California Airport Noise regulations, contained in the *California Code of Regulations,* Title 21, establish an airport noise compatibility standard of 65 dBA CNEL. This standard is intended to ensure an interior noise level of 45 dBA CNEL in residences, assuming standard construction practices. These standards apply to the operation of the helistop on the UCLA campus.

[1] Although the FAA- identified noise standards are based on Day-Night Average (L_{dn}) levels, CNEL is considered to be equivalent to L_{dn} and is used for consistency in this EIR.

City of Los Angeles

UCLA is part of the University of California, a constitutionally created entity of the State of California. As a constitutional entity, the University of California is not subject to municipal regulations, such as the County and City General Plans. Nevertheless, UCLA has considered local plans and policies for the communities surrounding the campus. The City of Los Angeles, through the Noise Element of the General Plan, classifies land uses for noise compatibility as acceptable, conditionally acceptable, normally unacceptable, and unacceptable depending on the noise level and land use. Noise levels of less than 60 dBA CNEL are classified as acceptable for land uses that are sensitive to noise, such as multi-family residences, schools, libraries, churches, hospitals, nursing homes, and transient lodging (City of Los Angeles 1999). Noise levels from 60 to 70 dBA CNEL are "conditionally acceptable" for noise-sensitive uses, meaning a detailed analysis of noise mitigation is required and needed noise insulation features should be included in the project design. Noise levels above 70 dBA CNEL are considered by the City to be "normally unacceptable" or "unacceptable" for noise-sensitive land uses (City of Los Angeles 1999).

4.9.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

The analysis in this section focuses on the nature and magnitude of the change in the noise environment associated with implementation of the proposed Project. This implementation would result in an increase in the on-campus population of students, academic and staff employees, and visitors. The primary sources of noise associated with the proposed Project, would be (1) construction activities for the 1.87 million gross square feet (gsf) remaining development (allocated among the 8 existing campus zones) to address existing and future program needs and (2) increased campus-related traffic volumes associated with the additional students, employees, and visitors. Secondary sources of noise would include new stationary sources (such as heating, ventilation, and air conditioning [HVAC] units) and increased human activity throughout the campus. The net increase in campus-wide noise levels generated by these activities and other sources have been quantitatively estimated and compared to applicable noise standards and thresholds of significance.

Construction Noise Levels

Construction noise levels were estimated using data published by the U.S. Department of Transportation. Potential noise levels are identified for on- and off-campus locations that are sensitive to noise, including residences, medical buildings, and school facilities.

Roadway Noise Levels

Roadway noise levels for on- and off-campus locations were calculated using the FHWA Highway Noise Prediction Model and traffic volumes from the Traffic Study (included as Appendix I). Caltrans has modified the average vehicle noise rates (energy rates) utilized in the FHWA Model so they reflect average vehicle noise rates identified for California.

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed project would not have a significant impact for the following thresholds from the CEQA Checklist and no further analysis of these issues is presented in this section.

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Noise and Vibration.

- Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies *(Impact 4.9-1)*?

- Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels *(Impacts 4.9-2, 4.9-3, and 4.9-4)*?

- Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project *(Impacts 4.9-5 and 4.9-6)*?

- Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project *(Impacts 4.9-7, 4.9-8, and 4.9-9)*?

- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels *(Impact 4.9-10)*?

The applicable State interior noise standard for aircraft/helicopter noise levels within residential dwellings is 45 dBA CNEL. The State standard for interior noise levels within new dwellings other than detached single-family dwellings attributable to exterior noise sources is also 45 dBA CNEL. Therefore, the proposed new undergraduate housing structures are subject to both of these standards.

The CEQA Guidelines do not define the levels at which groundborne vibration is considered "excessive". This analysis uses the Federal Railway Administration's vibration impact thresholds for sensitive buildings, residences, and institutional land uses. These thresholds are 65 VdB at buildings where vibration would interfere with interior operations (e.g., sensitive on-campus research buildings), 80 VdB at residences and buildings where people normally sleep (e.g., student housing buildings and nearby residences), and 83 VdB at other institutional buildings (FRA 2005). As described earlier, groundborne noise impacts are associated with railroad and transit noise sources. There are no railroad or transit sources in the proposed project area; therefore, groundborne noise impacts are not addressed in this EIR.

The State CEQA Guidelines also do not define the levels at which permanent and temporary increases in ambient noise are considered "substantial". For the purposes of this analysis, noise impacts would be considered significant if the project resulted in the following:

- A permanent (i.e., long term operational) increase of 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category, or any 5 dBA or greater noise increase. The "normally unacceptable" or "clearly unacceptable" categories are residential and school areas where the ambient noise level exceeds 70 dBA CNEL. This threshold is consistent with the City of Los Angeles' *LA CEQA Thresholds Guide* for operational noise (City of Los Angeles 2006).

- Construction activities lasting more than one day that increase the ambient noise levels by 10 dBA or more at any on-campus or off-campus noise-sensitive location within

500 feet of the construction site. This is consistent with the City of Los Angeles' *L.A. CEQA Thresholds Guide* threshold for construction noise impacts (City of Los Angeles 2006). As discussed previously in this section, a noise level increase of 3 dBA is barely perceptible to most people, a 5 dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness.

Impacts Analysis

Campus Programs, Practices and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures were adopted as part of the 2002 Final EIR LRDP and shall be continued throughout the planning horizon for the proposed Project. They are therefore considered part of the proposed Project and assumed in the analysis presented in this section. Additions to the PPs from the 2002 LRDP Final EIR are shown **bold-faced** type. This change clarifies that this PP also applies to the on campus helistop.

PP 4.9-1 — *The campus shall continue to evaluate ambient noise conditions when placing new student housing near regular sources of noise such as roadways, **the on-campus helistop** and stationary equipment, and design the new buildings to ensure that interior noise levels would be less than 45 dBA CNEL.*

PP 4.9-2 — *The campus shall continue to notify research facilities located near approved construction sites of the planned schedule of vibration causing activities so that the researchers can take necessary precautionary measures to avoid negative effects to their research.*

PP 4.9-6(a) — *The campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses.*

PP 4.9-6(b) — *The campus shall continue to provide a landscaped buffer along the western, northern, and eastern edges of the main campus in order to maximize the distance between the roadways and new buildings and provide an acoustically soft environment. At a minimum, this environment can be provided by planting grass and other low landscaping.*

PP 4.9-7(a) — *To the extent feasible, construction activities shall be limited to 7:00 AM to 9:00 PM Monday through Friday, 8:00 AM to 6:00 PM on Saturday, and no construction on Sunday and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise.*

PP 4.9-7(b) — *The campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers.*

PP 4.9-7(c) *The campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors.*

PP 4.9-7(d) *The campus shall continue to conduct regular meetings with on-campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed.*

PP 4.9-8 *The campus shall continue to conduct meetings, as needed, with off-campus constituents that are affected by campus construction to provide advance notice of construction activities and ensure that the mutual needs of the particular construction project and of those impacted by construction noise are met, to the extent feasible.*

Threshold	Would the project result in the 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?

Future noise levels within the campus would continue to be dominated by vehicular traffic on the adjacent roadways. Table 4.9-6, Future Roadway Noise Levels On Campus, presents the future average daily noise levels associated with these roadways. Other sources of noise would include new stationary sources (such as rooftop HVAC equipment) and increased human activity throughout the campus and along Gayley Avenue.

TABLE 4.9-6
FUTURE ROADWAY NOISE LEVELS ON CAMPUS

Roadway Segment	Reference CNEL at 75 Feet[a]	Distance to Noise Contour[a]		
		70 CNEL	65 CNEL	60 CNEL
Sunset Blvd, Veteran Ave to Bellagio Rd	70	75	236	747
Sunset Blvd, Bellagio Rd to Westwood Blvd	69	60	189	597
Sunset Blvd, Westwood Blvd to Stone Canyon Rd	70	69	219	693
Sunset Blvd, Stone Canyon Rd to Copa de Oro Rd	69	62	197	623
Hilgard Ave, Sunset Blvd to Wyton Dr	65	–[b]	79	249
Hilgard Ave, Wyton Dr to Westholme Ave	67	–[b]	109	344
Hilgard Ave, Westholme Ave to Manning Ave	67	–[b]	118	372
Hilgard Ave, Manning Ave to Le Conte Ave	67	37	116	367
Le Conte Ave, Gayley Ave to Westwood Blvd	63	–[b]	47	147
Le Conte Ave, Westwood Blvd to Tiverton Ave	62	–[b]	37	117
Le Conte Ave, Tiverton Ave to Hilgard Ave	61	–[b]	32	101
Gayley Ave, Le Conte Ave to Strathmore Pl	66	31	99	314
Gayley Ave, Strathmore Pl to Veteran Ave	64	–[b]	56	176
Veteran Ave, Sunset Blvd to Gayley Ave	61	–[b]	33	103
Westwood Plaza, north of Le Conte Ave	64	–[b]	62	197
Westwood Blvd, south of Sunset Blvd	60	–[b]	26	83
Strathmore Pl, east of Gayley Ave	64	19	60	190
Bellagio Road, south of Sunset Boulevard	60	–[b]	25	78

TABLE 4.9-6 (Continued)
FUTURE ROADWAY NOISE LEVELS ON CAMPUS

Roadway Segment	Reference CNEL at 75 Feet[a]	Distance to Noise Contour[a]		
		70 CNEL	65 CNEL	60 CNEL
Stone Canyon Rd, south of Sunset Blvd	61	–[b]	28	88
Wyton Dr, west of Hilgard Ave	61	–[b]	32	102
Westholme Ave, west of Hilgard Ave	62	–[b]	38	121

[a] Distances are in feet from roadway centerline. The identified noise level at 75 feet from the roadway centerline is for reference purposes only as a point from which to calculate the noise contour distances. It does not reflect an actual building location or potential impact location.
[b] Noise contour is located within the roadway lanes.

Source: EDAW 2008 (Calculation data and results are provided in Appendix H).

Proposed 2008 NHIP

As discussed in Section 4.9.1, the exterior-to-interior reduction of newer residential units constructed in California is generally 30 dBA or more; thus, noise levels within the 2008 NHIP student housing buildings could exceed the State's 45 dBA CNEL standard only if the exterior noise levels average 75 dBA CNEL or more. All 2008 NHIP residential buildings are proposed in areas located beyond the 70 dBA CNEL traffic noise contour distances identified in Table 4.9-6 for Gayley Avenue. Therefore, interior noise levels from traffic noise would be less than 40 dBA CNEL.

The 2008 NHIP buildings are also located well beyond the 65 dBA CNEL noise contours for the RRUCLAMC helipad, as previously identified in Figure 4.9-4, Helicopter Noise Contours. Therefore, interior noise levels from helicopter noise would be less than 35 dBA CNEL.

Mechanical HVAC equipment would be located on the rooftop of each new building. The type of equipment currently installed on new buildings on campus generates noise levels that average around 66 dBA L_{eq} on the air inlet side and 62 dBA L_{eq} on the other sides when measured at 50 feet from the source. As discussed previously in this section, 24-hour CNEL noise levels associated with a constant source are about 7 dBA greater than 24-hour L_{eq} measurements. This means that this equipment could generate noise levels that average 69 to 73 dBA CNEL at 50 feet when the equipment is operating constantly for 24 hours. Based on available building plans, the mechanical equipment associated with the NHIP buildings would be housed in a penthouse structure on the roof of each building. Based on observations and standard designs of new buildings within the campus, the location and shielding installed around this equipment would be attenuated a minimum of 15 dBA (UCLA 2003b).

Based on this information, exterior noise levels around the 2008 NHIP student housing buildings would not approach 75 dBA CNEL and, therefore, interior noise levels within these buildings would not exceed 45 dBA CNEL. This impact would be less than significant.

Following PP 4.9-1 and PP 4.9-7(a) ensures that this impact remains less than significant by ensuring that interior noise levels would be less than 45 dBA CNEL, consistent with Title 24 of the *California Code of Regulations.* No mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

The 2002 LRDP, as amended, is a land use plan that guides the physical development of the campus. It is not an implementation plan and does not constitute a commitment to any specific

project. The environmental analysis for the 2002 LRDP, as amended, is programmatic, rather than project-specific, as the actual sites and design of future buildings, other than the 2008 NHIP, are undetermined. Therefore, it is not possible to conduct a detailed quantitative evaluation for all buildings to be developed under the 2002 LRDP, as amended. However, it is anticipated that future development would be subjected to similar noise sources (mobile and stationary) as discussed above for the 2008 NHIP, including traffic-related roadway noise, as shown in Table 4.9-6.

Each building proposal undertaken during the planning horizon of the LRDP, as amended, will require project-specific environmental review in accordance with CEQA. However, implementation of PP 4.9-1 and PP 4.9-7(a) would provide evaluation and design to ensure that interior noise levels would be less than 45 dBA CNEL, consistent with Title 24 of the *California Code of Regulations.* Thus, the impact would be less than significant and no mitigation would be required.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.9-1 ***Continued compliance with PP 4.9-1 and PP 4.9-7(a) would ensure that implementation of the proposed Project would not expose new on-campus student residential uses to noise levels in excess of the State's 45 dBA CNEL interior noise standard. This impact is less than significant and no mitigation is required.***

Threshold	Would the project result in the exposure of persons to or generation of excessive groundborne vibration levels?

Construction-Related Vibration Levels On Campus

Proposed 2008 NHIP

Construction activities for the proposed 2008 NHIP would have the potential to generate low levels of groundborne vibration. Table 4.9-7, Vibration Source Levels for Construction Equipment, identifies various vibration velocity levels for the types of construction equipment that would operate at the campus during construction. This table does not show groundborne vibration velocity levels for actions such as pile driving or blasting, since they are not expected to occur at the campus during the implementation of the 2008 NHIP.

TABLE 4.9-7
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Approximate VdB			
	25 Feet	50 Feet	75 Feet	100 Feet
Large Bulldozer	87	78	73	69
Loaded Trucks	86	77	72	68
Jackhammer	79	70	65	61
Small Bulldozer	58	49	44	40
Source: FRA 2006.				

Construction activities that would occur for the proposed 2008 NHIP have the potential to generate low levels of groundborne vibration at the nearby existing student housing buildings. These activities would primarily impact existing buildings in the Northwest zone, including De Neve Plaza Housing, Dykstra Hall, Rieber Hall, Saxon Housing, and Sproul Hall.

Construction of Sproul West and the sidewalk south of De Neve Drive would be constructed as close as 50 feet to existing residence halls. Based on the information presented in Table 4.9-7, vibration levels could reach up to 78 VdB within 50 feet of the construction activity. These vibration levels would be noticeable by the residents and could possibly be annoying when they are trying to sleep, study, or relax. However, these levels would not cause any damage to the existing residence halls, nor would they exceed the 80 VdB significance threshold for residences. Therefore, the impact would be less than significant.

As shown in Table 4.9-7, vibration levels from the heaviest equipment could reach up to 87 VdB at the buildings located within 25 feet of construction. Construction activities using large equipment would need to be 43 feet away to not exceed the 80 VdB significant threshold. Construction of the Sproul South Complex would occur adjacent to Sproul Hall (closer than 25 feet). Therefore, the vibration levels within the existing building with construction of the Sproul South Complex could exceed 87 VdB depending on the type of construction activity and equipment being used. These levels would not cause any damage to the existing residence halls, but would exceed the significance threshold of 80 VdB for residences, would be noticeable by the residents, and may be considered annoying or disruptive when they are trying to sleep, study, or relax. Therefore, construction activities adjacent to Sproul Hall would be a potentially significant impact even with implementation of 2002 LRDP Final EIR PP 4.9-7(a) which limits the days and hours of construction and PP 4.9-7(d) which requires meetings be held with on campus constituents regarding construction activities. New MM 4.9-2, shown below, would require the use of smaller, lighter construction equipment when working within 43 feet of Sproul Hall and other occupied residence buildings, and could reduce the impact to a less than significant level. However, given site constraints, proximity of the proposed new Sproul buildings to existing occupied residence halls, and the extent and type of construction activities needed for construction of the proposed 2008 NHIP, implementation of new MM 4.9-2 may not be feasible for some construction requirements. Therefore, this impact is considered significant and unavoidable.

Remaining Buildout of the 2002 LRDP as Amended

Vibration from construction activities associated with development of remaining buildout under the 2002 LRDP, as amended, would primarily impact existing buildings within the campus. Off-campus residences are separated from the campus by at least 75 feet, a distance that would reduce vibration from heavy bulldozers, loaded trucks and similar equipment to less than the 80 VdB significance threshold. On-campus buildings could sometimes be as close as

25 feet to the construction site. As shown in Table 4.9-7, vibration levels from the heaviest equipment could reach up to 87 VdB at the buildings located within 25 feet of construction. Based on the anticipated propagation of vibration waves associated with construction, vibration levels would exceed the 83 VdB threshold for non-sensitive, non-residential buildings within approximately 34 feet of construction activities. So long as construction occurs more than 40 feet from campus classroom buildings, office buildings and similar facilities, the vibration would not exceed 83 VdB and the impact would be less than significant. As discussed above, for residential buildings, the significance threshold distance is approximately 43 feet. In order for construction activities to not potentially impact sensitive research buildings (i.e., vibration levels over 65 VdB), the activities would need to occur at least 135 feet from the sensitive building. Thus, because construction activities could occur less than 135 feet from sensitive research buildings, less than 43 feet from residence halls, and less than 34 feet from other buildings, the impact could be significant.

The incorporation of new MM 4.9-2 (shown below) into development of remaining buildout under the 2002 LRDP, as amended, could reduce the potential vibration level below the significance threshold for non-sensitive buildings, and buildings that house sensitive instrumentation or similar vibration-sensitive equipment or activities. However, as discussed above for the proposed 2008 NHIP, there is the potential that this mitigation measure would not be feasible at certain construction sites. Implementation of new MM 4.9-2 and continued compliance with 2002 LRDP Final EIR PP 4.9-2, 4.9-7(a) and 4.9-7(d) represent the best management practices to minimize the impact of construction activities, including groundborne vibration, near sensitive on-campus facilities during construction. Because it may not be feasible in some situations to avoid the use of heavy equipment close to sensitive buildings, these measures would not ensure that groundborne vibration does not exceed the identified threshold of significance for sensitive buildings located in close proximity to the construction sites. Therefore, this impact would be significant and unavoidable.

New Mitigation Measure

The following new mitigation measure is required to further reduce vibration impacts during construction. This measure applies to remaining buildout of the 2002 LRDP, as amended, but not the proposed 2008 NHIP because it is not feasible.

MM 4.9-2 *The campus shall require by contract specifications that, to the extent feasible, large bulldozers, large heavy trucks, and other similar equipment not be used within 43 feet of occupied residence halls, within 34 feet of non-residential/non-sensitive buildings, and within 135 feet of buildings that house sensitive instrumentation or similar vibration-sensitive equipment or activities. The work shall be done with medium-sized equipment or smaller within these prescribed distances to the extent practicable.*

Level of Significance After Mitigation

Significant and Unavoidable.

Impact 4.9-2 ***Continued compliance with PPs 4.9-2, 4.9-7(a), and 4.9-7(d) would ensure that proposed Project construction activities could generate and expose users or residents of adjacent buildings to excessive groundborne vibration levels. This potentially significant impact would be reduced with***

implementation of new MM 4.9-2; however, this measure may not be feasible in all situations. Therefore, this impact is significant and unavoidable.

Construction-Related Vibration Levels Off Campus

Proposed 2008 NHIP

The nearest off-campus residential uses to the 2008 NHIP construction area are located along Gayley Avenue, southeast of the intersection of Gayley Avenue and Landfair Avenue, approximately 75 feet from the nearest potential construction site, which is at the southern edge of the proposed Lower De Neve building construction area. Based on the information presented in Table 4.9-7, vibration levels from on-campus construction activities would be 78 VdB or less at these residential uses.

As described in Section 3, Project Description, heavy trucks could transport materials to and from the 2008 NHIP site along Gayley Avenue, Weyburn Drive, Veteran Avenue, Wilshire Boulevard, and Sunset Boulevard. These trucks typically generate maximum groundborne vibration levels of 77 VdB at a distance of 50 feet. These levels could reach 79 VdB where trucks pass over bumps in the road. In both instances, the vibration levels would be less than the adopted 80 VdB vibration impact significance threshold for residences. Therefore, construction during the implementation of the 2008 NHIP would not expose occupants of buildings off-campus to excessive groundborne vibration levels, and this impact would be less than significant. No mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Off-campus residences and other sensitive land uses are separated from the campus by perimeter streets, including but not limited to Gayley Avenue, Hilgard Avenue, and Sunset Boulevard. Sensitive land uses would be at least 75 feet from the nearest potential construction site and usually at a much greater distance. Based on the information presented in Table 4.9-7, vibration levels from on-campus construction activities at these sensitive uses would be 78 VdB or less, which is less than the 80 VdB significance threshold.

Heavy trucks would transport materials to and from the campus when construction activities occur. These trucks are expected to use Wilshire Boulevard, Sunset Boulevard, Gayley Avenue, Veteran Avenue, and Hilgard Avenue as the primary access routes to and from the campus. These trucks typically generate groundborne vibration levels of around 77 VdB at 50 feet, which would be less than the Federal Railway Administration's 80 VdB vibration impact threshold for residences. Therefore, construction during the implementation of the 2002 LRDP, as amended, would not expose occupants of off-campus buildings to excessive groundborne vibration levels, and this impact would be less than significant. No mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.9-3 ***Construction activities associated with the proposed Project would not generate and expose persons off***

campus to excessive groundborne vibration levels from heavy construction trucks. This impact is less than significant and no mitigation is required.

Operational Vibration Levels both On Campus and Off Campus

Remaining Buildout of the 2002 LRDP as Amended Including the Proposed 2008 NHIP

When construction activities are not occurring at the campus, background operational vibration levels would be expected to average around 50 VdB, as discussed previously in this section. This is substantially less than the 65 VdB threshold for sensitive on-campus research buildings, 80 VdB at residences and student housing buildings, and 83 VdB at other institutional buildings. Therefore, operational activities during implementation of the proposed Project would not expose on- or off-campus persons to excessive groundborne vibration or levels, and this impact would be less than significant. No mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.9-4 ***Operation (post-construction) of the proposed Project would not generate and expose persons on or off campus to excessive long-term groundborne vibration levels. This is considered a less than significant impact.***

Threshold	Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Vehicular Roadway Noise

Proposed 2008 NHIP

The 2008 NHIP would provide approximately 1,525 beds, of which approximately 1,068 would be assigned to new resident students and the remainder to existing resident students currently housed in triple room accommodations. The elimination of 1,068 commuting students would result in a net reduction of vehicle trips on roadways in the vicinity of the campus. Therefore, there would be no increase in the long-term ambient noise level from vehicle traffic. The impact would be less than significant.

Remaining Buildout of the 2002 LRDP as Amended

Locations in the vicinity of the campus could experience slight changes in noise levels as a result of an increase in the student, staff and faculty population and resulting changes in motor vehicle trips. The changes in future noise levels at the selected noise-sensitive locations along the study-area roadway segments are identified in Table 4.9-8, Roadway Noise Impacts. For the roadways that border the campus, these changes would occur on both the off-campus and on-campus sides of the roadway. As shown, the changes in motor vehicle trips and circulation

patterns would increase local noise levels by a maximum of 1 dBA CNEL, which is inaudible and imperceptible to most people. Where Table 4.9-8 indicates a zero increase in noise level, the calculated change would be less than 0.5 dBA CNEL. For traffic noise to increase by 3 dBA, the traffic volume would have to double, assuming no change in speed or the proportion of trucks in the traffic vehicular mix. A traffic volume increase of 12 percent or less would increase noise by less than 0.5 dBA. Therefore, while the implementation of the 2002 LRDP, as amended may increase traffic on area roadways, small increases in traffic volumes would result in negligible increases in traffic noise.

TABLE 4.9-8
ROADWAY NOISE IMPACTS

Roadway Segment	Land Use	Noise Levels in dBA CNEL		
		Future Without Project Traffic Volumes	Future With Project Traffic Volumes	Increase
Wilshire Blvd, Glendon Ave to Malcolm Ave	Multi-Family	71	71	0
Wilshire Blvd, Malcolm Ave to Westholme Ave	Multi-Family	71	71	0
Wilshire Blvd, Westholme Ave to Warner Ave	Multi-Family	71	71	0
	Church	71	71	0
Wilshire Blvd, Warner Ave to Beverly Glen Blvd	Multi-Family	71	71	0
	Church	71	71	0
Wilshire Blvd, east of Beverly Glen Blvd	Multi-Family	71	71	0
Sunset Blvd, west of Church St	Single-Family	70	70	0
Sunset Blvd, Church St to Sepulveda Blvd	Single-Family	70	70	0
Sunset Blvd, Sepulveda Blvd to Veteran Ave	Single-Family	68	68	0
Sunset Blvd, Veteran Ave to Bellagio Rd	Single-Family	69	69	0
Sunset Blvd, Bellagio Rd to Westwood Blvd	Single-Family	68	68	0
Sunset Blvd, Westwood Blvd to Stone Canyon Rd	Single-Family	68	68	0
	High School	66	66	0
	Elementary School/Day Care	67	67	0
Sunset Blvd, Stone Canyon Rd to Copa de Oro Rd	Single-Family	69	69	0
Sunset Blvd, Copa de Oro Rd to Bel-Air Rd	Single-Family	69	69	0
Sunset Blvd, Bel-Air Rad to Beverly Glen Blvd	Single-Family	71	71	0
Sunset Blvd, east of Beverly Glen Blvd	Single-Family	69	69	0
Hilgard Ave, Sunset Blvd to Wyton Dr	Single-Family	65	65	0
Hilgard Ave, Wyton Dr to Westholme Ave	Single- and Multi-Family	67	67	0
Hilgard Ave, Westholme Ave to Manning Ave	Church	68	68	0
	Multi-Family	67	67	0
Hilgard Ave, Manning Ave to Le Conte Ave	Multi-Family	67	68	1
Hilgard Ave, Le Conte Ave to Weyburn Ave	Multi-Family	67	67	0
	Church	67	67	0
Hilgard Ave, Weyburn Ave to Lindbrook Dr	Multi-Family	67	67	0
Le Conte Ave, east of Hilgard Ave	Multi-Family	62	62	0
Gayley Ave, Weyburn Ave to Le Conte Ave	Multi-Family	66	67	1
Gayley Ave, Le Conte Ave to Strathmore Pl	Multi-Family	66	66	0
Gayley Ave, Strathmore Pl to Veteran Ave	Multi-Family	64	64	0

TABLE 4.9-8 (Continued)
ROADWAY NOISE IMPACTS

Roadway Segment	Land Use	Noise Levels in dBA CNEL		
		Future Without Project Traffic Volumes	Future With Project Traffic Volumes	Increase
Strathmore Pl, west of Gayley Ave	Multi-Family	62	62	0
Levering Ave, Montana Ave to Veteran Ave	Multi-Family	62	62	0
Levering Ave, Veteran Ave to Le Conte Ave	Multi-Family	64	64	0
Levering Ave, Le Conte Ave to Weyburn Ave	Multi-Family	71	71	0
Veteran Ave, Sunset Blvd to Gayley Ave	Single- and Multi-Family	68	68	0
Veteran Ave, Gayley Ave to Levering Ave	Multi-Family	67	67	0
Veteran Ave, Levering Ave to Wilshire Blvd	Multi-Family	73	74	1
Veteran Ave, Wilshire Blvd to Ohio Ave	Multi-Family	70	69	(1)
Veteran Ave, Ohio Ave to Santa Monica Blvd	Multi-Family	68	68	0
Montana Ave, Veteran Ave to Levering Ave	Multi-Family	65	65	0
Montana Ave, Levering Ave to Sepulveda Blvd	Single-Family	68	68	0
Montana Ave, west of Sepulveda Blvd	Single-Family	65	65	0
Sepulveda Blvd, Ovada Pl to Sunset Blvd	Single-Family	72	72	0
Sepulveda Blvd, Sunset Blvd to Montana Ave	Multi-Family	69	69	0
Sepulveda Blvd, Wilshire Blvd to Ohio Ave	Multi-Family	71	71	0
Sawtelle Blvd, Ohio Ave to Santa Monica Blvd	Multi-Family	66	66	0
Sawtelle Blvd, south of Santa Monica Blvd	Multi-Family	69	69	0
Weyburn Ave, Glendon Ave to Westwood Blvd	Multi-Family	67	67	0
Weyburn Ave, Westwood Blvd to Gayley Ave	Multi-Family	67	67	0
Lindbrook Ave, Westwood Blvd to Gayley Ave	Multi-Family	62	62	0
Wyton Dr, east of Hilgard Ave	Single-Family	59	59	0
Westholme Ave, east of Hilgard Ave	Single-Family	61	61	0
Manning Ave, east of Hilgard Ave	Single-Family	57	57	0
Beverly Glen Blvd, Wilshire Blvd to Comstock Ave	Single-Family	65	65	0
Beverly Glen Blvd, Comstock Ave to Sunset Blvd	Single-Family	66	66	0
Beverly Glen Blvd, Sunset Blvd to Greendale Dr	Single-Family	69	69	0
Beverly Glen Blvd, Greendale Dr to Mulholland Dr	Single-Family	66	66	0
Ohio Ave, Westwood Blvd to Veteran Ave	Multi-Family	68	68	0
Ohio Ave, Veteran Ave to Sepulveda Blvd	Multi-Family	68	68	0
Ohio Ave, Sepulveda Blvd to Beloit Ave	Multi-Family	68	68	0
Ohio Ave, Beloit Ave to Sawtelle Blvd	Multi-Family	68	68	0
Ohio Ave, west of Sawtelle Blvd	Multi-Family	68	68	0
Bellagio Rd, Chalon Rd to Sunset Blvd	Single-Family	64	64	0
Bel-Air Rd, north of Sunset Blvd	Single-Family	61	61	0

Source: EDAW 2008 (Calculation data and results are provided in Appendix H).

Because the roadway noise levels at all on- and off-campus locations would increase by less than 5 dBA CNEL, and by less than 3 dBA CNEL where the resulting noise level is 70 dBA CNEL or more, the 2002 LRDP, as amended would not generate increased local traffic volumes

that cause a substantial permanent on- or off-campus increase in ambient noise levels in the project vicinity. This impact would be less than significant.

Following PP 4.13-1(c) (continue to provide on campus housing) and PP 4.13.1(d) (continue to implement a TDM program that meets or exceeds trip reduction and the SCAQMD's AVR requirements) in Section 4.13, Transportation/Traffic, would ensure that motor vehicle trips to and from the campus and the associated noise levels are reduced to the maximum extent feasible and that this impact remains less than significant. On-campus housing reduces the number of people that otherwise would need to commute to and from the campus to attend class. The TDM program reduces the number of motor vehicle trips for campus employees. No mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.9-5 ***Continued implementation of PP 4.13-1(c) and PP 4.13-1(d) from Section 4.13, Transportation/Traffic would ensure that implementation of the proposed Project would not cause a substantial permanent on- or off-campus increase in ambient roadway noise levels in the project vicinity. This impact is less than significant and no mitigation is required.***

Noise from Stationary Sources

Remaining Buildout of the 2002 LRDP as Amended Including the Proposed 2008 NHIP

New stationary sources of noise, such as rooftop HVAC equipment, would be installed on the 2008 NHIP buildings and future buildings under the 2002 LRDP, as amended. This equipment would be shielded and appropriate noise-muffling devices would be installed to reduce noise levels that affect nearby on- and/or off-campus noise-sensitive uses (as required by 2002 LRDP Final EIR PP 4.9-6[a]). The type of HVAC equipment currently installed on new buildings within the campus generates noise levels that average around 66 dBA L_{eq} on the air inlet side and 62 dBA L_{eq} on the other sides when measured at 50 feet from the source. The shielding installed around all new equipment at the campus is designed to reduce these noise levels by around 15 dBA. Because existing noise levels within the campus currently average 54 to 69 dBA L_{eq}, the resulting equipment noise levels of less than 51 dBA L_{eq} at ground level locations surrounding the buildings would not be expected to cause a substantial permanent increase in noise levels on campus of 5 dBA CNEL or more. Off-campus uses would be located at least 100 feet from any potential site of new stationary equipment and would be separated from the campus by landscaped buffers and roadways (as required by 2002 LRDP Final EIR PP 4.9-6[b]). As such, it would not cause a substantial increase in noise levels of 5 dBA CNEL or more. This impact would be less than significant.

Continued compliance with 2002 LRDP Final EIR PP 4.9-6(a) and PP 4.9-6(b) would reduce the noise levels generated by mechanical equipment that could be audible at noise-sensitive uses, and would ensure that this impact remains less than significant. No mitigation is required.

Mitigation Measure

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.9-6 ***Implementation of the proposed Project could add new stationary sources of noise, but with continued compliance with PPs 4.9-6(a) and 4.9-6(b) would not cause a substantial permanent on- or off-campus increase in ambient noise levels. This impact is less than significant and no mitigation is required.***

Threshold	Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction-Related Noise at On Campus Locations

Proposed 2008 NHIP

Construction of the proposed NHIP would impact existing buildings in the Northwest zone, particularly Rieber Hall, Sproul Hall, Covel Commons, and the De Neve Plaza Housing complex. Based on the information presented in Table 4.9-5, construction noise levels could reach up to 86 dBA L_{eq} during the daytime at these buildings. This would be an increase of more than 10 dBA L_{eq} over the current daytime noise levels at the existing buildings. Noise levels would also increase within the dormitory units that face the construction sites, although by a lesser amount, since the buildings would reduce exterior noise levels by 20 to 25 dBA. Noise levels this high would be noticeable by the residents and would be possibly annoying or disturbing when the residents try to sleep, study, or relax when construction activities are occurring between 7:00 AM and 9:00 PM on weekdays, and 8:00 AM and 6:00 PM on Saturdays and national holidays; therefore, PP 4.9-7(a) requires that construction activities do not occur during these time periods. PP 4.9-7(b) requires muffling or shielding of construction equipment, PP 4.9-7(c) requires that stationary construction equipment be placed so noise is directed away from sensitive receptors, and PP 4.9-7(d) requires that the campus conduct regular meetings with on-campus constituents in order to provide advance notice of construction activities. These meetings serve as a coordinating mechanism whereby noisy construction activities can be stopped during finals week, commencement, and other times, as necessary. However, as described above, because noise levels could reach up to 86 dBA L_{eq} during the daytime, which would represent an increase of more than 10 dBA L_{eq} over the existing daytime noise levels, this impact is significant.

Implementation of new MM 4.9-7 identified below which requires installation of noise barriers during construction would not be feasible/effective for the proposed 2008 NHIP due to the existing topographical changes within the sites. Additionally, continued compliance with PP 4.9-7(a) through PP 4.9-7(d) would minimize construction noise impacts to the existing residence halls adjacent to the 2008 NHIP site and other on campus uses. These actions would not, however, ensure that construction noise levels would not increase by less than 10 dBA at all sensitive areas, especially those above the ground level. Therefore, this impact would be significant and unavoidable.

Remaining Buildout of the 2002 LRDP as Amended

Under the 2002 LRDP, as amended, noise would be generated during the construction of the remaining 1.87 million gsf of campus development including the 2008 NHIP (allocated among the 8 existing campus zones) to address existing and future program needs. Based on historic trends at the campus, there could be an average of between two to four building projects under construction at one time. Each of these buildings would be in a different location and would affect different receptors. When construction is completed at one location, other buildings could be constructed or renovated. Because these activities would not occur at a single location over the planning horizon of the 2002 LRDP, as amended (that would affect the same receptors), these construction-related noise impacts would be temporary.

Four general types of activities would be expected to occur and generate noise during construction: (1) some existing buildings within the campus would be demolished and existing surface features cleared; (2) following demolition, the development sites would be prepared (graded and/or excavated) to accommodate the new building foundations and surface features; (3) the buildings and surface features would be constructed and readied for use; and (4) the area around the new buildings would be landscaped. During each stage of development, there would be a different mix of equipment operating, and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The potential noise levels associated with typical construction equipment were previously identified in Table 4.9-5. Classroom and office buildings are located in close proximity to areas within the main campus where development under the 2002 LRDP, as amended, would occur. Construction noise levels could temporarily reach up to 85 dBA L_{eq} during the daytime at nearby on-campus buildings. This could be an increase of more than 10 dBA L_{eq} over the existing daytime noise levels at these buildings. As such, construction noise levels could substantially increase existing noise levels at on-campus classrooms and office uses. This would be a significant impact.

Continued compliance with PP 4.9-7(a) through PP 4.9-7(d) would minimize construction noise impacts to the existing on campus uses, and implementation of new MM 4.9-7 identified below which requires (to the extent feasible) installation of noise barriers during construction would further reduce potential impacts. However, these actions would not ensure that construction noise levels would not increase by less than 10 dBA at all sensitive areas, especially those above the ground level. Therefore, this impact would be significant and unavoidable.

New Mitigation Measure

The following new mitigation measure has been identified to reduce construction-related noise impacts from the proposed Project. This MM would not be applied to the proposed 2008 NHIP as it would be ineffective due to existing site topography.

MM 4.9-7 *A solid noise barrier that would break the line of sight between the construction site and a sensitive use area would reduce construction noise by at least 5 dBA. Therefore, when detailed construction plans are complete, the campus shall review the locations of sensitive receptor areas in relation to the construction site. If it is determined that a 12-foot-high barrier would break the line of sight between an 11-foot-high noise source and adjacent sensitive use areas, a temporary barrier shall be erected to the extent practicable. The barrier shall be solid from the ground to the top with no openings, and shall have a weight of at least 3 pounds per square foot, such as plywood that is ½-inch thick.*

Level of Significance After Mitigation

Significant and Unavoidable.

Impact 4.9-7 ***Even with continued implementation of PPs 4.9-7(a) through 4.9-7(d) during construction of the proposed Project, substantial temporary or periodic increases in ambient noise levels at on-campus locations would occur. This potentially significant impact could be reduced to the extent practicable with implementation of MM 4.9-7, but not to a less than significant level. This impact is significant and unavoidable.***

Construction-Related Noise at Off Campus Locations

Proposed 2008 NHIP

Off-campus residential uses are located at approximately 75 feet from the edge of potential construction near the proposed Lower De Neve residence hall. The center of the construction site for the Lower De Neve building is more than 120 feet from these off-site sensitive uses, and because of this, construction noise levels would be reduced by at least 6 dBA. Construction noise levels from the on-campus work would attenuate to approximately 78 dBA L_{eq} at the nearest residential uses. The residences are separated from the campus by Gayley Avenue where vehicle noise is 70 dBA CNEL, as shown in Table 4.9-2. As the existing daytime noise levels would not increase by more than 10 dBA L_{eq}, construction noise would not result in substantial temporary periodic increases in ambient noise levels at off-campus residential locations.

The proposed 2008 NHIP does include construction activities along Gayley Avenue for two access driveways; however, it does not require utility installations in off-campus roadways. These construction activities (off-campus) may need to be scheduled outside of the typical hours of construction in order to avoid traffic impacts from temporary road, lane, or intersection closures. As required by PP 4.9-8, Capital Programs conducts meetings, as needed, with off-campus constituents that are affected by campus construction in order to provide advance notification of construction activities and to ensure that the mutual needs of the particular construction project and those impacted by construction noise are met, to the maximum extent feasible.

Continued compliance with PP 4.9-7(a) through PP 4.9-7(c) and PP 4.9-8 would minimize construction noise impacts to off-campus locations. These actions would not, however, ensure that noise levels do not increase by less than 10 dBA at noise-sensitive uses located in close proximity to construction sites. No further mitigation is feasible and this impact would be significant and unavoidable.

Remaining Buildout of the 2002 LRDP as Amended

The 2002 LRDP is a land use plan that guides the physical development of the campus. It is not an implementation plan and does not constitute a commitment to any specific project beyond the 2008 NHIP. Therefore, it is not possible to conduct a detailed quantitative construction noise evaluation for all buildings to be included in the buildout of the 2002 LRDP, as amended. Each major building proposal undertaken during the 2002 LRDP Amendment's planning horizon will require project-specific environmental review in accordance with CEQA.

Future construction activities for development under the 2002 LRDP, as amended, may include some infrastructure improvements and utility connections in off-campus roadways. Such infrastructure and/or utility work could occur within 100 feet of off-site residences. Residences located less than 100 hundred feet from off-site construction sites could experience noise levels increases of 10 dBA or more. As discussed above, off-site construction activities may need to be scheduled outside the typical hours of construction in order to avoid traffic impacts from temporary road, lane, or intersection closures. The construction of noise barriers for short-term utility work in roadways is generally not feasible. However, in accordance with PP 4.9-8, Capital Programs conducts meetings, as needed, with off-campus constituents that are affected by campus construction. There is a potential for significant noise impacts from on-campus construction activities to off-campus receptors.

Continued compliance with 2002 LRDP Final EIRs PP 4.9-7(a) through PP 4.9-7(d) and PP 4.9-8 throughout the planning horizon for 2002 LRDP, as amended, would minimize construction noise impacts to off-campus locations. MM 4.9-7 would also reduce construction noise levels at off campus locations. These actions would not, however, ensure that noise levels do not increase by less than 10 dBA at noise-sensitive uses located in close proximity to construction sites. No further mitigation is feasible and this impact is significant and unavoidable.

Mitigation Measures

No additional feasible mitigation measures are available beyond that identified.

Level of Significance After Mitigation

Significant and Unavoidable.

Impact 4.9-8 ***Even with continued implementation of PPs 4.9-7(a) through 4.9-7(d) and PP 4.9-8 during construction activities associated with the proposed Project, substantial temporary or periodic increases in ambient noise levels at off-campus locations would occur. This impact is significant and unavoidable.***

Noise Due to Special Events On Campus

Proposed 2008 NHIP

Implementation of the 2008 NHIP would increase the number of students living on campus by approximately 1,068 over the currently existing approximate 10,360 students within Northwest zone, but is not anticipated to increase the number of special events beyond those that currently occur. Thus, there would be no substantial temporary or periodic increases in ambient noise levels. This is a less than significant impact, and no mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Noise would continue to be generated by occasional special events at the UCLA campus, such as athletic and concert events at Drake Track and Field Stadium and the Intramural Field and outdoor concerts in the Northwest zone (i.e., Sunset Canyon Recreation Center). The loudest of these would continue to be the outdoor concerts. While all projects that may be developed under the 2002 LRDP, as amended, have not been defined, no projects are anticipated that would increase the number of special events or the loudness of existing special events. Thus,

there would be no substantial temporary or periodic increases in ambient noise levels. This is a less than significant impact, and no mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.9-9 ***Implementation of the proposed Project would not result in substantial temporary or periodic increases in ambient noise levels due to special events. This impact is less than significant.***

Threshold	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

UCLA students, faculty, and visitors are currently exposed to short-term noise levels generated by helicopter operations to and from the RRUCLAMC. These helicopter operations occur on average approximately twice per day.

Proposed 2008 NHIP

Implementation of the proposed 2008 NHIP would not increase the number of helicopter flights. As described under Impact 4.9-1 the proposed 2008 NHIP buildings would not be within the 65 dBA CNEL noise contours for the RRUCLAMC helistop. Additionally, in compliance with 2002 LRDP Final EIR PP 4.9-1, new buildings would be designed to ensure that interior noise levels would be less than 45 dBA CNEL. Therefore, this impact is less than significant.

Remaining Buildout of the 2002 LRDP as amended

Implementation of remaining buildout of the 2002 LRDP, as amended, would not increase the number of helicopter flights. As shown in Figure 4.9-4, there is a limited number of on campus buildings that are within the 65 dBA CNEL noise contours for the RRUCLAMC helistop. Due to the developed nature of this area it is not expected that additional development would occur with implementation of the proposed Project. Additionally, in compliance with 2002 LRDP Final EIR PP 4.9-1, new buildings would be designed to ensure that interior noise levels would be less than 45 dBA CNEL. This is a less than significant impact, and no mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.9-10 ***Continued compliance with PP 4.9-1 would ensure the proposed Project would not expose additional students, faculty, or visitors within the UCLA campus to excessive noise levels generated by helicopter operations. This impact is less than significant and no mitigation is required.***

4.9.4 CUMULATIVE IMPACTS

For the purposes of this analysis, development of the related projects provided in Table 4-1, Off-Campus Related Projects, in Section 4.0, Introduction to the Environmental Analysis, would be considered to contribute to cumulative noise impacts. Noise, by definition, is a localized phenomenon, and diminishes in magnitude as distance from the source increases. Consequently, only projects and growth expected occur in the immediate campus area would be likely to contribute to cumulative noise impacts.

Cumulative development is not expected to result in the exposure of persons to noise levels in excess of applicable standards. Campus development included as part of the proposed Project would be subject to the California Noise Insulation Standards, which require that new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings achieve interior noise levels of 45 dBA CNEL. The assessments of vehicle noise generation that would affect interior noise levels are based on traffic analyses that consider cumulative area and regional development. Therefore, noise-land use compatibility would be achieved under cumulative conditions. This is considered to be a less than significant impact.

Cumulative development in the immediate campus area would not result in the exposure of people to or the generation of excessive groundborne vibration or levels, due to the localized nature of vibration impacts and the fact that all construction would not occur at the same time and at the same location.

Construction activities associated with the proposed Project would not utilize explosives or pile driving, which are the most intensive ground-shaking activities associated with construction. Although nearby off-campus construction could utilize explosives or pile driving concurrently with on-campus construction, because vibration decreases substantially with distance, groundborne vibration caused by construction of the proposed Project would not contribute to any cumulatively excessive groundborne vibration on or off campus. Therefore, the implementation of the proposed Project would not result in a cumulatively considerable contribution with respect to groundborne vibration from construction. This is considered to be a less than significant impact.

With regard to cumulative groundborne vibration due to operations, it is not expected that growth in the immediate campus area would lead to a cumulatively significant impact. According to the City of Los Angeles General Plan Framework, the Westwood area is a mixture of residential, retail, and commercial land uses, and no industrial land uses are allowed. These land uses would not result in excessive groundborne vibration, and consequently a cumulatively significant impact in this area would not occur. Because background operational vibration levels under the proposed Project are expected to be about 50 VdB, which is well below the sensitivity threshold for even sensitive scientific equipment, the project contribution would be minimal. This is considered to be a less than significant impact.

Cumulative development in the UCLA area would not result in a significant impact in terms of a substantial permanent increase in ambient noise levels. A substantial permanent increase in noise levels would result from increases in roadway traffic. For the purposes of this EIR, an

increase of 5 dBA at any location is considered to be a significant impact, and if the resulting noise level would exceed 70 dBA CNEL, an increase of 3 dBA is considered significant. In order to determine whether the proposed Project, combined with future Westwood development would result in a cumulatively significant impact, the increase between existing conditions and the "Future With Project Traffic Volumes" scenario was determined (refer to Table 4.9-9, Cumulative Project Roadway Noise Impacts). As shown in Table 4.9-9, the maximum traffic noise increase, approximately 4 dBA CNEL, would occur along Beverly Glen Boulevard between Wilshire Boulevard and Comstock Avenue; this increase would be less than the 5 dBA criterion for an area where the CNEL is less than 70 dBA. All other noise level increases would be 3 dBA CNEL or less, and as the calculated existing and future noise levels are below 70 dBA CNEL (which is below identified impact thresholds), there would be no cumulatively significant impact in this area with regard to roadway noise. This is considered to be a less than significant impact.

TABLE 4.9-9
CUMULATIVE PROJECT ROADWAY NOISE IMPACTS

Roadway Segment	Noise Levels in dBA CNEL		
	Existing Traffic Volumes	Future With Project Traffic Volumes	Increase
Wilshire Blvd, Glendon Ave to Malcolm Ave	70	71	1
Wilshire Blvd, Malcolm Ave to Westholme Ave	70	71	1
Wilshire Blvd, Westholme Ave to Warner Ave	70	71	1
Wilshire Blvd, Warner Ave to Beverly Glen Blvd	70	71	1
Wilshire Blvd, east of Beverly Glen Blvd	70	71	1
Sunset Blvd, west of Church St	70	71	1
Sunset Blvd, Church St to Sepulveda Blvd	70	71	1
Sunset Blvd, Sepulveda Blvd to Veteran Ave	70	70	0
Sunset Blvd, Veteran Ave to Bellagio Rd	69	70	1
Sunset Blvd, Bellagio Rd to Westwood Blvd	68	68	0
Sunset Blvd, Westwood Blvd to Stone Canyon Rd	69	69	0
Sunset Blvd, Stone Canyon Rd to Copa de Oro Rd	68	68	0
Sunset Blvd, Copa de Oro Rd to Bel Air Rd	68	68	0
Sunset Blvd, Bel-Air Rd to Beverly Glen Blvd	66	66	0
Sunset Blvd, east of Beverly Glen Blvd	67	67	0
Hilgard Ave, Sunset Blvd to Wyton Dr	69	69	0
Hilgard Ave, Wyton Dr to Westholme Ave	68	69	1
Hilgard Ave, Westholme Ave to Manning Ave	70	71	1
Hilgard Ave, Manning Ave to Le Conte Ave	68	69	1
Hilgard Ave, Le Conte Ave to Weyburn Ave	65	65	0
Hilgard Ave, Weyburn Ave to Lindbrook Dr	66	67	1
Le Conte Ave, east of Hilgard Ave	67	68	1
Gayley Ave, Weyburn Ave to Le Conte Ave	67	67	0
Gayley Ave, Le Conte Ave to Strathmore Pl	67	68	1
Gayley Ave, Strathmore Pl to Veteran Ave	65	67	2
Strathmore Pl, west of Gayley Ave	65	67	2
Levering Ave, Montana Ave to Veteran Ave	66	67	1
Levering Ave, Veteran Ave to Le Conte Ave	61	62	1
Levering Ave, Le Conte Ave to Weyburn Ave	64	67	3
Veteran Ave, Sunset Blvd to Gayley Ave	66	66	0

TABLE 4.9-9 (Continued)
CUMULATIVE PROJECT ROADWAY NOISE IMPACTS

Roadway Segment	Noise Levels in dBA CNEL		
	Existing Traffic Volumes	Future With Project Traffic Volumes	Increase
Veteran Ave, Gayley Ave to Levering Ave	64	64	0
Veteran Ave, Levering Aveto Wilshire Blvd	62	62	0
Veteran Ave, Wilshire Blvd to Ohio Ave	61	62	1
Veteran Ave, Ohio Ave to Santa Monica Blvd	61	64	3
Montana Ave, Veteran Ave to Levering Ave	69	71	2
Montana Ave, Levering Ave to Sepulveda Blvd	67	68	1
Montana Ave, west of Sepulveda Blvd	66	67	1
Sepulveda Blvd, Ovada Pl to Sunset Blvd	73	74	1
Sepulveda Blvd, Sunset Blvd to Montana Ave	69	69	0
Sepulveda Blvd, Wilshire Blvd to Ohio Ave	67	68	1
Sawtelle Blvd, Ohio Ave to Santa Monica Blvd	65	65	1
Sawtelle Blvd, south of Santa Monica Blvd	68	68	0
Weyburn Ave, Glendon Ave to Westwood Blvd	65	65	0
Weyburn Ave, Westwood Blvd to Gayley Ave	71	72	1
Lindbrook Ave, Westwood Blvd to Gayley Ave	67	69	2
Wyton Dr, east of Hilgard Ave	70	71	1
Westholme Ave, east of Hilgard Ave	66	66	0
Manning Ave, east of Hilgard Ave	69	69	0
Beverly Glen Blvd, Wilshire Blvd to Comstock Ave	63	67	4
Beverly Glen Blvd, Comstock Ave to Sunset Blvd	65	67	2
Beverly Glen Blvd, Sunset Blvd to Greendale Dr	68	69	1
Beverly Glen Blvd, Greendale Dr to Mulholland Dr	66	66	0
Ohio Ave, Westwood Blvd to Veteran Ave	68	68	0
Ohio Ave, Veteran Ave to Sepulveda Blvd	68	68	0
Ohio Ave, Sepulveda Blvd to Beloit Ave	68	68	0
Ohio Ave, Beloit Ave to Sawtelle Blvd	68	68	0
Ohio Ave, west of Sawtelle Blvd	68	68	0
Bellagio Rd, Chalon Rd to Sunset Blvd	64	64	0
Bel-Air Rd, north of Sunset Blvd	61	61	0
Source: EDAW 2008 (Calculation data and results are provided in Appendix H).			

With regard to stationary sources, it is also not expected that there would be a cumulatively significant impact. The major stationary sources of noise that would be introduced into the immediate campus area, due to the land use restrictions that the City of Los Angeles has in place, would be rooftop machinery on new commercial development. This type of equipment generally produces noise levels of around 69 to 73 dBA L_{eq} at a distance of 50 feet. These uses would be required to comply with the City of Los Angeles Noise Ordinance and related noise-control policies, which limit noise levels generated by one property that affect another. With consideration of City regulations and, as commercial areas tend to have higher ambient noise levels, it is not expected that these stationary sources would result in a significant cumulative increase in permanent ambient noise levels and the impact would be less than significant. The contribution of the proposed Project would not be considerable. Development with proposed Project would occur on-campus, as opposed to within the adjacent commercial

and residential areas. Because of the decrease in magnitude of noise as distance increases, the stationary sources due to the on-campus development would contribute negligibly to the ambient noise levels existing within those off-campus districts. Additionally, campus policies provide for the shielding of these sources as well as the provision of landscaping and other buffers in order to reduce noise levels. Consequently, the proposed Project would not contribute a substantial permanent increase in ambient noise levels and its impact is less than significant. This is considered to be a less than significant impact.

Proposed Project construction activities combined with future construction in the off-campus area could result in a cumulatively significant impact in terms of substantial temporary or periodic increases in ambient noise levels. The threshold for this impact with relation to noise impact is whether an increase in 10 dBA or more would occur, which is consistent with the City of Los Angeles' *Draft L.A. CEQA Thresholds Guide* threshold for construction noise impacts. As described above in Impact 4.9-7, infrastructure construction off campus associated with the construction of the 2008 NHIP or future on-campus buildings could result in short-term increases of construction noise that exceed 10 dBA. Therefore, if there was concurrent construction of other projects in the same area, the combined noise increase would also exceed 10 dBA. The impact would be temporary and cumulatively significant.

With regard to operations, it is not expected that there would be cumulatively substantial temporary or periodic increase in ambient noise levels. The development envisioned in the off-campus Westwood area would not be likely to give rise to new outdoor events, nor would it result in periodic industrial operations, as industrial land uses are not allowed in the Westwood Community Plan area. Thus, there would not be any notable new temporary noise sources. The proposed Project contributions to this impact would not be considerable because special events are not expected to occur with more frequency than already exists. This is considered to be a less than significant impact.

Implementation of the proposed Project would not increase the noise generated by helicopter flights to and from the helipads at the RRUCLAMC. Therefore, the proposed Project would not contribute to a cumulative aircraft noise impact. The impact would be less than significant.

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4.10 POPULATION AND HOUSING

This section summarizes existing and forecasted population and housing in the City of Los Angeles Subregion[1] and the City of Los Angeles. This section also presents the existing and projected campus population information.

Data used in preparing this section was derived primarily from the Southern California Association of Governments' (SCAG's) 2008 Regional Transportation Plan (RTP) and Integrated Growth Forecast (SCAG 2008a), the UCLA Office of Analysis and Information Management (2008), and the UCLA 2002 LRDP Final EIR (UCLA 2003b). The *Los Angeles Citywide General Plan* (City of Los Angeles 2001) was also reviewed. Full bibliographic entries for all reference materials are provided in Section 4.10.5 (References) of this section.

One private individual submitted comments in response to the Notice of Preparation addressing population and housing issues. The individual requested that the EIR explain the projected increase in total campus population with implementation of the proposed Project and suggested the EIR provide mitigation to maintain the current campus population by limiting the daily visitor population (refer to Impact 4.10-1).

4.10.1 ENVIRONMENTAL SETTING

Population

City of Los Angeles Subregion and City of Los Angeles

Regional and local demographic data provided in this section (i.e., population and housing) is based on the most recent SCAG data used as the basis of the 2008 RTP as it is the most recent and relevant data set available.[2] SCAG forecasts are developed in five-year increments. The years 2005, 2010, and 2015 are provided to use in the assessment of the proposed LRDP Amendment. The SCAG forecasts are summarized in Table 4.10-1, Population Growth Forecast in the City of Los Angeles Subregion and City of Los Angeles, 2005–2015.

TABLE 4.10-1
POPULATION GROWTH FORECAST IN THE CITY OF LOS ANGELES SUBREGION AND CITY OF LOS ANGELES, 2005–2015

	2005	2010	2015	Change 2005–2015	
				Growth	Percent
City of Los Angeles Subregion	4,037,549	4,140,516	4,214,083	176,534	4.4
City of Los Angeles	3,955,392	4,057,484	4,128,125	172,733	4.4
Source: SCAG 2008a.					

As shown in Table 4.10-1, the SCAG growth forecasts indicate that the City of Los Angeles Subregion had a total population of approximately 4,037,549 in 2005, including persons residing

[1] As designated by the Southern California Association of Governments (SCAG), the City of Los Angeles Subregion includes the City of Los Angeles, the City of San Fernando, and small unincorporated areas of Los Angeles County. UCLA is also located near other Westside cities (e.g., Beverly Hills, Culver City, Santa Monica, and West Hollywood), which are a part of another SCAG-designated subregion: Westside Cities Subregion.

[2] The demographic forecasts provided in the *Los Angeles Citywide General Plan* (City of Los Angeles 2001) and the *Westwood Community Plan* (City of Los Angeles 1999) are based on growth forecasts provided by SCAG in 1993 and have a horizon year of 2010. These documents do not provide demographic information that could be used for the 2002 LRDP Amendment, which has a planning horizon year of 2013.

in households, institutional group quarters (correctional institutions, nursing homes, and mental hospitals), and non-institutional group quarters (university dormitories, military barracks, and homeless shelters). By 2015, SCAG forecasts that the City of Los Angeles Subregion's total population will reach about 4,214,083, a growth of approximately 4.4 percent (SCAG 2008a).

As shown in Table 4.10-1, SCAG currently projects that the Subregion and the City both have population growth rates of 4.4 percent over the ten-year period between 2005 and 2015. This similarity is expected as the majority of the population within the Subregion (98 percent) is within the City of Los Angeles (SCAG 2008a). As discussed earlier, the current City of Los Angeles General Plan is based on SCAG growth projection from 1993. The current (2008) SCAG projections indicate a markedly slower rate of growth than previously estimated in 1993, as summarized below.

The currently forecasted 2015 population of 4.1 million persons in the City of Los Angeles (SCAG 2008a) is lower than the previously forecasted 4.3 million persons in 2010, which SCAG estimated in 1993 (City of Los Angeles 2001). This contrast to previous growth projections is also reflected in comparing the current rate of increase of 4.4 percent between 2005 and 2015 (SCAG 2008a), less than half of what was previously anticipated (11.8 percent) for the period between 2000 and 2010 for the City of Los Angeles (City of Los Angeles 2001). SCAG currently forecasts a City of Los Angeles population of around 4.3 million persons in the year 2030 (SCAG 2008a).

UCLA Campus

The on-campus population, or the number of individuals either enrolled, employed or visiting the campus (represented by headcount), consists of students, academic employees, staff employees, and other individuals (e.g., visitors). Students make up the largest headcount group, followed by staff and academic employees. The on-campus student population includes total general campus and health science enrollment and excludes off-campus health science students, students studying abroad, and students in self-supporting evening programs. Staff and academic employees who work at off-campus locations or outside normal business hours are also excluded from the on-campus population.

On-campus population figures are adjusted to reflect the fact that all students, faculty, and staff who may be on campus at some time will not be on campus simultaneously on any given day. This is because weekday attendance patterns for students and employees vary due to class and teaching schedules, vacations, sick leave, and absences from campus for travel, among other reasons, and other less than full-time work or study schedules. Due to these variations, the number of enrolled students and employed individuals on campus on any given weekday is less than the total number of people enrolled and employed. The average weekday population adjusts the total on-campus population to represent the average number of people (students and employees) physically on campus on any given weekday.

While the campus operates 365 days a year, the academic calendar consists of the regular session (fall, winter, and spring three-quarter average) and summer session (12 weeks). The average weekday population during the 12-week summer session is typically between 60 and 65 percent of the average weekday population during the regular session. Therefore for purposes of analysis in this EIR, regular session population is used to derive environmental impacts.

The estimated average weekday on-campus population for the 2007–2008 academic year is shown in Table 4.10-2, Existing Average Weekday On-Campus Population. As shown, on an average weekday, the on-campus population at UCLA is currently 59,711, with approximately

49 percent of the population being students, 33 percent academic and staff employees, and 18 percent visitors.

TABLE 4.10-2
EXISTING AVERAGE WEEKDAY[a] ON-CAMPUS POPULATION

Type	2007–2008 Baseline
Students[b]	
Undergraduate	20,336
Graduate Students	9,044
Subtotal Student Enrollment	**29,380**
Academic Employees[c]	5,292
Staff Employees[d]	14,438
Subtotal Employees	**19,730**
Other Individuals (Visitors)[e]	10,601
Total	***59,711***

[a] Adjusted for varied class and teaching schedules, vacations, sick leave, absences from campus and other less than full-time work or study schedules.
[b] Includes total general campus and health science enrollment and excludes off-campus health science students, students studying abroad, and students in self-supporting evening programs with adjustment for average weekend population.
[c] Includes faculty and other teaching and academic staff and Emeriti; excludes sabbatical leaves, off-campus assignments, evening employees, and student employees (i.e., teaching assistants and interns and residents who are included in student enrollment numbers).
[d] Includes non-academic career, casual and contract/per diem employees, and excludes off-campus assignments, evening employees, and student employees (student employees are included in the student enrollment numbers).
[e] Average weekday numbers of Medical Center clinical and affiliated faculty, patients, visitors, and volunteers; pre-school and elementary school children; other campus visitors and volunteers; vendors; and contractors.

Source: UCLA 2008.

Households and Housing

City of Los Angeles Subregion and City of Los Angeles

SCAG's household forecast is summarized in Table 4.10-3, Household Growth Forecast in the City of Los Angeles Subregion and City of Los Angeles, 2005–2015.

TABLE 4.10-3
HOUSEHOLD GROWTH FORECAST IN THE CITY OF LOS ANGELES SUBREGION AND CITY OF LOS ANGELES, 2005–2015

				Change 2005–2015	
	2005	2010	2015	Growth	Percent
City of Los Angeles Subregion	1,325,600	1,386,658	1,445,177	119,577	9.0
City of Los Angeles	1,306,079	1,366,985	1,424,701	118,622	9.1
Source: SCAG 2008a.					

As shown, SCAG estimates that there were 1,325,600 households[3] in the City of Los Angeles Subregion in 2005 and forecasts that this number will increase to 1,445,177 by 2015. This represents an increase of approximately 119,577 households.

Additionally, the Subregion and the City are expected to have household growth rates of 9.0 percent and 9.1 percent, respectively, over the 10-year period between 2005 and 2015. Similar to population growth, most of the household growth (99 percent) would be within the City of Los Angeles. Based on information provided by the City of Los Angeles Housing Department (LAHD),[4] as of March 2008, the City of Los Angeles has 1,340,978 housing units, and of the individually metered units, approximately 3.0 percent (38,903 units) were vacant (LAHD 2008).

As discussed in Section 4.11.3, Schools, of this EIR, approximately 70 percent of UCLA employee households are located in the City of Los Angeles and the largest concentration of employees (approximately 35 percent) reside in neighborhoods on the Westside. Approximately 23 percent reside in other Los Angeles County Cities, and the remainder (approximately 7 percent) resides in other areas outside Los Angeles County.

UCLA Campus

The 2002 LRDP incorporates the 2001 *Student Housing Master Plan 2000–2010* (2001 SHMP), which provided for the continuing development of on-campus student housing to enhance the educational experience for students and to continue the evolution of UCLA from a commuter to a residential campus. The 2001 SHMP included a goal of housing approximately 60 percent of UCLA student enrollment in a combination of University-owned or private-sector housing within 1 mile of campus. The goal of the 2001 SHMP has largely been met with approximately 56 percent of the UCLA student population projected to live on campus or within one mile in the 2007–2008 academic year (UCLA 2007). Specifically, 10,357 undergraduate students and 2,962 graduate students are estimated to live on campus for the 2007–2008 academic year, and 7,225 students are estimated to live in private-sector housing within 1 mile of campus.

However, there still are not sufficient on-campus housing opportunities to meet the established SHMP goals. The continued shortfall of beds, as measured against institutional objectives, necessitated an SHMP update, the *Student Housing Master Plan 2007–2017,* which was completed in 2007 (2007 SHMP)(UCLA 2007).

It should also be noted that, through 2013, UCLA will continue to renovate existing residence halls built between 1959 and 1963 (i.e., Dykstra, Sproul, Rieber, and Hedrick). During the renovation process, between 824 and 836 beds would be unavailable, exacerbating the unmet demand for on-campus housing. To compensate for the lost beds, existing double occupancy rooms are being converted to triple-room accommodations to increase the bed inventory in the interim.

[3] "Household" is the same as occupied housing unit. Occupied units plus vacant units equals an area's total number of housing units. SCAG forecasts households, not housing units.

[4] LAHD derives its vacancy rate based on Los Angeles Department of Water and Power (LADWP) monthly meter activity report for individually metered residential housing units.

4.10.2 REGULATORY FRAMEWORK

State

The University of California Master Plan for Higher Education provides enrollment goals for new and transfer students. The *California Education Code* contains several provisions mandating enrollment access levels. Section 66202.5 of the Education Code states:

> The State of California reaffirms its historic commitment to ensure adequate resources to support enrollment growth, within the systemwide academic and individual campus plans to accommodate eligible California freshmen applicants and eligible California Community College transfer students, as specified in Sections 66202 and 66730.
>
> The University of California and the California State University are expected to plan that adequate spaces are available to accommodate all California resident students who are eligible and likely to apply to attend an appropriate place within the system. The State of California likewise reaffirms its historic commitment to ensure that resources are provided to make this expansion possible, and shall commit resources to ensure that students from enrollment categories designated in subdivision (a) of Section 66202 are accommodated in a place within the system.

Similarly, Section 66011(a) of the *California Education Code* provides that all resident applicants to California institutions of public higher education, who are determined to be qualified by law or by admission standards established by the respective governing boards, should be admitted to either (1) a district of the California Community Colleges, in accordance with Section 76000; (2) the California State University; or (3) the University of California.

Section 66741 of the *California Education Code* requires acceptance of qualified transfer students at the advanced standing level.

It also should be noted that under Section 21080.9(b) of the *Public Resources Code*, the environmental effects relating to changes in enrollment are to be considered for each campus or medical center of public higher education in the environmental impact report prepared for the long range development plan.

4.10.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

The proposed 2002 LRDP Amendment assumes a 2013 horizon year for development. The following analysis addresses (1) population, household, and employment growth that could occur with implementation of the proposed Project and (2) whether this growth is considered substantial in relation to local and regional forecasts.

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed project would not have a significant impact for the following thresholds from the CEQA Checklist and no further analysis of these issues is presented in this section.

- Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

- Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The following threshold of significance criterion is based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Population and Housing.

- Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) *(Impact 4.10-1)*?

Impact Analysis

Threshold	Would the project induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?

As described in Section 3.6, Components of the Amendment to the 2002 LRDP, implementation of the 2002 LRDP, as amended, would involve development of the remaining 2002 LRDP allocation of 1.32 million gross square feet (gsf) and the proposed 2008 NHIP (550,000 gsf). It should be noted that the 1.32 million gsf of the remaining 2002 LRDP development allocation includes the estimated square footage from Phase 2 of the previously approved Southwest Graduate Student Housing Project, which has not yet been undertaken. The inclusion of this previously committed square footage into the remaining allocation under the 2002 LRDP Amendment does not preclude the development of additional graduate student infill housing in the Southwest zone. Additional graduate student housing is contemplated in the 2007 SHMP; however, as of the preparation of this EIR, the only housing proposed to be constructed under the 2002 LRDP is the 2008 NHIP, which is evaluated in this EIR. Future housing projects would be subject to environmental review pursuant to CEQA.

Implementation of the proposed Project would not involve the development of any housing units which could generate a direct increase in population as on-campus housing is typically proposed to accommodate existing campus population. However, there could be an indirect increase in population resulting from the introduction of new jobs on campus. The 2002 LRDP Final EIR identifies a direct-to-indirect employment impact ratio of 0.68 (indirect jobs for every direct job). For purposes of this EIR analysis, it is assumed that this rate represents current conditions since there have been no changes in the structure of the campus' employment base. The following analysis addresses the indirect population growth from increased employment associated with the proposed Project.

Proposed 2008 NHIP

The proposed NHIP provides 1,525 beds and associated support facilities to address the unmet demand for undergraduate housing on campus. It is estimated that 70 percent (1,068 beds) of the 1,525 beds would be used by students that would otherwise have to live off campus, and the remaining 30 percent (457 beds) would be used by students that currently reside in triple accommodations (3 beds in one room) on campus. The NHIP is proposed in response to the existing and projected student population and the related demand for on-campus housing in accordance with the 2007 SHMP; it would not, therefore, generate new student enrollment growth. Specifically, the proposed NHIP project would contribute to UCLA's goals to provide guaranteed housing to all freshmen who desire such housing for four consecutive years, thereby continuing the evolution of UCLA from a commuter to a residential campus. Therefore,

the 2008 NHIP and associated LRDP Amendment would not directly generate population growth. However, additional staff would be required to serve the additional housing and students at the 2008 NHIP. Approximately 151 new average weekday staff members (or approximately 131 full-time-equivalent employees) would be employed on campus by 2013 to provide administrative, housing maintenance, information technology, and dining services to the expanded residential population. This represents an increase of approximately 0.2 percent over the 2007–2008 academic year total average weekday population of 59,711 (UCLA 2008).

Based on the direct-to-indirect employment impact ratio of 0.68, the 151 new employees associated with the 2008 NHIP would be expected to generate 103 indirect jobs distributed throughout the County of Los Angeles, for a total employment generation of up to 254 jobs through the year 2013. This is a negligible increase in new jobs when compared to the total existing and projected jobs in the County or even the City of Los Angeles. Additionally, it should also be noted that most of these staff positions involve vocational opportunities that are generally found in most communities, and may not offer a unique enough opportunity to induce job-seekers to relocate to the area for the sole purpose of filling these positions. Due to the existing unemployment rate in Los Angeles County, which is currently 8.1 percent and has averaged 6.6 percent over the previous 10 years (EDD 2008a, 2008b), it is expected that qualified area residents would fill the vast majority of additional staff positions. Accordingly, it is anticipated that most new staff positions would be filled by persons already residing in the area and would not result in population growth. This impact is less than significant.

Remaining Buildout of the 2002 LRDP as Amended

UCLA has estimated the projected increase in average weekday on-campus population (students, employees and visitors) during the regular session through the horizon year of the 2002 LRDP, as amended (2013–2014 academic year). Table 4.10-4 below updates Table 6 of the 2002 LRDP (page 26) to consider population growth through the 2013 horizon year. As shown in Table 4.10-4, Existing and Projected On-Campus Average Weekday Population—Regular Session, which includes the employment growth associated with the 2008 NHIP, UCLA anticipates an average weekday campus population growth of 2,780 persons (681 enrolled students, 957 academic and staff jobs, and 1,142 visitors) by the 2013–2014 academic year.

Based on the direct-to-indirect employment impact ratio of 0.68, the additional 957 employees associated with implementation of the 2002 LRDP, as amended, would be expected to generate 651 indirect jobs, for a total employment generation of approximately 1,608 jobs. A portion of the anticipated new employees would already reside in the area (or are also enrolled as students at UCLA) and would not require new housing. It is possible that faculty and staff added as a result of the 2002 LRDP Amendment may seek housing opportunities in the Westwood Community Plan area and in other nearby areas, such as West Los Angeles, Santa Monica, Culver City, and/or the San Fernando Valley. However, the specific distribution of faculty and staff housing in these and other areas is speculative and is driven by many factors, such as housing, cost, choice of school district, and personal preferences that are outside UCLA's control or influence.

TABLE 4.10-4
EXISTING AND PROJECTED ON-CAMPUS AVERAGE WEEKDAY[a] POPULATION—REGULAR SESSION

Type	Estimated 2007–2008	Projected 2013–2014	Growth
Students (Three Quarter Average)[b]			
Undergraduate	20,336	20,464	128
Graduate Students	9,044	9,596	553
Subtotal Student Enrollment	**29,380**	**30,061**	**681**
Employees			
Academic Employees[c]	5,292	5,650	358
Staff Employees[d]	14,438	15,037	599
Subtotal Employees	**19,730**	**20,687**	**957**
Other Individuals (Visitors)[e]	10,601	11,743	1,142
Total	***59,711***	***62,490***	***2,780***

Note: Numbers are rounded to the nearest whole number and may be subject to minor rounding error (i.e., less than 1).

[a] Adjusted for varied class and teaching schedules, vacations, sick leave, absences from campus, and other less than full-time work or study schedules.

[b] Includes total general campus and health science enrollment and excludes off-campus health science students, students studying abroad, and students in self-supporting evening programs with adjustments for average weekend population.

[c] Includes faculty and other teaching and academic staff and Emeriti; excludes sabbatical leaves, off-campus assignments, evening employees, and student employees (i.e., teaching assistants and interns and residents who are included in student enrollment numbers).

[d] Includes non-academic career, casual and contract/per diem employees, and excludes off-campus assignments, evening employees, and student employees (student employees are included in the student enrollment numbers).

[e] Average weekday numbers of Medical Center clinical and affiliated faculty, patients, visitors, and volunteers; pre-school and elementary school children; other campus visitors and volunteers; vendors; and contractors.

Source: UCLA 2008.

However, as discussed above and in Section 4.11.3 (Schools) of this EIR, if the projected 1,608 total additional employees distribute their households in the same patterns as existing employee households, just over two-thirds (1,072) would be expected to locate in the City of Los Angeles, and a large portion of these (534) would choose neighborhoods on the Westside. Approximately 402 employees would reside in other Los Angeles County Cities, and the balance (134) would locate in other areas outside Los Angeles County.

The current vacancy rate for housing in the City of Los Angeles is approximately three percent (LAHD 2008). In addition, it is expected that additional new housing stock would be constructed in the City of Los Angeles, including low and moderate income housing, in accordance with housing goals and policies set forth in the Housing Element of the *Los Angeles Citywide General Plan* and State law. SCAG's Regional Housing Needs Assessment (2007) has identified that the City of Los Angeles is to provide an additional 112,876 housing units between 2006 and 2014 to accommodate anticipated demand from population growth. While the number of new housing units to be constructed and future vacancy rates are unknown, the relatively small population increases associated with implementation of the 2002 LRDP, as amended, are within the SCAG projections, and are within the SCAG-identified anticipated future demand for housing in the City of Los Angeles. As a result, the proposed LRDP Amendment, including the 2008 NHIP, would not place an additional burden on the City of Los Angeles's ability to satisfy its share of regional housing needs during the LRDP Amendment timeframe.

As noted above under the discussion of the 2008 NHIP, most staff positions (which are the majority of the additional jobs that could be added as a result of the 2002 LRDP Amendment) involve vocational opportunities that are generally found in most communities, and may not offer a unique enough opportunity to induce job-seekers to relocate to the area for the sole purpose of filling these positions. Due to the existing unemployment rate in Los Angeles County, it is expected that the vast majority of additional staff positions associated with buildout of the 2002 LRDP, as amended, would be filled by qualified area residents. Accordingly, it is anticipated that persons already residing in the area would fill most new staff positions.

Regardless, even if all 1,608 additional jobs were filled by employees from outside the SCAG region and they settled within the City of Los Angeles Subregion, this would represent only 0.9 percent of the SCAG population growth forecast between 2005 and 2015 for both the Los Angeles Subregion (176,534) and the City of Los Angeles (172,733).

This level of potential indirect population growth would be well below regional population projections for the City of Los Angeles and the Los Angeles Subregion. Therefore, the additional employment opportunities would not result in substantial indirect population growth. A less than significant population impact would occur, and no mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.10-1 ***Implementation of the proposed Project would not result in substantial population growth, either directly or indirectly. This impact is less than significant and no mitigation is required.***

4.10.4 CUMULATIVE IMPACTS

SCAG's six-county region is the geographic context for the analysis of cumulative population and housing impacts. The cumulative context within this geographic area includes all growth envisioned by SCAG in the Regional Transportation Plan Growth Forecast and the Regional Comprehensive Plan and Guide, which includes all growth anticipated to occur under the implementation of the *Los Angeles Citywide General Plan Framework,* and development of the related projects provided in Table 4-1 in Section 4.0, Introduction to the Environmental Analysis.

As discussed above, the proposed Project would not directly induce population growth in the area. However, new staff employment opportunities would be generated and could indirectly generate an increased population of approximately 1,608 persons. This growth represents a nominal increment (0.9 percent) compared to growth expected in both the City of Los Angeles Subregion and the City of Los Angeles between 2005 and 2015. Moreover, as discussed previously, due to the existing unemployment rate and the nature of many of the new employment positions that would be created by the LRDP Amendment, it is expected that many of the new employees would be drawn from current residents of the City of Los Angeles, and, to a lesser degree, the six-county SCAG region. As a result, the proposed Project's contribution to regional cumulative population growth would not be cumulatively considerable and less than significant.

4.10.5 REFERENCES

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4.11 PUBLIC SERVICES

This section evaluates the effects on public services related to implementation of the proposed Project by identifying anticipated demands and existing and planned service availability. For purposes of this EIR, public services consist of (1) fire protection, (2) police protection, and (3) schools. Parks, while described as a public service in Appendix G of the CEQA Guidelines, are analyzed separately in Section 4.12 (Recreation). Impacts related to emergency access are analyzed in Section 4.13 (Transportation/Traffic) of this EIR.

Data used to prepare this section was taken from various sources, which include reviewing previous environmental documentation prepared for the campus and by contacting service providers. Full bibliographic entries for all reference materials are provided in Section 4.11.5, References, of this section.

One private individual submitted comments in response to the Notice of Preparation requesting that the EIR address how the increased on-campus student population with implementation of the proposed Project would impact public safety (refer to Impact 4.11-2). This section of the EIR also describes the University of California Police Department services provided to ensure public safety related to UCLA operations.

4.11.1 FIRE PROTECTION

Environmental Setting

The Los Angeles City Fire Department (LAFD) provides fire suppression and rescue operations for the UCLA campus (LAFD 2008). Fire alarm calls on campus are received by the UCPD command center staff, which screen calls, determine the call location, and then alert the LAFD (UCLA 2007d).

Fire Stations Nos. 37 and 71 have primary responsibility for a first alarm call to the campus. In cases where there is a need for backup support, additional City fire stations would provide the necessary assistance (LAFD 2008). Fire Station No. 37 is located at 1090 Veteran Avenue in the Southwest zone, approximately 1.3 miles from the campus at its furthest point, and Fire Station No. 71 is located at 107 South Beverly Glen Boulevard northwest of the campus, approximately 1.8 miles from the campus at this furthest point. Fire Station No. 37, which responds to the majority of emergency calls to the campus, includes a truck company, a two-piece engine company, a rescue ambulance, and a fire chief command car. As of 2008, the station is staffed by 14 people daily, including 10 sworn fire personnel, 2 paramedics, and 2 members of the battalion command team. Initial response times on a citywide basis meet the goal of 5 minutes or less 90 percent of the time. In addition to LAFD paramedics, campus emergency technicians from the Medical Center respond to a number of emergency calls both on and off campus (UCLA 2007e).

Three principal City of Los Angeles Department of Water and Power (LADWP) water supply service connections each provide fire flows to the campus at a rate of 5,000 gallons per minute (gpm) with a supply pressure of between 135 pounds per square inch (psi) and 185 psi. There is a campus pressure-reducing station at each connection to regulate and control the pressure throughout the campus's water grid system. The system is designed based on any two of the three service connections being on line, assuming one of the three might be out of service for any reason. The design capacity of the system is not based on the normal campus demand, but rather on the provision of adequate fire flows to each campus building, which are greater than normal water demands.

Fire prevention programs, practices, and procedures for the campus are managed by the Environment, Health, and Safety (EH&S) Fire Protection Section. Their primary responsibility is to assist in enforcing State building codes and regulations, which involve reviewing all plans for new construction and renovation, as well as conducting inspections of existing campus buildings. EH&S is also responsible for training UCLA staff and building coordinators on emergency procedures and safety techniques (UCLA 2007f). The Campus Fire Marshal reviews and approves all individual development plans prior to construction to ensure that adequate fire flows will be maintained; an adequate number of fire hydrants will be provided in the appropriate locations; and circulation and design features will allow adequate emergency vehicle access in compliance with the *City of Los Angeles Municipal Code.* In addition, the Campus Fire Marshal inspects buildings during and after construction, and buildings can only be occupied with the approval of the Marshal (UCLA 2007g).

Regulatory Framework

Federal

Higher Education Opportunity Act

The University shall comply with the requirements of the Campus Fire Safety Right-to-Know Act in the Higher Education Opportunity Act, which was signed by President Bush on August 1, 2008. Specifically, the legislation requires that a Fire Safety Report be distributed by the University containing statistics concerning the following in each on-campus student housing facility during the most recent calendar year for which data are available:

- The number of fires and the cause of each fire;
- The number of injuries related to a fire that resulted in treatment at a medical facility;
- The number of deaths related to a fire;
- The value of property damage caused by a fire;
- A description of each on-campus student housing facility fire safety system, including the fire sprinkler system;
- The number of regular mandatory supervised fire drills;
- Policies or rules on portable electrical appliances, smoking, and open flames (such as candles), procedures for evacuation, and policies regarding fire safety education and training programs provided to students, faculty, and staff;
- Plans for future improvements in fire safety, if determined necessary by such institution.

State

State fire regulations are set forth in Sections 13000 et seq. of the *California Health and Safety Code,* which include regulations concerning building standards (as also set forth in the *California Building Code*); fire protection and notification systems; fire protection devices, such as extinguishers and smoke alarms; high-rise building and childcare facility standards; and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all State-owned buildings, State-occupied buildings, and State institutions throughout California, including UCLA.

Project Impacts and Mitigation

Analytic Method

Impacts on fire protection services would result from an increase in population or building area that results in lengthened response times, inadequate fire flows, or any change in services that requires the need for new or altered facilities. The LAFD determines adequacy of fire protection services by using response times as performance objectives. Therefore, the following analysis is based on this performance objective rather than service ratios, which are not utilized by the LAFD. The standard for an urban level of service requires that an engine company arrive on the scene within 5 minutes 90 percent of the time, with 4 firefighters per Engine Company (NFPA 2004). The LAFD currently meets this standard on a citywide basis (Wells 2008).

Thresholds of Significance

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Fire Protection.

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection *(Impact 4.11-1)?*

Impacts Analysis

Campus Program, Practice, and Procedure Carried Forward from the 2002 LRDP Final EIR

The following campus program, practice, and procedure (PP) was adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. It is therefore considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.11-1 *Fire alarm connections to the University Police Command Center shall continue to be provided in all new and renovated buildings to provide immediate location information to the Los Angeles Fire Department to reduce response times in emergency situations.*

Threshold	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection?

Proposed 2008 NHIP

Currently, the LAFD is meeting its established goal response time of 5 minutes or less at least 90 percent of the time on a citywide basis (Wells 2008). Furthermore, as required by the *Los Angeles Municipal Code* (Section 57.09.06, as amended), the nearest engine company is located 1.5 miles or less from the furthest point on campus (Fire Station No. 37), which is within the maximum response distance allowed by Code for commercial, industrial, and/or high-density

residential uses. The Code allows response distances to exceed 1.5 miles if new structures are constructed with automatic fire sprinkler systems, which is standard practice for all campus buildings. Because buildout of the proposed Project would occur entirely within campus boundaries, which can be adequately served within the established response times and distances, no new, expanded, or altered fire-protection services or facilities are required to maintain acceptable response times or distances (Wells 2008).

