

UC DAVIS

CASTILIAN HALL REDEVELOPMENT

Tiered Initial Study

The following Initial Study has been prepared in compliance with CEQA.

Prepared By:

ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY

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April 2012

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1 PROJECT INFORMATION

Project title:

Castilian Hall Redevelopment

Project location:

University of California, Davis
Yolo County

Lead agency's name and address:

The Regents of the University of California
1111 Franklin Street
Oakland, CA 94607

Contact person:

A. Sidney England, Assistant Vice Chancellor for Environmental
Stewardship and Sustainability, 530-752-2432

Project sponsor's name and address:

Environmental Stewardship and Sustainability
University of California
One Shields Avenue
436 Mrak Hall
Davis, CA 95616-8678

Location of administrative record:

See project sponsor.

Identification of previous documents relied upon for tiering purposes:

This environmental analysis is tiered from the Environmental Impact Report (EIR) for the UC Davis 2003 Long Range Development Plan (2003 LRDP) (State Clearinghouse No. 2002102092). The 2003 LRDP is a comprehensive land use plan that guides physical development on campus to accommodate projected enrollment increases and expanded and new program initiatives through the 2015-16 academic year. Section 2.2 provides additional information about the tiering process. The 2003 LRDP and its EIR are available for review at the following locations:

- UC Davis Office of Environmental Stewardship and Sustainability, 436 Mrak Hall on the UC Davis campus
- Reserves at Shields Library on the UC Davis campus
- Yolo County Public Library at 315 East 14th Street in Davis
- Online at http://sustainability.ucdavis.edu/progress/commitment/environmental_review/index.html

2 INTRODUCTION

2.1 INITIAL STUDY

Pursuant to Section 15063 of the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations, Sections 15000 et seq.), an Initial Study is a preliminary environmental analysis that is used by the lead agency as a basis for determining whether an EIR, a Mitigated Negative Declaration, or a Negative Declaration is required for a project. The CEQA Guidelines require that an Initial Study contain a project description, description of environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project's consistency with existing, applicable land use controls, and the name of persons who prepared the study.

In 2011, UC Davis ended the use of Castilian Hall for student housing because of seismic safety concerns and the final residents of Castilian Hall moved out of the buildings in June 2011. At that time, UC Davis did not have a redevelopment plan for the Castilian parcel and briefly contemplated an action to demolish the structures and retain the land for future housing needs. In July 2011, UC Davis started the CEQA review process for a project titled the "Castilian Hall Demolition Project" (State Clearinghouse No. 2011082014) which began to evaluate the environmental effects of demolishing the existing buildings and retaining the land in a housing reserve status.

In October 2011, UC Davis decided to revisit the issue of redevelopment at the Castilian parcel. With consideration of a redevelopment action, UC Davis stopped the prior environmental review (i.e. the Castilian Hall Demolition Project (State Clearinghouse No. 2011082014)) and embarked on a redevelopment planning effort for the site. With a new plan for demolition and subsequent redevelopment, this April 2012 Tiered Initial Study evaluates the environmental effects of demolishing the existing buildings and redeveloping the Castilian site to provide housing for 225 to 275 graduate students in apartment-style housing. This Tiered Initial Study is expected to lead to preparation of an Environmental Impact Report that will support consideration of demolition and redevelopment at the Castilian parcel. The tiering process and decision to prepare an Environmental Impact Report are further described in Section 2.2 below.

2.2 TIERING PROCESS

The CEQA concept of "tiering" refers to the evaluation of general environmental matters in a broad program-level EIR, with subsequent focused environmental documents for individual projects that implement the program. This environmental document incorporates by reference the discussions in the 2003 LRDP EIR (the Program EIR) and concentrates on project-specific issues. CEQA and the CEQA Guidelines encourage the use of tiered environmental documents to reduce delays and excessive paperwork in the environmental review process. This is accomplished in tiered documents by eliminating repetitive analyses of issues that were adequately addressed in the Program EIR and by incorporating those analyses by reference.

Section 15168(d) of the State CEQA Guidelines provides for simplifying the preparation of environmental documents on individual parts of the program by incorporating by reference analyses and discussions that apply to the program as a whole. Where an EIR has been prepared or certified for a program or plan, the environmental review for a later activity consistent with the program or plan should be limited to effects that were not analyzed as significant in the prior EIR or that are susceptible to substantial reduction or avoidance (CEQA Guidelines Section 15152[d]).

This Initial Study is tiered from the UC Davis 2003 LRDP EIR in accordance with Sections 15152 and 15168 of the CEQA Guidelines and Public Resources Code Section 21094. The 2003 LRDP EIR is a Program EIR that was prepared pursuant to Section 15168 of the CEQA Guidelines. The 2003 LRDP is a comprehensive land use plan that guides physical development on campus to accommodate projected enrollment increases and expanded and new program initiatives through the 2015-16 academic year. The 2003 LRDP EIR analyzes full implementation of uses and physical development proposed under the 2003 LRDP, and it identifies measures to mitigate the significant adverse program-level and cumulative impacts associated with that growth. The proposed project is an element of the growth that was anticipated in the 2003 LRDP and evaluated in the 2003 LRDP EIR.

By tiering from the 2003 LRDP EIR, this Tiered Initial Study will rely on the 2003 LRDP EIR for the following:

- a discussion of general background and setting information for environmental topic areas;
- overall growth-related issues;
- issues that were evaluated in sufficient detail in the 2003 LRDP EIR for which there is no significant new information or change in circumstances that would require further analysis; and
- assessment of cumulative impacts.

This Initial Study will evaluate the potential environmental impacts of the proposed project with respect to the 2003 LRDP EIR to determine what level of additional environmental review, if any, is appropriate. As shown in the Determination in Section 6 of this document, and based on the analysis contained in this Initial Study, it has been determined that the proposed project may have potentially significant effects on the environment that were not previously addressed or adequately addressed in the 2003 LRDP EIR, or may have environmental effects that are less-than-significant but have been selected for further analysis and disclosure. Therefore, an EIR will be prepared.

This Initial Study concludes that that many potentially significant project impacts are addressed by the measures that have been adopted as part of the approval of the 2003 LRDP. Therefore, those 2003 LRDP EIR mitigation measures that are related to, and may reduce the impacts of, this project will be identified in this Initial Study. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they will not be readopted, but rather are incorporated as part of the project and the impact analysis assumes implementation for purposes of determining the significance of any project impact. The benefits of these mitigation measures will be achieved independently of considering them as specific mitigation measures of this project. Nothing in this Initial Study in any way alters the obligations of the campus to implement the LRDP EIR mitigation measures.

2.3 PUBLIC AND AGENCY REVIEW

This Initial Study will be circulated for public and agency review from April 6, 2012 to May 7, 2012. Copies of this document, the 2003 LRDP, and the 2003 LRDP EIR are available for review at the following locations:

- UC Davis Office of Environmental Stewardship and Sustainability in 436 Mrak Hall on the UC Davis campus
- Reserves at Shields Library on the UC Davis campus

- Yolo County Public Library at 315 East 14th Street in Davis
- Online at:
http://sustainability.ucdavis.edu/progress/commitment/environmental_review/index.html

On April 25th at 6:30 pm in the Castilian Lounge at 1440 Wake Forest Drive, the University will host a scoping meeting as an opportunity for the public to provide information about environmental issues or concerns that may be relevant to the preparation of the Focused Tiered EIR.

Comments on this Initial Study must be received by 5:00 PM on May 7, 2012 and can be e-mailed to environreview@ucdavis.edu or sent to:

A. Sidney England
 Assistant Vice Chancellor – Environmental Stewardship and Sustainability
 University of California
 One Shields Avenue
 436 Mrak Hall
 Davis, CA 95616

Comments received on this Initial Study will be considered during the preparation of the upcoming EIR for the proposed project. In addition, the Draft EIR will include a copy of all the public and agency comments.

2.4 PROJECT APPROVALS

As a public agency principally responsible for approving or carrying out the proposed project, the Regents of the University of California (or its delegate) is the Lead Agency under CEQA and is responsible for reviewing and certifying the adequacy of the environmental document and approving the proposed project. It is anticipated that the Chancellor may consider approval of the Phase 1 demolition project in the Summer of 2012 and that Committee on Grounds and Building for the Board of Regents of the University of California (The Regents) may consider approval of the Phase 2 redevelopment in the Fall of 2012.

2.5 ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

Section 1 – Project Information: provides summary background information about the proposed project, including project location, lead agency, and contact information.

Section 2 – Introduction: summarizes the Initial Study's relationship to the 2003 LRDP EIR, the scope of the document, the project's review and approval processes, and the document's organization.

Section 3 – Project Description: includes a description of the proposed project, including the need for the project, the project's objectives, and the elements included in the project.

Section 4 – Consistency with the 2003 LRDP: describes the consistency of the proposed project with the 2003 LRDP and 2003 LRDP EIR.

Section 5 – Environmental Factors Potentially Affected: identifies which environmental factors, if any, involve at least one significant or potentially significant impact that has not been previously addressed in the 2003 LRDP EIR and cannot be reduced to a less-than-significant level.

Section 6 – Determination: indicates whether impacts associated with the proposed project are significant, and what, if any, additional environmental documentation is required.

Section 7 – Evaluation of Environmental Impacts: contains the Environmental Checklist form for each resource area. The checklist is used to assist in evaluating the potential environmental impacts of the proposed project with respect to the 2003 LRDP EIR. This section also presents a background summary for each resource area, the standards of significance, relevant impacts and mitigation measures from the 2003 LRDP EIR, and an explanation of all checklist answers.

Section 8 – Fish and Game Determination: indicates if the project has a potential to impact wildlife or habitat and if an associated Fish and Game filing fee would be paid.

Section 9 – References: lists references used in the preparation of this document.

Section 10 – Agencies and Persons Consulted: provides the names of individuals contacted in preparation of this document.

Section 11 – Report Preparers: lists the names of individuals involved in the preparation of this document.