The proposed 2008 NHIP is designed in accordance with fire safety regulations to allow for fire truck access within 150 feet of all new perimeter-building walls. De Neve Drive provides or would provide this access for Upper De Neve, Sproul West, Sproul South, and Sproul Complex. Access to Sproul West can also be gained via Sunset Village Drive and Sproul South, and Sproul Complex could also be accessed via Charles E. Young Drive West. Access to Lower De Neve would be via a striped fire zone on Gayley Avenue and a new eastern driveway at Gayley Avenue proposed as part of the project. For the 2008 NHIP, water connections would be extended from the existing water lines in Sunset Village Drive and De Neve Drive. The proposed NHIP buildings would demand a fire flow of 1,500 gpm at 20 psi, which can be provided by the existing Northwest Zone water system from the existing water lines in Charles E. Young Drive and De Neve Drive water lines. Fire hydrants would be provided in accordance with the *California Code of Regulations.* The physical impacts associated with extension of water lines from the proposed building to existing water lines and installation of the new driveway along Gayley Avenue have been addressed in the respective technical sections of this EIR (refer to Section 4.2, Air Quality and Section 4.9, Noise and Vibration).

The Campus Fire Marshal would review and approve the 2008 NHIP plans to ensure that (1) adequate fire flows are maintained (including localized pipe upgrades or connections that might be required to connect new buildings to the system); (2) an adequate number of fire hydrants is provided in the appropriate locations; and (3) circulation and design features allow adequate emergency vehicle access in compliance with the *City of Los Angeles Municipal Code.* In addition, the 2008 NHIP would comply with all regulations of the *California Health and Safety Code* (Sections 13000 et seq.) pertaining to fire protection systems, including provision of State-mandated smoke alarms, fire extinguishers, appropriate building access, and emergency response notification systems.

Because emergency access and fire flows are adequate to serve the proposed 2008 NHIP and no new facilities are required, impacts associated with the provision of fire protection services from implementation of the proposed 2008 NHIP are considered less than significant. Continued compliance with 2002 LRDP Final EIR PP 4.11-1 identified previously would ensure that this impact remains less than significant by facilitating emergency response, which has historically allowed the LAFD to provide acceptable response times. No mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Due to the developed nature of the campus, existing emergency access and the provision of sufficient fire flow, it is not expected that future projects developed under buildout of the 2002 LRDP, as amended, would require the construction of new roadways or water infrastructure to meet fire protection requirements. However, each project would undergo project-specific environmental review pursuant to CEQA at which time the physical impacts of fire protection-related facilities would be addressed. Additionally, the Campus Fire Marshal would review each individual future development project to ensure that building design is in compliance with applicable regulations, as discussed above.

As noted above, because buildout of the 2002 LRDP, as amended, including the 2008 NHIP, would occur entirely within campus boundaries and can be adequately served within the

established response times and distances, no new, expanded, or altered fire protection services or facilities (e.g., fire stations) are required to maintain acceptable response times or distances (Wells 2008). Therefore, no physical impacts associated with new or altered fire protection facilities would result. Following PP 4.11-1 identified previously would ensure that this impact remains less than significant by facilitating emergency response, which has historically allowed the LAFD to provide acceptable response times. No mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.11-1 ***Implementation of the proposed Project could increase the demand for fire protection services, but would not require the construction of new or physically altered facilities to accommodate the increased demand to maintain acceptable response times and fire flows. This impact is less than significant.***

4.11.2 POLICE SERVICES

Environmental Setting

As with other University campuses, the University of California Police Department (UCPD) has primary responsibility for the campus and all off-campus properties owned and operated by UCLA. According to Section 92600 of the *California Education Code,* the UCPD has concurrent jurisdiction with the Los Angeles Police Department (LAPD) within a one-mile radius of University-owned property. The UCPD is often the first responder at properties around the campus and may take primary responsibility for student-oriented events off campus (UCLA 2007a).

Historic Crime Trends

According to the Campus Security Policy and Crime Statistics Report (prepared pursuant to the Jeanne Cleary Disclosure of Campus Security Policy and Campus Crime Statistics Act), there were 1,587 reported offenses on campus in 2007, which represents a slight decrease from the 1,455 incidents reported in 2006 (UCPD 2008). The majority of these crimes were burglary/theft and liquor law violations.

In the LAPD West Los Angeles Area, the predominant crimes in 2007 were aggravated assault, burglaries, vehicle theft, and other theft. According to past annual crime statistics, the crime rate in Westwood Village and on the campus is lower than the citywide average of 47.13 crimes per 1,000 persons. (LAPD 2008; Greenstein 2008)

University Police

Service Levels

The UCPD are duly sworn police officers under 830.2(b) of the *California Penal Code* and its jurisdictional responsibilities are articulated in the aforementioned section of the *California Education Code.* The UCPD station is located on campus adjacent to the Energy Systems

Facility, at the northwestern corner of the intersection of Charles E. Young Drive South and Westwood Plaza (UCLA 2007b). This station is currently being replaced, which will slightly increase building area and upgrade police facilities. No staffing increases are associated with this renovation (Greenstein 2008). While the replacement facility is under construction, the police station is temporarily located in the Southwest zone of campus on Kinross Avenue.

The UCPD force currently employs 62 sworn officers, 46 civilians and approximately 100 students who work in non-sworn capacities for the UCPD (UCLA 2007b). Personnel are used in crime prevention, investigations, and administration (UCLA 2007b). All sworn officers are available on an on-call basis to respond in emergency situations, as needed. On a part-time basis, students are employed as Community Service Officers (CSOs) to provide escort, equipment security services, and patrol assistance. Current staffing levels are considered adequate to provide police protection to the campus. The campus evaluates police protection needs on an ongoing basis and considers the need to augment UCPD and CSO staffing levels as institutional priorities (Greenstein 2008).

As previously mentioned, all new building projects and existing buildings undergoing renovation have fire alarm connections to the UCPD command center. This computerized system immediately identifies the location requiring police or fire protection services (Greenstein 2008).

Services Addressing Residential Uses/Alcohol Use

As a University in a dense urban environment, the UCLA campus is adjacent to multi- and single-family residential neighborhoods to the north, west, and east of the main campus. These neighborhoods are typically non-student/non-University owned residences. However, the off-campus area commonly known as North Westwood Village is predominantly made up of non-University owned multi-family residential units (i.e., apartments) with a large segment of the population comprised of UCLA students and Greek fraternities. Weekend nights (Thursday through Saturday) in this area are popular nights for social events (including events with alcohol). To ensure the safety of this residential population, a lead UCPD officer is assigned to fraternities and the residential neighborhood to provide presentations and outreach and to develop a strong presence in the area. The lead UCPD officer also creates relationships with the fraternity officers.

In general, UCPD receives and responds to calls concerning “loud noise,” which can be parties or groups (on or off campus) engaged in social activities outside a particular residential property. According to UCPD Dispatch logs, they receive between 5 and 15 daily calls complaining about noise (Greenstein 2008). Officers in almost all situations are dispatched to respond to the complaints, official or anonymous. Once on scene, the UCPD officers request that the noise be lowered and typically get cooperation. If the group is non-cooperative, the social activity/party may be shut down.

In order to ensure the safety of the students and community members, UCPD educates and enforces programs to minimize issues related to alcohol. The UCPD has established the following programs for UCLA students, both on the campus and off the campus:

- ***Zero Tolerance Program.*** Coming into its third year, officers take a no tolerance approach in the use of alcohol and unsafe party behavior off campus. Campus partners have joined in this effort by providing public information and advertisements in the *Daily Bruin.*

- ***Party Notification.*** A program where UCLA affiliates provide information to UCPD regarding their parties, alcohol service, and security. This is required for fraternities. The

UCPD also encourages the use of the system by all other organizations having private parties near campus.

- ***Neighborhood Nuisance Abatement.*** Working with the City Attorney (CA), the UCPD provides information on buildings with ongoing issues to the CA's office for action. The UCPD prepares a background on a property in question that includes statistics on calls to the location, information from neighbors, and other applicable documentation. The LAPD also provides information that they may have on the same properties. The CA determines if there is cause to open up a case against the Property Owner, which may include correspondence, mediation, and office hearings. This has been successful in dealing with buildings where the landlord/management is not properly monitoring their property.

- ***Midnight Yell.*** When a past collective shout at midnight (marking the end of finals week) turned into street parties, noise and some dangerous behaviors, the UCPD developed a strategy to extinguish the practice and continues to be proactive in addressing similar disruptive behavior.

Arthur Ashe Student Health and Wellness Center

In addition to the UCPD programs in place to minimize issues related to noise and other conflicts between students and the communities adjacent to the main campus, the University has a number of programs that focus on alcohol harm reduction and prevention. Harm reduction is an approach to regulating or modifying behavior related to alcohol use by reducing or eliminating harm that may be caused by an individual upon themselves or those who come into contact with said individual. UCLA applies this philosophy:

- Accepting, for better or worse, that legal and illegal alcohol use is part of our campus and chooses to work to minimize its harmful effects rather than simply condemn or ignore them;

- Understands alcohol use as a complex, multifaceted phenomenon, and acknowledges that some ways of drinking alcohol are clearly safer than others;

- Recognizing that the realities of student life, peer pressure, developmental, and other issues affect both students' vulnerability to and capacity for effectively dealing with alcohol-related harms, and that successful interventions and policies will consider these multiple influences and focus on improving the quality of individual and community life and well being;

- Seeking to strengthen the students' knowledge of the various harms associated with alcohol use and promote a reduction in use; and

- Establishing the quality of individual and community life and well-being—and not necessarily the cessation of all alcohol use—as the criteria for successful interventions and policies.

In an effort to apply the harm-reduction philosophy to the UCLA community, the alcohol programs described below are multifaceted and coordinated by several organizations on campus.

- ***Drug Free Schools Committee.*** The Drug Free Schools Committee (DFSC) was formed in 1989 in response to the Drug Free Schools Communities Act, which

established criteria for drug prevention programs in order to receive federal funding through the Department of Education. The DFSC is a coalition of key campus stakeholders that guide policy development and provide coordination and evaluation of harm-reduction initiatives. Under the DFSC, the Westside Harm Reduction Program was developed and uses University resources to discourage alcohol abuse. The DFSC meets periodically and is composed of various stakeholders from the University. A strategy currently in development is the safe party website, which will provide related information and encourage the use of the party notification forms.

- ***Campus Alcohol Policy.*** Developed by the campus DFSC, the policy is applied campus-wide and includes sanctions relating to student use of alcohol and other drugs.

- ***Chancellor's Annual Notice to Students.*** At the beginning of every academic year, the Chancellor's annual notice is mailed to every registered student and details campus alcohol and drug use policies, sanctions, programs, and services.

- ***UCLA AlcoholEdu Program.*** Although UCLA is well below the national average in the number of campus incidents related to harmful drinking behavior, it feels its students' safety and well-being are foremost in importance. The AlcoholEdu program is a required, online alcohol awareness course for incoming students (i.e., first-year freshman and transfer students) that delivers an effective means for helping students practice safe and healthy choices. Even for those students who do not drink, it is very likely that during their college experience they will know others who do and includes material on managing peer pressure. The overall goal of the program is to provide the entire incoming class with a common baseline of knowledge and awareness of alcohol issues and use.

- ***Student Health Advocates.*** Student Health Advocates are student volunteers that have provided over 15,000 annual service hours disseminating health education to fellow students on campus. These volunteers are trained in the latest approaches to outreach and conduct ongoing alcohol harm-reduction programs for groups and at campus events.

- ***Residential Health Education Committee.*** Coordinated by the Office of Residential Life, with multi-departmental student and staff representation, this committee coordinates harm-reduction programs targeting students in the residence halls. Programming includes training of staff and student leaders, multimedia messages infused throughout the residential environment, and many student-led initiatives.

- ***Greeks Advocating Mature Management of Alcohol (GAMMA).*** Coordinated by the Office of Fraternity and Sorority Relations, GAMMA is an international peer education network that serves to promote social responsibility and awareness within the UCLA community through education initiatives and peer-driven accountability for fraternity and sorority chapters.

- ***Alcohol Harm Reduction Courses.*** Ashe Health Education offers a variety of courses for academic credit through the School of Public Health. Each course addresses alcohol harm reduction and other wellness topics. The current list of courses includes: (1) Community Health Sciences 181 – "Campus/Community Health & Wellness Promotion" and (2) Community Health Sciences 179 – "Life Skills for College Women & Men".

- ***"Done 4" Social Norms Campaign.*** The "Done 4" program is a multimedia campaign to correct student misperceptions of peer alcohol norms. Students are initially introduced to the program at new student and parent orientations, which are reinforced throughout the year with ten "Done 4" ads that appear regularly in the *Daily Bruin.* Trained students also promote the "Done 4" campaign at campus outreach events. One such example of the multi-media campaign is called "Get the Keys", which targets drinking and driving.

UCLA Policies on Alcohol

Several policies have been developed regarding the regulation and consumption of alcohol by the UCLA students. For the campus as a whole, the *Student Conduct Code* addresses many topics including alcohol and the standards of conduct expected by the University and disciplinary actions for misconduct. For students who live on or off campus in University housing, two sets of regulations are in place: *UCLA Student Housing Handbook* and *UCLA University Apartment Regulations*. These regulations address issues concerning conduct within the residence halls and the University-owned apartments and include policies and rules related to possession and consumption of alcohol.

Los Angeles Police Department

The LAPD has the primary responsibility for providing police protection to the neighborhoods adjacent to the campus. While officers from the LAPD do not patrol the UCLA campus, the LAPD will provide assistance in homicide investigations, bomb disposals, and large demonstrations. The campus has mutual aid agreements with the Santa Monica Police Department and the California Highway Patrol, and maintains a Memorandum of Understanding (MOU) with the LAPD (UCLA 2007c; Greenstein 2008).

The campus is located within the LAPD's West Los Angeles Area and is served by a station located at 1663 Butler Avenue, approximately one mile from the southern part of campus. The West Los Angeles Area encompasses 64 square miles, bound by the Los Angeles City boundary to the west; Mulholland Drive to the north; La Cienega Boulevard to the east; and the Santa Monica Freeway, Los Angeles City boundary, and Pacific Coast Highway to the south (LAPD 2006). The majority of the UCLA campus is within the smaller geographic area of Reporting District (RD) 818, which is bound by Veteran Avenue and Gayley Avenue to the west, Sunset Boulevard to the north, Hilgard Avenue to the east, and Le Conte Avenue to the south (Greenstein 2008).

Regulatory Framework

Federal and State

There are no federal or State police services regulations applicable to the proposed Project.

Project Impacts and Mitigation

Analytic Method

Impacts on police services would be caused by an increase in campus population, which could, in turn, result in inadequate staffing levels and/or the need for new or altered facilities. As part of a current study, the UCPD is evaluating the adequacy of police protection services (Greenstein 2008). Estimated staffing-to-population ratios for 2008 at all University of California (UC) campuses range from 0.8 to 4.2 sworn officers per 1,000 population, and UCLA currently provides a ratio of approximately 0.85 sworn officers per 1,000 population. These ratios are not

used to determine when staffing increases are necessary; they simply reflect the current staff to population ratio for each individual UC campus. Each campus evaluates the need for increased staff through regular evaluations of campus dynamics, enforcement needs, and budget allocations. The study underway for UCLA will evaluate the campus' police service needs as a whole and make recommendations regarding any proposals for hiring of new police officers.

Thresholds of Significance

The following threshold of significance is based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Police Protection.

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection *(Impact 4.11-2)?*

Impact Analysis

Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus PPs were adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. They are therefore considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.11-2(a) *Police staffing levels and equipment needs shall continue to be assessed on an ongoing basis as individual development projects are proposed and on an annual basis during the campus budgeting process to ensure that the appropriate service levels will be maintained to protect an increased campus population and an increased level of development.*

PP 4.11-2(b) *Annual meetings shall continue to be attended by the Director of UCLA Housing and the UCPD to evaluate the adequacy of police protection service for University-owned housing, assess institutional priorities and budgetary requirements, and identify and implement appropriate actions to ensure the continued adequacy of police protection services for resident students.*

Threshold	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection?

Proposed 2008 NHIP

The Northwest zone, including the area that would be developed with the proposed 2008 NHIP, is served by dedicated sworn patrol officers. In addition, Community Safety Officers (CSOs) are assigned to provide foot patrol around the housing facilities during the evening, night, and early morning hours. Security for UCLA housing is constantly monitored by several existing campus

practices, including: (1) key-card restricted entry to all buildings; (2) ongoing education of student residents on safety and security issues; (3) provision of staff presence 24 hours a day, 7 days a week at the front desks of residence halls; and (4) provision of staff and faculty (who live in each building along with the students) to be responsible for student safety and building security.

The 2008 NHIP would create on-campus housing to accommodate 1,525 existing students (who are either commuting to campus or are currently housed in triple-room accommodations); no increase in student population would result from the proposed 2008 NHIP. However, additional staff would be required to serve the additional housing and students. Approximately 151 new staff members (or approximately 131 full-time-equivalent employees) would be employed on campus by 2013 to provide administrative, housing maintenance, information technology, and dining services to the expanded residential population. As the proposed 2008 NHIP would not increase the student population, the development of the new on-campus residence halls would not result in the need to hire new sworn officers; therefore, no new facilities would be required to accommodate new officers and no physical impacts would result. In addition, as provided by PP 4.11-2(a), staffing and equipment levels are assessed on an ongoing basis as campus development progresses to ensure that adequate police protection continues to be provided.

No impacts related to the provision of police services would result with implementation of the 2008 NHIP and no mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

UCLA has estimated that the projected increase in average weekday on-campus population during the regular session through the horizon year of the 2002 LRDP, as amended (2013–2014 academic year) would be approximately 2,780 persons, including approximately 681 students, 957 staff and academic employees, and 1,142 visitors. It is expected that the types of crimes that have historically been committed on campus would remain the same and that existing UCPD and University programs to address resident population alcohol-related issues would continue.

A study is currently being prepared for the University for the purpose of assessing the campus' need for new sworn officers and it is anticipated that the hiring of additional sworn officers would be necessary to serve the campus under full buildout of the 2002 LRDP, as amended (Greenstein 2008). The provision of adequate police services is an important institutional priority in ensuring the quality of life and safety for the campus community. Again, the campus is evaluated as a whole based on campus dynamics, enforcement needs, and budgetary constraints. In addition to the sworn offices, the campus would continue to provide CSOs. With pending completion of new replacement facilities for the UCPD on campus, any additional sworn officers hired under the full buildout of the 2002 LRDP, as amended, would be accommodated within the new facility; thus there would be no need for expansion of the pending facility or any additional facilities to maintain police protection services.

To ensure adequate response to life safety issues, campus buildings would continue to feature direct fire alarm connections in all new and renovated campus buildings to facilitate emergency response by providing immediate location information to the fire department, as required by 2002 LRDP Final EIR PP 4.11-1. Re-assessing police staffing and equipment needs during implementation of the 2002 LRDP Amendment, as required by 2002 LRDP Final EIR PP 4.11-2(a), would also ensure that police protection services and facilities continue to adequately serve the increased campus population and the increased level of development. In addition, the UCPD would continue its current practice of cooperating with the LAPD, the Santa Monica Police Department, and the California Highway Patrol to help ensure the adequacy of

police protection services for the campus (UCLA 2007c). Furthermore, as required by 2002 LRDP Final EIR PP 4.11-2(b), annual meetings would continue to occur between the Director of UCLA Housing and the UCPD to evaluate the adequacy of police protection service for University-owned housing. Through this mechanism, existing police and CSO service are evaluated, institutional priorities and budgetary requirements are assessed, and appropriate actions are identified and implemented to ensure the continued adequacy of police protection services for resident students.

In summary, the proposed Project could result in the need for new officers that would be accommodated by the replacement Police Station currently under construction for the UCPD. There would not be a need for the construction of new or altered police protection facilities beyond that currently under construction. Impacts associated with the provision of adequate police protection services are considered less than significant, and no mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.11-2 ***Implementation of the proposed Project could increase the demand for police services, but would not require new or physically altered facilities to maintain acceptable service ratios for police protection services. This impact is less than significant and no mitigation is required.***

4.11.3 SCHOOLS

Environmental Setting

The Los Angeles Unified School District (LAUSD) encompasses 710 square miles and serves a population of 4,636,724 individuals with 586 schools (elementary, middle, and high schools), 138 magnet centers, and multiple other educational facilities (LAUSD 2007). During the 2007–2008 academic year, it employed 45,473 full-time teachers and had a total K–12 enrollment of 694,288 students, including students enrolled in alternative and adult educational programs, occupational and skills centers, and children's centers (LAUSD 2007). In 2005, the LAUSD was reorganized to comprise eight local districts, each with its own local district superintendent, along with a central office that provides tactical support, services, and compliance monitoring functions for the local districts (LAUSD 2008a). Its elected Board of Education oversees a $19 billion operating budget and is responsible for setting policy for accommodating future enrollment growth and financing the development of new school facilities (LAUSD 2008a). The UCLA campus is located within the LAUSD's Local District 3, which includes a total of 73 elementary, 18 junior high, 11 high, and 8 continuation schools. The Local District is bound by Mulholland Drive to the north, the Los Angeles International Airport to the south, Mulholland Avenue to the east, and the Pacific Ocean to the west, except for areas included within the separate Culver City Unified School District, Beverly Hills Unified School District, or Santa Monica/Malibu Unified School District. The Local District includes the communities of Topanga, Pacific Palisades, Mar Vista, the University, Baldwin Hills, Marina Del Rey, Crenshaw, and Westchester.

Any demand for K–12 public education facilities that is generated by the UCLA campus population is associated primarily with married student households, faculty households, and staff households. Data on the number and residential location of married students is not available, but these data are available for faculty and staff. During preparation of the 2002 LRDP Final EIR, a detailed assessment of the distribution of employee households by school district was conducted. For purposes of analysis in this EIR, it assumed that the distribution has not changed appreciably in the intervening time. The 2002 LRDP Final EIR determined that over two-thirds (69.7 percent) of existing UCLA employees reside within the boundaries of LAUSD, with the largest concentration of these households is on the Westside (34.7 percent). About one-quarter of the employees (22.7 percent) reside within the boundaries of other Los Angeles County School Districts, and the remainder (7.5 percent) resides within school districts located outside Los Angeles County.

Based upon the current residential patterns of campus faculty and staff, the schools that would accept the largest relative proportion of the K–12 public educational needs of the UCLA campus population are located in the University, Hamilton, Fairfax, Venice, Pacific Palisades, and Westchester Senior High School attendance areas of the Westside.

The LAUSD monitors student enrollment figures on an annual basis and accommodates changes in enrollment using a wide range of strategies including (1) adjustments to average class sizes; (2) attendance boundary changes; (3) grade reconfigurations; (4) use of portable classrooms; (5) the closing and re-opening of existing schools; (6) use of alternative school calendars (e.g., year-round, multi-track); (7) busing; (8) additions to existing schools; and (9) construction of new schools. Current and projected enrollment and classroom capacity for the elementary, middle, and high schools serving UCLA households are summarized in Table 4.11-1, Current and Projected Enrollment and Classroom Capacity of LAUSD Schools Serving UCLA Households.

TABLE 4.11-1
CURRENT AND PROJECTED ENROLLMENT AND CLASSROOM CAPACITY OF LAUSD SCHOOLS SERVING UCLA HOUSEHOLDS

Current Actual Enrollment[a]	Current Resident Enrollment[b]	Current Capacity[c]	Projected Enrollment (SY 2013–2014)[d]	Projected Capacity (SY 2013–2014)[e]	Remaining Capacity or (Shortfall) for Projected Enrollment[e]
Elementary Schools Serving UCLA Households					
19,999	**18,237**	**24,032**	**13,789**	**18,148**	**4,359**
Middle and High Schools Serving UCLA Households					
25,576	**20,294**	**29,314**	**18,357**	**27,941**	**9,584**

SY = school year
[a] The number of students actually attending the schools.
[b] The total number of students living in the school's attendance area and who are eligible to attend.
[c] The school's current operating capacity or the maximum number of students the schools can serve while operating on the current calendar.
[d] Projected 5-year total number of students living in the school's attendance area and who are eligible to attend. Projected data incorporates the seating and enrollment effects of planned schools scheduled to open SY2008-2009.
[e] The capacity the schools will have after shifting to a 2-semester (1 track) calendar and implementing operational goals such as full-day kindergarten and class-size reduction.

Source: LAUSD 2008b.

UCLA operates the Seeds University Elementary School located on the main campus on Sunset Boulevard. The school is a teaching laboratory for UCLA professional training in education and serves approximately 435 elementary school-aged children of campus faculty and staff (Seeds Elementary 2008).

Overall, the LAUSD anticipates having excess capacity for elementary, middle, and high schools that serve UCLA households. However, among the elementary schools, LAUSD identified five schools (Clover, Fairburn, Grand View, Kenter Canyon, and Westwood) that have a projected shortfall of capacity for 354 students. LAUSD is planning to construct the 650-student capacity Central Region Elementary School #22 to help offset projected overcrowding among LAUSD's elementary schools. Among middle and high schools, LAUSD identified one school, Hamilton High School which is projected to have a shortfall in capacity for 71 students. Currently, no middle or high schools are planned to relieve projected overcrowding at this school (LAUSD 2008a).

Regulatory Framework

Federal and State

There are no federal or State regulations pertaining to schools applicable to the 2008 NHIP or 2002 LRDP, as amended.

Impact Analysis

Analytic Method

Impacts on schools are determined by analyzing the projected increase in the demand for schools as a result of the proposed Project and comparing the projected increase with the remaining capacity to determine whether new or altered facilities would be required. While the proposed Project does not include any new housing for married students, faculty, or staff that would create a direct demand for public school facilities, the increase in campus population includes additional faculty, staff, and students with children that could indirectly create a demand for school facilities. If these households distribute themselves similarly to existing faculty and staff, most would settle within the boundaries of the LAUSD, particularly on the Westside. On average, the LAUSD estimates that each household produces the need to accommodate 0.186 elementary students, 0.097 middle school students, and 0.108 high school students (LAUSD 2008b). Because it is not possible to identify the mix of dwelling unit types that would be occupied by future UCLA faculty and staff, this analysis uses the single-family generation rates which are more conservative than the multi-family rates. The LAUSD controls seating capacity standards and makes decisions about the choice of methods to maintain enrollment levels at individual schools; these change from time to time in light of financial and other circumstances. LAUSD's goal is to eventually reduce and/or eliminate the need for year-round, multi-track school calendars, and to make it possible for students to attend their neighborhood schools (LAUSD 2008b).

Thresholds of Significance

The following threshold of significance is based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Schools.

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause

significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools *(Impact 4.11-3)?*

Impact Analysis

Threshold	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools?

Proposed 2008 NHIP

As discussed above, the proposed 2008 NHIP does not involve the development of new homes that would result in a direct increase/generation of students in the LAUSD. Additionally, the proposed 2008 NHIP would generate a relatively small number of new employees (151 direct and potentially 103 indirect). As noted in Section 4.10, Population and Housing, the jobs associated with the proposed 2008 NHIP would likely be filled from the local labor pool. Therefore, it is not expected that a substantial number of new students attending schools within the LAUSD would be generated as a result of the proposed 2008 NHIP. The proposed 2008 NHIP would not require the construction of new or physically altered school facilities, and no physical impacts would occur. This impact is less than significant and no mitigation is necessary.

It should be noted that the estimated new employees from the proposed 2008 NHIP are assumed in the total population growth with buildout of the 2002 LRDP, as amended as discussed below.

Remaining Buildout of the 2002 LRDP as Amended

Assuming that the additional academic and staff employees associated with the proposed 2002 LRDP Amendment represent separate households and assuming that their residences are distributed in the same manner as existing employees, most households would be concentrated within the boundaries of LAUSD (69.7 percent), and many of these would be on the Westside of Los Angeles. As discussed in Section 4.10, Population and Housing, buildout of the 2002 LRDP, as amended, would be expected to generate up to 1,608 new jobs, including both direct and indirect job creation. As noted above, approximately 254 of these jobs would be associated with the proposed 2008 NHIP. Based on the anticipated increase of 1,608 employees, approximately 1,122 would be expected to live within LAUSD boundaries. As shown in Table 4.11-2, Distribution of LRDP Amendment Employee Households within LAUSD, applying LAUSD's average student generation rates, 1,121 households would result in an estimated demand for LAUSD to accommodate an additional 441 students (209 elementary, 110 middle, and 122 high school students).

TABLE 4.11-2
DISTRIBUTION OF 2002 LRDP AMENDMENT
EMPLOYEE HOUSEHOLDS WITHIN LAUSD

	Projected UCLA Employee Households		Students			
	Number	Percent of Total	Elementary[a]	Middle[b]	High[c]	Total
Los Angeles County/LAUSD						
Westside	558	34.69	104	54	60	218
South Central	137	8.55	25	13	15	53
West Valley	123	7.66	23	12	13	48
East Valley	119	7.41	22	12	13	47
Downtown	101	6.27	19	10	11	40
Northeast LA	42	2.61	8	4	5	17
Southeast LA	26	1.59	5	3	3	11
East LA	15	0.92	3	2	2	7
Total	***1,121***	***69.70[d]***	***209***	***110***	***122***	***441***

[a] Based on a generation rate of 0.186 students per household, rounded up to the nearest whole number.
[b] Based on a generation rate of 0.097 students per household, rounded up to the nearest whole number.
[c] Based on a generation rate of 0.108 students per household, rounded up to the nearest whole number.
[d] Number does not equal 100 due to the assumption that a certain percentage of households would be located in districts other than the LAUSD.

Source of Student Generation Factors: LAUSD 2008b.

The highest concentration of students (218) associated with buildout of the 2002 LRDP, as amended, would be located in the schools on the Westside, including 104 students distributed across 41 elementary schools, 54 students across 7 middle schools, and 60 students across 8 high schools. LAUSD has determined that the operating capacity of these 56 schools will exceed the projected enrollment when considering the 2002 LRDP Amendment (LAUSD 2008b). It is recognized that other areas of the City of Los Angeles that are currently served by the LAUSD are experiencing overcrowded conditions at various locations, particularly within the South Central, Northeast, East Valley, and Downtown areas of Los Angeles. While the number of LRDP-related employee households residing in each of these areas is relatively small when compared to West Los Angeles (see Table 4.11-2, Distribution of 2002 LRDP Amendment Employee Households within LAUSD), the impacts of 2002 LRDP Amendment employee household growth in these areas could be greater due to current overcrowded conditions. However, according to the LAUSD's adopted Strategic Execution Plan, the LAUSD will add an additional 165,000 seats in 343 separate capital projects by 2012 (LAUSD 2008a). According to the Strategic Execution Plan, the primary funding sources for the New School Construction Program are local bonds approved by voters within the boundaries of LAUSD, and matching funds from State bonds approved through statewide ballot initiatives. The combination of these two sources provides about $11.57 billion, or 92 percent, of new construction funding. Other sources include developer fees, Certificates of Participation (COPs), and special funding sources such as Federal Emergency Management Agency (FEMA) grants, Qualified Zone Academy Bonds (QZABs) and other local sources of matching funds. The vast majority of this new construction to provide additional capacity would be in those areas of the LAUSD that are currently operating under overcrowded conditions.

As discussed above, approximately 30.3 percent, or 487 households, would be served by other school districts. Therefore, the percentage of UCLA employee households residing in any single

school district other than the LAUSD is very low, and thus the impact of the LRDP Amendment, including the 2008 NHIP, on other districts would be less than the impact on the LAUSD.

It should also be noted that the foregoing estimates assume that the employee households with buildout of the 2002 LRDP, as amended, are all net new households and is thus a conservative analysis. In fact, the staff employees, who constitute most of the projected LRDP Amendment employment growth, are likely already located in the region. Staff positions involve vocational opportunities that are found in most communities and would not drive relocation to the area. Moreover, the foregoing assumes that all these households have school-aged children and that all these school-aged children (elementary, middle school, and high school students) would attend public schools, when it can be anticipated that some percentage of these households do not have school-aged children and some percentage of students would attend private schools.

In summary, buildout under the 2002 LRDP, as amended, would result in a relatively small increase in the number of students throughout the LAUSD as a whole, with the largest area of student growth concentrated in West Los Angeles, where LAUSD has determined that existing school capacity is adequate to serve this increase in students (LAUSD 2008b). A much smaller percentage of students would be directed to areas of the LAUSD that are currently above enrollment capacity, and the LAUSD would direct extensive resources toward reducing over-enrollment in these areas during the 2002 LRDP, as amended, planning horizon, as described above. Therefore, the incremental increase in demand associated with additional faculty and staff as a result of the 2002 LRDP, as amended, could be accommodated by the LAUSD, and no new or expanded facilities would be needed. The impact of the proposed Project on schools would be less than significant and no mitigation is required.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.11-3 ***Implementation of the proposed Project would not require new or physically altered facilities to accommodate additional students in LAUSD schools. This is considered a less than significant impact.***

4.11.4 CUMULATIVE IMPACTS

The geographic context for the analysis of cumulative public services impacts is the City of Los Angeles and the LAUSD boundaries (which coincide), including all cumulative growth therein, as represented by full implementation of the *Los Angeles Citywide General Plan Framework* and development of the related projects list provided by Table 4-1, Off-Campus Related Projects, in Section 4.0, Introduction to Environmental Analysis.

Fire Protection and Law Enforcement Services

As additional development occurs in the City of Los Angeles, there may be an overall increase in the demand for law enforcement and fire protection services, including personnel, equipment, and/or facilities. However, increases in demand are routinely assessed by these agencies as part of an annual monitoring and budgeting process, and law enforcement and fire protection services in the City are anticipated to be adequate. Therefore, the cumulative impact on police

and fire services in the City would be less than significant. The proposed Project's contribution to this cumulative impact would also be less than significant since the campus can be served within the established response times and distances for the LAFD, while providing adequate fire flows. Because implementation of the proposed Project can also be accommodated within the existing and projected UCPD police protection and LAFD fire protection service capabilities and because existing campus programs, practices, and procedures would continue to ensure the adequate provision of established response times and/or service ratios, the proposed Project's contribution to cumulative impacts on fire and police protection would be less than significant. This is considered to be a less than significant impact.

Schools

Increased residential and nonresidential development throughout the City of Los Angeles would generate additional demand for public school classroom seating capacity in LAUSD schools. While there is a projected future surplus of classroom capacity in the Westside LAUSD schools (as reflected by Table 4.11-2) that are most affected by buildout of the 2002 LRDP, as amended, the LAUSD has experienced, and may continue to experience, a shortfall of classroom capacity in other geographic areas throughout the LAUSD. The degree to which this demand would be satisfied is dependent upon future enrollment trends. However, as indicated above, under the LAUSD's adopted Strategic Execution Plan, the LAUSD will add an additional 165,000 seats in 343 separate capital projects by 2012, the vast majority of which will be in those areas of the LAUSD that are currently operating under overcrowded conditions (LAUSD 2008a). Finally, all new private-sector development will be required to pay statutory impact fees to LAUSD (pursuant Senate Bill 50) to help fund construction of additional classroom capacity, and under current law, payment of these fees is deemed to constitute full mitigation under CEQA. For these reasons, and assuming that cumulative demand for school capacity would be met as planned by the LAUSD, cumulative impacts throughout the LAUSD would be less than significant. However, even in the event that significant cumulative impacts do occur as a result of future areawide population growth, the proposed Project's contribution would remain less than significant. As discussed above, the geographical area within LAUSD that would be most affected by population growth (and consequent demand for school capacity) is West Los Angeles, which is operating with remaining student capacity. Although each of the other areas within LAUSD that are currently experiencing overcrowded conditions would receive a very small number of new students as a result of the proposed Project, that number is overly conservative and these areas are also the focus of LAUSD efforts to reduce overcrowding. As a result, the proposed Project's contribution to cumulative impacts on school facility capacity is not cumulatively considerable. This is considered to be a less than significant impact.

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4.12 RECREATION

This section describes the current recreational uses on the UCLA campus and its surrounding areas and analyzes whether implementation the proposed Project could lead to (1) increased demand for, or physical deterioration of, recreational facilities or (2) the creation or expansion of recreational facilities, the construction of which could have an adverse physical effect on the environment.

Data used to prepare this section was taken from various sources, including previous environmental documentation prepared for the UCLA campus, coordination with the City of Los Angeles Department of Recreation and Parks, and the UCLA Department of Cultural and Recreational Affairs. Full bibliographic entries for all reference materials are provided in Section 4.12.5 (References) of this section.

No comment letters related to recreational facilities were received in response to the Notice of Preparation circulated for the project.

4.12.1 ENVIRONMENTAL SETTING

The UCLA campus provides extensive access to a broad range of recreational facilities, activities, and services that reflect the varied athletic, recreational and leisure needs of students, faculty, and staff. Athletic and recreational facilities include several existing outdoor playing fields (formal spectator fields and informal fields), running tracks (including an on-campus track and an informal running path around the campus perimeter), courts (i.e., tennis, basketball), swimming pools, and lawn areas. Indoor facilities for multi-purpose sports and fitness training, gymnastics, dance, and other cultural activities are also provided. Despite UCLA's relatively limited land area, there is a high value placed on preserving and developing on-campus recreational areas and on enhancing existing recreational areas in order to increase utilization and to encourage the use of other appropriate campus spaces that are not traditionally used for recreational activities. Table 4.12-1, Recreation Space and Multi-Use Facilities, lists recreational facilities on the UCLA campus as of June 2008. Approximately 80 percent of students and 25 percent of faculty and staff use UCLA's indoor and outdoor recreational facilities.

TABLE 4.12-1
RECREATIONAL SPACE AND MULTI-USE FACILITIES (JUNE 2008)

Facility/Space	Space Allocation[a]	Programs
Existing Facilities		
John Wooden Center	161,150 sf	3 large gymnasiums for basketball, volleyball, badminton, and gymnastics; the strength and cardio exercise zone; 4 fitness, dance, fencing, and martial arts studios; 9 handball/racquetball courts; 2 squash courts; a rock climbing wall; outdoor adventures resource and rental center; a games lounge with tables, chairs, and a large-screen TV; and men's and women's locker and shower facilities with saunas.
Pauley Pavilion	28,000 sf (gym floor surface)	Can accommodate 3–4 regulation basketball courts or 6 regulation volleyball courts. Used by Intramural Teams, student events, and the UCLA basketball team.

TABLE 4.12-1 (Continued)
RECREATIONAL SPACE AND MULTI-USE FACILITIES (JUNE 2008)

Facility/Space	Space Allocation[a]	Programs
Student Activities Center	26,900 sf (indoor) 22,400 sf (outdoor pool area)	1 gymnasium for basketball, volleyball, and badminton; a 25-meter swimming pool; men's and women's locker and shower rooms; multi-use meeting room space.
Los Angeles Tennis Center	3.6 acres	8 lighted tennis courts and a 6,262-sf clubhouse.
Sunset Canyon Recreation Center	6.0 acres	One 50-meter swimming pool with limited diving facilities; one 25-yard family swimming pool; picnic and barbecue areas; an open lawn area for free play; a sand volleyball court; an outdoor amphitheater; meeting rooms and lounges; 6 lighted tennis courts; a challenge (ropes) course.
Sycamore Canyon Recreation Center	0.65 acre	A lawn area and golf green; 6 unlit tennis courts.
Glorya Kaufman Hall – North Pool	1,689 sf (indoor) 8,300sf (outdoor pool and deck area)	Lifeguard office, meeting room, and men's and women's locker and shower facilities; 25-yard outdoor swimming pool.
FitCenter South	8,700 sf	A co-ed weight training and cardiovascular equipment room; men's and women's locker facilities (in the Rehabilitation Building).
Drake Track & Field Stadium/ Marshall Field	2.5 acres	400-meter, 9-lane running track; soccer field; grass field space.
Intramural Field	7.5 acres	Lighted grass playing field space for intramural sports, including football, soccer, golf, baseball, and softball; club team practice and games; student and campus events.
North Athletic Field	3.0 acres	Grass field space for intramural and club team sports practice and games (see Intramural Field above).
Spaulding Field	5.0 acres	Grass and synthetic turf field space; used exclusively for intercollegiate football and other intercollegiate team use with some rare occasional use for intramural or club team practice.
Easton Stadium	3.0 acres	Exclusively used by the Intercollegiate Women's softball team; On some rare occasions, recreational softball special event use.
Jackie Robinson Baseball Stadium	8.0 acres	Located on the Veteran's Administration (leased from the Veterans Administration) property and exclusively used for Men's baseball; 5.0 acres of grass field, 3.0 acres of parking; No recreational use.
Parking Lot 13	7,500 sf	Conversion of 45 parking spaces to outdoor mini-basketball court areas. Completed in October 2008.
Proposed Facilities		
Spieker Aquatic Center (within the Sunset Canyon Recreation Center)	3,900 sf (indoor locker rooms and mechanical equipment space) 30,000 sf (Outdoor pool and deck area)	Construction began in July 2008. Competition swimming pool for collegiate swimming, water polo and diving. Will include 1-meter & 3-meter spring boards; a diving tower; 7.5-meter & 10-meter platforms; warming pool; locker rooms. Expected to be complete by June 2009.

TABLE 4.12-1 (Continued)
RECREATIONAL SPACE AND MULTI-USE FACILITIES (JUNE 2008)

Facility/Space	Space Allocation[a]	Programs
Proposed 2008 Northwest Housing Infill Project	Approximate 6,000 sf Satellite Fitness Recreation Center	In design as part of the proposed 2008 NHIP (addressed in this EIR).

[a] All figures are approximate
sf – square feet
co-ed – coeducational

Source: Dudman 2008.

While it is likely that most students who live on campus use on-campus recreational facilities, students living off campus and faculty and staff may use off-campus recreational facilities. Several off-campus recreational facilities are located in proximity to the campus. Currently, the West Los Angeles Community Plan Area contains 54.7 acres of parkland and the Westwood Community Plan Area (of which UCLA is a part) contains approximately 37.5 acres of parkland (Sorkin 2008). The City of Los Angeles Department of Recreation and Parks manages 3 public parks and recreational facilities within approximately 1 mile of UCLA: Barrington Recreation Center (17 acres) in the West Los Angeles Community Plan Area; Holmby Park (8.5 acres); and the Westwood Park and Recreation Center (26.7 acres) in the Westwood Community Plan Area (Sorkin 2008). The Barrington Recreation Center includes, but is not limited to: an auditorium, active sports fields, picnic facilities, tennis and volleyball courts, and a dog park. The Westwood Park and Recreation Center located on Sepulveda Boulevard includes a community building, tennis courts and game courts, active sports fields, picnic facilities, an indoor swimming pool, and other indoor activities. Holmby Park, an 8.5 acre facility located on Club View Drive, provides picnic and play areas (Sorkin 2008). Other large parks and recreational facilities that may serve UCLA students and staff include Griffith Park, the Hansen Dam Recreation Area, the Sepulveda Basin Recreation Area, the Santa Monica Mountains Recreation Area, and numerous bicycle and hiking trails throughout the city and beaches.

4.12.2 REGULATORY FRAMEWORK

There are no federal or State regulations applicable to the proposed Project pertaining to recreation.

4.12.3 PROJECT IMPACTS AND MITIGATION

Analytic Method

Neither the Board of Regents nor the UCLA campus has established minimum standards for the provision of parkland or recreational facilities, reflected in acres per person. Potential impacts of the proposed Project are based on review of (1) the existing and proposed recreational facilities on campus and in the vicinity and (2) the increased demand for recreational facilities placed on these facilities.

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact on recreational services and facilities if it would:

- Result in an increase in 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 *(Impact 4.12-1).*

- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment *(Impact 4.12-2).*

Impact Analysis

Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures (PPs) were adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project. Therefore, they are considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.12-1(a) *The campus shall continue to provide, operate, and maintain recreational facilities for students, faculty, and staff on campus.*

PP 4.12-1(b) *The campus shall continue to integrate landscaped open space (including plazas, courts, gardens, walkways, and recreational areas) with development to encourage use through placement and design.*

Threshold	Would the project 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?

As previously noted, the West Los Angeles Community Plan Area contains 54.7 acres of parkland, and the Westwood Community Plan Area (of which UCLA is a part) contains approximately 37.5 acres of parkland (Sorkin 2008). The three closest City-owned park facilities encompass approximately 52.2 acres. The on-campus recreational areas described in Table 4.12-1 currently total approximately 46.4 improved acres, with the Spieker Aquatic Center currently under construction, and basketball courts on Parking Lot 13 recently opened. Additionally, the proposed 2008 NHIP includes development of a fitness center for use by all on-campus student residents.

Proposed 2008 NHIP

The proposed 2008 NHIP provides 1,525 beds and associated support facilities to address the unmet demand for undergraduate housing on campus. It is estimated that 70 percent of the 1,525 beds (1,068 beds) would be used by students that would otherwise have to live off campus, and the remaining 30 percent (457 beds) would be used by students that currently reside in triple accommodations (3 beds in one room) on campus. The proposed 2008 NHIP would accommodate the existing and projected student population and would not generate new

students. Therefore, there would not be an increased demand for recreational facilities as a result of the new student residents on campus. It should also be noted that the proposed 2008 NHIP includes the provision of a new fitness center in the Sproul Complex that would serve to meet the existing demand for recreational facilities on campus.

Approximately 151 new staff members (or approximately 131 full-time-equivalent employees) would be employed on campus by 2013–2014 to provide administrative, housing maintenance, information technology, and dining services to the expanded residential population. It is expected that these new staff positions would be filled by the existing labor pool in the City of Los Angeles or in the campus' immediately surrounding areas. Because these individuals are already living in the area and likely using off-campus recreational facilities, there would not be an increase in demand for off-campus facilities that would result from the 2008 NHIP.

The new employees would be able to use on-campus recreational facilities, which would potentially increase the demand for these facilities. Pursuant to PP 4.12-1(a), the campus will continue to provide, operate, and maintain recreational facilities for the on-campus population, including staff. Additionally, pursuant to PP 4.12-1(b), the campus will continue to integrate landscaped open areas with new development. Figure 3-5 identifies the landscaped areas that would be incorporated into the proposed 2008 NHIP.

In addition to incorporating new recreational and open areas, as feasible, into new development projects to meet the demands of the campus population, the UCLA Cultural Recreational Affairs Department continuously monitors the demand for recreational facilities on campus and adjusts operating hours and other program operating procedures to ensure that the existing facilities are used as efficiently as possible. It is not anticipated that the increase in population associated with buildout of the 2002 LRDP, as amended, would result in the increased use of on-campus recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. The ongoing maintenance conducted by the campus ensures that substantial physical deterioration does not occur. Additionally, continued review of the demand for facilities and adjustments to operating procedures and facility design (e.g., extending hours of operation) ensure that the on-campus demands are met to the extent feasible.

The increased staff population associated with the 2008 NHIP would not increase the demand for off-campus recreational facilities and would not result in a substantial physical deterioration of on-campus recreational facilities or acceleration of such deterioration. This impact would be less than significant and no mitigation is required for the proposed 2008 NHIP.

Remaining Buildout of the 2002 LRDP as Amended

Buildout of the 2002 LRDP, as amended, would involve a slightly less than 5 percent increase in the average weekday campus population (including students, faculty, and staff) by 2013–2014 compared to the 2007–2008 population. This increase (approximately 2,780 persons, including the staff, from the 2008 NHIP) could result in an increase in the demand for parks or other recreational facilities both on and off campus.

It is anticipated that the majority of the estimated 2,780 new staff, faculty, and students associated with buildout of the 2002 LRDP, as amended, would primarily use on-campus recreational facilities which are described in Table 4.12-1, Recreational Space and Multi-use Facilities (June 2008). As noted above, the campus implements PP 4.12-1(a) and PP 4.12-1(b) to provide, operate, and maintain recreational facilities for the on-campus population and to integrate landscaped open areas (providing for passive recreational opportunities) with new development. While there is limited land available for new recreational facilities, the campus continuously monitors the demand for such facilities and makes operational and physical

changes as needed to accommodate this demand. As feasible and appropriate, recreational facilities are included in proposed new development (refer to Table 4.12-1, which includes approved and proposed recreational facilities to be constructed on campus). The ongoing maintenance of existing facilities (structural and non-structural) (PP 4.12-1[a]) ensures that substantial physical deterioration of on-campus recreational facilities and uses does not occur. The impact of the increased population from buildout of the 2002 LRDP, as amended, would be less than significant, and no mitigation is required.

While the majority of new students, faculty, and staff projected through year 2013–2014 would take advantage of the existing and new recreational facilities and programs at UCLA, other off-campus community parks and large recreational areas in a broader geographical area may also serve UCLA students, staff, and faculty. As previously identified, these off-campus resources include local (City of Los Angeles) and regional facilities. Large parks and recreational facilities that may serve UCLA students and staff include Griffith Park, the Hansen Dam Recreation Area, the Sepulveda Basin Recreation Area, the Santa Monica Mountains Recreation Area, and numerous bicycle and hiking trails throughout the city and beaches.

As identified in Section 4.10, Population and Housing, as of 2005 there are 3,955,392 individuals in the City of Los Angeles (see Table 4.10-1, Population Growth Forecast in the City of Los Angeles Subregion and City of Los Angeles, 2005–2015). The increase in average weekday population on campus associated with buildout of the 2002 LRDP, as amended, would represent an increase of only 0.0007 percent in the City. While this is not a substantial increase, there is a potential for these individuals to use off-campus recreational facilities. The increased use of off campus recreational facilities would not cause substantial physical deterioration of off-campus facilities or accelerate such deterioration due to (1) the availability of considerable on- and off-campus recreational facilities, which ensures that any increase in demand is absorbed by multiple facilities; (2) the relatively small increase in population associated with buildout of the 2002 LRDP, as amended; and (3) the expectation that the majority of the on-campus population would use on-campus recreational facilities.

In summary, the buildout of the proposed Project would have a less than significant impact related to the physical deterioration of recreational facilities on and off campus, and no mitigation is required.

Mitigation Measures

No mitigation measures are necessary.

Level of Significance After Mitigation

Less than Significant.

Impact 4.12-1 ***Implementation of the proposed Project would increase the campus population, but would not result in the increased use of parks and recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. This is considered a less than significant impact.***

Threshold	Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Proposed 2008 NHIP

The recreational component of the proposed 2008 NHIP is the approximate 6,000 gross square feet (gsf) fitness center that would be developed within the Sproul South residence hall. As the fitness center is a part of the proposed 2008 NHIP, the direct and indirect impacts associated with construction of the 2008 NHIP includes analysis of the potential impacts resulting from the fitness center. Specifically, short-term, construction-related local and regional air quality impacts are addressed in Section 4.2, Air Quality (Impacts 4.2-2 and 4.2-6); construction-related noise and vibration impacts are addressed in Section 4.9, Noise (Impacts 4.9-2, 4.9-3, 4.9-7, 4.9-8, and 4.9-9), and construction-related traffic impacts are addressed in Section 4.13, Transportation/Traffic. No additional impacts associated with construction of the fitness center would occur beyond those addressed for the 2008 NHIP in this EIR.

It should also be noted that the proposed 2008 NHIP would not require the expansion of any existing recreational facilities on or off campus, nor would it require the construction of any additional facilities (with the exception of the proposed fitness center); therefore, no additional physical impacts would occur within implementation of the 2008 NHIP.

Remaining Buildout of the 2002 LRDP as Amended

The 2002 LRDP is a land use plan that guides the physical development of the campus. It is not an implementation plan and does not constitute a commitment to any specific project. The environmental analysis for buildout of the 2002 LRDP as amended is programmatic, rather than project-specific, as the actual sites and design of future buildings and support facilities (including recreational facilities) are undetermined. Therefore, it is not possible to conduct a construction-related impact analysis for any recreational facilities that may be constructed under buildout of the 2002 LRDP as amended (with the exception of the fitness center proposed with the 2008 NHIP discussed above).

The 2002 LRDP, as amended, does not identify any specific future recreational facilities that may be implemented; however, these types of facilities would be allowed in various campus zones including the Northwest and the Central zones. Each major building proposal undertaken during the planning horizon of the 2002 LRDP, as amended, will require project-specific environmental review in accordance with CEQA. However, it is expected that the construction impacts that would result from implementation of the 2008 NHIP (as addressed in this EIR) would be representative of impacts that would occur with future development projects on campus, including future recreational facilities.

Impact 4.12-2 ***The proposed Project would involve construction of recreational facilities; specifically, the 2008 NHIP would include a fitness center in the Sproul South residential structure. Impacts resulting from construction are addressed in the following sections: 4.2, Air Quality, 4.9, Noise, and 4.13, Transportation/Traffic.***

4.12.4 CUMULATIVE IMPACTS

The geographic context for the analysis of cumulative recreational impacts is the City of Los Angeles and development of the related projects provided by Table 4-1, Off-Campus Related Projects, of Section 4.0, Introduction to Environmental Analysis.

The rationale for including the entire City is that since commuting students, faculty, and staff live off campus, they may utilize a variety of recreational facilities and programs offered by the campus and/or the City of Los Angeles. Based on the City of Los Angeles *Public Recreation Plan* adopted in 1980, the City recommends 10 acres of parkland/recreational facilities per 1,000 residents, of which 4 acres should be parkland. As of 2001, the City of Los Angeles had 15,686 acres of parkland (City of Los Angeles 2001b). Based on the 2005 population of 3,955,392, there are approximately 15,821 acres of parkland per 1,000 residents, which is slightly less than the City's goal. As additional residential development in the City is approved, in-lieu fees for parks or donation of parkland (pursuant to the Quimby Act[1]) are required as part of the individual City of Los Angeles projects. In addition, grants from State and County bond sources are available to fund additional park and recreational facilities in urban areas. These funding sources would provide additional parkland and recreational facilities to satisfy demand from future population growth. As identified under Impact 4.12-1, buildout of the proposed Project would not result in a substantial increased demand for off-campus recreational facilities. The majority of the campus population utilizes on-campus recreational facilities and these facilities would continue to be adequately provided and maintained for students, faculty, and staff. Therefore, buildout of the proposed Project would not result in a substantial deterioration of existing facilities, nor would it accelerate such deterioration. The project's contribution to cumulative impacts on park and recreational facilities is, therefore, less than significant.

In order to accommodate future cumulative demand, additional park and recreational facilities would be developed and constructed throughout the City of Los Angeles, including on the UCLA campus. Because the size, location, and type of these future facilities is not known at this time, it is impossible to assess the magnitude of cumulative impacts associated with the construction of these facilities. However, it is reasonable to expect that all these facilities would undergo CEQA review in accordance with California law, and that project-specific impacts associated with development of each of these facilities would be mitigated to the extent feasible.

As previously discussed, the buildout of the proposed Project includes provision of a fitness center as a component of the Sproul South building. There are no other specific recreational facilities identified in the 2002 LRDP, as amended. The potential construction impacts associated with the 2008 NHIP are fully analyzed in each appropriate section of this EIR (e.g., 4.2, Air Quality). Since the proposed fitness center is a small part of the 2008 NHIP, its construction is not anticipated to result in a significant cumulative impact when considered in conjunction with the construction of future park and recreational facilities elsewhere in the City of Los Angeles. As a result, the contribution of the 2008 NHIP fitness center to cumulative impacts from construction of park and recreational facilities citywide is less than significant.

4.12.5 REFERENCES

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[1] The Quimby Act (passed in 1975) allows Cities and Counties "to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements" (CPRS 2008). The money generated from park in-lieu fees cannot be used for operation or maintenance of parks, but is solely for creating parks.

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4.13 TRANSPORTATION/TRAFFIC

This section of the EIR evaluates the potential for implementation of the proposed Project to result in impacts to traffic, circulation, parking, access, and other transportation modes, including the potential to increase local and regional traffic volumes; exceed a level of service standard; increase hazards due to a design feature; interfere with emergency access; result in inadequate parking supply; or conflict with applicable alternative transportation programs, practices, and procedures.

Data used in preparation of this section is taken from the *University of California, Los Angeles Northwest Housing Infill Project and Long Range Development Plan Amendment Traffic Impact Study* (Traffic Study) conducted for the proposed Project by Iteris (included as Appendix I of this document). The full bibliographic entry for this reference material is provided in Section 4.13.4, References. This traffic study evaluates existing traffic conditions and future traffic conditions both with and without implementation of the proposed Project.

Two comments were submitted in response to the Notice of Preparation that addressed traffic issues: one was from the California Department of Transportation (Caltrans) and one was from a private individual. Caltrans requested that freeway operations be addressed in the EIR (refer to Thresholds 4.13-1a and 4.13-1b). Additionally, Caltrans requested that the provisions for campus transportation demand management be addressed (discussed in Section 4.13.1 under Alternative Transportation, and Impact 4.13-12). The private individual requested that the EIR address traffic from the new on-campus resident population (proposed 2008 NHIP) (refer to Threshold 4.13-1b) and the potential for parking spaces previously used by these new residents to generate new traffic when these spaces are used by other commuters (refer to Thresholds 4.13-9 and 4.13-10).

4.13.1 ENVIRONMENTAL SETTING

Regional Highway and Street Network

The UCLA campus is located within the community of Westwood in the City of Los Angeles. The major freeways and surface streets in the vicinity are described below and illustrated in Figure 4.13-1, Local Circulation Network.

Streets and Highways

Description of Existing Network

The following is a list of major surface streets that make up the project area's extensive street network.

- ***Wilshire Boulevard.*** Wilshire Boulevard is designated as a Major Highway Class II facility in the project area; it begins in downtown Los Angeles and traverses westerly through the Cities of Los Angeles, Beverly Hills, and Santa Monica, terminating near the Pacific Ocean. It provides four lanes in each direction west of Glendon Avenue and east of the Interstate-405 (I-405) freeway, and left-turn channelization (including eastbound double left-turn lanes at many locations). The Wilshire Boulevard right-of-way is generally 105 feet, and is among the most prominent streets in the West Los Angeles area, providing direct access to commercial establishments along the Wilshire Corridor, and serving as a major thoroughfare between the Westside and downtown Los Angeles. Wilshire Boulevard is one of the highest capacity surface street routes between I-405

and the Century City and Beverly Hills areas, with full access to both the northbound and southbound I-405 freeway facilities.

- ***Westwood Boulevard.*** Westwood Boulevard is designated as a Major Highway Class II facility in the project area that runs north-south in the vicinity of the campus. It provides two to three through lanes in each direction and left-turn channelization. Westwood Boulevard terminates at Le Conte Avenue where it becomes Westwood Plaza, an internal campus roadway that provides two to three travel lanes in each direction. Westwood Boulevard extends southeasterly, past the I-10 where it becomes National Place.

- ***Sunset Boulevard.*** Sunset Boulevard is an east/west roadway throughout the Westside and is classified as a Major Highway Class II in the project area. It provides a continuous facility from downtown Los Angeles, through West Hollywood and Beverly Hills, and continuing through Pacific Palisades where it terminates at Pacific Coast Highway (PCH). Sunset Boulevard also provides the northernmost east/west thoroughfare south of the Santa Monica Mountains through the campus vicinity, and is heavily utilized by both local and commuter traffic. Sunset Boulevard is approximately 50 feet wide in the study area, and is striped for two lanes in each direction, plus left-turn channelization at major intersections. Parking is prohibited along Sunset Boulevard within the study area.

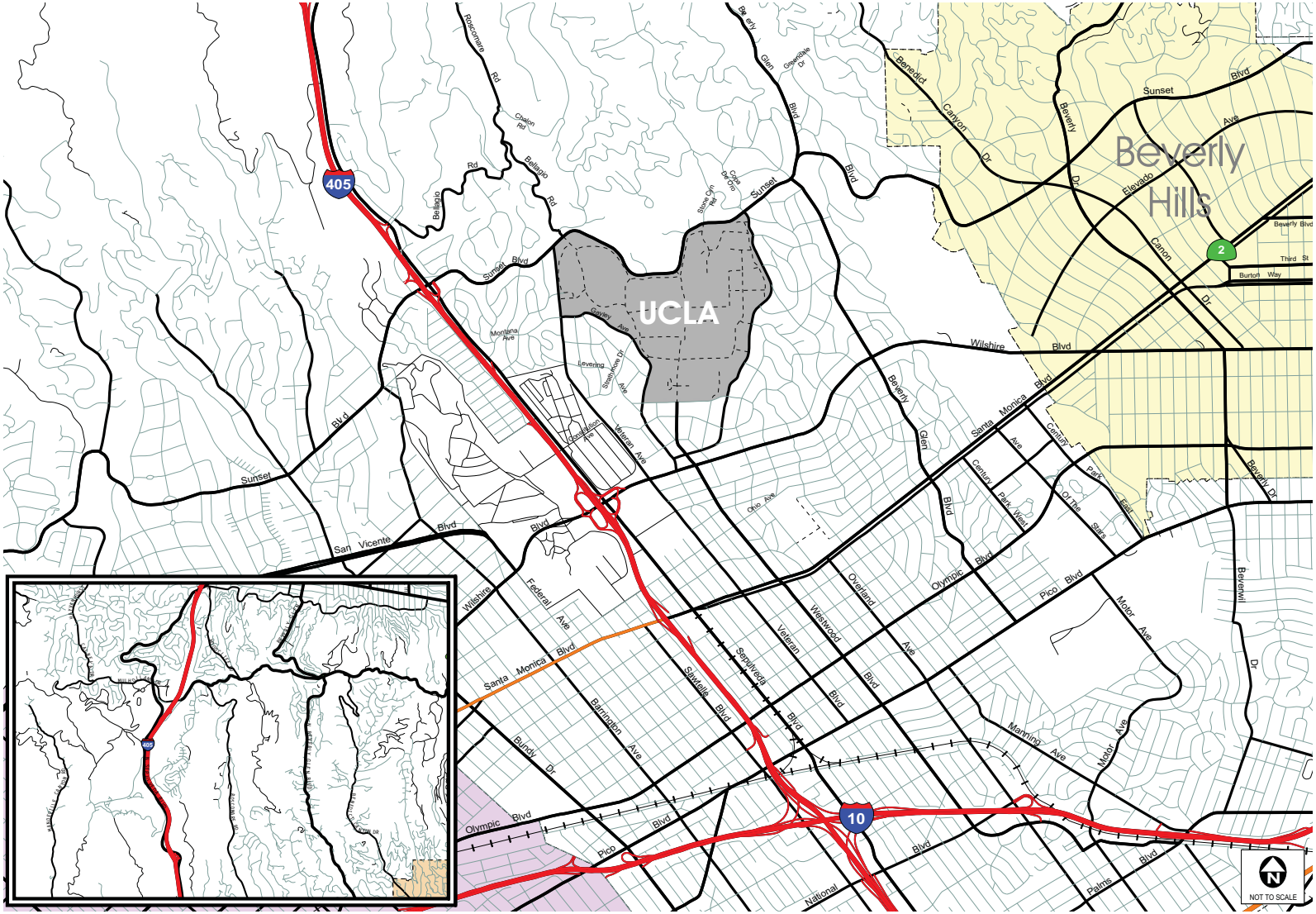
- ***Hilgard Avenue.*** Hilgard Avenue is a north/south secondary highway that connects to Sunset Boulevard to the north, and merges with Lindbrook Drive to the south. Hilgard Avenue is the eastern boundary of the campus, and provides two travel lanes in each direction. On-street parking is generally permitted, but is prohibited on some segments.

- ***Le Conte Avenue.*** Le Conte Avenue is an east/west secondary highway through the commercial portions of Westwood Village (between Gayley Avenue and Hilgard Avenue) and a local (residential) street east of Hilgard Avenue. Le Conte Avenue provides a single travel lane in each direction, plus left-turn channelization and on-street parking on both sides of the street.

- ***Gayley Avenue.*** Gayley Avenue is primarily a north/south secondary highway that extends from Veteran Avenue on the north (where it becomes Montana Avenue) to Wilshire Boulevard on the south (where it becomes Midvale Avenue). Gayley Avenue is a primary access route to the campus, and is striped to provide one to two travel lanes in each direction. On-street parking is allowed along some portions of the street, including a portion of the street that fronts the proposed NHIP site.

- ***Strathmore Drive.*** Strathmore Drive is a local street that serves the residential neighborhood west of the campus. Strathmore Drive also serves through traffic from Veteran Avenue to the campus. East of Gayley Avenue, Strathmore Drive enters the campus and turns into Strathmore Place, which is an internal campus road with two lanes in each direction.

- ***Levering Avenue.*** Levering Avenue is a short, northwest-to-southeast local street to the west of the campus that begins at Montana Avenue and terminates at Glenrock Avenue west of Gayley Avenue. Although Levering Avenue is approximately one-half mile long, its location and orientation make it an alternate route to Montana Avenue and Gayley Avenue both into and out of Westwood Village. At its intersection with Veteran Avenue, Levering Avenue is 40 feet wide and is striped to provide a single lane in each direction. On-street parking is allowed on Levering Avenue.



Source: Iteris Inc. 2008

Local Circulation Network

Figure 4.13-1

2008 NHIP and LRDP Amendment

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- ***Veteran Avenue.*** Veteran Avenue is a north/south secondary highway located to the west of the campus. Veteran Avenue varies in width from approximately 40 to 60 feet between Sunset Boulevard and Wilshire Boulevard, and is striped to provide a single travel lane in each direction and on-street parking on both sides of the street. At Wilshire Boulevard, the roadway widens to approximately 70 feet in width to provide additional through lanes, as well as left- and right-turn channelization in both the northbound and southbound directions. Veteran Avenue provides (1) a primary connection between Sunset Boulevard and Wilshire Boulevard and (2) access to the UCLA campus.

- ***Montana Avenue.*** Montana Avenue is an east/west collector street that starts just west of Beloit Avenue and turns into Gayley Avenue east of Veteran Avenue. Montana Avenue has one lane in each direction near the study area, and on-street parking is restricted to permitted vehicles. A northbound off-ramp from I-405 is provided via Montana Avenue.

- ***Sepulveda Boulevard.*** Sepulveda Boulevard runs northwest-southeast in the vicinity of the project, and is designated as a Major Highway Class II. It extends north to the vicinity of the I-405 and I-5 interchange, and south to Manhattan Beach where it turns into PCH. Sepulveda Boulevard has two through lanes in each direction near the study area.

- ***Church Lane.*** Church Lane is a frontage road located west of I-405. It extends in a southeast-to-northwest direction from Waterford Street to Sunset Boulevard, where it continues and crosses I-405 and becomes Ovada Place at Sepulveda Boulevard. Church Lane provides two through lanes in the northbound approach and one through lane in the southbound approach at Sunset Boulevard, with left-turn and right-turn channelization in both directions. Church Lane also provides access to the I-405 southbound ramps located north of Sunset Boulevard.

- ***Sawtelle Boulevard.*** Sawtelle Boulevard is a northwest/southeast secondary highway that runs parallel to and west of I-405. It extends from Ohio Avenue to Overland Avenue, south of Jefferson Boulevard in Culver City. It is striped as a four-lane facility with left-turn channelization at major intersections.

- ***San Vicente Boulevard.*** San Vicente Boulevard is a major arterial that extends from Wilshire Boulevard (near Veteran's Hospital) to Ocean Avenue in the City of Santa Monica. San Vicente Boulevard is striped for two through lanes in the northbound and southbound directions, with triple left-turn lanes in the southbound approach to Wilshire Boulevard, and one left-turn lane and one right-turn lane in the northbound approach.

- ***Weyburn Avenue.*** Weyburn Avenue is a short local street that traverses the southern end of the UCLA Southwest zone, beginning at Veteran Avenue on the west and continuing east of Hilgard Avenue to Le Conte Avenue. Weyburn Avenue generally provides a single travel lane in each direction with on-street parking on both sides. However, a portion of Weyburn Avenue that traverses University property, between the Midvale Alley and Veteran Avenue, has one lane in each direction with no on-street parking.

- ***Kinross Avenue.*** Kinross Avenue is a short local street that runs between Veteran Avenue on the west and Glendon Avenue on the east. It provides one to two travel lanes and on-street parking in each direction. As part of the Southwest Campus Housing Project, the parking gates were removed from this road on the UCLA Southwest zone, and Kinross Avenue has been opened to public through traffic with two lanes in each

direction and three turn lanes that channelize traffic at the intersection of Kinross Avenue and Veteran Avenue: two southbound and one northbound.

- ***Lindbrook Drive.*** Lindbrook Drive is an east/west local street east of Hilgard Avenue and a secondary highway west of Hilgard Avenue. West of Hilgard Avenue, it is striped for two travel lanes in each direction, with limited on-street parking permitted. Lindbrook Drive extends northeasterly from Gayley Avenue and terminates at Devon Avenue (east of Beverly Glen Boulevard).

- ***Tiverton Avenue.*** Tiverton Avenue is a short collector roadway that runs between Lindbrook Drive and Le Conte Avenue. South of Weyburn Avenue, Tiverton Avenue is a one-way facility in the northbound direction. On-street parking is allowed on both sides of the street. North of Le Conte Avenue, the roadway enters the UCLA campus and becomes a two-way street at Tiverton Drive.

- ***Wyton Drive.*** Wyton Drive is a local street east of the UCLA campus. This roadway extends to Charles E. Young Drive East, which allows access to the eastern side of campus. Wyton Drive provides one lane in each direction between Hilgard Avenue and Beverly Glen Boulevard.

- ***Westholme Avenue.*** Westholme Avenue is a collector street east of the UCLA campus. It is a two-lane residential street that extends from Santa Monica Boulevard to Hilgard Avenue, where it becomes an internal campus roadway.

- ***Manning Avenue.*** Manning Avenue is a local street that serves the residential community east of the campus. Manning Avenue turns into a secondary roadway between Wilshire Boulevard and Santa Monica Boulevard, and terminates at the Santa Monica Freeway off-ramp on National Boulevard. West of Hilgard Avenue, Manning Avenue jogs northward where it becomes an access roadway to the campus. It provides one lane in each direction at Hilgard Avenue.

- ***Malcolm Avenue.*** Malcolm Avenue is a local street located east of the campus. This roadway starts at Westholme Avenue and runs parallel to Hilgard Avenue. Malcolm Avenue intersects with Wilshire Boulevard, where it provides one through lane in each direction. It terminates south of Wilshire Boulevard at Holman Avenue.

- ***Beverly Glen Boulevard.*** Beverly Glen Boulevard is a north/south roadway located approximately one-half mile east of the campus. It is classified as a secondary roadway between Mulholland Drive and Wilshire Boulevard, and a Major Highway Class II between Wilshire Boulevard and Pico Boulevard. It extends in a southeast/northwest direction from Pico Boulevard to Ventura Boulevard in Sherman Oaks. Beverly Glen Boulevard provides two through lanes and left-turn channelization within the study area.

- ***Ohio Avenue.*** Ohio Avenue is an east/west collector street located south of the campus. Ohio Avenue is a relatively heavily used roadway for local access, as it provides the only roadway connection across the I-405 between Wilshire Boulevard and Santa Monica Boulevard. Near the campus, Ohio Avenue is typically 40 feet in width, and is striped to provide a single travel lane in each direction, although at many intersections, localized flaring or parking restrictions allow for left and/or right-turn channelization.

- ***Santa Monica Boulevard.*** Santa Monica Boulevard is an east/west Major Highway Class II that extends from the City of Santa Monica to the Silver Lake area northwest of

downtown Los Angeles. In the study area, Santa Monica Boulevard extends southwest to northeast, and is striped for three to four lanes in each direction at I-405, and two to three lanes in each direction east of Sepulveda Boulevard. This facility is listed on the Congestion Management Program (CMP) roadway system as part of the CMP roadway network.

- ***Copa De Oro Road.*** Copa De Oro Road is a short local street that intersects Sunset Boulevard and is located opposite Hilgard Avenue. It serves the residential neighborhood northeast of the campus and provides one travel lane in each direction.

- ***Stone Canyon Road.*** Stone Canyon Road is a local roadway that primarily serves the residential neighborhood north of campus. South of Sunset Boulevard, Stone Canyon Road becomes Royce Drive, which is an internal campus roadway.

- ***Bellagio Road/Way.*** North of Sunset, Bellagio Way connects via Bellagio Road and Chalon Road to Roscomare Road and Mulholland Drive. Bellagio Road is a two-lane collector road that serves the residential neighborhood northwest of the campus. South of Sunset Boulevard, Bellagio Way crosses into campus and turns into an internal campus roadway.

- ***Bel Air Road.*** Bel Air Road is a short local street that is north of Sunset Boulevard and opposite Beverly Glen Boulevard. It serves the residential neighborhood northeast of the campus. This roadway provides one travel lane in each direction.

- ***Linda Flora Drive.*** Linda Flora Drive is a local roadway that intersects Roscomare Road and is opposite Stradella Road. This roadway serves the residential neighborhood north of the campus and provides one travel lane in each direction.

- ***Chalon Road.*** Chalon Road is a local roadway that extends from Stone Canyon Road to Bellagio Road, where it turns north and becomes Linda Flora Drive. Chalon Road is striped for two lanes.

- ***Roscomare Road.*** Roscomare Road is a north/south collector road located approximately one mile north of campus. It extends north from Chalon Road and terminates at Mulholland Drive. Roscomare Road is one lane in each direction.

- ***Stradella Road.*** Stradella Road is a local street located north of the campus and generally extends in a north/south direction. It extends from Roscomare Road to Sarbonne Road and provides one travel lane in each direction.

- ***Greendale Drive.*** Greendale Drive is a short local street located north of Sunset Boulevard and intersects with Beverly Glen Boulevard and Faring Road. This roadway provides one travel lane in each direction.

- ***Mulholland Drive.*** Mulholland Drive is an east/west major highway located approximately four miles north of the campus. It provides one travel lane in each direction north of the campus between Skirball Center Drive and Beverly Glen Boulevard, and two lanes in each direction east of Beverly Glen Boulevard.

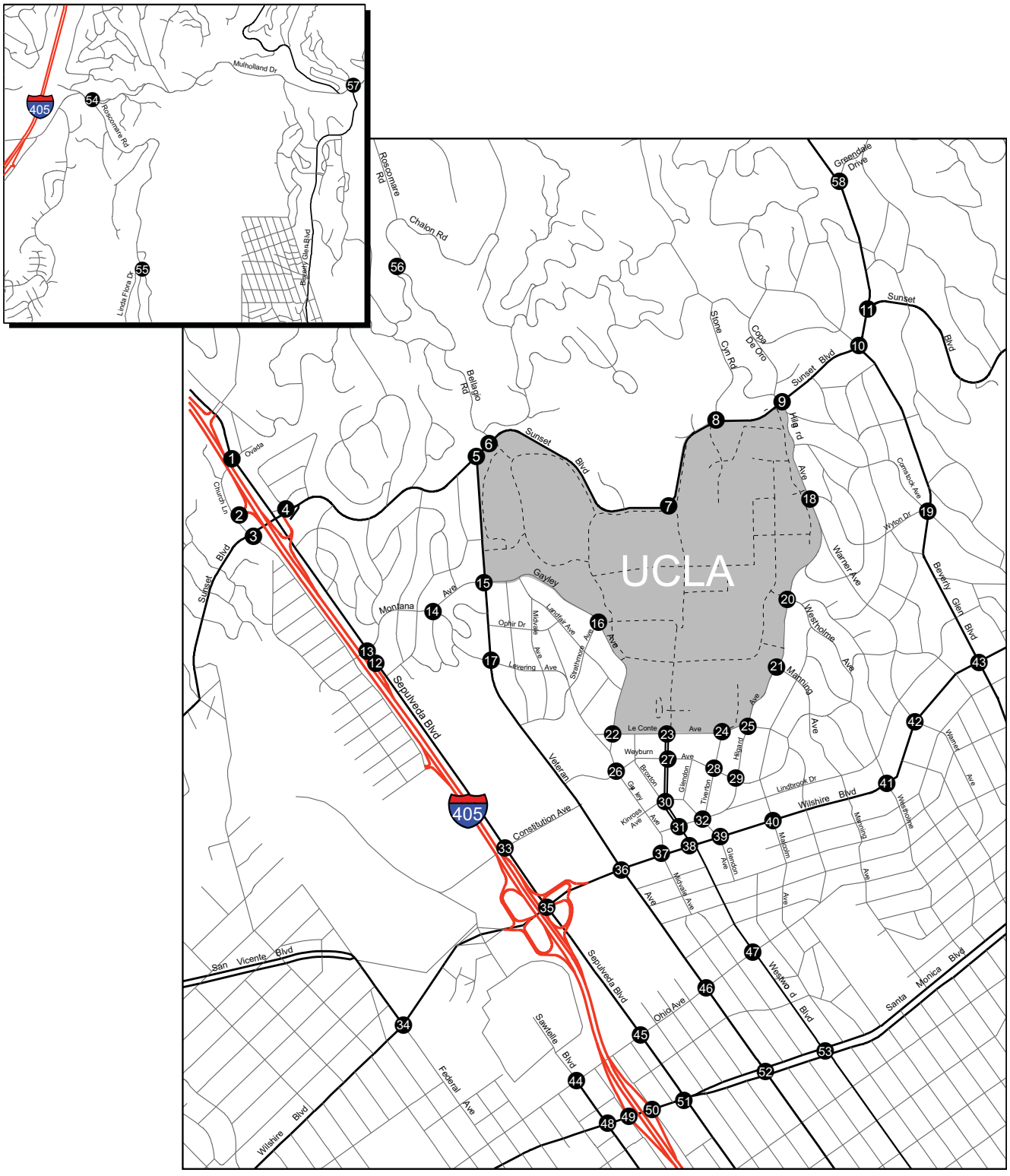
Future Projects

Per the *Draft 2008 Regional Transportation Plan (RTP) Transportation Conformity Supplemental Report*, produced by the Southern California Association of Governments (SCAG), a number of freeways, highways, and streets around the UCLA campus are projected to undergo roadway improvements over the next five years (between 2008 and 2013). These improvements are identified in Table 1 of the Traffic Study included in Appendix I, and are planned to occur along the I-405, Santa Monica Boulevard, Bundy Drive, Barrington Avenue, and Sepulveda Boulevard. These roadway improvements are identified for informational purposes only and are not assumed in the traffic impact analysis (Iteris 2008).

Study Intersections

To be consistent with the analysis completed for the 2002 LRDP Final EIR, and as a conservative measure, this analysis incorporates a detailed evaluation of existing and future traffic conditions at the same 58 study intersections that were addressed in the 2002 LRDP's traffic study. The 58 study intersections, shown on Figure 4.13-2 (and also listed in Table 4.13-1 later in this section) are within the area surrounding the campus and are the intersections expected to be most directly affected by the vehicle trips generated by the proposed 2008 NHIP and buildout of the remaining development allocation under the 2002 LRDP, as amended. A field inventory was conducted at the 58 study area intersection locations and included review of each intersection's geometric layout, traffic control, lane configuration, posted speed limits, transit service, land use, and parking. The existing lane configurations are shown in Figure 4A in the Traffic Study included in Appendix I. Counts of existing AM peak period (7:00 AM to 9:00 AM) and PM peak period (4:00 PM to 6:00 PM) traffic conditions were conducted by a professional data collection company during January and February 2008. The counts were conducted manually at each of the 58 study intersections, where count personnel tracked the number of vehicles making each possible turning movement. The peak hour traffic volumes for each intersection were then determined for analysis purposes by finding the 4 highest consecutive 15-minute volumes for all movements combined. This procedure provides the highest existing volumes, as it is based on the peak hour for each intersection independent of other intersections. The existing peak hour turning movement volumes for the 58 study intersections are shown in Figures 9A, 9B, and 9C in the Traffic Study included in Appendix I.

AM and PM peak hour level of service (LOS) analyses (described below under "Analytic Method and Assumptions") were conducted at the 58 study intersections based on the existing traffic volume counts. The volume/capacity (V/C) ratios (for signalized intersections) and delay (for unsignalized intersections) and the corresponding LOS for existing AM and PM peak hour conditions are shown in Table 4.13-1. Table 4.13-2 shows the V/C and corresponding LOS for existing AM and PM peak hour conditions at unsignalized intersections that have been analyzed as 2-phase signalized intersections with a capacity of 1,200 vehicles per hour, in accordance with LADOT guidelines. The LOS analysis was performed using TRAFFIX software, version 7.8. LOS D is generally considered to be the lowest acceptable LOS in an urban or suburban area, including the City of Los Angeles. LOS E is considered to have poor operation and LOS F is considered forced flow. As the values in Tables 4.13-1 and 4.13-2 indicate, 16 of the 58 study intersections currently operate at LOS E or F during the AM peak hour, PM peak hour, or both.



Source: Iteris Inc. 2008

Study Intersections

Figure 4.13-2

2008 NHIP and LRDP Amendment

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TABLE 4.13-1
EXISTING 2008 PEAK HOUR LEVEL OF SERVICE SUMMARY

Study Intersection	Existing 2008 Conditions			
	AM Peak Hour		PM Peak Hour	
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh
1. Church Ln/Ovada Pl/Sepulveda Blvd[a]	C	0.752	C	0.705
2. I-405 S/B On/Off Ramps and Church Ln[a]	C	0.724	A	0.594
3. Sunset Blvd and Church Ln[a]	D	0.822	C	0.754
4. Sunset Blvd and I-405 N/B On-/Off-Ramps[a]	D	0.897	A	0.348
5. Sunset Blvd and Veteran Ave[a]	D	0.848	C	0.738
6. Sunset Blvd and Bellagio Way[a]	D	0.838	D	0.899
7. Sunset Blvd and Westwood Blvd[a]	A	0.571	A	0.487
8. Sunset Blvd and Stone Canyon Rd[a]	A	0.494	C	0.707
9. Sunset Blvd and Hilgard Ave/Copa De Oro Rd[a]	D	0.889	C	0.769
10. Sunset Blvd and Beverly Glen Blvd[a]	D	0.854	F	1.003
11. Sunset Blvd (East I/S) and Beverly Glen Blvd[a]	F	1.113	F	1.109
12. I-405 N/B Off-ramp and Sepulveda Blvd[a]	A	0.498	A	0.536
13. Montana Ave and Sepulveda Blvd[a]	C	0.712	C	0.721
14. Montana Ave and Levering Ave (unsignalized)	C	22.9	E	49.5
15. Montana Ave/Gayley Ave and Veteran Ave[a]	C	0.771	D	0.883
16. Strathmore Pl and Gayley Ave[a]	B	0.620	A	0.583
17. Levering Ave and Veteran Ave[a]	A	0.474	A	0.596
18. Wyton Dr and Hilgard Ave[a]	A	0.390	A	0.401
19. Wyton Dr/Comstock Ave and Beverly Glen Blvd[a]	A	0.335	B	0.603
20. Westholme Ave and Hilgard Ave[a]	A	0.461	A	0.400
21. Manning Ave and Hilgard Ave[a]	A	0.251	A	0.252
22. Le Conte Ave and Gayley Ave[a]	A	0.494	A	0.554
23. Le Conte Ave and Westwood Blvd[a]	A	0.515	A	0.498
24. Le Conte Ave and Tiverton Dr[a]	A	0.417	A	0.475
25. Le Conte Ave and Hilgard Ave[a]	A	0.491	A	0.571
26. Weyburn Ave and Gayley Ave[a]	A	0.409	B	0.606
27. Weyburn Ave and Westwood Blvd[a]	A	0.368	D	0.860
28. Weyburn Ave and Tiverton Dr (unsignalized)	A	7.7	A	9.9
29. Weyburn Ave and Hilgard Ave[a]	A	0.371	A	0.574
30. Kinross Ave and Westwood Blvd[a]	C	0.765	D	0.854
31. Lindbrook Dr and Westwood Blvd[a]	A	0.478	A	0.465
32. Lindbrook Dr and Tiverton Ave	B	0.608	A	0.580
33. Constitution Ave and Sepulveda Blvd[a]	A	0.471	B	0.692
34. Wilshire Blvd and San Vicente Blvd[a]	D	0.873	C	0.768
35. Wilshire Blvd and Sepulveda Blvd[a]	F	1.282	F	1.040
36. Wilshire Blvd and Veteran Ave[a]	F	1.100	F	1.554
37. Wilshire Blvd and Gayley Ave[a]	D	0.886	F	1.123
38. Wilshire Blvd and Westwood Blvd[a]	E	0.929	D	0.854
39. Wilshire Blvd and Glendon Ave[a]	D	0.842	C	0.797
40. Wilshire Blvd and Malcolm Ave (unsignalized)	F	467.1	F	319.9
41. Wilshire Blvd and Westholme Ave[a]	B	0.687	B	0.662

TABLE 4.13-1 (Continued)
EXISTING 2008 PEAK HOUR LEVEL OF SERVICE SUMMARY

Study Intersection	Existing 2008 Conditions			
	AM Peak Hour		PM Peak Hour	
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh
42. Wilshire Blvd and Warner Ave[a]	B	0.625	A	0.502
43. Wilshire Blvd and Beverly Glen Blvd[a]	D	0.818	B	0.686
44. Ohio Ave and Sawtelle Blvd[a]	E	0.920	D	0.806
45, Ohio Ave and Sepulveda Blvd[a]	C	0.751	C	0.780
46. Ohio Ave and Veteran Ave[a]	C	0.725	C	0.770
47. Ohio Ave and Westwood Blvd[a]	B	0.668	B	0.662
48. Santa Monica Blvd and Sawtelle Blvd[a]	F	1.264	F	1.385
49. Santa Monica Blvd and I-405 (S/B)	F	1.068	F	1.031
50. Santa Monica Blvd and I-405 (N/B)	D	0.884	F	1.011
51. Santa Monica Blvd and Sepulveda Blvd[a]	F	1.139	F	1.274
52. Santa Monica Blvd and Veteran Ave[a]	B	0.651	D	0.875
53. Santa Monica Blvd and Westwood Blvd[a]	E	0.968	E	0.924
54. Roscomare Rd and Mulholland Dr[a]	C	0.749	B	0.650
55. Roscomare Rd and Stradella Rd/Linda Flora Dr (unsignalized)	B	12.5	B	10.2
56. Chalon Rd and Bellagio Rd (unsignalized)	B	11.9	B	13.2
57. Beverly Glen Blvd and Mulholland Dr	E	0.957	E	0.992
58. Beverly Glen Blvd and Greendale Dr	D	0.825	E	0.996

S/B: southbound; N/B: northbound; I/S: Intersection
[a] 7% ATSAC reduction applied to final V/C.

Source: Iteris 2008.

TABLE 4.13-2
EXISTING 2008 PEAK HOUR LEVEL OF SERVICE SUMMARY
(UNSIGNALIZED ANALYZED AS 2-PHASE SIGNALIZED INTERSECTION)

Study Intersection	Existing 2008 Conditions			
	AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C
14. Montana Ave/Levering Ave	E	0.955	B	0.640
28. Weyburn Ave/Tiverton Dr	A	0.192	A	0.434
40. Wilshire Blvd/Malcolm Ave	C	0.718	B	0.626
55. Roscomare Rd and Stradella Rd/Linda Flora Dr	A	0.504	A	0.446
56. Chalon Rd/Bellagio Rd	A	0.500	A	0.498

Note: Unsignalized intersections were analyzed with CMA as 2-phased signalized intersections with a capacity of 1,200.

Source: Iteris 2008.

Freeways

The campus is located approximately 0.7 mile east of the I-405, which is a north/south freeway that provides regional access throughout and beyond the western portion of Los Angeles County. Near the campus, the I-405 is a north/south freeway that provides five mixed-flow lanes

in each direction. A southbound high-occupancy vehicle (HOV) lane is currently under construction near the UCLA campus, and a northbound HOV lane is in the planning phases. To the north, I-405 merges with the I-5 at Mission Hills. I-405 also provides direct access to other freeways, including an interchange with the I-10 approximately 2.5 miles south of the campus, and with US Highway 101 approximately 7 miles northwest of the campus. Access to and from the surface street network immediately surrounding the project site is provided by northbound and southbound freeway on- and off-ramps located at Wilshire Boulevard, Santa Monica Boulevard, and Sunset Boulevard, and a northbound off-ramp and southbound on-ramp located near Montana Avenue.

The I-10 is an east/west facility located approximately 2.5 miles south of the campus. It provides regional access throughout Los Angeles County, extending east to San Bernardino and beyond. To the west, I-10 transitions into PCH in the City of Santa Monica; PCH then extends to the northwest. I-10 typically provides four through lanes in each direction in the vicinity of the campus.

The impact analysis in this study addresses seven freeway segments along the I-405 and the I-10 within the general project vicinity. These freeway segments are shown on Figure 4.13-3 and include:

1. I-405, south of I-10;
2. I-405, between I-10 and Santa Monica Blvd;
3. I-405, between Wilshire Blvd and Santa Monica Blvd;
4. I-405, between Sunset Blvd and Wilshire Blvd;
5. I-405, north of Sunset Blvd;
6. I-10, between Bundy Dr and I-405;
7. I-10, between Overland Avenue and National Boulevard.

The Los Angeles County CMP also is used as a guide for the analyzing freeway segments. The closest CMP freeway mainline monitoring stations include:

8. I-10 at Lincoln Blvd;
9. I-10, east of Overland Ave;
10. I-10, east of La Brea Ave Undercrossing;
11. I-405, north of Venice Blvd;
12. I-405, south of Mulholland Dr.

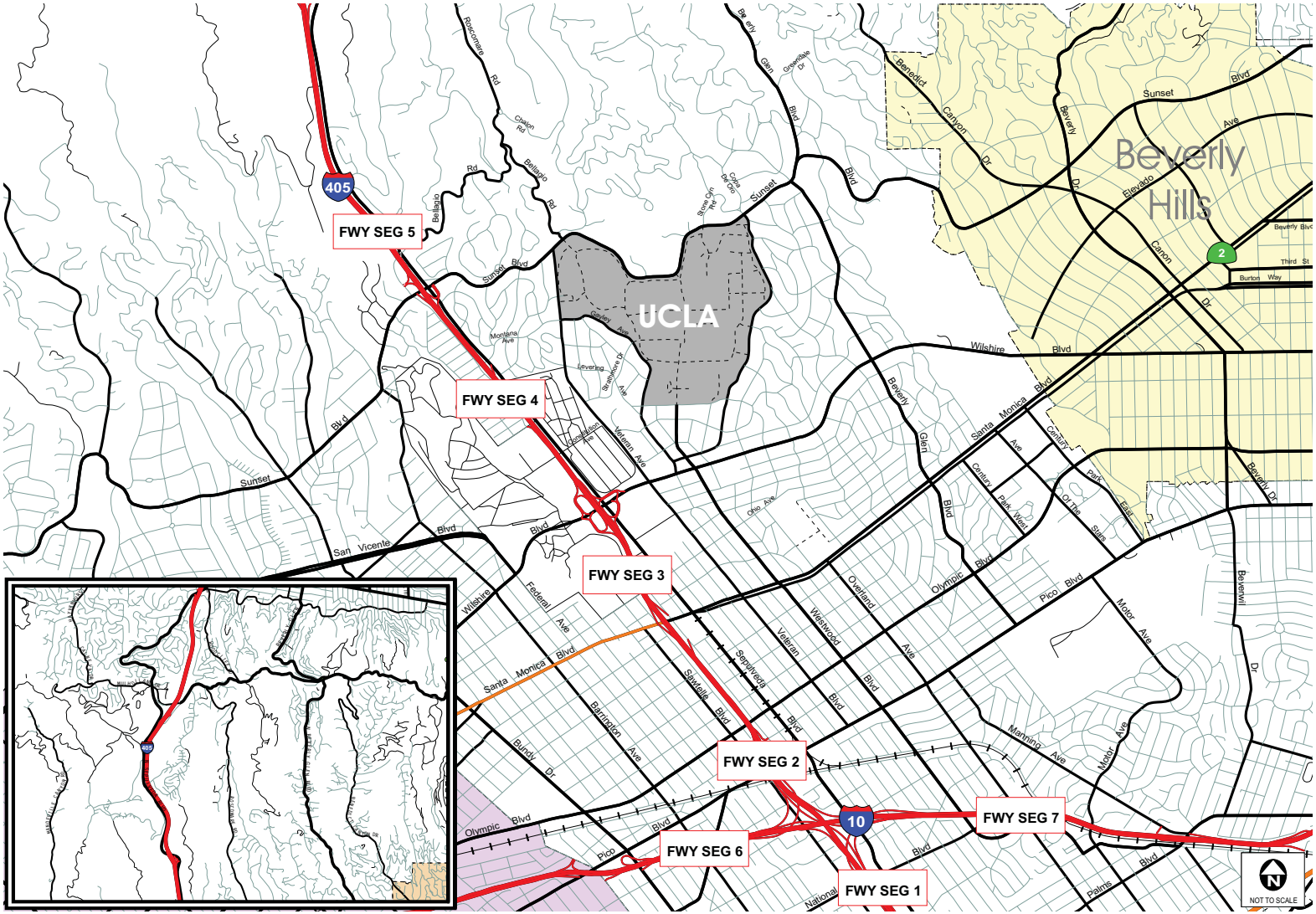
Current traffic volumes on these freeway segments were obtained from several sources. Daily, AM and PM peak hour traffic volumes on the segments were obtained from Caltrans. In addition, AM and PM peak hour directional splits were taken from the Los Angeles County 2004 CMP. The methodology for determining existing and future operating conditions is described under the “Analytic Method and Assumptions” discussion later in this section. The existing operational values for these freeway segments are shown in Tables 4.13-3 (AM peak hour) and 4.13-4 (PM peak hour).

TABLE 4.13-3
EXISTING AM PEAK HOUR FREEWAY VOLUMES AND LOS SUMMARY

Freeway Segment	AM Peak Hour										
	Direction	No. of Lanes	Freeway Capacity	2007 Daily Segment Volume	2008 Daily Segment Volume	2007 Peak Segment Volume	2008 Peak Segment Volume	Distribution Split	Peak Hour Volume	LOS	D/C
1. I-405 South of I-10	N/B	5	10,000	280,000	282,800	17,800	17,978	60%	10,787	F(0)	1.079
	S/B	5	10,000			17,800	17,978	40%	7,191	C	0.719
2. I-405 Between I-10 and Santa Monica Blvd	N/B	5	10,000	296,500	299,465	20,550	20,756	60%	12,453	F(0)	1.245
	S/B	5	10,000			20,550	20,756	40%	8,302	D	0.830
3. I-405 Between Wilshire Blvd and Santa Monica Blvd	N/B	6	12,000	291,000	293,910	20,300	20,503	60%	12,302	F(0)	1.025
	S/B	6	12,000			20,300	20,503	40%	8,201	C	0.683
4. I-405 Between Sunset Blvd and Wilshire Blvd	N/B	5	10,000	271,500	274,215	18,950	19,140	60%	11,484	F(0)	1.148
	S/B	5	10,000			18,950	19,140	40%	7,656	C	0.766
5. I-405 North of Sunset Blvd	N/B	5	10,000	275,000	277,750	17,000	17,170	42%	7,211	C	0.721
	S/B	4	8,000			17,000	17,170	58%	9,959	F(0)	1.245
6. I-10 Between Bundy Dr and I-405	E/B	5	10,000	245,000	247,450	17,800	17,978	58%	10,427	F(0)	1.043
	W/B	5	10,000			17,800	17,978	42%	7,551	C	0.755
7. I-10 Between Overland Ave and National Blvd	E/B	5	10,000	261,000	263,610	17,400	17,574	60%	10,544	F(0)	1.054
	W/B	4	8,000			17,400	17,574	40%	7,030	D	0.879

N/B – Northbound; S/B – Southbound; E/B – Eastbound; W/B – Westbound; D/C – Demand to capacity

Source: Iteris 2008.



Source: Iteris Inc. 2008

Freeway Analysis Segments

Figure 4.13-3

2008 NHIP and LRDP Amendment

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TABLE 4.13-4
EXISTING PM PEAK HOUR FREEWAY VOLUMES AND LOS SUMMARY

Freeway Segment	PM Peak Hour										
	Direction	No. of Lanes	Freeway Capacity	2007 Daily Segment Volume	2008 Daily Segment Volume	2007 Peak Segment Volume	2008 Peak Segment Volume	Distribution Split	Peak Hour Volume	LOS	D/C
1. I-405 South of I-10	N/B	5	10,000	280,000	282,800	17,800	17,978	52%	9,349	E	0.935
	S/B	5	10,000			17,800	17,978	48%	8,629	D	0.863
2. I-405 Between I-10 and Santa Monica Blvd	N/B	5	10,000	296,500	299,465	20,550	20,756	52%	10,793	F(0)	1.079
	S/B	5	10,000			20,550	20,756	48%	9,963	E	0.996
3. I-405 Between Wilshire Blvd and Santa Monica Blvd	N/B	6	12,000	291,000	293,910	20,300	20,503	52%	10,662	D	0.888
	S/B	6	12,000			20,300	20,503	48%	9,841	D	0.820
4. I-405 Between Sunset Blvd and Wilshire Blvd	N/B	5	10,000	271,500	274,215	18,950	19,140	52%	9,953	E	0.995
	S/B	5	10,000			18,950	19,140	48%	9,187	D	0.919
5. I-405 North of Sunset Blvd	N/B	5	10,000	275,000	277,750	17,000	17,170	64%	10,989	F(0)	1.099
	S/B	4	8,000			17,000	17,170	36%	6,181	D	0.773
6. I-10 Between Bundy Dr and I-405	E/B	5	10,000	245,000	247,450	17,800	17,978	48%	8,629	D	0.863
	W/B	5	10,000			17,800	17,978	52%	9,349	E	0.935
7. I-10 Between Overland Ave and National Blvd	E/B	5	10,000	261,000	263,610	17,400	17,574	62%	10,896	F(0)	1.090
	W/B	4	8,000			17,400	17,574	38%	6,678	D	0.835

N/B – Northbound; S/B – Southbound; E/B – Eastbound; W/B – Westbound; D/C – Demand to capacity

Source: Iteris 2008.

As shown in Tables 4.13-3 and Table 4.13-4, all study segments on I-405 and I-10 currently operate at or above design capacity in at least one direction during one or both peak hours, which results in severe congestion and travel speeds of less than 25 miles per hour. The freeway segments that currently operate at LOS E or F during the AM or PM peak hour are listed below.

1. I-405, south of I-10
    - AM Peak – Northbound- LOS F(0)
    - PM Peak – Northbound- LOS E

2. I-405, between I-10 and Santa Monica Blvd
    - AM Peak – Northbound- LOS F(0)
    - PM Peak
        - Northbound – LOS F(0)
        - Southbound – LOS E

3. I-405, between Wilshire Blvd and Santa Monica Blvd
    - AM Peak – Northbound- LOS F(0)

4. I-405, between Sunset Blvd and Wilshire Blvd
    - AM Peak – Northbound – LOS F(0)
    - PM Peak – Northbound – LOS E

5. I-405, north of Sunset Blvd
    - AM Peak – Southbound – LOS F(0)
    - PM Peak – Northbound – LOS F(0)

6. I-10, between Bundy Dr and I-405
    - AM Peak – Eastbound – LOS F(0)
    - PM Peak – Westbound – LOS E

7. I-10, between Overland Ave and National Blvd
    - AM Peak – Eastbound – LOS F(0)
    - PM Peak – Eastbound – LOS F(0)

Alternative Transportation

Public Transit

The UCLA campus area is served by six public transit operators: Los Angeles County Metro, LADOT, Santa Clarita Transit, Antelope Valley Transit Authority, Santa Monica Municipal Bus Lines, and Culver City Bus. Together, these operators run a total of 24 local routes, limited stop routes, express routes, and rapid bus routes within 2 miles of the UCLA campus. The Hilgard Bus Terminal, located on the eastern edge of campus, is in close proximity to a single-family residential neighborhood called Holmby Hills. The Hilgard Terminal serves as the final bus stop for several Santa Monica Big Blue Bus routes. In order to reduce the impacts of the buses on

the adjoining neighbors, UCLA arranged with the City of Santa Monica's Big Blue Bus to reroute these buses to the central-campus located Ackerman Bus Terminal after 10:00 PM on weekdays, and all day on weekends and major holidays. The Ackerman Bus Terminal serves as the primary on-campus bus stop location for Metro bus routes and is also used by Culver City Bus. Per CMP guidelines, a description of all 24 routes is provided in the Traffic Study included in Appendix I. The public transit routes serving the UCLA campus are identified below and shown on Figure 4.13-4.

- Metro Line 2 (Sunset Boulevard)/302 (Sunset Blvd Limited).
- Metro Line 16/316 (Downtown LA – Century City via 3rd St).
- Metro Line 20 (Downtown LA – Santa Monica via Wilshire Blvd).
- Metro Rapid Line 233 (Lakeview Terrace – Van Nuys Blvd).
- Metro Line 305 (Cross-town Bus: UCLA/Westwood – Imperial/Wilmington Station Limited).
- Metro Rapid Line 704 (Downtown LA – Santa Monica via Santa Monica Blvd).
- Metro Rapid Line 720 (Commerce – Santa Monica via Whittier Blvd and Wilshire Blvd).
- Metro Rapid Line 728 (Metro Rapid – Downtown LA – Century City via Olympic Blvd).
- Metro Rapid Line 761 (Metro Rapid – Van Nuys Blvd – Westwood/UCLA).
- Metro Transitway Line 920 (Wilshire Rapid Express).
- LADOT Commuter Express 430.
- LADOT Commuter Express 431.
- LADOT Commuter Express 534.
- LADOT Commuter Express 573.
- LADOT Commuter Express 574.
- Santa Clarita Transit Commuter Express Service 792.
- Santa Clarita Transit Commuter Express Service
- Antelope Valley Transit Authority Route 786 (West Los Angeles).
- Big Blue Bus Line 1 (Santa Monica Blvd).
- Big Blue Bus Line 2 (Wilshire Blvd).
- Big Blue Bus Line 3 (Rapid 3 – Montana Ave and Lincoln Blvd).
- Big Blue Bus Line 8 (Ocean Park Blvd).
- Big Blue Bus Line 12 (Super 12 – Westwood and Palms).
- Culver City Bus Line 6 (Sepulveda Blvd).

Campus Transportation Demand Management Program

UC Policy goals for achieving a sustainable transportation system are multi-facetted, with a focus on increasing the Average Vehicle Ridership (AVR)[1], the number of low- or zero-emission vehicles (PZEV or ZEV), and the number of fuel efficient/alternative fuel vehicles in the campus fleet. The UCLA Transportation Demand Management (TDM) Program began in 1984 with a mission of using parking fees and other UCLA resources to achieve cost-effective reductions in campus trip generation and parking demand, while increasing mobility options for faculty, staff, and students. The Final EIR for the 1990 LRDP required that the TDM program be continued and expanded. As a result, the UCLA TDM program has grown into a comprehensive program

[1] The AVR is the ratio of employees arriving between 6 AM and 10 AM to the motor vehicles they drive to campus.

that offers a broad range of services to encourage and assist UCLA commuters in utilizing alternatives to the single-occupancy vehicle. As part of its ongoing TDM Program, UCLA actively provides and promotes vanpools; carpool matching and parking incentive programs; financial incentives for carpool and vanpool participants; accommodation of the use of other modes of transportation, including walking, bicycles, motorcycles, and scooters; an on-campus car share program; alternative work schedules and telecommuting; annual distribution of the UCLA Commuter's Guide; parking control management; and access restriction to main campus parking facilities for on-campus housing residents. UCLA has one of the most comprehensive TDM programs in the country, with the largest vanpool program of any public or private university. During the more than 24 years of operation, UCLA's TDM program has remained at the leading edge of such programs, and has received numerous awards from regional and local agencies, including the State of California's Governor's Award, the City of Los Angeles Mayoral Award, and Rideshare Program Awards from the South Coast Air Quality Management District (SCAQMD), the Metropolitan Transportation Authority (also known as Metro); in addition, UCLA has been recognized as a best work place for commuters by the USDOT and the USEPA.

Since 1984, UCLA's comprehensive TDM program increased the campus-wide AVR from 1.26 to 1.60; exceeding or meeting (for 8 consecutive years) the 1.5 AVR goal set by the SCAQMD. The TDM program includes incentives to reduce the employee drive-alone rate, which has resulted in a decline from 69 percent in 1990 to 55 percent in 2007. The drive-alone rate has been accomplished through 1,100 carpools serving approximately 2,700 participants and 1,505 vanpools transporting approximately 1,600 full-time and 700 part-time riders from 85 communities, as of October 2007.

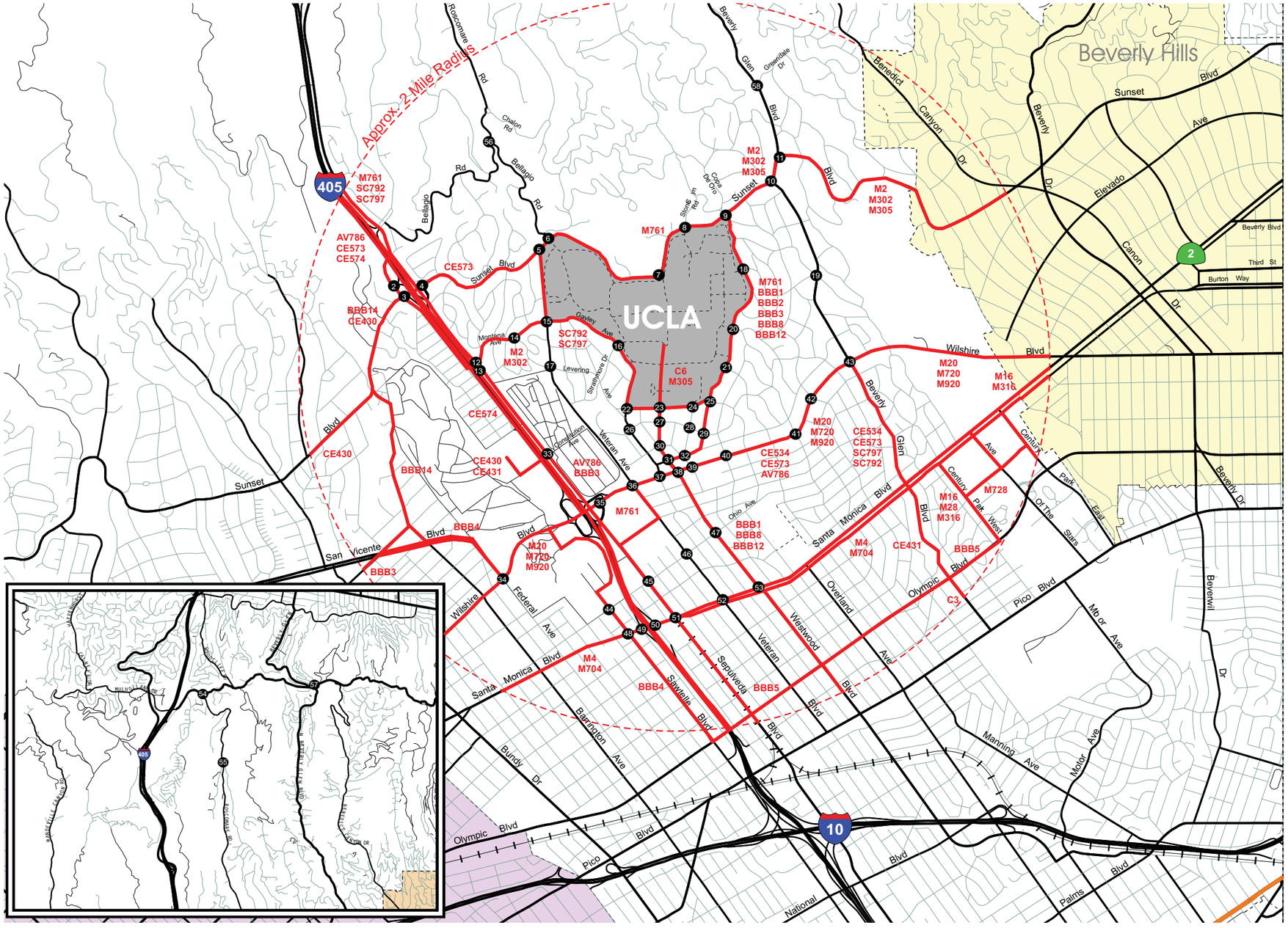
In addition, UCLA began the BruinGo! transit subsidy program in September 2000, which includes reduced fares on the Santa Monica Big Blue Bus and Culver City Bus. In 2005, the GoMetro program was launched introducing 50 percent transit subsidies for Los Angeles County's Metro Bus and Metro Rail systems. The LADOT and Santa Clarita Transit (the newest additions) both have 50 percent transit subsidy agreements with the University.

Much has been accomplished towards meeting the goals to increase the University's fuel efficient/alternative fuel fleet. In the area of clean and fuel efficient vehicles, the campus fleet currently has a combined PZEV and ZEV total of 246 vehicles. By 2008–2009, the campus fleet will expand to 312 PZEVs and ZEVs, an increase of 27 percent. Through development of the UCLA Fleet Optimization Plan, UCLA Transportation will systematically reduce the number of conventionally fueled fleet vehicles and increase the number of alternative fuel vehicles between 2006 and 2009.

The specific components of the TDM program may change over time as the campus strives for the most cost-effective manner by which to maintain achievement of its required goals, so long as the overall effectiveness of the program is not compromised. A description of the components of the current TDM program is provided below.

- ***Carpool Matching.*** Carpool matching is provided by Carpoolworld.com via a UCLA-specific matching system. In addition, UCLA Transportation's website and print media present a full explanation of carpooling to UCLA, including an explanation of the convenience and money-saving option of carpool permits (which are currently reduced from $63 for a yellow parking permit to $27 for two-person carpools and $11 for three-person carpools). There are approximately 2,700 active carpools participants at UCLA.

- ***Vanpool.*** Commuter Assistance-Ridesharing (CAR) currently operates a fleet of over 155 vans, covering more than 80 Southern California communities. Approximately



Source: Iteris Inc. 2008

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Existing Transit

Figure 4.13-4

2008 NHIP and LRDP Amendment

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1,650 monthly full-time riders participate in the program, for which fares are partially subsidized by the campus. Part-time riders can also use the van service at any time on a space available basis, and there are approximately 750 part-time participants.

- ***Campus Transit.*** In addition to the public transit routes previously described, UCLA also provides shuttle bus service around the campus and from several remote housing facilities. The campus shuttle system incorporates the use of buses and vans that are clean, wheelchair accessible, and well equipped with air conditioning and comfortable seating. The SCAQMD gave UCLA an Honorable Mention award in 2000 for its fleet of clean-operating compressed natural gas (CNG) transit buses. That success continued and in 2006, UCLA Transportation received a grant from the SCAQMD that aided in the purchase of seven new CNG transit buses. The routes covered are described below and shown in Figure 6 of the Traffic Study included in Appendix I.

    - *Campus Express.* The Campus Express shuttle travels in a counterclockwise direction, providing round-trip service from Weyburn Terrace and Lot 36 in the southwestern corner of campus, through Westwood and the University to the Macgowan Hall turnaround in the northeastern region of campus. Campus Express shuttles operate Monday through Friday (excluding holidays) from 7:00 AM to 7:00 PM, on an eight to ten minute headway throughout the day. During Summer, Winter and Spring Breaks, the Campus Express shuttle operates on a reduced schedule between 7:30 AM and 6:00 PM.

    - *Wilshire Center Express.* The Wilshire Center Express shuttle travels in a counterclockwise direction, providing round-trip service from the Wilshire Center, through Westwood Village, up Hilgard Avenue to Parking Structure 2 between Manning Avenue and Westholme Avenue. Wilshire Center Express shuttles operate Monday through Friday (excluding holidays) from 7:30 AM to 5:30 PM, on an eight to ten minute headway throughout the day.

    - *Northwest Campus Shuttle.* The Northwest Campus Shuttle travels in a counterclockwise direction, providing round-trip van service across the northern region of campus. It travels on Charles E. Young Drive between Macgowan Hall, Kreiger (Bellagio) Child Care Center, Southern Regional Library, and Hedrick Hall. Northwest Campus shuttles operate Monday through Friday (excluding holidays) from 11:30 AM to 2:00 PM. Stops are made at Macgowan Hall every 30 minutes.

- ***Emergency Ride Home Program.*** To further support the campus carpooling and vanpooling efforts, UCLA Transportation has an “Emergency Ride Home” Program that offers full-time vanpool and carpool participants who must get home during the day for a family emergency or who have to work late, free or subsidized rental cars, nightrider vanpools, or special arrangements with existing van and carpools.

- ***Bicycles.*** To support and encourage bicycling, UCLA provides more than 2,500 bicycle spaces throughout the campus, as well as access to on-campus shower facilities, such as those located in the Men’s Gym and Kaufman Hall. The campus continues to work with agencies (such as Los Angeles County Metro and SCAG) and UCLA student groups to promote a comprehensive system of bicycle routes in the vicinity of the campus. Designated City of Los Angeles bicycle routes near the campus include Sepulveda Boulevard (Class II between Venice Boulevard and Mulholland Drive, except a small portion classified as Class I north of Santa Monica Boulevard), Santa Monica Boulevard (Class II east of Sepulveda Boulevard), Westwood Boulevard (between Santa

Monica Boulevard and south of Wilshire Boulevard), Gayley Avenue and Le Conte Avenue (Class II along the southwestern perimeter of campus), Veteran Avenue (Class I south of the campus), and Beverly Glen Boulevard (Class II between Santa Monica Boulevard and Sunset Boulevard). A map of bicycle facilities in and around the UCLA campus is provided in Figure 7 of the Traffic Study included in Appendix I.

- ***iWalk Pedestrian Program.*** UCLA Transportation, in conjunction with the Cultural and Recreational Affairs Department, created the iWalk Program to encourage walking on and around campus. The program is jointly focused on increasing physical activity while reducing vehicle traffic, and particularly aims at reducing midday vehicle trips.

- ***Motorcycles and Scooters.*** There are nearly 1,200 specially designated motorcycle/scooter parking spaces located throughout parking lots and structures around campus. Location information and maps are available at the Parking Services office on the main campus and on the UCLA Transportation website (www.transportation.ucla.edu).

- ***Telecommuting and Alternative Work Schedules.*** UCLA Transportation continues to encourage all campus groups to consider telecommuting and alternative work schedules, including a compressed workweek and flextime schedules. Information about these programs is available through Campus Human Resources and UCLA Transportation.

- ***Car Share.*** UCLA Transportation has contracted with a car share provider (Zipcar Inc.) to provide car share vehicles on and adjacent to campus for employee and student use. The car share program is, beyond its typical aim of providing short-term car rental use, also intended as an alternative mode program benefit. Each alternative mode program participant is accorded eight hours of Zipcar use each month, thus obviating the need to drive to campus on days when a transit or vanpool rider has, for example, a personal appointment that day that would otherwise require them to drive to campus in their own vehicle.

- ***Alternative Fuel Infrastructure.*** UCLA provides fueling infrastructure for alternative mode vehicles. There are two forms of this on campus: first, there is a public access, CNG station located adjacent to the fleet yard and secondly, UCLA continues to participate in the SCAQMD electric vehicle (EV) infrastructure program called “Quick Charge LA”. This program consists of a network of over 200 EV charging stations at transit centers, shopping malls, and other locations throughout the region. Currently, there are ten public electric vehicle-charging stations on the UCLA campus. Location information and maps are available at the Transportation Lobby on the main campus and on the UCLA Transportation website.

- ***TDM Outreach.*** The UCLA Commuter Guide, which is published by UCLA Transportation Communications and Marketing Group, is a comprehensive information source that describes parking and transportation options at UCLA. The Commuter Guide is distributed to all incoming students, faculty, and staff for both the regular and summer sessions. In addition, all UCLA’s departmental parking coordinators receive copies of the updated Commuter Guide for distribution each spring, when faculty and staff make decisions regarding annual parking permit renewal.

  UCLA also publicizes the availability and convenience of alternative transportation modes to campus though Ridesharing brochures, the UCLA Transportation website, information within the General Catalog and admissions packets sent to students,

advertisements in the *Daily Bruin,* annual commuter fairs, and presentation and distribution of information at new student and employee orientation sessions. Public transit is also actively promoted through Metro, Culver City, and Santa Monica route information and schedule brochures available at the Transportation Lobby on campus and on the UCLA Transportation website. The website provides extensive information regarding commuting regularly to campus using public transit, including links to local public transit providers' published schedules and maps and inexpensive ways to travel to off-campus locations, such as the airport or Metrolink commuter rail stations.

- ***BruinGo! Transit Program.*** BruinGo! was collaboratively launched by UCLA and the Santa Monica Municipal Bus Lines at the beginning of the 2000–2001 academic year to provide partially subsidized bus travel to UCLA students, faculty, and staff on the Big Blue Bus upon presentation of a Bruin ID card. The program was intended as a pilot to determine whether subsidized transit fare service would reduce on-campus parking demand. Today, the success of the BruinGo! Transit Program has allowed UCLA to expand its transit pass subsidy programs to include Santa Monica Big Blue Bus, Culver City Bus, Los Angeles County Metro, LADOT, and Santa Clarita Transit. All currently enrolled UCLA students and current UCLA staff and faculty with a valid Bruin ID card may participate in the BruinGo! Transit Program.

- ***Non-Stop Bus Service to LAX.*** Los Angeles World Airports, in cooperation with UCLA Transportation, provides daily non-stop bus service (one-way and roundtrip), between Westwood and the Los Angeles International Airport (LAX). The expansion of the popular FlyAway service to UCLA provides a convenient connection to airports for students, staff, faculty, and local residents. The FlyAway service stop to LAX is located next to UCLA Parking Structure 32, two blocks north of Wilshire Boulevard, just west of Gayley Avenue. The bus departs every 30 minutes from Westwood to LAX between 5:00 AM and 1:00 AM, 7 days a week. The cost is $4.00 each way, with weekend overnight parking available from 3:00 PM Friday until 7:00 AM Monday in Structure 32 and Lot 36 for $6.00 per day.

- ***Go Metro "TAP" Passes.*** Go Metro transit passes, or a TAP pass, give Metro riders the convenience of a quarterly transit pass with unlimited Metro Bus or Metro Rail access throughout the greater Los Angeles area. UCLA Transportation subsidizes 50 percent of the cost of a TAP pass for current UCLA students and faculty and staff who work on the UCLA campus and are employed 40 percent or more of the time. Current parking permit holders and full-time vanpoolers are not eligible for the subsidized Go Metro TAP pass. Transfers from a Metro bus or rail line to a Big Blue Bus or Culver City Bus require a 30-cent transfer coupon.

Campus Parking and Trip Generation

A commuter's decision on whether or not to drive a personal motor vehicle is usually predicated upon the ability to find affordable parking spaces upon reaching their destination. This includes UCLA commuters traveling to campus. In order to control trips to UCLA, two direct parking measures were used. First, parking fees are set to fully recover the cost of the construction and operation of parking at UCLA and to provide necessary support of alternative transportation to mitigate impacts of single occupant vehicles (SOVs). Second, permits to commuter students are issued on a space available basis. Commuter students able to demonstrate the highest need (e.g., an off-campus job) are given the first opportunity to purchase a parking permit. On-campus residents are provided a parking permit only if they can demonstrate that they have an off-campus job or internship. Thus, at UCLA, trip generation is based not only on the

population, but also on the parking supply that serves the campus. Following is a discussion of the current 2007–2008 parking supply, parking allocation, and trip generation.

Parking Supply

As shown in Table 4.13-5, the UCLA campus currently has approximately 24,074 on-campus street and off-street parking spaces. More than 21,000, or 89 percent, of these spaces are provided in structures. UCLA records also show that 2,350 spaces are located in surface parking lots (10 percent) and 183 parking spaces are located in loading zones (less than 1 percent). Figure 3-3, Campus Map, in Section 3, Project Description, shows the location of the parking areas. The major parking structures are located in the Core, Central, and Health Science zones of the main campus. Limited structure parking is also provided in the Northwest (residential) and Southwest zones of the campus.

TABLE 4.13-5
CURRENT 2007–2008 UCLA PARKING INVENTORY

Parking Area	Parking Spaces	Parking Area	Parking Spaces
East Cluster		**Medical Plaza (Patient)**	
Structure 2	2,243	Structure MB 100	186
Structure 3	1,198	Structure MB 200/300	558
Structure 3 Addition	844	MB/MP Circle Level B-1	52
Structure 5	744	Medical Plaza Turnaround	26
Royce Hall LZ (including dock)	9	Ronald Reagan UCLA Medical Center	305
Fowler Loading Dock	7	*Medical Plaza Totals*	*1,127*
Chemistry Loading Dock	8	**Medical Plaza (Non-Patient)**	
Franz Hall Loading Dock	4	Structure 1	1,738
Public Policy	7	Structure MB 100	298
Young Dr./Geology	6	*Medical Center (Non-Patient) Totals*	*2,036*
Lot A	154	**Residence Halls**	
Charles E. Young Dr. East	117	Lot 11	458
Charles E. Young Dr. North	70	Lot 13	45
Lot R	110	Lot 15	57
AGSM Meter Lot K4	13	Lot 17	39
Lot J	8	Dykstra Hall Street and Brad. Dock	42
Structure 9	1,942	Dykstra/De Neve Structure	289
Life Science Loading Zone	3	Lot Hedrick Hall	9
MBI Loading Dock	5	Lot Rieber Hall	18
Boyer Ortho Dock	3	Sproul Hall	114
9 South Driveway	3	RC	151
Engineering I	11	SV	724
East Cluster Total	*7,509*	Bus Loading Zone/Softball	8
West Cluster		*Residence Hall Totals*	*1,954*
Structure 4 Wooden/Soccer/Janss	1,708	**Southwest Campus**	
Structure 7	1,484	Lot 31	136
Structure 6	754	Lot 36	637
Structure 8	2,822	Structure 32	920
Gonda/BRI	2	Lot 33	27
Strathmore Bldg/Police Station	16	Lot 34	9
James West Circle	9	W. Med Bldg/Capital Programs	18
West Cluster Total	*6,795*	Rehab Center Circle	2
Central Hub		Fire Station	0
Dickson Court	145	Lot MR	73
Central Hub Total	*145*	Weyburn Terrace	1,232
Medical Center		*Southwest Campus Totals*	*3,054*
Structure CHS	819	**Scattered**	
Structure MC	255	Lot 10	30
ER	28	PVUB	5

TABLE 4.13-5 (Continued)
CURRENT 2007–2008 UCLA PARKING INVENTORY

Parking Area	Parking Spaces		Parking Area	Parking Spaces
Lot Doris Stein	118		W. Unex	13
Tiverton	21		Weyburn Alley	21
Structure E	133		*Scattered Totals*	*69*
Lot S	11		***UCLA Campus Total***	***24,074***
RRUCLAMC Totals	*1,385*			

Note: 305 parking spaces at the Ronald Reagan UCLA Medical Center are built and therefore included in the existing parking inventory. However these spaces were not being utilized when the 2007 cordon counts were taken; thus, the trips generated by utilization of these 305 parking spaces are only included in the trip generation analysis for the future 2013 With Project condition.

Source: Iteris 2008.

The Wilshire Center, located at 10920 Wilshire Boulevard, was acquired by UCLA in 1992 and currently accommodates various administrative units that were previously located in other leased space in Westwood Village. As the building was constructed in 1981, the traffic impacts of the building had been included in the Westwood Village traffic long before UCLA acquired it. Furthermore, the building's traffic impacts were included in the cumulative baseline for the 1990 LRDP EIR traffic analysis. The Wilshire Center is not within the 2002 LRDP boundary and therefore the Wilshire Center parking is not included in the on-campus parking inventory. However, in accordance with the Trip Mitigation Monitoring Agreement between UCLA and the City of Los Angeles, the additional trips generated by the UCLA occupants of the Wilshire Center not generated in 1990 are included in the campus vehicle trip generation cordon count counted on an annual basis. For analytical purposes, the UCLA employees that occupy the Wilshire Center and off-campus leased space are conservatively included in the population estimates for the NHIP and 2002 LRDP Amendment traffic study.

Parking Allocation

Use of the parking spaces on the UCLA campus is controlled through a permit system. Employees (who work more than 49 percent time) are eligible to purchase a parking permit. A number of spaces are allocated to university guests, emeritus faculty, vendors, medical center patients, and other visitors (through both quarterly and daily permit sales). A number of student permits are allocated (1) based on institutional priorities; (2) to students with disabilities; (3) to certain highly recruited scholars; (4) to scholarship athletes; and (5) to teaching and research assistants. Additional spaces are allocated to residential students.

The remaining on-campus parking spaces are allocated to commuter students, which currently results in permits being awarded to approximately 24 percent of commuting students. Student permits are issued on a need-based point system. Students with off-campus jobs or other special circumstances are given higher priority to purchase permits. Those students most able to use other modes of transportation (e.g., live close to campus) are given the lowest priority.

The availability of student permits varies from year-to-year based on the total parking inventory; participation in carpools, vanpools, and other alternative transportation modes; and the allocation of spaces to faculty/staff and university guests and visitors. Prior to 2005, student demand typically exceeded the available supply, and a waiting list for student parking was established each year during the regular session. The 2005–2006 academic year was the first year a student parking waiting list was not needed, and the trend has continued through the 2007–2008 academic year.

Table 3 of the Traffic Study included in Appendix I summarizes the current allocation of parking spaces to the various campus user groups (in the fall when parking demand is greatest). In summary, the total number of permits issued is greater than the number of spaces because at any given time, a portion of faculty, staff, and students (with parking permits) are not on campus (e.g., because of variable student class schedules, staff vacation, or faculty sabbaticals) or may have traveled to campus using an alternative mode.

Campus Vehicle Trips

In conjunction with the adoption of the 1990 LRDP, UCLA entered into a Transportation Mitigation Monitoring Agreement (TMMA) with the City of Los Angeles, which limits the total number of vehicle trips that can be generated over the 15-year planning horizon of the 1990 LRDP to 139,500 average daily vehicle trips (this limit is codified as 1990 LRDP Mitigation Measure C-1.5). This commitment was extended an additional five years with the adoption of the 2002 LRDP, and UCLA proposes to extend it an additional three years through 2013 as part of the proposed LRDP Amendment (refer to PP 4.13-1[a] carried forward from the 2002 LRDP Final EIR). To determine the annual status of UCLA campus trip generation, UCLA conducts a week-long count of vehicles entering and exiting the UCLA campus during the third week of October. This week was chosen as it represents a heavy vehicle generation week during the regular session. This "cordon count" is conducted via a mixture of electronic and mechanical means (e.g., magnetic road loops and rubber hose counting systems). As a result, all trips entering and exiting the campus are recorded, including those associated with pass-through traffic (e.g., non-UCLA vehicles traversing the campus to travel from one location to another). The Wilshire Center's traffic is handled by agreed upon formula with LADOT and is added to the main campus cordon count.

The historic campus vehicle trip generation (ADT) from 1990 to 2007 is shown in Table 4 of the Traffic Study included in Appendix I. The total average daily trip generation for the UCLA campus has varied since the 1990 LRDP, but has remained well below the LRDP trip cap of 139,500 average daily vehicle trips. During the fall 2007 cordon counts (the most current available at the time the traffic report was prepared), the campus generated approximately 119,269 daily vehicle trips.

Campus Trip Generation Rates

To estimate future vehicle trips and to provide an estimate of the relative contribution of parking groups (e.g., faculty/staff, students, resident students, and commuter students) to the overall trip generation for the campus, trip generation rates were developed in the 2002 UCLA LRDP. These rates were developed based upon traffic counts from the Fall 2001 Cordon Count Study conducted for UCLA, and counts conducted during the 1999–2000 and 2000–2001 academic years of trips in and out of individual UCLA parking structures.

Counts at individual parking lots and structures were conducted and linear regressions were utilized to disaggregate parking spaces among the various population (or user) groups within each parking lot or structure. The linear regressions compared the total inbound and outbound trips at each time of day to the permits that were issued for that parking structure. In that way the number of trips per permit could be determined for each student and employee user group. The number of cars parked in each area was also determined from this data. Daily permit sales and parking meter revenue data were analyzed to determine the trip generation characteristics of other population segments, such as medical center patients and campus visitors. The results of this analysis are provided in Table 4.13-6.

It should be noted that, in an effort to maintain consistency with the 2002 UCLA LRDP, the trip generation was calculated based on the number of parking spaces in each permit group for all categories except Resident Graduate Students and University Extension Permits. When the 2002 UCLA LRDP was written, there were no graduate students living on campus; thus, no trip generation rates were developed for the Existing scenario. However, under the "Future" scenario, it was assumed that graduate housing would be built and trip generation rates were developed based on the population number within the Resident Graduate Student permit group. For the purposes of this study, the future trip generation rates for Resident Graduate Students were applied to the "Existing" scenario, and an estimated trip generation was developed based on the Resident Student Permit population. The University Extension Permit category is based on the number of permits in that permit group since University Extension students only travel to and from campus at night during off-peak hours.

TABLE 4.13-6
EXISTING VEHICLE TRIP RATES

Permit Group	Trip Generation Rates			
	Trip Rate Variable	Daily Trip Rate	AM Peak Trip Rate	PM Peak Trip Rate
Medical Center Faculty & Staff	Spaces	2.538	0.320	0.329
Other University Faculty & Staff	Spaces	3.293	0.289	0.383
Undergraduate Resident Students	Spaces	2.444	0.034	0.202
Graduate Resident Students	Number (Population)	0.959	0.091	0.101
Commuter Students[a]	Spaces	3.716	0.304	0.356
Quarterly Guest/Emeritus Permits	Spaces	3.789	0.400	0.198
University Extension Permits[b]	Permits	1.705	0.000	0.000
Daily Permit Sales	Spaces	8.546[c]	0.493	0.432

[a] Student Academic Employee and Other Commuter Student categories were combined into one Commuter Student category and the highest trip rate between the two was used.
[b] University Extension Permit trip generation rates are based on the number of permits, not parking spaces, since University Extension students are only on campus at night. They do not generate AM or PM peak hour trips.
[c] Because of the highest turnover associated with visitor parking, those spaces allocated to visitor parking generate approximately 8.5 vehicle trips per day.
Source: Iteris 2008.

As shown in Table 4.13-6, differences in trip generation characteristics were identified for general campus and health sciences faculty and staff. Therefore, for the purposes of this study, separate groups were established and are utilized in the analysis of current and future parking and trip rates.

Using the above trip rates and current parking allocations, an estimate of how each population group contributes to overall campus trip generation was developed and is provided in Table 4.13-7. This breakdown also includes estimates for certain campus uses such as parking meters; a single line entry that covers two-wheeled vehicles and through traffic and drop-off trips; campus shuttles; and the Wilshire Center. The trip generation for these categories were estimated based on the difference between the 2007 cordon count and the total number of trips generated by faculty and staff, resident students, commuter students, and trips generated under the "Other Permits" category.

TABLE 4.13-7
ESTIMATED CURRENT VEHICLE TRIP GENERATION

Permit Group	Number	Variable	Trip Generation Rates			Estimated Trip Generation		
			Daily	AM Peak Hour	PM Peak Hour	Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
Faculty and Staff								
General Campus	7,020	Parking Spaces	3.293	0.289	0.383	23,117	2,029	2,689
Health Sciences	3,444[a]	Parking Spaces	2.538	0.320	0.329	8,741	1,102	1,133
Resident Students								
Undergraduate	431	Parking Spaces	2.444	0.034	0.202	1,053	15	87
Graduate	1,370	Number (Population)	0.959	0.091	0.101	1,314	125	138
Commuter Students	5,821	Parking Spaces	3.716	0.304	0.356	21,631	1,770	2,072
Other Permits								
Quarterly Guest/Emeritus Permits	1,144	Parking Spaces	3.789	0.400	0.198	4,335	458	227
University Extension Permits	3,513	Permits	1.705	0.000	0.000	5,990	0	0
Daily Permit Sales	4,053	Parking Spaces	8.546	0.493	0.432	34,637	1,998	1,751
Other Parking (e.g., meters)						2,341	22	118
2-Wheeled Vehicles/Thru Vehicles/ Drop-offs						13,129	356	422
Campus Shuttles						1,756	61	89
Main/Southwest Campus Total						**118,043**	**7,934**	**8,725**
Wilshire Center						1,226	41	74
2007 Cordon Total						***119,269***	***7,975***	***8,799***

[a] 305 parking spaces located at the Ronald Reagan UCLA Medical Center were not included in the trip generation estimates because the 305 spaces were built, but were not being utilized when the 2007 cordon counts were conducted. Thus, the 305 RRUCLAMC spaces were included in the existing parking inventory, but not included in the trip generation estimates. The trips associated with the 305 spaces were included in the Future 2013 With Project analysis.

Note: Totals may not add due to rounding.

Source: Iteris 2008.

4.13.2 REGULATORY FRAMEWORK

State

The CMP is a State-mandated program enacted by the State legislature with the passage of various Assembly Bills. The requirements for the program became effective with the voter approval of Proposition 111 in June 1990. Proposition 111 provided a nine-cent increase in the State gas tax over a five-year period. The CMP document states:

> The CMP was created to link land use, transportation, and air quality decisions; to develop a partnership among transportation decision makers on devising appropriate transportation solutions that includes all modes of travel; and to propose transportation projects which are eligible to compete for state gas tax funds.

Los Angeles County Metropolitan Transportation Authority (Metro) implements the CMP locally. The CMP for Los Angeles County requires that the traffic impact of individual development projects that have potential regional significance be analyzed. A specific system of arterial roadways plus all freeways comprise the CMP system. A total of 164 intersections are identified for monitoring on the system in Los Angeles County. This section describes the analysis of impacts from buildout of the 2002 LRDP, as amended, on the CMP system. The Traffic Analysis presented in Appendix I and summarized in this section has been conducted according to the guidelines set forth in the 2004 CMP for Los Angeles County.

University of California

As with all University of California (UC) campuses, UCLA implements the UC Policy on Sustainable Practices and Guidelines (UC Sustainability Policy) (refer to PP 4.15-1 provided in Section 4.15, Climate Change). Accordingly, the proposed Project is subject to the UC Sustainability Policy. Following is a summary of the provision of this policy concerning transportation.

Sustainable Transportation Practices

UCLA strives to incorporate alternative means of transportation to, from, and within the campus to improve the quality of life on campus and in the surrounding community. Through implementation of the University's TDM programs, incentives have been developed to reduce the employee drive-alone rate, which has resulted in a decline from 69 percent in 1990 to 55 percent in 2007. The drive-alone rate reduction has been accomplished through 1,100 carpools serving approximately 2,700 participants and 155 vanpools transporting approximately 1,600 full-time and 700 part-time riders from 85 communities as of October 2007.

UCLA Transportation is also continuing to "green" the fleet through the purchase of clean and fuel efficient vehicles (PZEV, ZEV) as well as Alternative Fuel Vehicles (AFVs) that use biodiesel, compressed natural gas, and/or ethanol. By 2008–2009, the campus fleet will expand to 312 PZEVs and ZEVs, an increase of 27 percent from 2004–2005.

Although not directly related to the mission of UCLA Transportation, the University's commitment to providing affordable on-campus housing has an important secondary benefit of reducing the volume of student commutes to and from campus. The campus student housing goals are described in Section 3, Project Description.

4.13.3 PROJECT IMPACTS AND MITIGATION

Analytic Method and Assumptions

Analysis of Roadway Conditions

Traffic operating conditions for study intersections (existing and future) were analyzed using an intersection capacity-based methodology known as the Circular 212 "Critical Movement Analysis" (CMA) method for the signalized locations, in accordance with LADOT standards. The unsignalized and stop-controlled study intersections were analyzed as a two-phase signalized intersection with a maximum capacity of 1,200 vehicles per hour. V/C ratios and corresponding LOS were calculated at study intersections during the weekday AM and PM peak hours in accordance with City of Los Angeles standards.

The efficiency of traffic operations at a location is measured in terms of LOS, which is a description of traffic performance at intersections. The LOS concept is a measure of average operating conditions at intersections during an hour. It is based on a V/C ratio for signalized locations and delay (in seconds) for stop-controlled intersections. Levels range from A to F, with LOS A representing excellent (free-flow) conditions and LOS F representing extreme congestion. The CMA methodology compares the amount of traffic an intersection is able to process (the capacity) to the level of traffic during the peak hours (volume). The Intersection Capacity Utilization (ICU) methodology is the same as CMA in that it calculates the V/C ratio by comparing the critical traffic volumes to the maximum volume of vehicles in the critical lanes. CMA has some additional factors to account for the effect of through traffic on opposing left-turn traffic movements. V/C ratio is calculated to determine the LOS. The Highway Capacity Manual (HCM) method for stop-controlled intersections calculates the average delay, in seconds, per vehicle for each approach and for the intersection as a whole. The delay for the intersection corresponds to an LOS value, which describes the intersection operations. Table 4.13-8 describes the LOS concept and the operating conditions for signalized and stop-controlled intersections.

TABLE 4.13-8
INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service		Description	Signalized Intersection (V/C) Ratio	Unsignalized Intersections Delay (seconds per vehicle)
A		Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000–0.600	≤ 10
B		Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>0.600–0.700	>10 and ≤ 15
C		Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>0.700–0.800	>15 and ≤ 25
D		Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>0.800–0.900	>25 and ≤ 35

TABLE 4.13-8 (Continued)
INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service		Description	Signalized Intersection (V/C) Ratio	Unsignalized Intersections Delay (seconds per vehicle)
E		Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>0.900–1.000	>35 and ≤ 50
F		Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 1.000	> 50
Source: Iteris 2008.				

Analysis of Freeway Conditions

All 2007 freeway traffic volumes were increased by a growth factor of one percent (one percent per year) to reflect 2008 traffic conditions, in accordance with Los Angeles County CMP traffic forecasting procedures. Existing freeway geometrics (e.g., number of mainline travel lanes) for each segment analyzed were determined from CMP data, aerial photographs, and field surveys. Segment peak hour traffic capacities were computed for each direction using established HCM methodology. As detailed in procedures discussed in Chapter 3 of the HCM, each mainline travel lane is assumed to have a capacity of 2,000 vehicles per hour (VPH). The total directional capacities were then computed and used in conjunction with the previously determined peak hour directional freeway segment volumes to calculate the existing and freeway levels of service in the project vicinity.

Per CMP guidelines, freeway mainline LOS is estimated through calculation of the demand-to-capacity (D/C) ratio and associated LOS according to Table 4.13-9. LOS calculation based on D/C ratios is a surrogate for the speed-based LOS that Caltrans uses for traffic operational analysis. LOS F(1) through F(3) designations are assigned where severely congested (less than 25 mph) conditions prevail for more than one hour, converted to an estimate of peak hour demand. Note that calculated LOS F traffic demands may therefore be greater than observed traffic volumes.

TABLE 4.13-9
FREEWAY LEVEL OF SERVICE DEFINITIONS

D/C Ratio	LOS	D/C Ratio	LOS
0.00–0.35	A	>1.00–1.25	F(0)
>0.35–0.54	B	>1.25–1.35	F(1)
>0.54–0.77	C	>1.35–1.45	F(2)
>0.77–0.93	D	>1.45	F(3)
>0.93–1.00	E		
Source: Iteris 2008.			

Automated Traffic Surveillance and Control and Adaptive Traffic Control System

Discussions with LADOT staff indicated that 48 of the 58 analyzed intersections are currently included in the City's Automated Traffic Surveillance and Control (ATSAC) system. In accordance with standard procedures established by the LADOT, the capacity of these intersections should be increased by seven percent when conducting V/C analyses to reflect the system's expected benefits. This adjustment was made to the following 48 study intersections under both Existing 2008 and Future 2013 (With and Without Project) traffic scenarios:

1. Church Ln-Ovada Pl/Sepulveda Blvd
2. I-405 SB On-Off Ramp/Church Ln
3. Sunset Blvd/Church Ln
4. Sunset Blvd/I-405 NB On-/Off-ramps
5. Sunset Blvd/Veteran Ave
6. Sunset Blvd/Bellagio Way
7. Sunset Blvd/Westwood Blvd
8. Sunset Blvd/Stone Canyon Rd
9. Sunset Blvd/Hilgard Ave and Copa De Oro Rd
10. Sunset Blvd/Beverly Glen Blvd
11. Sunset Blvd (East I/S)/Beverly Glen Blvd
12. I-405 NB Off-ramp/Sepulveda Blvd
13. Montana Ave/Sepulveda Blvd
15. Montana Ave/Gayley Ave and Veteran Ave
16. Strathmore Pl/Gayley Ave
17. Levering Ave/Veteran Ave
18. Wyton Dr/Hilgard Ave
19. Wyton Dr-Comstock Ave/Beverly Glen Blvd
20. Westholme Ave/Hilgard Ave
21. Manning Ave/Hilgard Ave
22. Le Conte Ave/Gayley Ave
23. Le Conte Ave/Westwood Blvd
24. Le Conte Ave/Tiverton Dr
25. Le Conte Ave/Hilgard Ave
26. Weyburn Ave/Gayley Ave
27. Weyburn Ave/Westwood Blvd
29. Weyburn Ave/Hilgard Ave
30. Kinross Ave/Westwood Blvd
31. Lindbrook Dr/Westwood Blvd
33. Constitution Ave/Sepulveda Blvd
34. Wilshire Blvd/San Vicente Blvd
35. Wilshire Blvd/Sepulveda Blvd
36. Wilshire Blvd/Veteran Ave
37. Wilshire Blvd/Gayley Ave
38. Wilshire Blvd/Westwood Blvd
39. Wilshire Blvd/Glendon Ave
41. Wilshire Blvd/Westholme Ave
42. Wilshire Blvd/Warner Ave
43. Wilshire Blvd/Beverly Glen Blvd
44. Ohio Ave/Sawtelle Blvd
45. Ohio Ave/Sepulveda Blvd
46. Ohio Ave/Veteran Ave
47. Ohio Ave/Westwood Blvd
48. Santa Monica Blvd/Sawtelle Blvd
51. Santa Monica Blvd/Sepulveda Blvd
52. Santa Monica Blvd/Veteran Ave
53. Santa Monica Blvd/Westwood Blvd
54. Roscomare Rd/Mulholland Dr

In addition to ATSAC, the Adaptive Traffic Control System (ATCS) is the latest enhancement to ATSAC. ATCS uses a personal computer-based traffic signal control software program that provides fully traffic adaptive signal control based on real-time traffic conditions. ATCS will be implemented using new software and additional pavement traffic detectors at intersections currently on-line as part of the City of Los Angeles's ATSAC System. As traffic volumes and patterns change, ATCS can adapt traffic signal timing in real-time to match the current conditions. This immediately leads to an improvement in the LOS and reduced traffic congestion. Results have shown that ATCS provides a minimum of three percent of added capacity. The existing ATSAC system in Westwood and the West Los Angeles area is projected to be enhanced with ATCS by early 2011; thus, the capacity of the 48 aforementioned ATSAC intersections were increased an additional three percent to reflect the system's expected benefits under Future 2013 (With and Without Project) scenarios.

Reduced Capacity at Select Study Intersections

Due to downstream congestion problems in the Westwood area, LADOT has requested that the capacity of some intersections be reduced by 25 percent to account for the drop of traffic volumes in recent counts (traffic volumes have not reduced, but rather vehicles are not able to cross the intersection during the given green time due to congestion downstream). The 25 percent capacity reduction has been applied to the locations listed below during both the AM and PM peak hours.

Wilshire Boulevard between Sepulveda Boulevard and Glendon Avenue

35. Wilshire Blvd/Sepulveda Blvd
36. Wilshire Blvd/Veteran Ave
37. Wilshire Blvd/Gayley Ave
38. Wilshire Blvd/Westwood Blvd
39. Wilshire Blvd/Glendon Ave

Westwood Boulevard between Le Conte Avenue and Wilshire Boulevard

27. Weyburn Ave/Westwood Blvd
30. Kinross Ave/Westwood Blvd
31. Lindbrook Dr/Westwood Blvd

Santa Monica Boulevard between Sawtelle Boulevard and Sepulveda Boulevard

48. Santa Monica Blvd/Sawtelle Blvd
49. Santa Monica Blvd/I-405 S/B Ramp
50. Santa Monica Blvd/ I-405 N/B Ramp
51. Santa Monica Blvd/Sepulveda Blvd

Scramble Crosswalk at Westwood Boulevard and Le Conte Avenue

A new scramble crosswalk was installed at the intersection of Westwood Boulevard and Le Conte Avenue after the existing 2008 traffic counts were conducted. The scramble crosswalk became operational on August 7, 2008, giving pedestrians their own exclusive phase to cross the intersection from all four corners, including diagonally. Implementation of a scramble crosswalk typically reduces the capacity of the intersection up to approximately 33 percent since the intersection experiences an all-red phase for pedestrians to cross. Since the scramble crosswalk was implemented after the existing 2008 traffic counts were conducted, the existing traffic operations analysis of Westwood Boulevard and Le Conte Avenue did not incorporate the estimated 33 percent capacity reduction. However, the 33 percent capacity reduction was factored into the Future 2013 Without Project and Future 2013 With Project scenarios at Westwood Boulevard and Le Conte Avenue.

Future 2013 Without Project Conditions

Ambient Growth and Related Projects

To determine the “Future Without Project” 2013 traffic volumes, two primary variables were considered: (1) ambient traffic growth rate and (2) traffic due to other known or related future development projects. The background “Future Without Project” traffic forecasts include a

determination of the annual ambient traffic growth rate combined with specific related development projects in the area. The ambient growth rate accounts for projects that will occur in the future but are not yet known and smaller projects that are not on the local jurisdiction's list of related projects. An ambient background traffic growth rate of one percent per year was applied in this study, consistent with the background growth rates used in other studies in the surrounding area and as approved by LADOT. For purposes of this analysis the planning horizon for the proposed Project is projected to be 2013; thus, a five percent growth rate was applied to the 2008 existing counts. Future 2013 traffic volumes with ambient growth only are provided in Figures 10A, 10B, and 10C of the Traffic Study provided in Appendix I.

In addition to ambient growth, the other component of future background traffic is the known list of cumulative development projects. The cumulative projects included in this study were compiled for Iteris by LADOT staff. These include projects for which there is an application on file at the City (or other adjacent jurisdictions) and projects that are reasonably foreseeable; are completed but not fully occupied; are currently under construction or beginning construction; or are presently only proposed but could become operational by 2013. Table 4-1 in Section 4, Introduction to the Environmental Analysis, lists these cumulative projects, and Figure 4-1 depicts their locations. The list represents all projects within a 2½-mile radius of the campus center. This includes the projects anticipated to have a potential significant impact at study intersections. A total of 73 projects in the City of Los Angeles and 36 projects in the City of Beverly Hills were identified for this analysis, for a total of 109 related projects. Figures 12A, 12B, and 12C provided in the Traffic Study (Appendix I) illustrate the related project trip assignment during the AM and PM peak hour at the study intersections

Table 11 provided in the Traffic Study (Appendix I) identifies the ADT and AM and PM peak hour trip volumes from the cumulative projects under the "Future Without Project Scenario". Without implementation of the proposed Project, the cumulative projects would generate approximately 60,909 average daily trips, 5,179 trips during the AM peak hour, and 6,017 trips during the PM peak hour.

Future 2013 Without Project Level of Service

To estimate future traffic volumes for the "Future 2013 Without Project", traffic volumes were developed using both ambient growth and approved and pending projects near the proposed project site. The V/C ratios (for signalized intersections) and delay (for unsignalized intersections) and the corresponding LOS are shown in Table 4.13-10. Table 4.13-11 shows the V/C and corresponding LOS at unsignalized intersections that have been analyzed as two-phase signalized intersections with a capacity of 1,200 vehicles per hour in accordance with LADOT guidelines. Figures 13A, 13B, and 13C in the Traffic Study (Appendix I) illustrate the Future 2013 Without Project (with both ambient growth and related projects) turning movement volumes at study intersections.

TABLE 4.13-10
FUTURE 2013 WITHOUT PROJECT PEAK HOUR
LOS SUMMARY

Study Intersection	Future 2013 Without Project			
	AM Peak Hour		PM Peak Hour	
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh
1 Church Ln-Ovada Pl/Sepulveda Blvd[a]	C	0.770	C	0.759
2. I-405 Southbound On-/Off-ramps and Church Ln[a]	C	0.749	B	0.643
3. Sunset Blvd and Church Ln[a]	D	0.837	C	0.780
4. Sunset Blvd and I-405 N/B On-/ Off-ramps[a]	E	0.929	A	0.366
5. Sunset Blvd and Veteran Ave[a]	E	0.907	D	0.836
6. Sunset Blvd and Bellagio Way[a]	D	0.867	E	0.956
7. Sunset Blvd and Westwood Blvd[a]	A	0.576	A	0.493
8. Sunset Blvd and Stone Canyon Rd[a]	A	0.496	C	0.724
9. Sunset Blvd and Hilgard Ave/Copa De Oro Rd[a]	E	0.945	D	0.846
10. Sunset Blvd and Beverly Glen Blvd[a]	E	0.933	F	1.071
11. Sunset Blvd (East I/S) and Beverly Glen Blvd[a]	F	1.203	F	1.212
12. i-405 N/B Off-ramp and Sepulveda Blvd[a]	A	0.500	A	0.560
13. Montana Ave and Sepulveda Blvd[a]	C	0.725	C	0.706
14. Montana Ave and Levering Ave (unsignalized)	D	27.0	F	96.7
15. Montana Ave/Gayley Ave and Veteran Ave[a]	D	0.818	E	0.956
16. Strathmore Pl and Gayley Ave[a]	B	0.624	A	0.586
17. Levering Ave and Veteran Ave[a]	A	0.546	C	0.720
18. Wyton Dr and Hilgard Ave[a]	A	0.396	A	0.415
19. Wyton Dr/Comstock Ave and Beverly Glen Blvd[a]	A	0.375	B	0.644
20. Westholme Ave and Hilgard Ave[a]	A	0.472	A	0.415
21. Manning Ave and Hilgard Ave[a]	A	0.245	A	0.261
22. Le Conte Ave and Gayley Ave[a]	A	0.487	A	0.581
23. Le Conte Ave and Westwood Blvd[a, b]	B	0.672	E	0.976
24. Le Conte Ave and Tiverton Dr[a]	A	0.319	A	0.415
25. Le Conte Ave and Hilgard Ave[a]	A	0.528	A	0.535
26. Weyburn Ave and Gayley Ave[a]	A	0.570	B	0.697
27. Weyburn Ave and Westwood Blvd[a]	B	0.674	F	1.247
28. Weyburn Ave and Tiverton Dr (unsignalized)	A	9.2	C	24.2
29. Weyburn Ave and Hilgard Ave[a]	A	0.395	B	0.633
30. Kinross Ave and Westwood Blvd[a]	E	0.971	F	1.236
31. Lindbrook Dr and Westwood Blvd[a]	B	0.612	B	0.666
32. Lindbrook Dr and Tiverton Ave	B	0.648	B	0.606
33. Constitution Ave and Sepulveda Blvd[a]	A	0.470	C	0.711
34. Wilshire Blvd and San Vicente Blvd[a]	E	0.968	D	0.861
35. Wilshire Blvd and Sepulveda Blvd[a]	F	1.473	F	1.287
36. Wilshire Blvd and Veteran Ave[a]	F	1.223	F	1.730
37. Wilshire Blvd and Gayley Ave[a]	E	0.984	F	1.396
38. Wilshire Blvd and Westwood Blvd[a]	F	1.191	F	1.191
39. Wilshire Blvd and Glendon Ave[a]	E	0.953	E	0.931
40. Wilshire Blvd and Malcolm Ave (unsignalized)	F	OVRFL	F	OVRFL
41. Wilshire Blvd and Westholme Ave[a]	C	0.779	C	0.783
42. Wilshire Blvd and Warner Ave[a]	C	0.709	B	0.607

TABLE 4.13-10 (Continued)
FUTURE 2013 WITHOUT PROJECT PEAK HOUR
LOS SUMMARY

Study Intersection	Future 2013 Without Project			
	AM Peak Hour		PM Peak Hour	
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh
43. Wilshire Blvd and Beverly Glen Blvd[a]	E	0.905	D	0.812
44. Ohio Ave and Sawtelle Blvd[a]	E	0.950	D	0.832
45, Ohio Ave and Sepulveda Blvd[a]	C	0.785	D	0.825
46. Ohio Ave and Veteran Ave[a]	C	0.753	D	0.808
47. Ohio Ave and Westwood Blvd[a]	C	0.726	C	0.764
48. Santa Monica Blvd and Sawtelle Blvd[a]	F	1.362	F	1.508
49. Santa Monica Blvd and I-405 (S/B)	F	1.222	F	1.123
50. Santa Monica Blvd and I-405 (N/B)	F	1.029	F	1.14
51. Santa Monica Blvd and Sepulveda Blvd[a]	F	1.279	F	1.366
52. Santa Monica Blvd and Veteran Ave[a]	C	0.714	E	0.964
53. Santa Monica Blvd and Westwood Blvd[a]	F	1.118	F	1.043
54. Roscomare Rd and Mulholland Dr[a]	C	0.769	B	0.676
55. Roscomare Rd and Stradella Rd/Linda Flora Dr (unsignalized)	B	14.0	B	11.1
56. Chalon Rd and Bellagio Rd (unsignalized)	B	13.1	C	15.3
57. Beverly Glen Blvd and Mulholland Dr	F	1.019	F	1.082
58. Beverly Glen Blvd and Greendale Dr	D	0.884	F	1.075

I/S – Intersection; S/B – Southbound; N/B – Northbound; OVRFL (Overflow) – Indicates oversaturated congestion, typically on one approach of the intersection, where calculation of vehicle delay is not feasible due to inability of the methodology to calculate extreme or infinite delays.

[a] 7% ATSAC and 3% ATCS reduction applied to final V/C.
[b] V/C calculation includes a 33% capacity reduction to the intersection to account for delay caused by the pedestrian scramble crosswalk.

Source: Iteris 2008.

TABLE 4.13-11
FUTURE 2013 WITHOUT PROJECT PEAK HOUR LOS SUMMARY
(UNSIGNALIZED ANALYZED AS 2-PHASE SIGNALIZED INTERSECTION)

Study Intersection	Future 2013 Without Project			
	AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C
14. Montana Ave/Levering Ave	F	1.031	B	0.694
28. Weyburn Ave/Tiverton Dr	A	0.365	C	0.703
40. Wilshire Blvd/Malcolm Ave	D	0.883	D	0.828
55. Roscomare Rd and Stradella Rd/Linda Flora Dr	A	0.544	A	0.491
56. Chalon Rd/Bellagio Rd	A	0.540	A	0.546

Note: Unsignalized intersections were analyzed with CMA as 2-phased signalized intersections with a capacity of 1,200.

Source: Iteris 2008.

The results indicate that 28 of the 58 study intersections are projected to operate at LOS E or F under the Future 2013 Without Project scenario during the AM peak hour, PM peak hour, or both.

4. Sunset Blvd and I-405 N/B On-/Off-ramps: AM Peak Hour.
5. Sunset Blvd and Veteran Ave: AM Peak Hour.
6. Sunset Blvd and Bellagio Way: PM Peak Hour.
9. Sunset Blvd and Hilgard Ave/Copa De Oro Rd: AM Peak Hour.
10. Sunset Blvd and Beverly Glen Blvd: AM and PM Peak Hours.
11. Sunset Blvd (East I/S) and Beverly Glen Blvd: AM and PM Peak Hours.
14. Montana Ave and Levering Ave: PM Peak Hour (as unsignalized), AM Peak Hour (as signalized).
15. Montana Ave/Gayley Ave and Veteran Ave: PM Peak Hour.
23. Le Conte Ave and Westwood Blvd: PM Peak Hour.
27. Weyburn Ave and Westwood Blvd: PM Peak Hour.
30. Kinross Ave and Westwood Blvd: AM and PM Peak Hours.
34. Wilshire Blvd and San Vicente Blvd: AM Peak Hour.
35. Wilshire Blvd and Sepulveda Blvd: AM and PM Peak Hours.
36. Wilshire Blvd and Veteran Ave: AM and PM Peak Hours.
37. Wilshire Blvd and Gayley Ave: AM and PM Peak Hours.
38. Wilshire Blvd and Westwood Blvd: AM and PM Peak Hours.
39. Wilshire Blvd and Glendon Ave: AM and PM Peak Hours.
40. Wilshire Blvd and Malcolm Ave: AM and PM Peak Hours.
43. Wilshire Blvd and Beverly Glen Blvd: AM Peak Hour.
44. Ohio Ave and Sawtelle Blvd: AM Peak Hour.
48. Santa Monica Blvd and Sawtelle Blvd: AM and PM Peak Hours.
49. Santa Monica Blvd and I-405 (S/B): AM and PM Peak Hours.
50. Santa Monica Blvd and I-405 (N/B): AM and PM Peak Hours.
51. Santa Monica Blvd and Sepulveda Blvd: AM and PM Peak Hours.
52. Santa Monica Blvd and Veteran Ave: PM Peak Hour.
53. Santa Monica Blvd and Westwood Blvd: AM and PM Peak Hours.
57. Beverly Glen Blvd and Mulholland Dr: AM and PM Peak Hours.
58. Beverly Glen Blvd and Greendale Dr: PM Peak Hour.

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study UCLA determined that the proposed Project would not have a significant impact for the following threshold from the CEQA Checklist and no further analysis of this issue is presented in this section.

- Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Transportation and Traffic.

- Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase

in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections) *(Impacts 4.13-1 and 4.13-2)*?

- Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways *(Impact 4.13-3)*?
- Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) *(Impacts 4.13-4, 4.13-5, and 4.13-6)*?
- Would the project result in inadequate emergency access *(Impacts 4.13-7 and 4.13-8)*?
- Would the project result in inadequate parking capacity *(Impacts 4.13-9, 4.13-10, and 4.13-11)*?
- Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) *(Impact 4.13-12)*?

For the purposes of this study, a substantial increase in traffic is defined consistent with City of Los Angeles criteria. In the City of Los Angeles, the LADOT has established criteria to determine if a project has a significant traffic impact. For analysis purposes, the University has used this significance criteria for assessing intersection impacts. Using the LADOT standard, a project impact would be considered significant if the conditions in Table 4.13-12 are triggered.

TABLE 4.13-12
CITY OF LOS ANGELES THRESHOLDS OF SIGNIFICANCE

Significant Transportation Impact		
Final V/C Ratio		
LOS	V/C	Project-Related Increase in V/C
C	0.700–0.800	Equal to or greater than 0.040
D	0.800–0.900	Equal to or greater than 0.020
E or F	0.901–1.000	Equal to or greater than 0.010
Source: Iteris 2008.		

The LADOT criteria was applied to determine potential significant traffic impacts associated with the project at the 58 study intersections.

For the purposes of the Los Angeles County CMP, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by two percent of capacity (V/C ≥ 0.02), causing LOS F (V/C > 1.00). If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by two percent of capacity (V/C ≥ 0.02). For purposes of analysis, the University has used this significance criterion for freeway impacts.

Impact Analysis

Campus Programs, Practices, and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures were adopted as part of the 2002 LRDP Final EIR and shall be continued throughout the planning horizon for the proposed

Project. They are therefore considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.13-1(a) *The campus shall continue to maintain the 1990 LRDP vehicle trip cap of 139,500 average daily trips.*

PP 4.13-1(b) *The campus shall continue to maintain the 1990 LRDP parking cap of 25,169 spaces.*

PP 4.13-1(c) *The campus shall continue to provide on-campus housing to continue the evolution of UCLA from a commuter to a residential campus.*

PP 4.13-1(d) *The campus shall continue to implement a TDM program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.*

PP 4.13-2 *UCLA Capital Programs will assess construction schedules of major projects to determine the potential for overlapping construction activities to result in periods of heavy construction vehicle traffic on individual roadway segments, and adjust construction schedules, work hours, or access routes to the extent feasible to reduce construction-related traffic congestion.*

PP 4.13-5 *To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the campus shall provide appropriate signage indicating alternative routes.*

PP 4.13-6 *For any construction-related closure of pedestrian routes, the campus shall provide appropriate signage indicating alternative route and provide curb cuts and street crossings to assure alternate routes are accessible.*

PP 4.13-8 *To ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, UCLA shall consult with the UCPD, EH&S, and the LAFD to disclose temporary lane or roadway closures and alternative travel routes.*

2002 LRDP Mitigation Measures That No Longer Apply

2002 LRDP Final EIR Mitigation Measures—MM4.13-1 and MM 4.13-2(a) through 4.13-2(p)—are not carried forward as part of this traffic analysis for the following reasons: MM 4.13-2(a) has already been implemented; the 2002 LRDP traffic impact analysis that was part of the 2002 LRDP Final EIR for which MM 4.13-1 and MMs 4.13-2(b)–4.13-2(p) were proposed, has been superseded by the traffic impact analysis presented herein. Those previous MMs are no longer relevant and/or in some cases available, at the currently identified impacted intersections.

Threshold	Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio, or congestion at intersections)?

The impact categories addressed under this threshold include:

- Operational (long-term) traffic impacts to intersections and freeways
  - **Impact 4.13-1a** – Proposed 2008 NHIP
  - **Impact 4.13-1b** – Remaining Buildout of the 2002 LRDP, as Amended

- Construction-related (short-term) traffic impacts
  - **Impact 4.13-2** – Proposed 2008 NHIP and Remaining Buildout of the 2002 LRDP, as Amended

2008 NHIP Long-Term Operational Impacts

The "Future 2013 With 2008 NHIP" trip generation is based on the Future 2013 trip generation rates per person (refer to discussion provided under Impact 14.13-1b). Since the proposed 2008 NHIP is projected to accommodate approximately 1,068 new undergraduate resident students who were previously commuter students, the projected 2008 NHIP student trip generation was calculated based on the difference between the number of student trips generated by 1,068 commuter students and 1,068 new undergraduate resident students. The results are displayed below in Table 4.13-13. As shown, there would be a net reduction in student trips to and from campus.

TABLE 4.13-13
FUTURE 2013 WITH PROPOSED 2008 NHIP STUDENT TRIP GENERATION

Permit Group	Number of People	Variable	Revised 2013 Trip Rate per Person			Estimated 2013 Trip Generation		
			Daily	AM Peak	PM Peak	Daily	AM Peak	PM Peak
Resident Students								
Undergraduate	1,068	People	0.147	0.002	0.012	157	2	13
Commuter Students	-1,068	People	0.746	0.061	0.071	-797	-65	-76
					Total	**-640**	**-63**	**-63**
Source: Iteris 2008.								

Additionally, the proposed 2008 NHIP would also include approximately 151 new non-student employees who would commute to campus. A breakdown of each type of employee was reviewed, along with their anticipated work shift start time. Based on this information, the anticipated number of proposed 2008 NHIP non-student employees entering/leaving the UCLA campus by hour was identified. To provide a conservative analysis, the highest number of inbound and outbound employee trips during the two-hour AM and PM peak periods (7:00 AM–9:00 AM and 4:00 PM–6:00 PM) were considered in the AM and PM peak hour 2008 NHIP employee trip generation calculation. As shown in Table 4.13-14, the non-student employees of the proposed NHIP would generate approximately 262 daily trips (131 in and 131 out), 30 inbound trips during the AM peak hour (no outbound trips), and 26 inbound trips and 30 outbound trips (total of 56 trips) during the PM peak hour.

TABLE 4.13-14
ANTICIPATED 2008 NHIP NON-STUDENT EMPLOYEE TRIP GENERATION

Daily			AM Peak Hour			PM Peak Hour		
In	Out	Total	In	Out	Total	In	Out	Total
131	131	262	30	0	**30**	26	30	**56**
Source: Iteris 2008.								

When both the student and non-student employee trips are combined, the proposed 2008 NHIP is anticipated to reduce the number of AM and PM peak hour trips to the UCLA campus by 33 trips and 7 trips, respectively. Overall, the proposed 2008 NHIP would reduce the daily number of trips traveling to and from the campus by 378 daily trips (refer to Table 4.13-15). With a net reduction in trips, the proposed 2008 NHIP would have no impact to any study intersection or freeway segment. No project-specific mitigation is required. Implementation of the proposed 2008 NHIP would be consistent with PP 4.13-1(c) and would reduce vehicle trips made by commuter students. PP 4.13-1(d) would ensure continued implementation of the TDM program to reduce parking demand and vehicle trip generation.

TABLE 4.13-15
NET PROPOSED 2008 NHIP TRIP GENERATION ESTIMATES

Permit Group	Number	Variable	Trip Generation Rate			Trip Generation		
			Daily	AM Peak	PM Peak	Daily	AM Peak	PM Peak
Undergraduate Resident Students	1,068	Students	0.147	0.002	0.012	157	2	13
Commuter Students	-1,068	Students	0.746	0.061	0.071	-797	-65	-76
Non-Student Employees	131	Non-student Employees	N/A	N/A	N/A	262	30	56
Net Proposed 2008 NHIP Trip Generation						**-378**	**-33**	**-7**
Source: Iteris 2008.								

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact would occur.

Impact 4.13-1a ***Implementation of the proposed 2008 NHIP would not generate additional vehicular trips and would not result in a substantial degradation in intersection or freeway mainline levels of service. No impact would occur and no mitigation is required.***

Proposed Project Long-Term Operational Impacts

Future 2013 Trip Generation Rates

Future with Project trip generation was calculated based on the population within each parking permit group in the 2002 LRDP; thus, new per person trip generation rates had to be developed for the proposed Project based on the 2013 estimated population for the Future 2013 With Project scenario. UCLA proposes that the number of campus parking spaces will remain at or below 25,169 to 2013 (as required by 2002 LRDP Final EIR PP 4.13-1[b]). Since per space

vehicle trip rates are assumed to be constant (Table 4.13-6, Existing Vehicle Trip Rates), these rates were used to calculate the Future 2013 With Project trip generation per parking space. The estimated trip generation per space was then divided by the projected 2013 population, and new trip generation rates per person were developed in Table 4.13-16. Revised trip generation rates per person were not developed for Graduate Resident Students or University Extension Permits because per space trip rates were not available in the 2002 UCLA LRDP. These categories were calculated based on the future per person trip rates provided in the 2002 UCLA LRDP Final EIR.

TABLE 4.13-16
REVISED 2013 PER PERSON TRIP GENERATION RATES

Permit Group	Population	Estimated Trip Generation per Space			Rev. Trips per Person Ratio		
		Daily	AM Peak	PM Peak	Daily	AM Peak	PM Peak
Medical Center Faculty & Staff	7,777	10,482	1,322	1,359	**1.348**	**0.170**	**0.175**
Other University Faculty & Staff	15,578	27,243	2,391	3,169	**1.749**	**0.153**	**0.203**
Undergraduate Resident Students	11,082	1,625	23	134	**0.147**	**0.002**	**0.012**
Graduate Resident Students	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Commuter Students	23,473	17,517	1,433	1,678	**0.746**	**0.061**	**0.071**
Quarterly Guest/Emeritus Permits	3,867	3,096	327	162	**0.801**	**0.085**	**0.042**
University Extension Permits	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Daily Permit Sales	7,123	39,457	2,276	1,995	**5.539**	**0.320**	**0.280**

Source: Iteris 2008.

Future Campus Trip Generation

Using the revised trip generation rates in Table 4.13-16 and the proposed future allocation of parking (refer to discussion under Impact 4.13-9 in this section), an estimate of how each population group would contribute to overall campus trip generation under the Future 2013 With Project scenario was developed and is provided in Table 4.13-17. The trip generation for these categories were estimated based on the difference between the 2007 cordon count and the total number of trips generated by Faculty and Staff, Resident Students, Commuter Students, and trips generated under the “Other Permits” category in the Existing scenario. The trip generation is expected to remain constant; thus, the same trip generation was applied under the Future 2013 With Project scenario.