3 PROJECT DESCRIPTION

3.1 REGIONAL LOCATION

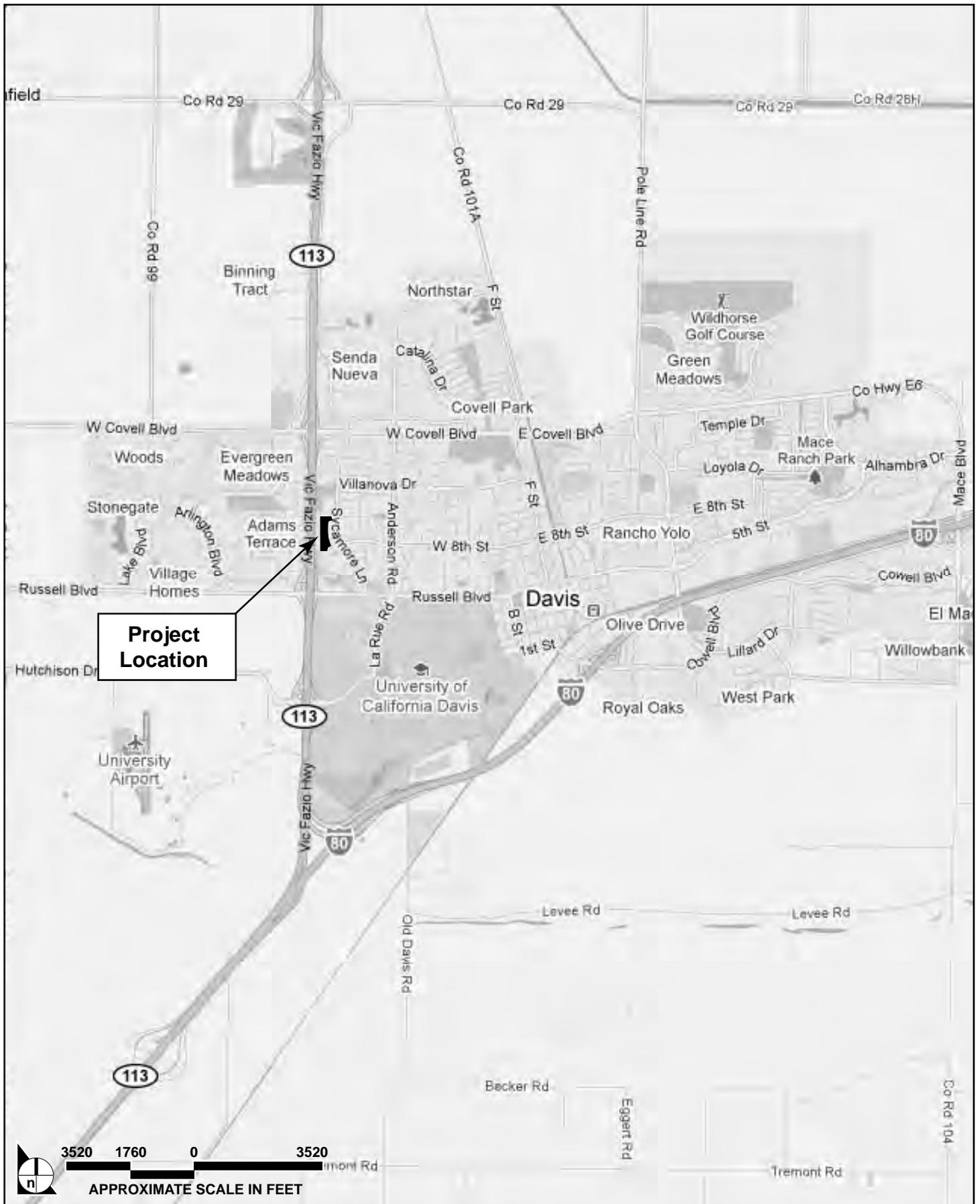
The approximately 5,300 acre UC Davis campus is located in Yolo and Solano Counties approximately 72 miles northeast of San Francisco, 15 miles west of the City of Sacramento, and adjacent to the City of Davis (see Figure 3.1). The campus is comprised of four campus units: the central campus, the south campus, the west campus, and Russell Ranch. Most academic and extracurricular activities occur within the central campus. The central campus is bounded generally by Russell Boulevard to the north, State Route 113 (SR 113) to the west, Interstate 80 (I-80) and the Union Pacific Railroad tracks to the south, and A Street to the east. The south campus is located south of I-80 and north of the South Fork of Putah Creek. The west campus is bounded by SR 113 to the east, Putah Creek to the south, Russell Boulevard to the north, and extends approximately one-half mile west of County Road 98. The south and west campus units are contiguous with the central campus, and are used primarily for field teaching and research. The approximately 1,600 acre Russell Ranch portion of the campus lies to the west, separated from the west campus by approximately one and one-half miles of privately owned agricultural land. Russell Ranch was purchased in 1990 for campus uses including large-scale agricultural and environmental research, study of sustainable agricultural practices, and habitat mitigation. Russell Ranch is bordered roughly by County Road 96 on the east, Putah Creek on the south, Covell Boulevard on the north, and Russell Boulevard and privately owned agricultural land on the west and northwest.

3.2 PROJECT OVERVIEW

UC Davis proposes to redevelop the student apartment building complex located at 1440-1460 Wake Forest Drive in Davis, California (see Figure 2). The apartment complex, known as Castilian Hall, is approximately 3.3 acres and was developed in 1968 with two three-story apartment buildings that are currently vacant. The housing complex previously provided housing for 500 first-year and transfer students. The proposed project would consist of demolishing the existing buildings and constructing new apartment buildings to house between 225 to 275 graduate students.

A Seismic Performance and Strengthening Study performed in April 2004 classified the seismic condition of the building complex as “poor.” The campus determined that a seismic retrofit would not be appropriate due to significant cost of the corrections and associated building systems renovations. In addition, the campus recently constructed the Tercero South Phase II project that added approximately 600 beds (net) to the inventory of student housing on the campus, reducing the need for the student beds for first-year and transfer students previously provided by Castilian Hall. For these reasons, the campus ceased use of the buildings in June of 2011. Phase 1 of the project involves demolition of the buildings and would include removal of furnishings, recycling of select building materials, and demolition of the building structures.

To redevelop the project site, the campus has identified a goal of providing student apartment housing for up to 275 graduate students. Phase 2 of the project will be involve single graduate student housing and is not expected to accommodate graduate students with children. UC Davis provides family housing for students and dependents at other locations on campus and does not anticipate utilizing the redeveloped Castilian site for family housing. The buildings are expected to range from 2 to 3 stories in height and would include vehicle parking, bike parking, walkways, site landscaping.



SOURCE: Google Maps – June 2010

FIGURE 1

Regional Location



SOURCE: Google Maps – June 2011

FIGURE 2

 Project Location

3.3 PROJECT SITE

The approximately 3.3-acre project site is located north of the central campus, in the western portion of the Cuarto Housing complex, north of Russell Boulevard. It is on the west side of Wake Forest Drive between West 8th Street and Guava Lane (Figure 2). The Castilian Hall complex is surrounded by existing development on the north, south, and eastern sides. It is bordered by single-family residences to the north; single-family residences and apartment buildings to the east; a surface parking lot, a public park, and apartment units to the south; and a vegetated area to the west that is part of the State Route 113 (SR-113) right-of-way. The areas further north, east, and south of the site are residential neighborhoods; these include some UC Davis student housing buildings to the southeast (north of Russell Boulevard) that are part of the Cuarto Housing complex. These include Emerson Hall, Thoreau Hall, Webster Hall, and an associated dining commons.

The Castilian Hall building complex consists of two three-story buildings commonly designated as “south” and “north.” The southerly building encompasses 61,650 gross square feet (gsf), and the northerly building encompasses 42,396 gsf. Each building has a central courtyard with an outdoor swimming pool. The facility also includes a one-story dining commons that encompasses approximately 12,120 gsf and a main lounge area. The lounge area has a front desk, office space, mail room, and restrooms.

Castilian Hall was constructed in 1968, first occupied in 1969, and renovated in 1991. The building is wood construction with stucco exterior walls and a flat roof. It is heated and cooled by individual electric units located in each apartment.

3.4 PROJECT NEED AND OBJECTIVES

In the 2011 – 2012 academic year, UC Davis housed approximately 800 graduate students on-campus, in a combination of University-owned and privately-owned facilities. In addition, the UC Davis West Village development is currently under construction and will provide housing for a combined total of 3,000 undergraduate and graduate students.

Historically, the residential capacity of the City of Davis has been severely constrained, causing increasing numbers of students, faculty, and staff to seek housing outside of Davis. The campus believes this trend diminishes the sense of campus community that makes UC Davis a special place to study and work. Accordingly, the University has long encouraged private development of on-campus housing facilities. It has a track record of success with such housing, with five privately-developed projects constructed in the past 25 years, providing over 2,200 beds to date. Most recently, the University entered into ground leases with a private developer for the construction of the initial phase of the University’s West Village project, a mixed use campus community located west of Highway 113, which at completion will provide as many as 3,000 beds of student housing, and 500 single-family units for faculty and staff members. To date, West Village has delivered 846 student beds and 1,134 additional beds are scheduled for delivery in 2012 and 2013 (for a total of 1,980 beds at full build-out of the first phase).

The goal of the University in the Project is to demolish a seismically poor structure and redevelop the site with approximately 225-275 beds of rental apartment housing for single graduate students, for initial occupancy in the fall 2014. The exact number of beds, apartment unit mix, number, height and bulk of buildings, common facilities, parking provisions, and all other design matters will be determined by an initial planning exercise conducted by the developer’s team.

The proposed first phase of the Project would remove aging, substandard housing structures. Due to their condition, renovation and reuse of the existing Castilian buildings is not practical, and leaving them in

place while unoccupied would create additional hazards due to the potential for further deterioration and risks related to trespassing or vandalism.

The overall Project objectives are to:

- Demolish the existing buildings on the property;
- Maintain parking lots and exterior lighting between completion of demolition and commencement of redevelopment construction;
- Minimize the effects of demolition on nearby residents and along haul routes.
- Provide new, high quality, affordable housing for graduate students in close proximity to campus.
- Utilize University-owned land with sufficient utilities and roadway access to support new housing.

3.5 PROJECT ELEMENTS

3.5.1 Building Demolition

The proposed phase 1 of the Project would demolish the Castilian Hall building complex. Prior to demolition any reusable and recyclable materials would be identified and removed. As part of demolition, any hazards present would be abated to acceptable levels, including, but not limited to, asbestos-containing materials and lead-based paint.

The buildings would be demolished using standard demolition techniques. The foundation slabs and underground utilities serving the buildings would also be removed and building utilities would be capped at the points where they tie in to municipal systems. Existing water service to the site would be maintained, if possible, to provide irrigation water. The underground storm drainage system in the south parking lot would be retained and would continue to drain into the municipal catch basin and curb inlet. Electrical connections to the site would be maintained to serve the parking lot lighting and new pole-mounted lights and a new electrical meter would be installed to provide safety lighting in the parking areas.

Debris generated from the demolition of the buildings would be sorted into materials that can be reused or recycled, materials containing lead or asbestos and cannot be reused, and non-hazardous waste materials. Each type of material would be appropriately reused, stored, and/or disposed.

3.5.2 Redevelopment

As the site is University-owned, the project is not subject to the zoning and building ordinances of local jurisdictions, including building permits and inspections. The University of California will serve as the entitling body for the project. The University is currently selecting a development partner to assist with planning, design, construction, financing, and operation of the redeveloped housing.

The site planning for the phase 2 Project redevelopment will include space for buildings, vehicle parking, bike parking, landscaped spaces, and common spaces such as courtyards. The architecture of the new buildings would consider compatibility with the surrounding neighborhood and long-term attractiveness.