TABLE 4.13-17
FUTURE 2013 ON-CAMPUS TRIP GENERATION WITH THE PROPOSED PROJECT

Permit Group	Number of People	Variable	Revised 2013 Trip Rate per Person			Estimated 2013 Trip Generation		
			Daily	AM Peak	PM Peak	Daily	AM Peak	PM Peak
Medical Center Faculty & Staff	7,777	People	1.348	0.170	0.175	10,482	1,322	1,359
Other University Faculty & Staff	15,578	People	1.749	0.153	0.203	27,243	2,391	3,169
Undergraduate Resident Students	11,082	People	0.147	0.002	0.012	1,625	23	134
Graduate Resident Students	1,882	People	0.959	0.091	0.101	1,805	171	190
Commuter Students	23,473	People	0.746	0.061	0.071	17,517	1,433	1,678
Quarterly Guest/Emeritus Permits	3,867	People	0.801	0.085	0.042	3,096	327	162
University Extension Permits[a]	3,513	People	1.705	0.000	0.000	5,990	0	0
Daily Permit Sales	7,123	People	5.539	0.320	0.280	39,457	2,276	1,995
Other Parking[a]						2,341	22	118
2-Wheel Vehicles/Thru Vehicles/ Drop-offs[a]						13,129	356	422
Campus Shuttles[a]						1,756	61	88
Main/Southwest Campus Total						**124,440**	**8,381**	**9,314**
Wilshire Center [b]						1,226	41	74
Total 2013 Trip Generation						**125,666**	**8,422**	**9,388**

[a] Same trip generation calculated under the Existing 2007 scenario since trip generation rates for these categories is expected to remain constant.
Note: Totals may not add due to rounding.

Source: Iteris 2008.

It should be noted that 305 parking spaces at the Ronald Reagan UCLA Medical Center (RRUCLAMC) were listed in the existing parking inventory table (under Medical Center Faculty and Staff) since they were constructed in 2008. However, the trips attributable to the 305 spaces were not included in the Existing 2008 trip generation estimates because the 305 spaces were not yet being utilized when the 2007 cordon counts took place. The trips attributable to the 305 RRUCLAMC spaces could have been included for the Future 2013 Without Project scenario since they would be fully operational under 2013 conditions; however, this would have reduced the difference between the Future 2013 Without Project and Future 2013 With Project trip generation estimates, ultimately having the effect of reducing the projected project-related impact for the Future 2013 With Project scenario. By excluding the trips attributable to the 305 RRUCLAMC spaces from the Existing 2008 trip generation estimate (which was also used as the Future 2013 Without Project trip generation estimate), the number of trips attributed to the proposed Project is higher than it otherwise would have been. Thus, the approach taken to calculating Future 2013 With Project trip generation estimates in this EIR is conservative.

Table 4.13-18 compares the change in traffic volumes associated with the implementation of the proposed Project with the Existing 2007–2008 condition. Implementation of the proposed Project would generate an additional 6,397 daily trips, 447 AM peak hour trips, and 589 PM peak hour trips. The directional distribution (percentage in/out) of project-related trips is provided in Table 4.13-19. As shown, the Future 2013 With Project campus trip generation (125,666) remains below the 139,500 average daily vehicle trip limit established by the 1990 LRDP and carried forward in the 2002 LRDP.

TABLE 4.13-18
PROPOSED LRDP AMENDMENT TRIP GENERATION COMPARISON

Estimated Campus Trip Generation	Daily	AM Peak Hour	PM Peak Hour
Existing (same as Future Without Project)[a]	119,269	7,975	8,799
Future 2013 With Project	125,666	8,422	9,388
Estimated Project Trip Generation	**6,397**	**447**	**589**

[a] Existing trip generation based on 3,444 Medical Center Faculty and Staff spaces. 305 spaces at the RRUCLAMC were built, but were not being utilized when the 2007 cordon counts were taken; thus, they were included in the existing parking inventory, but not included in the existing trip generation estimates.

Source: Iteris 2008.

TABLE 4.13-19
PROJECT DIRECTIONAL DISTRIBUTION

	Directional Percentages			Trip Generation		
	In	Out	Total	In	Out	Total
Daily	50%	50%	100%	**3,199**	**3,199**	**6,397**
AM Peak Hour	80%	20%	100%	**358**	**89**	**447**
PM Peak Hour	30%	70%	100%	**177**	**413**	**590**

Note: Direction distribution (in/out) based on Institute of Transportation Engineers (ITE) Trip Generation (7th Edition), Land Use Code 550, University/College (students).

Note: Totals may not add due to rounding.

Source: Iteris 2008.

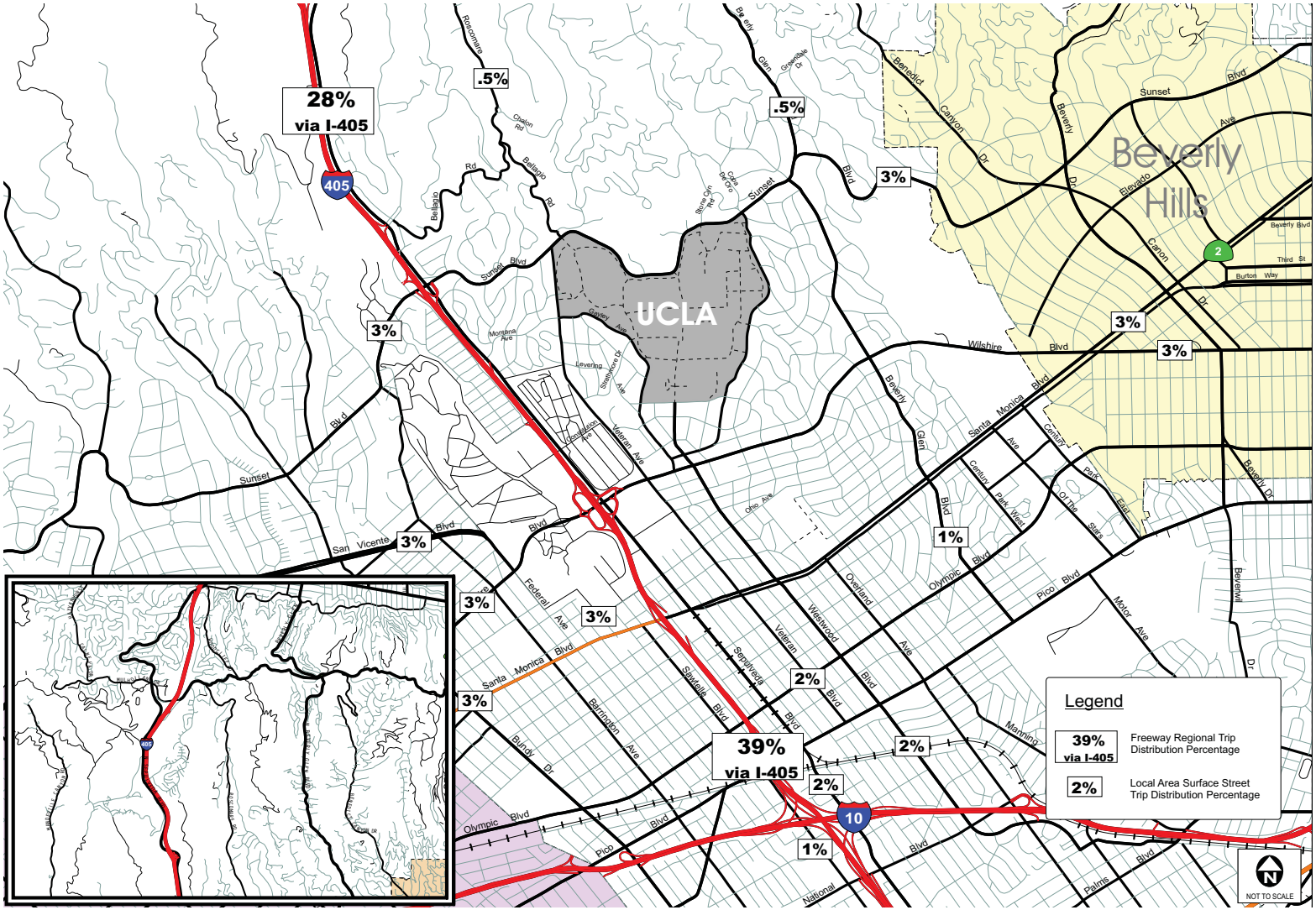
Trip Distribution and Assignment

The distribution and assignment of trips related to the proposed Project was calculated based on origin and destination (O-D) data provided by UCLA Transportation from UCLA faculty, graduate students, professionals, staff, and undergraduate students. For the purposes of this analysis, the origin data from each user group was summed and categorized into traffic analysis zones (TAZ), according to the Los Angeles County Metro TAZ map. The total number of trips made to the UCLA campus from each TAZ was then mapped using a geographic information systems (GIS) program and used to calculate trip distribution percentages and trip assignment. Table 4.13-20 lists the trip distribution near the campus and Figure 4.13-5 illustrates the trip distribution onto the roadway network. Figures 15A, 15B, and 15C in the Traffic Study (included in Appendix I) show the turning movement traffic volumes from the 2002 LRDP Amendment.

TABLE 4.13-20
DIRECTION OF CAMPUS TRIPS

Direction	Percent of Total
Regional Area North (I-405 from the North)	28%
Regional Area South (I-405 from the South)	39%
Local Area North (surface streets)	1%
Local Area South (surface streets)	8%
Local Area East (surface streets)	9%
Local Area West (surface streets)	15%
Total	**100%**

Source: Iteris 2008.



Source: Iteris Inc. 2008

Project Trip Distribution

Figure 4.13-5

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

R:/projects/UCLA/J011/graphics/ex4.13-5_trip_dist_102208.pdf

D:/Projects/UCLA/J011/Graphics/ex_trip_dist_102208.ai

Since almost all potential new campus parking associated with the proposed Project (i.e., assumed buildout to the 25,169 parking cap) would likely be located in the Southwest zone of campus, all project-related trips were distributed to/from Lot 36 located on Kinross Avenue, between Veteran Avenue and Gayley Avenue. It should be noted that a total of 305 new parking spaces are located in the RRUCLAMC parking garage, between Gayley Avenue and Westwood Boulevard, south of Charles E. Young Drive South. These parking spaces are entirely valet-operated for visitors, with the exception of two spaces reserved for high-ranking permit holders. These parking spaces were built, but were not operational at the time the 2007 cordon counts were conducted. Although these parking spaces were not operational, trips traveling to/from the old Medical Center and Medical Plaza still occurred and were captured by the 2007 cordon count at other parking locations (e.g., Center for Health Sciences [CHS] South Parking Structure and Lot 1 Parking Structure). Even though a small number of trips destined for the RRUCLAMC would travel past Lot 36, these trips would not generate a significant impact at any study intersections between Lot 36 and the UCLA campus. Those intersections primarily include Gayley Avenue and Weyburn Avenue and Gayley Avenue and Le Conte Avenue, which both have a very small project-related V/C impact of 0.001 or less without the added RRUCLAMC trips. While a majority of the RRUCLAMC trips to/from the 305 spaces would be expected to use Gayley Avenue, a small number may use Westwood Boulevard. The intersections that would be utilized by those RRUCLAMC trips include several study intersections between Lindbrook Avenue and Le Conte Avenue along Westwood Boulevard. Similarly, none of those study intersections are expected to experience a project-related impact with or without the RRUCLAMC trips.

Future 2013 With Project (2008 NHIP and LRDP Amendment) Level of Service

By adding the project-only turning movement volumes to the Future Without Project turning movement volumes, Future With Project turning movement volumes (that would occur with full implementation of the proposed Project) were estimated. Figures 16A, 16B, and 16C presented in the Traffic Study illustrate the Future With Project AM and PM peak hour traffic volumes at the study intersections.

A Critical Movement Analysis (CMA) was conducted to identify the Future 2013 With Project LOS at the 58 study intersections and to identify impacts associated with the implementation of the proposed Project. The V/C ratios (for signalized intersections) and delay (for unsignalized intersections) and the corresponding LOS are shown in Table 4.13-21. Table 4.13-22 shows the V/C and corresponding LOS at unsignalized intersections that have been analyzed as two-phase signalized intersections with a capacity of 1,200 vehicles per hour, in accordance with LADOT guidelines.

TABLE 4.13-21
FUTURE 2013 WITH PROJECT PEAK HOUR LEVEL OF SERVICE SUMMARY

Study Intersection	Future Without Project				Future With Project				AM Peak Hour		PM Peak Hour	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	Δ in V/C or Del/Veh	Sig Impact Yes/No	Δ in V/C or Del/Veh	Sig Impact Yes/No
1 Church Ln-Ovada Pl/Sepulveda Blvd[a]	C	0.770	C	0.759	C	0.770	C	0.759	0.000	NO	0.000	NO
2. I-405 S/B On-/Off-ramps and Church Ln[a]	C	0.749	B	0.643	C	0.749	B	0.643	0.000	NO	0.000	NO
3. Sunset Blvd and Church Ln[a]	D	0.837	C	0.780	D	0.838	C	0.784	0.001	NO	0.004	NO
4. Sunset Blvd and I-405 N/B On-/Off-ramps[a]	E	0.929	A	0.366	E	0.933	A	0.368	0.004	NO	0.002	NO
5. Sunset Blvd and Veteran Ave[a]	E	0.907	D	0.836	E	0.914	D	0.847	0.007	NO	0.011	NO
6. Sunset Blvd and Bellagio Way[a]	D	0.867	E	0.956	D	0.868	E	0.958	0.001	NO	0.002	NO
7. Sunset Blvd and Westwood Blvd[a]	A	0.576	A	0.493	A	0.576	A	0.493	0.000	NO	0.000	NO
8. Sunset Blvd and Stone Canyon Rd[a]	A	0.496	C	0.724	A	0.499	C	0.726	0.003	NO	0.002	NO
9. Sunset Blvd and Hilgard Ave/Copa De Oro Rd[a]	E	0.945	D	0.846	E	0.951	D	0.852	0.006	NO	0.006	NO
10. Sunset Blvd and Beverly Glen Blvd[a]	E	0.933	F	1.071	E	0.936	F	1.076	0.003	NO	0.005	NO
11. Sunset Blvd (East I/S) and Beverly Glen Blvd[a]	F	1.203	F	1.212	F	1.209	F	1.216	0.006	NO	0.004	NO
12. I-405 N/B Off-ramp and Sepulveda Blvd[a]	A	0.500	A	0.560	A	0.500	A	0.560	0.000	NO	0.000	NO
13. Montana Ave and Sepulveda Blvd[a]	C	0.725	C	0.706	C	0.725	C	0.706	0.000	NO	0.000	NO
14. Montana Ave and Levering Ave (unsignalized)	D	27.0	F	96.7	D	27.0	F	96.7	0.0	N/A	0.0	N/A
15. Montana Ave/Gayley Ave and Veteran Ave[a]	D	0.818	E	0.956	D	0.827	E	0.968	0.009	NO	0.012	**YES**
16. Strathmore Pl and Gayley Ave[a]	B	0.624	A	0.586	B	0.624	A	0.591	0.000	NO	0.005	NO
17. Levering Ave and Veteran Ave[a]	A	0.546	C	0.720	A	0.551	C	0.725	0.005	NO	0.005	NO
18. Wyton Dr and Hilgard Ave[a]	A	0.396	A	0.415	A	0.399	A	0.418	0.003	NO	0.003	NO
19. Wyton Dr/Comstock Ave and Beverly Glen Blvd[a]	A	0.375	B	0.644	A	0.377	B	0.646	0.002	NO	0.002	NO
20. Westholme Ave and Hilgard Ave[a]	A	0.472	A	0.415	A	0.474	A	0.416	0.002	NO	0.001	NO
21. Manning Ave and Hilgard Ave[a]	A	0.245	A	0.261	A	0.246	A	0.262	0.001	NO	0.001	NO
22. Le Conte Ave and Gayley Ave[a]	A	0.487	A	0.581	A	0.488	A	0.582	0.001	NO	0.001	NO
23. Le Conte Ave and Westwood Blvd[a, b]	B	0.672	E	0.976	B	0.675	E	0.977	0.003	NO	0.001	NO
24. Le Conte Ave and Tiverton Dr[a]	A	0.319	A	0.415	A	0.321	A	0.419	0.002	NO	0.004	NO
25. Le Conte Ave and Hilgard Ave[a]	A	0.528	A	0.535	A	0.529	A	0.540	0.001	NO	0.005	NO
26. Weyburn Ave and Gayley Ave[a]	A	0.570	B	0.697	A	0.571	B	0.692	0.001	NO	-0.005	NO
27. Weyburn Ave and Westwood Blvd[a]	B	0.674	F	1.247	B	0.677	F	1.249	0.003	NO	0.002	NO

TABLE 4.13-21 (Continued)
FUTURE 2013 WITH PROJECT PEAK HOUR LEVEL OF SERVICE SUMMARY

Study Intersection	Future Without Project				Future With Project				AM Peak Hour		PM Peak Hour	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	Δ in V/C or Del/Veh	Sig Impact Yes/No	Δ in V/C or Del/Veh	Sig Impact Yes/No
28. Weyburn Ave and Tiverton Dr (unsignalized)	A	9.2	C	24.2	A	9.2	C	24.8	0.0	N/A	0.6	N/A
29. Weyburn Ave and Hilgard Ave[a]	A	0.395	B	0.633	A	0.396	B	0.635	0.001	NO	0.002	NO
30. Kinross Ave and Westwood Blvd[a]	E	0.971	F	1.236	E	0.971	F	1.243	0.000	NO	0.007	NO
31. Lindbrook Dr and Westwood Blvd[a]	B	0.612	B	0.666	B	0.619	B	0.670	0.007	NO	0.004	NO
32. Lindbrook Dr and Tiverton Ave	B	0.648	B	0.606	B	0.648	B	0.608	0.000	NO	0.002	NO
33. Constitution Ave and Sepulveda Blvd[a]	A	0.470	C	0.711	A	0.470	C	0.711	0.000	NO	0.000	NO
34. Wilshire Blvd and San Vicente Blvd[a]	E	0.968	D	0.861	E	0.973	D	0.865	0.005	NO	0.004	NO
35. Wilshire Blvd and Sepulveda Blvd[a]	F	1.473	F	1.287	F	1.537	F	1.326	0.064	**YES**	0.039	**YES**
36. Wilshire Blvd and Veteran Ave[a]	F	1.223	F	1.730	F	1.259	F	1.848	0.036	**YES**	0.118	**YES**
37. Wilshire Blvd and Gayley Ave[a]	E	0.984	F	1.396	F	1.062	F	1.435	0.078	**YES**	0.039	**YES**
38. Wilshire Blvd and Westwood Blvd[a]	F	1.191	F	1.191	F	1.202	F	1.196	0.011	**YES**	0.005	NO
39. Wilshire Blvd and Glendon Ave[a]	E	0.953	E	0.931	E	0.959	E	0.938	0.006	NO	0.007	NO
40. Wilshire Blvd and Malcolm Ave (unsignalized)	F	OVRFL	F	OVRFL	F	OVRFL	F	OVRFL	OVRFL	N/A	OVRFL	N/A
41. Wilshire Blvd and Westholme Ave[a]	C	0.779	C	0.783	C	0.785	C	0.790	0.006	NO	0.007	NO
42. Wilshire Blvd and Warner Ave[a]	C	0.709	B	0.607	C	0.715	B	0.615	0.006	NO	0.008	NO
43. Wilshire Blvd and Beverly Glen Blvd[a]	E	0.905	D	0.812	E	0.915	D	0.818	0.010	**YES**	0.006	NO
44. Ohio Ave and Sawtelle Blvd[a]	E	0.950	D	0.832	E	0.961	D	0.840	0.011	**YES**	0.008	NO
45, Ohio Ave and Sepulveda Blvd[a]	C	0.785	D	0.825	C	0.794	D	0.838	0.009	NO	0.013	NO
46. Ohio Ave and Veteran Ave[a]	C	0.753	D	0.808	C	0.767	D	0.825	0.014	NO	0.017	NO
47. Ohio Ave and Westwood Blvd[a]	C	0.726	C	0.764	C	0.735	C	0.769	0.009	NO	0.005	NO
48. Santa Monica Blvd and Sawtelle Blvd[a]	F	1.362	F	1.508	F	1.366	F	1.511	0.004	NO	0.003	NO
49. Santa Monica Blvd and I-405 (S/B)	F	1.222	F	1.123	F	1.222	F	1.124	0.000	NO	0.001	NO
50. Santa Monica Blvd and I-405 (N/B)	F	1.029	F	1.140	F	1.030	F	1.140	0.001	NO	0.000	NO
51. Santa Monica Blvd and Sepulveda Blvd[a]	F	1.279	F	1.366	F	1.284	F	1.371	0.005	NO	0.005	NO
52. Santa Monica Blvd and Veteran Ave[a]	C	0.714	E	0.964	C	0.724	E	0.979	0.010	NO	0.015	**YES**
53. Santa Monica Blvd and Westwood Blvd[a]	F	1.118	F	1.043	F	1.121	F	1.048	0.003	NO	0.005	NO
54. Roscomare Rd and Mulholland Dr[a]	C	0.769	B	0.676	C	0.769	B	0.677	0.000	NO	0.001	NO
55. Roscomare Rd and Stradella Rd/Linda Flora Dr (unsignalized)	B	14.0	B	11.1	B	14.1	B	11.2	0.1	N/A	0.1	N/A

TABLE 4.13-21 (Continued)
FUTURE 2013 WITH PROJECT PEAK HOUR LEVEL OF SERVICE SUMMARY

Study Intersection	Future Without Project				Future With Project				AM Peak Hour		PM Peak Hour	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	Δ in V/C or Del/Veh	Sig Impact Yes/No	Δ in V/C or Del/Veh	Sig Impact Yes/No
56. Chalon Rd and Bellagio Rd (unsignalized)	B	13.1	C	15.3	B	13.1	C	15.4	0.0	N/A	0.1	N/A
57. Beverly Glen Blvd and Mulholland Dr	F	1.019	F	1.082	F	1.020	F	1.083	0.001	NO	0.001	NO
58. Beverly Glen Blvd and Greendale Dr	D	0.884	F	1.075	D	0.885	F	1.076	0.001	NO	0.001	NO

Δ – Change; I/S – Intersection; S/B – Southbound; N/B – Northbound; OVRFL (Overflow) – Indicates oversaturated congestion, typically on one approach of the intersection, where calculation of vehicle delay is not feasible due to inability of the methodology to calculate extreme or infinite delays.

Bold-faced text identifies significant impacts.

[a] 7% ATSAC and 3% ATCS reduction applied to final V/C.

[b] V/C calculation includes a 33% capacity reduction to the intersection to account for delay caused by the pedestrian scramble crosswalk.

Source: Iteris 2008.

TABLE 4.13-22
FUTURE 2013 WITH PROJECT PEAK HOUR LEVEL OF SERVICE SUMMARY (UNSIGNALIZED ANALYZED AS 2-PHASE SIGNALIZED INTERSECTION)

Study Intersection	Future Without Project				Future With Project				AM Peak Hour		PM Peak Hour	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	Δ in V/C or Del/Veh	Sig Impact Yes/No	Δ in V/C or Del/Veh	Sig Impact Yes/No
14. Montana Ave/Levering Ave	F	1.031	B	0.694	F	1.031	B	0.694	0.000	NO	0.000	NO
28. Weyburn Ave/Tiverton Dr	A	0.365	C	0.703	A	0.366	C	0.707	0.001	NO	0.004	NO
40. Wilshire Blvd/Malcolm Ave	D	0.883	D	0.828	D	0.891	D	0.837	0.008	NO	0.009	NO
55. Roscomare Rd and Stradella Rd/Linda Flora Dr	A	0.544	A	0.491	A	0.546	A	0.492	0.002	NO	0.001	NO
56. Chalon Rd/Bellagio Rd	A	0.540	A	0.546	A	0.542	A	0.547	0.002	NO	0.001	NO

Note: Unsignalized intersections were analyzed with CMA as 2-phased signalized intersections with a capacity of 1,200.

Source: Iteris 2008.

Intersection Impacts

The results of this analysis indicate that 28 of the 58 study intersections are projected to operate at LOS E or F under the Future 2013 With Project scenario during the AM peak hour, PM peak hour, or both. These are the same intersections that operate at LOS E or F under the Future 2013 Without Project scenario (previously listed). Using the LADOT significant impact threshold criteria, the proposed Project would result in significant impacts at the following eight study intersections listed below.

15. Montana Avenue/Gayley Avenue and Veteran Avenue – PM Peak Hour
35. Wilshire Boulevard and Sepulveda Boulevard – AM and PM Peak Hours
36. Wilshire Boulevard and Veteran Avenue – AM and PM Peak Hours
37. Wilshire Boulevard and Gayley Avenue – AM and PM Peak Hours
38. Wilshire Boulevard and Westwood Boulevard – AM Peak Hour
43. Wilshire Boulevard and Beverly Glen Boulevard – AM Peak Hour
44. Ohio Avenue and Sawtelle Boulevard – AM Peak Hour
52. Santa Monica Boulevard (North) and Veteran Avenue – PM Peak Hour

To determine the feasibility of mitigating impacts at these intersections, the following potential mitigation measures have been considered.

- ***Intersection No. 15 – Montana Avenue/Gayley Avenue and Veteran Avenue.*** Physical modification of the intersection could be used to mitigate potential impacts. As identified in conjunction with the environmental review of previous UCLA projects, one potential option for a physical improvement is to widen Gayley Avenue, east of Veteran Avenue, to create a dedicated right-turn lane for westbound vehicles turning north onto Veteran Avenue. However, this measure has been rejected previously as infeasible due to the presence of a major utility vault that accommodates multiple utility lines serving both campus and off-campus facilities, which would have to be relocated. Assuming another location for the vault could be found, construction to move the vault and utility lines would be cost prohibitive and disruptive. Therefore, the University considers this measure infeasible. No other feasible mitigation measures have been identified to mitigate the potentially significant impact at this location.

- ***Intersection No. 35 – Wilshire Boulevard and Sepulveda Boulevard.*** Physical modification of the intersection to improve capacity could be used to mitigate potential impacts. However, this intersection is fully improved within the existing right-of-way and therefore, re-striping is not possible. Widening is not possible because the roadways under the I-405 underpasses (including the on- and off-ramps) are at or near capacity. No other feasible mitigation options have been identified for this intersection.

- ***Intersection No. 36 – Wilshire Boulevard and Veteran Avenue.*** In conjunction with its approval of the Southwest Campus Housing and Parking project, The Regents adopted a mitigation measure (SWH C-6.2) to fund ATCS installation at Wilshire Boulevard and Veteran Avenue. Mitigation measure SWH C-6.2 also included widening the east side of Veteran Avenue (on University property) and re-striping Veteran Avenue to create dual right-turn only lanes in the southbound direction for cars turning onto westbound Wilshire Boulevard. These physical improvements to this intersection were completed in 2005. Because of the proximity of adjacent land uses to the roadway (including the Los Angeles National Cemetery [which is surrounded by a concrete and metal fence], the West Los Angeles Federal Building [which is surrounded by concrete bollards], and a

private office building) and the presence of street trees along Wilshire Boulevard and Veteran Avenue, additional widening of Wilshire Boulevard (east and west of the intersection) or Veteran Avenue (south of Wilshire Boulevard, or on the west side of the roadway, north of Wilshire Boulevard) is not considered feasible. Additional widening of Veteran Avenue on the east side, north of Wilshire Boulevard (on University property) may be possible. However, this would result in an additional offset of the north and south legs of the intersection, requiring vehicles to veer when crossing the intersection, which could pose a traffic hazard. No other feasible mitigation measures have been identified for this intersection.

- ***Intersection No. 37 – Wilshire Boulevard and Gayley Avenue.*** Physical modification of the intersection to improve capacity could be used to mitigate potential impacts. However, this intersection is fully improved within the existing right-of-way and therefore re-striping is not possible. Widening would require acquisition of land by the City of Los Angeles and, due to proximity of office or retail uses adjacent to the roadways, it is not feasible. No other feasible mitigation options have been identified for this intersection.

- ***Intersection No. 38 – Wilshire Boulevard and Westwood Boulevard.*** Physical modification of the intersection to improve capacity could be used to mitigate potential impacts. However, this intersection is fully improved within the existing right-of-way and therefore, re-striping is not possible. Widening would require acquisition of land by the City of Los Angeles and, due to proximity of office or retail uses adjacent to the roadways, it is not feasible. No other feasible mitigation options have been identified for this intersection.

- ***Intersection No. 43 – Wilshire Boulevard and Beverly Glen Boulevard.*** Physical modification of the intersection to improve capacity could be used to mitigate potential impacts. However, this intersection is fully improved within the existing right-of-way and therefore, re-striping is not possible. Widening would require acquisition of land by the City of Los Angeles and, due to longstanding community opposition to any such proposed widening, this improvement is not considered feasible. No other feasible mitigation options have been identified for this intersection.

- ***Intersection No. 44 – Ohio Avenue and Sawtelle Boulevard.*** Physical modification of the intersection to improve capacity could be used to mitigate potential impacts. However, this intersection is fully improved within the existing right-of-way and therefore, re-striping is not possible. Widening would require acquisition of land by the City of Los Angeles and, due to the proximity of adjacent land uses to the roadway (including the Veterans Administration), it is not feasible. No other feasible mitigation options have been identified for this intersection.

- ***Intersection No. 52 – Santa Monica Boulevard (North) and Veteran Avenue.*** Physical modification of the intersection to improve capacity could be used to mitigate potential impacts. However, this intersection has been fully improved within the existing right-of-way after the completion of the Santa Monica Boulevard Transitway project. No other feasible mitigation options have been identified for this intersection.

Beyond physical modifications to improve intersection capacity, the campus has considered operational measures to further reduce parking demand and associated trip generation through more aggressive implementation of TDM programs. As noted above, since the inception of the TDM program, the components of the program have varied, as the University has investigated various alternative modes and incentives. The University will continue to search for strategies to

reduce parking demand and trip generation that are both cost-effective and attractive to faculty, staff, and students. PP 4.13-1(d) commits the campus to continue implementation of appropriate TDM strategies in order to meet the trip reduction and SCAQMD-established AVR targets. However, given the already notable success of the campus TDM programs to date, it is unlikely that more substantial expansion in TDM participation or substantial reductions in parking demand could be achieved in the 2013 planning horizon to reduce trip-generation impacts at these intersections. Although it is acknowledged that technological advancements, changes in commuting patterns, increases in commuting costs, or other factors could affect future participation in TDM programs, in the absence of such changes in external conditions, substantial expansion of the components of the TDM program is not considered feasible.

Therefore, because physical modifications to impacted intersections or substantial expansion of TDM programs to reduce parking demand are not feasible, as described above, substantial additional reductions in vehicle trips are not feasible, and implementation of the proposed Project would result in significant and unavoidable impacts at these eight intersections. However, as noted previously under Impact 4.13-1a, the proposed 2008 NHIP by itself would not result in any intersection impacts.

Analysis of Future 2013 Freeway Conditions

To calculate the Future 2013 With Project freeway levels of service, project trips were added to the Future 2013 Without Project freeway volumes and the levels of service were calculated. The future daily 2013 freeway segment volumes, with and without the proposed Project are provided in Table 4.13-23, and the future 2013 peak hour volumes are provided in Tables 4.13-24 and 4.13-25.

TABLE 4.13-23
FUTURE 2013 DAILY FREEWAY SEGMENT VOLUMES

Freeway Segment	Direction	No. of Lanes	Freeway Capacity (veh/hr)	Future Without Project		Future With Project		
				2007 Daily Segment Volume	2013 Daily Segment Volume	2013 Daily Segment Volume	Project Added Daily Trips	2013 Daily Segment Volume With Project
1. I-405 South of I-10	N/B	5	10,000	280,000	296,800	296,800	1,408	298,208
	S/B	5	10,000					
2. I-405 between I-10 and Santa Monica Blvd	N/B	5	10,000	296,500	314,290	314,290	2,496	316,786
	S/B	5	10,000					
3. I-405 between Wilshire Blvd and Santa Monica Blvd	N/B	6	12,000	291,000	308,460	308,460	2,496	310,956
	S/B	6	12,000					
4. I-405 between Sunset Blvd and Wilshire Blvd	N/B	5	10,000	271,500	287,790	287,790	1,792	289,582
	S/B	5	10,000					
5. I-405 north of Sunset Blvd	N/B	5	10,000	275,000	291,500	291,500	1,792	293,292
	S/B	4	8,000					
6. I-10 between Bundy Dr and I-405	E/B	5	10,000	245,000	259,700	259,700	128	259,828
	W/B	5	10,000					
7. I-10 between Overland Ave and National Blvd	E/B	5	10,000	261,000	276,660	276,660	960	277,620
	W/B	4	8,000					

N/B – Northbound; S/B – Southbound; E/B – Eastbound; W/B – Westbound.

Note: To provide a conservative analysis, northbound I-405 between I-10 and US-101 is assumed in these calculations to not include a HOV lane.

Source: Iteris 2008.

TABLE 4.13-24
FUTURE 2013 AM PEAK HOUR FREEWAY SEGMENT VOLUMES

Freeway Segment	Direction	No. of Lanes	Freeway Capacity	Future Without Project						Future With Project					Δ in D/C
				2007 Peak Segment Volume	2013 Peak Segment Volume	Distribution Split	2013 Peak Hour Volume	LOS	D/C	2013 Peak Hour Volume	Pk Hr Project Added Trips	2013 Pk Hr Vol With Project	LOS	D/C	
1. I-405 South of I-10	N/B	5	10,000	17,800	18,868	60%	11,321	F(0)	1.132	11,321	79	11,400	F(0)	1.140	0.008
	S/B	5	10,000	17,800	18,868	40%	7,547	C	0.755	7,547	20	7,567	C	0.757	0.002
2. I-405 between I-10 and Santa Monica Blvd	N/B	5	10,000	20,550	21,783	60%	13,070	F(1)	1.307	13,070	140	13,210	F(1)	1.321	0.014
	S/B	5	10,000	20,550	21,783	40%	8,713	D	0.871	8,713	35	8,748	D	0.875	0.003
3. I-405 between Wilshire Blvd and Santa Monica Blvd	N/B	6	12,000	20,300	21,518	60%	12,911	F(0)	1.076	12,911	140	13,051	F(0)	1.088	0.012
	S/B	6	12,000	20,300	21,518	40%	8,607	C	0.717	8,607	35	8,642	C	0.720	0.003
4. I-405 between Sunset Blvd and Wilshire Blvd	N/B	5	10,000	18,950	20,087	60%	12,052	F(0)	1.205	12,052	25	12,077	F(0)	1.208	0.002
	S/B	5	10,000	18,950	20,087	40%	8,035	D	0.803	8,035	100	8,135	D	0.813	0.010
5. I-405 north of Sunset Blvd	N/B	5	10,000	17,000	18,020	42%	7,568	C	0.757	7,568	25	7,593	C	0.759	0.003
	S/B	4	8,000	17,000	18,020	58%	10,452	F(1)	1.306	10,452	100	10,552	F(1)	1.319	0.013
6. I-10 between Bundy Dr and I-405	E/B	5	10,000	17,800	18,868	58%	10,943	F(0)	1.094	10,943	2	10,945	F(0)	1.095	0.000
	W/B	5	10,000	17,800	18,868	42%	7,925	D	0.792	7,925	7	7,932	D	0.793	0.001
7. I-10 between Overland Ave and National Blvd	E/B	5	10,000	17,400	18,444	60%	11,066	F(0)	1.107	11,066	54	11,120	F(0)	1.112	0.005
	W/B	4	8,000	17,400	18,444	40%	7,378	D	0.922	7,378	13	7,391	D	0.924	0.002

Δ – Change; N/B – Northbound; S/B – Southbound; E/B – Eastbound; W/B – Westbound; D/C – Demand to capacity.

Note: To provide the a conservative analysis, northbound I-405 between I-10 and US-101 is assumed in these calculations to not include a HOV lane.

Source: Iteris 2008.

TABLE 4.13-25
FUTURE 2013 PM PEAK HOUR FREEWAY SEGMENT VOLUMES

Freeway Segment	Direction	No. of Lanes	Freeway Capacity	Future Without Project						Future With Project					Δ in D/C
				2007 Peak Segment Volume	2013 Peak Segment Volume	Distribution Split	2013 Peak Hour Volume	LOS	D/C	2013 Peak Hour Volume	Pk Hr Project Added Trips	2013 Pk Hr Vol With Project	LOS	D/C	
1. I-405 south of I-10	N/B	5	10,000	17,800	18,868	52%	9,811	E	0.981	9,811	39	9,850	E	0.985	0.004
	S/B	5	10,000	17,800	18,868	48%	9,057	D	0.906	9,057	91	9,148	D	0.915	0.009
2. I-405 between I-10 and Santa Monica Blvd	N/B	5	10,000	20,550	21,783	52%	11,327	F(0)	1.133	11,327	69	11,396	F(0)	1.140	0.007
	S/B	5	10,000	20,550	21,783	48%	10,456	F(0)	1.046	10,456	161	10,617	F(0)	1.062	0.016
3. I-405 between Wilshire Blvd and Santa Monica Blvd	N/B	6	12,000	20,300	21,518	52%	11,189	E	0.932	11,189	69	11,258	E	0.938	0.006
	S/B	6	12,000	20,300	21,518	48%	10,329	D	0.861	10,329	161	10,490	D	0.874	0.013
4. I-405 between Sunset Blvd and Wilshire Blvd	N/B	5	10,000	18,950	20,087	52%	10,445	F(0)	1.045	10,445	116	10,561	F(0)	1.056	0.012
	S/B	5	10,000	18,950	20,087	48%	9,642	E	0.964	9,642	50	9,692	E	0.969	0.005
5. I-405 north of Sunset Blvd	N/B	5	10,000	17,000	18,020	64%	11,533	F(0)	1.153	11,533	116	11,649	F(0)	1.165	0.012
	S/B	4	8,000	17,000	18,020	36%	6,487	D	0.811	6,487	50	6,537	D	0.817	0.006
6. I-10 between Bundy Dr and I-405	E/B	5	10,000	17,800	18,868	48%	9,057	D	0.906	9,057	8	9,065	D	0.906	0.001
	W/B	5	10,000	17,800	18,868	52%	9,811	E	0.981	9,811	4	9,815	E	0.982	0.000
7. I-10 between Overland Ave and National Blvd	E/B	5	10,000	17,400	18,444	62%	11,435	F(0)	1.144	11,435	27	11,462	F(0)	1.146	0.003
	W/B	4	8,000	17,400	18,444	38%	7,009	D	0.876	7,009	62	7,071	D	0.884	0.008

Δ – Change; N/B – Northbound; S/B – Southbound; E/B – Eastbound; W/B – Westbound; D/C – Demand to capacity.

Note: To provide a conservative analysis, northbound I-405 between I-10 and US-101 is assumed in these calculations to not include a HOV lane.

Source: Iteris 2008.

As shown in Tables 4.13-24 and 4.13-25, all study segments on the I-405 and the I-10 are projected to operate at or above design capacity during at least one of the peak hours under Future 2013 conditions, both with and without the proposed Project; this would result in severe congestion and travel speeds of less than 25 miles per hour. The freeway segments that are projected to operate at LOS E or F during the AM peak hour, PM peak hour, or both are listed below.

1. I-405 south of I-10
    - AM Peak Hour, Northbound – LOS F(0)
    - PM Peak Hour, Northbound – LOS E

2. I-405 between I-10)and Santa Monica Boulevard
    - AM Peak Hour, Northbound – LOS F(1)
    - PM Peak Hour
        - Northbound – LOS F(0)
        - Southbound – LOS F(0)

3. I-405 between Wilshire Boulevard and Santa Monica Boulevard
    - AM Peak Hour, Northbound – LOS F(0)
    - PM Peak Hour, Northbound – LOS E

4. I-405 between Sunset Boulevard and Wilshire Boulevard
    - AM Peak Hour, Northbound – LOS F(0)
    - PM Peak Hour
        - Northbound – LOS F(0)
        - Southbound – LOS E

5. I-405 north of Sunset Boulevard
    - AM Peak Hour, Southbound – LOS F(1)
    - PM Peak Hour, Northbound – LOS F(0)

6. I-10 between Bundy Drive and I-405
    - AM Peak Hour, Eastbound – LOS F(0)
    - PM Peak Hour, Westbound – LOS E

7. I-10 between Overland Avenue and National Boulevard
    - AM Peak Hour, Eastbound – LOS F(0)
    - PM Peak Hour, Eastbound – LOS F(0)

The CMP defines regional project impacts as significant if the D/C ratio increases by 0.020 or more and the final (with Project) LOS is F. According to Tables 4.13-24 and 4.13-25, all the analyzed freeway segments would be operating at LOS E or F in one or both of the peak hours. However, neither the I-405 nor the I-10 would experience a project-related increase in traffic demand by two percent; thus, less than significant impacts would occur as a result of future development under buildout of the proposed Project. No mitigation is necessary.

Freeway Ramp Queuing

In its comment letter on the Notice of Preparation, Caltrans requested that freeway off-ramp queuing[2] at local intersections be addressed. With respect to accessing the freeway system, nearly all freeway-oriented traffic generated by the proposed Project would use the Wilshire Boulevard ramps at I-405 based on the anticipated location of future parking facilities. Other freeway ramps may receive traffic as a result of the proposed Project; however, not a substantial amount. The ramps at I-405 and Wilshire Boulevard do not end in signalized intersections on Wilshire Boulevard. Rather the northbound off ramp traffic merges onto Wilshire Boulevard into an added lane, and southbound traffic connects to an undercrossing within the Veterans Administration property and then to Wilshire via a ramp/merge. Thus, the traffic flow from the freeway to the arterial street, in this case, is much different than at a typical ramp system where there is a signalized intersection at the end of the ramps.

Having a merge from the ramp onto an added lane on the arterial roadway (as opposed to the ramp terminating at a traffic signal) helps to limit the length of vehicle queues on the ramp since the off-ramp traffic can simply merge into the new added lane on the arterial facility (in this case Wilshire Boulevard) without stopping at a signal. However, because there is an extremely high volume of traffic on the freeway and on Wilshire Boulevard at this location, and due to weaving maneuvers that occur on Wilshire Boulevard, vehicles queues do form on the northbound off-ramp. Those vehicle queues extend, during peak times, back to the freeway auxiliary lanes. A similar situation occurs during some peak hours for the southbound off ramp leading into the Veteran's Administration property, and ultimately to Wilshire Boulevard.

Queuing on freeway ramps that could potentially affect freeway mainline operations is not considered a significant impact under the established threshold of significance for both the proposed LRDP Amendment and the proposed 2008 NHIP. Moreover, the proposed 2008 NHIP would not contribute to off-ramp queuing. As discussed under Impact 4.13-1, the proposed 2008 NHIP would actually reduce trips on the Wilshire Boulevard/I-405 ramps and freeway mainline, thus there would be no project-related or cumulative impacts to either the ramps or freeway mainline due to the proposed 2008 NHIP project and no mitigation is required. No other specific project under the LRDP Amendment is proposed for approval at this time. Although a specific project's potential cumulative contribution to queuing would not necessarily result in a potentially significant impact, specific ramp or freeway impacts will be evaluated as part of project-specific environmental documentation for individual projects that could be proposed pursuant to the 2002 LRDP, as amended.

Mitigation Measures

- **Study Intersections** – there are no feasible mitigation measures available for the eight intersections significantly impacted by the proposed Project.

- **Freeways** – No mitigation is required.

Level of Significance After Mitigation

- **Study Intersections** – Impacts to the following intersection would remain Significant and Unavoidable:

[2] Off-ramp queuing is the condition where exiting vehicles stack up on the off-ramp and if the number of vehicles in the queue is great enough it could exceed the storage capacity of the ramp and potentially affect mainline freeway operations.

15. Montana Avenue/Gayley Avenue and Veteran Avenue – PM Peak Hour
35. Wilshire Boulevard and Sepulveda Boulevard – AM and PM Peak Hours
36. Wilshire Boulevard and Veteran Avenue – AM and PM Peak Hours
37. Wilshire Boulevard and Gayley Avenue – AM and PM Peak Hours
38. Wilshire Boulevard and Westwood Boulevard – AM Peak Hour
43. Wilshire Boulevard and Beverly Glen Boulevard – AM Peak Hour
44. Ohio Avenue and Sawtelle Boulevard – AM Peak Hour
52. Santa Monica Boulevard (North) and Veteran Avenue – PM Peak Hour

- **Freeways** – Less than Significant.

Impact 4.13-1b ***Even with continued compliance with PP 4.13-1(a) through 4.13-1(d), remaining buildout of the proposed Project would result in additional vehicular trips which would result in substantial degradation of intersection levels of service resulting in a significant impact. There is no feasible mitigation and this impact is significant and unavoidable.***

Impact to freeway mainline segments would be less than significant and no mitigation is required.

Construction-Related Traffic Impact Analysis

Proposed 2008 NHIP

Implementation of the proposed 2008 NHIP would involve the construction of 550,000 gross square feet (gsf) of undergraduate housing and associated facilities on three sites in the Northwest zone. Demolition, excavation, site grading, and construction activities would result in the generation of construction vehicle trips. The number of vehicle trips generated on a daily basis would vary, depending on the number of buildings that are being constructed at the same time and the type of construction activities occurring at the same time. The analysis of construction-related impacts presented in the EIR assumes that the peak construction period for truck traffic would be when deck slabs are poured for the proposed 2008 NHIP; during this time, there could be 75 trucks per day (generated 150 truck trips per day). Using the conservative assumption that all these trips would be generated by a tractor-trailer combination (for which each truck trip is equivalent to 2.5 vehicle trips) peak construction traffic of approximately 375 car equivalent trips could result. Because these trips would occur over a typical 8-hour construction day, approximately 47 trips would be generated during an average hour. With a typical construction day starting at 7:00 AM, approximately 47 equivalent trips would be generated during the AM peak hour during the period of heaviest construction activity. Construction would typically be completed each day prior to the PM peak hour; therefore, no PM peak hour impacts are anticipated.

As described in Section 3, Project Description, construction vehicles would access the sites via the I-405 freeway along routes that would include Wilshire Boulevard, Veteran Avenue, Weyburn Avenue, Gayley Avenue, Strathmore Place, Charles E. Young Drive West, and De Neve Drive. The generation of up to 47 equivalent trips during the AM peak hour could result in traffic delays along these routes, which could degrade intersection levels of service at some locations along the access routes. Although the addition of 47 trips during the AM peak hour may not degrade intersection levels of service sufficiently to exceed the identified significance criteria, because truck trips may not be spread out over the peak hour, and could at times occur

in a relatively short timeframe, the impact of construction traffic could be significant at some locations along the identified access route.

Continued implementation of 2002 LRDP Final EIR PP 4.13-2, which has been incorporated into the project, would require an assessment by UCLA of the construction schedules for major projects that could overlap and any adjustments made as necessary, and to the extent feasible, in order to reduce construction-related traffic congestion. Although this would reduce potential impacts associated with the proposed 2008 NHIP, because of existing traffic conditions along the expected haul routes, construction impacts could remain significant.

Beyond continued compliance with the identified programs, practices, and procedures identified above, no feasible mitigation measures have been identified to further reduce this potentially significant impact. Limiting construction activity (e.g., allowing construction to occur at only one or two sites simultaneously) or limiting the frequency of construction deliveries or export of construction debris (e.g., to several trips per hour) would substantially delay the construction schedule, as construction would occur over a much longer period. Delaying completion of the project would impede the campus's ability to make additional on-campus housing available; this would, in turn, defer the reduction in triple-occupancy rooms and the conversion of commuter students to residential students. Therefore, constraining construction activities or restricting the frequency of construction vehicle traffic is considered infeasible. No other feasible mitigation measures have been identified to reduce this impact. This impact would remain significant and unavoidable.

Remaining Buildout of the 2002 LRDP as Amended

Implementation of the 2002 LRDP, as amended, could result in the construction of up to 1.87 million gsf of additional development on campus during the planning horizon, including the proposed 2008 NHIP. Construction of buildings and facilities could involve demolition of existing structures and removal of construction debris; grading and/or excavation of the site (for building foundation or below grade levels) and associated export of earth materials; and delivery of construction materials and trips associated with construction workers. In general, construction of individual buildings during the planning horizon is not anticipated to result in substantial construction-related trip volumes, except for those facilities that could involve substantial excavation and export of earth materials, which could result in periods of heavy truck traffic that could negatively affect road segments and intersections in the project vicinity.

A number of projects are currently under construction on the campus, including the Spieker Aquatic Center, Engineering 1 Demolition, the Life Sciences Replacement Building, and the Police Department Replacement Building. Future construction projects that may be implemented with the proposed Project could overlap with current construction projects and create the potential for overall campus-related construction traffic. As existing projects are completed, the construction-related traffic impacts associated with those projects would cease; however, as new projects are approved and implemented, additional construction-related trips could result in impacts at individual intersections in proximity to construction sites or along the designated haul routes used for export or delivery of construction materials. Because of the constrained nature of access to and from the campus (due to the presence of residential streets, the Los Angeles National Cemetery, the Santa Monica Mountains, and Westwood Village) as a practical matter, two roadways, (Wilshire and Sunset Boulevards) provide the primary access route for construction vehicles. Because the proposed Project does not include specific projects (beyond the proposed 2008 NHIP), it would be speculative to identify which specific roadway segments or intersections could be affected by future construction projects. However, as a conservative assumption, it is assumed that the net effect of campus construction activities could result in localized traffic impacts in the vicinity of the campus, including the Wilshire and

Sunset Boulevard intersections that provide north/south access to the campus, including Veteran Avenue. This is a potentially significant impact.

Although coordination of major construction projects would minimize construction traffic impacts to the extent feasible, due to the uncertainty of construction schedules, material deliveries, and the potential for lane closures or other access restrictions, construction traffic impacts are expected to remain significant and unavoidable. No feasible mitigation is available.

Mitigation Measures

There are no feasible mitigation measures available for construction-related traffic impacts.

Level of Significance After Mitigation

Significant and Unavoidable.

Impact 4.13-2 ***Construction of the proposed Project would result in the generation of construction-related vehicle trips, which could impact traffic conditions along roadway segments and at individual intersections resulting in a potentially significant impact. There is no feasible mitigation; therefore, this impact is significant and unavoidable.***

Congestion Management Plan Analysis

Threshold	Would the project exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways?

Proposed 2008 NHIP

As identified under Threshold 4.13-1a, the overall trip generation would decrease slightly with implementation of the proposed 2008 NHIP, and no impacts to study intersections or freeway segments would result. Further, continued compliance with PP 4.13-1(a) and PP 4.13-1(b) would extend the 1990 limits on parking supply and total campus trip generation through 2013. Implementation of the proposed 2008 NHIP would also be consistent with PP 4.13-1(c) by providing on-campus housing that would reduce vehicle trips made by commuter students, and PP 4.13-1(d) commits the campus to continue implementation of appropriate TDM strategies in order to meet the trip reduction and SCAQMD-established AVR targets. No impacts to CMP facilities would result with implementation of the 2008 NHIP.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact.

Impact 4.13-3a ***Implementation of the proposed 2008 NHIP would not result in additional vehicular traffic volumes, and would not exceed established service levels on roadways designated by the Los***

Angeles Congestion Management Program. No impact would occur and no mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

This section describes the analysis of impacts on the CMP system from buildout of the remaining development allocation under the 2002 LRDP, as amended. The analysis has been conducted according to the guidelines set forth in the 2004 CMP for Los Angeles County. According to the CMP Traffic Impact Analysis (TIA) Guidelines developed by the MTA, a traffic impact analysis is required given the following conditions:

- CMP arterial monitoring intersections, including freeway on- or off-ramps, where the proposed project would add 50 or more trips during either the AM or PM weekday peak hours.

- CMP freeway monitoring locations where the proposed project would add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

CMP Intersection Analysis

Three of the proposed 58 study area intersections are part of the 164 CMP arterial monitoring locations. The three CMP intersections are listed below in Table 4.13-26.

TABLE 4.13-26
CMP ARTERIAL MONITORING STATIONS

CMP Int. No	Responsible Agency	CMP Route	Cross Street
62	Los Angeles City	Santa Monica Blvd	Westwood Blvd
86	Los Angeles City	Wilshire Blvd	Beverly Glen Blvd
88	Los Angeles City	Wilshire Blvd	Sepulveda Blvd
Source: Iteris 2008.			

After calculating the number of project-related trips assigned to the street network using the TRAFFIX model, it has been determined that the proposed Project would add 50 or more trips to one CMP arterial monitoring station: the intersection of Wilshire Boulevard and Sepulveda Boulevard. Specifically, the CMP arterial monitoring station located at this intersection would experience an increase of 337 AM project-related trips and 444 PM project-related trips during the weekday. This intersection is shown to experience a significant impact during the AM and PM peak hour and has been analyzed as part of the traffic impact study (refer to the analysis presented under Threshold 4.13-1b). Following is a summary of that analysis:

	Weekday									
	AM Peak Hour					PM Peak Hour				
	Future W/O Project		Future With Project		Δ in V/C	Future W/O Project		Future With Project		Δ in V/C
Intersection	LOS	V/C	LOS	V/C		LOS	V/C	LOS	V/C	
Wilshire Blvd/ Sepulveda Blvd	F	1.503	F	1.317	**0.064**	F	1.567	F	1.356	**0.039**

The other two CMP arterial monitoring stations located at Santa Monica Boulevard and Westwood Boulevard and Wilshire Boulevard and Beverly Glen Boulevard are not anticipated to accumulate more than 50 project-related trips during the weekday AM or PM peak period. The

intersection of Santa Monica Boulevard and Westwood Boulevard is projected to accumulate 15 AM peak hour project-related trips and 21 PM peak hour project-related trips, and the intersection of Wilshire Boulevard and Beverly Glen Boulevard is projected to accumulate 35 AM peak hour project-related trips and 46 PM project-related trips. Although the proposed Project would not add 50 trips to the Wilshire Boulevard and Beverly Glen Boulevard intersection, it should be noted that, as discussed previously, the proposed Project would have a significant impact at this intersection.

Because the proposed Project would significantly impact CMP intersections (i.e., Wilshire Boulevard/Sepulveda Boulevard and Wilshire Boulevard/Beverly Glen Boulevard), this impact is significant under this threshold. As discussed under Threshold 4.13-1(b), there is no feasible mitigation for the impact at this intersection; therefore, this impact is significant and unavoidable.

CMP Mainline Freeway Segment Analysis

The focus of this analysis is to determine whether trips associated with buildout of the 2002 LRDP, as amended, would significantly impact the freeway system according to CMP guidelines and thresholds of significance. According to the guidelines, if the proposed Project fails to add 150 or more trips in either direction during the AM or PM weekday peak period, no further traffic analysis is required. To calculate the number of project-related trips added to I-405 and I-10, the total number of trips generated during the AM and PM peak periods were calculated and distributed across the network in accordance with the trip distribution rates.

As shown in Table 4.13-25, the project is expected to add 161 southbound trips during the PM peak hour on I-405 between Wilshire Boulevard and I-10. The closest CMP monitoring station to the north is I-405, south of Mulholland Drive. At this location, project-related trips are expected to be less than 150 (25 northbound and 100 southbound during the AM peak hour, and 116 northbound and 50 southbound during the PM peak hour) since most inbound and outbound project traffic will utilize the I-405 ramps at Wilshire Boulevard to get to and from Parking Lot 36 at UCLA. The closest CMP monitoring station to the south is I-405 north of Venice Boulevard. Since the 161 southbound project-related trips between Wilshire Boulevard and I-10 would be distributed east and west on I-10 and since they are in addition to I-405 trips, the CMP monitoring station at I-405 north of Venice Boulevard is also expected to have less than 150 project-related trips (79 northbound and 20 southbound during the AM peak hour, and 39 northbound and 91 southbound during the PM peak hour). All other CMP freeway monitoring stations near the campus are expected to experience less than 150 project-related trips in either direction during the AM and PM peak hours; thus, no further CMP mainline freeway segment analysis is required. The proposed Project would have a less than significant impact to CMP freeway facilities under this threshold and no mitigation is required.

Mitigation Measures

- **Intersections** – there are no feasible mitigation measures available for the significantly impacted CMP facilities (Wilshire Boulevard/Sepulveda Boulevard and Wilshire Boulevard/Beverly Glen Boulevard).

- **Freeways** – No mitigation is required.

Level of Significance After Mitigation

- **Intersections** – Significant and Unavoidable.

- **Freeways** – Less than Significant.

Impact 4.13-3b ***Buildout of the proposed Project would exceed established service levels on roadways designated by the Los Angeles Congestion Management Program. This impact is significant and unavoidable. Impacts to CMP freeway facilities are less than significant.***

Analysis of Traffic Hazards Due To Design Features

Threshold	Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The impact categories addressed under this threshold include:

- **Impact 4.13-4** – Vehicular hazards during operation (long-term)
- **Impact 4.13-5** – Vehicular hazards during construction (short-term)
- **Impact 4.13-6** – Pedestrian hazards during construction (short-term)

Vehicular Hazards During Operation

Proposed 2008 NHIP

Vehicular circulation improvements associated with the proposed 2008 NHIP would include expanding an existing driveway for Housing Maintenance service vehicles into the Sproul Complex from De Neve Drive and widening the existing loading dock off De Neve Drive from two bays to three. For the new Upper De Neve building, a vehicular drop-off with two to three short-term parking spaces would be provided adjacent to De Neve Drive. These on-campus modifications would be engineered and designed to provide adequate access for vehicles and to ensure pedestrian safety.

Lower De Neve would develop two driveways on the northern side of Gayley Avenue for service vehicle and emergency access only. These driveways would require two new curb cuts on Gayley Avenue. Gayley Avenue accommodates high levels of traffic volumes during peak hour periods. It is anticipated that the proposed new driveways would be used primarily for emergency access and service access for building maintenance and refuse removal, which would occur sporadically with limited vehicular activity. Vehicular activity anticipated at these locations is similar to activity that currently occurs for off-campus buildings across Gayley Avenue. The driveways would be engineered and designed in accordance with requirements of LADOT and would require LADOT permits. Therefore, the proposed 2008 NHIP would not substantially increase hazards due to design features or incompatible uses. This impact would be less than significant, and no project-specific mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Buildout of the remaining development allocation under 2002 LRDP, as amended, would result in an increase in student enrollment, the employment of additional faculty and staff, and an increase in visitors to campus. As future projects are implemented, new buildings and parking facilities would be constructed, subject to the limitations on available building space and the parking cap. It is anticipated that the development of new buildings and parking facilities would not result in the need for any new roadway segments (except to provide access to parking

facilities) or any substantive changes in existing roadway configurations. As individual projects are proposed and implemented, design development would include the use of standard engineering practices (e.g., use of standard road and driveway widths, provision of adequate sight lines, and avoidance of sharp turning radii) to avoid design elements that could result in hazards due to features such as sharp curves or dangerous intersections.

With the proposed Project, the campus would maintain the eight existing land use zones (described in Section 4.8, Land Use and Planning) and would continue to develop uses in each of the zones that are compatible with the existing uses. A key planning objective in the 2002 LRDP states that all new building projects are sited in established land use zones to ensure compatibility with existing uses to the extent feasible. Thus, traffic hazards related to land use incompatibilities resulting from implementation of the proposed Project would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.13-4 ***Implementation of the proposed Project would not substantially increase vehicular hazards due to design features or incompatible uses during operation (long-term). This impact is less than significant and no mitigation is required.***

Vehicular Hazards During Construction

Proposed 2008 NHIP

Construction associated with the proposed 2008 NHIP would occur at three locations in the Northwest zone. As described in Section 3.5.3, 2008 NHIP Construction Activities (from Section 3, Project Description), construction activities associated with the proposed 2008 NHIP could result in temporary closure of traffic lanes or roadway segments along De Neve Drive, Gayley Avenue, Sunset Village Drive, and Charles E. Young Drive West to allow for construction staging, to permit the delivery of construction materials, and/or to provide adequate site access. Additionally, portions of De Neve Drive and Charles E. Young Drive West would operate as one-way streets during construction. The reduction of roadway capacity, the narrowing of traffic lanes, and the occasional interruption/re-direction of traffic flow could pose hazards to vehicular traffic due to localized traffic congestion, decreased turning radii, or the condition of roadway surfaces. The 2002 LRDP Final EIR PP 4.13-5, which has been incorporated into the proposed Project and would require maintenance of one travel lane in each direction (to the extent feasible) and/or the provision of signal carriers (i.e., flagpersons) when only a single lane can be maintained. This would ensure that this impact would be less than significant and that no project-specific mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Construction activities associated with remaining buildout of the 2002 LRDP, as amended, could result in temporary closure of traffic lanes or roadway segments to permit the delivery of construction materials or to provide adequate site access (similar to that discussed above for the 2008 NHIP). The reduction of roadway capacity, the narrowing of traffic lanes, and the

occasional interruption of traffic flow on streets could pose hazards to vehicular traffic due to localized traffic congestion, decreased turning radii, or the condition of roadway surfaces.

Continued compliance with PP 4.13-5 would ensure that impacts associated with construction-related traffic lane or roadway closures would remain less than significant by either maintaining at least one lane of travel on affected roadways during construction activities and/or by providing appropriate signage for alternative routes.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.13-5 Construction of the proposed Project would not substantially increase vehicular hazards due to closure of traffic lanes or roadway segments. This impact is less than significant.

Pedestrian Hazards During Construction

Proposed 2008 NHIP

Construction of the proposed 2008 NHIP would occur at sites adjacent to existing residences halls. Construction activities would require the closure of some pedestrian sidewalks and paths adjacent to these construction locations to ensure pedestrian safety and to allow for the construction of new pathways to enhance overall non-vehicular circulation in the Northwest zone. Following 2002 LRDP Final EIR PP 4.13-6—which has been incorporated into the project and requires provision of temporary signage that indicates alternate pedestrian routes and modifications, as warranted, to make alternate routes accessible—would ensure that this impact would be less than significant and that no project-specific mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Construction activities associated with buildout of the remaining development allocation under the 2002 LRDP, as amended, could result in temporary closure of on-campus pedestrian sidewalks and paths or the provision of temporary pedestrian routes. The arrival or departure of construction vehicles and delivery of construction materials could also intermittently disrupt pedestrian travel along pedestrian routes adjacent to construction sites.

Continued compliance with 2002 LRDP Final EIR PP 4.13-6 would ensure that impacts associated with construction-related pedestrian sidewalk or path closures would remain less than significant by providing appropriate signage for alternative pedestrian routes. No mitigation is required.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.13-6 ***Continued compliance with PP 4.13-6 would ensure that construction of the proposed Project would not substantially increase pedestrian hazards due to closure of sidewalks or paths. This impact is less than significant.***

Threshold	Would the project result in inadequate emergency access?

The impact categories addressed under this threshold include:

- **Impact 4.13-7** – Emergency access during operation (long-term)
- **Impact 4.13-8** – Emergency access during construction (short-term)

Emergency Access During Operation

Proposed 2008 NHIP

Implementation of the proposed 2008 NHIP would not impair or otherwise restrict access to the campus. As previously noted, the proposed 2008 NHIP would slightly decrease traffic volume. There would be no increase in traffic volumes that could impede the ability of emergency vehicles to provide emergency police, fire, or medical services and a less-than-significant impact would occur. The proposed 2008 NHIP also provides sufficient emergency access to proposed structures, including the provision of emergency access from Gayley Avenue which currently does not exist. In addition, as described above under Impact 4.13-5, implementation of the proposed 2008 NHIP would not result in hazards due to design features or land use incompatibilities, which could impair emergency access. This impact would be less than significant, and no project-specific mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Implementation of the 2002 LRDP, as amended, would result in an increase in the campus population (students, faculty and staff, and visitors), which would increase the demand for parking, and the utilization of additional parking spaces would generate additional vehicle trips compared to existing conditions. The increase in campus-related vehicle trip generation would increase traffic volumes on the local street and regional highway network, which could degrade intersection levels of service. Buildout of the 2002 LRDP, as amended (including the 2008 NHIP), could result in 6,397 daily vehicle trips: 447 AM peak hour trips (358 in and 89 out) and 589 PM peak hour trips (177 in and 413 out). As discussed above under Impact 4.13-1b, this increase in vehicle trips would result in significant impacts at 8 of the 58 study intersections. There are no feasible mitigation measures to reduce these impacts to a less than significant level. Regardless, implementation of the proposed Project would not restrict access to the campus. Thus, implementation of the proposed Project would not result in a substantive increase in traffic volumes that would impede the ability of emergency vehicles to provide emergency police, fire, or medical services; a less than significant impact would occur. In addition, as described above under Impact 4.13-4, implementation of the proposed Project would not result in hazards due to design features or land use incompatibilities, which could impair emergency access. A less than significant impact would occur, and no mitigation is required.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.13-7 Implementation of the proposed Project would not result in inadequate emergency access. This is considered a less than significant impact.

Emergency Access During Construction

Remaining Buildout of the 2002 LRDP as Amended Including the Proposed 2008 NHIP

As discussed above, construction activities associated with the proposed 2008 NHIP and the remaining buildout of the 2002 LRDP, as amended, could result in temporary closure of on-campus traffic lanes or roadway segments to permit the delivery of construction materials, to accommodate construction staging, or to provide adequate site access. The reduction of roadway capacity, the narrowing of traffic lanes, and the occasional interruption of traffic flow could impair emergency access. Continued implementation of 2002 LRDP Final EIR PP 4.13-8, which has been incorporated into the project, would require consultation with emergency service providers in the event of lane or street closures and would ensure that this impact would be less than significant. No mitigation is required.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.13-8 Continued compliance with PP 4.13-8 would ensure that construction of the proposed Project would not result in inadequate emergency access. This is considered a less than significant impact.

Parking Capacity

Threshold	Would the project result in inadequate parking capacity?

The impact categories addressed under this threshold include:

- **Impact 4.13-9** – On-campus parking capacity
- **Impact 4.13-10** – Off-campus parking capacity
- **Impact 4.13-11** – Parking capacity during construction

On-Campus Parking Capacity

Proposed 2008 NHIP

The proposed 2008 NHIP would increase on-campus student housing and allow approximately 1,068 undergraduate commuter students to become new on-campus residents. Approximately 151 persons would be employed to staff the proposed 2008 NHIP. Thus, the 2008 NHIP project would increase parking demand for resident students and staff (associated with the 2008 NHIP)

and decrease parking demand for commuter students (as 1,068 former commuter students would be able to reside on campus). Because the reduction in the demand for on-campus parking spaces for commuter students (estimated to be a reduction of 214 spaces) is greater than the increased demand for resident students (64 spaces) and non-student employees (99 spaces), there would be a net decrease in parking demand associated with the proposed 2008 NHIP (a net reduction of 51 spaces). Because there is a reduction in parking demand, the proposed NHIP would have a less than significant impact to on-campus parking. No mitigation is required.

It should also be noted that implementation of the proposed 2008 NHIP would include the removal/reconfiguration of some parking spaces (on-campus metered, permit, and loading) along on campus streets (Charles E. Young Drive West, Sproul Hall Circle Drive, and De Neve Drive). The majority of these parking spaces would be replaced after completion of construction so that housing maintenance and service operations in these areas are accommodated. The temporary removal of on-street parking in the Northwest zone would not result in a significant impact and no mitigation is necessary.

Remaining Buildout of the 2002 LRDP as Amended

Because buildout of the 2002 LRDP, as amended, would result in an increase in the estimated total campus population (including faculty, staff, and campus visitors), the demand for parking would also be assumed to increase. An analysis of potential demand was conducted to determine whether projected future demand could be accommodated within the parking cap of 25,169 spaces, as established in the 1990 LRDP. This analysis included an assessment of the permit demand associated with projected increases in faculty/staff and other individuals (e.g., emeritus faculty, visitors, and medical patients). Then it was conservatively assumed that the campus could increase the on-campus parking inventory (during the 2013 planning horizon of the 2002 LRDP Amendment) to the LRDP parking cap of 25,169 spaces. Given the parking demand for faculty, staff, on-campus residents, and other permits (e.g., guest, emeritus faculty and visitors), the future number of on-campus parking spaces that would be available for commuter students was estimated and is shown below in Table 4.13-27 (Future On-Campus Parking Allocation 2008 NHIP and 2002 LRDP Amendment).

As shown in Table 4.13-27 with implementation of the proposed Project, there would be a net decrease in demand for parking (reduction of 1,733 permits), as there would be a reduction in the commuter student population and associated parking demand through the development of additional student housing on campus. As previously noted, prior to 2005, student demand for on-campus parking typically exceeded the available supply, and a waiting list for student parking was established each year during the regular session. The 2005–2006 academic year was the first year a student parking waiting list was not needed, and the trend has continued through the 2007–2008 academic year. As a result, implementation of the proposed project would not result in an inadequate parking capacity, and this impact is less than significant. No mitigation is required.

TABLE 4.13-27
FUTURE 2013 ON-CAMPUS PARKING ALLOCATION WITH THE PROPOSED PROJECT

Permit Group	Existing (Same as Future Without Project) 2007 Number	2007 Permits	2007 Spaces	Future With Project 2013 Number	2013 Permits	2013 Spaces
Medical Center Faculty & Staff	7,415	5,166	3,749[a]	7,777	5,435	4,130
Other University Faculty & Staff	14,853	10,307	7,020	15,578	10,886	8,273
Undergraduate Resident Students	10,032	431	431	11,082	665	665
Graduate Resident Students	1,370	855	1,126	1,882	1,223	1,223
Commuter Students	24,210	8,945	5,821	23,473	6,333	4,714
Quarterly Guest/Emeriti Permits (vendors, donors, contractors, emeriti)	5,132	5,132	1,144	3,867	3,867	817
University Extension Permits	3,513	3,513	N/A	3,513	3,513	N/A
Daily Permit Sales (includes kiosk and pay stations)	6,429	6,429	4,053	7,123	7,123	4,617
Other Spaces (meters and loading)	0	0	730	0	0	730
Totals	**72,954**	**40,778**	**24,074**	**74,295**	**39,045**	**25,169**
Change				**1,341**	**(1,733)**	**1,095**

[a] 305 parking spaces at the Ronald Reagan UCLA Medical Center are built and therefore included in the existing parking inventory. However these spaces were not being utilized when the 2007 cordon counts were taken; thus, the trips generated by utilization of these 305 parking spaces are only included in the trip generation analysis for the future 2013 With Project condition.

Source: Iteris 2008.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.13-9 Implementation of the proposed Project would not result in inadequate parking capacity on campus. This impact is less than significant and no mitigation is required.

Off-Campus Parking Capacity

The following analysis focuses on potential impacts to off campus parking resulting from implementation of the proposed 2008 NHIP. The need to modify off campus parking, if at all, as part of the remaining development under the 2002 LRDP, as amended, would be determined on a project–specific basis primarily for projects proposed on the edge of the campus. The extent of potential impacts that may occur for future projects cannot be determined at this time and would be addressed as part of project-specific environmental documentation if required.

Proposed 2008 NHIP

The Lower De Neve component of the 2008 NHIP would include modifications to the northern side of Gayley Avenue adjacent to the project boundary. Currently, the Gayley Avenue edge of the project boundary accommodates space for approximately 17 cars. The proposed 2008 NHIP would remove approximately 8 of the 17 on-street parking spaces along the project boundary to provide two new service access driveways, and a new fire hydrant and short-term loading zone. Specifically, the eastern driveway would be approximately 20 feet wide and it would be used for maintenance vehicles and fire department access. This driveway would require approximately 15 feet of red curb on either side of the driveway and would therefore result in the loss of approximately three parking spaces. The western driveway would be approximately 12 feet wide and would be used to access refuse containers for curbside loading. The western driveway would result in the loss of approximately one parking space. Between the two driveways there would be a new fire hydrant that requires approximately 30 feet of red curb, which would result in the loss of approximately two parking spaces. In addition a new loading zone would be provided to accommodate approximately two spaces that would replace two unrestricted curbside parking spaces with two spaces for short-term loading only. In summary, approximately eight unrestricted parking spaces would be removed, and two short-term loading spaces provided. Modifications to provide driveways, red curbs for fire hydrant and loading zone areas along Gayley Avenue would require permits from the City of Los Angeles Department of Transportation (LADOT).

Public parking demand in the North Village area including Gayley Avenue has historically exceeded supply. This is due to the fact that many of the multi-family housing buildings were constructed prior to current City of LA parking standards and do not provide adequate parking for their tenants. Based upon a study prepared in August 2006 *Barriers to Mobility for Residents with Disabilities: Illegally Parked Cars and Broken Sidewalks in North Westwood Village* by Robert Campbell, there are approximately 857 curb parking spaces in the North Village area, approximately 79 of which are along Gayley Avenue between Veteran Avenue and Le Conte Avenue. Many of the multi-family residential buildings along this portion of Gayley Avenue reflect more contemporary construction and on-site parking is available for many of those residents. In addition, the land use on the east side of Gayley Avenue is the UCLA campus that provides adequate parking for students, staff, faculty and visitors. Additionally, the above referenced report included a survey that indicates that there are approximately 11,000 residents in the North Village, 51 percent of which indicated that that they walk to work. Lastly, a large segment of the North Village population is comprised of UCLA students and employees and Greek Fraternities. UCLA students and employees who live in the North Village can participate in the extensive UCLA TDM options including the recently established car share program that enables students, faculty and staff who do not choose to own a car, to rent a car on an affordable and convenient basis, with the vehicles located on-campus and in close proximity to the North Village. Refer to Section 4.13.1 under the discussion of “Alternative Transportation” for a full description of UCLA’s TDM programs.

The anticipated removal of an estimated eight spaces represents 0.9 percent, or less than one percent, of the total parking supply in the North Village and approximately ten percent of the supply along Gayley Avenue. Although there are no significance standards promulgated by the City of Los Angeles to assess impacts of removing public parking spaces, UCLA has an adequate inventory of parking on the UCLA campus available for students, faculty and staff and provides the campus community several transportation alternatives to owning a car. In addition, as the proposed 2008 NHIP would have a beneficial effect on off-site parking through the conversion of 1,068 commuter students to on-campus student residents, the removal of eight parking spaces on Gayley Avenue would be considered adverse, but less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.13-10 Implementation of the proposed 2008 NHIP would not result in inadequate parking capacity off campus. This impact is less than significant and no mitigation is required.

Parking Capacity During Construction

Proposed 2008 NHIP

Proposed 2008 NHIP construction activities would require the temporary removal of short-term parking spaces on-campus primarily along the roadways in and around the project site. Construction of the proposed 2008 NHIP is estimated to require a peak workforce of approximately 175 construction workers. Assuming a worst-case scenario where each construction worker drives alone, a maximum of 175 construction-employee parking spaces would be needed.

As discussed in Section 3.5.3, 2008 NHIP Construction Activities (from Section 3.0, Project Description), construction worker parking would be provided in Parking Lot 11 and the Dykstra Parking Structure. If sufficient spaces are not available on campus, then off-campus construction worker parking would be provided pursuant to 2002 LRDP Final EIR MM 4.13-11 below. Therefore, construction of the proposed 2008 NHIP would not result in an inadequate parking supply and the impact would be less than significant. No additional mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

During the planning horizon of the 2002 LRDP, as amended, construction of new structures could result in elimination of parking spaces in existing parking lots and/or structures to provide access to the construction site or space for staging of construction materials. In addition, construction employees for the proposed project would contribute to parking demand (similar to that required for the proposed 2008 NHIP). Typically, very few on-site parking spaces are available for construction employees due to site constraints. Thus, parking for construction employees has historically been provided within existing on-campus parking facilities, with typical demand estimated at between 300 to 525 spaces per day over the past decade. As construction projects are completed, those spaces currently allocated for construction employees would become available to accommodate the demand for future construction projects. However, at times, the combined effect of construction worker parking demand and the loss of parking spaces (for construction site access or material storage) could result in a net increase in construction-related parking demand that exceeds the historical average or available supply. This is a potentially significant impact.

Implementation of 2002 LRDP Final EIR MM 4.13-11 would ensure that impacts from the proposed Project associated with parking for construction workers would be reduced to a less than significant level.

Mitigation Measure Carried Forward from the 2002 LRDP Final EIR

The following mitigation measure was adopted as part of the 2002 LRDP Final EIR and shall continue to be implemented as part of the proposed Project, including the 2008 NHIP.

MM 4.13-11 *To the extent that construction worker parking demand exceeds historical levels or available supply, off-site construction worker parking shall be provided with shuttle service to and from the remote parking location.*

Level of Significance After Mitigation

Less than Significant.

Impact 4.13-11 ***Construction of the proposed Project could result in the temporary elimination of on-campus parking spaces and could require additional temporary parking for construction workers. This potentially significant impact would be reduced to a less than significant level with implementation of 2002 LRDP Final EIR MM 4.13-11.***

Threshold	Would the project conflict with adopted programs, practices, or procedures supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Proposed 2008 NHIP

As noted above in the Environmental Setting section and further discussed below, the UCLA TDM program is a comprehensive program that offers a broad range of services to encourage and assist UCLA commuters in utilizing alternatives to the single-occupancy vehicle. (The TDM program will continue throughout the planning horizon of the proposed Project (pursuant to 2002 LRDP Final EIR PP 4.13-1[d].)

The 1990 LRDP and 2002 LRDP Final EIRs also included policies to expand the supply of on-campus housing, in recognition of the potential for on-campus housing to reduce trips and commuter students and to increase the use of alternative modes, including walking, bicycles and campus shuttles. Implementation of the proposed 2008 NHIP would be consistent with 2002 LRDP Final EIR PP 4.13-1(c), which requires the provision of additional on-campus housing to continue the evolution of UCLA from a commuter to a residential campus. The proposed 2008 NHIP would allow approximately 1,068 currently enrolled undergraduate commuter students to become on-campus residents. Approximately 151 persons would be employed to staff the proposed 2008 NHIP. As discussed under Impact 4.13-1a, the 2008 NHIP would have a net decrease in the number of commuters to campus.

Thus, the NHIP would not conflict with adopted polices, plans, or programs that support alternative transportation, and the impact would be less than significant. No project-specific mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

As shown in Table 4.13-28, there are currently about 46,478 commuters who are employed or are non-resident students at UCLA. There are 24,418 parking permits issued to these

commuters, or approximately half of the total commuters. The remainder (approximately 22,060 persons) must utilize an alternative mode to travel to and from campus, including vanpools, buses, walking, bicycling, or other alternative means. With implementation of the proposed Project, as shown in Table 4.13-29, the future number of commuters without parking is estimated to increase by approximately 2,114 commuters compared to the existing condition.

TABLE 4.13-28
CURRENT COMMUTERS

Group	Number	Parking Permits	Other Commuters
Faculty & Staff	22,268	15,473	6,795
Commuter Students	24,210	8,945	15,265
Total	**46,478**	**24,418**	**22,060**
Source: Iteris 2008.			

TABLE 4.13-29
FUTURE (2013) COMMUTERS WITH THE PROPOSED PROJECT

Group	Number	Parking Permits	Other Commuters
Faculty & Staff	23,355	16,321	7,034
Commuter Students	23,473	6,333	17,140
Total	**46,828**	**22,654**	**24,174**
Source: Iteris 2008.			

The Los Angeles County CMP states the "information on facilities and/or programs that will be incorporated in the development plan that will encourage public transit use" should be included into the EIR transit impact analysis. As previously described in Section 4.13.1, Environmental Setting (Alternative Transportation) and pursuant to 2002 LRDP Final EIR PP 4.13-1(d), UCLA actively provides and promotes: vanpools; carpool matching and parking incentive programs; financial incentives for carpool and vanpool participants; accommodation of the use of other modes of transit, including bicycles, motorcycles, and scooters; alternative work schedules and telecommuting; a car share program; annual distribution of the UCLA Commuter's Guide; parking control management; and access restriction to main campus parking facilities for on campus housing residents. As a result, UCLA has one of the most comprehensive TDM programs in the country with the largest vanpool program of any public or private university. The UCLA campus is also served by 24 bus routes operated by 6 public transit operators. Services are provided to all commuters, especially those without parking permits, by the CAR office. Since 1990, when the SCAQMD first required a survey of all employees to determine AVR, the TDM program increased the campus-wide AVR from 1.26 to 1.60 by fall 2007, exceeding the goal of 1.5 set by the SCAQMD. Continued implementation of the TDM program is necessary to ensure that reductions in parking demand that have been achieved to date are maintained throughout the LRDP Amendment's planning horizon.

In continued compliance with 2002 LRDP Final EIR PP 4.13-1(d), UCLA is pursuing the following additional facilities and/or programs to help encourage public transit patronage for project-related trips as part of its TDM. Note that the implementation responsibility for some of these facilities and programs would fall on agencies other than UCLA, the lead agency for this project. Thus, coordination between UCLA and local and regional transit providers would be required for several of these items.

- ***Transit Priority System.*** UCLA is participating in an LADOT and Metro project to implement a system that uses advanced technology to give Rapid Buses (both Metro and Culver City Bus) traffic signal priority for transit routes on campus.

- ***Transit Pass Subsidy Agreement Expansion.*** UCLA continues to expand its transit pass subsidy program, having added Santa Clarita Transit and LADOT subsidies in 2007. Further expansion plans include Antelope Valley, which runs commuter buses to West Los Angeles daily, and AMTRAK buses, offering connections to AMTRAK train service.

- ***Advanced Traveler Information System.*** UCLA is partnering with transit agencies to provide route, arrival, and departure time information to transit patrons on campus.

- ***Program Marketing and Promotion.*** UCLA employs continual marketing campaigns intended to shift single-occupant vehicle trips to alternative modes, including public transit. Examples of the behavioral adaptation approaches used to shift trips to public transit include target marketing based on spatial distribution of customers and transit service options; promotional campaigns that offer free transit passes; and provision of commute options including transit to new employees and incoming students.

In addition to the components of the campus TDM program, the campus has implemented a Student Housing Master Plan (SHMP) that provides for the continuing development of on-campus student housing (such as the proposed 2008 NHIP) to enhance the educational experience for students and to continue the evolution of UCLA from a commuter to a residential campus, which would reduce vehicle trips by commuter students and encourage use of alternative transportation modes (including bicycles, campus shuttles, and walking to campus) (refer to 2002 LRDP Final EIR PP 4.13-1[c]). As noted above, with implementation of the proposed 2008 NHIP there would be a net reduction in commuters.

Therefore, continued compliance with PP 4.13-1(c) and PP 4.13-1(d) would ensure that impacts associated with compliance with adopted programs, practices, and procedures supporting alternative transportation remain less than significant; no mitigation is required.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.13-12 Implementation of the proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation. This impact is less than significant impact and no mitigation is required.

4.13.4 CUMULATIVE IMPACTS

The geographic context for the analysis of cumulative transportation/traffic impacts includes the list of off-campus related projects and other future development within the general boundaries of the community of Westwood in the City of Los Angeles (included on Table 4-1 in Section 4.0, Introduction to the Environmental Analysis). In addition, cumulative impacts are based on future ambient growth in traffic volumes estimated by the Los Angeles County CMP. As discussed in

the methodology section, future traffic volumes for the project study area were projected using a combination of future known development projects, the CMP ambient growth factor, plus traffic generated by the project. This was conservative in that the highest potential traffic volumes were estimated for each cumulative project. The results of this analysis are shown in Table 4.13-21, which shows future traffic conditions both with and without implementation of the proposed Project.

By comparing existing (2008) traffic conditions (in Table 4.13-1) to the future (2013) "Without Project" traffic conditions (in Table 4.13-10), an estimate of the traffic impact of regional growth can be developed, as shown in Tables 4.13-30 and 4.13-31. These tables show that cumulative traffic growth, even without implementation of the proposed Project, could result in increases in traffic volumes that could be considered significant at 29 of the 58 study intersections in the AM peak hour and 33 intersections in the PM peak hour. Significance is defined by LADOT as a cumulative increase in the CMA value of 0.01 or more, when the final ("With Project") LOS is E or F; a CMA increase of 0.02 or more when the final LOS is D; or an increase of 0.04 or more at LOS C.

With implementation of the proposed Project (including the proposed 2008 NHIP which has a net reduction in traffic), the number of campus-related vehicle trips would increase by approximately 6,397 average daily trips compared to future "Without Project" conditions. This increase in average daily trips would contribute to the cumulative increases in traffic on local streets, as shown in Table 4.13-21, Future 2013 With Project Peak Hour Level of Service Summary. The feasibility of mitigating the potentially significant cumulative increases in traffic at the identified intersections was evaluated. As discussed previously (under Impacts 4.13-1), no feasible mitigation measures have been identified at the following intersections:

15. Montana Avenue/Gayley Avenue and Veteran Avenue
35. Wilshire Boulevard and Sepulveda Boulevard
36. Wilshire Boulevard and Veteran Avenue
37. Wilshire Boulevard and Gayley Avenue
38. Wilshire Boulevard and Westwood Boulevard
43. Wilshire Boulevard and Beverly Glen Boulevard
44. Ohio Avenue and Sawtelle Boulevard
52. Santa Monica Boulevard and Veteran Avenue

Regional plans to improve some of the cumulative traffic conditions have been developed in the SCAG Regional Mobility Element, the Los Angeles County Congestion Management Plan, and the transportation elements of the Los Angeles General Plan, Westwood Community Plan, and certain interim control ordinances. However, a comprehensive traffic mitigation program for the Westwood/West Los Angeles area is still under development by the City of Los Angeles. Since most of these improvements have not yet been approved or funded, this EIR does not assume implementation of any such programs during the planning horizon. In addition, because off-campus roadway improvements and regional transportation strategies are not within the jurisdiction of The Regents to implement, and because some of these improvements and strategies are unfunded or are otherwise uncertain from a technical, economic, legal or political perspective, these cumulative traffic impacts are considered significant and unavoidable for purposes of this EIR. This is considered to be a *significant and unavoidable* impact.

TABLE 4.13-30
CUMULATIVE ANALYSIS PEAK HOUR LEVEL OF SERVICE SUMMARY

Study Intersection	Existing 2008				Future Without Project				AM Peak Hour		PM Peak Hour	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	Δ in V/C or Del/Veh	Sig Impact Yes/No	Δ in V/C or Del/Veh	Sig Impact Yes/No
1. Church Ln-Ovada Pl/Sepulveda Blvd[a]	C	0.752	C	0.705	C	0.770	C	0.759	0.018	NO	0.054	**YES**
2. I-405 Southbound On-/Off-Ramps and Church Ln[a]	C	0.724	A	0.594	C	0.749	B	0.643	0.025	NO	0.049	NO
3. Sunset Blvd and Church Ln[a]	D	0.822	C	0.754	D	0.837	C	0.780	0.015	NO	0.026	NO
4. Sunset Blvd and I-405 Northbound On-/Off-Ramps[a]	D	0.897	A	0.348	E	0.929	A	0.366	0.032	**YES**	0.018	NO
5. Sunset Blvd and Veteran Ave[a]	D	0.848	C	0.738	E	0.907	D	0.836	0.059	**YES**	0.098	**YES**
6. Sunset Blvd and Bellagio Way[a]	D	0.838	D	0.899	D	0.867	E	0.956	0.029	**YES**	0.057	**YES**
7. Sunset Blvd and Westwood Blvd[a]	A	0.571	A	0.487	A	0.576	A	0.493	0.005	NO	0.006	NO
8. Sunset Blvd and Stone Canyon Rd[a]	A	0.494	C	0.707	A	0.496	C	0.724	0.002	NO	0.017	NO
9. Sunset Blvd and Hilgard Ave/Copa De Oro Rd[a]	D	0.889	C	0.769	E	0.945	D	0.846	0.056	**YES**	0.077	**YES**
10. Sunset Blvd and Beverly Glen Blvd[a]	D	0.854	F	1.003	E	0.933	F	1.071	0.079	**YES**	0.068	**YES**
11. Sunset Blvd (East I/S) and Beverly Glen Blvd[a]	F	1.113	F	1.109	F	1.203	F	1.212	0.090	**YES**	0.103	**YES**
12. I-405 Northbound Off-Ramp and Sepulveda Blvd[a]	A	0.498	A	0.536	A	0.500	A	0.560	0.002	NO	0.024	NO
13. Montana Ave and Sepulveda Blvd[a]	C	0.712	C	0.721	C	0.725	C	0.706	0.013	NO	-0.015	NO
14. Montana Ave and Levering Ave (unsignalized)	C	22.9	E	49.5	D	27.0	F	96.7	4.1		47.2	
15. Montana Ave/Gayley Ave and Veteran Ave[a]	C	0.771	D	0.883	D	0.818	E	0.956	0.047	**YES**	0.073	**YES**
16. Strathmore Pl and Gayley Ave[a]	B	0.620	A	0.583	B	0.624	A	0.586	0.004	NO	0.003	NO
17. Levering Ave and Veteran Ave[a]	A	0.474	A	0.596	A	0.546	C	0.720	0.072	NO	0.124	**YES**
18. Wyton Dr and Hilgard Ave[a]	A	0.390	A	0.401	A	0.396	A	0.415	0.006	NO	0.014	NO
19. Wyton Dr/Comstock Ave and Beverly Glen Blvd[a]	A	0.335	B	0.603	A	0.375	B	0.644	0.040	NO	0.041	NO
20. Westholme Ave and Hilgard Ave[a]	A	0.461	A	0.400	A	0.472	A	0.415	0.011	NO	0.015	NO
21. Manning Ave and Hilgard Ave[a]	A	0.251	A	0.252	A	0.245	A	0.261	-0.006	NO	0.009	NO
22. Le Conte Ave and Gayley Ave[a]	A	0.494	A	0.554	A	0.487	A	0.581	-0.007	NO	0.027	NO
23. Le Conte Ave and Westwood Blvd[a, b]	A	0.515	A	0.498	B	0.672	E	0.976	0.157	NO	0.478	**YES**
24. Le Conte Ave and Tiverton Dr[a]	A	0.417	A	0.475	A	0.319	A	0.415	-0.098	NO	-0.060	NO
25. Le Conte Ave and Hilgard Ave[a]	A	0.491	A	0.571	A	0.528	A	0.535	0.037	NO	-0.036	NO
26. Weyburn Ave and Gayley Ave[a]	A	0.409	B	0.606	A	0.570	B	0.697	0.161	NO	0.091	NO
27. Weyburn Ave and Westwood Blvd[a]	A	0.368	D	0.860	B	0.674	F	1.247	0.306	NO	0.387	**YES**
28. Weyburn Ave and Tiverton Dr (unsignalized)	A	7.7	A	9.9	A	9.2	C	24.2	1.5		14.3	
29. Weyburn Ave and Hilgard Ave[a]	A	0.371	A	0.574	A	0.395	B	0.633	0.024	NO	0.059	NO
30. Kinross Ave and Westwood Blvd[a]	C	0.765	D	0.854	E	0.971	F	1.236	0.206	**YES**	0.382	**YES**
31. Lindbrook Dr and Westwood Blvd[a]	A	0.478	A	0.465	B	0.612	B	0.666	0.134	NO	0.201	NO
32. Lindbrook Dr and Tiverton Ave	B	0.608	A	0.580	B	0.648	B	0.606	0.040	NO	0.026	NO
33. Constitution Ave and Sepulveda Blvd[a]	A	0.471	B	0.692	A	0.470	C	0.711	-0.001	NO	0.019	NO

TABLE 4.13-30 (Continued)
CUMULATIVE ANALYSIS PEAK HOUR LEVEL OF SERVICE SUMMARY

Study Intersection	Existing 2008				Future Without Project				AM Peak Hour		PM Peak Hour	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	Δ in V/C or Del/Veh	Sig Impact Yes/No	Δ in V/C or Del/Veh	Sig Impact Yes/No
34. Wilshire Blvd and San Vicente Blvd[a]	D	0.873	C	0.768	E	0.968	D	0.861	0.095	**YES**	0.093	**YES**
35. Wilshire Blvd and Sepulveda Blvd[a]	F	1.282	F	1.040	F	1.473	F	1.287	0.191	**YES**	0.247	**YES**
36. Wilshire Blvd and Veteran Ave[a]	F	1.100	F	1.554	F	1.223	F	1.730	0.123	**YES**	0.176	**YES**
37. Wilshire Blvd and Gayley Ave[a]	D	0.886	F	1.123	E	0.984	F	1.396	0.098	**YES**	0.273	**YES**
38. Wilshire Blvd and Westwood Blvd[a]	E	0.929	D	0.854	F	1.191	F	1.191	0.262	**YES**	0.337	**YES**
39. Wilshire Blvd and Glendon Ave[a]	D	0.842	C	0.797	E	0.953	E	0.931	0.111	**YES**	0.134	**YES**
40. Wilshire Blvd and Malcolm Ave (unsignalized)	F	467.1	F	319.9	F	OVRFL	F	OVRFL	OVRFL		OVRFL	
41. Wilshire Blvd and Westholme Ave[a]	B	0.687	B	0.662	C	0.779	C	0.783	0.092	**YES**	0.121	**YES**
42. Wilshire Blvd and Warner Ave[a]	B	0.625	A	0.502	C	0.709	B	0.607	0.084	**YES**	0.105	NO
43. Wilshire Blvd and Beverly Glen Blvd[a]	D	0.818	B	0.686	E	0.905	D	0.812	0.087	**YES**	0.126	**YES**
44. Ohio Ave and Sawtelle Blvd[a]	E	0.920	D	0.806	E	0.950	D	0.832	0.030	**YES**	0.026	**YES**
45, Ohio Ave and Sepulveda Blvd[a]	C	0.751	C	0.780	C	0.785	D	0.825	0.034	NO	0.045	**YES**
46. Ohio Ave and Veteran Ave[a]	C	0.725	C	0.770	C	0.753	D	0.808	0.028	NO	0.038	**YES**
47. Ohio Ave and Westwood Blvd[a]	B	0.668	B	0.662	C	0.726	C	0.764	0.058	**YES**	0.102	**YES**
48. Santa Monica Blvd and Sawtelle Blvd[a]	F	1.264	F	1.385	F	1.362	F	1.508	0.098	**YES**	0.123	**YES**
49. Santa Monica Blvd and I-405 (S/B)	F	1.068	F	1.031	F	1.222	F	1.123	0.154	**YES**	0.092	**YES**
50. Santa Monica Blvd and I-405 (N/B)	D	0.884	F	1.011	F	1.029	F	1.140	0.145	**YES**	0.129	**YES**
51. Santa Monica Blvd and Sepulveda Blvd[a]	F	1.139	F	1.274	F	1.279	F	1.366	0.140	**YES**	0.092	**YES**
52. Santa Monica Blvd and Veteran Ave[a]	B	0.651	D	0.875	C	0.714	E	0.964	0.063	**YES**	0.089	**YES**
53. Santa Monica Blvd and Westwood Blvd[a]	E	0.968	E	0.924	F	1.118	F	1.043	0.150	**YES**	0.119	**YES**
54. Roscomare Rd and Mulholland Dr[a]	C	0.749	B	0.650	C	0.769	B	0.676	0.020	NO	0.026	NO
55. Roscomare Rd and Stradella Rd/Linda Flora Dr (unsignalized)	B	12.5	B	10.2	B	14.0	B	11.1	1.5		0.9	
56. Chalon Rd and Bellagio Rd (unsignalized)	B	11.9	B	13.2	B	13.1	C	15.3	1.2		2.1	
57. Beverly Glen Blvd and Mulholland Dr	E	0.957	E	0.992	F	1.019	F	1.082	0.062	**YES**	0.090	**YES**
58. Beverly Glen Blvd and Greendale Dr	D	0.825	E	0.996	D	0.884	F	1.075	0.059	**YES**	0.079	**YES**

I/S – Intersection; S/B – Southbound; N/B – Northbound; OVRFL – Overflow

[a] 7% ATSAC and three percent ATCS reduction applied to final V/C.
[b] V/C calculation includes a 33% capacity reduction to the intersection to account for delay caused by the pedestrian scramble crosswalk.

Source: Iteris 2008.

TABLE 4.13-31
FUTURE 2013 WITH PROJECT PEAK HOUR LEVEL OF SERVICE SUMMARY
(UNSIGNALIZED ANALYZED AS 2-PHASE SIGNALIZED INTERSECTION)

Study Intersection	Existing 2008				Future With Project				AM Peak Hour		PM Peak Hour	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	LOS	V/C or Del/Veh	Δ in V/C or Del/Veh	Sig Impact Yes/No	Δ in V/C or Del/Veh	Sig Impact Yes/No
14. Montana Ave/Levering Ave	E	0.955	B	0.640	F	1.031	B	0.694	0.076	**YES**	0.054	NO
28. Weyburn Ave/Tiverton Dr	A	0.192	A	0.434	A	0.365	C	0.703	0.173	NO	0.269	**YES**
40. Wilshire Blvd/Malcolm Ave	C	0.718	B	0.626	D	0.883	D	0.828	0.165	**YES**	0.202	**YES**
55. Roscomare Rd and Stradella Rd/Linda Flora Dr	A	0.504	A	0.446	A	0.544	A	0.491	0.040	NO	0.045	NO
56. Chalon Rd/Bellagio Rd	A	0.500	A	0.498	A	0.540	A	0.546	0.040	NO	0.048	NO

Note: Unsignalized intersections were analyzed with CMA as 2-phased signalized intersections with a capacity of 1,200.

Source: Iteris 2008.

It is expected that construction of the related projects (shown on Table 4-1) and other future development during the timeframe of the proposed Project would result in periods of heavy truck traffic as a result of the delivery of construction materials and the hauling of demolition waste and earth materials. Although the timeframe for construction of these projects is uncertain (as well as the degree to which construction of these projects would overlap among themselves and the locations at which impacts could occur), it is likely that construction and hauling activity associated with these future projects would significantly affect road segments and intersections, resulting in a significant cumulative impact. Due to the potential overlap between the 2008 NHIP construction and other current and future campus construction projects, it was conservatively assumed that the net effect of campus construction activities could result in localized traffic impacts in the vicinity of campus, particularly at the Wilshire Boulevard and Sunset Boulevard intersections that provide access to the campus. While PP 4.13-2 would reduce construction traffic impacts to the extent feasible by monitoring and adjusting construction schedules and access routes, it is anticipated that significant impacts may occur from time to time during the construction of development under the 2008 NHIP and 2002 LRDP as amended. It is further possible that construction activities under the proposed Project would overlap with construction activities associated with the off-campus related projects. Since it is not possible to quantify the proposed Project's exact contribution to cumulative construction-related traffic impacts and since these impacts would vary on a periodic basis, it is anticipated that at times the proposed Project's contribution to cumulative impacts would be considerable and, therefore, significant and unavoidable.

By its nature, the Los Angeles County CMP is a cumulative scenario that considers the impact of single projects in the context of cumulative traffic demand on CMP facilities. Cumulative impacts at CMP arterial monitoring stations and freeway mainline segments are therefore addressed under Impact 4.13-3(b). As identified, the project would result in a significant impact at the designated CMP arterial monitoring station at Sepulveda Boulevard and Wilshire Boulevard, but would not have a significant impact on designated CMP freeways.

It is anticipated that future development of the related projects and other future development would be required to adhere to standard engineering practices and requirements and would be subject to City of Los Angeles planning and design review to avoid traffic hazards created by design features and land use incompatibilities. For this reason and because such impacts (if and where they occur) are relatively site specific, cumulative impacts associated with such traffic hazards are less than significant. As discussed under Impact 4.13-4, the proposed Project would not result in the need for any new roadway segments or substantive changes in roadway configuration. All design development under the proposed Project would include the use of standard engineering practices to avoid design elements that would increase roadway hazards. Moreover, development of the proposed Project would not result in land use incompatibilities that would lead to the creation of traffic hazards. For these reasons, the proposed Project's contribution to any cumulative impacts from traffic hazards is also less than significant.

Due to the dispersed location of future development (including the related projects) and the anticipation that the related projects would be required to implement safety and access measures during construction (in accordance with City of Los Angeles requirements), cumulative impacts associated with vehicular and pedestrian hazards during construction are expected to be less than significant. Impacts 4.13-5 and 4.13-6 discuss the proposed Project's potential to increase vehicular or pedestrian hazards as a result of the closure of traffic lanes, roadway segments, or sidewalks. As indicated, the campus follows procedures (PP 4.13-5 and PP 4.13-6) to maintain safety and accessibility during construction periods. As a result, these potential impacts, which are localized at the area of construction activity, would remain less than significant, making the proposed Project's contribution to cumulative impacts less than significant.

It is anticipated that construction and operation of the related projects (and other future growth in the area during the LRDP Amendment's planning horizon) would generate additional traffic on surface streets and intersections in the area of cumulative analysis and would, from time to time, result in lane closures and other temporary access constraints. However, as discussed above, operational traffic associated with the related projects and future growth in general is captured within the assumptions that form the future "Without Project" traffic volumes utilized in this EIR and which represent an incremental change over existing conditions. It is not anticipated that future levels of traffic associated with the related projects would result in a significant impairment of emergency access. Impacts from closure due to construction of the related projects and other future projects (like those associated with the proposed 2008 NHIP) are relatively site-specific and, thus, it is not considered likely that the construction of the related projects would have a cumulative effect above and beyond the immediate effects of this construction at the location in question. For these reasons, the cumulative impact of the related projects on emergency access is less than significant. As discussed in Impacts 4.13-7 and 4.13-8, the proposed Project would not result in inadequate emergency access. As a result, trip generation on surface arterials, construction activity, and (as discussed in Impact 4.13-7) traffic associated with the proposed Project would not be a considerable addition to future traffic volumes in terms of its effect on emergency access. For these reasons, the proposed Project's contribution to the less than significant cumulative impacts on emergency access is less than significant.

Under the City of Los Angeles Zoning Code, the related projects and other future development would be required to provide adequate on-site (off-street) parking as a condition of development approval; thus, it is unlikely that future development would have a significant cumulative effect on parking supply and demand in the area. In addition, as shown on Figure 4-1, most related projects are a sufficient distance from one another (and far enough from the UCLA campus) to reduce the potential for parking shortages at one location from having an effect elsewhere. It is further anticipated that on-site parking at many of the related project sites, particularly those located in Westwood Village, would continue to be regulated by monthly permit sales and user fees (generally limited to building tenants and visitors), validation by merchants and other businesses, and physical barriers such as gates. For these reasons, cumulative impacts on parking are not anticipated to be significant. As part of the proposed 2008 NHIP, approximately 8 on-street City of Los Angeles parking spaces would be removed on the north side of Gayley Avenue to accommodate two driveways, a loading area and a fire hydrant. This loss of parking is less than significant. Additionally, as discussed under Impact 4.13-9, the proposed Project would result in a net reduction in overall parking demand. UCLA would continue to provide adequate on-campus parking to satisfy student, faculty, and visitor demand. In addition, UCLA would continue to provide and support alternative transportation to reduce vehicle trips to campus and to increase on-campus student housing (such as the proposed 2008 NHIP) to reduce the number of commuters to campus. The proposed Project's contribution to cumulative impacts associated with parking is less than significant.

In accordance with City of Los Angeles requirements, it is anticipated that related projects and other future development would either accommodate construction worker parking on site or through other suitable means to reduce impacts on surrounding parking facilities. For these reasons, cumulative construction activity associated with the related projects would be less than significant. As discussed under Impact 4.13-11, the proposed Project would not result in significant impacts due to the elimination of parking spaces necessary to accommodate construction activity and construction workers. As required by MM 4.13-11, off-campus parking for construction workers, with shuttle service, would be provided, if necessary. For this reason, construction activity as a result of the proposed Project would not significantly displace other users of on-campus parking and would not create significant impacts to off-campus parking

facilities. Consequently, the proposed Project's contribution to cumulative impacts associated with construction worker parking is less than significant.

It is anticipated that development associated with the related projects and other future development would result in an increased demand on alternative transportation, although due to the locations of the various related projects, it is expected that cumulative increases in demand would be distributed among the various bus routes that serve the area. While it is possible that ridership demand on a particular bus route associated with future development could be significant when compared to existing conditions, it can generally be expected that cumulative impacts on bus service would be less than significant as a whole. Impacts of the proposed Project on alternative transportation are discussed as Impacts 4.13-12. The contribution of the proposed Project to cumulative impacts on alternative transportation is less than significant.

4.13.5 REFERENCES

Campbell, R. 2006 (August). *Barriers to Mobility for Residents with Disabilities: Illegally Parked Cars and Broken Sidewalks in North Westwood Village.* Los Angeles, CA: Campbell.

Iteris. 2008 (October). *University of California, Los Angeles Northwest Housing Infill Project and Long Range Development Plan Traffic Impact Study*.

University of California, Los Angeles (UCLA). 2003a (February). *2002 Long Range Development Plan.* Los Angeles, CA: UCLA.

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4.14 UTILITIES AND SERVICE SYSTEMS

This section evaluates the effects on utilities and service systems related to implementation of the proposed Project by identifying both the anticipated demand and the existing and planned utility availability. For purposes of this EIR, utilities and service systems include domestic water supply, solid waste collection and disposal, wastewater conveyance and treatment, and energy (electricity and natural gas). Storm water drainage facilities are discussed in Section 4.7, Hydrology and Water Quality, of this EIR.

Data used to prepare this section was taken from various sources, including UCLA-provided data on current and projected utility demands (UCLA 2008b) and the *UCLA 2002 Long Range Development Plan Final EIR* (UCLA 2003b). Additionally, a *Water Supply Analysis UCLA 2008 Northwest Housing Infill Project and Long Range Development Plan Amendment* was prepared by Best Best & Krieger (2008) and is provided in Appendix J. Full bibliographic entries for all reference materials are provided in Section 4.14.6 (References) of this section.

The University received one comment letter related to utilities in response to the Notice of Preparation circulated for the project from the City of Los Angeles Bureau of Sanitation regarding wastewater conveyance into City of Los Angeles infrastructure.

4.14.1 WATER SUPPLY

Environmental Setting

City of Los Angeles

Water Supply

The City of Los Angeles Department of Water and Power (LADWP) supplies domestic water to UCLA. The Los Angeles Aqueducts (LAA), local groundwater, purchased water from the Metropolitan Water District of Southern California (MWD), and recycled water are the primary sources of water supplies for the City of Los Angeles (Best Best & Krieger 2008).

Snowmelt runoff from the Eastern Sierra Nevada Mountains is collected and conveyed to the City of Los Angeles via the LAA. The LAA supplies come primarily from snowmelt and secondarily from groundwater pumping; as such, supplies can fluctuate yearly due to varying hydrologic conditions. In recent years, LAA supplies have been less than the historical average because of environmental obligations to restore Mono Lake and mitigate dust from Owens Lake. Additional information regarding water supplies from Mono Lake and Owens Lake is provided in the Water Supply Analysis provided in Appendix J. As a result, the LADWP predicts that 276,000 acre-feet (af) per year (af/year) would be available from the LAA in average year scenarios through 2030. In single-dry years, LAA deliveries would be about 95,300 af/year and in multiple dry year droughts, deliveries would range from 135,500 af/year in the first year to 63,200 af/year in the third year (Best Best & Krieger 2008).

The LADWP has a long-term groundwater management plan in place. It extracts groundwater from four local groundwater basins and various locations throughout the Owens Valley, where it owns extensive property. The LADWP appropriates groundwater from beneath its lands for use in the Owens Valley and in Los Angeles. The LADWP holds adjudicated extraction rights to extract groundwater from four local groundwater basins: San Fernando (entitlement of 87,000 af/year), Sylmar (entitlement of 3,255 af/year), Central (entitlement of 15,000 af/year), and West Coast (entitlement of 1,503 af/year) (Best Best & Krieger 2008). (For more information on extraction rights, please see the Water Supply Assessment in Appendix J.) Groundwater

volumes extracted by LADWP vary annually, and groundwater basin management is based on a safe yield operation. From October 2005 to September 2006, the LADWP extracted 35,428 af from the San Fernando basin, 1,853 af from the Sylmar basin, and 13,395 af from the Central basin. The LADWP does not currently exercise its pumping rights in the West Coast basin due to localized water quality concerns (Best Best & Krieger 2008).

The MWD is the largest water wholesaler for domestic and municipal uses in Southern California. As one of 26 member agencies, the LADWP purchases water from MWD to supplement LADWP supplies from local groundwater and the LAA. The MWD imports a portion of its water supplies from Northern California through the State Water Project's (SWP) California Aqueduct and from the Colorado River through MWD's Colorado River Aqueduct. The LADWP will continue to rely on the MWD to meet its current and future supplemental water needs (Best Best & Krieger 2008). As discussed further in the Water Supply Analysis provided in Appendix J, all 26 member agencies have preferential rights to purchase water from the MWD. The MWD has also been developing plans and taking actions to provide additional water supply reliability for the entire Southern California region. The LADWP coordinates closely with the MWD to ensure implementation of these water resource development plans. Part of this planning effort is MWD's creation of a 500,000 af "buffer" supply that is meant to protect against uncertainties in water resource supply (e.g., the recent restrictions on export pumping from the San Francisco Bay-Delta—see the discussion provided in the Water Supply Analysis presented in Appendix J for more information). MWD's long-term plans to meet its member agencies' growing reliability needs are through water transfer programs, outdoor conservation measures, and development of additional local resources, such as recycling, brackish water desalination, and seawater desalination. Additionally, the MWD has more than 3.8 million af of storage capacity available in reservoirs and banking/transfer programs, with approximately 2.5 million af currently in that storage. Such programs enabled MWD to conclude in its 2005 Regional Urban Water Management Plan (UWMP) that its present and planned supplies would be sufficient to meet the projected supplemental water needs of its member agencies through 2030 in average, single-dry year, and multiple-dry year hydrological scenarios. For the LADWP, its 2005 UWMP predicts that average year MWD deliveries will be, at most, 309,550 af per year by 2030; 2030 single-dry year needs will be 498,250 af per year; and 2030 multiple-dry year deliveries will range from 445,250 af per year to 562,150 af per year (Best Best & Krieger 2008).

In discussing imported water supplies from MWD, it must be noted that several factors affect the availability and reliability of LADWP's imported water supplies. Such factors include potential reductions in Delta exports and Colorado River supplies, potential regulatory and emergency constraints on the use of water conveyance facilities, water quality issues, and short- and long-term climatic changes. These factors and their impact on water supplies have been independently analyzed in the Water Supply Analysis presented in Appendix J.

Water Demand

During fiscal year 2006–2007, annual water demands in Los Angeles totaled about 635,868 af with an average per capita use of 141 gallons per day (gpd). Approximately 71 percent of the City's demand goes to residential uses while approximately 26 percent of the demand goes to commercial and governmental uses, with a very small amount used by industry (LADPW 2008).

LADWP's 2005 UWMP projects yearly water demand to reach 776,000 af by 2030 or an increase of 17 percent or 115,000 af from 2005 (Best Best & Krieger 2008). Water demand projections in five-year increments through 2030 are available in the 2005 UWMP for each major customer class: single-family, multi-family, commercial, governmental, and industrial. Demographic data from the Southern California Association of Governments' (SCAG's) 2004

Regional Transportation Plan; billing data for each major customer class; weather, and water conservation were factors used in forecasting future water demand growth.

The 2005 UWMP used a service area-wide method in developing its water demand projections. This methodology does not rely on individual development demands to determine areawide growth. Rather, the growth in water use for the entire service area was considered in developing long-term water projections for the City of Los Angeles through the year 2030. The 2005 UWMP is updated every five years as required by California law. This process entails, among other requirements, an update of water supply and water demand projections for water agencies. In the next update, the LADWP will develop a revised demand forecast that will factor in the water demand for all water supply assessments that have been prepared and future demands in order to continually hone the accuracy of the water demand forecasts. While quantified water demands will be added to the water demand baseline for use in future UWMPs, project consistency with the amount of growth assumed in the 2005 UWMP's projections supports a conclusion that such a project's demands were included in the 2005 UWMP supply-demand analysis.

As mentioned above, the 2005 UWMP anticipates a growth in water demand of 115,000 af per year by 2030. The additional water demand represented by the 2002 LRDP Amendment, 307 af per year, falls well within this amount. Further, the 2005 UWMP anticipates that governmental land uses (under which the UCLA campus would fall) would result in an increase of 3,000 af per year in water demands by 2030, with 1,000 af per year of this demand growth occurring by 2010. Therefore, the additional water use that would result from the proposed Project is also consistent with these land-use specific projections. The growth in water demand that would occur with the proposed Project is consequently included within the demand forecasts utilized in the 2005 UWMP (Best Best & Krieger 2008).

UCLA Campus

Water Demand

The LADWP supplies water to the UCLA campus and ensures that the water meets all applicable State water quality standards. In 2007, the total campus water consumption was approximately 2.34 million gallons per day (mgd) (UCLA 2008b). This represents a reduction of approximately 100,000 gpd compared to 2001 consumption. Approximately 80 to 85 percent of total campus water consumption is attributed to indoor use, with approximately 15 percent used for landscape irrigation. The largest portion of indoor water use is attributable to mechanical equipment used to cool campus buildings using the Cogeneration Plant cooling towers, steam boilers and other stand-alone chiller equipment. Other indoor water uses include residence halls, research laboratories, medical and patient care activities, dining facilities, restrooms, gymnasium showers and swimming pools, custodial areas, and drinking fountains (UCLA 2003b).

Water Conservation Efforts

In the 1990 LRDP, UCLA adopted measures to reduce overall water consumption by at least 15 percent from the levels used in academic year 1987–1988. A water-conservation retrofitting program on the UCLA campus included (1) technological advances in cooling equipment to cool campus buildings; (2) the installation of low-flow showers, toilets, and urinals throughout campus, except for patient care facilities in the Medical Center; and (3) improvements in irrigation techniques. UCLA has also established maintenance programs to reduce water loss from leaky faucets and water main breaks, and has installed hot water circulating pumps that provide almost instantaneous hot water in lavatory faucets, thereby preventing the wasteful use

of running water until it becomes hot. UCLA has replaced older galvanized irrigation pipes with new polyvinyl chloride (PVC) pipes and automatic sprinkler controls to activate irrigation systems during evening or early morning hours. Such changes significantly reduce irrigation water loss through leaks and evaporation. Water use in 2001 decreased approximately 25 percent from that of 1987–1988, exceeding the 15 percent reduction goal adopted in the 1990 LRDP (UCLA 2003b). Between 2001 and 2007, water use decreased by another four percent (UCLA 2008b).

The campus also has a process whereby condensate water from mechanical equipment (such as air circulation fans) at the Center for the Health Sciences is captured for use in the Environmental Services Facility (ESF) cooling system. UCLA recycles approximately 50 percent of cooling water used in the ESF (chiller/Cogeneration facility) and continues to achieve reductions in water usage for cooling campus buildings. The campus has continued to improve its cooling water treatment program through alterations to water chemistry, thereby extending the number of times the water can be recycled through the system.

Regulatory Framework

State

Water Conservation Projects Act

The State of California's requirements for water conservation are codified in the Water Conservation Projects Act of 1985 (*California Water Code,* Sections 11950–11954), as reflected below:

> *11952. (a)* It is the intent of the Legislature in enacting this chapter to encourage local agencies and private enterprise to implement potential water conservation and reclamation projects….

Senate Bill 610

Senate Bill (SB) 610 amended Part 2.10 of the Water Code regarding water supply availability. SB 610, also known as Water Supply Assessment, requires Cities and Counties to request specific information on water supplies from public water systems that would serve (1) a project that is subject to CEQA and is defined as a "project" in Section 10912 of the *California Water Code*; this information must be included in environmental review documents prepared pursuant to CEQA.

However, SB 610 applies only to Cities and Counties, and not to the University of California, a constitutionally established public entity. Nonetheless, in 2002, the University of California (UC) Regents voluntarily requested that the LADWP prepare a Water Supply Assessment (WSA) for the 2002 LRDP then being proposed. This WSA was completed and adopted by the LADWP Board of Commissioners in July 2002.

For the currently proposed Project, a Water Supply Analysis has been prepared by Best Best & Krieger (2008) in compliance with the intent of SB 610 and is located in Appendix J of this EIR. The Water Supply Analysis used references and data from the LADWP's 2005 UWMP.

University of California

As with all UC campuses, UCLA is required to implement the UC Policy Guidelines for Sustainable Practices (UC Sustainability Policy) (refer to PP 4.15-1 provided in Section 4.15,

Climate Change). Accordingly, the proposed 2008 NHIP and future development under the proposed 2002 LRDP, as amended, are subject to the UC Sustainability Policy. Following are the policies designed to address water conservation. A complete listing of policies is provided in Section 4.15, Climate Change:

- For product categories that have Energy Star© rated products available, the campus will focus its procurement efforts only on products with an Energy Star© rating (e.g., appliances).
- For products and services requiring the use of water, the campus will give preference to technologies that ensure the efficient use of water resources.

In addition, the campus has several ongoing programs and policies (PPs) related to water conservation as will be described later in this section.

Project Impacts and Mitigation

Analytic Method

The existing (2007) water use for the campus assumed in this analysis includes water use associated with existing development, including the Ronald Reagan UCLA Medical Center (RRUCLAMC). Projected water use as a result of project implementation may be analyzed and calculated by one of three methods: (1) using standard use (or demand) factors (usually published by a water provider)[1] that correlate the type of land use with a water use rate; (2) determining a water demand factor specific to the campus by dividing the total existing campus water usage by the total wastewater generation to calculate a water demand ratio; or (3) applying a two percent annual growth factor to the total existing campus water usage, which has been determined by the LADWP in the 2005 UWMP to be a reasonable projection of future water demand growth.

In preparing this EIR, projected water use was calculated using all three methods, and the results were analyzed to determine which method yielded data closest to actual campus water use. Based upon this analysis, it was determined that utilization of a campus water demand ratio (Method 2) provided the most accurate yet conservative results. The use of both a standard water provider demand factor and a 2 percent annual growth factor resulted in less water demand as compared to the use of a campus water demand ratio.

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the State CEQA Guidelines. For purposes of this EIR, implementation of the proposed Project may have a significant impact on water supply if it would result in any of the following:

- Would the Project require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (*Impact 4.14-1)?*

- Would the Project require new or expanded water entitlements and resources if there are not sufficient water supplies available to serve the project from existing entitlements and resources *(Impact 4.14-2)?*

[1] Water providers, including the LADWP, do not have standard demand factors for all of the uses that are unique to a University environment.

Impact Analysis

Campus Programs, Practices and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus programs, practices, and procedures were adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project; they are therefore considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.14-2(a) *New facilities and renovations (except for patient care facilities in the Medical Center) shall be equipped with low-flow showers, toilets, and urinals.*

PP 4.14-2(b) *Measures to reduce landscaping irrigation needs shall be used, such as automatic timing systems to apply irrigation water during times of the day when evaporation rates are low, installing drip irrigation systems, using mulch for landscaping, subscribing to the California Irrigation Management Information System Network for current information on weather and evaporation rates, and incorporating drought-resistant plants as appropriate.*

PP 4.14-2(c) *The campus shall promptly detect and repair leaks in water and irrigation pipes.*

PP 4.14-2(d) *The campus shall minimize the use of water to clean sidewalks, walkways, driveways and parking areas.*

PP 4.14-2(e) *The campus shall avoid serving water at UCLA food service facilities except upon request.*

PP 4.14-2(f) *The campus shall provide ongoing water treatment programs for campus cooling equipment by adding biodegradable chemicals to achieve reductions in water usage.*

PP 4.14-2(g) *The campus shall educate the campus community on the importance of water conservation measures.*

Threshold	Would the project require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Proposed 2008 NHIP

The proposed water facilities (i.e., conveyance pipes for domestic and fire water supply) included as part of the proposed 2008 NHIP are described in Section 3, Project Description. Four- and six-inch laterals would be extended to the proposed 2008 NHIP structures from the water main in De Neve Drive, and would primarily require removal of existing asphalt surfaces. Substantial demolition or significant excavation would not be required as water mains are located near the surface. The water facilities for the proposed 2008 NHIP would occur within the identified impact area evaluated throughout this EIR. No additional direct or indirect impacts related to construction and operation of the water distribution system would occur. Construction impacts anticipated to result from implementation of the proposed 2008 NHIP are comprehensively analyzed in Sections 4.2 (Air Quality), 4.9 (Noise and Vibration), and 4.13 (Transportation/Traffic) of this EIR.

Remaining Buildout of the 2002 LRDP as Amended

Because specific projects (except for the 2008 NHIP) are not identified as part of the LRDP Amendment and, therefore, the sites for potential development are as yet unknown, construction of specific buildings, depending on location and other factors, could potentially affect the adequacy of individual campus water lines to accommodate increased water demand (water demand from the proposed Project is discussed below under Impact 4.14-2). In this regard, it is possible that new or expanded on-campus water distribution lines may be required for specific projects developed under the proposed Project. Future on-campus development would be subject to project-specific CEQA and site-specific analyses of potential impacts from construction and operation of individual projects, including infrastructure (similar to that conducted for the proposed 2008 NHIP in this EIR). However, construction impacts anticipated to result from implementation of the proposed Project are comprehensively analyzed at a program level in Sections 4.2 (Air Quality), 4.9 (Noise and Vibration), and 4.13 (Transportation/Traffic) of this EIR.

Impact 4.14-1 ***Implementation of the proposed Project would require the construction of new water facilities. Potential impacts from construction are addressed in Sections 4.2 (Air Quality), 4.9 (Noise and Vibration), and 4.13 (Transportation/Traffic) of this EIR.***

Threshold	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Table 4.14-1 depicts the calculation for the water demand ratio, which utilizes the existing average campus water demand (2007) and the monitored campus wastewater generation (2007) to derive the projected water demand with the proposed Project.

Proposed 2008 NHIP

The projected water demand for the proposed 2008 NHIP as an individual project is 117,012 gallons per day (gpd)[2] or 131 af per year, which is a portion of the projected water use increase as shown in Table 4.14-1. As indicated above and further discussed below, the growth in water demand that would occur with the proposed Project, of which the proposed 2008 NHIP is a part, is included within the demand forecasts utilized in the 2005 UWMP. Therefore, the proposed 2008 NHIP would not result in a demand for water that would exceed existing or projected supplies. This impact would be less than significant. No mitigation is required.

[2] Calculated by multiplying the projected wastewater generation for the NHIP project, 101,750 gpd (RBF Consulting, 2008) by the water demand ratio of 1.15.

TABLE 4.14-1
EXISTING AND PROJECTED WATER USE[a]

	Gallons Per Day (gpd)
Average Annual Campus Water Use (2007)[a]	2,337,598
Campus Wastewater Generation (2007)[b]	2,035,000
Water Demand Ratio	**1.15**
2008 Baseline Water Use[c]	2,475,598
2008 Baseline Wastewater Generation[d]	2,155,000
Proposed Project Water Use Increase (2013)[e]	274,207
Proposed Project Wastewater Generation Increase (2013)[b]	238,441
Total Campus Water Use (2013)[f]	2,749,805

gpd – gallons per day

[a] Includes indoor and outdoor water use.
[b] Sanitary Sewer Study, RBF Consulting, 2008.
[c] Includes 2007 average water use, 2,337,598 gpd plus the projected water demand from the RRUCLAMC, 138,000 gpd, which is calculated by multiplying the projected sewage generation for the RRUCLAMC, 120,000 gpd by the water demand ratio of 1.15.
[d] Includes the 2007 campus wastewater generation, 2,035,000 gpd plus the projected wastewater generation for the RRUCLAMC, 120,000 gpd.
[e] The projected increased water demand for 2013 is calculated by multiplying the projected wastewater generation, 238,441 gpd by the water demand ratio of 1.15.
[f] The Total Campus Water Use for 2013 is calculated by adding the projected water use increase (2013), 274,207 gpd to the 2008 Baseline Water Use, 2,475,598.

Source: UCLA 2008b; Best Best & Krieger 2008.

Remaining Buildout of the 2002 LRDP as Amended

Table 4.14-1 provides the actual water use associated with existing on-campus development and the estimated water use with the proposed Project. To determine impacts on water supply resulting from implementation of the proposed Project, the projected increase in campus water use was compared to LADWP water supplies in 2030 to evaluate whether there would be an adequate and reliable source of water for the 2002 LRDP, as amended, and whether any infrastructure improvements would be necessary.

Implementation of the proposed Project would increase campus water demand by 274,207 gpd (or 307 af per year) (UCLA 2008b), an 11 percent increase over the existing (2008) condition. As described above, approximately 117,012 gpd of the increased demand would result from the proposed 2008 NHIP. Total campus water use in 2013, which is projected at approximately 2.75 mgd (3,080 af/year), includes existing water use and the projected water use that would result from implementation of the proposed Project. It should be noted that the proposed Project's water demand estimate assumes continued implementation of PPs 4.14-2(a) through 4.14-2(g) identified previously, which include requirements for water conservation and ongoing efforts for water conservation required through UC Sustainability Policy (see PP 4.15-1 in Section 4.5, Climate Change).

The 307 af/year additional water demand associated with the proposed Project falls within projections of the 2005 UWMP and is consistent with the land use projections in the 2005 UWMP (Best Best & Krieger 2008). Therefore, the growth in water demand that would occur under the proposed Project is included within the demand forecasts utilized in the 2005 UWMP. Also as discussed above, the MWD concluded in its 2005 UWMP that its present and planned supplies would be sufficient to meet the projected supplemental water needs of its member agencies through 2030 in average, single-dry year, and multiple-dry year hydrological scenarios. Therefore, sufficient water supplies exist to serve all projected growth in 2030,

including the proposed Project, in both normal and dry years. Impacts from the proposed Project related to water supply are less than significant and no mitigation is required with implementation of the identified PPs.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.14-2 ***Continued compliance with PPs 4.14-2(a) through 4.12(g) would ensure that, although implementation of the proposed Project would generate an additional demand for water, it would not require water supplies in excess of existing entitlements and resources or result in the need for new or expanded entitlements. This is considered a less than significant impact.***

4.14.2 SOLID WASTE

Environmental Setting

UCLA contracts with a private solid waste disposal company to collect, recycle, and dispose of campus-generated solid waste. Under this contract, the private solid waste hauler is responsible for all on-campus facilities and residence halls, the medical center, the Student Union buildings, and the Associated Student food service areas. The hauler transports and deposits waste at the American Waste Transfer Station in Gardena. Following waste separation and sorting and recycling activities, the recovery facility then ships remaining waste to the Sunshine Canyon Landfill (which is partially located in both the County and City of Los Angeles) and/or Chiquita Canyon Landfill (which is located in unincorporated County of Los Angeles near the Community of Castaic). Approximately 90 percent of the solid waste generated in the City of Los Angeles, including the UCLA campus, is currently disposed of at the Sunshine Canyon Landfill (UCLA 2007a).

Table 4.14-2, Existing Waste Disposal for Landfills Serving the UCLA Campus, summarizes the operations of the Sunshine Canyon and Chiquita Canyon Landfills; the total daily and remaining capacity at the landfills; and information regarding the waste-to-energy facility utilized by UCLA.

The campus generated a total of 38,644,586 pounds (19,322 tons) of solid waste in calendar year 2007 (UCLA 2008b). Of this amount, 22,351,060 pounds (11,176 tons/58 percent) was disposed of in landfills (including non-hazardous solid waste generated by the Center for Health Sciences [CHS]) and 16,293,526 pounds (8,147 tons/42 percent) was diverted from the solid waste stream through recycling or incineration.[3]

The diversion rate of 42 percent in 2007 was below the goal of 50 percent established by Assembly Bill (AB) 939 (discussed below) and the UC Sustainability Policy related to solid waste. Therefore, for 2008, UCLA contracted with a new waste management provider with greater experience in recycling, and campus-wide recycling programs and facilities were

[3] Solid waste is transported to a SCAQMD-approved waste-to-energy plant in the City of Commerce for incineration. The incineration heat is used to generate electricity and the remaining ash is used for road base projects. One hundred percent of this waste stream is utilized.

expanded. Campus-generated green waste has been kept and used as mulch in campus landscape areas or sorted and transported to an off-campus composting facility. UCLA operates a SAFE Collection Center at the Environmental Health and Safety (EH&S) facility that accepts off-campus residential hazardous and electronic waste for recycling at no charge. On-campus waste separation for recycling has been expanded and includes white paper, mixed (colored) paper, glass, aluminum, plastic, cardboard, green waste, wood, metal, rock, used printer ink cartridges, and construction waste. A food waste-recycling program in the UCLA residence halls was launched in May 2008. Medical Centers, which were previously exempt, are now required to divert recyclable materials and report tonnage to UCLA Facilities Management. In addition, the UCLA Facilities Management department established a full-time Recycling Coordination position for fiscal year 2007–2008.

TABLE 4.14-2
EXISTING WASTE DISPOSAL FOR LANDFILLS SERVING THE UCLA CAMPUS

Site	Estimated Closure Date	Solid Waste Facility Permit Max Daily Capacity (12/31/06) (tons)	Average Permitted Daily Intake (tons per day)	Annual Capacity (million tons)	Annual Disposal Quantity in 2006 (million tons)[b]	Total Remaining Permitted Capacity as of 1/1/2007 (million tons)[c]
Chiquita Canyon	2019	6,000	5,648	1.87[a]	1.54	11.05
Sunshine Canyon	2036	12,100	4,940	3.78[a]	2.13[d]	5.64[e]
	Total	**18,100**		**5.65**	**3.67**	**16.69**
Commerce Refuse-to-Energy Facility	–	1,000	–	0.15[f]	0.104	466.64

[a] Estimated by multiplying solid waste facility permit daily capacity by operation (days/week) by 52 (weeks per year).
[b] Disposal quantities based on actual tonnages reported by owners/operators of permitted solid waste disposal facilities to the Los Angeles County Department of Public Works (LADPW) for the period between 1/1/2006 and 12/31/2006.
[c] Estimated remaining permitted capacity as of January 1, 2007, is based on landfill owner/operator responses to a written survey conducted by the LADPW in August 2007 and a review of site-specific permit criteria established by land use agencies, local enforcement agencies, the California Regional Water Quality Control Board, and the South Coast Air Quality Management District.
[d] Disposal quantities based on actual tonnages reported by owners/operators of permitted solid waste disposal facilities to the LADPW for the period between 1/1/2006 and 12/31/2006.
[e] Estimated remaining permitted capacity as of January 1, 2007, is based on landfill owner/operator responses to a written survey conducted by the LADPW in August 2007 and a review of site-specific permit criteria established by land use agencies, local enforcement agencies, the California Regional Water Quality Control Board, and the South Coast Air Quality Management District.
[f] Based on the Solid Waste Facility Permit of 2,800 tons per week for 52 weeks.

Source: LADPW 2008 (Appendix E-2.1).

With implementation of the above-described ongoing and expanded waste reduction efforts, the campus achieved a 55 percent diversion rate for the period between January and June 2008, which exceeded the UC Sustainability Policy objective of 50 percent by June 2008. Of the total waste stream from January to June 2008, 30 percent was recycled, 11 percent was used as green waste, 14 percent was diverted to a waste-to-energy facility, and the remaining 45 percent was disposed of in a landfill. While the 6-month average for the waste to energy component of the waste stream was 14 percent, UCLA reported an average of 25 percent for the final 3 months. It is planned to continue to maintain this higher diversion to a transformation facility.

Regulatory Framework

State

At the State level, the management of solid waste is governed by regulations established by the California Integrated Waste Management Board (CIWMB), which delegates local permitting, enforcement, and inspection responsibilities to Local Enforcement Agencies. In 1997, some of the regulations adopted by the State Water Quality Control Board pertaining to landfills (Title 23, Chapter 15) were incorporated with CIWMB regulations (Title 14) to form Title 27 of the *California Code of Regulations.*

AB 939–California Integrated Waste Management Act

In 1989, the Legislature adopted the California Integrated Waste Management Act of 1989 (AB 939), which established an integrated waste management hierarchy that consists of the following in order of importance: source reduction, recycling, composting, and land disposal of solid waste. The law also requires that each County prepare a new Integrated Waste Management Plan. The Act further required each City to prepare a Source Reduction and Recycling Element by July 1, 1991. Each source reduction element includes a plan for achieving a solid waste goal of 25 percent by January 1, 1995, and 50 percent by January 1, 2000. SB 2202 made a number of changes to the municipal solid waste diversion requirements under the Integrated Waste Management Act. These changes included a revision to the statutory requirement for 50 percent diversion of solid waste to clarify that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000.

University of California

As with all UC campuses, UCLA is required to implement the UC Sustainability Policy (refer to PP 4.15-1 provided in Section 4.15, Climate Change). Accordingly, the proposed 2008 NHIP and future development under the proposed 2002 LRDP, as amended, are subject to the UC Sustainability Policy. Following is a summary of the policies designed to address solid waste recycling and waste management.

Sustainable Recycling and Waste Management Practices

a. In response to Public Resources Code Section 40196.3 which states that the Regents of the University of California are encouraged to comply with code Chapter 18.5, the "State Agency Integrated Waste Management Plan" and in support of the California Integrated Waste Management Board's goal for a "zero waste California", the University voluntarily adopts the following waste diversion goals:

    - 50 percent by June 30, 2008
    - 75 percent by June 30, 2012
    - Ultimate goal of zero waste by 2020

b. All campuses will develop an Integrated Waste Management Plan (IWMP) and funding mechanism by June 30, 2007.

c. Waste reduction and recycling elements shall be integrated in Green Building Design and Sustainable Operation implementation goals and into campus operations as they are developed.

d. The University will seek to develop funding sources for financing waste reduction projects.

Project Impacts and Mitigation

Analytic Method

Solid waste generated as a result of proposed Project implementation was calculated by developing a generation factor of pounds of solid waste per square foot of development by dividing the total solid waste generated by the campus in 2007 by the gross square footage currently on campus, including parking structures (as these facilities can indirectly generate solid waste) and the RRUCLAMC.

To determine impacts on solid waste disposal resulting from implementation of the proposed Project, the projected increase in the solid waste generation amount was compared to the total anticipated remaining capacity at landfills that serve the UCLA campus.

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact on solid waste if it would do any of the following:

- Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs *(Impact 4.14-3)*?[4]

- Would the project fail to comply with applicable federal, State, and local statutes and regulations related to solid waste *(Impact 4.14-4)*?[5]

Impact Analysis

Campus Programs, Practices and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus PP was adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project; it is therefore considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.14-3 *The campus shall continue to implement a solid waste reduction and recycling program designed to limit the total quantity of campus solid waste that is disposed of in landfills during the LRDP horizon.*

Threshold	Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?

Table 4.14-3 depicts the existing campus solid waste generation for the campus and the projected solid waste generation for the proposed Project.

[4] This standard has been re-written from a positive sense ("sufficient") to a negative sense ("insufficient") for ease of comprehension.

[5] This standard has been re-written from a positive sense ("Comply") to a negative sense ("Fail to comply") for ease of comprehension.

TABLE 4.14-3
EXISTING AND PROJECTED SOLID WASTE GENERATION

	Development (gsf)	Solid Waste Generation (tons per year) [b]
Existing On Campus Development (2008)	24,480,067[a]	19,322
Proposed Project (2013) (estimated)	2,008,615[c]	1,586
Total Solid Waste Generation	**26,488,682**	**20,908**

gsf – gross square feet

[a] Includes 7,644,051 gsf of parking structures.
[b] Assumes a solid waste generation factor of 1.57861 pounds per year/square foot which is calculated by dividing the total solid waste generated on campus in pounds per year by the total existing baseline square footage (e.g., 38,644,586 pounds per year ÷ 24,480,067 gsf = 1.57861 pounds per year/square feet).
[c] Includes 550,000 gsf for the proposed 2008 NHIP; 1,320,615 gsf of remaining 2002 LRDP development allocation; and 138,000 gsf under construction.
Source: UCLA 2008b.

The campus generated a total of 38,644,586 pounds (19,322 tons) of solid waste in calendar year 2007 (UCLA 2008b). Of this amount, 22,351,060 pounds (11,176 tons/58 percent) was disposed of in landfills (including non-hazardous solid waste generated by the Center for Health Sciences [CHS]) and 16,293,526 pounds (8,147 tons/42 percent) was diverted from the solid waste stream through recycling or incineration.[6]

The diversion rate of 42 percent in 2007 was below the goal of 50 percent established by Assembly Bill (AB) 939 (discussed below) and the UC Sustainability Policy related to solid waste. Therefore, for 2008, UCLA contracted with a new waste management provider with greater experience in recycling, and campus-wide recycling programs and facilities were expanded. Campus-generated green waste has been kept and used as mulch in campus landscape areas or sorted and transported to an off-campus composting facility. UCLA operates a SAFE Collection Center at the Environmental Health and Safety (EH&S) facility that accepts off-campus residential hazardous and electronic waste for recycling at no charge. On-campus waste separation for recycling has been expanded and includes white paper, mixed (colored) paper, glass, aluminum, plastic, cardboard, green waste, wood, metal, rock, used printer ink cartridges, and construction waste. A food waste-recycling program in the UCLA residence halls was launched in May 2008. Medical Centers, which were previously exempt, are now required to divert recyclable materials and report tonnage to UCLA Facilities Management. In addition, the UCLA Facilities Management department established a full-time Recycling Coordination position for fiscal year 2007–2008.

Proposed 2008 NHIP

Construction

Construction waste would be generated during demolition, grading, and construction activities. As shown in Table 4.14-4, 2008 NHIP Expected Construction Waste Generation, the proposed 2008 would generate a total of approximately 1,100.41 tons of construction waste. This includes an average of approximately 1.4 tons of debris per day over the approximate one month demolition period (Office of Residential Life and Rooms Division) and an average of

[6] Solid waste is transported to a SCAQMD-approved waste-to-energy plant in the City of Commerce for incineration. The incineration heat is used to generate electricity and the remaining ash is used for road base projects. One hundred percent of this waste stream is utilized.

approximately 1.2 tons of construction waste per day over the approximate 42-month construction period.

TABLE 4.14-4
PROPOSED 2008 NHIP EXPECTED CONSTRUCTION WASTE GENERATION

Proposed Activity	Size (sf)	Waste Generation Rate (lbs/sf)[a]	Total Solid Waste Generated (tons)	Daily Solid Waste Generated (tons/day)[b]
Demolition of Existing Structures	14,000	4.38	30.66	1.40
Construction	550,000	3.89	1,069.75	1.2
Total Solid Waste Generation			**1,100.41**	

sf – square feet.

[a] USEPA 1998 (page A-1).
[b] Based on an assumed demolition schedule of 1month (or 22 working days) and a construction schedule of 42 months (22 x 42 = 924 working days).

However, as part of the implementation of designing all new buildings to meet the UC equivalent of a Leadership in Energy and Environmental Design (LEED)™ certification (per the UC Sustainability Policy), UCLA has developed design features to ensure that new construction will achieve a certified rating. As part of this effort, the UCLA campus is committed to achieving a 75 percent construction waste diversion, which includes demolition waste. This would reduce the total construction waste for the proposed project to approximately 7.67 tons (30.66 x 0.25) or an estimated average of 0.34 tons per day during the peak demolition period.

As shown in Table 4.14-2, the combined remaining daily intake of the Sunshine and Chiquita Canyon Landfills is 7,512 tons per day. The daily solid waste generated by construction of the proposed 2008 NHIP represents approximately 0.004 percent of the currently estimated remaining daily intake at the local landfills that serve the campus. This impact is less than significant impact and no mitigation is required.

Operation

The projected solid waste generation from the operation of the proposed 2008 NHIP is 868,236 pounds per year (lbs/year, 434 tons/year)[7] or 2,378 lbs/day (1.2 tons/day). This represents an approximate two percent increase over the existing baseline solid waste generation on campus. As reflected in Table 4.14-2, the combined remaining permitted capacity in the Sunshine Canyon and Chiquita Canyon Landfills is approximately 7,512 tons/day. The Sunshine Canyon Landfill, which would receive the majority of the solid waste generated on campus, has a remaining permitted daily capacity of 6,452 tons/day, and the Chiquita Canyon Landfill has a remaining permitted daily capacity of 1,060 tons/day.

The incremental increase in solid waste generation from the proposed 2008 NHIP (1.2 tons per day) would not exceed the landfill capacity of either the Sunshine Canyon or Chiquita Canyon Landfills daily or annually. Because sufficient capacity exists at these landfills, this impact is considered less than significant. Further, the UCLA campus is currently diverting waste consistent with, and exceeding, AB 939 requirements and is committed to continuing to achieve a 50 percent or greater diversion. This will be accomplished through waste reduction and minimization efforts, as required by 2002 LRDP Final EIR PP 4.14-3 and continued implementation of the UC Sustainability Policy (required by PP 4.15-1), including provisions

[7] Calculated as 550,000 gsf x 1.57861 pounds per year.

related to waste management practices (discussed above under "Regulatory Setting" and in Section 4.15, Climate Change). Continued compliance with 2002 LRDP Final EIR PP 4.14-3 and new 4.15-1 would ensure that the impacts on solid waste from implementation of the proposed 2008 NHIP remains less than significant.

In summary, implementation of the proposed 2008 NHIP would not generate solid waste that exceeds the permitted capacity of landfills serving the campus. This impact is less than significant and no mitigation is necessary.

Remaining Buildout of the 2002 LRDP as Amended

With the exception of the proposed 2008 NHIP, the 2002 LRDP, as amended does not identify specific construction projects. However, it is expected that future construction projects on campus would have similar construction impacts related to solid waste as the proposed 2008 NHIP, which would be less than significant.

As shown in Table 4.14-3, in year 2013, the campus would generate approximately 20,908 tons of solid waste per year (57 tons/day). Of this amount, approximately 1,586 tons/year or 4.3 tons/day would be generated by the proposed Project, an approximate 8.2 percent increase over existing conditions. This projection includes reductions from waste diversion since these efforts are currently ongoing and are assumed in the solid waste generation factor, which is based on the amount of solid waste generated in 2007. However, as noted above, the total amount of waste that was generated in 2008 was less than in 2007 due to waste-diversion programs on campus; therefore, the actual solid waste generation in the future would likely be less than that estimated in Table 4.14-3.

Although UCLA is currently diverting 55 percent of its solid waste stream, it is anticipated that approximately 75 percent or more of the total campus solid waste generation would be recycled, used as green waste, or transferred from waste-to-energy through the 2013 planning horizon, consistent with the UC Sustainability Policy to divert 75 percent of the waste generated by 2012. According to the Los Angeles County Countywide Integrated Waste Management Plan (LA IWMP), waste-to-energy facilities are assumed to remain operational during the 15-year IWMP planning period, although utilization of these facilities is limited by the maximum daily amount that can be accepted for incineration and these facilities do not accept any metal waste (LADPW 2008).

As noted above, the remaining daily permitted capacity in the Sunshine Canyon and Chiquita Canyon Landfills is approximately 7,512 tons/day. The incremental daily increase in solid waste generation with the proposed Project (4.3 tons/day) would represent approximately 0.05 percent of the total daily permitted capacity of the landfills. Because sufficient capacity exists at the Sunshine Canyon and Chiquita Canyon Landfills, this impact is considered less than significant and no mitigation is necessary.

Further, continued implementation of 2002 LRDP Final EIR PP 4.14-3 and new PP 4.15-1 would ensure that the impact on solid waste facilities from implementation of the proposed Project remains less than significant.

Mitigation Measures

No mitigation measures are necessary.

Level of Significance After Mitigation

Less than Significant.

Impact 4.14-3 ***Implementation of the proposed Project would not generate solid waste that exceeds the permitted capacity of landfills serving the campus. This impact is less than significant and no mitigation is required.***

Threshold	Would the project fail to comply with applicable federal, State, and local statutes and regulations related to solid waste?

Remaining Buildout of the 2002 LRDP as Amended Including the Proposed 2008 NHIP

As described in Regulatory Framework, AB 939 requires that local jurisdictions divert at least 50 percent of all generated solid waste by and after January 1, 2000. As noted above, the UCLA campus is achieving a 55 percent diversion rate; is committed to achieving a 75 percent diversion rate by 2012; and plans to have a 100 percent diversion rate by 2020. This would be accomplished through continuing waste-reduction and minimization efforts (PP 4.14-3 and PP 4.15-1, from Section 4.15 Climate Change). Therefore, implementation of the proposed Project, which includes the proposed 2008 NHIP, would be consistent with AB 939 and no impact would occur. No mitigation is required.

Mitigation Measures

No mitigation measures are necessary.

Level of Significance After Mitigation

No impact.

Impact 4.14-4 ***With implementation of 2002 LRDP Final EIR PP 4.14-3 and new PP 4.15-1, implementation of the proposed Project would comply with all applicable federal, State, and local statutes and regulations related to solid waste. No impact would occur.***

4.14.3 WASTEWATER

Environmental Setting

City of Los Angeles Wastewater Collection and Treatment Facilities

The City of Los Angeles provides wastewater (or sewer) transmission facilities from the campus to the City of Los Angeles's Hyperion Treatment Plant (HTP), located in Playa del Rey, directly west of the Los Angeles World Airport. The HTP treats wastewater from Santa Monica, Beverly Hills, Burbank, Culver City, El Segundo, Glendale, San Fernando, portions of unincorporated Los Angeles County, twenty-nine contract agencies, and most of the City of Los Angeles. The neighboring cities and agencies contract with the City of Los Angeles to treat their wastewater at the City's facilities (UCLA 2003b).

The HTP has a design capacity of 450 mgd and currently treats an average of 362 mgd to primary and secondary treatment standards, using 3 levels of filtration treatment before discharging the treated wastewater 5 miles offshore. Therefore, the HTP currently operates at 80 percent of its capacity (City of Los Angeles Bureau of Sanitation 2008b).

UCLA Wastewater System

The UCLA Capital Programs Department determines utility needs and plans improvements to the campus sanitary sewer system. System conveyance enhancements are made, as appropriate, in conjunction with project-specific development requirements. The UCLA EH&S ensures compliance with industrial wastewater regulations and oversees a campus-wide program that teaches and enforces procedures for proper industrial wastewater disposal (UCLA 2003b). UCLA's Facilities Management Department maintains the campus sanitary sewer system.

Thirteen separate sewer lines, which generally run in a north-south direction, serve campus buildings. The lines vary in size from 6 inches to 21 inches in diameter. In addition, there are various minor laterals along the campus's perimeter that connect a building or a number of buildings directly to the off-site (i.e., City) sewer mains. Figure 4.14-1, Existing Campus Sewer Lines, shows the general location of the campus sewer lines. A primary sewer line that conveys discharges from off-campus areas north of UCLA enters the campus system through the City connection at Sunset Boulevard and Westwood Plaza (labeled "Line G" in Figure 4.14-1). A description of the existing sewer lines is provided in the Sanitary Sewer Study (sewer study) completed by RBF Consulting (2008) for the proposed Project.

The existing sewer system within the Northwest zone consists of a series of campus-owned sewer lines, which discharge into a sewer line within Gayley Avenue (maintained by the City of Los Angeles Bureau of Sanitation). This sewer line is initially an 8-inch-diameter line that runs from the upstream terminus manhole near the intersection of Gayley and Landfair Avenues and flows downstream in a southeastern direction. At the intersection of Gayley Avenue and Strathmore Drive, the sewer line increases to a 12-inch-diameter main as it accepts sewage discharge from UCLA's sewer lines K, X, and Y (RBF Consulting 2008).

The sewer study measured the existing average and peak flows at 19 manhole locations, including each on-campus line and the points of connection to City-owned sewer lines (shown on Figure 4.14-1). Average flow for the entire campus system was calculated at 2.155 mgd, including the projected wastewater generation associated with the RRUCLAMC (RBF Consulting 2008).

The five locations where campus sewer lines connect to the City of Los Angeles's lines are identified as points C, D, E, M, and AA in Figure 4.14-1. Table 4.14-6 under Impact 4.14-5 summarizes the sewer flow monitoring results at these locations. As shown in Table 4.14-6, under existing conditions, the average and peak flows at the five sewer locations where UCLA wastewater flows connect the City's sewer lines are operating at or below each pipeline's design capacity (UCLA 2008c). These flows include flows from upstream of UCLA that flow through the UCLA sewer lines, as well as the UCLA campus.

Campus Wastewater Reduction Efforts

As previously discussed, the campus has implemented water conservation programs that have resulted in substantial decreases in water use. Because wastewater generation is directly related to water use, the reduction in water use is estimated to have resulted in an associated decrease in wastewater generation of approximately 23 percent assuming that 80 percent of water use is discharged into the sewer system (e.g., if water use has decreased approximately 29 percent, then wastewater generation has been reduced by approximately 23 percent, which is 80 percent of 29 percent).

Regulatory Framework

State

The quality of effluent that the HTP can discharge is established by the Los Angeles Regional Water Quality Control Board (RWQCB) through a National Pollutant Discharge Elimination System (NPDES) permit that specifies Waste Discharge Requirements (WDRs). Operation of the HTP is subject to regulations set forth by the California Department of Health Services (DHS) and State Water Resources Control Board (SWRCB).

Local

The Industrial Waste Management Division (IWMD) of the Bureau of Sanitation, Department of Public Works, protects the local receiving waters by (1) regulating industrial wastewater discharge to the City's sewer system; (2) by administering and enforcing the Los Angeles Municipal Code; and (3) enforcing federal regulations. All of the treatment plants operated by the City of Los Angeles are subject to the requirements and limitations of the NPDES permits, which the RWQCB issues. NPDES permits are required for all facilities (including sewage treatment plants) that discharge to navigable waters or surface waters of the state. In order to meet and maintain the requirements of the NPDES permits, the City, through the IWMD, regulates industries discharging to the sewer system.

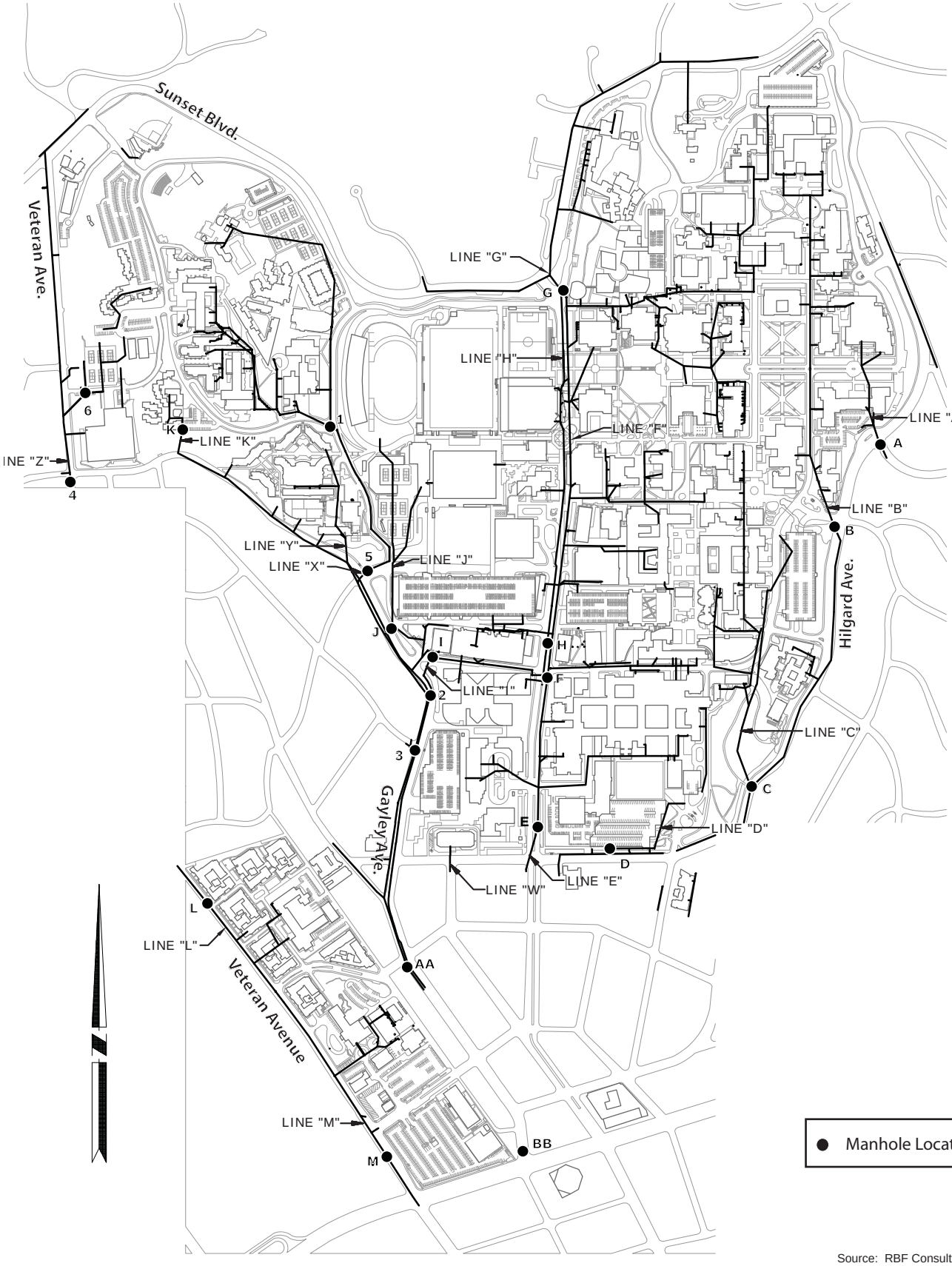
Project Impacts and Mitigation

Analytic Method

As discussed further above, a sewer study (RBF Consulting 2008) was conducted to measure actual flows at a total of 19 manhole locations, which represent all on-campus lines and the 5 points of connection to City-owned sewer lines. The sewer study used the collected sewer flow monitoring data to calculate current total wastewater flows from the campus (including wastewater generation from land uses north of the campus that contribute to UCLA's total wastewater flow) to derive sewage generation factors for each campus land use zone and to determine increases in flow with proposed Project development. Specifically, to determine campus wastewater generation for future development, the zone-specific factors, measured in gallons per day per 1,000 gross square feet (gpd/kgsf), was derived by dividing the measured sewer flows by the total gross square footage of occupied campus facilities, excluding parking structures. The zone-specific campus wastewater generation factors ranged from 91 to 185 gpd/kgsf (RBF Consulting 2008). These factors were then applied to the square footage of development allowed by the proposed Project to estimate future wastewater generation by the campus.

The wastewater generation factor for the Northwest zone was calculated as 185 gpd per 1,000 occupied gsf and, as a residential zone, the factor was also calculated as 50 gpd per bed. These factors were developed so that either factor would provide approximately the same result.

The sewer study also compared the zone-specific campus sewage generation factors to those typically used by the City of Los Angeles. This comparison indicated that City generation rates overstate flows by a large margin for campus land uses and generally do not represent actual campus flows. The City generation rates are standardized rates that are broadly applied and are not based on actual measured flows. Therefore, the zone-specific rates were considered most representative of existing conditions on campus and were used to determine existing and



Source: RBF Consulting 2008

Existing Campus Sewer Lines

Figure 4.14-1

2008 NHIP and LRDP Amendment

BonTerra CONSULTING

R:\Projects\UCLA\J011\Graphics\LRDP\ex4.14-1_exist_sewer_102908.pdf

D:\Projects\UCLA\J011\Graphics\Ex_exsit_sewer_102908.ai

projected flows for future development as well as potential impacts to the City of Los Angeles's wastewater infrastructure (UCLA 2008c).

To determine wastewater impacts associated with implementation of the proposed Project, the sewer study compared estimated future wastewater flows (as shown in Table 4.14-5 below) to the remaining capacity of the conveyance and treatment systems serving the campus, including their connection to the City's infrastructure, to determine whether sufficient capacity exists and/or whether there is the need for additional wastewater treatment systems.

Thresholds of Significance

As previously discussed in Section 2.3.2, Effects Found Not to be Significant, during preparation of the Initial Study, UCLA determined that the proposed Project would not have a significant impact for the following threshold from the CEQA Checklist and no further analysis of these issues is presented in this section.

- Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The following thresholds of significance criteria are based on the Initial Study checklist contained in Appendix G of the State CEQA Guidelines for Wastewater.

- Would the project require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects *(Impact 4.14-5)*?

- Would the project result in a determination by the wastewater treatment provider that 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 *(Impact 4-14-6)*?

Impact Analysis

Campus Programs, Practices and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus PP was adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project; it is therefore considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.14-5 *As part of the design process for proposed projects, an evaluation of the on-campus sewer conveyance capacity shall be undertaken, and improvements provided if necessary in order to ensure that connections are adequate and capacity is available to accommodate estimated flows.*

Threshold	Would the project require or result in the construction of new or expanded wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Table 4.14-5 identifies the wastewater generation from existing development on campus, and the projected wastewater generation with implementation of the proposed Project.

TABLE 4.14-5
EXISTING AND PROJECTED
WASTEWATER GENERATION

	Wastewater (gpd)
Existing Campus Wastewater Generation (2008)[a]	2,155,000
Proposed Project Wastewater Generation Increase (2013)[b]	238,441
Total	**2,393,441**

gpd – gallons per day

[a] Includes the total campus wastewater generation for 2007, 2,035,000 gpd plus the projected wastewater generation for the RRUCLAMC, 120,000 gpd (RBF Consulting, 2008).

Source: UCLA 2008b; RBF Consulting 2008

Proposed 2008 NHIP

In accordance with PP 4.14-5, UCLA has evaluated the proposed 2008 NHIP to determine if the wastewater generated by this development project would exceed the capacity of existing sewer lines. Based on the wastewater generation factor provided above, the estimated wastewater generation from the proposed 2008 NHIP is 101,750 gpd (Northwest zone wastewater generation rate 0.185[8] multiplied by 550,000 gsf).

Planned sewer line improvements with implementation of the proposed 2008 NHIP are described in Section 3, Project Description. The proposed 2008 NHIP would be served by both on-campus Lines "X" and "K". The sewer study includes the proposed 2008 NHIP as a specific known project and determines that there would be adequate on-campus and off-campus sewer conveyance capacity to serve the proposed 2008 NHIP without diversions or expansions of the existing infrastructure (RBF Consulting 2008; UCLA 2008c).

As described in Section 3, Project Description, the proposed 2008 NHIP does require the installation of sewer lines (i.e., on-campus conveyance pipes) to connect the proposed structures to existing lines. The sewer facilities for the proposed 2008 NHIP are allocated within the identified impact area evaluated throughout this EIR. No additional direct or indirect impacts related to construction and operation of the sewer infrastructure system would occur. Construction impacts anticipated to result from implementation of the proposed 2008 NHIP are comprehensively analyzed in Sections 4.2 (Air Quality), 4.9 (Noise and Vibration), and 4.13 (Transportation/Traffic) of this EIR.

Remaining Buildout of the 2002 LRDP as Amended

The existing capacity of the on-campus sewer lines was evaluated, and the increased average and peak wastewater flows to each line from the proposed Project was estimated, including additional flow at each of the five connection points to Los Angeles's sewer lines (i.e., locations "C", "D", "E", "M", and "AA"). Development under the proposed Project is anticipated to generate an estimated additional average wastewater flow of 238,441 gpd (refer to Table 4.14-4), an approximate 11 percent increase compared to existing conditions. The projected total wastewater flows from the campus would be 2.393 mgd.

[8] The Sanitary Sewer Report prepared by RBF Consulting (2008) created zone-specific wastewater generation factors based on sewer line monitoring data collected for the report. The Northwest zone of the UCLA campus is predominantly undergraduate student housing and recreational uses.

Although the calculation of average flows is important for projection purposes, the determination of available capacity in either the campus or the City's sewer systems depends on the peak flow measurements. With respect to on-campus sewer lines, it was determined that the campus system has capacity for the majority of the future development with the proposed Project, with the potential exception of Line "J" which already exceeds capacity during maximum flows. To address this issue, a portion of future flows could be redirected to an alternative line with additional capacity. The need for flow redirection would be determined when project-specific analysis is completed for any future development that would use Line "J". Therefore, the on-campus sewer lines that would receive additional flows associated with the proposed Project are expected to have adequate remaining wastewater conveyance capacity for the projected development through use of existing on-campus sewer connection or future on-campus diversions (RBF Consulting 2008). Therefore, based on this program-level analysis, the proposed Project would not require the construction of new or upgraded facilities. This impact would be less than significant, and no mitigation is required.

However, it should be noted that, because specific projects are not identified as part of the LRDP Amendment and the sites for potential development are as yet unknown (except for the 2008 NHIP), construction of specific buildings, depending on location and other factors, could potentially affect the adequacy of individual campus sewer pipes to accommodate increased flows. In this regard, it is possible that new or expanded on-campus lateral lines or service connections, which branch from the main trunk sewer lines addressed above, may be required for specific projects developed with the proposed Project. Depending upon the proposed future development, a site-specific sewer evaluation, including flow monitoring and modeling, may be required as part of the project design to determine the adequacy of the existing sewer pipe capacity in the affected on-campus lines. As previously noted, PP 4.14-5 requires that an evaluation of the sewer conveyance capacity be undertaken in conjunction with development proposals in order to ensure that connections are adequate and capacity is available to accommodate estimated flows. Continued implementation of PP 4.14-5 would ensure that impacts to the sewer conveyance system would remain less than significant by ensuring that new or expanded lines are provided, if necessary. Environmental impacts from the construction of new and/or upgraded sewer lines would be addressed in project-specific environmental documents (similar to that conducted for the proposed 2008 NHIP above).

With respect to City facilities that receive wastewater from the campus, when the projected increase in peak flow associated with the proposed Project is added to the existing peak flow (refer to Table 4.14-6), the five sewer lines are anticipated to have sufficient capacity to accommodate the projected increase in peak flows from the proposed Project in 2013.

Therefore, the incremental increase in wastewater generation to the City's wastewater conveyance system with development under the proposed Project would not require the construction of new or upgraded facilities. This impact would be less than significant and no mitigation is required.

In addition, because wastewater generation is correlated with water usage, continued water conservation practices would reduce the volume of wastewater generated. As previously described, PP 4.14-2(a) through PP 4.14-2(g) emphasize a variety of water conservation practices, which would further reduce wastewater generation and utilization of conveyance capacity.

TABLE 4.14-6
PROPOSED PROJECT SEWER FLOW (2013)

Sewer Test Location	Pipe Size (inches)	Peak Capacity @75%	2008 Average Flow (gpd)	2008 Peak Flow (gpd)	2013 Estimated Average Flow Increase (gpd)	2013 Projected Average Flow (gpd)	2013 Projected Peak Flow Increase (gpd)	2013 Total Projected Peak Flow (gpd)
C	8	880,000	114,000	367,000	26,000	140,000	84,000	451,000
D	8	320,000	84,000	203,000	20,000	104,000	48,000	251,000
E	12	2,970,000	513,000	1,343,000	11,000	523,000	27,000	1,370,000
M	12	1,840,000	831,000	1,616,000	27,000	851,000	39,000	1,655,000
AA	18	3,760,000	1,796,000	3,396,000	134,000	1,930,000	252,000	3,648,000

gpd – gallons per day

Source: UCLA 2008c.

Impact 4.14-5 ***Implementation of the proposed Project would increase the amount of wastewater generated on campus, but would not require the construction of new or expanded wastewater conveyance system beyond on campus conveyance pipes to connect to existing lines. Potential impacts from construction are addressed in Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.***

Threshold	Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Proposed 2008 NHIP

As discussed above, the proposed 2008 NHIP would generate approximately 101,750 gpd of wastewater, or 0.101 mgd, which would represent approximately 0.09 percent of the remaining capacity of the HTP (88 mgd). This nominal increase would not preclude the City of Los Angeles Bureau of Sanitation from serving existing commitments. This impact would be less than significant and no mitigation is required.

Remaining Buildout of the 2002 LRDP as Amended

Development under the proposed Project would not generate wastewater that would exceed the capacity of the HTP wastewater treatment system in combination with the provider's existing service commitments. It should be noted that 1.32 million sf of the remaining 2002 LRDP development allocation being evaluated in this EIR is already included in the existing commitments for the HTP. The incremental increase in development allocation associated with the proposed Project is related to the 2008 NHIP discussed above. Regardless, the additional 238,441 gpd, or 0.24 mgd of wastewater generated with the proposed Project would represent only 0.3 percent of the remaining capacity of the HTP and could be adequately treated at this facility. This impact would be less than significant and no mitigation is required.

Mitigation Measures

No mitigation measures are necessary.

Level of Significance After Mitigation

Less than Significant.

Impact 4.14-6 ***Implementation of the proposed Project would not increase wastewater generation such that treatment facilities would be inadequate to serve the project's projected demand in addition to the provider's existing commitments. This is considered a less than significant impact.***

4.14.4 ENERGY

Environmental Setting

Campus energy supply sources include electricity generated by the on-campus Cogeneration Plant, electricity purchased from the LADWP, natural gas purchased from The Gas Company, and landfill gas purchased from SCS Renewable Energy-Mountaingate, LLC.

Electricity

In January 1994, the Cogeneration Plant began providing electricity to the UCLA campus with two combustion turbine generators burning a combination of natural gas and methane gas from the nearby Mountaingate Landfill. The facility simultaneously produces electricity and steam for the entire campus, as well as chilled water for air conditioning and cooling activities in many buildings on the main campus. The Cogeneration Plant produces over 250 million kilowatt-hours (kWh) of electricity annually, while the central Cogeneration Heating and Chiller Plant provides in excess of 730,000 million British thermal units (MMBTU) of heating energy in the form of steam and 870,000 MMBTU of air conditioning annually. No expansion of the Cogeneration Plant is currently planned. Some individual buildings in the northern portion of the main campus have stand-alone chillers and heating, ventilation, and air conditioning (HVAC) systems.

The simultaneous production of electricity and steam greatly increases the efficiency of campus energy use and improves the capacity and reliability of the campus electrical generation system. Operation of the facility has reduced the campus long-term utility expenditures and dependence upon electricity provided by the LADWP. The Cogeneration Plant currently provides 70 percent of the campus' demand for electricity (UCLA 2007b). Remaining electrical needs are supplied by the LADWP, and complete campus utility connections with the LADWP have been maintained for emergencies and peak energy demands.

The LADWP connections serve the majority of the campus through an electric substation located immediately north of the Cogeneration Plant. The substation provides electric power to distribution switchboards located in the Cogeneration Plant, and the output of the Cogeneration Plant electric generators are also connected to the distribution switchboards. The LADWP and the Cogeneration Plant are both continually connected to the campus so that if one fails, the other would continue to supply the campus and the hospital with electricity. Emergency back-up electricity is also available in many campus buildings through existing stand-by diesel-powered generators (UCLA 2003b).

A Thermal Energy Storage (TES) System began operation in August 2002 and has enhanced the efficiency and effectiveness of the campus cooling system by storing chilled water produced during the night when electrical demand is lower to provide air conditioning for campus buildings during high energy cost periods (days). This system saves energy costs while increasing the efficiency and capacity of the campus chilled water production system to ensure a continuous supply of chilled water to essential campus facilities (UCLA 2003b).

Within the Cogeneration Plant is the Emergency Services Building (ESB), designed to the standards of the Office of Statewide Health Planning and Development. The ESB routinely supplies the campus with steam and chilled water, but can be configured in emergencies to be dedicated to supporting the hospital facilities (UCLA 2003b).

The School of Engineering and Applied Sciences (SEAS) Chiller Plant is located adjacent to the northeastern portion of Parking Structure 9. The SEAS Chiller Plant consists of four belowground chillers and associated cooling towers. With commissioning of the TES tank in August 2002, the SEAS Chiller Plant is used primarily as an emergency back-up facility unless and until an increase in campus consumption requires its operation (UCLA 2003b).

Monthly electricity usage on campus is relatively constant during the course of a year; the annual electricity consumption for the campus in 2007 was 346,338,601 kWh.

Natural Gas

The Gas Company supplies natural gas, while SCS Energy – Mountaingate, LLC supplies landfill gas to the campus. All of the landfill gas and the majority of the natural gas are used to power the campus Cogeneration Plant which, in turn, provides electricity and steam to the majority of the campus and chilled water to many buildings on the main campus. Campus cafeterias, laboratories, and residence halls also use natural gas. The Gas Company supplied lines deliver natural gas to the campus (UCLA 2003b). The 2007 annual baseline natural gas consumption for the campus was approximately 134,205 MMBTU of gaseous fuel used directly in buildings other than the Cogeneration Plant.