The University will require that the design of phase 2 of the Project meet the goal to outperform the required provisions of the California Energy Code (Title 24) energy-efficiency standards by at least 15

percent. Additional sustainable and environmentally responsive elements are preferred and will be detailed during the upcoming design efforts.

3.5.3 Landscaping

Under Phase 1 and following building demolition, the site would be landscaped with low maintenance, drought tolerant landscaping. Following completion of the phase 2 Project redevelopment, additional landscaping would be added to complement the new buildings, walkways, and parking areas.

3.5.4 Parking and Roadways

During phase 1 implementation and until the commencement of phase 2 redevelopment, the existing surface parking lots on the Project site would remain in place and are expected to be reused for construction staging. Outdoor lighting would also be installed to help with site security between Project phases. The parking lots would be available for use by residents of the existing nearby Cuarto Housing complex, located about 600 feet to the southeast; these buildings have associated parking lots and the former Castilian lots are expected to provide backup/overflow parking for the nearby student housing, reducing the demand for on-street parking in the surrounding neighborhood. Parking at these lots would be restricted to holders of UC Davis parking permits. Once the phase 2 Project redevelopment construction begins, the parking lots would not be available and new parking lots would be constructed on the project site to serve the residents of the phase 2 Project redevelopment.

3.5.5 Utilities and Infrastructure

As discussed briefly below and analyzed in Section 7.16, the proposed phase 2 of the Project would require connections to campus utilities and infrastructure including domestic water, sanitary sewer, storm drainage, electricity, natural gas, and telecommunications.

- **Domestic Water:** Domestic water for the redevelopment will be obtained from the existing City of Davis water main located in Wake Forest Drive. The required supply to serve up to 275 residents is expected to be less than the supply previously provided to the 500 residents. This issue will be evaluated in detail in the Draft EIR.
- **Sanitary Sewer:** Sanitary sewer service for the redevelopment will be obtained from the existing City of Davis sewer main located in Wake Forest Drive. The required capacity to serve up to 275 residents is expected to be less than the amount previously provided to the 500 residents at Castilian Hall. This issue will be evaluated in detail in the Draft EIR.
- **Storm Drainage:** The project would continue to route stormwater to the existing City of Davis stormwater drainage system. The existing connections are expected to be adequate to serve the redevelopment. This issue will be evaluated in detail in the Draft EIR.
- **Electricity:** Electricity for the redevelopment will be obtained from the existing Pacific Gas and Electric electrical supply located at the project site. The required supply to serve up to 275 residents is expected to be less than the supply previously provided to the 500 residents. This issue will be evaluated in detail in the Draft EIR.

- Natural Gas: Natural gas for the redevelopment will be obtained from the existing Pacific Gas and Electric gas supply located at the project site. The required supply to serve up to 275 residents is expected to be less than the supply previously provided to the 500 residents. This issue will be evaluated in detail in the Draft EIR.
- Telecommunications: The redevelopment phase will connect to the AT&T telecommunication infrastructure for network and telephone service. This issue will be evaluated in detail in the Draft EIR.

3.5.6 Population

Phase 1 of the Project would not affect student or employee population; phase 2 would increase the number of students living in campus housing by 275. The project is not expected to increase the employee population at UC Davis.

3.6 CONSTRUCTION SCHEDULE AND STAGING

Phase 1 demolition of the existing structures is anticipated to begin in fall 2012 and last for approximately 2 months. Demolition staging and contractor parking associated with the proposed project would occur on site. The redevelopment activities planned for Phase 2 are anticipated to begin in Spring of 2013 with occupancy expected in Fall of 2014.

4 CONSISTENCY WITH THE 2003 LRDP AND 2003 LRDP EIR

In order to determine the proposed project's consistency with the 2003 LRDP and 2003 LRDP EIR, the following questions must be answered:

- Is the proposed project included in the scope of the development projected in the 2003 LRDP?
 - Is the proposed location of the project in an area designated for this type of use in the 2003 LRDP?
 - Are the changes to campus population associated with the proposed project included within the scope of the 2003 LRDP's population projections?
 - Are the objectives of the proposed project consistent with the objectives adopted for the 2003 LRDP?
-
- Is the proposed project within the scope of the cumulative analysis in the 2003 LRDP EIR?

The following discussion describes the proposed project's relationship to and consistency with the development projections, population projections, land use designations, objectives, and cumulative impacts analyses contained in the 2003 LRDP and the 2003 LRDP EIR.

4.1 2003 LRDP SCOPE OF DEVELOPMENT

The proposed Project would demolish a vacant housing building that is rated seismically "poor" (phase 1) and redevelop the site to provide student housing (phase 2). The 2003 LRDP identifies an objective relating to seismic safety by stating that development under the 2003 LRDP will "continue structural upgrades as required by evolving seismic safety codes." The 2003 LRDP identified the need for increased student housing both on and off campus to support overall growth and development at UC Davis. In response, UC Davis is executing a series of phased housing project improvements that will improve the overall quantity and condition of student housing in a way that is consistent with the LRDP, and the proposed demolition and redevelopment project would not compromise these LRDP goals. The 2003 LRDP projected that UC Davis student housing would increase by a total of 2,000 beds on the Central Campus and by 3,000 beds at West Village. The projection for West Village of 3,000 beds remains accurate and the proposed project would bring housing in the Central Campus to nearly 1,800 of the expected 2,000 beds.

4.2 2003 LRDP LAND USE DESIGNATION

The project site is designated as *Student Housing* under the 2003 LRDP. The proposed project would provide student housing which is consistent with the 2003 LRDP designation.

4.3 2003 LRDP POPULATION PROJECTIONS

The 2003 LRDP estimates that, through 2015-16, the on-campus population will increase to include approximately 30,000 students, 14,500 faculty and staff, and 3,240 non-UC employees.¹ In addition, the

¹ The on-campus population includes students and employees on the UC Davis main campus and at other University owned and operated facilities in the City of Davis. The campus population is determined based on headcount, a method of counting faculty, staff, and students in which each person is counted as one unit regardless of whether he or she is employed or studying full-time or part-time. Student population figures represent student headcount averaged over the primary three academic quarters (i.e., fall, winter, spring).

total number of household members associated with students and employees living in on-campus housing is expected to increase to approximately 29,803. The 2010-2011 on-campus faculty and staff headcount was approximately 11,400, and the three-quarter average on-campus student population was approximately 28,968 (UC Davis ORMP 2011). The proposed project, would introduce no new students and no new members of the faculty and staff population, and accordingly, would not increase the campus population to a level that would approach that projected for 2015-16. Therefore, the proposed project is within the 2003 LRDP's on-campus population projections.

4.4 2003 LRDP OBJECTIVES

The primary objective of the 2003 LRDP is to plan for the Davis campus's share of the University of California's short- and long- term enrollment demands. In addition, the 2003 LRDP aims to:

- create a physical framework to support the teaching, research, and public service mission of the campus;
- manage campus lands and resources in a spirit of stewardship for the future; and
- provide an environment that enriches campus life and serves the greater community.

The proposed project would support these 2003 LRDP objectives by maintaining campus-owned lands and resources in a condition that allows for future uses.

4.5 2003 LRDP EIR CUMULATIVE IMPACTS ANALYSES

In addition to evaluating the environmental effects directly associated with projected campus development, the 2003 LRDP EIR evaluates the cumulative effects of campus development combined with off-campus development through 2015-16. The cumulative context considered in the 2003 LRDP EIR varies, depending on the nature of the issue being studied, to best assess each issue's geographic extent. For example, the cumulative impacts on water and air quality are best analyzed within the boundaries of the affected resources, such as water bodies and air basins. For other cumulative impacts, such as hazard risks, traffic, and the need for new public service facilities, the cumulative impact is best analyzed within the context of the population growth and associated development that are expected to occur in the region.

As discussed in Sections 4.1 through 4.4 above, the proposed project is within the scope of campus development projected in the 2003 LRDP EIR. In addition, the campus is unaware of any changes to local growth plans or other changes in the region since certification of the 2003 LRDP EIR that would substantially change the document's conclusions regarding cumulative impacts. Therefore, the project will not incrementally contribute to the cumulative impacts analyses included in the 2003 LRDP EIR.

5 ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The following environmental resources, if checked below, would be potentially affected by this project and would involve at least one impact that is a significant or potentially significant impact that has not been previously addressed in the 2003 LRDP EIR. Therefore, an EIR will be prepared for the project. The EIR will analyze the potential impacts of the proposed project on the topics of Air Quality, Greenhouse Gas Emissions, Noise, Transportation and Circulation, and Utilities/Service Systems.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology & Water Quality |
| <input type="checkbox"/> Land Use & Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population & Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation & Circulation | <input checked="" type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

6 DETERMINATION

On the basis of this initial evaluation:

- The proposed project COULD NOT have a significant effect on the environment that has not been previously addressed in the 2003 LRDP EIR, and no new mitigation measures, other than those previously identified in the 2003 LRDP EIR, are required. A NEGATIVE DECLARATION will be prepared.**
- Although the proposed project COULD have a significant effect on the environment, the project impacts were adequately addressed in an earlier document or there will not be a significant effect in this case because revisions in the project have been made that will avoid or reduce any potential significant effect to a less-than-significant level. A MITIGATED NEGATIVE DECLARATION will be prepared.**
- The proposed project MAY have a potentially significant effect on the environment that was not previously addressed in the 2003 LRDP EIR. A TIERED ENVIRONMENTAL IMPACT REPORT will be prepared to address new impacts not previously identified in the 2003 LRDP EIR.**

A. Sidney England

Assistant Vice Chancellor – Environmental Stewardship and Sustainability

Date

7 EVALUATION OF ENVIRONMENTAL IMPACTS

Introduction

The University has defined the column headings in the Initial Study as follows:

- Impact to be Analyzed in the EIR: This column is checked when an impact that may or may not be significant will be addressed in the project EIR. The effect may be a less than significant impact that will be addressed to provide a more comprehensive analysis, an impact for which further analysis is necessary or desirable before a determination about significance can be made, an impact that is potentially significant but may be reduced to a less than significant level with the adoption of mitigation measures, or an impact that may be significant and unavoidable.
- No Additional Analysis Required: This column is checked when implementation of the proposed project would clearly not result in an impact, would clearly result in a less than significant impact under CEQA criteria, or may result in a significant impact but the impact was adequately analyzed in the 2003 LRDP EIR no additional analysis beyond that provided in the 2003 LRDP EIR or the Initial Study is necessary.

7.1 AESTHETICS

7.1.1 Background

Section 4.1 of the 2003 LRDP EIR addresses the aesthetics effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.1 of the 2003 LRDP EIR.

Campus

The campus is surrounded by extensive agricultural uses to the west and south, and by residential, institutional, and commercial land uses in the City of Davis to the north and east. Views within the Davis area are generally of two types: open views of agricultural land and supporting facilities with views of hills to the west, and views of developed areas within UC Davis and the City of Davis.