The Gas Company is currently the largest campus supplier of natural gas and delivers about 90 percent of the natural gas used by the campus, all of which is used to fuel the campus Cogeneration facility (3,027,217 MMBTU/year). SCS Energy – Mountaingate, LLC sells landfill gas to UCLA, and supplies about eight percent of the gas fuel used by the campus. Landfill gas is supplied only to fuel the gas turbine generators in the Cogeneration Plant. In 2007, 268,105 MMBTU were delivered to UCLA via a dedicated piping system originating at the Mountaingate Landfill, which is located northwest of the campus near the Sepulveda Pass. The Gas Company currently provides about one percent of the natural gas used by the campus. Natural gas from The Gas Company is used directly by some campus structures for heating, cooking, and laboratory uses.

Regulatory Framework

State

California Code of Regulations Title 24

New buildings in California are required to conform to energy conservation standards specified in Title 24 of the *California Code of Regulations* (CCR). The standards establish “energy budgets” for different types of residential and nonresidential buildings; all new buildings must comply with these energy budgets. The energy budget has a space-conditioning component

and a water-heating component, both expressed in terms of energy (BTU) consumed per year. The regulations allow for trade-offs within and between the components to meet the overall budget.

Energy consumption of new buildings in California is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the CCR. The efficiency standards apply to new construction of both residential and nonresidential buildings and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building or individual agency permit and approval processes. It is UC policy to meet Title 24 for all new buildings.

University of California

As with all UC campuses, UCLA is required to implement the UC Sustainability Policy (refer to PP 4.15-1 provided in Section 4.15, Climate Change). Accordingly, the proposed 2008 NHIP and future development under the proposed 2002 LRDP, as amended, are subject to the UC Sustainability Policy. Following are the policies designed to address energy conservation. A complete listing of policies is provided in Section 4.15, Climate Change.

Green Building Design

a. Given the importance of energy efficiency to Green Building design, the University of California has set a goal for all new building projects, other than acute-care facilities, to outperform the required provisions of the California Energy Code (Title 24) energy-efficiency standards by at least 20 percent. Standards for energy efficiency for acute care facilities will be developed in consultation with campuses and medical centers.

d. Given the importance of specifically addressing sustainability in laboratory facilities, the University of California will design and build all new laboratory buildings to a minimum standard equivalent to a *LEED*™ "Certified" rating and the *Laboratories for the 21st Century (Labs21) Environmental Performance Criteria* (EPC), as appropriate. The design process will include attention to energy efficiency for systems not addressed by the California Energy Code (Title 24).

Clean Energy Standard

a. The University of California will implement a systemwide portfolio approach to reduce consumption of non-renewable energy. The portfolio will include a combination of energy efficiency projects, the incorporation of local renewable power measures for existing and new facilities, green power purchases from the electrical grid, and other energy measures with equivalent demonstrable effect on the environment and reduction in fossil fuel usage. The appropriate mix of measures to be adopted within the portfolio will be determined by each campus. Since each campus' capacity to adopt these measures is driven by technological and economic factors, the campus will need to reevaluate their energy measures mix on a regular basis. The portfolio approach will provide valuable analytical information for improving energy efficiency, resulting in an overall improvement in the University of California's impact on the environment and reduced reliance on fossil fuels during the next decade of capital program growth.

b. The University of California will strive to achieve a level of grid-provided electricity purchases from renewable sources that will be similar to the State's Renewable Portfolio Standard, which sets a goal of procuring 20 percent of its electricity needs from renewable sources by 2010.

c. With a goal of providing up to 10 megawatts of local renewable power by 2014, the University of California will develop a strategic plan for siting renewable power projects in existing and new facilities throughout the 10 UC campuses. The plan will include demonstration projects for photovoltaic systems and other renewable energy systems, such as landfill gas fueled electricity generation or thermal energy production. The strategic plan will include criteria for evaluating the feasibility of a variety of projects, such as incorporating photovoltaic systems in replacement roofing projects and in new buildings, as well as forecasting the accommodations necessary for eventual installation of photovoltaic systems. The University of California will assess the progress of renewable energy technology improvements, both in terms of cost and technical efficiency. To achieve the renewable power goal, the University will maximize the use of available subsidies and negotiate pricing reductions in the marketplace, and will develop funding sources for financing the costs of renewable energy measures.

d. With a goal of reducing systemwide non-renewable energy consumption, the UCLA campus will develop a strategic plan for implementing energy efficiency projects for existing buildings and infrastructure to include operational changes and the integration of best practices. The UCLA campus will monitor industry progress in energy retrofits and implement technical improvements as they become available. As with renewable energy projects, the UCLA campus will develop funding sources and establish a program for financing retrofit projects. The initial goal for energy efficiency retrofit projects will be to reduce systemwide growth-adjusted energy consumption by 10 percent or more by 2014 from the year 2000 base consumption level. The University will strive to achieve even greater savings as additional potential is identified and funding becomes available.

e. The UCLA campus will continuously evaluate the feasibility of other energy-saving measures with equivalent demonstrable effect on the environment and reduction in fossil fuel usage. In particular, campuses will strive to implement the Sustainable Transportation Practices described in Section III, below.

f. The UCLA campus will develop a variety of funding sources and financing alternatives for energy efficiency, renewable energy, and clean energy projects that will enable campuses to be flexible in addressing their energy needs.

g. The UCLA campus will pursue marketing of emissions credits as a means to bridge the cost-feasibility gap for green power projects.

In addition to the UC Sustainability Policy programs, the campus has instituted an extensive program of continuing energy conservation measures. These include, but are not limited to, renovating HVAC systems to improve energy efficiency; increasing the use of electronic building management systems to control energy use; increasing the use of high-efficiency motors with variable-speed drives; and replacing direct expansion air conditioners with connections to the central chilled water system. (UCLA 2003b).

UCLA has instituted lighting conservation measures in order to conserve electricity. Lighting conservation efforts include installation of occupancy sensors to automatically turn off lights when not in use, lighting reflectors, electronic ballasts, and high efficiency lamps. The campus has converted all exterior lighting to high-pressure sodium fixtures (UCLA 2003b).

Project Impacts and Mitigation

Analytic Method

To determine whether development associated with the proposed Project would result in impacts related to electric and natural gas supplies, the projected increase in electricity demand was calculated based on annual demand factors per square foot of development. UCLA developed the demand factors using available data regarding campus demand and the amount of existing development (UCLA 2008b).

Thresholds of Significance

The following thresholds of significance are based on Appendix F and Appendix G of the CEQA Guidelines. Appendix F sets forth guidelines with regard to addressing impacts of a proposed project on energy resources. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact on energy if it would result in any of the following:

- Would the project require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which could cause significant environmental effects *(Impacts 4.14-7 and 4.14-8)?*

- Would the project encourage the wasteful or inefficient use of energy *(Impact 4.14-9)?*

Impact Analysis

Campus Programs, Practices and Procedures Carried Forward from the 2002 LRDP Final EIR

The following campus PP was adopted as part of the 2002 LRDP and shall be continued throughout the planning horizon for the proposed Project; it is therefore considered part of the proposed Project and assumed in the analysis presented in this section.

PP 4.14-9 *The campus shall continue to implement energy conservation measures (such as energy-efficient lighting and microprocessor-controlled HVAC equipment) to reduce the demand for electricity and natural gas. The energy conservation measures may be subject to modification as new technologies are developed or if current technologies become obsolete through replacement.*

Threshold	Would the project require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Electricity Demand

Table 4.14-7, Existing and Projected Electricity Demand, provides electricity demand associated with existing campus development and future development as part of the proposed Project. As noted in the table, the demand factor was calculated using baseline development information and actual campus electricity demand.

TABLE 4.14-7
EXISTING AND PROJECTED ELECTRICITY DEMAND

	Total Development (gsf)	Total Electricity Consumed (kWh/yr)
Existing On Campus Development (2008)	24,480,067[a]	346,338,601
Proposed Project (2013)(estimated)	2,008,615[b]	28,417,444 [c]
Total	**26,488,682**	**374,756,045**

gsf – gross square feet; kWh/yr – kilowatt hours per year

[a] Includes 7,644,051 gsf for parking structures to account for nighttime lighting.
[b] Includes 550,000 gsf 2008 NHIP, 1,320,615 gsf remaining 2002 LRDP development allocation, and 138,000 gsf under construction.
[c] Demand factor: 346,338,601 kWh/yr24,480,067 gsf=~14.14778 kWh/gsf/yr

Source: UCLA 2008b.

As shown in Table 4.14-7, implementation of the proposed Project is estimated to increase the annual campus electricity consumption by approximately 28.4 million kWh/yr. As required by PP 4.14-9 and the energy conservation measures that are outlined in the UC Sustainability Policy (required to be implemented with PP 4.15-1 in Section 4.15, Climate Change), UCLA is implementing various building design and operational features into its programs to reduce energy consumption (refer to Impact 4.14-9 below).

Proposed 2008 NHIP

The projected electric demand for the proposed 2008 NHIP is 7,781,279 kWh/year.[9] The proposed 2008 NHIP would not require the development of new electricity sources beyond that already serving the campus. However, the proposed 2008 NHIP does require the installation of new electrical conduits from the proposed structures to existing lines in adjacent streets (De Neve Drive and Charles E. Young Drive West). Construction of these components is considered part of the overall building construction, and construction-related impacts are comprehensively analyzed in Sections 4.2 (Air Quality), 4.9 (Noise and Vibration), and 4.13 (Transportation/ Traffic) of this EIR.

Remaining Buildout of the 2002 LRDP as Amended

Implementation of the proposed Project would increase campus development and correspondingly increase the campus use of electricity. Academic, residential, and support facilities would be constructed and/or subjected to increased use, increasing the demand for electricity to light, heat, and cool these facilities. However, the campus Cogeneration Plant's simultaneous production of electricity, steam, and chilled water would continue to be an efficient method of allowing the campus to meet approximately 70 percent of its current electricity demand. Additionally, the campus TES facility reduces the campus peak energy demand by storing chilled water generated during off-peak periods of energy use (nights) for use during peak periods of energy use (days). However, implementation of the proposed Project would reduce the proportion of the total campus demand met by the campus Cogeneration Plant.

As shown in Table 4.14-7, implementation of the proposed Project is estimated to increase the annual electricity consumption by approximately 28.4 million kWh/yr so the campus's annual consumption would be approximately 374 million kWh/yr. However, ongoing campus energy

[9] Calculated as 550,000 gsf multiplied by the demand factor of 14.14778 kWh/gsf/year.

conservation measures and the increased campus capacity to store chilled water would offset some of the increased demand. Please refer to the discussion below under Impact 4.14-9.

The existing campus and LADWP electrical facilities would be sufficient to supply this increase in demand, and new infrastructure beyond project-specific distribution lines that would be addressed in site-specific environmental documentation would not be necessary. Environmental impacts from the construction of new or upgraded electrical lines would be addressed in project-specific environmental documents (similar to that conducted for the proposed 2008 NHIP above).

Impact 4.14-7 ***Implementation of the proposed Project would increase the demand for electricity, but would not require the construction of new or expanded electric facilities beyond on campus distribution lines to connect individual projects to existing facilities. Potential impacts from construction are addressed in Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.***

Natural Gas Demand

Because the Cogeneration Plant would not be expanded with implementation of the proposed Project, the increase in the demand for electricity would be accommodated by LADWP, as described above in the Electricity discussion. Consequently, the primary use of natural gas by the Cogeneration facility—the generation of electricity—is not anticipated to increase with the proposed Project, and development associated with the proposed Project would increase consumption of natural gas by the campus for only the following uses:

- Direct use of natural gas for heating, laboratory uses, and cooking and
- Indirect use of natural gas for heating (steam from the Cogeneration facility).

Because there would be no change in operations at the Cogeneration Plant through the year 2013, the analysis of impacts to natural gas from the proposed Project focuses on the change to natural gas demand that is used directly in buildings other than the Cogeneration Plant. Therefore, only The Gas Company facilities would be potentially affected by the proposed Project because it supplies 100 percent of the natural gas used directly in buildings on campus. Table 4.14-8 identifies the existing and projected natural gas consumption.

TABLE 4.14-8
EXISTING AND PROJECTED NATURAL GAS DEMAND

	Total Development (gsf)	Total Natural Gas Consumed (MMBTU /yr)
Existing gas supplied by SCGC (not including natural gas used for the Cogeneration facility)	16,836,016 [a]	134,205
Proposed Project (2013)(estimated)	2,008,615 [b]	15,987 [c]
Total	**18,844,631**	**150,192**

gsf – gross square feet; MMBTU/yr – one million British thermal units per year

[a] Excludes parking structure gsf.
[b] Includes 550,000 gsf for the proposed 2008 NHIP; 1,320,615 gsf of remaining 2002 LRDP development allocation; and 138,000 gsf under construction.
[c] Demand factor: 134,205 MMBTU/yr / 16,836,016 gsf = 0.00797 MMBTU/yr/gsf

Source: UCLA 2008b.

Proposed 2008 NHIP

The projected natural gas demand for the proposed 2008 NHIP is 4,384 MMBTU/year.[10] The proposed 2008 NHIP would not require the development of new natural gas sources beyond those already serving the campus. However, the proposed 2008 NHIP does require the installation of new natural gas lines to distribute natural gas to the new buildings. These facilities are described in Section 3, Project Description and generally include the installation of four-inch lines to from the proposed structures to existing lines in adjacent streets (De Neve Drive and Charles E. Young Drive West). Construction of these components is considered part of the overall building construction, and construction-related impacts are comprehensively analyzed in Sections 4.2 (Air Quality), 4.9 (Noise and Vibration), and 4.13 (Transportation/Traffic) of this EIR.

Remaining Buildout of the 2002 LRDP as Amended

Implementation of the proposed Project would result in increased development and a corresponding increase in campus use of natural gas directly supplied to buildings other than the Cogeneration Plant for operations in academic, residential, and support facilities. Implementation of the proposed Project would result in an estimated increase of 15,987 MMBTU/yr from The Gas Company, for a total annual demand of 150,192 MMBTU/yr. The Gas Company would be able to provide the increase in its portion of the volume of natural gas anticipated from implementation of the proposed Project based on existing and projected supplies.

The existing campus and The Gas Company natural gas facilities would be sufficient to supply this increase in demand, and new infrastructure beyond project-specific distribution lines to connect to existing facilities would not be necessary. Environmental impacts from the construction of new or upgraded natural gas facilities would be addressed in project-specific environmental documents (similar to that conducted for the proposed 2008 NHIP above).

Impact 4.14-8 ***Implementation of the proposed Project could increase the demand for natural gas but would not require the construction of new or expanded natural gas facilities beyond on campus lines to connect to existing facilities. Potential impacts from construction are addressed in Section 4.2, Air Quality; Section 4.9, Noise; and Section 4.13, Transportation/Traffic.***

Threshold	Would the project encourage the wasteful or inefficient use of energy?

Remaining Buildout of the 2002 LRDP as Amended Including the Proposed 2008 NHIP

While an increase in direct campus use of electricity and natural gas is expected as a result of future development under the proposed Project, including the proposed 2008 NHIP, the efficiency with which energy is used by the campus is expected to increase with continued implementation of campus-wide energy conservation policies and programs described previously. PP 4.14-9 requires incorporating energy-efficiency measures into all future construction projects and would continue to foster the efficient use of energy on the campus.

[10] Calculated as 550,000 gsf multiplied by the natural gas demand factor of 0.00797 MMBTU/year/gsf.

Additionally, the UC Sustainability Policy, which would continue to be implemented by the campus (as required by PP 4.15-1), would further increase energy efficiency associated with campus construction and operation activities. The UC Sustainability Policy is aligned with objectives of the CEQA Guidelines Appendix F regarding energy conservation. Through the implementation of energy-efficient technologies throughout campus operations, UCLA has reduced its energy use from 194.8 MMBTU/sf in 1999–2000 to 168 MMBTU/sf in 2006–2007, representing a reduction of 13 percent. This meets the UC Sustainability Policy goal of a ten percent reduction six years ahead of schedule. Additionally, UCLA is working with the LADWP to take advantage of the existing "green energy" portfolio. As of 2006, approximately seven percent of LADWP's overall electrical supply was attributed to green energy sources. The LADWP has an aggressive goal to increase their renewable energy percentage to 20 percent by 2010. In the event that the LADWP does not achieve the 20 percent goal, then UCLA will assess the financial viability of purchasing whatever increases in green electrical power that the utility provider is able to accommodate at that time to bridge the gap (UCLA 2008a).

More efficient electrical use conserves natural gas and reduces purchases from The Gas Company, and using co-generated steam to heat campus buildings further reduces campus demand for natural gas by reducing its direct use to heat campus structures, which also reduces purchases from The Gas Company. Because the proposed Project, including the 2008 NHIP, would foster energy conservation, rather than resulting in wasteful or inefficient energy consumption, there would be a less than significant impact.

Following PP 4.14-10 and PP 4.15-1 would continue to foster efficient energy use on campus and would ensure that a less than significant impact remains with respect to the wasteful or unnecessary use of energy. No mitigation is required.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than Significant.

Impact 4.14-9 ***Implementation of the proposed Project would not result in the wasteful or inefficient use of energy by UCLA. This is considered a less than significant impact.***

4.14.5 CUMULATIVE IMPACTS

Water Supply

The geographic context for the analysis of cumulative water supply is the City of Los Angeles, including all cumulative growth therein, as represented by the full implementation of allowed development under the City of Los Angeles General Plan Framework and development of the related projects provided by Table 4-1, Off-Campus Related Projects, in Section 4.0, Introduction to Environmental Analysis. The City of Los Angeles represents the service area for the City of Los Angeles Department of Water and Power (LADWP) with respect to water supplies.

Development of cumulative projects would demand additional quantities of water, depending on net increases in population, square footage, and intensity of uses. These projects would

contribute to the overall regional water demand, which the LADWP has estimated to be approximately 705,000 acre-feet/year by 2015. The 2005 UWMP prepared by the LADWP to assess water demand in the City of Los Angeles accounts for all projected development in its service area, including the UCLA campus. The UWMP includes regional water demand and supply projections, as well as demand management and supply enhancement elements. The LADWP determined that water supplies for its service area are adequate through 2030. Additionally, the LADWP is committed to supplying a higher percentage of the City's water demand through conservation and recycling, and efforts are underway to increase water recycling, further conserve local stormwater runoff, explore seawater desalination, engage in water transfer programs, and expand LADWP's water conservation program (Best Best & Krieger 2008). Therefore, cumulative water supply impacts for the Los Angeles area are less than significant. The Water Supply Assessment completed for the proposed Project (Best Best & Krieger 2008) indicates that an adequate water supply is available to meet the needs of the campus through the planning horizon of the 2002 LRDP, as amended, along with the demands of future projects in Los Angeles; thus, the proposed Project contribution to the cumulative impact is less than significant. In addition, due to the various conservation measures implemented on campus, even if the area-wide impacts were to become significant during the planning horizon of the 2002 LRDP, as amended, water use under the 2002 LRDP, as amended, would not create a cumulatively considerable impact to water supply in the City of Los Angeles. This is considered a less than significant impact.

Individual cumulative development projects would require the construction of necessary infrastructure (e.g., water lines, reservoirs, pump stations) to serve each new project. The potential environmental impacts associated with these construction activities would be primarily related to increased noise and local and regional air pollutant emissions. These impacts cannot be quantified at this time, and would be evaluated in project-specific environmental documentation. However, as noted above, the infrastructure needed for the proposed Project would be limited to relatively small distribution lines from future development, including the proposed 2008 NHIP, which would occur primarily in existing streets. Therefore, the project would not have a considerable contribution to cumulative impacts associated with construction water supply infrastructure. This impact is considered less than significant.

Solid Waste

The analysis of cumulative solid waste impacts is not based strictly on geographic context because the Sunshine Canyon and Chiquita Canyon Landfills are privately operated and do not have legislated wastesheds, such as the Calabasas Landfill. However, the Sunshine Canyon Landfill generally serves the County of Los Angeles and incorporated cities, and the Chiquita Canyon Landfill generally services the greater Los Angeles metropolitan area and unincorporated Ventura County. Both these facilities are subject to daily and annual capacity restrictions and can accept waste from any hauler, provided they are disposing only material acceptable to that facility and pay the appropriate tipping fees. Therefore, the cumulative analysis of solid waste focuses on the remaining capacity of landfills serving UCLA and the significance of the incremental contribution of solid waste to that capacity.

Development of cumulative projects would produce additional quantities of solid waste, depending on net increases in population, square footage, intensity of uses, and quantities of demolition debris generated by redevelopment projects. These projects would contribute to overall regional solid waste disposal and landfill demand. The County of Los Angeles Department of Public Works has determined that there will be insufficient landfill space without implementation of out-of-County disposal options currently being implemented (LADPW 2007). The Mesquite and Eagle Mountain regional waste-by-rail landfill facilities are both fully permitted and in varying stages of implementation (LADPW 2007). Additional capacity may or may not be

available at Orange County landfills, which currently contract with certain waste haulers to accept waste from the City of Los Angeles, but as development proceeds in Orange County, acceptance of waste from Los Angeles may be eliminated.

As discussed above, the incremental increase in solid waste generation with implementation of the proposed Project, which includes the proposed 2008 NHIP, assuming a continuing waste diversion rate of at least 50 percent, would be approximately 1,586 tons/year (4.3 tons/day), representing less than 1 percent of both the total remaining daily permitted capacity (0.05 percent) and the total remaining annual capacity (0.005 percent) in the landfills serving UCLA (Sunshine Canyon and Chiquita Canyon Landfills). Even with consideration of substantial anticipated growth in the City of Los Angeles, the County of Los Angeles, and the greater regional area that cumulatively contribute to various private and County-operated landfills, the minimal contribution of additional solid waste from implementation of the LRDP Amendment, including the proposed 2008 NHIP, would not be cumulatively considerable. In other words, the contribution of far less than one percent of the total daily and annual remaining capacity from the LRDP Amendment, including the proposed 2008 NHIP, in combination with solid waste generated from cumulative regional growth, would not result in the exceedance of capacity of the landfills serving UCLA (Sunshine Canyon and Chiquita Canyon Landfills).

Considering the small magnitude of the contribution to the impact and the extent of campus efforts to decrease solid waste generation, the impact of the LRDP Amendment with regard to solid waste generation is cumulatively less than significant.

The California Integrated Waste Management Act of 1989 requires that the City of Los Angeles divert 50 percent of its solid waste by 2000. As discussed above, the City is achieving a 62 percent diversion rate with a goal of 70 percent diversion by the year 2015 and 0 waste disposal by 2025. The City has developed a very strong waste management infrastructure. Through both City and private-sector efforts, a myriad of innovative source reduction, recycling, composting, and reuse programs have been implemented. These programs have made waste diversion inroads not only in City government, but also in the residential and commercial/ industrial sectors. Due to the strength of this waste management infrastructure, the City has surpassed the State-mandated 50 percent diversion rate. Cumulative development in the County of Los Angeles could result in a significant impact in terms of compliance with regulations concerning solid waste, as continued growth could hamper the City's ability to reach its waste diversion goals. It is, therefore, conservatively assumed that there would be a cumulatively significant impact in this area. However, UCLA is currently achieving a 55 percent diversion rate for solid waste, and it is expected that, with implementation of the LRDP Amendment, this high rate of diversion would be preserved due to the incorporation of existing and emerging solid waste diversion into campus practices. Consequently, the proposed Project's contribution to this impact would not be cumulatively considerable. This impact is considered less than significant.

Wastewater

Development of cumulative projects within the HTP service area would generate additional quantities of wastewater, depending on net increases in population, square footage, and intensification of uses. These projects would contribute to the overall regional demand for wastewater conveyance and treatment. The HTP is currently operating at 80 percent of capacity. Projected additional wastewater generation with the proposed 2008 NHIP, which is the only new development allocation associated with the proposed Project, represents approximately 0.09 percent (0.101 mgd) of the HTP's remaining design capacity. The proposed Project's wastewater generation represents approximately 0.3 percent of the remaining capacity. Additionally, the campus would continue to implement water conservation measures

that would result in a concomitant decrease in wastewater generation. The proposed Project's incremental increase in wastewater generation is nominal and would not be cumulatively considerable. Therefore, the individual contribution of the campus with proposed Project implementation to wastewater generation on a regional basis would be less than significant.

Cumulative growth in the HTP service area could result in the need for additional conveyance infrastructure. Due to the built-out, urban nature of most of the service area, however, it is not expected that such expansion of conveyance infrastructure would result in significant environmental effects. Consequently, the cumulative impact is considered to be less than significant. Additionally, the proposed Project would not require expansion of off-campus conveyance infrastructure, and any potential need to expand on-campus conveyance infrastructure is not expected to result in significant cumulative effects. Consequently, the proposed Project's contribution is also less than significant.

Energy

For cumulative impacts related to electricity, the geographic context is the service area of the LADWP, which is nearly totally coincident with the boundaries of the City of Los Angeles. With regard to natural gas cumulative impacts, the geographic context is the Pacific Region service area of The Gas Company, which includes the West Los Angeles area.

With respect to electricity, the proposed Project, including the proposed 2008 NHIP, would result in the permanent and continued use of this resource. However, anticipated power supplies for the City of Los Angeles are projected to be adequate through the planning horizon of the proposed Project. The LADWP is a municipal utility that generates its own electricity and independently supplies the City of Los Angeles, and has stated that electricity would be available to supply energy to the City of Los Angeles at full implementation of the General Plan Framework, which includes the level of campus development that would occur under implementation of the proposed Project. Since the LADWP is able to meet all future projected demands, there would be no significant cumulative impacts in terms of either supply or a potential need for added facilities. Therefore, both the overall cumulative impact as well as the contribution of the LRDP Amendment with respect to electricity supplies or the need for additional facilities would be less than significant. Note that, although the City of Los Angeles General Plan Framework states that there is a significant cumulative impact with regard to electricity, for all the reasons listed above, the proposed Project contribution would still be less than significant.

With regard to natural gas, the proposed Project would also result in permanent and continued use of this resource. The campus is currently served by existing infrastructure that conveys gas from The Gas Company and landfill gas from SCS – Mountaingate, LLC. However, the proposed Project would result in increased demand only from The Gas Company, as the operation of the Cogeneration Plant would not change. The Gas Company continuously updates demand projections and supplying the campus with additional natural gas would not compromise its existing and projected service commitments. In addition, there would be no need to expand natural gas transmission infrastructure beyond project specific distribution lines. The cumulative impact related to the supply of natural gas and to the need for additional or expanded facilities is thus less than significant. The individual contribution from implementation of the proposed Project is also less than significant due to the fact that no additional infrastructure is needed. Note that, although the City of Los Angeles General Plan Framework states that there is a significant cumulative impact with regard to natural gas, for all the reasons listed above, the proposed Project contribution would still be less than significant.

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4.15 CLIMATE CHANGE

This section discusses the existing global, national, and statewide conditions for greenhouse gases (GHG) and global climate change and evaluates the potential impacts on global climate from the implementation of the proposed Project. The section also provides a discussion of the applicable federal, State, regional, and local agencies that regulate, monitor, and control GHG emissions. Copies of the modeling runs to estimate GHG emissions associated with the proposed Project and supporting technical data are found in Appendix K of this EIR. Information used to prepare this section is listed in Section 4.15.4, References.

No public or agency comments related to this environmental topic were received in response to the Notice of Preparation issued for the EIR.

4.15.1 ENVIRONMENTAL SETTING

4.15.1.1 General Description of Global Climate Change

Global climate change is currently an important and controversial environmental, economic, and political issue. Climate change is a recorded change in the average weather of the earth, measured by variables such as wind patterns, storms, precipitation, and temperature. Historical records show that global temperature changes have occurred naturally in the past, such as during previous ice ages. Recent scientific research indicates very high confidence (i.e., at least 90 percent) that the rate and magnitude of current global temperature changes are anthropogenic (i.e., human caused), and that global warming will lead to adverse climate change effects around the globe (IPCC 2007).

Greenhouse Gases

Atmospheric GHGs and clouds within the earth's atmosphere influence the earth's temperature by absorbing most of the infrared radiation rising from the earth's sun-warmed surface that would otherwise escape into space. This process is commonly known as the Greenhouse Effect. GHGs are emitted by natural processes and human activities. The earth's surface temperature averages about 58°F because of the Greenhouse Effect. Without it, the earth's average surface temperature would be somewhere around an uninhabitable 0°F (Henson 2006). The resulting balance between incoming solar radiation and outgoing radiation from both the earth's surface and atmosphere keeps the planet habitable.

Anthropogenic[1] emissions of GHGs into the atmosphere enhance the Greenhouse Effect by absorbing the radiation from other atmospheric GHGs that would otherwise escape to space, thereby trapping more radiation in the atmosphere and causing temperature to increase. Carbon dioxide (CO_2) is the most important anthropogenic GHG. The global atmospheric concentration of CO_2 has increased from a preindustrial (roughly 1750) value of about 280 parts per million (ppm) to 379 ppm in 2005, primarily due to fossil fuel use, with land use change providing a significant but smaller contribution. The annual rate of growth in CO_2 concentrations continues to increase, with a larger annual CO_2 concentration growth rate during the last 10 years (1995–2005 average: 1.9 ppm), than since the beginning of continuous direct measurements in 1960.

The human-produced GHGs responsible for increasing the Greenhouse Effect and their relative contribution to global warming (i.e., their relative ability to trap heat in the atmosphere) are CO_2 (53 percent); methane (CH_4) (17 percent); near-surface ozone (O_3) (13 percent); nitrous oxide

[1] Anthropogenic effects, processes, objects, or materials are those that are derived from human activities, as opposed to those occurring in natural environments without human influences.

(N_2O) (12 percent); and chlorofluorocarbons (CFCs) (5 percent). The most common GHG is CO_2, which constitutes approximately 84 percent of all GHG emissions in California (CEC 2006a). Worldwide, the State of California ranks as the 12th to 16th largest emitter of CO_2 (the most prevalent GHG) and is responsible for approximately 2 percent of the world's CO_2 emissions (CEC 2006a).

Like CO_2, the global atmospheric concentration of CH_4 in 2005 exceeded its preindustrial value. CH_4 growth rates have declined since the early 1990s with total emissions being nearly constant during this period. The observed increase in CH_4 concentration is very likely (at least 90 percent likelihood) due to anthropogenic activities, primarily agriculture and fossil fuel use. The atmospheric concentrations of CO_2 and CH_4 in 2005 greatly exceeded the natural range over the last 650,000 years. The global concentration of N_2O in 2005 also exceeded the preindustrial value. The growth rate in N_2O concentration has been approximately constant since 1980. More than a third of all N_2O emissions are anthropogenic and primarily due to agriculture.

Eleven of the 12 years from 1995–2006 rank among the 12 warmest years in the instrumental record of global surface temperature (since 1850). An increase in global surface temperature of 0.74°C (0.56°C to 0.92°C) occurred during the 100-year period from 1906–2005.

The increasing emissions of GHGs—primarily associated with the burning of fossil fuels (during motorized transport, electricity generation, consumption of natural gas, industrial activity, manufacturing, etc.) and deforestation, as well as agricultural activity and the decomposition of solid waste—have led to a trend of anthropogenic warming of the earth's average temperature, which is causing changes in the earth's climate. This increasing temperature phenomenon is known as global warming and the climatic effect is known as climate change or global climate change. Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants (CAPs) and toxic air contaminants (TACs), which are pollutants of regional and local concern. While pollutants with localized air quality effects have relatively short atmospheric lifetimes (generally on the order of a few days), GHGs have relatively long atmospheric lifetimes ranging from one year to several thousand years. The long atmospheric lifetimes allow for GHGs to disperse around the globe. In addition, the impacts of GHGs are borne globally, as opposed to the localized air quality effects of CAPs and TACs.

GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to carbon dioxide. For example, since CH_4 and N_2O are approximately 21 and 310 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have global warming potentials of 21 and 310 (CO_2 has a global warming potential of 1). Carbon Dioxide Equivalent (CO_2e) is a figure that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e.

The atmospheric lifetime and GWP of selected GHGs are summarized in Table 4.15-1. As shown in the table, GWP ranges from 1 (carbon dioxide) to 23,900 (sulfur hexafluoride).

TABLE 4.15-1
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide (CO_2)	50–200	1
Methane (CH_4)	12 ± 3	21
Nitrous Oxide (N_2O)	114	310
HFC-134a	48.3	1,300
PFC: Tetrafluoromethane (CF_4)	50,000	6,500
PFC: Hexafluoroethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900
Source: USEPA 2008; CCAR 2008.		

4.15.1.2 General Environmental Effects of Global Climate Change

Executive Order S-3-05 discussed below under Regulatory Setting resulted in the preparation of a report on the impacts of climate change on California, including impacts to water supply, public health, agriculture, the coastline, and forestry. *Scenarios of Climate Change in California: An Overview* (Climate Scenarios report), was published in February 2006 (CCCC 2006b).

The Climate Scenarios report uses a range of emissions scenarios developed by the Intergovernmental Panel on Climate Change (IPCC) to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century: lower warming range (3.0–5.5°F); medium warming range (5.5–8.0°F); and higher warming range (8.0–10.5°F). The Climate Scenarios report then presents analysis of future climate in California under each warming range.

Each emissions scenario would result in substantial temperature increases for California. According to the report, substantial temperature increases would result in a variety of impacts to the people, economy, and environment of California associated with a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming. Under the emissions scenarios of the Climate Scenarios report (CCCC 2006b), the impacts of global warming in California are anticipated to include, but are not limited to, the following:

- ***Public Health.*** Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to O_3 formation are projected to increase from 25 to 35 percent under the lower warming range to 75 to 85 percent under the medium warming range. In addition, if global background O_3 levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.

  In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising

temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

- ***Water Resources.*** A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from Northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

  If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. Under the lower warming scenario, snowpack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snowpack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

  The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta—a major state fresh water supply.

  Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25 percent of the water supply they need; decrease the potential for hydropower production within the state (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

- ***Agriculture.*** Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development will change, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate O_3 pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

  Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

  In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving

species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

- ***Forests and Landscapes.*** Global warming is expected to intensify this threat by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature and landscape and vegetation conditions, future risks will not be uniform throughout the state. For example, if precipitation increases as temperatures rise, wildfires in Southern California are expected to increase by approximately 30 percent toward the end of the century. In contrast, precipitation decreases could increase wildfires in Northern California by up to 90 percent.

  Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and subalpine ecosystems are expected to decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the state's forests is also expected to decrease as a result of global warming.

4.15.1.3 Global, National, and State Contributions to Greenhouse Gas Emissions

Global

Anthropogenic GHG emissions worldwide as of 2006 (the latest year for which data are available for Annex I countries) totaled approximately 30,800 CO_2 equivalent million metric tons ($MMTCO_2E$).[2] It should be noted that global emissions inventory data are not all from the same year and may vary depending on the source of the emissions inventory data (UNFCCC 2005, 2008).[3] Six countries and the European Community accounted for approximately 70 percent of the total global emissions (refer to Table 4.15-2, Six Top GHG-Producing Countries and the European Community). The GHG emissions in more recent years may be substantially different than those shown in Table 4.15-2.

[2] The CO_2 equivalent emissions are commonly expressed as "million metric tons of carbon dioxide equivalent ($MMTCO_2E$)" The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated GWP, such that $MMTCO_2E$ = (million metric tons of a GHG) x (GWP of the GHG). For example, the GWP for methane is 21. This means that emissions of one million metric tons of methane are equivalent to emissions of 21 million metric tons of CO_2.

[3] The global emissions are the sum of Annex I and non-Annex I countries without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries where 2004 data were unavailable, the UNFCCC data for the most recent year were used.

TABLE 4.15-2
SIX TOP GHG-PRODUCING COUNTRIES AND THE EUROPEAN COMMUNITY

Emitting Countries	GHG Emissions ($MMTCO_2E$)*
United States	7,019.0[a]
China	4,882.7[b]
European Community	4,057.0[a]
Russian Federation	2,190.0[a]
India	1,606.5[b]
Japan	1,340.0[a]
Germany[c]	1,001.5[a]

Sources:
[a] UNFCC 2008
[b] GHG emissions for China and India (Calendar Year 2000) were obtained from WRI 2008.
[c] Germany's GHG emissions are included in the European Community.
* Excludes emissions/removals from LULUCF.

United States

As noted in Table 4.15-2, the United States was the top producer of greenhouse gas emissions as of 2005. Based on GHG emissions in 2005, six of the states—Texas, California, Ohio, Pennsylvania, Florida, and Illinois, in ranked order—would each rank among the top 25 GHG emitters internationally (WRI 2008). The primary greenhouse gas emitted by human activities in the United States was CO_2, representing approximately 85 percent of total greenhouse gas emissions (USEPA 2008). Carbon dioxide from fossil fuel combustion, the largest source of US greenhouse gas emissions, accounted for approximately 80 percent of US GHG emissions (USEPA 2008).

State of California

Based upon the 2004 GHG inventory data (the latest year available) compiled by CARB for the California 1990 greenhouse gas emissions inventory, California emitted emissions of 484 $MMTCO_2E$, including emissions resulting from out-of-state electrical generation (CARB 2007). Based on the CARB inventory and GHG inventories for countries contributing to the worldwide GHG emissions inventory compiled by the United Nations Framework Convention on Climate Change (UNFCCC) for 2005, California's GHG emissions rank second in the United States (Texas is number one) with emissions of 423 $MMTCO_2E$ (excluding emissions related to imported power) and internationally between Ukraine (418.9 $MMTCO_2E$) and Spain (440.6 $MMTCO_2E$) (UNFCCC 2008).

A California Energy Commission (CEC) emissions inventory report placed CO_2 produced by fossil fuel combustion in California as the largest source of GHG emissions in 2004, accounting for 81 percent of the total GHG emissions (CEC 2006a). CO_2 emissions from other sources contributed 2.8 percent of the total GHG emissions, methane emissions 5.7 percent, nitrous oxide emissions 6.8 percent, and the remaining 2.9 percent was composed of emissions of high-GWP gases (CEC 2006a). These high GWP gases are largely composed of refrigerants and a small contribution of sulfur hexafluoride (SF_6) used as insulating materials in electricity transmission and distribution.

The primary contributors to GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources, industry, agriculture and forestry, and

other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions are presented in Table 4.15-3, GHG Sources in California.

TABLE 4.15-3
GHG SOURCES IN CALIFORNIA*

Source Category	Annual GHG Emissions ($MMTCO_2E$)[a]	Percent of Total	Annual GHG Emissions ($MMTCO_2E$)[b]	Percent of Total
Agriculture	27.9	5.8%	27.9	6.6%
Commercial Uses	12.8	2.6%	12.8	3.0%
Electricity Generation	119.8	24.7%	58.5	13.8%
Forestry (excluding sinks)	0.2	0.0%	0.2	0.0%
Industrial Uses	96.2	19.9%	96.2	22.7%
Residential Uses	29.1	6.0%	29.1	6.9%
Transportation	182.4	37.7%	182.4	43.1%
Other[c]	16.0	3.3%	16.0	3.8%
Totals	**484.4**	**100.0%**	**423.1**	**100.0%**

Sources:
* CARB 2007.
[a] Includes emissions associated with imported electricity, which account for 61.3 $MMTCO_2E$ annually.
[b] Excludes emissions associated with imported electricity.
[c] Unspecified combustion and use of ozone-depleting substances.

It should be noted that emissions from each of these economic sectors are not confined to emissions from a single process, since there is crossover with other sectors. For example, the GHG emissions from cement production places clinker manufacturing in its own category and the fuel used to heat the cement production process within the industrial fuel category. In the case of landfills, methane emissions and CO_2 emissions and sinks are reported in their respective portions of the inventory. Taken together, the CO_2 sinks approximately offset the landfill methane emissions. Additionally, fuel-related GHG emissions from transporting wastes to landfills are included in transportation fuels.

4.15.1.4 Baseline Level of Greenhouse Gas Emissions – UCLA Campus

The proposed Project site is the UCLA campus, exclusive of off-campus, University-owned facilities. The following discussion examines existing GHG emission levels from the UCLA campus.

GHG emissions generated by the existing campus are predominantly in the form of CO_2. While emissions of other GHGs, such as CH_4, N_2O, HFCs, PFCs, and SF_6 are important with respect to global climate change, the existing emission levels of these other GHGs for the campus are relatively small compared with CO_2 emissions. SF_6 is used on campus for insulation in electric power transmission and distribution equipment, occasionally as a tracer gas for leak detection, and specific academic research activities. Fume hood testing is performed by an outsourced agency who reports the quantities of SF_6 from their operations separate from UCLA (approximately 33 pounds of SF_6 are used on campus annually for academic research). The University no longer uses PFCs on campus for insulation of electrical transformers and all PFCs were removed prior to 2008. UCLA currently utilizes refrigerants in maintenance and operation of existing refrigeration systems in HVAC systems, refrigerators, cogeneration equipment, and similar sources. UCLA has undertaken a program to eliminate Carbon Fluorocarbon (CFC) refrigerants from all central and large major air conditioning machines and replace them with HFC refrigerants, which are less

adverse. HFC emissions would only occur with leaks, and UCLA has an aggressive leak-prevention program. Therefore, it is assumed that HFC emissions are negligible.

The principal GHG emissions sources associated with the existing campus operations include: electricity produced by the on-campus Cogeneration Plant using purchased natural and landfill gas, purchased grid-based electricity, natural gas use for space and water heating, operation of the campus vehicle fleet, air travel paid for by the University, use of emergency generators, private vehicle trips by students, faculty, and staff, the electricity use embodied in water consumed at the campus, and other sources. An inventory of existing GHG emissions is provided in Table 4.15-4. The 2007 baseline level GHG emissions associated with operation of the campus as defined for purposes of this EIR is approximately 343,401 metric tons of carbon dioxide ($MTCO_2$) per year.

The principal sources of data for the baseline level of GHG emissions are the *UCLA Year 2007 Greenhouse Gas Emission Inventory Report to the California Climate Action Registry,* and mobile source emissions data for vehicle trips as included in the December 2008 *UCLA Climate Action Plan* (Climate Action Plan). See further discussion in Section 14.5.3.3 below.

Additional data was calculated for emissions associated with energy embodied in water demand. Water provided to the project is embodied with energy by virtue of the amount of energy consumed in collecting, extracting, conveying, treating, distributing water to end users, and treating and disposing of wastewater.[4] The analysis of embodied energy of water consumed by the proposed Project assumed that potable water delivered to the campus has an embodied energy of 13,222 kilowatt-hours (kWh) per million gallons (MG). Existing water consumption was provided by UCLA, Facilities Management. Embodied energy of water consumption was converted to GHG emissions using the CCAR GRP emission factor for CO_2 in electricity use in California.

TABLE 4.15-4
BASELINE* LEVELS OF GREENHOUSE GAS EMISSIONS 2007

Emissions Source	Annual CO_2 (Metric Tons)	Percent of Total
Campus Purchased Electricity	94,578	28
Campus Purchased Natural Gas	168,613	49
Emergency Diesel (Generators)	145	<1
Propane	11	<1
Mobile Sources[a]	75,970	22
Water Consumption	4,082	1
Total	**343,401**	

$MTCO_2$ = metric tons carbon dioxide

* The Baseline Levels were calculated based on stationary and mobile emissions from the UCLA campus only, exclusive of off-campus University-owned facilities (e.g., Wilshire Center and Santa Monica/UCLA Medical Center).

[a] Includes emissions from personal commutes, campus Fleet vehicles, staff air travel, and visitor commutes. It should be noted that visitor commutes are not included, per reporting protocol under the ACUPCC, in the mobile emissions data presented in the Climate Action Plan.

Source: UCLA 2008a.

[4] Analysis of water demand is included in this draft EIR in response to the recommendation of OPR's June 2008 Technical Advisory on Climate Change.

4.15.2 REGULATORY SETTING

4.15.2.1 Federal

House Resolution 6 – The 2007 Energy Bill

House Resolution (HR) 6, the 2007 Energy Bill, mandates improved national standards for vehicle fuel economy (Corporate Average Fuel Economy [CAFE] standards). These standards require a fleetwide average of 35 miles per gallon (mpg) to be achieved by 2020. The National Highway Traffic Safety Administration is directed to phase-in requirements to achieve this goal. Analysis by the California Air Resources Board (CARB) suggests that achieving this goal will require an annual improvement in fleetwide average fuel economy of approximately 3.4 percent between now and 2020 (CARB 2008c). Although the explicit purpose of requiring improved national standards for fuel economy was not to address climate change, these requirements would improve the fuel economy of the nation's vehicle fleet, and therefore incrementally lower the amount of fuel use and GHG emissions associated with vehicle trips generated by the proposed project.

4.15.2.2 State

There are numerous State plans, policies, regulation and laws related to GHG and global climate change. Following is a brief discussion of these plans which are presented in chronological order.

California Climate Action Registry (Senate Bills 1771 and 527)

The California Climate Action Registry (CCAR) was established in 2001 by Senate Bill (SB) 1771 and SB 527 as a nonprofit voluntary registry for GHG emissions. The purpose of CCAR is to help companies and organizations with operations in the state establish GHG emissions baselines against which any future GHG emissions reduction requirements may be applied. CCAR has developed a general reporting protocol (GRP) and additional industry-specific protocols that provide guidance on how to inventory GHG emissions for participation in the registry. UCLA is a member of the CCAR.

California's Renewable Energy Portfolio Standard Program and Senate Bill 107

In 2002, California established its Renewable Energy Portfolio Standard Program, which originally included a goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent by 2017. SB 107 requires investor-owned utilities such as Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric (SDG&E) to meet the 20 percent renewable energy goal by 2010. The State's most recent Energy Action Plan (2005) raised the renewable energy goal to 33 percent by 2020.

Assembly Bill 1493

In 2002, Governor Gray Davis signed AB 1493. AB 1493 required CARB to develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state."

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards in 2004. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and

1961 (CCR 13 1961) and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016.

In December 2004 a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against CARB to prevent enforcement of CCR 13 1900 and CCR 13 1961 as amended by AB 1493 and CCR 13 1961.1 (*Central Valley Chrysler-Jeep et al., v. Catherine E. Witherspoon,* in her official capacity as Executive Director of the California Air Resources Board, et al.). The suit, heard in the U.S. District Court for the Eastern District of California, contended that California's implementation of regulations that in effect regulate vehicle fuel economy violates various federal laws, regulations, and policies. In January 2007, the judge hearing the case accepted a request from the State Attorney General's office that the trial be postponed until a decision is reached by the U.S. Supreme Court on a separate case addressing GHGs. In the Supreme Court Case, *Massachusetts vs. EPA*, the primary issue in question is whether the federal Clean Air Act provides authority for EPA to regulate CO_2 emissions. In April 2007, the U.S. Supreme Court ruled in *Massachusetts'* favor, holding that GHGs are air pollutants under the Clean Air Act. On December 11, 2007, the judge in the *Central Valley Chrysler-Jeep* case rejected each plaintiff's arguments and ruled in California's favor. On December 19, 2007, the EPA denied California's waiver request. California filed a petition with the Ninth Circuit Court of Appeals challenging EPA's denial on January 2, 2008. California's waiver request has not been granted as of this writing.

Executive Order S-20-04 – The California Green Building Initiative

Governor Schwarzenegger signed Executive Order S-20-04 ("The California Green Building Initiative") establishing California's priority for energy and resource-efficient high performance buildings on December 14, 2004. The Executive Order sets a goal of reducing energy use in state-owned and private commercial buildings by 20 percent in 2015 using nonresidential Title 20 and 24 standards adopted in 2003 as the baseline. The California Green Building Initiative also encourages private commercial buildings to be retrofitted, constructed, and operated in compliance with the state's Green Building Action Plan.

Executive Order S-3-05

Executive Order S-3-05, signed by Governor Arnold Schwarzenegger on June 1, 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. In an effort to avoid or reduce the impacts of climate change, Executive Order #S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050.

In order to meet the targets established under Executive Order S-3-05, the Governor directed the Secretary of the California EPA to lead a Climate Action Team (CAT) comprised of representatives from the Business, Transportation and Housing Agency, the Department of Food and Agriculture, the Resources Agency, the Air Resources Board, the Energy Commission, and the Public Utilities Commission. The 2006 CAT Report to the Governor contains a number of recommendations and strategies to help ensure that the targets established in Executive Order S-3-05 are met. The Secretary will submit biennial reports to the governor and state legislature describing progress made toward reaching the emission targets established by the executive order and on the impacts of climate change on California, including

impacts to water supply, public health, agriculture, the coastline, and forestry, and shall prepare and report on mitigation and adaptation plans to combat these impacts. The first of these reports on the impacts to California, "Scenarios of Climate Change in California: An Overview" (Climate Scenarios report), was published in February 2006 (CCCC 2006b), and is discussed further in Section 4.15.1.3.

Senate Bill 1505

SB 1505 of 2006 establishes environmental performance standards for the production and use of hydrogen fuel for transportation purposes in the state. In general, SB 1505 specifically requires that hydrogen-fueled vehicles reduce GHG emissions by at least 30 percent compared to emissions from new gasoline vehicles; at least one-third of the hydrogen produced or dispensed for transportation purposes in the state must be made from renewable sources of electricity; well-to-tank emissions of smog-forming pollutants from hydrogen fuel dispended in the state must be reduced by at least 50 percent when compared to gasoline; and emissions of toxic contaminants must be reduced to the maximum extent feasible compared to gasoline on a site-specific basis.

Assembly Bill 32

The State Legislature adopted the public policy position that global warming is, "a serious threat to the economic well-being, public health, natural resources, and the environment of California" (*California Health and Safety Code,* Section 38501). Further, the State Legislature has determined that, "the potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra Nevada snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious disease, asthma, and other human health-related problems," and that, "(g)lobal warming will have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry (and)…will also increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the State" (*California Health and Safety Code,* Section 38501). These public policy statements became law with the enactment of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, signed by Governor Arnold Schwarzenegger in September 2006. Assembly Bill (AB) 32 is now codified as Health & Safety Code Sections 38500–38599.

AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction is to be accomplished through an enforceable statewide cap on GHG emissions to be phased in starting in 2012. AB 32 directs that CARB establish this statewide cap based on 1990 GHG emissions levels; disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms. Emission reductions under AB 32 are to include carbon sequestration projects and best management practices that are technologically feasible and cost-effective. As of October 2008, when this climate change analysis was prepared, CARB has not yet promulgated GHG emission or reporting standards directly applicable to the proposed project.

GHGs as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). General discussions of climate change often include water vapor, ozone, and aerosols in the category of greenhouse gases. Water vapor and atmospheric ozone are not gases that are formed directly in the construction or operation of development projects nor can they be controlled in these projects. Aerosols are not gases. While these elements have a role in climate change, they are

not considered by either regulatory bodies, such as CARB, or climate change groups, such as CCAR as gases to be reported or analyzed for control. Therefore, no further discussion of water vapor, ozone, and aerosols is provided.

Senate Bill 1368 (Public Utilities Code §§ 8340–8341)

Senate Bill (SB) 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 required the California Public Utilities Commission (PUC) to establish a GHG emission performance standard for baseload generation from investor-owned utilities by February 1, 2007. Similarly, the California Energy Commission (CEC) was tasked with establishing a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the GHG emission rate from a baseload combined-cycle natural gas fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and the CEC. In January 2007, the PUC adopted an interim Greenhouse Gas Emissions Performance Standard, which requires that all new long-term commitments for baseload generation entered into by investor-owned utilities have emissions no greater than a combined cycle gas turbine plant (i.e., 1,100 pounds of CO_2 per megawatt-hour). A "new long-term commitment" refers to new plant investments (new construction), new or renewal contracts with a term of five years or more, or major investments by the utility in its existing baseload power plants. In May 2007, the CEC approved regulations that prohibit the state's publicly owned utilities from entering into long-term financial commitments with plants that exceed the standard adopted by the PUC of 1,100 pounds of CO_2 per megawatt hour.

CARB "Early Action Measures"

On June 21, 2007, CARB approved a list of discrete early action measures to address climate change as required by AB 32. The three measures include (1) a low-carbon fuel standard, which will reduce the carbon intensity in California's transportation fuels by at least 10 percent by 2020, thereby reducing total CO_2 emissions; (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance through the restriction of "do-it-yourself" automotive refrigerants; and (3) increased CH_4 capture from landfills through the required implementation of state-of-the-art capture technologies.

Senate Bill 97

SB 97, signed August 2007, (*Public Resources Code,* Sections 21083.05, 21097) directs the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, for evaluation under CEQA by July 1, 2009. The Resources Agency is required to certify or adopt those guidelines by January 1, 2010. This bill also protects projects (retroactive and future) funded by the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 (Proposition 1B or 1E) from claims of inadequate analysis of GHGs as a legitimate cause of action. This latter provision will be repealed on January 1, 2010.

CARB Resolution 07-55

The adoption of CARB Resolution 07-55 on December 6, 2007, established 427 $MMTCO_2e$ as the statewide GHG emissions limit to be achieved by 2020 as required by AB 32.

CAPCOA White Paper on CEQA and Climate Change

In January 2008, the California Air Pollution Control Officers Association (CAPCOA) issued a white paper on CEQA and Climate Change (CAPCOA Guidance). The informal CAPCOA Guidance presents a number of approaches that air districts could use to determine the significance of climate change impacts in CEQA documents. The CAPCOA Guidance itemizes over 20 different potential thresholds of significance and leaves to the lead agency discretion on which of these methods, or other methods not itemized therein, to use to determine significance.

Governor's Office of Planning and Research Technical Advisory

On June 19, 2008, the OPR issued a Technical Advisory on addressing climate change impacts of a proposed project under CEQA (OPR Climate Change Advisory). The OPR Climate Change Advisory recommends that lead agencies quantify, determine the significance of, and (as needed) mitigate the cumulative climate change impacts of a proposed project. The OPR Climate Change Advisory identifies that each lead agency is required under CEQA to exercise its own discretion in choosing how to determine significance, in the absence of adopted thresholds or significance guidelines from the State, CARB, or the applicable local air district.

Consistent with the OPR Climate Change Advisory, this section provides a discussion of (a) the baseline level of GHG emissions in 2008 on the UCLA campus; (b) the projected level of GHG emissions associated with full buildout of the proposed Project in 2013, which includes the proposed 2008 NHIP; (c) a determination of the significance of the climate change impacts from the proposed Project, together with an explanation of the method used to determine significance; and (d) feasible mitigation measures to reduce the climate change impacts.

Air Resources Board (CARB) Scoping Plan

As discussed previously, CARB is required by AB 32 (*California Health and Safety Code,* Section 38500 et seq.) to develop a Scoping Plan to lower the state's GHG emissions to meet the 2020 limit. A Draft Scoping Plan was released for public comment on June 26, 2008 (CARB 2008a). The Draft was revised and the Proposed Scoping Plan was released for public comment on October 15, 2008 (CARB 2008b). Key elements of the Proposed Scoping Plan include expansion and strengthening of existing energy efficiency programs and building and appliance standards, achieving a statewide renewable energy mix of 33 percent, development of a California cap-and-trade program linked with other similar programs, establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets, implementation of existing laws and standards such as California's clean car standards (AB 1493), goods movement measures, and the Low Carbon Fuel Standard, and targeted fees to fund the State's long-term commitment to AB 32 administration. The Proposed Scoping Plan was addressed by the Board at the November board meeting and will be considered for approval at the December board meeting. The measures in the Scoping Plan adopted by the Board will be developed over the next three years and be in place by 2012.

Table 4.15-5, AB 32 Draft Scoping Plan Measures, lists CARB's preliminary recommendations for achieving greenhouse gas reductions under AB 32 along with a brief description of the requirements and applicability.

TABLE 4.15-5
AB 32 DRAFT SCOPING PLAN MEASURES

Scoping Plan Measure	Description
SPM-1: California Cap-and-Trade Program linked to Western Climate Initiative	Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.
SPM-2: California Light-Duty Vehicle GHG Standards	Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
SPM-3: Energy Efficiency	Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).
SPM-4: Renewables Portfolio Standard	Achieve 33 percent renewable energy mix statewide.
SPM-5: Low Carbon Fuel Standard	Develop and adopt the Low Carbon Fuel Standard (LCFS). CARB identified the LCFS as a Discrete Early Action item and is developing a regulation for Board consideration in March 2009. In January 2007, Governor Schwarzenegger issued Executive Order S-1-07, which called the reduction of the carbon intensity of California's transportation fuels by at least ten percent by 2020.
SPM-6: Regional Transportation-Related GHG Targets	Develop regional greenhouse gas emissions reduction targets for passenger vehicles. Senate Bill 375, signed into law in September 2008, requires CARB to develop, in consultation with metropolitan planning organizations (MPOs), passenger vehicle greenhouse gas emissions reduction targets for 2020 and 2035 by September 30, 2010.
SPM-7: Vehicle Efficiency Measures	Implement light-duty vehicle efficiency measures. CARB is pursuing fuel-efficient tire standards and measures to ensure properly inflated tires during vehicle servicing.
SPM-8: Goods Movement	Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement operations.
SPM-9: Million Solar Roofs Program	Install 3,000 MW of solar-electric capacity under California's existing solar programs.
SPM-10: Heavy/Medium-Duty Vehicles	Adopt heavy- and medium-duty vehicle and engine measures. Measures targeting aerodynamic efficiency, vehicle hybridization, and engine efficiency are recommended.
SPM-11: Industrial Emissions	Require assessment of large industrial sources (greater than 0.5 $MMTCO_2E$ per year) to determine whether individual sources within a facility can cost-effectively reduce GHG emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
SPM-12: High Speed Rail	Support implementation of a high speed rail (HSR) system. This measure supports implementation of plans to construct and operate a HSR system between Northern and Southern California serving major metropolitan centers.
SPM-13: Green Building Strategy	Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.

TABLE 4.15-5 (Continued)
AB 32 DRAFT SCOPING PLAN MEASURES

Scoping Plan Measure	Description
SPM-14: High GWP Gases	Adopt measures to reduce high global warming potential gases. The Draft Scoping Plan contains 6 measures to reduce high GWP gases from mobile sources, consumer products, stationary sources, and semiconductor manufacturing.
SPM-15: Recycling and Waste	Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling, and move toward zero-waste.
SPM-16: Sustainable Forests	Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. California's Board of Forestry and Fire Protection has the regulatory authority to implement the Forest Practice Act to provide for sustainable management practices. This measure is expected to play a greater role in the 2050 goals.
SPM-17: Water	Continue efficiency programs and use cleaner energy sources to move water. CARB recommends a public goods charge for funding investments in water efficiency that will lead to as yet undetermined reductions in greenhouse gases.
SPM-18: Agriculture	In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020. Increase efficiency and encourage use of captured methane for fuels or energy production. CARB has begun research on nitrogen fertilizers and will explore opportunities for emission reductions.
Source: CARB 2008b.	

4.15.2.3 University of California

UC Policy on Sustainable Practices and Emission Reduction Strategies

In March 2007, as an update to the green building policy adopted in 2004, the President of the University of California issued a Presidential Policy on Sustainable Practices, which was accompanied by Policy Guidelines for Sustainable Practices. The policy documents the University's commitment to the stewardship of the environment and to reducing the University's dependence on non-renewable energy sources. Emission reduction strategies established under this policy include practices related to green building design, clean energy, climate protection, transportation, operations, recycling and waste management, and environmentally preferable procurement (EPP).

As with all University of California (UC) campuses, UCLA is required to implement the UC Policy on Sustainable Practices and the associated Guidelines (UC Sustainability Policy)[5] (refer to the campus program PP 4.15-1 presented in Section 4.15.3.3, below). All future development under the proposed Project is subject to the UC Sustainability Policy. A copy of the current UC Policy Guidelines is provided at the end of this section. Following is a summary of UCLA programs and protocols being implemented under the UC Sustainability Policy that would minimize or reduce GHG emissions with implementation of the proposed Project. Except where otherwise specifically noted below, these campus programs and protocols are already in place, and would automatically apply to future development under the 2002 LRDP, as amended. As appropriate, the current status of UCLA's programs is also discussed below.

[5] To the extent that the Policy and Guidelines are updated from time to time, the then-current version can be viewed online at http://www.ucop.edu/ucophome/coordrev/policy/PP032207ltr.pdf or obtained through Universitywide Policy Office, Office of the President, 1111 Franklin Street, 12th Floor, Oakland, CA 94607.

UCLA Climate Action Plan

The UC Sustainability Policy requires that, by December 2008, all UC campuses, including UCLA, prepare a Climate Action Plan establishing strategies to reduce GHG emissions from campus to 2000 levels by 2014 and to 1990 levels by 2020. The Climate Action Plan incorporates information under the American College & University President's Climate Commitment (ACUPCC) Implementation Guidelines. The Climate Action Plan required under the UC Sustainability Policy thus sets target GHG emission reductions for UCLA that are consistent with the statewide targets set under AB 32.

Because UCLA is required to have its Climate Action Plan in place by December 2008, this plan will be in effect prior to any certification of this EIR and approval of the proposed Project. Accordingly, the proposed Project would be subject to, and required to be consistent with, the UCLA's Climate Action Plan, as effectuated in December 2008 and updated from time to time consistent with UC Sustainability Policy (Climate Action Plan). UCLA's Climate Action incorporates into its year 2020 projections, a growth adjustment of up to 2.1 million additional gsf—an amount that would allow for the full amount of potential additional development under the proposed Project, if approved. UCLA's Climate Action Plan thus sets policies and programs with the goal of reaching AB 32 target GHG emission levels by or before the AB 32 target dates, on a campus-wide level, assuming additional growth that includes the proposed Project. This means that the proposed Project would incorporate design elements to contribute towards the campus' achievement of the goals of the Climate Action Plan, which in turn is consistent with AB 32.

As of December 2008, under the Climate Action Plan UCLA will be subject to the following plans and policies to further advance consistency with AB 32 targets. With a goal of reducing system-wide non-renewable energy consumption, the Climate Action Plan will describe current energy efficiency and mobile emission reduction projects for existing buildings, infrastructure, Fleet, and commutes. The Climate Action Plan also incorporates protocols to allow for normalization of GHG data and reporting mechanisms to monitor progress towards the emission reduction goals. The Climate Action Plan evaluates the feasibility of a variety of projects, and anticipated biennial updates will continue to track the progress of renewable energy technology improvements, both in terms of cost and technical efficiency. To achieve the renewable power goal, UCLA will consider the use of available subsidies and potential pricing reductions in the marketplace. Strategies for developing various funding sources for financing the estimated cost associated with each of the proposed projects will also be described in the Climate Action Plan.

Because the proposed Project is automatically subject to and required to meet the provisions of the UC Sustainability Policy it would thereby be consistent with the goals of the Climate Action Plan when finalized by UCLA in December 2008. The implementation of the Climate Action Plan is intrinsic to the underlying proposed Project design and therefore, compliance with the applicable Climate Action Plan is incorporated into PP 4.15-1 below and will be monitored as part of the amended 2002 LRDP Mitigation Monitoring and Reporting Program.

UCLA Application of Green Building Design Standards & Sustainable Operations

UCLA has been and will continue to use green building design standards for development under the LRDP Amendment. By promoting energy efficiency and helping to minimize water consumption, these programs also contribute to minimizing and reducing GHG emissions.

- UCLA completed construction of La Kretz Hall (Home to the Institute of the Environment), the University's first LEED NC "Silver" rated building in 2005.

- UCLA currently has three buildings under construction that have been designed to target a LEED NC "Silver" rating.

- In the category of LEED Commercial Interiors (CI), UCLA has two major renovation projects in construction and design that are targeted to achieve a LEED CI "Gold" rating.

- UCLA has been developing plans to operate and maintain all eligible campus buildings to a minimum standard of UC-equivalent LEED™ Existing Buildings (EB) "certified" rating. All remaining development entitlement under the 2002 LRDP Amendment will conform to this standard.

- UCLA has chosen the Public Affairs building to be the pilot project for LEED-EB. Through implementation of the pilot project, the campus will develop the campus' core credits for LEED EB and develop a funding strategy by July 1, 2009, for achieving campus wide LEED-EB certification for existing campus buildings.

- To date, UCLA has reduced its overall campus-wide water consumption by approximately 110 MG between fiscal year 1999–2000 and 2005–2006 in the context of campus growth from 17.4 million gross square feet (gsf) to 21.6 million gsf during the same time period. From a daily use perspective, this translates to a reduction of approximately 301,360 gallons per day from 1999–2000 to 2005–2006.

UCLA Programs to Implement Clean Energy Targets

- UCLA's Cogeneration Plant began operation in 1994, providing the campus with an energy-efficient centralized plant that generates chilled water, electricity, and steam. The plant utilizes a mix of natural and renewable landfill gas, of which the landfill gas generates eight percent of the campus' electricity. As the Cogeneration Plant has output capacity of 43.5 MW, UCLA is producing 3.48MW of power through on-site renewable resources.

- Through the implementation of energy-efficient technologies throughout campus operations, UCLA has reduced its energy use from 196.7 MBTU/square foot in 2000 to 164.1 MBTU/square foot in 2007. Representing a reduction of energy usage of 16 percent per square foot below 2000 levels.

- Grid-based electricity is provided to the campus by the City of Los Angeles Department of Water and Power (LADWP). UCLA is working with LADWP to take advantage of the existing "green energy" portfolio. As of 2006, approximately 7 percent of LADWP's overall electrical supply was attributed to green energy sources. LADWP has an aggressive goal to increase their renewable energy percentage to 20 percent by 2010. In the event that LADWP does not achieve the 20 percent goal, then UCLA will assess the financial viability of purchasing whatever increases in green electrical power the utility provider is able to accommodate at that time to bridge the gap.

UCLA Membership in CCAR and Climate Change Working Group

Pursuant to the UC Sustainability Policy, UCLA became a member of the California Climate Action Registry (CCAR) in 2005 and is a participant in the Climate Change Working Group that is made up of representatives from all ten UC campuses. The group monitors progress toward

reaching the stated goals for GHG reduction, and evaluates suggestions for programs to reach these goals.

UCLA Sustainable Transportation Practices

Transportation Demand Management Program

UCLA has a nationally renowned Transportation Demand Management (TDM) program that was established in 1984, to promote use of alternative transportation with lower GHG emissions than individual automotive transport to/from campus. As described in detail in Section 4.13, Transportation/Traffic, UCLA provides ongoing education to students, faculty, and staff about UCLA's TDM programs (BruinGo! And GoMetro) that provide reduced-fare, pre-tax access to more than 7,500 regular riders on Metro, Big Blue Bus, Culver CityBus, and LADOT. All of these transportation providers stop on or in close proximity to the campus. More recently, the Flyaway—a shuttle bus service operated by Los Angeles World Airports—opened new airport service from Westwood. All students, including those who would reside in the new housing contemplated in the proposed 2002 LRDP, as amended, including the 2008 NHIP, can participate in any of the campus TDM programs and would have access to this shuttle service to and from Los Angeles International Airport.

Another component of UCLA's TDM program is the continued development of incentives to reduce the employee drive-alone rate, which has resulted in a decline from 69 percent in 1990 to 55 percent in 2007. The drive-alone rate reduction has been accomplished, in part through 1,100 carpools serving approximately 2,700 participants and 1,505 vanpools transporting approximately 1,600 full-time and 700 part-time riders from 85 communities as of October 2007.

Other UCLA Programs Promoting Sustainable Transportation Practices

UCLA Transportation is also continuing to "green" the campus Fleet through the purchase of clean and fuel efficient vehicles (partial zero emissions vehicles and zero emissions vehicles [PZEV, ZEV]) as well as Alternative Fuel Vehicles (AFVs) that use biodiesel, compressed natural gas, and/or ethanol. By 2008–2009, the campus Fleet will expand to 312 PZEVs and ZEVs, an increase of 27 percent from 2004–2005. During the same timeframe, the number of AFVs will increase from 319 to 451 vehicles.

The University's commitment to providing affordable on-campus housing has had an important secondary benefit of reducing the volume of student commutes to and from campus. These housing goals are described in Section 3.2 of the Project Description.

UCLA Program to Minimize University-Generated Waste Sent to Landfills

For the period of January to June 2008, UCLA achieved a 55 percent recycling (landfill diversion) percentage. This is above the UC Policy June 2008 target of 50 percent. Surpassing the 50 percent threshold was the result of improvements in the mixed paper recycling program, more comprehensive tracking of green waste, the beginning of a composting program in the Residence Hall dining facilities, incorporating construction waste from small construction projects in the recycling program, and inclusion of demolition waste into the program. In addition, the Waste to Energy component of the total waste stream has been at approximately 25 percent between May and July 2008. Following is a summary of UCLA's practice related to recycling and waste management.

- UCLA has had a recycling program in place for almost two decades. The continuous efforts to expand the indoor/outdoor recycling program and waste diversion

requirements under the Green Building Design program will increase the percentage of campus waste recycled. Increasing waste diversion rates will reduce climate change emissions associated with energy intensive materials extraction and production as well as methane emissions from landfills (CARB 2008b).

- All standard configuration personal computers (desktop/laptop) purchased by UCLA are required meet the standard of Electronic Product Environmental Assessment Tool (EPEAT) Bronze certification—all but Gateway products are EPEAT Silver certified.

- All recyclers of University electronic waste are required to sign the Electronic Recyclers Pledge of True Stewardship.

- UCLA operates a SAFE Collection Center at the EH&S facility that accepts off-campus residential hazardous and electronic waste for recycling at no charge. Composting organic waste that would otherwise be disposed in a landfill would reduce GHG emissions. Anaerobic decomposition of organic waste in a landfill produces CH_4 (methane), a potent GHG, while composting does not produce any CH_4. Composting also has other climate- and environmentally friendly co-benefits.

UCLA Programs Related to Environmentally Preferable Purchasing Practices

Changing what the campus purchases and establishing environmentally preferable purchasing standards is a process that has reached several significant thresholds in three major areas: (1) recycled-content paper; (2) computer purchases and electronic waste; and (3) energy/water efficient products.

In 2008, the campus purchases of post-consumer recycled content copier paper have gone from 26 percent to 80 percent.

All standard configuration personal computers (desktop/laptop) purchased by the University meet the standard of EPEAT Silver or Gold certification and all recyclers of University electronic waste are required to sign the Electronic Recyclers Pledge of True Stewardship.

UCLA purchases Energy-Star® rated personal computers, while other Energy-Star® products are purchased whenever possible for both energy and water efficiency.

UCLA's environmentally preferable purchasing activities also support the green building program requirements for low VOC carpet, recycled-content carpet, low VOC adhesives, sealants, paints, and coatings, furniture purchases with foam components that do not contain CFCs or HFCs, and wood furniture certified by the Forest Stewardship Council (FSC).

UCLA HFCs Reduction Program

UCLA has undertaken a program to eliminate CFC refrigerants from all central and large major air conditioning machines and replace them with HFC refrigerants, which are less adverse. However it should be noted that there is no "emission" from these refrigerants unless there is a leak in the system. UCLA Facilities Management is diligent in maintaining these systems leak-free to avoid such environmental impacts. Also, HVAC systems are upgraded and/or replaced as feasible throughout the campus as part of the deferred maintenance program.

UCLA Compliance with Future Regulations Required to be Promulgated under AB 32

AB 32 requires that CARB promulgate regulations to effectuate the GHG emission reduction targets, such that the State will reach 1990 emission levels by 2020. To the extent that CARB promulgates any such regulations that are applicable to UCLA under the 2002 LRDP as amended or otherwise, UCLA plans to comply with those regulations. Such regulations have not yet been promulgated but are required to be promulgated under AB 32 prior to 2013. Nonetheless, this draft EIR takes a conservative approach, in that it does not take into account, in determining significance, anticipated compliance with future regulations under AB 32 by UCLA, by California utilities supplying energy and water to the campus, by vehicle or fuel manufacturers, or by others. It is currently unknown what regulations will be implemented by CARB under AB 32 or whether such regulations would apply to UCLA and/or the proposed project.

4.15.3 ANALYSIS OF POTENTIAL CLIMATE CHANGE IMPACTS

4.15.3.1 Analytical Method

The analysis of potential climate change impacts includes both quantitative and qualitative methods. As stated above, the OPR Climate Change Advisory recommends that lead agencies quantify, determine the significance of, and (as needed) mitigate the cumulative climate change impacts of a proposed project. Therefore, quantitative methods, as described in this section, are used to describe the nature and magnitude of GHG emissions attributable to the 2002 LRDP, as amended. Qualitative methods are used to determine significance, as described in the following section.

Emission factors and calculation methods for GHG from development projects have not been formally adopted for use by the state or SCAQMD. The CCAR GRP is the most comprehensive guidance and is designed to be used by existing large entities and facilities where there are records of energy use, vehicle fleet activities, and manufacturing processes (CCAR 2008). The protocol was used by UCLA to prepare its Year 2007 Greenhouse Gas Emission Inventory Report to the California Climate Action Registry and to estimate GHG emissions associated with electricity and natural gas consumption under buildout of the 2002 LRDP as amended.

Additional data was developed by UCLA in conjunction with the campus GHG emissions reports in preparation for submittal in accordance with the ACUPCC Guidelines and for input into the Climate Action Plan.

It is noted that the methodologies for identification and reporting of GHG emissions differ for UCLA's annual reports per the UC Sustainability Policy and the ACUPCC Guidelines and for this EIR. The ACUPCC guidelines support reporting of direct emissions from University-owned and -operated functions, and some indirect emissions, whereas the EIR analysis includes both direct and indirect emissions associated with the proposed Project. As examples, but not all inclusive, UCLA does not report the emissions embodied in water consumption or emissions from construction equipment used on new development projects. The reason for not reporting these emissions is that the emissions are required to be reported by the water and power utilities and by the companies consuming the fuel and energy for construction activities. However, GHG emissions associated with water consumption and construction equipment are included in the estimated project-related emissions described in this section.

4.15.3.2 Method Used to Determine Significance

The OPR Climate Change Advisory explains that under CEQA the choice of method or threshold to determine the significance of a climate change impact, is left to the "judgment and discretion of the lead agency." Accordingly, the UC as lead agency for the proposed Project has, using its best judgment and information available at this time, determined an analytical framework and determined the significance of potential climate change impacts associated with the proposed Project in this EIR.

Neither the SCAQMD nor any state regulatory agency has identified a CEQA significance threshold for GHG emissions generated by a proposed project. CAPCOA has proposed, in the recent informal CAPCOA Guidance discussed above, a number of potential methods for determining significance of climate change impacts under CEQA. Moreover, the OPR Climate Change Advisory references the lead agency's obligation under CEQA to determine the significance of the environmental impacts associated with a proposed project, even in the absence of a threshold of significance established by the State or applicable local air district. The OPR Climate Change Advisory goes on to state that compliance with CEQA involves an assessment by the lead agency of whether a project's GHG emissions are individually or cumulatively significant.

No air district or other regulatory agency in California, including SCAQMD, has specified a methodology for analyzing impacts related to GHG emissions or global climate change. By adoption of AB 32 and SB 97, however, the State of California has established GHG reduction targets and has determined that GHG emissions as they relate to global climate change are a source of adverse environmental impacts in California that should be addressed under CEQA. SB 97 amended CEQA to require OPR to prepare CEQA Guidelines revisions addressing the mitigation of GHGs or their environmental effects. The proper context for addressing the issue in an EIR is the discussion of cumulative impacts; although the emissions of one single project will not cause global climate change, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change.

The impact of the proposed Project with respect to global climate change is evaluated in this EIR by determining whether it would impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32. A project's consistency with the implementing programs and regulations to achieve the statewide GHG emission reduction goals established under AB 32 cannot be evaluated explicitly because these regulations are still under development. However, in October 2008, CARB issued the AB 32 Proposed Scoping Plan which identifies measures that will likely be included in the Final Scoping Plan that will be adopted in January 2009. For purposes of this EIR, the following method is used to evaluate Project GHG emissions:

- The proposed project would be considered not to impede the emissions reduction targets developed by the state pursuant to AB 32 if it is consistent with applicable AB 32 Proposed Scoping Plan measures and the applicable UCLA Climate Action Plan.

4.15.3.3 Impact Analysis

Campus Program, Practice, and Procedure

The following campus program, practice, and procedure (PPs) shall be continued throughout the planning horizon for the proposed Project and is assumed in the analysis presented in this section:

PP 4.15-1 *The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; Environmentally Preferable Purchasing Practices; and provisions of the applicable UCLA Climate Action Plan.*

GHG Emissions from the Proposed Project

This draft EIR takes a two-tiered approach to evaluating the potential level of GHG emissions from the proposed Project. The first segment quantifies emissions from the additional development contemplated by the proposed Project assuming "business as usual". Under the "business as usual" assumption, energy, fuel, water consumption rates, and vehicle trips per student, staff, and visitor would be the same as assumed for the Baseline scenario, or existing conditions. Because the "business as usual" projections are derived from baseline numbers, they ***do not*** account for GHG emission reduction strategies included in the Climate Action Plan or many of the other UCLA policies and programs that are currently being implemented to reduce GHG emissions as described in Section 4.15.2.3 above. Accordingly, the second segment of this analysis takes into account UCLA's additional GHG reduction policies and programs, including the Climate Action Plan.

It should be noted that the UCLA's Climate Action Plan, to be completed prior to any approval of this proposed Project, will quantify and estimate projected future emissions based on implementation of the current and proposed GHG emission reduction initiatives described in the Climate Action Plan. In the interim, this draft EIR qualitatively evaluates the net effect of UCLA's GHG emission reduction programs and policies, including the Climate Action Plan, on projected Project emissions. Moreover, the proposed Project will incorporate PP 4.15-1 to ensure the Project is consistent with both the UC Sustainability Policy and the applicable UCLA Climate Action Plan. With implementation of Climate Action Plan's GHG emission reduction initiatives, UCLA anticipates that it may be able to meet the AB 32 2014 and 2020 target goals ahead of schedule.

Quantified projections of proposed Project impacts—before taking into account the Climate Action Plan and various other GHG reduction policies and programs—would result in a business as usual scenario of increased generation of GHG emissions beyond the baseline emissions. GHG emissions generated by the proposed Project would predominantly be in the form of CO_2. As previously noted, while emissions of other GHGs, such as CH_4, N_2O, HFCs, PFCs, and SF_6 are important with respect to global climate change, the emission levels of these other GHGs for the sources considered for proposed Project are relatively small compared with CO_2 emissions. Long-term operation and short-term construction of the proposed Project would produce emissions of GHGs as discussed below. The second segment of the proposed Project—UCLA's existing GHG reduction policies and programs and the Climate Action Plan—is anticipated to lower the projected generation of GHG emissions from the proposed Project below business as usual, as also discussed below.

Operations

Operational emissions would be associated with purchased electricity, electricity produced on site via the Cogeneration Plant using natural and landfill gas, natural gas use for space and water heating, operation of the campus vehicle fleet, air travel paid for by the University, private vehicle trips by students, faculty, staff and visitors, and the electricity use embodied in anticipated future water demand associated with the proposed project. Following is additional information regarding the operational sources of GHG emissions and the associated emissions calculations:

- ***Building Energy Use.*** GHG emissions associated with anticipated purchased grid electricity and purchased natural gas were calculated using utility generation factors provided by UCLA and CCAR GRP emission factors for CO_2 from natural gas consumption and electricity use in California. The campus Cogeneration Plant is currently operating at maximum capacity. As a result, all future building energy demand will be met through the purchase of grid electricity or the purchase of natural gas.

- ***Mobile Source Emissions.*** CO_2 emissions associated with operation of the UCLA vehicle fleet, commute vehicle trips generated by the campus, and UCLA staff-related airplane trips were developed by UCLA as part of reporting annual GHG emissions in accordance with ACUPCC guidelines. With respect to the trip generation increases, it should be noted that the new on-campus housing in the 2002 LRDP, as amended, which includes the 2008 NHIP, would reduce trips otherwise taken by students and faculty between campus and off-campus residences. Approximately 70 percent of the residents projected for the new proposed housing would be new student residents who otherwise would live off-campus.

- ***Embodied Energy of Water Consumption.*** The analysis of embodied energy of water consumed by the proposed Project assumed that potable water consumed has an embodied energy of 13,222 kWh per MG. Anticipated water consumption under the 2002 LRDP Amendment was provided by UCLA. Embodied energy of water consumption was converted to GHG emissions using the CCAR GRP emission factor for CO_2 in electricity use in California.

The results of the operational CO_2 emissions calculations for the proposed Project are shown in Table 4.15-6.

During the planning horizon (i.e., 2007 to 2013), the proposed Project would add approximately 681 students, 957 employees, and 1,142 visitors to the campus (average weekday estimates), and includes 1.87 million square feet of remaining development allocation. Prior to implementation of the CAP, estimated GHG emissions resulting from the proposed Project in 2013 would be approximately 19,374 $MTCO_2$/year. As shown in Table 4.15-6, the increase over the Baseline emissions would be approximately 6 percent. This estimated increase represents a "worst case" projection since campus sustainability and GHG reduction initiatives are not quantified for purposes of this analysis. In particular for example, all new development pursuant to the proposed Project would be subject to the UC Sustainability Policy green building requirement to outperform California Title 24 energy efficiency standards by a minimum of 20 percent.

TABLE 4.15-6
PROJECTED OPERATIONAL GHG EMISSIONS OF THE PROPOSED PROJECT

Emissions Source	Baseline		Buildout[b]		Increase		
	MT CO_2	Percent of Total	MT CO_2	Percent of Total	MT CO_2	Percent of Total	Percent of Baseline
Campus Purchased Electricity[c]	94,579	28	105,020	29	10,441	54	11
Campus Purchased Natural Gas[c]	168,614	49	169,290	47	676	3	<1
Emergency Diesel (Generators)	145	<1	145	<1	No data[a]	–	–
Propane	11	<1	11	<1	No data[a]	–	–
Mobile Sources[d]	75,970	22	83,740	23	7,770	40	10
Water Consumption	4,082	1	4,569	1	487	3	12
Total	**343,401**		**362,775**		**19,374**		**6**

MT CO_2 – Metric tons of CO_2

[a] The use of emergency diesel generators and propane is likely to increase; however data to estimate the increase is not available at the program level. Although the magnitude of the increases are not estimated, the changes in these emissions would negligibly affect the results.

[b] The projected operational GHG emissions for the buildout year (2013) assumes a "Business as Usual" scenario from the Baseline where the campus continues to operate without implementation of the Climate Action Plan and no additional energy efficiency or mobile source emission reduction projects or programs are initiated.

[c] Baseline emissions for purchased electricity and natural gas do not include off-campus purchased electricity, gas, or purchased utilities for the Santa Monica/UCLA Medical Center.

[d] For purposes of this EIR, mobile sources includes vehicle emissions from visitors to the UCLA campus (21,372 MT CO_2), whereas the Draft Climate Action Plan does not account for these emissions.

As noted above, the projected increases in GHG emissions are based on a "Business as Usual" assumption, that is, the energy, fuel, and water consumption rates, and vehicle trips and miles per student, staff, and visitor would be the same as assumed for the Baseline scenario, or existing conditions. Thus, the calculated emissions do not account for many of the UCLA policies and programs to reduce GHG emissions, as discussed in Section 4.15.2.3 above. As described, some of these policies and programs are already in place and have resulted in reductions in energy use, water consumption, vehicle trips, etc. and the corresponding GHG emissions. Continuation of these policies and programs pursuant to PP 4.15-1 and implementation of new programs would result in smaller GHG emission increases than shown in Table 4.15-6, and are anticipated to result in future emissions that would be less than the Baseline emissions. Moreover, the Draft Climate Action Plan establishes programs and policies to bring future reasonably foreseeable campus growth, including growth associated with the proposed Project, within AB 32 GHG reduction targets.

Construction

Construction emissions would be associated with vehicle engine exhaust from construction equipment, vendor trips, and employee compute trips. The estimated construction emissions for the proposed 2008 NHIP are shown in Table 4.15-7. The GHG emissions from construction of the 2008 NHIP would average approximately 2,100 $MTCO_2$/year. Construction plans and schedules for future development under the 2002 LRDP, as amended, have not been developed at this stage, but it may be assumed that construction emissions for other projects would be of a similar order of magnitude, or less, than for the 2008 NHIP.

TABLE 4.15-7
ESTIMATED GHG EMISSIONS FROM 2008 NHIP CONSTRUCTION

Year	Emissions Metric tons CO_2
2009	234
2010	3,027
2011	3,539
2012	1,614
Average	**2,103**
Source: EDAW 2008, see Appendix K	

Construction emissions for major improvement projects are not long-term recurring emissions, nor are they under the direct control of UCLA. In accordance with the ACUPCC Implementation Guide, UCLA does not report major project construction emissions as part of the annual GHG reporting. GHG emissions from minor construction and maintenance performed by UCLA employees are included in the annual reporting as part of campus fleet and fuel use categories.

Threshold	Would the project impede the emissions reductions targets developed by the State pursuant to AB 32?

Impact 4.15-1 ***Implementation of the proposed Project would not impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32, including without limitation UCLA's Climate Action Plan. This would be a less than significant impact.***

Implementation of the proposed Project, based on current emissions rates (without the implementation of many UCLA GHG reduction policies and programs) would increase annual GHG emissions approximately six percent above the Baseline. The increase would be 19,374 MT CO_2 per year in 2013, as shown in Table 4.15-6. Construction projects (such as the 2008 NHIP which was used for this analysis) would generate an estimated average of 2,103 metric tons of CO_2 per year, as shown in Table 4.15-7 and the accompanying discussion.

The proposed Project's contribution to the cumulative global climate change impact is evaluated in this EIR by determining whether the project would conflict with programs and measures that the state is developing to comply with AB 32. Towards this end, Table 4.15-8, Consistency of 2002 LRDP as amended with AB 32 Draft Scoping Plan Measures, lists all pertinent measures included in CARB's Draft Scoping Plan for the state's compliance with AB 32, and presents ongoing 2002 LRDP EIR policies, programs, and project design features that comply with the draft scoping plan measures, and indicates that the proposed Project is in substantial conformance with the CARB Draft Scoping Plan measures. Consistency is further evaluated based on conformity with UCLA's Climate Action Plan and the previously-adopted UC Sustainability Policy requiring that the Draft Climate Action Plan (a) meet or exceed AB 32 GHG emission reduction targets and (b) be completed by the University by December 2008, prior to any approval of this proposed Project.

TABLE 4.15-8
CONSISTENCY OF 2002 LRDP AS AMENDED WITH AB 32 DRAFT SCOPING PLAN MEASURES

Scoping Plan Measure	LRDP Policy/Project Feature
SPM-1: California Cap-and-Trade Program linked to Western Climate Initiative	**Not applicable.**
SPM-2: California Light-Duty Vehicle GHG Standards	**Not applicable.**
SPM-3: Energy Efficiency	**PP 4.15-1:** The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices. **PP 4.14-10:** The campus shall continue to implement energy conservation measures (such as energy-efficient lighting and microprocessor-controlled HVAC equipment) to reduce the demand for electricity and natural gas. The energy conservation measures may be subject to modification as new technologies are developed or if current technologies become obsolete through replacement.
SPM-4: Renewables Portfolio Standard	**Not applicable.**
SPM-5: Low Carbon Fuel Standard	**Not applicable.**
SPM-6: Regional Transportation-Related GHG Targets	**Not applicable.**
SPM-7: Vehicle Efficiency Measures	**PP 4.15-1:** The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices.
SPM-8: Goods Movement	**Not applicable.**
SPM-9: Million Solar Roofs Program	**PP 4.15-1:** The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices.
SPM-10: Heavy/Medium-Duty Vehicles	**Not applicable.**
SPM-11: Industrial Emissions	**Not applicable.**
SPM-12: High Speed Rail	**Not applicable.**
SPM-13: Green Building Strategy	**PP 4.15-1:** The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices.
SPM-14: High GWP Gases	**PP 4.15-1:** The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices.
SPM-15: Recycling and Waste	**PP 4.15-1:** The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable

TABLE 4.15-8 (Continued)
CONSISTENCY OF 2002 LRDP AS AMENDED WITH AB 32 DRAFT SCOPING PLAN MEASURES

Scoping Plan Measure	LRDP Policy/Project Feature
	Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices. **PP 4.14-3:** The campus shall continue to implement a solid waste reduction and recycling program designed to limit the total quantity of campus solid waste that is disposed of in landfills during the LRDP plan horizon.
SPM-16: Sustainable Forests	**Not applicable.**
SPM-17: Water	**PP 4.14-2(a):** New facilities and renovations (except for patient care facilities in the Medical Center) shall be equipped with low-flow showers, toilets, and urinals. **PP 4.14-2(b):** Measures to reduce landscaping irrigation needs shall be used, such as automatic timing systems to apply irrigation water during times of the day when evaporation rates are low, installing drip irrigation systems, using mulch for landscaping, subscribing to the California Irrigation Management Information System Network for current information on weather and evaporation rates, and incorporating drought-resistant plants as appropriate. **PP 4.14-2(c):** The campus shall promptly detect and repair leaks in water and irrigation pipes. **PP 4.14-2(d):** The campus shall minimize the use of water to clean sidewalks, walkways, driveways, and parking areas. **PP 4.14-2(e):** The campus shall avoid serving water at UCLA food service facilities except upon request. **PP 4.14-2(f):** The campus shall provide ongoing water treatment programs for campus cooling equipment by adding biodegradable chemicals to achieve reductions in water usage. **PP 4.14-2(g):** The campus shall educate the campus community on the importance of water conservation measures.
SPM-18: Agriculture	**Not applicable.**

As discussed in more detail above in Section 4.15.2.3 above, the UC Sustainability Policy requires that UCLA's Climate Action Plan be completed by December 2008—prior to any approval of the proposed Project—and that the Climate Action Plan incorporate AB 32 GHG reduction targets at a campus-specific level. Moreover, to achieve these targets, the Climate Action Plan will necessarily take into account reasonably foreseeable campus growth, including growth under this proposed Project. Consistent with this assumption, the Draft Climate Action Plan specifically incorporates into its year 2020 projections a growth adjustment of up to 2.1 million additional gsf—an amount that would allow for full development of allocated square footage under the proposed Project, if approved. Accordingly, the proposed Project is expected to be consistent with UCLA's Climate Action Plan, and would be subject to programs and policies established under the plan to meet (or even potentially exceed) AB 32 target GHG emission levels by or before the AB 32 target dates, on a campus-wide level.

Conclusion

The information provided in Table 4.15-9 taken together with the UCLA's ongoing GHG emission reduction programs discussed in Section 4.15.2.3, demonstrate that the proposed Project is consistent with applicable measures of the AB 32 Draft Scoping Plan, would be consistent with the applicable UCLA Climate Action Plan, and would not impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32. The proposed Project's cumulative impact related to climate change would be less than significant.

Additional Analysis

The impact of the proposed Project, with incorporation of all PPs and implementation of UCLA's Climate Action Plan, on cumulative climate change would be less than significant. Therefore, no mitigation measures are required.

Notwithstanding the above analysis under the significance threshold described above, in this period of development of CEQA analysis of program and project impacts to global climate change, for informational purposes only this draft EIR further discusses features of the proposed Project that also are in substantial conformity with most GHG reduction measures recommended as GHG emission reduction or "mitigation measures" by the State Attorney General and OPR. Therefore, the following tables: Table 4.15-9, Attorney General's Recommended "Project Level" Mitigation Measures; Table 4.15-10, Attorney General's Recommended General Plan Mitigation Measures; and Table 4.15-11, Office of Planning and Research Suggested Mitigation Measures, present mitigation measures recommended by the Attorney General's office and OPR for lead agencies to consider in the development and approval of projects. Most of the applicable measures are already covered by the policies and practices (PPs) contained in the proposed Project, by design features in the proposed 2008 NHIP, by sustainability elements of the 2002 LRDP as amended, or in mitigation previously identified in the respective technical analyses presented throughout Section 4 of this EIR. An "X" indicates that the measure is already addressed. A blank generally indicates that the measure is not applicable to the development of the 2008 NHIP and 2002 LRDP, as amended,

TABLE 4.15-9
ATTORNEY GENERAL'S RECOMMENDED "PROJECT LEVEL" MITIGATION MEASURES

ID	Suggested Mitigation Measures	2008 NHIP
Energy Efficiency		
GCC-1-1	Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.	X
GCC-1-2	Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.	X
GCC-1-3	Install light colored "cool" roofs, cool pavements, and strategically placed shade trees	X
GCC-1-4	Provide information on energy management services for large energy users.	
GCC-1-5	Install energy efficient heating and cooling systems, appliances and equipment, and control systems.	X

TABLE 4.15-9 (Continued)
ATTORNEY GENERAL'S RECOMMENDED "PROJECT LEVEL" MITIGATION MEASURES

ID	Suggested Mitigation Measures	2008 NHIP
GCC-1-6	Install light emitting diodes (LEDs) for traffic, street and other outdoor lighting.	X
GCC-1-7	Limit the hours of operation of outdoor lighting.	X
GCC-1-8	Use solar heating, automatic covers, and efficient pumps and motors for pools and spas.	
GCC-1-9	Provide education on energy efficiency.	X
Renewable Energy		
GCC-1-10	Install solar and wind power systems, solar and tankless hot water heaters, and energy-efficient heating ventilation and air conditioning. Educate consumers about existing incentives.	X
GCC-1-11	Install solar panels on carports and over parking areas.	
GCC-1-12	Use combined heat and power in appropriate applications.	X
Water Conservation and Efficiency		
GCC-1-13	Create water-efficient landscapes.	X
GCC-1-14	Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.	X
GCC-1-15	Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water.	
GCC-1-16	Design buildings to be water-efficient. Install water-efficient fixtures and appliances.	X
GCC-1-17	Use graywater. (Graywater is untreated household waste water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines.) For example, install dual plumbing in all new development allowing graywater to be used for landscape irrigation.	
GCC-1-18	Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.	X
GCC-1-19	Restrict the use of water for cleaning outdoor surfaces and vehicles.	X
GCC-1-20	Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site.)	X
GCC-1-21	Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.	X
GCC-1-22	Provide education about water conservation and available programs and incentives.	X
Solid Waste Measures		
GCC-1-23	Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).	X
GCC-1-24	Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.	X
GCC-1-25	Recover by-product methane to generate electricity.	X
GCC-1-26	Provide education and publicity about reducing waste and available recycling services.	X

TABLE 4.15-9 (Continued)
ATTORNEY GENERAL'S RECOMMENDED "PROJECT LEVEL" MITIGATION MEASURES

ID	Suggested Mitigation Measures	2008 NHIP
Land Use Measures		
GCC-1-27	Include mixed-use, infill, and higher density in development projects to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods.	X
GCC-1-28	Educate the public about the benefits of well-designed, higher density development.	
GCC-1-29	Incorporate public transit into project design.	
GCC-1-30	Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.	X
GCC-1-31	Develop "brownfields" and other underused or defunct properties near existing public transportation and jobs.	
GCC-1-32	Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.	X
Transportation and Motor Vehicles		
GCC-1-33	Limit idling time for commercial vehicles, including delivery and construction vehicles.	X
GCC-1-34	Use low or zero-emission vehicles, including construction vehicles.	X
GCC-1-35	Promote ride sharing programs e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides.	X
GCC-1-36	Create car sharing programs. Accommodations for such programs include providing parking spaces for the car share vehicles at convenient locations accessible by public transportation.	X
GCC-1-37	Create local "light vehicle" networks, such as neighborhood electric vehicle (NEV) systems.	X
GCC-1-38	Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations.	X
GCC-1-39	Increase the cost of driving and parking private vehicles by, e.g., imposing tolls and parking fees.	X
GCC-1-40	Build or fund a transportation center where various public transportation modes intersect.	
GCC-1-41	Provide shuttle service to public transit.	X
GCC-1-42	Provide public transit incentives such as free or low-cost monthly transit passes.	X
GCC-1-43	Promote "least polluting" ways to connect people and goods to their destinations.	X
GCC-1-44	Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.	X
GCC-1-45	Incorporate bicycle-friendly intersections into street design.	
GCC-1-46	For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, e.g., locked bicycle storage or covered or indoor bicycle parking.	X

TABLE 4.15-9 (Continued)
ATTORNEY GENERAL'S RECOMMENDED "PROJECT LEVEL" MITIGATION MEASURES

ID	Suggested Mitigation Measures	2008 NHIP
GCC-1-47	Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.	X
GCC-1-48	Work with the school district to restore or expand school bus services.	
GCC-1-49	Institute a telecommute work program. Provide information, training, and incentives to encourage participation. Provide incentives for equipment purchases to allow high-quality teleconferences.	
GCC-1-50	Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation.	X
Source: DOJ 2008.		

TABLE 4.15-10
ATTORNEY GENERAL'S RECOMMENDED GENERAL PLAN MITIGATION MEASURES

ID	Suggested Mitigation Measures	2002 LRDP as Amended
GCC-2-1	Climate Action Plan or Policy: Include a comprehensive climate change action plan that requires a baseline inventory of greenhouse gas emissions from all sources by a date certain; greenhouse gas emissions reduction targets and deadlines; and enforceable greenhouse gas emissions reduction measures.	X
GCC-2-2	Climate Action Plan Implementation Program: Include mechanisms to ensure regular review of progress toward the emission reduction targets established by the Climate Action Plan, report progress to the public and responsible officials, and revise the plan as appropriate, using principles of adaptive management. Allocate funding to implement the plan. Fund staff to oversee implementation of the plan.	X
GCC-2-3	Strengthen local building codes for new construction and renovation to require a higher level of energy efficiency.	X
GCC-2-4	Require that all new government buildings, and all major renovations and additions, meet identified green building standards.	X
GCC-2-5	Adopt a "Green Building Program" to require or encourage green building practices and materials. The program could be implemented through, e.g., a set of green building ordinances.	X
GCC-2-6	Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, and promote effective use of daylight. Orientation should optimize opportunities for on-site solar generation.	X
GCC-2-7	Provide permitting-related and other incentives for energy efficient building projects, e.g., by giving green projects priority in plan review, processing and field inspection services.	X
GCC-2-8	Conduct energy efficiency audits of existing buildings by checking, repairing, and readjusting heating, ventilation, air conditioning, lighting, water heating equipment, insulation, and weatherization. Offer financial incentives for adoption of identified efficiency measures.	X
GCC-2-9	Partner with community services agencies to fund energy efficiency project, including heating, ventilation, air conditioning, lighting, water heating equipment, insulation, and weatherization, for low income residents.	

TABLE 4.15-10 (Continued)
ATTORNEY GENERAL'S RECOMMENDED GENERAL PLAN MITIGATION MEASURES

ID	Suggested Mitigation Measures	2002 LRDP as Amended
GCC-2-10	Target local funds, including redevelopment and Community Development Block Grant resources, to assist affordable housing developers in incorporating energy efficient designs and features.	
GCC-2-11	Provide innovative, low-interest financing for energy efficiency and alternative energy projects. For example, allow property owners to pay for energy efficiency improvements and solar system installation through long-term assessments on individual property tax bills	
GCC-2-12	Fund incentives to encourage the use of energy efficient vehicles, equipment and lighting. Provide financial incentives for adoption of identified efficiency measures	X
GCC-2-13	Require environmentally responsible government purchasing. Require or give preference to products that reduce or eliminate indirect greenhouse gas emissions, e.g., by giving preference to recycled products over those made from virgin materials.	X
GCC-2-14	Require that government contractors take action to minimize greenhouse gas emissions, e.g., by using low or zero-emission vehicles and equipment.	X
GCC-2-15	Adopt a "heat island" mitigation plan that requires cool roofs, cool pavements, and strategically placed shade trees. (Darker colored roofs, pavement, and lack of trees may cause temperatures in urban environments to increase by as much as 6-8 degrees Fahrenheit as compared to surrounding areas.40) Adopt a program of building permit enforcement for re-roofing to ensure compliance with existing state building requirements for cool roofs on non-residential buildings.	X
GCC-2-16	Adopt a comprehensive water conservation strategy. The strategy may include, but not be limited to, imposing restrictions on the time of watering, requiring water-efficient irrigation equipment, and requiring new construction to offset demand so that there is no net increase in water use.	X
GCC-2-17	Adopt water conservation pricing, e.g., tiered rate structures, to encourage efficient water use.	X
GCC-2-18	Adopt water-efficient landscape ordinances	X
GCC-2-19	Strengthen local building codes for new construction and implement a program to renovate existing buildings to require a higher level of water efficiency.	X
GCC-2-20	Adopt energy and water efficiency retrofit ordinances that require upgrades as a condition of issuing permits for renovations or additions, and on the sale of residences and buildings.	X
GCC-2-21	Provide individualized water audits to identify conservation opportunities Provide financial incentives for adopting identified efficiency measures.	
GCC-2-22	Provide water audits for large landscape accounts. Provide financial incentives for efficient irrigation controls and other efficiency measures.	
GCC-2-23	Require water efficiency training and certification for irrigation designers and installers, and property managers	
GCC-2-24	Implement or expand city or county-wide recycling and composting programs for residents and businesses. Require commercial and industrial recycling.	X
GCC-2-25	Extend the types of recycling services offered (e.g., to include food and green waste recycling).	X
GCC-2-26	Establish methane recovery in local landfills and wastewater treatment plants to generate electricity.	X

TABLE 4.15-10 (Continued)
ATTORNEY GENERAL'S RECOMMENDED GENERAL PLAN MITIGATION MEASURES

ID	Suggested Mitigation Measures	2002 LRDP as Amended
GCC-2-27	Implement Community Choice Aggregation (CCA) for renewable electricity generation. (CCA allows cities and counties, or groups of them, to aggregate the electric loads of customers within their jurisdictions for purposes of procuring electrical services. CCA allows the community to choose what resources will serve their loads and can significantly increase renewable energy.)	X
GCC-2-28	Preserve existing conservation areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) that provide carbon sequestration benefits	
GCC-2-29	Establish a mitigation program for development of conservation areas. Impose mitigation fees on development of such lands and use funds generated to protect existing, or create replacement, conservation areas.	
GCC-2-30	Provide public education and information about options for reducing greenhouse gas emissions through responsible purchasing, conservation, and recycling.	X
GCC-2-31	Adopt land use designations to carry out policies designed to reduce greenhouse gas emissions, *e.g.*, policies to minimize or reduce vehicle miles traveled, encourage development near existing public transportation corridors, encourage alternative modes of transportation, and promote infill, mixed use, and higher density development.	X
GCC-2-32	Identify and facilitate the development of land uses not already present in local districts – such as supermarkets, parks and recreation fields, and schools in neighborhoods; or residential uses in business districts – to reduce vehicle miles traveled and allow bicycling and walking to these destinations.	
GCC-2-33	Create neighborhood commercial districts.	
GCC-2-34	Require bike lanes and bicycle/pedestrian paths	
GCC-2-35	Prohibit projects that impede bicycle and walking access, *e.g.*, large parking areas that cannot be crossed by non-motorized vehicles, and new residential communities that block through access on existing or potential bicycle and pedestrian routes	X
GCC-2-36	Site schools to increase the potential for students to walk and bike to school.	
GCC-2-37	Enact policies to limit or discourage low density development that segregates employment, services, and residential areas	X
GCC-2-38	Where there are growth boundaries, adopt policies providing certainty for infill development.	X
GCC-2-39	Require best management practices in agriculture and animal operations to reduce emissions, conserve energy and water, and utilize alternative energy sources, including biogas, wind and solar.	
GCC-2-40	In conjunction with measures that encourage public transit, ride sharing, bicycling and walking, implement circulation improvements that reduce vehicle idling. For example, coordinate controlled intersections so that traffic passes more efficiently through congested areas	X
GCC-2-41	Create an interconnected transportation system that allows a shift in travel from private passenger vehicles to alternative modes, including public transit, ride sharing, car sharing, bicycling and walking. Before funding transportation improvements that increase vehicle miles traveled, consider alternatives such as increasing public transit or improving bicycle or pedestrian travel routes.	X

TABLE 4.15-10 (Continued)
ATTORNEY GENERAL'S RECOMMENDED GENERAL PLAN MITIGATION MEASURES

ID	Suggested Mitigation Measures	2002 LRDP as Amended
GCC-2-42	Give funding preference to investment in public transit over investment in infrastructure for private automobile traffic	
GCC-2-43	Include safe and convenient bicycle and pedestrian access in all transportation improvement projects. Ensure that non-motorized transportation systems are connected and not interrupted by impassable barriers, such as freeways and include amenities such as secure bicycle parking.	X
GCC-2-44	Provide adequate and affordable public transportation choices including expanded bus routes and service and other transit choices such as shuttles, light rail, and rail where feasible.	X
GCC-2-45	Assess transportation impact fees on new development in order to maintain and increase public transit service.	
GCC-2-46	Provide public transit incentives, including free and reduced fare areas	X
GCC-2-47	Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation. For example, reduce parking for private vehicles while increasing options for alternative transportation; eliminate minimum parking requirements for new buildings; "unbundle" parking (require that parking is paid for separately and is not included in rent for residential or commercial space); and set appropriate pricing for parking.	X
GCC-2-48	Develop school transit plans to substantially reduce automobile trips to, and congestion surrounding, schools. (According to some estimates, parents driving their children to school account for 20-25% of the morning commute.) Plans may address, *e.g.*, necessary infrastructure improvements and potential funding sources; replacing older diesel buses with low or zero-emission vehicles; mitigation fees to expand school bus service; and Safe Routes to School programs and other formal efforts to increase walking and biking by students.	X
GCC-2-49	Create financing programs for the purchase or lease of vehicles used in employer ride sharing programs.	X
GCC-2-50	Enter into partnerships to create and expand polluting vehicle buy-back programs to include vehicles with high greenhouse gas emissions.	
GCC-2-51	Provide public education and information about options for reducing motor vehicle-related greenhouse gas emissions. Include information on trip reduction; trip linking; public transit; biking and walking; vehicle performance and efficiency (*e.g.*, keeping tires inflated); low or zero-emission vehicles; and car and ride sharing.	X
GCC-2-52	Improve the jobs-housing balance and promote a range of affordable housing choices near jobs, services and transit	X
GCC-2-53	Concentrate mixed use, and medium to higher density residential development in areas near jobs, transit routes, schools, shopping areas and recreation.	X
GCC-2-54	Increase density in single family residential areas located near transit routes or commercial areas. For example, promote duplexes in residential areas and increased height limits of multi-unit buildings on main arterial streets, under specified conditions.	
GCC-2-55	Encourage transit-oriented developments.	X
GCC-2-56	Impose minimum residential densities in areas designated for transit-oriented, mixed use development to ensure higher density in these areas.	
GCC-2-57	Designate mixed use areas where housing is one of the required uses.	

TABLE 4.15-10 (Continued)
ATTORNEY GENERAL'S RECOMMENDED GENERAL PLAN MITIGATION MEASURES

ID	Suggested Mitigation Measures	2002 LRDP as Amended
GCC-2-58	In areas designated for mixed use, adopt incentives for the concurrent development of different land uses (*e.g.*, retail with residential).	
GCC-2-59	Promote infill, mixed use, and higher density development by, for example, reducing developer fees; providing fast-track permit processing; reducing processing fees; funding infrastructure loans; and giving preference for infrastructure improvements in these areas.	X
GCC-2-60	Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space that provide carbon sequestration benefits.	
GCC-2-61	Establish a mitigation program for development of those types of open space that provide carbon sequestration benefits. Require like-kind replacement for, or impose mitigation fees on development of such lands. Use funds generated to protect existing, or create replacement, open space.	
GCC-2-62	Allow alternative energy projects in areas zoned for open space where consistent with other uses and values.	
GCC-2-63	Protect existing trees and encourage the planting of new trees. Adopt a tree protection and replacement ordinance, *e.g.*, requiring that trees larger than a specified diameter that are removed to accommodate development must be replaced at a set ratio.	X
GCC-2-64	Connect parks and publicly accessible open space through shared pedestrian/bike paths and trails to encourage walking and bicycling.	X
GCC-2-65	Address expected effects of climate change that may impact public safety, including increased risk of wildfires, flooding and sea level rise, salt water intrusion; and health effects of increased heat and ozone, through appropriate policies and programs.	X
GCC-2-66	Adopt programs for the purchase, transfer or extinguishment of development rights in high risk areas.	
GCC-2-67	Monitor the impacts of climate change. Use adaptive management to develop new strategies, and modify existing strategies, to respond to the impacts of climate change.	X
Source: DOJ 2008.		

TABLE 4.15-11
OFFICE OF PLANNING AND RESEARCH SUGGESTED MITIGATION MEASURES

ID	Suggested Mitigation Measures	2002 LRDP as Amended	2008 NHIP
Land Use and Transportation			
GCC-3-1	Implement land use strategies to encourage jobs/housing proximity, promote transit-oriented development, and encourage high density development along transit corridors. Encourage compact, mixed-use projects, forming urban villages designed to maximize affordable housing and encourage walking, bicycling and the use of public transit systems.	X	X
GCC-3-2	Encourage infill, redevelopment, and higher density development, whether in incorporated or unincorporated settings	X	X

TABLE 4.15-11 (Continued)
OFFICE OF PLANNING AND RESEARCH SUGGESTED MITIGATION MEASURES

ID	Suggested Mitigation Measures	2002 LRDP as Amended	2008 NHIP
GCC-3-3	Encourage new developments to integrate housing, civic and retail amenities (jobs, schools, parks, shopping opportunities) to help reduce VMT resulting from discretionary automobile trips.	X	X
GCC-3-4	Apply advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services.	X	X
GCC-3-5	Incorporate features into project design that would accommodate the supply of frequent, reliable and convenient public transit	X	
GCC-3-6	Implement street improvements that are designed to relieve pressure on a region's most congested roadways and intersections.		
GCC-3-7	Limit idling time for commercial vehicles, including delivery and construction vehicles.	X	X
Urban Forestry			
GCC-3-8	Plant trees and vegetation near structures to shade buildings and reduce energy requirements for heating/cooling.	X	X
GCC-3-9	Preserve or replace onsite trees (that are removed due to development) as a means of providing carbon storage.	X	X
Green Buildings			
GCC-3-10	Encourage public and private construction of LEED (Leadership in Energy and Environmental Design) certified (or equivalent) buildings.	X	X
Energy Conservation Policies and Actions			
GCC-3-11	Recognize and promote energy saving measures beyond Title 24 requirements for residential and commercial projects	X	X
GCC-3-12	Where feasible, include in new buildings facilities to support the use of low/zero carbon fueled vehicles, such as the charging of electric vehicles from green electricity sources.	X	X
GCC-3-13	Educate the public, schools, other jurisdictions, professional associations, business and industry about reducing GHG emissions.	X	X
GCC-3-14	Replace traffic lights, street lights, and other electrical uses to energy efficient bulbs and appliances.	X	
GCC-3-15	Purchase Energy Star equipment and appliances for public agency use.	X	X
GCC-3-16	Incorporate on-site renewable energy production, including installation of photovoltaic cells or other solar options.		
GCC-3-17	Execute an Energy Savings Performance Contract with a private entity to retrofit public buildings. This type of contract allows the private entity to fund all energy improvements in exchange for a share of the energy savings over a period of time.		
GCC-3-18	Design, build, and operate schools that meet the Collaborative for High Performance Schools (CHPS) best practices.		
GCC-3-19	Retrofit municipal water and wastewater systems with energy efficient motors, pumps and other equipment, and recover wastewater treatment methane for energy production.		
GCC-3-20	Convert landfill gas into energy sources for use in fueling vehicles, operating equipment, and heating buildings.	X	X
GCC-3-21	Purchase government vehicles and buses that use alternatives fuels or technology, such as electric hybrids, biodiesel, and ethanol. Where feasible, require fleet vehicles to be low emission vehicles. Promote the use of these vehicles in the general community.	X	X

TABLE 4.15-11 (Continued)
OFFICE OF PLANNING AND RESEARCH SUGGESTED MITIGATION MEASURES

ID	Suggested Mitigation Measures	2002 LRDP as Amended	2008 NHIP
GCC-3-22	Offer government incentives to private businesses for developing buildings with energy and water efficient features and recycled materials. The incentives can include expedited plan checks and reduced permit fees.		
GCC-3-23	Offer rebates and low-interest loans to residents that make energy-saving improvements on their homes.		
GCC-3-24	Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.	X	X
Programs to Reduce Vehicle Miles Traveled			
GCC-3-25	Offer government employees financial incentives to carpool, use public transportation, or use other modes of travel for daily commutes.	X	X
GCC-3-26	Encourage large businesses to develop commute trip reduction plans that encourage employees who commute alone to consider alternative transportation modes.	X	
GCC-3-27	Develop shuttle systems around business district parking garages to reduce congestion and create shorter commutes.	X	X
GCC-3-28	Create an online ridesharing program that matches potential carpoolers immediately through email.	X	X
GCC-3-29	Develop a Safe Routes to School program that allows and promotes bicycling and walking to school.		
Programs to Reduce Solid Waste			
GCC-3-30	Create incentives to increase recycling and reduce generation of solid waste by residential users.	X	X
GCC-3-31	Implement a Construction and Demolition Waste Recycling Ordinance to reduce the solid waste created by new development.	X	X
GCC-3-32	Add residential/commercial food waste collection to existing greenwaste collection programs.	X	X
Source: OPR 2008.			

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March 22, 2007

UNIVERSITY OF CALIFORNIA
POLICY GUIDELINES FOR SUSTAINABLE PRACTICES

SCOPE/AUTHORITY

The Regents have delegated authority to the President for promulgating policy promoting sustainable new capital projects, existing University facilities, and campus transportation resources. The President has delegated authority to the Senior Vice President, Business and Finance for further definition of measures to implement University policy regarding sustainability. Chancellors are responsible for implementation in the context of individual building projects, facilities operations, and transportation projects and programs.

These Policy Guidelines are intended to provide specific scope, direction, and expectations underlying from the Presidential Policy on Sustainable Practices. They also identify best practices to facilitate compliance and provide additional background relevant to this policy.

Supplementary to, and embedded within, these Policy Guidelines are Implementation Procedures that are intended to provide specific course of action, standardized methods, and/or consistent series of steps to implement the Presidential Policy on Sustainable Practices and these Policy Guidelines. The Implementation Procedures are denoted, follow applicable Policy Guidelines, and are formatted in *italics*.

BACKGROUND

Resource sustainability is critically important to the University of California, the State of California, and the nation. Efficient energy use is central to this objective, and renewable energy and energy-conservation projects provide a means to stabilize campus budgets, increase environmental awareness, reduce the environmental consequences of University activities, and provide educational leadership for the 21st century.

On July 17, 2003, The Regents of the University expressed their support for a Presidential policy to promote "…the principles of energy efficiency and sustainability in the planning, financing, design, construction, renewal, maintenance, operation, space management, facilities utilization, and decommissioning of facilities and infrastructure to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements." At their September 2005 meeting, The Regents authorized the President to incorporate sustainable transportation practices into this Policy.

Transportation to, from and within a campus grounds has a significant impact on air quality and affects both the campus landscape and relations with surrounding communities. It is desirable, therefore, to effectively manage transportation demand, provide transportation options and encourage the use of low-impact vehicles, non-fossil fuels, and creative modes of transport, while ensuring maximum campus access and preserving lifestyle features. This approach to transportation services is a necessary component of the University's sustainability efforts.

In October 2006, in response to the requirement that this policy guideline document be re-examined every three years, sections of the policy were clarified and new sections were added specifically in the areas of: renovation policy, climate change practices, green building operations and maintenance, recycling and waste management, and environmentally preferable procurement.

The University of California is committed to improving the University's effect on the environment and reducing the University's dependence on non-renewable energy. Guidelines for implementing practices in support of Green Building Design, Clean Energy Standards, and Sustainable Transportation Practices are explained in detail in the following plan for achieving these goals.

POLICY GUIDELINES

I. Green Building Design

New Buildings

a. Given the importance of energy efficiency to Green Building design, the University has set a goal for all new building projects, other than acute-care facilities, to outperform the required provisions of the California Energy Code (Title 24) energy-efficiency standards by at least 20 percent. Standards for energy efficiency for acute care facilities will be developed in consultation with campuses and medical centers.

b. The University of California will design and build all new buildings, except for laboratory and acute care facilities, to a minimum standard equivalent to a *LEED*™ 2.1 "Certified" rating.

c. Campuses will strive to achieve a standard equivalent to a *LEED*™ "Silver" rating or higher, whenever possible within the constraints of program needs and standard budget parameters.

d. Given the importance of specifically addressing sustainability in laboratory facilities, the University of California will design and build all new laboratory buildings to a minimum standard equivalent to a *LEED*™ *2.1* "Certified" rating and the *Laboratories for the 21st Century (Labs21) Environmental Performance Criteria* (EPC), as appropriate. The design process will include attention to energy efficiency for systems not addressed by the California Energy Code (Title 24).

e. In consultation with the campuses, the Office of the President will develop an internal evaluation and certification standard based on the *LEED*™ and *Labs21* measures.

f. The measures required by this Policy Guideline will be incorporated into all new building projects, other than acute care facilities, submitted for first formal scope and budget approval as of July 1, 2004.

g. Further study will be conducted before a similar sustainable design policy for new acute-care facilities is adopted.

Building Renovations

a. Any significant renovation projects involving existing buildings will also apply sustainability principles to the systems, components and portions of the building being renovated. At Budget Approval, all renovation projects should include a listing of sustainable measures under consideration. Design and specification of renovation components such as mechanical, electrical and plumbing components, lighting, finishes, materials, etc. must meet or exceed associated Campus Baseline Green Building points.

b. Renovation of buildings that require 100% replacement of mechanical, electrical and plumbing systems and replacement of over 50% of all non-shell areas (interior walls, doors, floor coverings and ceiling systems) should at a minimum comply with a UC equivalent to a

LEED-NC 2.1 or most current version of the LEED NC program certified rating. Subject to life cycle cost analysis, such projects should outperform Title 24, Part 6, that is currently in effect, by 20% and register with the Savings by Design program.

c. Renovation projects with a project cost of $5 million or greater (CCCI 5000) that do not fall [under item b. above] should at a minimum comply with a UC equivalent to a LEED Commercial Interiors certified rating and register with the Savings by Design program, if eligible.

d. The green building requirements in b. and c. above will apply to the listed categories of renovations, receiving budget approval after July 1, 2007.

General/Miscellaneous

a. Policy guidelines for sustainable operations of existing buildings previously addressed by this section are now found in Section V of this document.

b. Policy guidelines which previously indicated that the University will use its purchasing power to promote the availability of products that are resource-efficient, energy-efficient, water-efficient, and of recycled and rapidly renewable content for building materials, subsystems, components, equipment, and supplies are now found in Section VII, Environmentally Preferable Procurement, of this document.

c. The University will work with regulatory agencies and other entities to speed the development, approval, and implementation of products and technologies that improve energy efficiency and support sustainable design, construction, and operating practices.

d. The University will develop a program for sharing of best practices.

e. The University will incorporate the Green Building Design policy into existing facilities-related training programs, with the aim of promoting and maintaining the goals of the policy.

Implementation Procedures for Green Building Design – General/Miscellaneous:

- *Any proposed exception from standards listed in the Policy Guideline may be requested administratively during preparation of the Project Planning Guide (PPG). Any exception proposed after approval of the PPG will be treated as a scope change and processed in accordance with standard University procedures.*

- *Campuses may choose to pursue external certification through the LEED™ process, augmented with Labs21 criteria as appropriate for laboratory systems, in lieu of the internal process for a given project.*

- *The University planning and design process will include explicit consideration of lifecycle cost along with other factors in the project planning and design process, recognizing the importance of long-term operations and maintenance in the performance of University facilities.*

- *The University will work closely with the U.S. Green Building Council, Labs21, the Department of Energy, the U.S. Environmental Protection Agency, State government, and other organizations to facilitate the improvement of evaluation methodologies to better address University requirements. Additionally, the University will work with the U.S. Green Building Council to develop a self-certification tool for University use.*

II. Clean Energy Standard

a. The University will implement a systemwide portfolio approach to reduce consumption of non-renewable energy. The portfolio will include a combination of energy efficiency projects, the incorporation of local renewable power measures for existing and new facilities, green power purchases from the electrical grid, and other energy measures with equivalent demonstrable effect on the environment and reduction in fossil fuel usage. The appropriate mix of measures to be adopted within the portfolio will be determined by each campus. Since each campus's capacity to adopt these measures is driven by technological and economic factors, the campus will need to reevaluate their energy measures mix on a regular basis. The portfolio approach will provide valuable analytical information for improving energy efficiency, resulting in an overall improvement in the University's impact on the environment and reduced reliance on fossil fuels during the next decade of capital program growth.

b. The University will strive to achieve a level of grid-provided electricity purchases from renewable sources that will be similar to the State's Renewable Portfolio Standard, which sets a goal of procuring 20 percent of its electricity needs from renewable sources by 2010.

c. With a goal of providing up to 10 megawatts of local renewable power by 2014, the University will develop a strategic plan for siting renewable power projects in existing and new facilities. The plan will include demonstration projects for photovoltaic systems and other renewable energy systems, such as landfill gas fueled electricity generation or thermal energy production. The strategic plan will include criteria for evaluating the feasibility of a variety of projects, such as incorporating photovoltaic systems in replacement roofing projects and in new buildings, as well as forecasting the accommodations necessary for eventual installation of photovoltaic systems. The University will assess the progress of renewable energy technology improvements, both in terms of cost and technical efficiency. To achieve the renewable power goal, the University will maximize the use of available subsidies and negotiate pricing reductions in the marketplace, and will develop funding sources for financing the costs of renewable energy measures.

d. With a goal of reducing systemwide non-renewable energy consumption, the University will develop a strategic plan for implementing energy efficiency projects for existing buildings and infrastructure to include operational changes and the integration of best practices. The University will monitor industry progress in energy retrofits and implement technical improvements as they become available. As with renewable energy projects, the University will develop funding sources and establish a program for financing retrofit projects. The initial goal for energy efficiency retrofit projects will be to reduce systemwide growth-adjusted energy consumption by 10 percent or more by 2014 from the year 2000 base consumption level. The University will strive to achieve even greater savings as additional potential is identified and funding becomes available.

e. The University will continuously evaluate the feasibility of other energy-saving measures with equivalent demonstrable effect on the environment and reduction in fossil fuel usage. In particular, campuses will strive to implement the Sustainable Transportation Practices described in Section III, below.

f. The University will develop a variety of funding sources and financing alternatives for energy efficiency, renewable energy, and clean energy projects that will enable campuses to be flexible in addressing their energy needs.

g. The University will pursue marketing of emissions credits as a means to bridge the cost-feasibility gap for green power projects.

Implementation Procedures for Clean Energy Standard:

- *The University will initiate progress towards a level of grid-provided electricity purchases in 2004 by purchasing 10 percent of grid-supplied electricity from renewable sources, subject to funding availability, and will track progress annually toward achievement of the year 2010 goal.*

- *Campuses will provide strategic plans for implementing energy efficiency projects by identifying opportunities to incorporate energy retrofit projects into major building renovations as funding is available, and to initiate standalone retrofit projects as justified by future energy savings.*

III. Climate Protection Practices

a. With an overall goal of reducing greenhouse gas (GHG) emissions while maintaining enrollment accessibility for every eligible student, enhancing research, promoting community service and operating campus facilities more efficiently, the University will develop a long term strategy for voluntarily meeting the State of California's goal, pursuant to the "California Global Warming Solutions Act of 2006" that is: by 2020, to reduce GHG emissions to 1990 levels. In addition, consistent with the Clean Energy Standard sections a., b. and c. of this document, the University will pursue the goal of reducing GHG emissions to 2000 levels by 2014 and provide an action plan for becoming climate neutral as specified in the Implementation Procedures below.

Implementation Procedures for Climate Protection Practices:

- *By December 2008, the University will develop an action plan for becoming climate neutral which will include: a feasibility study for meeting the 2014 and 2020 goals stated in the Policy Guidelines, a target date for achieving climate neutrality as soon as possible while maintaining the University's overall mission, and a needs assessment of the resources required to successfully achieve these goals. Climate neutrality means that the University will have a net zero impact on the Earth's climate, and will be achieved by minimizing GHG emissions as much as possible and using carbon offsets or other measures to mitigate the remaining GHG emissions.*

- *Each UC campus will pursue individual membership with the California Climate Action Registry. The Senior Vice President, Business and Finance, in coordination with campus administration, faculty, students and other stakeholders will form a Climate Change Working Group that will develop a protocol to allow for growth adjustment and normalization of data and accurate reporting procedures. The Climate Change Working Group will monitor progress toward reaching the stated goals for GHG reduction, and will evaluate suggestions for programs to reach these goals.*

IV. Sustainable Transportation Practices

Metrics and Benchmarking

a. In implementing a most efficient and effective economic and environmental strategy for campus fleets, campuses shall implement practicable and cost-effective measures, including, but not necessarily limited to, the purchase of the cleanest and most efficient vehicles and replacement tires, the use of alternative fuels, and other conservation measures.

b. Campuses will be encouraged to collect data on Average Vehicle Ridership (AVR) of commuters.

c. The Senior Vice President, Business & Finance has made a written request to major automobile manufacturers expressing both the University's commitment to work with industry to provide vehicle and fuel choice, and the expectation that industry will provide these choices to the fullest extent possible.

d. Using the time period 2004-2005 as a baseline, campuses will strive to increase the percentage of low (PZEV) or zero-emission vehicles (ZEV) by 50% by the year 2009-2010, or to increase the number of PZEV and ZEV vehicles by 20% by the year 2009-2010, whichever is more feasible, and/or to convert campus vehicles to 50% non-carbon based fuel by year 2009-2010.

e. The University will work with regulatory agencies and other entities (e.g., regional transit agencies, air quality management districts) to speed the development, approval, and implementation of programs and technologies that support the goals of sustainable transportation as related to the increased use of biodiesel or other alternative fuel sources.

Implementation Procedures for Sustainable Transportation Practices:

- *With the goal of measuring all campus fleet vehicles fuel consumption reduction, campuses will collect and report fuel consumption annually to the Office of the President beginning in 2005-06.*

- *AVR is defined as the number of trips to campus divided by the number of automobiles used for those trips (AVR = trips/# automobiles). Campuses may use this data to set goals for reduction of fuel consumption. AVR data may also be used in conjunction with transportation mode split data to develop maps of distance "zones" surrounding the campus, and to model each zone's proportionate share of various commuting modes (e.g., percentage of bicycle or single-occupancy vehicle trips within 0-2 miles from the central campus core).*

- *The Sustainable Transportation Working Group will continue to work with State agencies to facilitate the purchase and use of LEV, ZEV, and alternative fuel vehicles by the campuses, and to find solutions for increasing the availability of an affordable supply.*

Transportation Programs

a. The University will continue to facilitate the sharing of best practices within the University and among other educational institutions.

b. The University will develop a mechanism for ongoing involvement of undergraduate and graduate students in efforts toward achieving sustainable campus transportation. The means may include but are not limited to undergraduate and graduate internships and/or scholarships for relevant conference attendance.

c. By January 2009, each campus will implement a pre-tax transit pass program to facilitate the purchase of transit passes by University employees, or will establish a universal access transit pass program for employees.

d. The University will pursue the introduction of ride-share programs at each campus for all eligible program participants, where available. In conjunction with this effort, campuses will engage in advocacy efforts with local transit districts to improve routes in order to better serve student and staff ridership.

e. To the extent practicable, campuses will develop a business-case analysis for any proposed parking structure projects.

Implementation Procedures for Transportation Programs:

- *The University will continue to participate in Transportation Sessions at the annual UC/CSU/CCC Campus Sustainability Conference.*

- *The Office of the President will begin funding an internship for one to two students in Academic Year 2005-06 and continuing until Academic Year 2009-10 or longer. At that time, the program's results will be reviewed and the Senior Vice President, Business and Finance, or other delegated administrator, will determine whether or not to extend the program.*

V. Sustainable Operations

a. For existing buildings, the University will explore the development of a standard methodology for sustainable practices and standards for facilities management, by assessing the LEED for Existing Building (LEED-EB) evaluation tool as described in b. through g. below.

b. For existing buildings, the University of California will develop a plan to operate and maintain all scope eligible campus buildings at a minimum standard equivalent to a LEED for Existing Buildings (LEED-EB) "Certified" rating. The implementation for certification will be carried out in a comprehensive campus approach vs. an individual building basis, except for exceptions noted below.

c. The University will incorporate these Sustainable Operations Policy Guidelines into existing facilities-related training programs, with the aim of promoting and maintaining the goals of the Policy.

d. The University will work closely with the U.S. Green Building Council (USGBC) to address the needs and concerns of campuses in the further development of the LEED-EB rating system and the USGBC's "Portfolio Program." As information and requirements are determined from the USGBC's "Portfolio Program"; the University will update this policy as appropriate.

e. Campuses will explore ways to connect the buildings it certifies through LEED-EB with the University's educational and research mission, using the buildings as living, learning laboratories.

f. Eligible scope buildings for the purpose of this policy will be all buildings on-site at the ten campuses; except the following buildings or building types: acute care and patient care facilities; buildings scheduled for demolition, replacement, or major renovation; any building not located on the main campus; and any building less than 50,000 maintained gross sq. ft.

g. A timetable for full campus implementation will be further evaluated after completion of the interim milestones listed in Implementation Procedures below.

Implementation Procedures for Sustainable Operations:

- *Each campus will submit for certification one pilot building at a LEED-EB "Certified" level or higher by July 1, 2008*

- *To facilitate the implementation steps for the policy, campuses will develop an inventory of buildings that meet the scope eligibility requirements above, and then group these*

eligible buildings into categories of buildings with similar operational and maintenance needs.

- *Campuses will submit proposed core credits for one of the building type groupings identified above and any campuswide core credits to the U.S. Green Building Council by July 1, 2009. A core credit is a credit that will be sought for either all scope eligible buildings on a campus, or for all buildings within a building type group.*

- *By July 1, 2009, the University will evaluate efforts to date and develop an implementation plan and funding strategy toward a goal of achieving campus wide LEED-EB certification.*

VI. Recycling and Waste Management

a. In response to Public Resources Code Section 40196.3 which states that the Regents of the University of California are encouraged to comply with code Chapter 18.5, the "State Agency Integrated Waste Management Plan" and in support of the California Integrated Waste Management Board's goal for a "zero waste California", the University voluntarily adopts the following waste diversion goals:

  - 50% by June 30, 2008
  - 75% by June 30, 2012
  - Ultimate goal of zero waste by 2020

b. All campuses will develop an Integrated Waste Management Plan (IWMP) and funding mechanism by June 30, 2007.

c. Waste reduction and recycling elements shall be integrated in Green Building Design and Sustainable Operation implementation goals and into campus operations as they are developed.

d. The University will seek to develop funding sources for financing waste reduction projects.

Implementation Procedures for Recycling and Waste Management:

- *The IWMP will include current and future programs, dates of implementation, funding, and exact diversion numbers intended to meet goals*

- *For purposes of reporting, the medical centers (and other traditionally exempted entities) (Satellite locations) at various campuses will be required to report solid waste and recycling tonnage to the campus entity collecting data for the report. Medical Centers and other exempted facilities are also required to meet diversion requirements. Exceptions will be considered for those entities which represent less than 1% of the overall campus solid waste tonnage.*

VII. Environmentally Preferable Purchasing Practices

Sustainable Economy

a. The University will utilize its purchasing power and academic and research excellence to advance the development of sustainable technologies by pressing markets to continually improve resource productivity.

b. For products and services that do not currently offer environmentally preferable alternatives, the University will work with its existing and potential suppliers to develop options.

c. "Cradle to cradle" is the preferred purchasing standard and is defined as accountable, responsible, and environmentally preferable supply chain management from material extraction, production, marketing, sale, use, disposal, collection, re-use and the web of closed loop cycles and processes.

d. The University will continue to transition all locations toward electronic and paperless processes and utilize web-based catalogs and programs.

e. The University will incorporate the credit requirements set forth by LEED (Leadership in Energy an Environmental Design) into product and service sourcing and procurement.

f. The University evaluates total cost of ownership including purchase price, operating cost, maintenance, collection and disposal, and recycling costs when selecting suppliers.

Energy and Water

a. For product categories that have ENERGY STAR© rated products available, the University will focus its procurement efforts only on products with an ENERGY STAR© rating, consistent with the needs of UC researchers.

b. For all electronic equipment, the supplier will deliver the items to the University with energy efficiency and conservation features enabled.

c. The University will utilize its strategic purchasing program to negotiate better pricing for rated commodities.

d. The University of California shall establish an ongoing partnership with the ENERGY STAR© Program administered by the EPA, and continually press the market for greater energy efficiency for the products and services regularly purchased by the University.

e. For products and services requiring the use of water, the University will give preference to technologies that ensure the efficient use of water resources.

Implementation Procedures for Energy and Water:

- *For those goods already in use across the system, available energy conservation features shall be ENERGY STAR© enabled by a designated party (e.g. IT, department MSO).*

Recycled Content

a. The University will phase out the use of virgin paper and adopt a minimum standard of 30% Post Consumer Waste (PCW) recycled content paper for all office supplies.

b. For uncut paper uses, including but not limited to janitorial supplies, the University will adopt a standard of 100% PCW recycled content paper.

c. The University will utilize its strategic purchasing program to negotiate better pricing for commodities with recycled content as compared to commodities without recycled content.

d. The University will continually work towards increasing the procurement of products with high recycled content.

e. Outside suppliers and consultants shall be encouraged to print proposals and reports on both sides, using recycled content paper. Furthermore, the documents shall be clearly marked to indicate that they are printed on recycled content paper.

Green Seal Certified Products

a. The University will work to phase in Green Seal certified products, as specified in the Implementation Procedures.

Implementation Procedures for Green Seal Certified Products:

- *The University will work to phase in Green Seal certified products through its Strategic Sourcing and local campus procurement programs in coordination with EH&S, Facilities Management, and Housing and Residential Services.*

Reduction of Hazardous Electronic Waste

a. All desktop computers, laptops, and computer monitors purchased by the University are required to have achieved Bronze registration or higher under the Electronic Products Environmental Assessment Tool (EPEAT).

b. Additional consideration will be provided for electronics products that have achieved EPEAT Silver or EPEAT Gold registration. The registration criteria and a list of all registered equipment are provided at http://www.epeat.net.

c. The University will recycle all electronic waste in a responsible manner, as specified in the Implementation Procedures.

Implementation Procedures for Reduction of Hazardous Electronic Waste:

- *The University will require all recyclers of the University's electronic equipment to have signed the Electronics Recyclers Pledge of True Stewardship, agreeing to a rigorous set of environmental criteria. The Pledge, and a list of recyclers who have signed, is available at http://www.ban.org/pledge1.html. In cases where the University has established recycling "take-back" programs, the University will ensure that the manufacturer adheres to similarly high standards of responsible recycling.*

Environmentally Responsible Packaging

a. Packaging for electronics products should be designed, produced, and managed in an environmentally sustainable manner, as specified in the Implementation Procedures.

b. The University will specify that all packing materials abide by at least one of, and preferably all of, the criteria listed in the Implementation Procedures:

c. The University will work with its suppliers to ensure effective waste management and recycling programs are in place for all business operations.

Implementation Procedures for Environmentally Responsible Packaging:

- *The University requires that a take-back program be offered for packaging of electronics products and will give preference to take-back programs that are provided free of charge. The University will also give preference to packaging that is reusable, contains a minimum of hazardous and non-recyclable materials, and meets or exceeds the recycled material content levels in the US EPA Comprehensive Procurement Guidelines for Paperboard and Packaging.*

- *Specify that all packing materials abide by at least one of and preferably all of the criteria listed below:*

  - *Made from 100% post-consumer recycled materials and be recyclable, reusable, or*

  - *Be non-toxic,*

  - *Be biodegradable,*

  - *Be produced with the minimum of resources and sized as small as possible, while still maintaining product protection during shipping. Where feasible, packaging materials should be eliminated, if unnecessary.*

- *The University will work with its suppliers to ensure effective waste management and recycling programs are in place for all business operations.*

Effective Recycling and Manufacturer Take-Backs

a. The University will work to incorporate effective end-of-life recycling programs into each commodity as applicable.

b. The University will work with its suppliers to establish, re-use or recycling “take-backs” at no extra cost to the University, and in compliance with environmental standards that abide by Federal, State, and local legislation regarding waste disposal.

Supply Chain Environmental Responsibility

a. The University will encourage suppliers to demonstrate environmental stewardship through their Environmental Management Programs.

Evaluating Environmental Claims

a. Suppliers citing environmentally preferred product claims shall follow requirements specified in the Implementation Procedures below.

Implementation Procedures for Evaluating Environmental Claims:

- *Suppliers citing environmentally preferred product claims shall provide proper certification or detailed information on environmental benefits, durability, and recyclable properties.*

Training and Annual Plan and Report

a. The University will incorporate the Environmentally Preferable Purchasing Policy into existing strategic sourcing and other training programs, with the aim of promoting and maintaining the goals of the policy. The University shall provide training seminars, supplier fairs, and workshops on purchasing environmentally preferred products and establish educational programs and materials for faculty, staff, and students.

b. An annual plan and report shall be completed by each campus to define their environmental purchasing plan and report their efforts.

Implementation Procedures for Training and Annual Plan and Report:

- *UC campus Sustainability Committees will be responsible for reporting to the Sustainability Steering Committee on an annual basis. The Sustainability Steering Committee and the Sustainable Purchasing Working Group will maintain responsibility for determining the format and data to be submitted in the annual report, and the form for the annual plan.*

VIII. Authority and Report Schedule

On an annual basis, the President will provide a report to The Regents detailing the impact of the University's sustainability efforts on the overall capital program, University operating costs, energy use, greenhouse gas emissions, solid waste diversion, campus environmentally preferable purchasing and campus transportation practices. The University's sustainability guidelines will be subject to continuous review. The Policy Guidelines for Sustainable Practices and Implementation Procedures will be reviewed at a minimum every three years, with the intent of developing and strengthening implementation provisions and assessing the influence of the guidelines on existing facilities, new capital projects, plant operating costs, fleet and transportation services, and campus accessibility, mobility, and livability. The University will provide means for the ongoing active participation of students, faculty, administrators, and external representatives in further development and implementation of the Policy on Sustainable Practices.

SECTION 5.0 ALTERNATIVES TO THE PROPOSED PROJECT

5.1 INTRODUCTION

Pursuant to Section 15126.6 of the State CEQA Guidelines, this section provides a description and evaluation of alternatives to the proposed Project. Section 15126.6 subdivision (a) of the 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.

In accordance with the CEQA Guidelines Section 15126.6(a), the discussion in this section focuses on a reasonable range of alternatives. The following alternatives have been eliminated from further consideration for the reasons identified below in Section 5.2.

- Off-Campus Site
- Alternative on-campus locations for the 2008 NHIP

The following alternatives are evaluated in this EIR (Section 5.3):

A. No Project/Continued Development under the 2002 LRDP
B. Alternative Location
C. Reduced Footprint
D. Reduced Development

The State CEQA Guidelines do not require the same level of detail in the alternatives analysis as in the analysis of the proposed Project. Section 15126.6(d) of the State CEQA Guidelines states:

> The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

In accordance with the CEQA Guidelines, Section 5.3 below provides a comparison of the environmental effects of each alternative to the proposed Project, in order to analyze and weigh the relative environmental advantages and disadvantages of each.

5.2 ALTERNATIVE CONCEPTS CONSIDERED AND REJECTED AS INFEASIBLE OR FOR FAILURE TO MEET KEY PROJECT OBJECTIVES

In connection with the EIR scoping process, UCLA considered and rejected a number of alternative concepts as infeasible or for failure to meet key Project Objectives. One alternative concept that was considered and rejected as failing to meet key Project Objectives was off-campus siting of the proposed student housing and associated support services. In addition to requiring acquisition of off-campus land for this purpose, off-campus housing would not meet the key Project Objectives, including the essential Objective to provide on-campus undergraduate housing and associated support services to continue the development of on-campus housing in the Northwest zone to maintain a supportive and cohesive student community that is well integrated with all aspects of campus life. Off-campus housing would be physically separated from the core undergraduate housing support facilities in the Northwest zone and would not take advantage of programmatic synergies with existing on-campus undergraduate facilities and programs.

The proposed 2008 NHIP is an infill development in an already highly developed area of the campus. The proposed 2007 NHIP infill sites (when used together) are largely made available for development by eliminating landscaped areas and demolishing existing buildings with less efficient land use intensity. In this regard, UCLA evaluated the potential to build a reduced density alternative consisting of fewer undergraduate student beds (e.g., 1,350 to 1,400) and determined that a reduced density alternative would fail to meet the key Project Objective to provide 1,525 beds thereby maximizing the number of commuter students that would become on-campus student residents, and would not realize the same economies of scale as the proposed project, thereby reducing the affordability of on-campus student housing. Under a Reduced Density Alternative there would be fewer students to share what would be close to the same cost as the full 1525-bed 2008 NHIP. As a result, a Reduced Density Alternative would be infeasible from a cost perspective. It also would fail to meet the important Project Objective that the housing project be planned, designed, and implemented "within the practical constraints of available funding sources, including the need to maintain affordable housing fees." Due to the configuration needed for effective undergraduate student housing, a reduction to 1,350–1,400 beds would not result in substantive physical changes to the proposed structures (i.e., footprint and massing) that would offer the opportunity to lessen any significant environmental impacts of the proposed Project.

Commenters during the EIR scoping process proposed two other alternative on-campus locations for the 2008 NHIP:

1. The landscaped area and roadway south of Rieber Hall.

2. Surface Parking Lot 13 that has recently been modified to provide mini-basketball courts to replace those removed for the Spieker Aquatic Center project currently under construction.

UCLA has examined these two proposed locations and has determined that neither alternative location is feasible. The area below Rieber Hall is comprised of a small steeply sloped landscape area and the existing De Neve Drive roadway. To create a site large enough to construct a building equivalent to either of the proposed De Neve buildings would require relocation of De Neve Drive southward which would result in a hazardous curve and slope on the relocated roadway and the need to construct very high retaining walls with special shoring in order to maintain slope stability to support the relocated roadway. The additional cost would be prohibitive, and construction impacts much more extensive than with the proposed 2008 NHIP.

Potential development of the proposed 2008 NHIP, or components thereof, on Parking Lot 13/mini-basketball court site, east of the Saxon Residential Suites is infeasible because the area is too small to accommodate a building of a size equivalent to any or the residential buildings proposed under the 2008 NHIP. Because the Saxon Suites are wood shingled buildings, fire access requirements are more stringent. Locating a building on Parking Lot 13 would adversely impact required fire access to the Saxon Suites. The small size of Parking Lot 13 and the potentially adverse impact to required fire access to the Saxon Suites makes this proposed alternative location infeasible.

5.3 ALTERNATIVES UNDER CONSIDERATION

The analysis of each of the project alternatives identified below includes the following:

- A description of the alternative.
- An analysis of the potential environmental impacts of each of the project alternatives, including a comparison of the potential impacts of the alternative to the proposed Project, as well as the impacts that would result from implementation of the project alternatives themselves. The comparative analysis assumes that all applicable 2002 LRDP Final EIR campus programs, practices and procedures (PPs) and mitigation measures (MMs) carried forward for the proposed Project and new PPs and MMs identified for the proposed Project would apply equally to each alternative, as appropriate. Impacts associated with each alternative are compared to project-related impacts and are classified as greater, less, or essentially similar to (or comparable to) the level of impacts associated with the proposed Project.
- An assessment of the alternative's ability to meet the Project Objectives (previously identified in Section 3.3).

5.3.1 ALTERNATIVE A: NO PROJECT/CONTINUED DEVELOPMENT UNDER THE 2002 LRDP

Description of the Alternative

Alternative A contemplates that the proposed 2008 NHIP would not be constructed and that no amendment to the 2002 LRDP would be considered. It assumes, however, that the campus would proceed with the same level of development contemplated and previously approved under the existing 2002 LRDP, together with related pre-existing project approvals and current infrastructure. Accordingly, this Alternative assumes continuation of the aggregate development level, vehicle trip limits, and parking limits, established under the 2002 LRDP. Taking into account current baseline conditions and infrastructure, under the 2002 LRDP approximately 1.32 million gross square feet (gsf) remains for new development allocated among the eight campus land use zones. Therefore, the square footage development analyzed under this Alternative would be the approximately 1.32 million gsf remaining allocation under the 2002 LRDP.

This Alternative is being analyzed as a "no project" alternative required under Section 15126.6(e) of the CEQA Guidelines. The proposed Project would revise the existing land use plan for the UCLA campus, and as such triggers the requirement under Section 15126.6(e)(3) to analyze a "no project" alternative that continues the existing plan (here, the 2002 LRDP and associated prior project development approvals) into the future. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan. This Guideline requires evaluation of this "no project"

alternative based on existing conditions at the time the environmental study was commenced, taking into account what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

Comparative Analysis of Environmental Impacts

Aesthetics

Although the proposed 2008 NHIP would not be constructed in the Northwest zone with Alternative A, other potential future development in the Northwest zone that could be accommodated by the remaining development allocation of 104,000 gsf could be constructed on the sites identified for the 2008 NHIP as these are among the last remaining undeveloped sites in this zone not subject to land use restrictions pursuant to existing Agreements as described in Section 4.8, Land Use and Planning. Therefore, the aesthetic impacts resulting from the proposed 2008 NHIP would be less than or similar with this alternative. Additionally, implementation of the remaining development allocation (1.32 million gsf) on campus would have the same impacts as that identified in Section 4.1, Aesthetics, for the proposed Project related to change in visual character, introduction of light and glare and shade/shadow. The aesthetic impacts from the proposed Project, including the proposed 2008 NHIP, would be less than significant, this alternative would result in similar less than significant impacts. Continued compliance with the 2002 LRDP Final EIR PPs would ensure that these impacts remain less than significant.

Air Quality

As with the proposed Project, development under Alternative A would neither conflict with nor obstruct implementation of the Air Quality Management Plan. This is because the proposed Project and this alternative do not provide for population, housing, or employment growth that exceeds regional forecasts from the Southern California Association of Governments (SCAG), which form the basis of the land use and transportation control portions of the AQMP. In addition, the UCLA campus would continue to implement trip reduction programs under both proposed Project and Alternative A. These programs are consistent with the goals of the AQMP for reducing the emissions associated with new development.

The proposed 2008 NHIP would not be developed under this alternative; however, as discussed in Section 4.2, Air Quality, it is expected that similar short-term construction-related air quality impacts would result with future campus development under the remaining buildout of the 2002 LRDP, as amended. Therefore, this alternative would have similar construction-related impacts as the proposed Project. The net increase in daily regional construction emissions would still likely exceed daily thresholds recommended by the South Coast Air Quality Management District (SCAQMD) for oxides of nitrogen (NOx) and construction under Alternative A would contribute substantially to an existing or projected air quality violation during peak periods and the potential impact would be significant. Following MM 4.2-2(a), MM 4.2-2(b), and new MM 4.4-2(c) and continued compliance with PP 4.2-2(a) through PP 4.2-2(c) and new PP 4.2-2(d) ensures that construction related air quality impacts are minimized. They would not, however, reduce the net increase in peak construction activities to below the SCAQMD thresholds of significance. Therefore, the short-term regional air quality impact of construction under Alternative A would be significant and unavoidable, similar to the proposed Project. Local construction-related air quality emissions would also be similar to the proposed project and would be less than significant.

With respect to operational emissions, the proposed 2008 NHIP reduces the overall campus criteria pollutant emissions because it reduces the total amount of vehicle trips to campus (vehicular emissions are the primary source or operational emissions). Therefore, the daily operational emissions of volatile organic compounds (VOC) and NOx associated with the proposed Project would be slightly reduced with the proposed 2008 NHIP. This alternative does not include the proposed 2008 NHIP, and although additional undergraduate housing could still be constructed in the Northwest zone with the remaining development allocation under the current 2002 LRDP, it would be less. Therefore, the reduction in traffic and associated reduction in vehicular air quality emissions (such as NOx) would not occur or would be less under this alternative. Therefore, Alternative A would have a slight increase in air quality emissions compared to the proposed Project and the significant and unavoidable impact would result, even with continued implementation of the PPs and MMs identified in Section 4.2, Air Quality, that would apply to future development.

Implementation of the proposed Project would not expose sensitive receptors near roadway intersections to substantial pollutant concentrations. Alternative A would generate slightly greater vehicular traffic to and from the campus compared to the proposed Project, and localized concentrations of carbon monoxide (CO) would be slightly increased. The resulting impact would remain less than significant under either development scenario.

Implementation of the proposed Project would not expose sensitive receptors on or off campus to substantial pollutant concentrations due to campus-generated toxic air emissions. The proposed residential uses with the 2008 NHIP would not generate greater amounts of toxic air contaminants than the uses proposed under the current 2002 LRDP. Therefore, the less than significant impacts with the proposed Project would similar with Alternative A.

Biological Resources

As addressed in Section 4.3, Biological Resources, the proposed 2008 NHIP would impact mature and protected tree species and could have an adverse effect on nesting birds if trees with active nests are removed during the breeding season. With implementation of identified MMs and PPs, these impacts from the proposed 2008 NHIP would be reduced to a less than significant level. The proposed 2008 NHIP would not be constructed under this alternative; however, the 2008 NHIP sites could still be developed with the remaining development allocation under the current 2002 LRDP. Therefore, the total amount of landscaped area and trees removed would be similar. Implementation of the remaining development allocation under the current 2002 LRDP would have the same impacts as the proposed Project; therefore, there would still be removal of mature and protected trees in other areas on campus. Additionally, potential impacts to sensitive biological resources associated with the 4-acre parcel in the Northwest zone and the aboveground portion of the Stone Canyon Creek could still occur. Because there are no areas on campus that provide a connection between natural areas, implementation of this alternative would not interfere with a wildlife movement corridor or with the movement of native animal species, similar to the proposed Project. With continued implementation of the identified PPs, and new MMs, Alternative A would have similar impacts as the proposed Project related to biological resources.

Cultural Resources

As addressed in Section 4.4, Cultural Resources, implementation of the proposed Project, including the proposed 2008 NHIP, may involve excavation in previously undisturbed areas, potentially resulting in disturbance to unidentified archaeological and paleontological resources. Because continued development associated with implementation of the 2002 LRDP under Alternative A could impact the same currently undisturbed areas as the proposed Project, the

potential to encounter archaeological and paleontological resources is the same as the proposed Project. With implementation the identified 2002 LRDP Final EIR MMs and new MMs, these impacts would be less than significant for the proposed Project and this alternative. As with the proposed Project, implementation of the remaining development allocation under this alternative could potentially impact historic resources. With continued implementation of the identified 2002 LRDP Final EIR PPs and this alternative would result in similar less than significant impacts to historic resources as the proposed Project.

Geology and Soils

Although the proposed 2008 NHIP would not be constructed under this alternative, the potential impacts related to geology and soils (as identified in Section 4.5 of this EIR) would be similar to the proposed Project since the areas that could potentially be developed would be the same. There were no potential geotechnical impacts resulting from the proposed 2008 NHIP that would not occur with other development on campus. As with the proposed Project, geology and soils impacts associated with development under Alternative A would be less than significant with implementation of the identified PPs.

Hazards and Hazardous Materials

As addressed in Section 4.6, Hazards and Hazardous Materials, with continued compliance with the identified PPs, the proposed Project would not result in significant hazards or hazardous materials impacts related to: the routine use, transport, disposal, and storage of hazardous materials; exposure of construction workers to hazardous materials during construction; release of hazardous materials into the environment; exposure to contaminated soils or groundwater (which is not known to existing on campus); handling of hazardous materials within 0.25 mile of a school; development on identified hazardous sites; exposure of people to safety hazards from the Ronald Reagan UCLA Medical Center (RRUCLAMC); and interference with an emergency response or evacuation plan. The proposed 2008 NHIP would not result in any impacts that would not occur with the remaining buildout under the current 2002 LRDP; therefore, the impacts under this alternative would be similar to the proposed Project.

Hydrology and Water Quality

As addressed in Section 4.7, Hydrology and Water Quality, with implementation of the identified PPs and MMs, the proposed Project would not result in significant hydrology and water quality impacts. Implementation of the proposed 2008 NHIP which would result in an increase in impervious surface would increase the amount of runoff and associated urban pollutants on campus. Under this alternative, the total amount of development on campus would be reduced, potentially resulting in less runoff and potential water quality issues. Therefore, this alternative would result in reduced impacts to hydrology and water quality compared to the proposed Project although the impacts would be less than significant for the proposed Project and Alternative A.

As with the proposed Project, this alternative would not substantially deplete groundwater supplies or interfere with groundwater recharge. Additionally, as with the proposed Project, this alternative would not be expected to result in runoff that exceeds the capacity of existing storm drain systems or provide substantially additional sources of polluted runoff. Alternative A would have similar impacts to the proposed Project for these issues.

Land Use and Planning

Although the proposed 2008 NHIP would not be constructed, the development of the remaining allocation under the 2002 LRDP would have similar less than significant land use impacts as the proposed Project since the areas to be developed on campus and types of uses would be the same. Similar to the proposed Project this alternative would be consistent with applicable plans and programs addressing land use issues.

Noise

Construction activities under Alternative A or the proposed Project that occur in close proximity to existing buildings at the campus could generate and expose persons on-campus to excessive groundborne vibration or groundborne noise levels and would result in a significant and unavoidable impact. While the construction-related impacts from the proposed 2008 NHIP would be avoided, similar impacts would occur with development of the remaining buildout under the current 2002 LRDP. Groundborne vibration and noise from construction activities would not be expected to significantly impact off-campus locations under Alternative A or the proposed Project.

When construction activities are not occurring at the campus, background operational vibration levels from on campus uses would be expected to be very low and not noticeable. This would occur under the Alternative A or the proposed Project and operational impacts would be less than significant for both scenarios.

As with the proposed Project, Alternative A would not expose people to noise levels (including noise from operation of the RRUCLAMC helistop) in excess of the State's 45 A-weighted decibel (dBA) Community Noise Equivalent Level (CNEL) interior noise standard as all buildings would be constructed to comply with this standard (as required by 2002 LRDP Final EIR PP 4.9-1).

Alternative A would generate slightly more daily vehicular traffic compared to the proposed Project since the proposed 2008 NHIP, which has a net reduction in vehicular trip generation, would not be implemented. Because the overall trip reduction from the proposed 2008 NHIP would be relatively small (378 trips), the roadway noise impacts would be equal to or slightly greater with Alternative A compared to the proposed Project and a less than significant impact would occur under both development scenarios.

The proposed Project and Alternative A would have similar operations and a similar amount of new stationary sources of noise would be added to the campus under both the proposed Project and Alternative A. This equipment would be shielded and appropriate noise muffling devices installed to reduce noise levels that affect nearby on- and/or off-campus noise-sensitive uses. As such, the noise levels generated by this new equipment would not cause a substantial permanent on- or off-campus increase in ambient noise levels under either the proposed Project or Alternative A.

Alternative A would have similar construction impacts as the proposed Project related to noise and vibration, and slightly greater operational noise impacts (due to the increase in vehicular traffic).

Population and Housing

As identified in Section 4.10, Population and Housing, it is estimated that 70 percent (1,068 beds) of the 1,525 beds associated with the proposed 2008 NHIP would be used by

students that would otherwise have to live off campus, and the remaining 30 percent (457 beds) would be used by students that currently reside in triple accommodations. This alternative would not construct the proposed 2008 NHIP and therefore would not meet an existing demand for on-campus housing. However, as with the proposed Project, development of this alternative would be consistent with local and regional growth projections and would have less than significant impacts related to population and housing.

Public Services

The proposed 2008 NHIP would result in an increased demand for fire protection, police protection, and school services; however, these impacts were determined to be less than significant and would not require the construction of new or expanded facilities. Although the proposed 2008 NHIP would not be developed under this alternative, there would be an increase in demand associated with remaining buildout under the current 2002 LRDP. As identified in Section 4.11, Public Services, this increase in demand would result in less than significant impacts. Therefore, there would be a slightly reduced demand for public services under Alternative A; however, the overall impacts from this alternative would be similar to the proposed Project as no new or expanded facilities would be required.

Recreation

Under Alternative A there would an increase in campus population similar to the proposed Project (2,780 individuals). Therefore, the impacts to recreational facilities would be the same as the proposed project (less than significant).

The proposed fitness center with the 2008 NHIP would not be constructed; however, it is assumed that other recreational facilities could be constructed under Alternative A that would result in similar construction impacts (as addressed in Sections 4.2, Air Quality; 4.9, Noise, and 4.13, Transportation/Traffic).

Transportation/Traffic

As discussed in Section 4.13, Transportation/Traffic, the proposed 2008 NHIP would have a net reduction in traffic (approximately 378 vehicle trips) because students currently living off campus would no longer need to commute. Therefore, with implementation of this alternative, which would not include the proposed 2008 NHIP but would include full buildout of the on campus parking cap, there would be a slight increase in traffic volumes (6,397 vehicles trips compared to 6,019 without the proposed 2008 NHIP). However, the resulting traffic impacts would be similar. Even with continued compliance with the identified PPs there would be significant unavoidable impacts at eight study intersections and less than significant impacts on freeway mainline facilities. Impacts to Congestion Management Plan (CMP) facilities would also be similar to the proposed Project (significant at CMP intersections and less than significant at CMP freeway facilities). Construction-related traffic impacts would also remain significant and unavoidable under this alternative. Although the proposed 2008 NHIP would not be constructed, other construction activities associated with continued development under the 2002 LRDP would occur and would have similar impacts, even with continued compliance with the identified PPs.

Under Alternative A, the on-campus parking inventory would remain limited to 25,169 spaces and the vehicle trip limit would remain at 139,500. As no increase in on-campus housing would occur under Alternative A, no reduction in commuter students would occur, and the supply of parking available to commuter students would be reduced. However, because the parking levels

would remain at 25,169 spaces, parking impacts would be the same as with the proposed Project, and would be less than significant.

Under Alternative A the proposed 2008 NHIP would not be constructed; however, it is possible that the landscaped slope adjacent to Gayley Avenue could be developed with some other use and impacts to off campus, on-street parking along Gayley Avenue could also occur as access to such new development would be needed. However, as with the proposed Project these impacts would be less than significant.

Under Alternative A, it is assumed that the campus Transportation Demand Management (TDM) program would continue, therefore Alternative A would not conflict with adopted plans, policies and programs supporting alternative transportation and impacts would be less than significant, similar to the proposed Project. Additionally, as with the propose Project, Alternative A would not result in vehicular or pedestrian hazards during construction or operation.

Utilities and Service Systems

As identified in Section 4.14, Utilities and Service Systems, the proposed 2008 NHIP would result in an increased demand for utilities and service systems (water, wastewater, natural gas, electric, and solid waste); however, these impacts were determined to be less than significant and would not require the construction of new or expanded facilities beyond that needed to serve the proposed 2008 NHIP structures. Although the proposed 2008 NHIP would not be developed under this alternative, there would be an increase in demand associated with continued development under the 2002 LRDP. As identified in Section 4.14, Utilities and Service Systems, this increase in demand resulted in less than significant impacts with implementation of the identified 2002 LRDP Final EIR PPs. Therefore, although there would be a reduced demand for utilities under this alternative, the overall impact would be similar and no new or expanded facilities would be required.

Climate Change

As discussed in Section 4.15, Climate Change, the proposed Project, which includes the 2008 NHIP, would not result in a significant impact related to global climate change. The campus would continue to implement the UC Policy on Sustainable Practices, including compliance with the UCLA Climate Action Plan. The proposed 2008 NHIP would reduce the overall amount of traffic generated by campus uses by reducing the number of students commuting to campus; therefore, this alternative (which does not include the proposed 2008 NHIP) would have a slight increase in greenhouse gas emissions from motor vehicles. However, climate change is a global issue and overall this alternative would have similar less than significant impacts as the proposed Project related to global change.

Ability to Meet the Project Objectives

Alternative A would allow previously approved remaining development allocation under the 2002 LRDP to proceed, and thus would meet the 2002 LRDP Objectives incorporated into the Project Objectives for this EIR. Alternative A would provide no new on-campus undergraduate housing or related services beyond the 2002 LRDP; therefore, it would not satisfy the essential Project Objectives concerning provision of 1,525 additional undergraduate beds on-campus. There is 104,000 gsf of development allocation remaining in the Northwest zone under the 2002 LRDP; however, this remaining allocation has previously been identified for library, child care, and recreational uses. Additionally, it is not expected that this remaining allocation would be used for undergraduate housing as it would not allow for an undergraduate student housing project of a sufficient size to realize economies of scale to keep housing fees affordable.

This alternative would fail to meet the following Project Objectives:

- Provide approximately 1,525 undergraduate beds in on-campus housing to address current and anticipated demand and housing guarantees for new, entering first year and transfer students, in order to meet projected demand identified in, and the undergraduate housing objectives of, the *Student Housing Master Plan 2007–2017* (Objective No. 1).

- Continue the transformation of UCLA from a commuter to residential campus, thereby improving the quality of student life and academic experience and reducing the number of students who commute to campus (Objective No. 2).

- Continue the development of on-campus housing in the Northwest zone to maintain a supportive and cohesive student community that is well integrated with all aspects of campus life (Objective No. 3).

- Provide sufficient support space (dining, meeting, assembly, and study rooms) to accommodate the proposed new undergraduate housing beds and to enhance meeting facility accommodations for the campus as a whole (Objective No. 4).

- Provide additional recreational opportunities to support the anticipated increase in the student resident population (Objective No. 5).

- Provide new undergraduate housing within the Northwest zone to take advantage of programmatic synergies with the existing undergraduate housing community, recreation, dining, and support services (Objective No. 6).

- Provide new undergraduate housing facilities that are designed to optimize security, safety, accessibility and convenience for student residents (Objective No. 8).

- Improve pedestrian and vehicular access and circulation in the Northwest zone proximate to the proposed NHIP and strengthen the pedestrian linkage with Bruin Walk (Objective No. 9).

- Meet the foregoing objectives to provide additional on-campus undergraduate student housing, while reserving the campus-wide remaining new development allocation of 1.32 million gsf previously approved under the 2002 LRDP to address the needs of the academic, research and community service mission of UCLA, for a maximum development of 1.87 million gsf of additional building space by 2013 (Objective No. 12).

- Carry forward the academic, physical and operational objectives identified in the 2002 LRDP, except as modified by Project Objective 12 above (Objective No. 13).

In sum, this alternative fails to meet the majority of Project Objectives, and in any event fails to meet the Project Objectives as well as the proposed Project.

5.3.2 ALTERNATIVE B: ALTERNATIVE LOCATION

Description of the Alternative

Under this alternative, the proposed 2008 NHIP would be built, in its entirety, on surface parking Lot 36 (Lot 36) in the Southwest zone of the campus. This alternative would include a proposed

amendment to the 2002 LRDP to provide an additional 550,000 gsf to accommodate the 2008 NHIP in that zone of the campus. As under the proposed Project, under this alternative the remaining development allocation under the 2002 LRDP of 1.32 million gsf would continue to be implemented. Therefore, when combined with previously approved development under the 2002 LRDP, the total square footage of new potential development that could occur on the campus is the same as for the proposed Project, or approximately 1.87 million gsf.

The Southwest campus zone is approximately 35.5 acres ad accommodates a mixture of uses and facilities including academic, research, administrative, and graduate student housing (Weyburn Terrace). Lot 36 is approximately seven acres in size and is bordered by Parking Structure 32 to the north, Veteran Avenue to the west, Wilshire Boulevard to the south, and the Kinross Building to the east. Lot 36 is currently used for campus parking. It provides approximately 637 surface parking spaces.

This alternative would result in the same number of undergraduate beds (1,525) and faculty-in-residence apartments as the proposed 2008 NHIP, and the same overall square footage as the 2008 NHIP for housing, dining commons, fitness center, multi-purpose room, and housing maintenance. It is assumed that buildings of the same size and massing as the proposed 2008 NHIP would be constructed on the Lot 36 site.

In order to construct the new housing at Lot 36, the existing surface parking spaces would need to be replaced on a minimum one-for-one basis, in a subterranean parking structure located beneath the development. Because these spaces are needed for campus operations, during construction of the replacement parking, an interim stack parking plan would need to be implemented elsewhere on campus so as to ensure continued availability of parking for campus users.

This alternative is included because it offers a different location for the proposed 2008 NHIP, while still meeting several Project Objectives, including a fundamental Project Objective to provide *on-campus* undergraduate housing. This alternative location has been selected for evaluation as a reasonable and feasible alternative site for the proposed 2008 NHIP, given that the areas of campus designated to accommodate undergraduate student housing (i.e., Northwest zone) are already highly developed and, with respect to the few undeveloped areas remaining, subject to agreements that currently restrict development and/or use as described in Section 4.8, Land Use and Planning.

Comparative Analysis of Environmental Impacts

This alternative specifically addresses implementation of the proposed 2008 NHIP at an alternative site. The following analysis focuses on the comparative impacts of implementation of the proposed 2008 NHIP on Lot 36 in the Southwest zone rather than the proposed three sites in the Northwest zone. Impacts associated with the implementation of remaining development allocation under the 2002 LRDP (1.32 million gsf) would be the same as the proposed Project and not discussed in this analysis as they would remain the same as evaluated throughout Section 4 of this EIR.

Aesthetics

The alternative site consists of a surface parking lot (Lot 36). Implementation of the proposed undergraduate housing on this site would introduce an undergraduate residential community into an established urbanized area. Surrounding land uses are commercial and office properties along Wilshire Boulevard (including high rise structures), the Los Angeles National Cemetery to the west, and the (on campus) Kinross Buildings to the east (one to three stories). Westwood

Village is further to the east. The area to the north across Kinross Drive consists of a campus parking structure (PS 32) and the campus transit operations maintenance yard. As described in previously, under Alternative B the proposed undergraduate housing development would include four buildings that would be of the same size and massing as those proposed in the Northwest zone (ranging from three to nine stories). The proposed residential buildings would be designed with architectural detail, height, bulk, building proportion and placement and landscaping to enhance compatibility with adjacent uses, in accordance with key planning objectives in the 2002 LRDP and identified PPs. Because this alternative site is currently a parking lot, and the proposed site in the Northwest zone includes a landscaped slope, the visual change would be greater with the proposed 2008 NHIP in the Northwest zone. As with the proposed 2008 NHIP, implementation of undergraduate housing on this alternative site would not substantially degrade the visual quality or character of the site or surrounding areas. As such, implementation of this alternative would result in reduced less than significant impacts compared to the proposed 2008 NHIP.

This alternative would introduce new sources of light and glare into the area including security and safety lighting for residential buildings, parking areas, and pedestrian pathways. However, the existing surface parking lot and surrounding areas are currently illuminated from existing security/safety lighting, street lights, lights associated with existing high-rise development along Wilshire Boulevard, and lights from motor vehicles at night. As a result, the new sources of lighting associated with undergraduate residential structures would not be substantially different from the existing lighting of the parking lot and adjacent areas and would be similar to the existing lighting in the area. Therefore, this alternative would have fewer impacts related to increased lighting compared to the proposed 2008 NHIP which would be constructed in part on a landscaped slope. However, this impact would be less than significant under both scenarios. As with the proposed 2008 NHIP, daytime glare could be created under this alternative. This impact would be reduced to a level considered less than significant with implementation of identified MMs, which set forth lighting requirements to minimize spillover onto adjacent uses and require minimization of the use of reflective exterior finishes reducing impacts from glare. The light and glare impact under this alternative would be similar to the proposed 2008 NHIP in the Northwest zone.

There are no scenic views to or from the alternative site, as the surrounding area is developed with high- and mid-rise commercial and office structures that effectively block mid-range and long-range views to and from the project site. In addition, the proposed undergraduate residential buildings under this alternative would not be higher than the high-rise structures across Wilshire Boulevard, and would not block views of the Santa Monica Mountains. Furthermore, Wilshire Boulevard at this location is not designated as a scenic corridor. Therefore, this alternative would not result in any impacts to scenic views, similar to the proposed 2008 NHIP.