UC Davis consists of four general land units that have distinct visual characters. The central campus is the most developed area of campus and is characterized by varied architectural styles, large trees, and formal landscaping. The west and south campus units and Russell Ranch primarily include teaching and research fields with agricultural buildings (although the west and south campus units also include more developed areas including campus support facilities and academic and administrative facilities).

The 2003 LRDP identifies the following as valued visual elements of the central campus: the large, open lawn of the Quad at the heart of the campus; the framework of tree-lined streets, particularly around the Quad where the street tree branches arch to create a canopy overhead; the Arboretum, with its large trees and variety of landscapes along the waterway; the shingle-sided buildings from the founding years of the University Farm; buildings from the second era of campus development such as Hart Hall and Walker Hall; green open spaces that face the community along Russell Boulevard and A Street; bicycles as a distinct and valued visual emblem on campus; and the South Entry area, including the new entrance quad and the Robert and Margrit Mondavi Center for the Performing Arts.

Design review of campus development projects takes place during the project planning, design, review, and approval processes to sustain valued elements of the campus“ visual environment, to assure new projects contribute to a connected and cohesive campus environment, and to otherwise minimize adverse aesthetics effects as feasible. Formal design review by the campus Design Review Committee takes place for every major capital project and would occur for the Phase 2 redevelopment portion of the project. This Committee includes standing members from the Offices of Campus Planning, Design and Construction Management, Grounds, and other departments concerned with potential aesthetic effects, as well as program representatives and invited design professionals with expertise relevant to the project type. Campus design standards and plans that provide the basis for design review include the 2003 LRDP, the Campus Design Framework Plan, the Campus Standards and Design Guide manual, the campus Architectural Design Guidelines, and the Campus Core Study.

Project Site

The project site is located north of the central campus, north of Russell Boulevard and encompasses the existing Castilian Hall and associated parking and landscaped areas. It is in a residential section of the City of Davis characterized by both single- and multi-family residences. West of the site is the entrance to State Route 113, a high-volume freeway. Wake Forest Drive, which is used by pedestrians, cyclists, service vehicles, and transit vehicles, lies just east of the site. Single-family residences and the eastern portion of the apartment-style Cuarto student housing complex lie further east of Wake Forest Drive.

Residential areas with primarily one- and two-story single-family residences are located to the north and east, with multi-family housing to the south.

The existing Castilian Hall was constructed in 1968 and was first occupied in 1969. The apartment complex comprises two 3-story structures that front Wake Forest Drive. The buildings have stucco and timber exteriors and are unremarkable in terms of aesthetic features to attract interest from viewers. Views of the site from State Route 113 are partially blocked by a vegetated sloping area with trees and shrubs.

7.1.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers an aesthetic impact significant if growth under the 2003 LRDP would:

- Have a substantial adverse effect on a scenic vista.
A scenic vista is defined as a publicly accessible viewpoint that provides expansive views of a highly valued landscape. On campus, the open view across agricultural lands west to the Coast Range is considered a scenic vista. This vista is primarily viewed from public viewpoints along SR 113, Hutchison Drive, La Rue Road, and Russell Boulevard.
- Substantially degrade the existing visual character or quality of the site and its surroundings.
For the campus, this standard is interpreted in terms of the effect of development under the 2003 LRDP on the valued elements of the visual landscape identified in the LRDP, or the effect associated with allowing incompatible development in or near areas with high visual quality such as Putah Creek and the Arboretum Waterway.
- Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

An additional standard from the CEQA Guidelines“ Environmental Checklist (“b” in the checklist below) was found not applicable to campus growth under the 2003 LRDP.

7.1.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on aesthetics are evaluated in Section 4.1 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR. Significant and potentially significant aesthetics impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR.

2003 LRDP EIR Impacts		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
AESTHETICS			
4.1-3	Development under the 2003 LRDP could create substantial light or glare on campus that could adversely affect daytime or nighttime views in the area.	PS	LS
4.1-6	Implementation of the 2003 LRDP together with cumulative development in the region would create new sources of light and glare that could adversely affect daytime or nighttime views in the region.	S	SU

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Certain mitigation measures may be applicable to the phase 1 demolition portion of the project and/or to the phase 2 redevelopment portion of the project. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted in this Initial Study or EIR. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

2003 LRDP EIR Mitigation Measures

AESTHETICS

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- | | |
|----------|---|
| 4.1-3(a) | Design for specific projects shall provide for the use of textured nonreflective exterior surfaces and nonreflective glass. |
| 4.1-3(b) | Except as provided in LRDP Mitigation 4.1-3(c), all new outdoor lighting shall utilize directional lighting methods with shielded and cutoff type light fixtures to minimize glare and upward directed lighting. |
| 4.1-3(c) | Non-cutoff, non-shielded lighting fixtures used to enhance nighttime views of walking paths, specific landscape features, or specific architectural features shall be reviewed by the Campus Design Review Committee prior to installation to ensure that: (1) the minimum amount of required lighting is proposed to achieve the desired nighttime emphasis, and (2) the proposed illumination creates no adverse effect on nighttime views. |
| 4.1-3(d) | The campus will implement the use of the specified lighting design and equipment when older lighting fixtures and designs are replaced over time. |
| 4.1-6(a) | Implement LRDP Mitigation 4.1-3(a) and (b). |
| 4.1-6(b) | The City of Davis and other surrounding jurisdictions can and should adopt (if necessary) and implement development standards and guidelines, which support the minimal use of site lighting for new developments. |
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7.1.4 Environmental Checklist and Discussion

AESTHETICS

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) The 2003 LRDP EIR defined a scenic vista as an expansive view of a highly valued landscape from a publicly accessible viewpoint, and identified the only scenic vista on the UC Davis campus to be the view west across agricultural land to the Coast Range. On and near campus, viewpoints along SR 113, Hutchison Drive, La Rue Road, and Russell Boulevard provide scenic vistas to the west across agricultural land to the Coast Range. The proposed project would demolish existing buildings and thus would not create visual barriers that could obstruct any views. It would have no effect on scenic vistas because the project site is within an already highly developed area where views toward the Coast Range are blocked by buildings and landscaping. Further, the project involves no vertical construction and eliminates existing two-story buildings. No impact would occur. Accordingly, no

additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- b) Neither the campus nor the project site is located near a state scenic highway. Furthermore, the existing Castilian Hall buildings on the project site are unremarkable and not historic. Demolition of these buildings would not affect scenic resources. There would be no impacts to scenic resources within a state scenic highway. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- c) The 2003 LRDP EIR found that development on campus (including off-campus properties) under the 2003 LRDP could degrade the visual character of the campus by substantially degrading the valued elements of the campus' visual landscape, which are identified above in the background discussion and include specific treed areas, historic buildings, and open space areas (Impact 4.1-2). The proposed project would have no effect on valued elements of the UC Davis visual landscape because the proposed building demolition would not occur in an area identified as having valued elements of the visual landscape, nor would it disturb an area of high visual quality. The project would remove buildings that are unremarkable and build new residential buildings within a developed residential area. Although the visual character of the project site would change, it would not represent a significant adverse effect. The project would have no impact on visual character and quality. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- d) The existing buildings on the site contain security lighting that are existing sources of glare and light. The 2003 LRDP EIR found that development on campus under the 2003 LRDP could create substantial light or glare that could adversely affect daytime or nighttime views in the area (LRDP Impact 4.1-3). The proposed project consists of demolition of existing structures and redevelopment of the site that include exterior lighting that could contribute to nighttime glare. After demolition but before redevelopment, existing site lighting around the existing parking lots would be left in place to help provide security lighting. These areas would experience the same levels of lighting as currently exist and would not have an increase in lighting. In compliance with LRDP Mitigation 4.1-3(a), the project would use textured nonreflective exterior surfaces and nonreflective glass. The exterior lighting would be limited to building entrances, parking lots, and low-level lighting along walkways. In compliance with LRDP Mitigation 4.1-3(b-c), and to prevent light spill and light pollution per LEED requirements, new outdoor lighting associated with the project would use directional lighting methods with shielded and cutoff-type light fixtures to minimize glare and upward directed lighting. In compliance with this measure, the Campus Design Review Committee will also review the proposed project's use of non-directional lighting design to ensure that no adverse effects on nighttime views occur. With implementation of LRDP Mitigation 4.1-3(a-c), which is included in the proposed project, the project's impact associated with light and glare would be less than the existing baseline condition. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The

Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.2 AGRICULTURAL AND FORESTRY RESOURCES

7.2.1 Background

Section 4.2 of the 2003 LRDP EIR addresses the agricultural resources effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.2 of the 2003 LRDP EIR.

Campus

As discussed in the 2003 LRDP EIR, of the approximately 5,300 acres of campus land, the California Department of Conservation’s Farmland Mapping and Monitoring Program (FMMP) designates approximately 3,700 acres as Prime Farmland and approximately 90 acres as Farmland of Local Importance. The FMMP designates the remaining 1,520 acres of campus land as Urban and Built-Up (approximately 1,400 acres) and Other Land (approximately 120 acres). Most of the campus’ agricultural lands are located on the west and south campuses and at Russell Ranch. The central campus includes land primarily designated as Urban and Built-Up, but small areas within the central campus that are used for teaching and research fields and community gardens are designated as Prime Farmland.

The 2003 LRDP EIR identifies that development under the 2003 LRDP through 2015-16 could result in conversion of approximately 745 acres of campus land that is considered prime farmland by the California Department of Conservation to nonagricultural uses. Approximately 330 acres of this land would be converted to habitat at Russell Ranch, which would not result in an irreversible loss of prime soil. Mitigation under the 2003 LRDP EIR requires the conservation of prime farmland at a one-to-one (1:1) ratio for prime farmland converted to developed uses and a one-third-to-one (1/3:1) ratio for prime farmland converted to habitat at Russell Ranch.

Project Site

The project site is within an urbanized portion of the City of Davis adjacent to the central campus. There are no agricultural resources adjacent to the site.

7.2.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considered an agricultural impact significant if growth under the 2003 LRDP would:

- Convert prime farmland, unique farmland or farmland of statewide importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to nonagricultural use.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland considered prime, unique, or of statewide importance to nonagricultural use.
- Conflict with existing zoning for agricultural use or a Williamson Act contract.
- Result in the loss of forest land or conversion of forest land to non-forest use.

7.2.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on agricultural resources are evaluated in Section 4.2 of the 2003 LRDP EIR. As discussed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. However, the significant agricultural impacts identified in the 2003 LRDP EIR are not relevant to the proposed project because the proposed project would not result in the conversion of farmland and no mitigation measures would be required.

7.2.4 Environmental Checklist and Discussion

AGRICULTURAL RESOURCES	Impact to be Analyzed in the EIR	No Additional Analysis Required
<hr/> Would the project...		
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest uses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<hr/>		
a) The FMMP designates the project site as Urban and Built-Up Land. The proposed project would not convert Farmland to non-agricultural use. No further analysis is required. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.		
b) Campus lands are state lands and are not eligible for Williamson Act agreements, nor are they subject to local zoning controls. The project site is designated as Urban and Built-Up Land by FMMP and Academic/Administrative High Density by the 2003 LRDP EIR. Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.		
c) None of the campus lands are zoned as forest land or timberland. The proposed project would not conflict with existing zoning or result in rezoning of forest or timberlands. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air		

quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- d) There are no forest lands on or adjacent to the project site. Therefore, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- e) The project site is not adjacent to agricultural, or forest land or timberland. Therefore, the proposed project would not involve any changes that could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.3 AIR QUALITY

7.3.1 Background

Section 4.3 of the 2003 LRDP EIR addresses the air quality effects of campus growth under the 2003 LRDP on air quality. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.3 of the 2003 LRDP EIR, updated with current data as necessary.

Campus

The campus is subject to air quality regulation programs under both the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA). Both the federal and state statutes provide for ambient air quality standards to protect public health, timetables for progressing toward achieving and maintaining ambient standards, and the development of plans to guide the air quality improvement efforts of state and local agencies. Within the campus vicinity, air quality is monitored, evaluated, and controlled by the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the Yolo-Solano Air Quality Management District (YSAQMD). The YSAQMD is one of five air districts located in the Sacramento Valley Air Basin (SVAB) and has jurisdiction over air quality in the Yolo County and the northeastern portion of Solano County.

Historically, air quality laws and regulations have divided air pollutants into two broad categories: “criteria pollutants” and “toxic air contaminants.” Federal and state air quality standards have been established for the following ambient air pollutants, the criteria pollutants: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter less than 10 microns in diameter (PM₁₀), lead (Pb), and particulate matter less than 2.5 microns in diameter (PM_{2.5}). Ozone is evaluated by assessing emissions of its precursors: reactive organic gases (ROG) and NO_x.

Toxic air contaminants (TACs) are airborne pollutants for which there are no air quality standards but which are known to have adverse human health effects. TACs are regulated under federal and state statutes, primarily with control technology requirements for stationary and mobile sources and mitigation established following human health risk assessments. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles and construction vehicles; and area sources such as farms, landfills, construction sites, and residential areas.

Air quality on campus on any given day is influenced by both meteorological conditions and pollutant emissions. In general, meteorological conditions vary more than pollutant emissions from day to day, and tend to have a greater influence on changes in measured ambient pollutant concentrations. Ambient concentrations of CO and PM₁₀, however are particularly influenced by local emission sources. The EPA has classified the entire SVAB, which includes the campus, as a nonattainment area for O₃. Districts in the SVAB have requested a voluntary bump-up designation to “severe,” which would result in an attainment deadline of 2018. The EPA approval of the voluntary bump-up is still pending. The CARB has also designated the area as being in nonattainment under the state ambient air quality standards for O₃ and PM₁₀. The designation of an area as attainment or nonattainment is based on monitored data throughout the SVAB.

Project Site

The proposed project includes demolition of the Castilian Hall complex with subsequent redevelopment and operation of an apartment complex for up to 275 graduate students. The project site is north of the central campus, and has residences directly adjacent to the north, east and south. To the west is State Highway 113. The adjacent residences would be considered sensitive receptors.

7.3.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers an air quality impact significant if growth under the 2003 LRDP would:

Criteria Pollutants

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation. (According to the YSAQMD, emissions of NO_x and ROG in excess of 10 tons per year, PM₁₀ emissions of 80 pounds a day, or CO emissions violating a state ambient air standard for CO would be considered significant.)
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

Toxic Air Contaminants

- Contribute to the probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeding the AB 2588 and Proposition 65 threshold of 10 in one million.
- Result in a noncarcinogenic (chronic and acute) health hazard index greater than the AB 2588 threshold of 1.0.

7.3.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-2015-16 on air quality are evaluated in Section 4.3 of the 2003 LRDP EIR. The Draft EIR for the project will evaluate the proposed Castilian Redevelopment to consider whether the project is within the scope of analysis in the 2003 LRDP EIR and whether any project-specific air quality impacts are associated with the proposed project. The DEIR will identify significant and potentially significant air quality impacts that were identified in the 2003 LRDP EIR and that are relevant to the proposed project with their corresponding levels of significance before and after application of relevant mitigation measures identified in the 2003 LRDP EIR.

7.3.4 Environmental Checklist and Discussion

AIR QUALITY	Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...		

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a,b,c,d) Project activities would result in air quality effects from demolition and redevelopment of the project site. The impact from these effects will be evaluated in the project EIR and will include detailed analysis of dust and vehicle emissions during demolition, construction impacts during redevelopment, and operational impacts after construction of the new housing.

e) The proposed project would not produce unusual odors because the residential redevelopment would not result in industrial processing or large-scale manufacturing operations such as food processing, agricultural waste processing, or storage of products with unusual odors. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.4 BIOLOGICAL RESOURCES

7.4.1 Background

Section 4.4 of the 2003 LRDP EIR addresses the effects of campus growth under the 2003 LRDP on biological resources. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.4 of the 2003 LRDP EIR.

Campus

The 5,300-acre campus is located in a region that is composed primarily of urban areas and agricultural lands that include remnant riparian areas. Habitat types on campus can be classified as Agricultural Lands (including Cropland/Pasture, and Orchard/Vineyard), Valley Foothill Riparian Woodland, Ruderal/Annual Grassland, Open Water Ponds, Riverine, and Urban Landscaping/Developed.

The 2003 LRDP EIR considers special status species to be those taxa that are: (1) listed as threatened or endangered under either the California or Federal Endangered Species Acts; (2) candidates for either state or federal listing; (3) species afforded protection under the Fish and Game Code of California; (4) federal and California Department of Fish and Game (CDFG) “Species of Special Concern”; (5) CDFG “Species of Special Concern” highest and second priority lists; or (6) California Native Plant Society (CNPS) List 1-3 plants.

A database search identified 15 special status plant species, 8 special status invertebrates, 11 special status fish, 3 special status amphibians, 3 special status reptiles, 26 special status birds, and 7 special status mammals that have the potential to occur on or within a 10-mile radius of the campus. However, only a few of these species are known to occur on campus or have potential habitat present on campus, including: northern California black walnut, burrowing owl, Swainson’s hawk, valley elderberry longhorn beetle, California tiger salamander, chinook salmon, giant garter snake, steelhead, and northwestern pond turtle.

Project Site

The project site is developed with a student housing complex and surface parking lots and is located in a highly-developed area of the City of Davis north of the central campus.

Habitat

The project site is designated as Urban Landscaping/Developed habitat in the 2003 LRDP EIR. Urban habitat includes landscaped areas that are vegetated with trees, shrubs, and maintained grassy areas. Landscaped areas with mature trees may provide wildlife habitat values (food and cover) within the developed areas of the campus. Many species of birds (including the Swainson’s hawk) are known to nest in central campus trees. Other resident and migratory hawks, owls, songbirds, and woodpeckers are also known to use landscaped areas on the campus for nesting, food, and cover.

Special Status Species

The project site includes limited areas of landscaping consisting of non-native grass, trees, and shrubs. Such areas do not typically provide habitat for special status plant and animal species. However, Swainson’s hawk, a special status animal species, could potentially occur on or near the site. Three nest sites have been located within one-half mile of the project site. All are over one-quarter mile away and screened by existing buildings and landscaping. The Swainson’s hawk (*Buteo swainsoni*) is listed as a threatened species under the California Endangered Species Act and is also fully protected against take

pursuant to Section 3503.5 of the Fish and Game Code of California. The Swainson's hawk is a relatively large bird of prey that typically nests in large trees in riparian corridors as well as isolated trees remaining in or adjacent to agricultural fields in the Central Valley. However, in the City of Davis, and on the central campus, these hawks also nest in the large trees among buildings, roads, and dwellings.

This species forages in open grassland habitats and has adjusted to foraging in certain types of agricultural lands. The value of foraging habitat can be affected by a variety of characteristics, including density and availability of prey, proximity to disturbing features, and distance to nesting territories. Published information indicates these raptors typically forage within a 10 mile radius of nest sites but may range up to 18 miles from a nest site in search of suitable foraging habitat and available prey. Formal studies have shown that Swainson's hawks will spend the majority of foraging time in close proximity to the nest site when high quality foraging habitat (measured by the abundance and availability of prey) is present.

The occurrence of the Swainson's hawk in and around the campus is well documented. UC Davis conducted yearly surveys for Swainson's hawk nests on the campus and within one half mile of the campus from 1991 through 1998. Project-specific surveys have been conducted annually since 1998. The results of these surveys documented approximately 20 active nests per year and a total of approximately 50 total nests within one-half mile of the campus over the decade. Most of the Swainson's hawk nests are located in the Putah Creek riparian corridor.

Trees

The proposed project will remove several trees adjacent to the existing buildings. The trees to be removed are common landscaping species that were planted following construction of the Castilian Apartments. The trees proposed for removal are of low to medium height (approximately 15 to 30 feet) and in average condition. The UC Davis Grounds Department has performed a tree evaluation of the project site. One pistache tree in the courtyard, a large juniper facing the street, and a large Chinese Elm at the easternmost part of the site were identified as trees that should be preserved. The remaining trees on site were not required to be retained, and their root systems would likely be disrupted by site grading activities.

7.4.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a biological resources impact significant if growth under the 2003 LRDP would:

- Result in 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 (CDFG) or U.S. Fish and Wildlife Service (USFWS).
- Result in the "take" (defined as kill, harm, or harass) of any listed threatened or endangered species or the habitat of such species.
- Result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS.
- Result in 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, or coastal wetland) through direct removal, filling, hydrological interruption, or other means.

- 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.
- Conflict with any applicable local policies protecting biological resources such as a tree protection policy or ordinance.

An additional standard from the CEQA Guidelines“ Environmental Checklist (“F” in the checklist below) was found not applicable to campus growth under the 2003 LRDP.

7.4.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on biological resources are evaluated in Section 4.4 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR and the significant and potentially significant biological resources impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR.