Air Quality

Development of this Alternative would occur on Parking Lot 36 (approximately 7 acres) and would require grading and earth movement over the entire area. Approximately 6.7 acres of disturbance would result from the proposed 2008 NHIP on the three sites in the Northwest zone. It is expected that the amount of earthwork/excavation for this alternative would be increased compared to the proposed 2008 NHIP due to the need to replace the existing 637 parking spaces on Lot 36 in a subterranean parking facility (to accommodate existing surface parking that would be removed). Due to the inclusion of the parking structure, this construction of this alternative would also occur over a longer period of time compared to the proposed 2008 NHIP. Additionally, the stack parking operations would require that cars be consistently moved requiring multiple engine starts which would increase vehicular air emissions during the

construction phase. This alternative would result in an increase in short-term daily peak construction emissions of NOx compared to the proposed 2008 NHIP. The short-term regional air quality impacts would be significant and unavoidable to a greater degree with this Alternative as compared with the proposed 2008 NHIP and would contribute substantially to an existing or projected air quality violation.

With respect to long-term air quality emissions, the operations under Alternative B would be the same as the proposed 2008 NHIP; therefore, long-term air quality impacts would be the same (less than significant) as the proposed 2008 NHIP related to CO hot spots, cumulatively considerable net increase of a criteria pollutant for which the regional is in non-attainment, toxic air quality emissions, and consistency with the Air Quality Management Plan.

The closest sensitive receptor to this alternative site is the Southwest Campus Graduate Student Housing which is approximately 850 feet to the north, and separated from the Parking Lot 36 site by existing development. Based on the local significance threshold (LST) analysis conducted for the proposed 2008 NHIP, impacts to adjacent sensitive receptors would be less than significant. This alternative, which would be located farther away from sensitive receptors compared with the proposed 2008 NHIP, would also have less than significant impacts.

Biological Resources

This alternative would involve new development on an existing surface parking lot that contains non-native trees along the Veteran Avenue and Wilshire Boulevard edges. Very few additional trees or landscaping are located on Lot 36. Construction activities would likely require the removal of some trees along the periphery of the site; however, the number of trees that would potentially be removed would be substantially fewer than those requiring removal for the proposed 2008 NHIP (131 mature trees and 1 native tree). As with the proposed 2008 NHIP, development under this alternative would be required to follow all applicable PPs and MMs related to the removal of mature trees and the potential disturbance of occupied nests. Because there are no areas on campus that provide a connection between natural areas, implementation of this alternative would not interfere with a wildlife movement corridor or with the movement of native animal species, similar to the proposed Project. Although the proposed 2008 NHIP would result in less than significant impacts to biological resources, the direct and indirect impacts of Alternative B would be less than the proposed 2008 NHIP, due primarily to the reduction in the number of trees removed.

Cultural Resources

As with the proposed 2008 NHIP, Lot 36 does not contain and therefore would not affect any historical structures. Because of the excavation that would occur for the subterranean parking structure to replace surface parking removed, development under Alternative B would have the same potential impacts to archaeological and paleontological resources during ground-disturbing activities at the proposed 2008 NHIP. These impacts can be mitigated to a less than significant level with implementation of identified MMs with the proposed 2008 NHIP and this alternative.

Geology and Soils

Under Alternative B, residential development would occur at a different location within the campus (Lot 36). Alternative B would result in the same impacts as the proposed 2008 NHIP related to seismic ground shaking and earthquake fault rupture, as seismicity across the campus is anticipated to be similar, and as with the proposed 2008 NHIP, no known earthquake fault traverses the alternative site. Alternative B would expose the same numbers of persons to

seismic events such as ground shaking, and the site would be subject to the same level of geotechnical investigation and review as the proposed 2008 NHIP, pursuant to 2002 LRDP Final EIR PPs 4.5-1(a), 4.5-1(c), and 4.5-1(d), which would ensure that impacts related to fault rupture and seismic ground shaking would be less than significant, the same as under the proposed 2008 NHIP.

The alternative site has not been designated as a potential landslide hazard area; therefore, the impact associated with a landslide risk would be less than significant similar to the proposed 2008 NHIP. This alternative site is within a designated liquefaction hazard area while the proposed 2008 NHIP is not. However, preparation of a geotechnical study for this alternative site would also be required, as with the proposed 2008 NHIP, and the recommendations of the geotechnical study would be required to be incorporated into the design of the residential project. Further, the project would be required to comply with applicable provisions of the statutes, regulations, and University policies, programs, practices, and procedures as identified in 2002 LRDP Final EIR PPs 4.5-1(a), 4.5-1(c), and 4.5-1(d). This impact would, therefore, be less than significant under this alternative, the same as under the proposed 2008 NHIP.

As with the proposed 2008 NHIP, the identified 2002 LRDP Final EIR PPs would ensure that impacts related to geotechnical conditions (e.g., seismic-related, liquefaction, expansive or unstable soils) would be less than significant under Alternative B.

This alternative would require subterranean parking which would result in more grading compared to the proposed 2008 NHIP. However, as with the proposed 2008 NHIP, this alternative would be required to comply with all applicable PPs and MMs related to erosion control as well as fugitive dust control PPs, identified in Section 4.2, Air Quality. Therefore, as with the proposed 2008 NHIP, substantial erosion would not occur with this alternative and this impact would be less than significant.

Hazards and Hazardous Materials

As described in Section 4.6 of this EIR, Hazards and Hazardous Materials, the proposed 2008 NHIP would require building demolition activities, the potential for exposure to asbestos containing materials, lead-based paint, polychlorinated biphenyls (PCBs), and/or mercury containing equipment could be present. Demolition activities associated with the proposed 2008 NHIP would be conducted in accordance with applicable provisions of the *California Health and Safety Code*, as well as other applicable State and federal regulations and the campus Asbestos Management Program, which would ensure that a less than significant impact would occur with respect to exposure of occupants or construction workers to hazardous materials. Lot 36 is occupied by an existing surface parking lot, with no buildings that contain asbestos, lead-based paint, or other hazardous substances, and demolition activities associated with Alternative B would not expose workers to such hazardous substances. This impact under Alternative B would, therefore, be slightly less than the less than significant impact under the proposed 2008 NHIP.

As described in Section 4.7, Hydrology and Water Quality, no evidence exists of current soils or groundwater contamination on campus. Although previously undetected underground storage tanks or other undetected soil or groundwater contamination could be exposed as a result of construction activities, 2002 LRDP Final EIR PP 4.6-4 requires the assessment and remediation of any contamination encountered during site preparation and construction activities for any project implemented. Further, Alternative B would be required to comply with all applicable federal, State, and local laws and regulations, which would ensure that a less than significant impact occurs, the same as under the proposed 2008 NHIP.

Lot 36 is not located within one-quarter mile of an existing or proposed school. Although the proposed 2008 NHIP site is located within one-quarter mile of a school, acutely hazardous materials would not be handled under the proposed 2008 NHIP or Alternative B. The impact of the proposed 2008 NHIP and this alternative would be less than significant.

Alternative B would not pose a safety hazard related to helistop operations from the RRUCLAMC as limited helicopter activity occurs to the southwest. Additionally, as with the proposed 2008 NHIP, under Alternative B there would be no buildings constructed that would penetrate the established 8:1 approach/departure surface (8 feet horizontal to 1 foot vertical) associated with permitted operation of the RRUCLAMC helistop. As with the proposed 2008 NHIP, impacts related to potential safety hazards associated with helistop operations would be less than significant.

Hydrology and Water Quality

As described in Section 4.7, Hydrology and Water Quality, implementation of the proposed 2008 NHIP would convert pervious (landscaped) surface area to impervious area for each of the three sites which would increase the total volume of storm water runoff. This increase would not result in significant impacts with continued compliance with PP 4.7-5 (as modified). Because development of the alternative site which is currently an impervious parking lot would include landscaping, post-construction permeability of the site could actually be greater than under the existing condition. Therefore, storm water runoff could incrementally decrease with implementation of this alternative, which would result in a less than significant impact on storm drain capacity. Although the proposed 2008 NHIP and this alternative would both result in less than significant impacts on storm drainage facilities, the impact of this alternative would be slightly less than under the proposed project, as the increase in volume of storm water runoff would be less.

As addressed in Section 4.7, Hydrology and Water Quality, implementation of the proposed 2008 NHIP would not substantially interfere with groundwater recharge. Further, the small amount of conversion of permeable to impermeable surfaces was not considered to substantially affect groundwater recharge, as the campus is not considered a major source of groundwater recharge in the area. As described above, development under this alternative would result in a slight increase in permeable surface area compared with the proposed 2008 NHIP. Therefore, this alternative would have a less than significant impact on groundwater recharge, similar to the proposed 2008 NHIP.

With respect to water quality impacts, development of undergraduate housing on this alternative site would be subject to the same water quality regulations as the proposed 2008 NHIP. Potential short-term and long-term impacts would be similar to the proposed 2008 NHIP as the ultimate land use and associated urban pollutants generated would be similar.

Land Use and Planning

Lot 36 is located in a developed urban setting with campus development to the north and east, and high-rise structures to the south across Wilshire Boulevard. Specifically, land uses surrounding this site are primarily offices, parking, and public service uses. The Southwest Graduate Student housing development is located approximately 850 feet to the north but is separated by existing non-residential campus development. Development of undergraduate housing in the Southwest zone, adjacent to Wilshire Avenue which is a major commercial corridor, could result in a potentially incompatible land use and a potentially significant land use impact would occur as compared with the proposed 2008 NHIP, which would have less than significant impacts related to land use compatibility.

Although the undergraduate housing under this alternative would provide all the support facilities necessary to accommodate the 1,525 beds, the provision of undergraduate housing on this alternative site in the Southwest zone would not be consistent with the planning objectives of the 2002 LRDP to provide undergraduate housing in the Northwest zone to take advantage of programmatic synergies with the existing undergraduate communities (refer to the discussion of the ability of this alternative to meet project objectives).

Noise

As identified in Section 4.9, Noise, the proposed 2008 NHIP construction activities could generate excessive vibration levels. Even with identified PPs and MMs, this impact would be significant and unavoidable for on campus land uses. The Kinross buildings located immediately east of Lot 36 would be adjacent to the construction activities, including excavation for the subterranean parking structure, and would be subject to construction-related vibration. Similar to the proposed 2008 NHIP, this impact would be significant and unavoidable.

The proposed 2008 NHIP construction activities would also result in substantial temporary or periodic increases in ambient noise levels at on-campus and off-campus locations. This is considered a significant and unavoidable impact. Implementation of this alternative would eliminate this impact for off campus uses as there are no existing uses immediately adjacent to the Lot 36 with the exception of the National Veteran's Cemetery which is across Veteran Avenue and already subject to noise from Wilshire Boulevard. The on-campus Kinross buildings would be subjected to substantial noise levels during construction which would be considered a significant and unavoidable impact, similar the proposed 2008 NHIP. It should be noted that the construction activities under Alternative B would occur for a longer period of time than the proposed 2008 NHIP due to the need to construct the subterranean parking structure.

Implementation of Alternative B would not expose new on-campus student residential units to noise levels in excess of the State's 45 dBA CNEL interior noise standard, similar to the proposed 2008 NHIP. Ambient noise levels at the alternative site are, however, higher than the Northwest zone of the campus. This is because the alternative site is acoustically "hard", with a predominance of concrete and asphalt. It is also because it is located close to two very busy roadways (Wilshire Boulevard and Veteran Avenue) and a busy commercial area. However, noise levels within any residential structures constructed within Lot 36 would still meet the State's 45 dBA CNEL noise standard without any special exterior to interior noise attenuation features.

Long-term operational noise and vibration impacts to on and off-campus uses from vehicular and stationary sources would be the same for this alternative as identified for the proposed 2008 NHIP and would be less than significant.

Population and Housing

As with the proposed 2008 NHIP, development under this alternative would increase the undergraduate housing available on campus. The increase in resident and staff population during operation would be the same as the proposed 2008 NHIP because the number of students and staffing needs would be the same. Therefore, less than significant population and housing impacts would be the same for Alternative B as those anticipated to occur with the proposed 2008 NHIP.

Public Services

The population increase as a result of development of this alternative would be the same as with the proposed 2008 NHIP and would result in the same demand for fire and police protection, and schools, to maintain adequate service levels or response times. As with the proposed 2008 NHIP, no new or expanded public service facilities would be needed with this alternative, and public services impacts would be less than significant.

As with all projects under the proposed Project, following 2002 LRDP Final EIR PP 4.11-1 would ensure that fire alarm connections are provided in all new and renovated buildings. Also, following 2002 LRDP Final EIR PPs 4.11-2(a) and 4.11-2(b) would ensure the continued assessment of police staffing and equipment levels, the provision of adequate staff and facilities, and the adequacy of police protection for University housing.

Implementation of 2002 LRDP Final EIR mitigation measures related to construction mitigation would ensure adequate emergency vehicle access during construction periods under Alternative B, the same as the less than significant impact identified for the proposed Project. Ongoing construction is anticipated on campus, and temporary road closures are routinely addressed to ensure maintenance of adequate emergency access at all times. With Alternative B, as with the proposed 2008 NHIP, no foreseeable conditions that would impair implementation of, or physically interfere with, the adopted UCLA Disaster Response Plan would occur during construction of the proposed undergraduate housing project.

Recreation

As with the proposed 2008 NHIP, this alternative would accommodate the existing and projected student population and would not generate new students. Therefore, there would not be an increased demand for recreational facilities with this alternative. The undergraduate housing development under this alternative would include a fitness center and would have similar construction-related impacts as the proposed 2008 NHIP.

Transportation/Traffic

As with the proposed 2008 NHIP, Alternative B would result in a net decrease of 378 daily vehicular trips, and would have no long-term impacts to study intersections or freeway mainline facilities. Construction-related traffic impacts would be greater because Lot 36 is at the intersection of Wilshire Boulevard and Veteran Avenue, and because excavation for the subterranean parking structure would generate additional truck trip to export soil. Thus, construction deliveries and potential lane closures would result in greater impacts than the proposed 2008 NHIP which are significant and unavoidable.

As with the proposed 2008 NHIP, with implementation of the identified 2002 LRDP Final EIR PPs, this alternative would not cause significant vehicular or pedestrian hazards during operation or construction, or impact emergency access. This alternative would not require the removal of off campus on-street parking (as required by the 2008 NHIP on Gayley Avenue) and would avoid this less than significant impact. As with the proposed 2008 NHIP, this alternative would not result in inadequate parking on campus during operation. The temporary loss of surface parking on Lot 36 during construction would be accommodated through use of stack parking; however, it would cause greater parking impacts during construction compared to the proposed 2008 NHIP. Long-term operational traffic and parking impacts from this alternative would be similar to the proposed 2008 NHIP (no impact and less than significant impacts, respectively); however, construction impacts would be greater.

Utilities and Service Systems

Because this alternative would construct undergraduate housing on campus with the same number of beds and amount of support facilities, water and energy (electric and natural gas) demand and wastewater generation would be similar for this alternative compared to the proposed 2008 NHIP. As with the proposed 2008 NHIP, new utility lines would need to be constructed to connect the proposed buildings with existing utility lines and the construction impacts would be similar to that addressed for the proposed 2008 NHIP. No new or expanded facilities off campus would be necessary.

As with the proposed 2008 NHIP, the projected water demand for Alternative B would not exceed the total projected demand for the 2002 LRDP, as amended, and adequate water has been determined available to serve the campus at full implementation of the 2002 LRDP, as amended. Therefore, this impact is less than significant, similar to the proposed 2008 NHIP.

As with the proposed 2008 NHIP, development of Alternative B would be in compliance with all applicable federal, State, and local statutes and regulations related to solid waste, and no impact would occur. Projected solid waste generation would be similar to the proposed 2008 NHIP and the landfills that currently serve the campus have adequate capacity to serve the campus at full implementation of the 2002 LRDP, as amended. Consequently, development of Alternative B would result in the same impacts as the proposed 2008 NHIP, and a less than significant impact related to solid waste would occur.

Climate Change

Alternative B would result in similar construction activities (with additional excavation) and the same operational activities as the proposed 2008 NHIP and would, therefore, have similar less than significant impacts related to global climate change. As with the proposed 2008 NHIP, construction and development under this alternative would be required to comply with new PP 4.15-1, which requires the campus to implement provisions of the UC Policy on Sustainable Practices.

Ability to Meet the Project Objectives

As discussed above, under this alternative, the proposed 2008 NHIP would be built on Lot 36. This alternative would meet several key Project Objectives, including the Project Objective to provide additional undergraduate housing *on* campus. Moreover, similar to the proposed Project, this alternative would amend the 2002 LRDP to provide an additional 550,000 gsf of future development to accommodate both the proposed 2008 NHIP and thereby retain previously approved remaining development allocation under the existing 2002 LRDP for other academic, research and community service uses. As a result, this alternative would meet Project Objective No. 12 to accommodate additional undergraduate student housing under the 2002 LRDP as amended without utilizing development potential previously approved under the 2002 LRDP for other academic, research and community service uses.

Nonetheless, this alternative would not meet several important Project Objectives met by the proposed Project. Notably, Lot 36 is located in the Southwest zone of the campus, away from the other undergraduate housing and support facilities. It thus would not meet the Project Objective related to taking advantage of programmatic synergies with other undergraduate facilities and programs in the Northwest zone, or the Project Objective to build the undergraduate housing in the Northwest zone and improve access and circulation in that zone. This alternative also would not provide the same level of cost efficiency as the proposed Project. The subterranean parking structure required to replace the existing surface parking spaces

would add significantly to the cost of the new housing project compared to that of the proposed Project. This additional cost in turn could increase the housing fees making them potentially less affordable compared with the proposed Project. As a result, this alternative would fail to meet the following Project Objectives as well as the proposed Project:

- Continue the development of on-campus housing in the Northwest zone to maintain a supportive and cohesive student community that is well integrated with all aspects of campus life (Objective No. 3).

- Provide new undergraduate housing within the Northwest zone to take advantage of programmatic synergies with the existing undergraduate housing community, recreation, dining, and support services (Objective No. 6).

- Provide new undergraduate housing facilities that are designed to optimize security, safety, accessibility and convenience for student residents (Objective No. 8).

- Improve pedestrian and vehicular access and circulation in the Northwest zone proximate to the proposed NHIP and strengthen the pedestrian linkage with Bruin Walk (Objective No. 9).

- Plan, design, and implement the proposed 2008 NHIP within the practical constraints of available funding sources, including the need to maintain affordable housing fees (Objective No. 10).

In contrast, the proposed Project meets all of the Project Objectives, including those listed above that are not met under Alternative B. Alternative B thus would not meet many of the Project Objectives met by the proposed Project, and overall would not satisfy the Project Objectives as well as the proposed Project.

5.3.3 ALTERNATIVE C: REDUCED FOOTPRINT

Description of the Alternative

Because of the limited land available in the Northwest zone for additional student housing, the Reduced Footprint Alternative examines the potential development of the 2008 NHIP on only two of the three sites considered for the proposed Project. That is, this alternative assumes that the 1,525 beds of undergraduate student housing, the associated faculty-in-residence apartments, and the dining, fitness, multipurpose rooms and housing maintenance functions (totaling approximately 550,000 gsf) would be accommodated in two high-rise buildings on the sites for the proposed Sproul West and Sproul Complex/South buildings (i.e., Sproul sites). As with the proposed Project, this alternative would include a proposed amendment to the 2002 LRDP to provide an additional 550,000 gsf to accommodate the 2008 NHIP in the Northwest zone of the campus, while continuing to implement the remaining development allocation under the 2002 LRDP of approximately 1.32 million gsf, for a total of approximately 1.87 million gsf of future development.

To accommodate the 1525 beds and associated support facilities at the Sproul sites, two high-rise towers would be constructed, each approximately 16–18 stories high. High-rise construction for housing would require building elements and construction processes that are more extensive than the proposed 2008 NHIP, including, but not limited to: provisions for fire safety, emergency egress, need for larger water pumps for fire protection purposes, need for larger emergency power generators and fuel tanks, more elevators to service larger buildings, stairway pressurization requirements, areas of refuge, larger stair vestibules, and larger loading

dock area. In addition to these elements that would require more square footage and would have significantly increased costs, there would also be increased operational requirements for inspection, waste management, and security, among other requirements. High-rise structures of this type would require roof lighting for aircraft obstruction avoidance, especially since they could be as much as 200 feet in height perched at the base elevation of approximately 440 feet above sea level. The same pedestrian and vehicular improvements included in the proposed 2008 NHIP would be provided under this alternative, with the exception of improvements needed on Gayley Avenue to accommodate the Lower De Neve building.

This alternative is analyzed in this EIR because land is a scarce resource and utilization of fewer sites to accommodate the proposed 2008 NHIP could result in fewer environmental impacts related to land use and other associated impact areas. By constructing the entire proposed 2008 NHIP exclusively on the Sproul sites, this alternative would not include construction of the proposed Upper and Lower De Neve buildings on the landscaped sloped area north of Gayley Avenue; however, this area would be available for future development under the 2002 LRDP remaining buildout.

Comparative Analysis of Environmental Impacts

This alternative specifically addresses implementation of the proposed 2008 NHIP within the Northwest zone but with a reduced footprint. The following analysis focuses on the comparative impacts of implementation of the proposed 2008 NHIP, in its entirety, on the Sproul sites with two high-rise buildings, and leaving the sites for the proposed Upper and Lower De Neve buildings for future use. Impacts associated with the implementation of remaining development allocation under the 2002 LRDP (1.32 million gsf) would be the same as the proposed Project and not discussed in this analysis as they would remain the same as evaluated throughout Section 4 of this EIR.

Aesthetics

Alternative C would place the proposed 2008 NHIP entirely on the Sproul sites and would not include development on the landscaped slope adjacent to and north of Gayley Avenue. This Alternative would avoid the less than significant visual character and visual quality changes to off-campus land uses located immediately across Gayley Avenue that would result with the proposed 2008 NHIP. Therefore, compared to the proposed 2008 NHIP, this alternative would result in reduced less than significant aesthetic impacts related to the local visual character and quality along Gayley Avenue. However, visual quality impacts from provision of two 16–18 story buildings in the Northwest zone would be greater for the campus since there are currently no buildings in the Northwest zone of comparable height.

As with the proposed 2008 NHIP, buildings development under Alternative C would not cause shadows that would affect off campus uses. Light and glare impacts would also be similar to the proposed 2008 NHIP (less than significant), although slightly less since the landscaped slope north of Gayley Avenue would remain in its current condition and would not have new sources of light or glare.

Through the Initial Study process, it was determined that the 2008 NHIP would not affect panoramic views from on-campus or off-campus views. However, because Alternative C would involve two high-rise towers at approximately 16 to 18 stories high each, panoramic views from on-campus and off-campus views would be altered. By providing an additional 7 to 9 stories on the proposed Sproul structures, the proposed high-rise structures would be higher than the rooftop elevations of the existing buildings on campus, including the Northwest zone. Off-campus views of the campus would be altered; however, panoramic views currently include

high-rise structures along Wilshire Boulevard. Therefore, this alternative would result in greater impacts to panoramic views compared to the proposed 2008 NHIP; however, this impact would be considered less than significant.

Air Quality

As identified in Section 4.2, Air Quality, the proposed 2008 NHIP would result in significant unavoidable construction-related air quality impacts. These impacts would remain significant and unavoidable even with the reduction in the development footprint because of the more extensive building elements and construction processes required of high-rise construction associated with Alternative C (e.g., the amount of earthwork for this alternative would be slightly greater with the high-rise buildings). Therefore, regional short-term construction-related impacts associated with the proposed 2008 NHIP would remain significant and unavoidable even with continued implementation of the 2002 LRDP Final EIR PPs and MMs identified in Section 4.2 and the new PP and MM that would apply to future development. As with the proposed 2008 NHIP, local construction-related impacts would be less than significant, as construction activities would be similar distance to sensitive receptors under Alternative C.

With respect to long-term air quality emissions, the operations under Alternative C would be the same as the proposed 2008 NHIP; therefore, long-term air quality impacts would be the same (less than significant) as the proposed 2008 NHIP related to CO hot spots, cumulatively considerable net increase of a criteria pollutant for which the regional is in nonattainment, toxic air quality emissions, and consistency with the Air Quality Management Plan.

Biological Resources

Alternative C would involve development on the Sproul sites consistent with the proposed 2008 NHIP but would not include development on the landscaped slope north of Gayley Avenue where the Upper and Lower De Neve buildings are proposed. Because there are no areas on campus that provide a connection between natural areas, implementation of this Alternative would not interfere with a wildlife movement corridor or with the movement of native animal species, similar to the proposed Project.

Construction activities associated with Alternative C would require the removal of trees on the Sproul sites similar to the proposed 2008 NHIP; however, the overall number of trees removed would be reduced from 131 mature trees and 1 native tree to 88 mature trees and 1 native tree (reduction of 43 trees) because the landscaped slope north of Gayley Avenue would not be disturbed. Additionally, the number of potentially impacted trees would be reduced from 13 to 3 trees. As with the proposed 2008 NHIP, development under this Alternative would be required to follow all applicable PPs and MMs related to the removal of mature trees and the potential disturbance of occupied nests. Although the proposed 2008 NHIP would result in less than significant impacts to biological resources, the direct and indirect impacts to biological resources of Alternative C would be less than the proposed 2008 NHIP due to the reduction in the number of trees removed.

Cultural Resources

As addressed in Section 4.4, Cultural Resources, implementation of the proposed 2008 NHIP would require excavation in previously undisturbed areas on the landscaped slope north of Gayley Avenue (the Sproul sites have been disturbed), potentially resulting in disturbance to unidentified archaeological resources. With implementation of the identified PPs and MMs this impact would be reduced to a less than significant level. Under Alternative C, there would be no grading activities on the landscaped slope adjacent to Gayley Avenue, eliminating the potential

impact to archaeological and paleontological resources in this area. Therefore, the less than significant impacts of the proposed 2008 NHIP would be less under Alternative C.

There are no historic resources within the proposed 2008 NHIP sites, including the Sproul sites. Therefore, as with the proposed 2008 NHIP, Alternative C would not impact historic resources.

Geology and Soils

Alternative C would result in the same impacts as the proposed 2008 NHIP related to seismic ground shaking and earthquake fault rupture, as seismicity across the campus is anticipated to be similar. Alternative C would expose the same numbers of persons to seismic events such as ground shaking, and the site would be subject to the same level of geotechnical investigation and review as the proposed 2008 NHIP, pursuant to 2002 LRDP Final EIR PPs 4.5-1(a), 4.5-1(c), and 4.5-1(d), which would ensure that impacts related to fault rupture and seismic ground shaking would be less than significant, the same as under the proposed 2008 NHIP.

As discussed in Section 4.5, Geology and Soils, none of the proposed 2008 NHIP sites, including the Sproul sites are designated as a potential landslide or liquefaction hazard areas; therefore, the impact associated with these risks would be less than significant similar to the proposed 2008 NHIP. Further, development of high rise structures on the Sproul sites would be required to comply with applicable provisions of the statutes, regulations, and University policies, programs, practices, and procedures as identified in 2002 LRDP Final EIR PPs 4.5-1(a), 4.5-1(c), and 4.5-1(d). This impact would, therefore, be less than significant under Alternative C, the same as under the proposed 2008 NHIP.

As with the proposed 2008 NHIP, the identified 2002 LRDP Final EIR PPs would ensure that impacts related to geotechnical conditions (e.g., seismic-related, liquefaction, expansive or unstable soils) would be less than significant under Alternative C.

This alternative would not involve construction of the landscaped slope north of Gayley Avenue and would result in less grading, but more excavation compared to the proposed 2008 NHIP. Additionally, as with the proposed 2008 NHIP, this alternative would be required to comply with all applicable PPs and MMs related to erosion control as well as fugitive dust control PPs, identified in Section 4.2, Air Quality. Therefore, substantial erosion would not occur with Alternative C and this impact would be less than significant, although slight reduced compared to the proposed Project.

Hazards and Hazardous Materials

As addressed in Section 4.6, Hazards and Hazardous Materials, with continued compliance with the identified PPs, the proposed Project would not result in significant hazards or hazardous materials impacts. Similar to the proposed 2008 NHIP, Alternative C would involve development of new undergraduate residential uses in the same area of the Northwest zone (with the exception that the landscaped slope north of Gayley Avenue would not be developed). Construction and operation activities would be similar with Alternative C and the proposed 2008 NHIP and potential impacts related to use of and exposure to hazardous materials, and emergency response/evacuation plan would also be similar and less than significant.

Similar to the proposed Project, Alternative C would not pose a safety hazard related to helistop operations from the RRUCLAMC (located approximately 0.4 mile to the southeast). The proposed high-rise structures would be sufficient distance from the RRUCLAMC that they would not penetrate the established 8:1 approach/departure surface (8 feet horizontal to 1 foot vertical)

required for the helistop operation. As with the proposed 2008 NHIP, safety hazards associated with helistop operations would be less than significant.

Alternative C would be required to comply with all applicable federal, State, and local laws and regulations related to hazards and hazardous materials, which would ensure that a less than significant impact occurs, the same as under the proposed 2008 NHIP.

Hydrology and Water Quality

As addressed in Section 4.7, Hydrology and Water Quality, with implementation of the identified PPs and MMs, the proposed 2008 NHIP would not result in significant hydrology and water quality impacts. Implementation of the proposed 2008 NHIP which would result in an increase in impervious surface would increase the amount of runoff and associated urban pollutants on campus. Under this alternative, the Upper and Lower De Neve buildings of the proposed 2008 NHIP would not be constructed, lessening the amount of potential impervious surfaces from the proposed 2008 NHIP sites and reducing the volume of site runoff and potential water quality issues (although the types of urban pollutants generated would be the same). Development of the proposed 2008 NHIP on only the Sproul sites would be subject to the same water quality regulations as the proposed 2008 NHIP as discussed in Section 4.7, Hydrology and Water Quality. This alternative would result in reduced impacts to hydrology and water quality compared to the proposed Project due to the reduction in development area. The impact would remain less than significant.

Land Use and Planning

As described in Section 4.7, Land Use and Planning, land use impacts from the proposed 2008 NHIP would be less than significant with incorporation of the identified 2002 LRDP Final EIR PPs. Although the proposed 2008 NHIP would not result in significant land use impacts, development of the Upper and Lower De Neve structures would introduce new undergraduate housing in this area which is in proximity to existing residential development off campus (south of Gayley Avenue). Alternative C would eliminate the Upper and Lower De Neve buildings; however, it would result in high-rise structures in the Northwest zone which would not be consistent with the height and massing of existing adjacent development. This land use incompatibility would be considered a significant and unavoidable impact of Alternative C. Therefore, this alternative would have greater land use impacts than the proposed 2008 NHIP which has less than significant land use compatibility impacts.

Similar to the proposed Project, this alternative would be consistent with applicable plans and programs addressing land use issues.

Noise

As identified in Section 4.9, Noise, the proposed 2008 NHIP construction activities could generate excessive groundborne noise and vibration levels on and off campus. With implementation of the identified 2002 LRDP Final EIR PPs and MMs these impacts would be reduced but, with the exception of off-campus vibration impacts, not to less than significant levels, resulting in significant unavoidable impacts to on- and off-campus uses in proximity to the project site. Alternative C would reduce the construction area associated with development of the proposed 2008 NHIP (by eliminating the Upper and Lower De Neve buildings); therefore, the construction-related noise would also be limited to a smaller area of exposure. Due to the proximity of the Sproul sites to existing development in the Northwest zone, noise and vibration impacts to on campus uses would still be significant and unavoidable with Alternative C. However, Alternative C would reduce or avoid construction-related noise impacts associated

with the construction of the Upper and Lower De Neve structures to off campus uses, resulting in less construction-related noise impacts compared to the proposed 2008 NHIP.

With respect to long-term operational noise impacts, the proposed 2008 NHIP would result in less than significant impacts from traffic and stationary sources. Alternative C would have similar operations as the proposed 2008 NHIP including a slight reduction in daily vehicle trips on campus; therefore, operational noise would be similar and less than significant.

Population and Housing

As with the proposed 2008 NHIP, development of Alternative C would increase the undergraduate housing available on campus. The increase in resident and staff population during operation would be the same as the proposed 2008 NHIP because the number of students and staffing needs would be the same. Therefore, less than significant population and housing impacts would be the same for Alternative C as those anticipated to occur with the proposed 2008 NHIP.

Public Services

The population increase as a result of development of Alternative C would be the same as with the proposed 2008 NHIP and would result in the same demand for fire protection, police and schools to maintain adequate service levels or response times. As with the proposed 2008 NHIP, no new or expanded public service facilities would be needed with this alternative, and public services impacts would be less than significant.

As with all projects under the proposed Project, following 2002 LRDP Final EIR PP 4.11-1 would ensure that fire alarm connections are provided in all new and renovated buildings. Also, following 2002 LRDP Final EIR PPs 4.11-2(a) and 4.11-2(b) would ensure the continued assessment of police staffing and equipment levels, the provision of adequate staff and facilities, and the adequacy of police protection for University housing.

Implementation of 2002 LRDP Final EIR mitigation measures related to construction mitigation would ensure adequate emergency vehicle access during construction periods under Alternative C, the same as the less than significant impact identified for the proposed project. Ongoing construction is anticipated on campus, and temporary road closures are routinely addressed to ensure maintenance of adequate emergency access at all times. With Alternative C, as with the proposed 2008 NHIP, no foreseeable conditions that would impair implementation of, or physically interfere with, the adopted UCLA Disaster Response Plan would occur during construction of the proposed undergraduate housing project.

Recreation

As with the proposed 2008 NHIP, this alternative would accommodate the existing and projected student population and would not generate new students. Therefore, there would not be an increased demand for recreational facilities with this alternative compared to the proposed 2008 NHIP. As with the proposed 2008 NHIP, a fitness center would be provided with Alternative C.

Traffic and Circulation

As with the proposed 2008 NHIP, Alternative C would result in a net decrease of 378 daily vehicular trips from campus, and would have no long-term impacts to study intersections or freeway mainline facilities. Construction-related traffic impacts would be slightly greater since

there would be a slight increase in the number of truck trips needed to haul excavated materials from the Sproul sites due to the added excavation required for high-rise buildings. The 2002 LRDP Final EIR PPs for construction traffic would apply; however, this impact would remain significant and unavoidable. This alternative would have similar construction-related parking impacts as the proposed 2008 NHIP.

As with the proposed 2008 NHIP, with implementation of the identified 2002 LRDP Final EIR PPs, Alternative C would not cause significant vehicular or pedestrian hazards during operation or construction, or impact emergency access. Additionally, because the Lower De Neve building would not be constructed, Alternative C would not require the removal of off campus on-street parking (as required by the 2008 NHIP on Gayley Avenue) and would avoid this less than significant impact. As with the proposed 2008 NHIP, this alternative would not result in inadequate parking on campus during operation.

With implementation of Alternative C, long-term operational traffic impacts and on-campus parking impacts (operational and construction) from Alternative C would be similar to the proposed 2008 NHIP (less than significant). Construction-related traffic impacts would be greater. Less than significant off-campus parking impacts would be avoided.

Utilities and Service Systems

Because Alternative C would construct undergraduate housing on campus with the same number of beds and amount of support facilities, water and energy (electric and natural gas) demand, and wastewater generation would be similar for this alternative compared to the proposed 2008 NHIP. As with the proposed 2008 NHIP, new utility lines would need to be constructed to connect the proposed buildings with existing utility lines and the construction impacts would be similar to that addressed for the proposed 2008 NHIP, although slightly less since there would only be two buildings developed (compared to four with the proposed 2008 NHIP). No new or expanded facilities off campus would be necessary.

As with the proposed 2008 NHIP, the projected water demand for Alternative C would not exceed the total projected demand for the 2002 LRDP, as amended, and adequate water has been determined available to serve the campus at full implementation of the 2002 LRDP, as amended. Therefore, this impact is less than significant, similar to the proposed 2008 NHIP.

As with the proposed 2008 NHIP, development of Alternative C would be in compliance with all applicable federal, State, and local statutes and regulations related to solid waste, and a less than significant impact would occur. Projected solid waste generation would be similar to the proposed 2008 NHIP and the landfills that currently serve the campus have adequate capacity to serve the campus at full implementation of the 2002 LRDP, as amended. Consequently, development of Alternative C would result in the same impacts as the proposed 2008 NHIP, and a less than significant impact related to solid waste would occur.

Climate Change

Alternative B would result in similar construction activities and the same operational activities as the proposed 2008 NHIP and would, therefore, have similar less than significant impacts related to global climate change. As with the proposed 2008 NHIP, construction and development under Alternative C would be required to comply with new PP 4.15-1 which requires the campus to implement provisions of the UC Policy on Sustainable Practices.

Ability to Meet the Project Objectives

This alternative would provide 1,525 beds of undergraduate student housing and associated support facilities in the Northwest zone of campus within the proposed 2008 NHIP Sproul sites, by other undergraduate housing and facilities, and thus achieves the same synergies with these existing undergraduate facilities as the proposed Project. In addition, as with the proposed Project, this alternative would include a proposed amendment to the 2002 LRDP to provide an additional 550,000 gsf to accommodate the proposed 2008 NHIP in the Northwest zone. Like the proposed Project, this alternative would satisfy Project Objective No. 12 to accommodate additional undergraduate student housing under the 2002 LRDP, as amended, without utilizing development potential previously approved under the 2002 LRDP for other academic, research and community service uses.

Despite these similarities to the proposed Project, Alternative C would not meet other Project Objectives that are met by the proposed Project. To fit the entire new housing project on the Sproul sites alone, the project would have to be reconfigured into two high-rise towers that would be unique to the Northwest zone. These high-rise towers would conflict with the Project Objective to:

- Provide undergraduate housing facilities that are similar (in size, configuration, and program operational efficiency) to existing housing facilities while maintaining the spatial development, massing and density of the Northwest campus zone to the extent feasible (Objective No. 7).

Further, the costs of building and operating the two high-rise towers under this alternative would be greater than those associated with the proposed Project reducing the affordability of this housing for the prospective student residents. This alternative would fail to meet the cost efficiency Project Objective below as well as the proposed Project:

- Plan, design, and implement the proposed 2008 NHIP within the practical constraints of available funding sources, including the need to maintain affordable housing fees (Objective No. 10).

Overall, then, Alternative C fails to meet Project Objectives as well as the proposed Project.

5.3.4 ALTERNATIVE D: REDUCED DEVELOPMENT ALTERNATIVE

Description of the Alternative

This alternative involves provision of the same 2008 NHIP as the proposed Project without including the proposed Amendment to the 2002 LRDP to add 550,000 gsf of new development allocation to the Northwest zone to accommodate the proposed undergraduate housing. Because there is insufficient remaining development allocation in the Northwest zone (i.e., approximately 104,000 gsf) to accommodate the proposed 2008 NHIP, under this alternative, an amendment to the 2002 LRDP to re-allocate (or transfer) development allocation from other campus zones to accommodate the 2008 NHIP in the Northwest zone would be considered. For analytical purposes, it is assumed that an amendment to re-allocate remaining 2002 LRDP square footage development allocation from other campus zones to the Northwest zone would include the following: transfer of approximately 175,000 gsf from the Bridge zone and approximately 271,000 gsf from the Southwest zone. Taken together with the remaining existing development allocation in the Northwest zone of 104,000 gsf, these re-allocations (i.e., 175,000

from the Bridge zone and 271,000 gsf from the Southwest zone) would accommodate the 550,000 gsf development of the proposed 2008 NHIP in the Northwest zone.

In summary, under this alternative the total square footage of new potential development that could occur on the campus would be the same as the remaining development allocation under the 2002 LRDP of 1.32 million gsf. Additionally, as with the proposed Project, the 2002 LRDP vehicle trip and parking limits would be maintained.

This alternative was selected to be analyzed in the EIR as a way to provide additional on-campus undergraduate student housing and associated support services without increasing the overall campus development allocation provided under the 2002 LRDP, and thus as a potentially less environmentally impacting alternative than the proposed Project.

Comparative Analysis of Environmental Impacts

The following analysis focuses on the comparative impacts of implementation of the proposed Project (buildout of the 2002 LRDP as amended) with this Alternative, which reduces the total amount of development allocation on campus (1.32 million gsf compared to 1.87 million gsf). Impacts associated with the implementation of proposed 2008 NHIP would be the same as with the proposed Project as evaluated throughout Section 4 of this EIR.

Aesthetics

With implementation of Alternative D, the proposed 2008 NHIP would continue to be constructed in the Northwest Zone; however, less development would occur in the Bridge and Southwest zones of campus due to the transfer of development allocations from these zones to the Northwest zone to accommodate the proposed 2008 NHIP. This alternative could result in less aesthetic impacts compared to the proposed Project because it would reduce the amount of new development along the campus perimeter in those two zones. However, with continued implementation of the identified 2002 LRDP Final EIR PPs, aesthetic impacts from the proposed Project related to change in visual character and quality and light and glare would be less than significant. Therefore, Alternative D would result in reduced less than significant impacts compared to the proposed Project.

Air Quality

As identified in Section 4.2, Air Quality, the proposed 2008 NHIP would result in short-term significant unavoidable construction-related regional air quality impacts, which would remain with Alternative D. It is expected that similar short-term air quality impacts would result from future construction activities under the remaining development allocation under Alternative D. Because of the reduced amount of remaining development allocation, Alternative D would reduce the extent of construction activities compared to the proposed Project; however, it would not avoid short-term significant and unavoidable construction-related regional air quality impacts that would also occur due to the exceedance of SCAQMD thresholds.

Although Alternative D would reduce the total amount of development allocation on campus (1.32 million gsf compared to 1.87 million gsf) due to the assumption that the 2002 LRDP would simply transfer existing development allocation from other zones, rather than add new development allocation (i.e., the 550,000 gsf), as with the proposed 2008 NHIP, it would not reduce the total amount of daily vehicular trips that would be generated (as discussed below under Transportation/Traffic). Therefore, this alternative would have similar significant and unavoidable air quality impacts as the proposed Project resulting from emissions of NOx. VOC emissions would be reduced but not to a less than significant level.

Similar to the proposed Project, this alternative would be consistent with the Air Quality Management Plan (AQMP), and would not result in significant local air quality impacts during construction or operation.

Biological Resources

Because Alternative D would construct the proposed 2008 NHIP, the same impacts identified for the proposed 2008 NHIP, which include impacts to mature and protected tree species and an adverse effect on nesting birds if trees with active nests are impacted during the breeding season, would result. Alternative D would also result in the removal of mature and protected trees in other areas on campus subject to future development resulting in similar impacts as the proposed Project, although potentially reduced since there would be reduced development. With implementation of identified 2002 LRDP Final EIR MMs and PPs, these impacts from the proposed Project would be less than significant.

Because there are no areas on campus that provide a connection between natural areas, implementation of this Alternative would not interfere with a wildlife movement corridor or with the movement of native animal species, similar to the proposed Project.

Potential significant impacts to sensitive biological resources associated with the 4-acre parcel in the Northwest zone would be avoided with Alternative D. As defined by this Alternative, no development allocation in the Northwest zone would remain after implementation of the proposed 2008 NHIP. These impacts would be less than significant with implementation of the new MMs 4.3-2(a) through 4.3-2(e), identified in Section 4.3, Biological Resources. Potential impacts to sensitive biological resources in the aboveground portion of the Stone Canyon Creek would still occur; however, these impacts of the proposed Project would also be less than significant with implementation of the identified PPs. Therefore, within continued implementation of the identified 2002 LRDP Final EIR PPs, and new MMs, Alternative D would have a less than significant impact to biological resources similar to the proposed Project although the impacts would be less due to the reduced amount of development.

Cultural Resources

Because Alternative D would include development of the proposed 2008 NHIP, the same potentially significant impacts identified for the proposed 2008 NHIP related to archaeological and paleontological resources would occur. Although Alternative D would reduce the overall total amount of development allocation on campus, this Alternative would still require subsurface excavation for future development. As such, there is the potential for subsurface cultural deposits (archaeological and paleontological) to be discovered during grading activities similar to the proposed Project. However, with implementation of the 2002 LRDP Final EIR PPs and MMs identified in Section 4.4, Cultural Resources, this impact would be reduced to a less than significant level with the proposed Project and Alternative D. Additionally, the potential to impact historic resources would be similar under this Alternative as with the proposed Project since future construction would occur potentially in proximity to significant historic resources. With continued implementation of the 2002 LRDP Final EIR PPs and MMs and the new MM, this alternative would result in less than significant impacts to cultural resources, similar to the proposed Project; however, the overall impact would be less given the reduced amount of development.

Geology and Soils

Alternative D would result in the same impacts as the proposed Project related to seismic groundshaking and earthquake fault rupture, as seismicity across the campus is anticipated to

be similar. Alternative D would expose the same numbers of persons to seismic events such as groundshaking, and development of the remaining development allocation would be subject to the same level of geotechnical investigation and review as the proposed Project, pursuant to 2002 LRDP Final EIR PPs 4.5-1(a), 4.5-1(c), and 4.5-1(d). This would ensure that impacts related to fault rupture and seismic groundshaking would be less than significant, the same as with the proposed Project.

Although the amount of development under Alternative D would be reduced compared to the proposed Project, the remaining development allocation would still require grading and ground disturbance for construction of projects. Construction of the remaining development allocation would be subject to similar geotechnical constraints as the proposed Project, as described in Section 4.5, Geology and Soils. As with the proposed Project, the identified 2002 LRDP Final EIR PPs would ensure that impacts related to geotechnical conditions (e.g., seismic-related, liquefaction, expansive or unstable soils) would be less than significant under Alternative D.

Hazards and Hazardous Materials

As addressed in Section 4.6, Hazards and Hazardous Materials, with continued compliance with the identified 2002 LRDP Final EIR PPs, the proposed Project would result in less significant impacts related to hazards or hazardous materials during construction and operation (e.g., use of and exposure to hazardous materials, helicopter operations, and emergency response/evacuation plans). Development under Alternative D would be required to comply with all applicable federal, State, and local laws and regulations, which would ensure that a less than significant impact occurs, as with the proposed Project.

Because Alternative D would result in less overall development on campus, the potential for impacts associated with hazards and hazardous materials may be slightly less compared to the proposed Project but would remain less than significant with continued implementation of the identified 2002 LRDP Final EIR PPs.

Hydrology and Water Quality

As addressed in Section 4.7, Hydrology and Water Quality, with implementation of the identified 2002 LRDP Final EIR PPs, the proposed Project would not result in significant hydrology and water quality impacts. Because development of Alternative D would result in less impervious surface (due to the reduced amount of remaining development allocation), the amount of storm water runoff would incrementally decrease with implementation of this alternative, which would result in a less than significant impact on storm drain capacity. Although the proposed Project and this alternative would both result in less than significant impacts on storm drainage facilities, the impact of Alternative D would be slightly less than the proposed Project, as the increase in runoff would be less. Under both scenarios future development proposals would be subject to site-specific hydrology studies to ensure that all necessary storm drain upgrades are identified and constructed.

Implementation of the proposed Project would not substantially interfere with groundwater recharge. Further, the conversion of permeable to impermeable surfaces was not considered to substantially affect groundwater recharge, as the campus is not considered a major source of groundwater recharge in the area. This alternative would have a less than significant impact on groundwater recharge, similar to the proposed Project.

With respect to water quality impacts, buildout of the remaining development allocation under this alternative would be subject to the same water quality regulations as the proposed Project.

Potential short-term and long-term impacts would be similar to the proposed Project as the ultimate land use and associated urban pollutants generated would be similar.

Under Alternative D, the total amount of development on campus would be reduced, resulting in less runoff and potential water quality issues. Therefore, this Alternative would result in reduced impacts related to hydrology and water quality compared to the proposed Project although the impacts would be less than significant under both development scenarios.

Land Use and Planning

With implementation of Alternative D, the proposed 2008 NHIP would be constructed in the Northwest Zone; however, less development would occur in the Bridge and Southwest zones of campus due to the transfer of development allocations from these zones to the Northwest zone to accommodate the proposed 2008 NHIP. With respect to physical land use compatibility, the proposed Project impacts would be less than significant with incorporation of the identified 2002 LRDP Final EIR PPs. Therefore, Alternative D would also have less than significant impacts as the types of uses developed in each campus zone and operational relationships would remain the same.

Noise

As identified in Section 4.9, Noise, the proposed Project, including the proposed 2008 NHIP, could generate excessive groundborne noise and vibration levels on and off campus. With implementation of the identified 2002 LRDP Final EIR PPs and MMs these impacts would be reduced but, with the exception of off-campus vibration impacts, not to less than significant levels, resulting in significant unavoidable impacts. Although Alternative D would result in less overall development (1.32 million gsf compared to 1.87 million gsf for the proposed Project), and less construction activities, construction generated excessive groundborne noise and vibration levels on campus would still remain significant and unavoidable.

When construction activities are not occurring at the campus, background operational vibration levels from on campus uses would be expected to be very low and not noticeable. This would occur under the Alternative D or the proposed Project and operational impacts would be less than significant for both scenarios, although there would be less development and less potential vibration from operations under Alternative.

As with the proposed Project, Alternative D would not expose people to noise levels (including noise from operation of the RRUCLAMC helistop) in excess of the State's 45 dBA CNEL interior noise standard as all buildings would be constructed to comply with this standard (as required by 2002 LRDP Final EIR PP 4.9-1).

As discussed under Transportation/Traffic, Alternative D would generate the same daily vehicular traffic as the proposed Project. Therefore, less than significant noise impacts from vehicles would also be the same (less than significant).

The proposed Project and Alternative D would have similar operations; however, there would be less development with Alternative D and an associated reduction in the amount of new stationary sources of noise. Under this Alternative and the proposed Project, new stationary noise sources would be shielded and appropriate noise muffling devices installed to reduce noise levels that affect nearby on- and/or off-campus noise-sensitive uses. As such, the noise levels generated by this new equipment would not cause a substantial permanent on- or off-campus increase in ambient noise levels under either the proposed Project or Alternative D; however, the overall noise impact would be less with Alternative D.

Population and Housing

As addressed in Section 4.10, Population and Housing, the proposed Project would result in less than significant population and housing impacts. The proposed 2008 NHIP, which would serve to meet an existing demand for on-campus housing, would continue to be implemented with Alternative D. The population increase associated with the proposed Project (increase of 2,780 individuals on an average weekday) would also occur under Alternative D, as the horizon year would be the same (2013). Therefore, as with the proposed Project, the increase in population would be consistent with local and regional growth projections and would have less than significant impacts related to population and housing.

Public Services

As addressed in Section 4.11, Public Services, continued compliance with the identified 2002 LRDP Final EIR PPs, would ensure that the proposed Project (including the proposed 2008 NHIP) would not result in significant public services impacts. Although there would be a reduction in the remaining development allocation, Alternative D would result in the same increase in population as the proposed Project which would cause an increased demand for public services (police protection, fire protection, and schools). Although there would be a slight increase in demand for public services under this alternative, the overall impact would be similar to the proposed Project (less than significant) as no new or expanded facilities would be required.

Recreation

As identified in Section 4.12, Recreation, the proposed Project, including the proposed 2008 NHIP, would result in less than significant recreation impacts. Although there would be a reduction in the remaining development allocation, Alternative D would result in the same increase in population as the proposed Project which would cause an increased demand for recreational facilities. Although there would be a slight increase in demand for recreational facilities under this alternative, the overall impact would be similar to the proposed Project (less than significant). As identified in Section 4.12, the proposed Project would include a fitness center as a component of the proposed 2008 NHIP. This Alternative would implement the proposed 2008 NHIP and associated fitness center and the impacts associated with construction of this facility would be the same under Alternative D as compared with the proposed Project.

Traffic and Circulation

As discussed previously, the proposed 2008 NHIP would have a net reduction in average daily vehicle trips (reduction of approximately 378 daily trips) because students currently living off campus would live on campus and no longer need to commute. The proposed 2008 NHIP would be implemented under Alternative D; therefore, the reduction in traffic associated with this undergraduate housing would also occur under this Alternative. However, the decrease in remaining development allocation by 550,000 gsf under Alternative would not result in a reduction in total daily vehicle trips since trip generation is based on the number of parking spaces, and the total amount of parking would not be reduced with Alternative D (the parking limit would remain at 25,169 spaces). Therefore, Alternative D would result in similar long-term operational impacts as the proposed project, even with continued implementation of the identified 2002 LRDP Final EIR PPs: impacts at eight study intersection would be significant and unavoidable, and impacts to freeway mainline facilities would be less than significant. Construction-related traffic impacts would also remain significant and unavoidable under Alternative D as similar construction activities as the proposed Project would occur.

As with the proposed Project, with implementation of the identified 2002 LRDP Final EIR PPs, less than significant parking impacts on campus during construction and long-term operation would result under this Alternative. Since this Alternative would also include development of the proposed 2008 NHIP, the less than significant impact to off-campus, on-street parking along Gayley Avenue would also occur.

As with the proposed Project, continued implementation of identified 2002 LRDP Final EIR PPs would ensure that development under this Alternative would also be consistent with plans and programs associated with alternative transportation, and would not result in vehicular or pedestrian hazards during construction or operation.

Utilities and Service Systems

As identified in Section 4.14, Utilities and Service Systems, with continued compliance with the identified 2002 LRDP Final EIR PPs, the proposed Project (including the proposed 2008 NHIP) would not result in significant utilities and service systems impacts and would not require the construction of new or expanded facilities beyond that needed to connect new buildings to existing on campus facilities.

As with the proposed Project, Alternative D would result in an increase in water and energy demand and would generate additional wastewater. However, because there would be less overall development with Alternative D compared to the proposed Project (1.32 million gsf compared to 1.87 million gsf) the demand for water and energy and amount of wastewater generated would also be reduced. Additionally, because there would be less development on campus, the need to construct new utility connections would also be reduced.

As with the proposed 2008 NHIP, the projected water demand for Alternative D would not exceed the total projected demand for the 2002 LRDP, as amended, and adequate water has been determined available to serve the campus at full implementation of the 2002 LRDP, as amended. Therefore, this impact is less than significant, similar to the proposed Project; however, the impact to available water supplies would be less.

Similarly, Alternative D would generate less solid waste than the proposed Project, and although the impact of the proposed Project is less than significant, the impact to landfills that serve the campus would be reduced.

Climate Change

As discussed in Section 4.15, Climate Change, the proposed Project, which includes the 2008 NHIP, would not result in a significant impact related to global climate change. The campus would continue to implement the UC Policy on Sustainable Practices, including compliance with the UCLA Climate Action Plan. The proposed 2008 NHIP which would be implemented with this Alternative would reduce the overall amount of traffic generated by campus uses by reducing the number of students commuting to campus. However, climate change is a global issue and overall Alternative D would have similar less than significant impacts as the proposed Project related to global climate change.

Ability to Meet the Project Objectives

This alternative involves provision of the same 2008 NHIP as the proposed Project, and thus meets most Project Objectives associated with providing the proposed new housing. The concern, however, is that Alternative D reallocates development square footage previously approved under the 2002 LRDP in other zones, in order to accommodate the 2008 NHIP. Under

this alternative, an amendment to the 2002 LRDP to re-allocate (or transfer) development allocation from other campus zones to accommodate the 2008 NHIP in the Northwest zone would be required. Consequently, this Alternative fails to meet the following important Project Objectives:

- Meet the foregoing objectives to provide additional on-campus undergraduate student housing, while reserving the campus-wide remaining new development allocation of 1.32 million gsf previously approved under the 2002 LRDP to address the needs of the academic, research and community service mission of UCLA, for a maximum development of 1.87 million gsf of additional building space by 2013 (Objective No. 12).

- Carry forward the academic, physical and operational objectives identified in the 2002 LRDP, except as modified by Project Objective 12 above (Objective No. 13).

Alternative D thus fails to meet Project Objectives as well as the proposed Project.

5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) states that if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Table 5-1 provides, in summary format, a comparison of the level of impacts for each alternative to the proposed project. The impact of the respective alternatives is identified followed parenthetically by the comparison to the impact of the proposed Project.

Based on the comparative analysis provided in Section 5.3 above for each of the alternatives, the Reduced Development Alternative (Alternative D) is the environmentally superior alternative. As shown in Table 5-1, for each impact category this Alternative would have either similar or less impacts compared to the proposed Project. The reduction in impacts is primarily related to the overall reduction in the amount of development that could occur on campus compared to the proposed project (reduction of 550,000 gsf since there would not be an amendment to the 2002 LRDP to increase the development allocation in the Northwest zone to accommodate the proposed 2008 NHIP). However, this alternative would not avoid any significant unavoidable impacts resulting from implementation of the proposed Project related to air quality, traffic, and noise. Additionally, although the Reduced Development Alternative is environmentally superior to the proposed Project, as discussed above, this alternative would not meet key Project Objectives.

As shown in Table 5-1 the other build alternatives for the proposed 2008 NHIP (Alternative Site and Reduced Footprint) would result in some impacts that are similar or reduced compared to the proposed 2008 NHIP; however, they would also result in increased impacts. Most notably, each of these alternatives would result in a new significant unavoidable land use impact that would not occur with the proposed Project related to land use compatibility.

TABLE 5-1
COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

Impact Area	No Project/Continued Development Under 2002 LRDP	Alternative Location[a]	Reduced Footprint[a]	Reduced Development
Aesthetics	LS (similar)	LS (less)	LS (greater)	LS (less)
Air Quality				
Construction	SU (similar)	SU (greater)	SU (greater)	SU (similar)
Operation	SU (greater)	LS (similar)	SU (similar)	SU (similar)
Biological Resources	LS (similar)	LS (less)	LS (less)	LS (less)
Cultural Resources	LS (similar)	LS (similar)	LS (less)	LS (less)
Geology and Soils	LS (similar)	LS (similar)	LS (less)	LS (similar)
Hazards and Hazardous Materials	LS (similar)	LS (less)	LS (similar)	LS (less)
Hydrology and Water Quality	LS (less)	LS (less)	LS (less)	LS (less)
Land Use and Planning	LS (similar)	SU (greater)	SU (greater)	LS (less)
Noise and Vibration				
Construction (On Campus)	SU (similar)	SU (similar)	SU (similar)	SU (similar)
Construction (Off Campus)	LS (similar)	LS (less)	LS (less)	SU (less)
Operation	LS (greater)	LS (similar)	LS (less)	LS (less)
Population and Housing	LS (similar)	LS (similar)	LS (similar)	LS (similar)
Public Services	LS (less)	LS (similar)	LS (similar)	LS (less)
Recreation	LS (similar)	LS (similar)	LS (similar)	LS (less)
Transportation/Traffic				
Construction	SU (similar)	SU (greater)	SU (greater)	SU (similar)
Operation	SU (greater)	NI (similar)	NI (similar)	SU (similar)
Utilities and Service Systems	LS (less)	LS (similar)	LS (similar)	LS (less)
Climate Change	LS (similar)	LS (similar)	LS (similar)	LS (similar)

LS - Less Than Significant; SU – Significant and Unavoidable

a This alternative specifically addresses implementation of the proposed 2008 NHIP. Impacts associated with the implementation of remaining development allocation under the 2002 LRDP [1.32 million gsf] would be the same as the proposed Project and not discussed in this analysis as they would remain the same as evaluated throughout Section 4 of this EIR.

SECTION 6.0 OTHER CEQA CONSIDERATIONS

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Environmental Impact Report (EIR) must also identify (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project, (5) mitigation measures proposed to minimize significant effects, and (6) alternatives to the proposed project.

6.1 SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Table 1-1, Summary of Environmental Impacts and Mitigation Measures, which is contained in Section 1 of this EIR, and Sections 4.1 through 4.15 of this EIR provide a comprehensive identification of the proposed project's environmental effects, including the level of significance both before and after mitigation.

6.2 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. Implementation of the proposed Project (2008 NHIP and buildout of the 2002 LRDP, as amended) would result in the following significant and unavoidable project-related impacts:

6.2.1 PROPOSED 2008 NHIP

- ***Impact 4.2.2*** – Regional construction emissions would exceed SCAQMD standards for NOx.

- ***Impact 4.2-4a*** – Short-term construction-related cumulatively considerable net increase of a criteria pollutant for which the project region is in non-attainment (NOx).

- ***Impact 4.9-2*** – Construction activities could generate and expose persons on campus, including residents, to excessive groundborne vibration levels.

- ***Impact 4.9-7*** – Construction activities could result in substantial temporary or periodic increases in ambient noise levels at on-campus locations.

- ***Impact 4.9-8*** – Construction activities could result in substantial temporary or periodic increases in ambient noise levels at off-campus locations.

- ***Impact 4.13-2*** – Generation of construction-related vehicle trips, which could impact traffic conditions along roadway segments and at individual intersections.

6.2.2 REMAINING BUILDOUT OF THE 2002 LRDP AS AMENDED

- ***Impact 4.2.2*** – Regional construction emissions would exceed SCAQMD standards for NOx.

- ***Impact 4.2-3b*** - Daily operational emissions of VOC and NOx that could contribute substantially to an existing or projected air quality violation.

- ***Impact 4.2-4c*** – Short-term and long-term cumulatively considerable net increase of a criteria pollutant for which the project region is in non-attainment (NOx).

- ***Impact 4.9-2*** – Construction activities could generate and expose persons on campus, including residents, to excessive groundborne vibration levels.

- ***Impact 4.9-7*** – Construction activities could result in substantial temporary or periodic increases in ambient noise levels at on-campus locations.

- ***Impact 4.9-8*** – Construction activities could result in substantial temporary or periodic increases in ambient noise levels at off-campus locations.

- ***Impact 4.13-1b*** – Generation of additional vehicular trips, which would result in a substantial degradation in intersection levels of service.

- ***Impact 4.13-2*** – Generation of construction-related vehicle trips, which could impact traffic conditions along roadway segments and at individual intersections.

- ***Impact 4.13-3b*** - Exceedance of established service levels at intersections designated by the Los Angeles Congestion Management Program.

Many project-related impacts resulting from implementation of the proposed Project can be mitigated to a less than significant level; however, cumulative impacts would result from implementation of the proposed Project in combination with the development of related projects in the area and projected regional growth. The impact areas for which there is a significant and unavoidable contribution of the proposed Project to significant and adverse cumulative impacts include the following:

- ***Air Quality*** – Short-term construction activities and long-term operations associated with the proposed Project would contribute to a cumulative considerable increase in regional emissions of a pollutant for which the Basin is in non-attainment (NOx is an O_3 precursor and the Basin is in nonattainment for O_3).

- ***Noise and Vibration*** – If there were concurrent construction projects in the same area (on- and off-campus), the combined noise increase would exceed 10 dBA resulting in a temporary cumulatively significant impact.

- ***Transportation/Traffic*** – The proposed Project would result in significant cumulative impacts at the following study intersections:

    15. Montana Avenue/Gayley Avenue and Veteran Avenue
    35. Wilshire Boulevard and Sepulveda Boulevard
    36. Wilshire Boulevard and Veteran Avenue
    37. Wilshire Boulevard and Gayley Avenue
    38. Wilshire Boulevard and Westwood Boulevard
    43. Wilshire Boulevard and Beverly Glen Boulevard
    44. Ohio Avenue and Sawtelle Boulevard

52. Santa Monica Boulevard and Veteran Avenue

- ***Transportation/Traffic*** – The proposed Project would result in significant cumulative impacts at the following designated CMP arterial monitoring stations: Sepulveda Boulevard/Wilshire Boulevard, and Wilshire Boulevard/Beverly Glen Boulevard.

- ***Transportation/Traffic*** – Due to the potential overlap between construction of projects under the 2002 LRDP, as amended, and construction of projects off campus, it is anticipated that at times the proposed Project's contribution to cumulative short-term traffic would be considerable and, therefore, significant and unavoidable.

6.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Specifically, Section 15126.2(c) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if

- The primary and secondary impacts would generally commit future generations to similar uses

- The project would involve a large commitment of nonrenewable resources

- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project

- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy)

Implementation of the proposed Project would result in the continued commitment of the UCLA campus to University-related uses, thereby precluding any other uses for the lifespan of the campus. UCLA's ownership of the campus represents a long-term commitment of the campus to the University's education, research and community service mission. Restoration of the campus to pre-developed conditions would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment. In addition, the proposed Project extends the 2002 LRDP from a horizon year of 2010 to 2013, while increasing development allocation only to accommodate the proposed 2008 NHIP; maintaining the same vehicle trip limits, and parking limits of the 2002 LRDP (and previously the 1990 LRDP); and accommodating a slight increase in the campus population. The proposed LRDP Amendment updates the zone allocations, but does not change the overall remaining development allocation under the 2002 LRDP except for the addition of 550,000 gsf in the Northwest zone necessary to accommodate the proposed 2008 NHIP. In effect, with the exception of the proposed 2008 NHIP, which is evaluated at a project level in this EIR, the total amount of potential

development, and its environmental impacts, was previously analyzed in the 2002 LRDP Final EIR and no additional commitment to additional future uses would occur. While the 2002 LRDP, as amended, could be said to continue the commitment of the UCLA campus site for University purposes for future generations, the 2002 LRDP, as amended, does not represent a change in commitment from existing conditions.

Resources that will be permanently and continually consumed by project implementation include water, electricity, natural gas, and fossil fuels; 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. In fact, the growth in the campus population is responsive to population growth that has already occurred in the state. Therefore, natural resources are currently being consumed by this demographic group and would continue to be consumed by this group at some location. Nonetheless, construction activities related to the proposed Project would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobiles and construction equipment.

With respect to operational activities on campus, continued compliance with all applicable building codes, as well as PPs and MMs identified in this EIR that were previously adopted as part of the 2002 LRDP Final EIR, compliance with new PPs and MMs, and standard campus conservation features of proposed projects, would ensure that all natural resources are conserved to the maximum extent possible. It is also possible that new technologies or systems will emerge, or will become more cost-effective or user-friendly, to further reduce the campus reliance upon nonrenewable natural resources.

In January 1994, the Cogeneration Plant began providing electricity to the UCLA campus in two combustion turbine generators using a combination of methane gas from the nearby Mountaingate Landfill as well as natural gas. The facility simultaneously produces electricity and steam for the entire campus, as well as chilled water for many buildings on the main campus for use in air conditioning and cooling activities. The simultaneous production of electricity and steam greatly increases the campus energy utilization efficiency and improves the capacity and reliability of the campus electrical distribution system. Operation of the facility has reduced the campus long-term utility expenditures and dependence upon electricity provided by the Los Angeles Department of Water and Power (LADWP). The Cogeneration Plant currently provides 70 percent of the electrical needs of the campus. However, according to the campus Energy Services Department, implementation of the 2002 LRDP, as amended, would reduce the proportion of campus demand met by campus. Remaining electrical needs are, and would be, supplied by LADWP. Consequently, a long-term increase in demand for electricity would occur.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with the project. While the campus uses, transports, stores, and disposes of hazardous wastes, as described in Impact 4.6-1 of Section 4.6, Hazards and Hazardous Materials, the campus complies with all applicable State and federal laws and existing campus programs, practices, and procedures (as required by PP 4.6-1) related to hazardous materials, which reduces the likelihood and severity of accidents that could result in irreversible environmental damage. In fact, over the campus history, there has never been an accident that resulted in irreversible environmental damage, indicating that current practices with respect to hazardous materials handling are adequate, and thus the potential for the proposed Project to cause irreversible environmental damage from an accident or upset of hazardous materials is less than significant.

The proposed Project would not involve a wasteful or unjustifiable use of energy or other resources. In 2002, the campus began operating the Thermal Energy Storage System (TES), an

extension of the campus Cogeneration Plant that stores chilled water produced during low energy cost periods (nights) for use during high energy cost periods (days). This system saves energy costs while increasing the efficiency and capacity of the campus chilled water production system to ensure a continuous supply of chilled water to essential campus facilities.

As previously discussed and further discussed in Section 4.14, Utilities and 4.15, Climate Change, the campus has instituted a Green Building program for new construction, renovations and existing buildings. In addition, over the years many energy conservation projects have been undertaken and continue to be implemented including, but not limited to lighting efficiency upgrades, HVAC efficiency upgrades, installation of in building lighting occupancy sensors, etc. In addition, the campus shall continue to implement all new development under the 2002 LRDP, as amended, in accordance with the UC Policy on Sustainable Practices (discussed in detail in Section 4.15, Climate Change) and specifications contained in Title 24 of the CCR. The UC Policy on Sustainable Practices includes provisions for new construction and major renovation projects to outperform Title 24 energy performance standards by a minimum of 20 percent.

Through the efficient use of electricity on campus, the use of natural gas on the campus would also occur in an efficient manner, as the cogeneration facility on campus is fired by natural gas. Improvements to the efficiency of HVAC units will also allow more efficient use of natural gas for heating.

6.4 GROWTH-INDUCING IMPACTS

As required by the CEQA Guidelines, an EIR must include a discussion of the ways in which the proposed project could directly or indirectly foster economic development or population growth, or the construction of additional housing and how that growth would, in turn, affect the surrounding environment (CEQA Guidelines Section 15126.2(d)). Growth can be induced in a number of ways, including the elimination of obstacles to growth, or through the stimulation of economic activity within the region. The discussion of removal of obstacles to growth relates directly to the removal of infrastructure limitations or regulatory constraints that could result in growth unforeseen at the time of project approval. Under CEQA, induced growth is not considered necessarily beneficial, detrimental, or of little significance to the environment.

In general, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the criteria identified below:

- The project removes an impediment to growth (e.g., the establishment of an essential public service, or the provision of new access to an area)
- The project results in the urbanization of land in a remote location (leapfrog development)
- Economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion), and
- The project establishes a precedent-setting action (e.g., a change in zoning or general plan amendment approval)

If a project meets any one of these criteria, it may be considered growth inducing. Generally, growth-inducing projects are either located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure such as sewer and water facilities or roadways, or encourage premature or unplanned growth.

The proposed Project represents a continuation of the use of the UCLA campus for University purposes. With the exception of the increased square footage allocation in the Northwest zone for the 2008 NHIP (which would not induce population growth), the proposed Project maintains the same square footage, parking and vehicle trip limits established by the 2002 LRDP (and previously the 1990 LRDP). Accordingly, the proposed Project would not remove an impediment to growth.

Overall campus population growth by 2013 (discussed in Section 4.10, Population and Housing, of this EIR) reflects an increase of approximately 4.65 percent on an average weekday (increase of 2,780 individuals including students, academic and staff employees, and visitors) over existing conditions. This growth by 2013 is not caused by the proposed Project, but is projected whether or not the proposed Project proceeds.

The proposed Project would accommodate this anticipated population growth. Additionally, campus population growth is consistent with the regional growth assumed in SCAG's regional growth forecast (refer to the discussion provided in Section 4.10, Population and Housing).

The continued development of the UCLA campus pursuant to the 2002 LRDP, as amended, would not encourage growth through the provision of new and essential public services or access opportunities, nor would it result in urbanization of land in a remote location, resulting in "leapfrog" development. The UCLA campus is located in an urbanized area that is served by a complex and extensive network of electricity, water, sewer, storm drain, communications, roadways, and other infrastructure sized to accommodate or allow existing and planned growth. New development occurs on "infill" sites as very little undeveloped land exists on the urbanized campus. Further, the proposed Project does not involve the construction of any new roadways other than those required for internal circulation or ingress/egress into new facilities.

The proposed Project would not result in significant growth inducement as a result of economic expansion or population growth. The addition of population in an area has the potential to increase the amount of spending, thereby stimulating the economic activity of the area. Increased future employment generated by resident and employee spending can ultimately result in the physical development of space or the need for services to accommodate additional employees to serve the new population. It is the provision of this physical space and its specific location that will determine the magnitude of environmental impacts of the additional economic activity. Although the economic effect can be predicted, the actual environmental implications of this type of economic growth are difficult to predict, since they can be spread throughout the region and beyond.

While short-term employment opportunities would be generated during the construction period for individual projects developed as part of the proposed Project, including the 2008 NHIP, it is anticipated that construction employees would commute from elsewhere in the region, rather than relocate to the UCLA area for a temporary construction assignment. Nonetheless, implementation of the proposed Project may result in the creation of indirect and induced jobs. Indirect jobs are those that would be created when the campus purchases goods and services from businesses in the region, and induced jobs are those that are created when wage incomes of those employed in direct and indirect jobs are spent on the purchase of goods and services in the region.

UCLA's economic impacts are primarily the result of campus purchases of goods and services, payment of taxes and salaries, capital expenditures, and visitor spending, which affects the regional economy of the City and County of Los Angeles, and on a more indirect basis the State of California. While UCLA contributes to the economic health of Westwood Village, historically, however, economic activity in Westwood Village, or the periodic fluctuation thereof, has not

been determined by growth or decline in campus population. Rather, it has been based upon general economic conditions, fluctuations in consumer confidence and spending, the shifting popularity of Westwood as a destination for shopping and entertainment as compared to other similar areas in Southern California, and other social and economic trends.

While there would be a total increase over 5 years of 2,780 average weekday population (i.e. students, academic and staff employees and visitors) as a result of the proposed Project, this increase would not exceed SCAG growth projections, and is a small component of the job growth anticipated in the local and regional economies. For example, based on the direct-to-indirect employment impact ratio identified in Section 4.10 (i.e., 0.68 direct and indirect jobs for every direct job), the proposed Project's estimated 957 employees would be expected to generate 651 indirect jobs, for a total employment generation of approximately 1,608 jobs throughout Los Angeles County. Even if all 1,608 additional jobs were filled by employees from outside the SCAG region and they settled within the City of Los Angeles Subregion, this would represent only 0.9 percent of the SCAG population growth forecast between 2005 and 2015 for both the Los Angeles Subregion (176,534) and the City of Los Angeles (172,733). Further, there would be no change in the operation of the campus administrative or academic programs.

It is possible that faculty and staff added as a result of the proposed Project may seek housing opportunities in the Westwood Community Plan area, as well as other areas such as West Los Angeles, Santa Monica, Culver City, and/or the San Fernando Valley. However, the specific distribution of faculty and staff housing in these and other areas is speculative, and is driven by many factors such as housing price, choice of school district, and personal preferences that are outside the control or influence of UCLA. It should further be considered that most staff positions (which are the majority of the additional jobs that would be added as a result of the proposed Project) involve vocational opportunities that are generally found in most communities, and may not offer a unique enough opportunity to induce job-seekers to relocate its household for the sole purpose of filling these positions. Due to the existing unemployment rate in Los Angeles County, it is expected that the vast majority of additional staff positions associated with buildout of the 2002 LRDP, as amended, would be filled by qualified area residents. Accordingly, it is anticipated that persons already residing in the area would fill most new staff positions. Any incremental increase in indirect demand created by additional campus population growth associated with the proposed Project is expected to be accommodated by the supply of resources available in the general economy as it grows over planning horizon of the 2002 LRDP, as amended. Therefore, growth-inducing impacts are considered less than significant.

Lastly, a decision by The Regents of the University of California to approve the proposed 2008 NHIP and proposed amendment to the 2002 LRDP is not a precedent-setting action. Approval of specific projects under the 2002 LRDP, as amended, would be considered on a case-by-case basis and would not necessarily mean that other development approvals in the area would follow. As noted above, the UCLA campus is located in an already urbanized area. As previously discussed, the scale of physical development with the remaining development allocation under the proposed Project does not exceed the remaining development allocations approved in the prior LRDP, except for the increased development allocation (550,000 gsf) for the Northwest zone to accommodate the proposed 2008 NHIP which is addressed at a project-specific level in this EIR. Additionally, the increase in population associated with the extended planning horizon for the 2002 LRDP, as amended, is a function of the State's Master Plan for Higher Education, which itself is intended to accommodate statewide growth trends. Therefore, the proposed Project does not set any new precedents for growth.

6.5 MITIGATION MEASURES PROPOSED TO MINIMIZE SIGNIFICANT EFFECTS OF THE 2002 LRDP

Tables 1-1 and 1-2 provided in Section 1 of this EIR, provide a comprehensive identification of the environmental effects and proposed mitigation measures for the proposed 2008 NHIP's and remaining buildout of the 2002 LRDP, as amended, respectively.

6.6 ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives to the proposed Project are presented in Chapter 5, Alternatives, of this Draft EIR.

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SECTION 8.0 LIST OF ABBREVIATIONS

The following comprehensive list of abbreviations is provided to clarify references used in this EIR.

Acronym	Acronym and Abbreviation Description
A	
AB	Assembly Bill
ACUPCC	American College & University President's Climate Commitment
ADT	average daily trips
AEA	Atomic Energy Act
AFV	Alternative fuel vehicle
AGSM	Anderson Graduate School of Management
AHC	Academic Health Center
AHCFRP	Academic Health Center Facilities Reconstruction Plan
ANSI	American National Standards Institute
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
ATCS	Adaptive Traffic Control System
ATSAC	Automated Traffic Surveillance and Control
AVR	Average Vehicle Ridership
AVTA	Antelope Valley Transportation Authority
B	
BACT	Best Available Control Technology
BMP	Best Management Practices
BTU	British thermal units
C	
CA	City Attorney
CAFE	Corporate Average Fuel Economy
CAIT	Climate Analysis Indicators Tool
Cal-EPA	California Environmental Protection Agency
Cal-OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAP	Criteria air pollutant
CAPCOA	California Air Pollution Control Officers Association
CAR	Commuter Assistance-Ridesharing
CAT	Climate Action Team
CBC	California Building Code
CCAR	California Climate Action Registry
CCB	Culver City Bus

Acronym	Acronym and Abbreviation Description
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDMG	California Department of Conservation, Division of Mines and Geology
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CH_4	methane
CHP	California Highway Patrol
CHRIS	California Historic Resources Information System
CHS	Center for Health Sciences
CIWMB	California Integrated Waste Management Board
CMA	Critical Movement Analysis
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	community equivalent noise level
CNG	compressed natural gas
CO	carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
COP	Certificate of Participation
CPA	Community Planning Area
CRHR	California Register of Historic Resources
CSO	Community Service Officer
CSWMP	Comprehensive Storm Water Management Program
CWA	Clean Water Act
D	
D/C	demand/capacity
dB	decibels
dBA	A-weighted decibels
DD	Doubling of distance (noise measurements)
DFSC	Drug Free Schools Committee
DHS	California Department of Health Services
DIRT	Disaster Initial Response Team
DTSC	California Department of Toxic Substances Control
DU	Dwelling Unit
E	
EDR	Environmental Data Resources
EH&S	Environment, Health and Safety
EIR	Environmental Impact Report

Acronym	Acronym and Abbreviation Description
EPC	Environmental Performance Criteria
EPEAT	Electronic Product Environmental Assessment Tool
EPP	environmentally preferable procurement
ESB	Emergency Services Building
ESF	Energy System Facility
ESF	Environmental Service Facility
EV	electric vehicle
F	
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FHWA-RD-77-108	Federal Highway Prediction Model
FICUN	Federal Interagency Committee on Urban Noise
FIRM	Flood Insurance Rate Map
FRA	Federal Railroad Administration
FSC	Forest Stewardship Council
ft^3	cubic feet
FTE	full-time equivalent
G	
GAMMA	Greeks Advocating Mature Management of Alcohol
gpd	gallons per day
gpd/kgsf	gallons per day per 1,000 gross square feet
GHG	Greenhouse gas
GIS	Geographic information system
GRP	general reporting protocol
gsf	gross square feet
GWP	Global warming potential
H	
HCM	Highway Capacity Manual
HFC	hydrofluorocarbon
HI	Hazard Index
HOV	high occupancy vehicle
HR	House Resolution
HRA	Health Risk Assessment
HTP	Hyperion Treatment Plant
HUD	United States Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning

Acronym	Acronym and Abbreviation Description
I	
IFPS	Intramural Field Parking Structure
INM	Integrated Noise Model (Federal Aviation Administration)
I/S	Intersection
IS	Initial Study
IWMD	Industrial Waste Management Division
K	
kWh	kilowatt-hour
L	
LAA	Los Angeles Aqueduct
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAPD	Los Angeles Police Department
LAUSD	Los Angeles Unified School District
LAX	Los Angeles World Airport
LED	light emitting diodes
L_{eq}	equivalent energy noise level
LLRW	low-level radioactive waste
L_{max}	maximum instantaneous noise level
L_{min}	minimum instantaneous noise level
LNG	liquid natural gas
LOS	level of service
LRDP	Long Range Development Plan
LULUCF	Land-Use, Land-Use Change and Forestry
LUST	leaking underground storage tanks
M	
MBTA	Migratory Bird Treaty Act
MCE	maximum credible earthquake
MDU	multiple dwelling unit
MEI	maximally exposed individual
MEP	maximum extent practicable
MG	Million gallons
mgd	million gallons per day
MM	mitigation measure
MMBTU	one million British thermal units
MMP	Mitigation Monitoring Program

Acronym	Acronym and Abbreviation Description
MMRP	Mitigation Monitoring and Reporting Program
$MMTCO_2E$	CO_2 equivalent million metric tons
MOU	Memorandum of Understanding
Mpg	Miles per gallon
MS4s	municipal separate storm sewer systems
MSDS	material safety data sheets
MTA	Metropolitan Transportation Authority
MTBE	methyl tertiary-butyl ether
$MTCO_2$	metric tons of carbon dioxide
Mw	moment magnitude
MWD	Metropolitan Water District
N	
N_2O	Nitrous oxide
NAL	Numeric action level
NEL	Numeric effluent limitations
NHIP	Northwest Housing Infill Project
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historical Places
NTSB	National Transportation Safety Board
O	
O_3	Ozone
O-D	Origin and destination
OEHHA	Office of Environmental Health Hazard Assessment
OPR	California Office of Planning and Research
OVRFL	Overflow
P	
Pb	lead
PCB	polychlorinated biphenyls
PFC	perfluorocarbon
PM10	particulate matter 10 microns in size or less in diameter
PM2.5	particulate matter 2.5 microns in size or less in diameter
PPM	parts per million
PPs	campus programs, practices, and procedures
PRC	Public Resources Code
psi	pounds per square inch
PUC	California Public Utilities Commission

Acronym	Acronym and Abbreviation Description
PZEV	partial zero emissions vehicle
Q	
QZAB	Qualified Zone Academy Bond
R	
RCPG	Regional Comprehensive Plan and Guide
RCRA	Resources Conservation Recovery Act
RD	reporting district
REAP	Rain Event Action Plan
RMPP	Risk Management Prevention Plan
RRUCLAMC	Ronald Reagan UCLA Medical Center
RSD	Radiation Safety Division
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
S	
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCGC	Southern California Gas Company
SCH	State Clearinghouse
SCT	Santa Clarita Transit
SDG&E	San Diego Gas and Electric
SEAS	School of Engineering and Applied Sciences
sf	square feet
SF_6	sulfur hexafluoride
SFB	San Fernando Basin
SHMP	Student Housing Master Plan
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SMMBL	Santa Monica Municipal Bus Lines
SO_2	sulfur dioxide
SOx	sulfur oxides
SOV	Single occupant vehicle
SQTF	Storm Water Quality Task Force
SRA	source receptor area
SRLF	Southern Regional Library Facility
SWH	Southwest Campus Housing Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

Acronym	Acronym and Abbreviation Description
T	
TAC	toxic air contaminants
TAZ	Traffic analysis zone
TDM	Transportation Demand Management
TDS	total dissolved solids
TES	thermal energy storage system
TIA	Traffic Impact Analysis
TMMA	Transportation Mitigation Monitoring Program
TSA	Transportation Systems Analysis
U	
UBC	Uniform Building Code
UC	University of California
UCLA	University of California, Los Angeles
UCPD	University of California Police Department
UES	Corinne A. Seeds University Elementary School
UNFCCC	United Nations Framework Convention on Climate Change
URBEMIS	Urban Emissions Model
USDHHS	Unites States Department of Health and Human Services
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UST	underground storage tanks
USTP	Underground Storage Tank Program
UWMP	Urban Water Management Plan
V	
VdB	vibration decibels
VMT	vehicle miles traveled
VOC	volatile organic compounds
VPR	vehicles per hour
W	
WDR	waste discharge requirements
Z	
ZEV	zero emissions vehicle
ZOA	zone of analysis