2003 LRDP EIR Impacts BIOLOGICAL RESOURCES		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.4-4	Development allowed under the 2003 LRDP could result in the failure of nesting efforts by nesting raptors, including Swainson’s hawks or other birds of prey.	PS	LS
4.4-5	Development allowed under the 2003 LRDP would result in the loss of active nest sites for Swainson’s hawk.	PS	LS

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Certain mitigation measures may be applicable to the phase 1 demolition portion of the project and/or to the phase 2 redevelopment portion of the project. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted in this Initial Study or Negative Declaration. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

2003 LRDP EIR Mitigation Measures

BIOLOGICAL RESOURCES

- 4.4-4(a) The campus shall conduct a pre-construction survey of trees on and adjacent to a project site during the raptor breeding season (approximately March 1 to August 31). Additionally, the campus shall conduct surveys within a ½-mile radius of the site to determine the presence or absence of any nesting Swainson’s hawks. The surveys shall be conducted by a qualified biologist during the same calendar year that the proposed activity is planned to begin to determine if any nesting birds-of-prey would be affected. If phased construction procedures are planned for the proposed activity, the results of the above survey shall be valid only for the season when it is conducted.
- If any Swainson’s hawks are nesting within a one-half-mile radius of the project site or if other raptors are nesting in, on or adjacent to the project site, a qualified biologist shall determine the potential for disturbance to nesting raptors, including Swainson’s hawks. If the biologist determines that there is a significant potential for disturbance, the campus shall implement feasible changes in the construction schedule or make other appropriate adjustments to the project in response to the specific circumstances. If feasible project changes are not readily

2003 LRDP EIR Mitigation Measures
BIOLOGICAL RESOURCES

identifiable, the campus will consult with CDFG to determine what actions should be taken to protect the nesting efforts. If, after five years, a previously recorded nest site remains unoccupied by a Swainson’s hawk, it will no longer be considered as a Swainson’s hawk nest site subject to this mitigation.

4.4-4(b) The campus shall continue to conduct annual surveys to determine the location of nesting Swainson’s hawks and other birds of prey on the campus outside the Putah Creek corridor. If nesting Swainson’s hawks are found during the survey at a previously unknown location within one-half mile of a project site and/or at a location closer to the project or more visually exposed to the project site than a nearby previously documented site, a qualified biologist shall, prior to project construction, determine the potential for disturbance to nesting Swainson’s hawks. If the biologist determines that there is a significant potential for disturbance, the campus shall implement feasible changes in the construction schedule or make other appropriate adjustments to the project in response to the specific circumstances (e.g. relocating noisy equipment or creating temporary sound barriers).

The implementation of LRDP Mitigations 4.4-4(a) and (b) shall be conducted under the supervision of a biologist whose qualifications include:

- A bachelor’s degree in biology or a related field;
- Two years of field experience related to nesting raptors; and
- Prior construction monitoring experience.

Further:

- All decisions of the qualified biologist shall be made in consultation with the California Department of Fish and Game;
- Monitoring shall be conducted for a sufficient time (minimum of 3 consecutive days following the initiation of construction) to verify that the nesting pair does not exhibit significant adverse reaction to construction activities (i.e., changes in behavioral patterns, reactions to construction noise, etc.); and
- Nest site monitoring will continue for a minimum of once a week through the nesting cycle at that nest.

4.4-5 Mitigation 4.4-4(a) and (b) will be implemented, including pre-construction survey of trees on and adjacent to a project site during the raptor breeding season (approximately March 1 to August 31). If a Swainson’s hawk nest tree is present, the tree will be removed outside the nesting season (March-May).

7.4.4 Environmental Checklist and Discussion

BIOLOGICAL RESOURCES

Would the project ...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | |
|--|--------------------------|-------------------------------------|
| d) 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
-

a) **Plants**

The proposed project site is fully developed, does not support habitat for sensitive plants, and would have no effect on sensitive plant species. See item (e) below for details related to removal of urban landscaping trees.

Wildlife

The 2003 LRDP EIR found that development under the 2003 LRDP could result in the loss of special-status plant species (LRDP Impact 4.4-1), and could affect several wildlife species, including the burrowing owl, Swainson’s hawk, the valley elderberry longhorn beetle, the western pond turtle, and special-status fish species (LRDP Impacts 4.4-2 through 4.4-7 and 4.4-12 through 4.4-14). Under the proposed project, construction would be limited to a previously developed site within a developed urban area. The proposed project would remove existing buildings that are surrounded by roadways, walkways, parking areas, residential buildings, and limited horticultural landscaping. Swainson’s hawks could possibly nest in trees on or adjacent to the site. Since the early 1990s, Swainson’s hawks have not nested in any trees on the site. However, it is possible they could nest in the area before construction starts. As noted above, three nest sites have been identified less than one-half mile but more than one-quarter mile from the project site. These nest sites are screened by existing buildings and landscaping. LRDP Mitigation Measures 4.4-4(a)-(b) and 4.4-5 require actions to ensure that active nests are not disturbed. Implementation of these measures, which are already incorporated into and a part of the proposed project for both phases 1 and 2, would reduce potential impacts to nesting Swainson’s Hawks to a less-than-significant level. The site does not provide suitable habitat for any special status plant or animal species. No additional impacts would occur to special status species. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- b, c) The proposed project site is an existing residential complex with no connection to riparian or wetland areas. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.
- d) The Putah Creek corridor, which is the southern boundary of the campus, is the principal corridor for the movement of native resident and migratory fish and wildlife through the UC Davis campus. It is the regional connection between the hills in western Yolo County and the Sacramento River. The project is over 1 mile north of the Putah Creek corridor. Therefore, the project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established

native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- e) Pursuant to LRDP Mitigation Measure 4.4-11, the campus performs a tree survey of a project site prior to project approval, and modifies the project design to the extent feasible to avoid tree removal or provide additional mitigation if removal of heritage or specimen trees cannot be avoided. The proposed project would not result in removal of heritage or specimen trees. The redevelopment component of the project (phase 2) would result in the removal of several landscaping trees. These trees are not highly rated and the potential impact would be less than significant. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- f) The campus does not fall within the boundaries of, nor is it adjacent to, an adopted regional Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). The campus has implemented two low effects HCPs for Valley Elderberry Longhorn Beetle at Russell Ranch. The project is not located at Russell Ranch. Therefore, the proposed project would not conflict with an adopted HCP or NCCP. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.5 CULTURAL RESOURCES

7.5.1 Background

Section 4.5 of the 2003 LRDP EIR addresses the effects of campus growth under the 2003 LRDP on cultural resources. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.5 of the 2003 LRDP EIR.

Campus

Cultural resources on campus include prehistoric and historic resources. Prehistoric resources are those sites and artifacts associated with the indigenous, non-Euroamerican population, generally dating prior to contact with people of European descent. Historic resources include structures, features, artifacts, and sites that date from Euroamerican settlement of the region.

Archaeological Resources

The campus lies in the ethnographic territory of the Patwin. Since 1991, extensive archaeological investigations (survey, testing, monitoring, and/or excavation) have been conducted on campus in conjunction with the development of campus projects (Nadolski 2003). Patwin sites, including burials, have been identified at several locations on the central campus. Areas within 800 feet of the banks of the historic channel of Putah Creek and its tributaries and slough channels, and within 800 feet of specific known archaeological sites, have been identified as archaeologically sensitive zones on campus.

Historic Resources

The earliest direct historic contacts in the Davis area probably occurred during 1806 to 1808. Farming on a large scale began in the Davis area in the 1850s. A “university farm” was established at Davis in 1906, classes began in 1909, and Davis became a general University of California campus in 1959. No properties within the campus are listed on the National Register of Historic Places. Six properties on or near the campus have been recorded with the California Inventory of Historic Resources. Historic architectural features typically must be at least 50 years of age to be considered for listing on the California Register of Historical Resources (CRHR).

Project Site

The proposed project site consists of an existing student housing complex that contains no known historic resources. The potential for intact buried archaeological resources is considered very low because the project site is located in an extensively disturbed developed area formerly used for agriculture, and is over 1 mile from the Putah Creek Corridor. In addition, the project is demolition of an existing facility and would require minimal subsurface disturbance of previously undisturbed area. The project site was included in the Cultural Resources Survey conducted in support of the 2003 LRDP EIR analysis and, because of its post-1965 construction date, the student housing complex was not considered to be a potential historic resource.

7.5.2 2003 LRDP EIR Standards of Significance

In addition to the following archaeological and historical standards of significance identified in the 2003 LRDP EIR, an additional standard from the CEQA Guidelines“ Environmental Checklist (“c” in the checklist below) was found not applicable to campus growth under the 2003 LRDP.

Archaeological Resources

The 2003 LRDP EIR considers an impact on archaeological resources significant if growth under the 2003 LRDP would:

- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guideline § 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

A “unique archaeological resource” is defined under CEQA through Public Resources Code Section 21083.2(g). A unique archaeological resource implies an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it meets one of the following criteria:

- The archaeological artifact, object, or site contains information needed to answer important scientific questions and there is a demonstrable public interest in that information, or
- The archaeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type, or
- The archaeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric or historic event or person.

For a resource to qualify as a unique archaeological resource, the agency must determine that there is a high probability that the resource meets one of these criteria without merely adding to the current body of knowledge (PRC § 21083.2(g)). An archaeological artifact, object, or site that does not meet the above criteria is a nonunique archaeological resource (PRC § 21083.2(h)). An impact on a nonunique resource is not a significant environmental impact under CEQA (CEQA Guidelines § 15064.5(c)(4)). If an archaeological resource qualifies as a historical resource under CRHR or other criteria, then the resource is treated as a historical resource for the purposes of CEQA (CEQA Guidelines § 15064.5(c)(2)).

Section 15064.5 of the CEQA Guidelines assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under PRC § 5097.98. California Health and Safety Code § 7050.5(b) prohibits disturbance of human remains uncovered by excavation until the Coroner has made a finding relative to PRC § 5097 procedures.

Historical Resources

For the purposes of this analysis, as mandated by PRC § 21083.2, impacts of the proposed project on an historical resource would be considered significant if it would:

- cause a significant adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5.

The standards of significance for historical resources are based on Appendix G and § 15064.5 of the CEQA Guidelines. Accordingly, historical resources include resources listed in, or determined to be eligible for listing in, the CRHR; resources included in a qualifying local register (such as the City of Davis Register of Historic Resources); and resources that the lead agency determines to meet the criteria for listing in the CRHR. These criteria may apply to any historic built environmental feature, and to historic or prehistoric archaeological sites. Properties or sites that are eligible for inclusion in the CRHR

are termed “historical resources.” Under the provisions of CEQA Guidelines § 15064.5(a)(3), generally a lead agency should find that a property is historically significant if it determines that the property meets one or more of the criteria for listing on the CRHR, which extend to any building, structure, feature or site that:

- is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- is associated with lives of persons important in our past;
- 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
- has yielded, or may be likely to yield, information important in prehistory or history

With few exceptions, to qualify as a historical resource a property must be at least 50 years old and also must retain physical integrity and integrity to its period of significance. For historic structures and buildings, significantly altering the setting, remodeling, or moving the structure may diminish or destroy its integrity. However, under some conditions, a building that has been moved or altered may still retain its historic significance. Landscaping or landscape features may in some cases, contribute to the significance of an historic architectural property. Such elements would be assessed as part of the evaluation of the related historic architectural property. Archaeological sites may also qualify as historical resources under CEQA Guideline Section 15064.5(a)(3). Archaeological sites most often are assessed relative to CRHR Criterion D (for potential to yield data important to history or prehistory). An archaeological deposit that has been extensively disturbed and archaeological artifacts found in isolation may not be eligible for listing on the CRHR, because the lack of stratigraphic context may reduce the potential for the resource to yield significant data. A resource that does not meet one of the criteria for eligibility to the CRHR is not a historical resource under CEQA, and impacts to such a property are not significant.

7.5.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on cultural resources are evaluated in Section 4.5 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR and significant and potentially significant cultural resources impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR.

2003 LRDP EIR Impacts		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
CULTURAL RESOURCES			
4.5-4	Implementation of the 2003 LRDP could disturb human remains, including those interred outside of formal cemeteries.	PS	LS

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Certain mitigation measures may be applicable to the phase 1 demolition portion of the project and/or to the phase 2 redevelopment portion of the project. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project

description and will not be readopted in this Initial Study or Negative Declaration. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

2003 LRDP EIR Mitigation Measures

CULTURAL RESOURCES

- 4.5-4(a) Implement LRDP Mitigation 4.5-1, 4.5-2 and 4.5-3 to minimize the potential for disturbance or destruction of human remains in an archaeological context and to preserve them in place, if feasible.
- 4.5-4(b) Provide a representative of the local Native American community an opportunity to monitor any excavation (including archaeological excavation) within the boundaries of a known Native American archaeological site.
- 4.5-4(c) In the event of a discovery on campus of human bone, suspected human bone, or a burial, all excavation in the vicinity will halt immediately and the area of the find will be protected until a qualified archaeologist determines whether the bone is human. If the qualified archaeologist determines the bone is human, or if a qualified archaeologist is not present, the campus will notify the Yolo or Solano County Coroner (depending on the county of the find) of the find before additional disturbance occurs. Consistent with California Health and Safety Code § 7050.5(b), which prohibits disturbance of human remains uncovered by excavation until the Coroner has made a finding relative to PRC 5097 procedures, the campus will ensure that the remains and vicinity of the find are protected against further disturbance. If it is determined that the find is of Native American origin, the campus will comply with the provisions of PRC § 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD).
- 4.5-4(d) If human remains cannot be left in place, the campus shall ensure that the qualified archaeologist and the MLD are provided opportunity to confer on archaeological treatment of human remains, and that appropriate studies, as identified through this consultation, are carried out prior to reinterment. The campus shall provide results of all such studies to the local Native American community, and shall provide an opportunity of local Native American involvement in any interpretative reporting. As stipulated by the provisions of the California Native American Graves Protection and Repatriation Act, the campus shall ensure that human remains and associated artifacts recovered from campus projects on state lands are repatriated to the appropriate local tribal group if requested.

7.5.4 Environmental Checklist and Discussion

CULTURAL RESOURCES

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) The project site is a modern residential building complex and contains no historic resources. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- b) Testing and monitoring for archaeological resources near the project site have indicated that this portion of the UC Davis campus and surrounding lands are not expected to contain archaeological resources. In addition, the project site has been previously disturbed and the proposed project would involve minimal excavation to remove existing foundations. Accordingly, the project would have a low potential for effects on intact archaeological resources. The impact would be less than significant. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.
- c) During the course of development at UC Davis, extensive excavation for buildings and infrastructure, and extensive agricultural operations have not revealed the presence of unique paleontological or geological resources. It appears that the campus lacks unique paleontological and geological resources due to the deep alluvial deposition of fairly uniform soil types in the area. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.
- d) The 2003 LRDP EIR found the potential for development under the 2003 LRDP to disturb human remains, including those interred outside of formal cemeteries (LRDP Impact 4.5-4). LRDP Mitigation 4.5-4(a-d), included in the proposed project, would ensure that human remains in archaeological and isolated contexts, if encountered during the removal of building foundations or site grading for phase 1 or phase 2, would be protected from destruction that might take place from development through measures including identification, Native American consultation, preservation in place or recovery, respectful treatment and study, and reinterment. Therefore, this impact would be less than significant. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.6 GEOLOGY, SOILS, & SEISMICITY

7.6.1 Background

Section 4.6 of the 2003 LRDP EIR addresses the geology, soils, and seismicity effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.6 of the 2003 LRDP EIR.

Campus

The campus is located within the Putah Creek Plain of California’s Great Valley geomorphic province. Except for the somewhat raised elevation along the levee adjacent to Putah Creek, the campus is topographically flat. Soils on campus generally contain a high amount of silt and clay, and as a result, are moderately to slowly permeable and have slow runoff rates, minimal erosion hazards, and moderate to high shrink-swell potential (the potential for soil volume to change with a loss or gain in moisture). The predominant soil constraint to construction on campus is soil shrink-swell potential.

A series of low foothills, including the Dunnigan Hills, the Capay Hills, and the English Hills, lie approximately 20 miles west of the campus at the eastern base of the Coast Range. The presence of subsurface thrust faults within these regional foothills and within 100 miles of the campus indicates the potential for seismic ground shaking in the Davis region. The Davis region is not located within an Alquist-Priolo Fault Zone as defined in the Alquist-Priolo Earthquake Fault Zoning Act, which is designed to prohibit the construction of new structures for human occupancy across active faults. According to the California Geological Survey’s Probabilistic Seismic Hazard Assessment for the State of California, the peak ground acceleration with a 10 percent probability of being exceeded in 50 years is 0.2 to 0.3g on the central campus, increasing to 0.3 to 0.4g on the western portion of Russell Ranch (CDOC 1996). By comparison, in most parts of the San Francisco Bay Area, the peak ground acceleration is 0.5g or greater. Likely effects of ground shaking during a probable maximum intensity earthquake for the area could include structural damage to stucco, masonry walls, and chimneys, which could expose people to risks associated with falling objects and potential building collapse.

Project Site

The project site is an existing student housing complex within a highly-developed portion of the City of Davis north of the central campus. The buildings in the complex were not among those identified in the 2003 LRDP EIR as having poor or very poor seismic safety ratings. However, a Seismic Performance and Strengthening Study was completed for the Castilian Hall complex in 2004. This study rated the buildings’ seismic condition as “poor.”

7.6.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers an impact related to geology, soils, and seismicity significant if growth under the 2003 LRDP would:

- Expose people or structures to potential substantial adverse effects involving strong seismic ground shaking.
- Expose people or structures to potential substantial adverse effects involving seismic-related ground failure.
- Result in substantial soil erosion or the loss of topsoil. (Impacts associated with the effect of erosion on water quality are addressed in Section 7.9 Hydrology & Water Quality.)

- 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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse.
- Be located on expansive soil, creating substantial risks to life or property.
- 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.

Additional standards from the CEQA Guidelines“ Environmental Checklist (a,i) and (a,iv) in the checklist below) were found not applicable to campus growth under the 2003 LRDP.

7.6.3 2003 LRDP EIR Impacts and Mitigation Measures

Geology, soils, and seismicity impacts of campus growth under the 2003 LRDP through 2015-16 related to geology, soils, and seismicity are evaluated in Section 4.6 of the 2003 LRDP EIR. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. No significant impacts identified in the 2003 LRDP EIR related to geology, soils, and seismicity are relevant to the proposed project.

7.6.4 Environmental Checklist and Discussion

GEOLOGY, SOILS, & SEISMICITY	Impact to be Analyzed in the EIR	No Additional Analysis Required
<hr/> Would the project...		
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a,i) The UC Davis campus and the surrounding area are not located within an Alquist-Priolo Earthquake Fault Zone, and the closest known active fault rupture zones are over 30 miles away. Therefore, no impact would occur and no further analysis is required. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR.

The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- a,ii) The campus is located in a seismically active area that could experience ground shaking, liquefaction, and settlement. The peak ground acceleration for the main campus is estimated to be 0.2 to 0.3g, and 0.3 to 0.4g on the western portion of Russell Ranch. This intensity of seismic groundshaking has the potential to dislodge objects from shelves and to damage or destroy buildings and other structures. In the case of such a seismic event, people on campus and in the area would be exposed to these hazards.

The proposed project would demolish an existing building complex that is rated as seismically “poor” and would not involve new construction or occupancy. Student beds in the existing building would be replaced with beds in newly constructed student housing that would meet modern seismic safety standards. Accordingly, the project would not expose people to hazards from seismic shaking. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- a,iii) See the discussion in item (c) below.

- a,iv) The UC Davis campus and the surrounding area are characterized by flat topography and therefore would not be subject to landslides. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- b) The soil types that occur on and near the UC Davis campus generally, including the project site, contain a high amount of silt and clay, and these soil types have minimal erosion hazard associated with them (see pages 4.6-1,2 and Figure 4.6-1 of the 2003 LRDP EIR). Therefore, for new construction sites, this impact was determined to be less than significant in the 2003 LRDP EIR. For the proposed project, which would remove buildings on a flat, previously developed parcel and replace them with low-maintenance, low-water-use landscaping, the project is not expected to increase erosion. No impact would occur. The relationship between receiving water quality and potential soil erosion as a result of construction activities is addressed in items (a) and (c) in Section 7.8 Hydrology & Water Quality. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- c) The potential for liquefaction on and near the campus is generally low because the depth to groundwater is relatively large (30 to 80 feet, depending on the season). At the project site, removal of the existing buildings would reduce any potential risks related to geologic instability. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- d) The soils in several areas of the campus have high shrink/swell potential and could, on a site-specific basis, have the potential to create risk to life or property. Campus policy requires compliance with the CBC, which includes provisions for construction on expansive soils such as proper fill selection, moisture control, and compaction during construction. The proposed project would remove existing buildings and would not involve new construction. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- e) The proposed project would use no septic tanks or alternative wastewater disposal systems. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.7 GREENHOUSE GAS EMISSIONS

7.7.1 Background

Since the publication of the 2003 LRDP EIR, checklist questions related to greenhouse gas emission have been added to Appendix G of the CEQA Guidelines as new Section VII, which require an evaluation of the potential of the proposed project to generate greenhouse gases that may contribute significantly to global climate change. Global climate change refers to any significant change in climate measurements, such as temperature, precipitation, or wind, lasting for an extended period (i.e., decades or longer).² Climate change may result from:

- Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation, reduction in sunlight from the addition of GHG and other gases to the atmosphere from volcanic eruptions); and
- Human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification).

The primary effect of global climate change has been a rise in the average global tropospheric temperature of 0.2° Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005.³ Climate change modeling using 2000 emission rates shows that further warming is likely to occur, which would induce further changes in the global climate system during the current century.⁴

The term “greenhouse gases” (GHGs) is used for human activity-generated gases that are considered as contributing to climate change. State law defines GHGs to include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Campus

The UC Davis campus has several sources of GHG emissions, including stationary combustion sources such as a central plant, boilers, and emergency generators; mobile combustion sources (fleet vehicles and buses); purchased electricity; faculty, staff and student commute trips; agricultural operations; landscape and building maintenance; a landfill; and a wastewater treatment plant.

UC Davis has prepared the 2009-2010 Climate Action Plan (CAP) for both the Davis and Sacramento campuses, as well as outlying facilities. The CAP describes and addresses policy and regulatory requirements of: (1) the UC Policy on Sustainable Practices; (2) AB 32; (3) the American College and University Presidents Climate Commitment; (4) CEQA; and (5) US EPA reporting requirements.

The CAP provides documentation of how campus GHG emissions are calculated, a report of current (2008) emissions, estimates of past (to 1990) and future emissions (to 2020), a statement of GHG

² US Environmental Protection Agency, “Glossary of Climate Change Terms,” <http://www.epa.gov/climatechange/glossary.html>. 2008.

³ Intergovernmental Panel on Climate Change, “Climate Change 2007: The Physical Science Basis, Summary for Policymakers,” http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf. 2007.

⁴ Ibid.

emission reduction goals, a characterization of options and methods to reduce emissions, and a blueprint for future action.

The CAP focuses on emissions related to campus operations, instead of commuting and air travel, because emissions related to commuting and air travel are less than one-quarter those of campus operations. The CAP provides an analysis of commuting and air travel reduction options, but does not quantify emissions reductions for those options.

Calculated emissions for all of UC Davis, excluding commuting and air travel, for 2000 are 246,000 MTCO_{2e} and for 1990 are 142,000 MTCO_{2e}. In 2008, inventoried emissions (in CCAR), excluding commuting and air travel, totaled 239,000, indicating that UC Davis had already met the 2014 target. Thus, the CAP defined a new emissions target of 210,000 MTCO_{2e}, almost 15 percent below the 2000 emissions, as the new 2014 target. The 2020 target, to reach 1990 emissions, is about 40 percent below the 1990 emissions.

Project Site

The project site is currently an unoccupied building with no active use of heating or cooling equipment and only minimal electricity use associated with security lighting and alarm systems.

7.7.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR did not evaluate the impacts of campus growth on global climate as this potential impact was not considered in CEQA documents at that time.

7.7.3 2003 LRDP EIR Impacts and Mitigation Measures

Not applicable.

7.7.4 Environmental Checklist and Discussion

Greenhouse Gas Emissions		Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...			
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a,b) Project activities would result in greenhouse gas emissions from demolition and construction equipment and long-term operation of the project and the impact from these emissions will be evaluated in the project EIR. The project effects will be quantified using the CalEEMod greenhouse gas emission modeling software published by the South Coast Air Quality Management District. The CalEEMod software is intended for use throughout California and includes specific input values for local meteorology and other regionally specific items.

7.8 HAZARDS & HAZARDOUS MATERIALS

7.8.1 Background

Section 4.7 of the 2003 LRDP EIR addresses the hazards and hazardous materials effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.7 of the 2003 LRDP EIR.

Campus

A variety of hazardous materials are used on campus during the course of daily operations. Hazardous chemicals used on campus include: chemical solvents, reagents, and aromatic hydrocarbons that are used in campus laboratories; pesticides, fungicides, and herbicides used by agricultural programs and in landscape maintenance; relatively small amounts of solvents, paints, and acids used by fine arts programs; gasoline and diesel fuels, oils and lubricants, antifreeze, cleaning solvents and corrosives, paints and paint thinners, and freon refrigerants used in vehicle and building maintenance. In addition, radioactive materials, biohazardous materials, and laboratory animals are used in teaching and research activities. The use of hazardous materials on campus generates hazardous byproducts that must eventually be handled and disposed of as hazardous wastes.

Generation, transportation, and disposal of hazardous wastes are regulated by various agencies. The lead federal regulatory agency is the Environmental Protection Agency. The State Department of Toxic Substances Control (DTSC) has primary state regulatory responsibility but can delegate enforcement authority to local jurisdictions that enter into agreements with the state agency, as it did with Yolo County Department of Environmental Health (YCDEH) under the Certified Unified Program Agency (CUPA) program.

The campus“ Office of Environmental Health and Safety (EH&S) coordinates most local, state, and federal regulatory compliance functions related to the campus“ health, safety, and environmental issues. EH&S performs safety education and training, regulatory interpretation and applicability, approval of potentially hazardous procedures, resolution of safety problems, surveillance, and monitoring. In addition, EH&S provides guidance for several campus safety programs, including: the Chemical Inventory System, which tracks inventory and use of hazardous materials on campus; the CUPA Self-Audit Program, which complies with the terms of an agreement with the YCDEH; development of laboratory-specific Chemical Hygiene Plans; the Radiation and X-Ray Safety Programs; and the Biological Safety Administrative Advisory Committee. EH&S is also a working partner in such campus administrative advisory groups as the Chemical Safety Committee, the Radiation Safety Committees, the Animal Use and Care Committee, and the Biological Safety Committee. External administrative and benchmarking reviews of the EH&S programs are conducted periodically to identify means of further improving the programs.

Project Site

The project site is an existing vacant student housing complex with associated parking and landscaped areas. Minor amounts of cleaning and maintenance products are used to maintain the buildings and grounds.

7.8.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a hazards and hazardous materials impact significant if growth under the 2003 LRDP would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.
- 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.
- For a project within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Additional standards from the CEQA Guidelines“ Environmental Checklist (“f” and “h” in the checklist below) were found not applicable to campus growth under the 2003 LRDP.

7.8.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 related to hazards and hazardous materials are evaluated in Section 4.7 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR and potentially significant hazards and hazardous materials impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR. In addition, LRDP Impacts 4.7-12 and 4.7-13, presented below, are considered less than significant prior to mitigation, but the 2003 LRDP EIR identified mitigation to further reduce the significance of these impacts. Less than significant impacts without mitigation measures are not presented here.

2003 LRDP EIR Impacts		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
HAZARDS & HAZARDOUS MATERIALS			
4.7-12	Construction activities on campus under the 2003 LRDP would not expose construction workers and campus occupants to contaminated soil or groundwater.	LS	LS
4.7-13	Demolition or renovation of buildings under the 2003 LRDP would not expose construction workers or campus occupants to contaminated building materials.	LS	LS

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Certain mitigation measures may be applicable to the phase 1 demolition portion of the project and/or to the phase 2 redevelopment portion of the project. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted in this Initial Study or Negative Declaration. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

2003 LRDP EIR Mitigation Measures

HAZARDS & HAZARDOUS MATERIALS

- | | |
|--------|--|
| 4.7-12 | The campus shall perform due diligence assessments of all sites where ground-disturbing construction is proposed. |
| 4.7-13 | The campus shall survey buildings for potential contamination before any demolition or renovation work is performed. |
-

7.8.4 Environmental Checklist and Discussion

HAZARDS & HAZARDOUS MATERIALS		Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...			
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h)	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Hazardous Chemicals

The proposed project would involve incidental use of construction-related hazardous materials during the demolition phase. The project would not involve long-term hazardous materials usage. No impact related to hazardous chemical use would occur.

Because of their age, the buildings on site proposed for demolition as part of phase 1 may contain hazardous materials including asbestos and lead. Campus policy and LRDP EIR Mitigation Measure 4.7-13 require that the buildings be surveyed for potential contamination before any demolition can occur. This mitigation measure was included to further reduce an already less than significant impact. A hazardous materials survey was performed on site that found asbestos-containing building finishes;

concentrations were generally very low. Detailed abatement would be performed for all materials with concentrations in excess of State and federal standards. During removal of these materials, each area with identified asbestos-containing materials would be isolated and proper removal techniques, including wetting of materials, non-dust-generating removal methods, and air filtration, would be used to ensure that asbestos fibers do not escape the removal area. Asbestos-containing materials with concentrations less than 1 percent would be left in place for the demolition process. The demolition process would include application of water during demolition of the building, as required by State and federal regulations and LRDP mitigation measures, to minimize dust and asbestos dispersion. Should lead paint be identified, these materials would be removed using proper techniques in compliance with all applicable State and federal regulations. Compliance with these regulations, including the YSAQMD rule related to asbestos, would reduce or avoid potential risks related to exposure from phase 1, and impacts would be less than significant. For the phase 2 redevelopment portion of the project, no asbestos or lead would be included in the construction and operation of the new buildings. For phase 2, no impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

Radioactive Materials

No radioactive materials would be used with the proposed project. No impact would occur.

Biohazardous Materials

No biohazardous materials would be used with the proposed project. No impact would occur.

Laboratory Animals

No laboratory animals would be used with the proposed project. No impact would occur.

- b) In Phase 1, demolition of the existing buildings would not involve hazardous materials usage and accordingly, would involve no impact related to hazardous materials. Although transport of hazardous materials during building demolition could pose a risk of upset or accident, compliance with applicable transportation regulations would reduce potential impacts to a less than significant level. For Phase 2, the redevelopment activities would utilize hazardous materials such as fuel for construction equipment, paints and solvents during construction, and common cleaning materials (such as bleach) during operation of the building. These materials would be used in low quantities and would not be expected to pose a hazard because they are commonly utilized. The potential impact would be less than significant. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.
- c) Willet Elementary School is the nearest school to the project site and is approximately 1,500 feet north of the project. Neither Phase 1 or Phase 2 of the project would emit hazardous materials or emit hazardous or acutely hazardous materials, substances, or waste within ¼ mile (1,320 feet) of a school site. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus

on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- d) The Laboratory for Energy Related Research/South Campus Disposal site is the only campus site that is listed as a hazardous materials site pursuant to Government Code Section 65962.5. The proposed project would not disturb this site.

The 2003 LRDP EIR found that construction activities under the 2003 LRDP would not expose construction workers and campus occupants to contaminated soil or groundwater (Impact 4.7-12). Campus policy requires that due diligence surveys be performed for all proposed project sites as part of the project planning process. Although the project site is not expected to contain contamination from prior uses, an evaluation of the site conditions will be conducted as part of further project coordination. Federal and state regulations require that workers who may be exposed to contaminants during the course of their jobs know of the presence of contamination and be properly trained. In addition, these regulations require that appropriate engineering and administrative controls and protective equipment be provided to reduce exposure to safe levels. Current campus due diligence policy and Cal/OSHA regulations minimize the exposure of construction workers to contaminants. In addition, if contaminants are identified on a project site, the campus would coordinate site remediation. Therefore, the impact would be less than significant. To ensure that due diligence surveys are performed and to further reduce this less-than-significant impact, LRDP Mitigation 4.7-12 is being implemented as part of the proposed phase 1 portion of the project. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- e) The 2003 LRDP EIR found that development of certain projects on the west campus under the 2003 LRDP could result in safety hazards associated with aircraft. However, the proposed project is not one of these projects and would not conflict with airport operations. No impact would occur under either project phase. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.
- f) The University Airport is a public use airport, not a private airstrip. No other airport facilities are within the immediate vicinity of the campus. No impact would occur. Refer to item e) above for a discussion of potential safety hazards associated with the University airport, a local public use airport. No impact would occur under either project phase. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.
- g) The 2003 LRDP EIR found that implementation of the 2003 LRDP could interfere with the campus' Emergency Operations Plan through construction-related road closures that would render roads impassable by emergency response vehicles (Impact 4.7-17). The proposed project would not require road closures. No impact would occur under either project phase. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the

forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- h) Areas along Putah Creek are the only areas on campus that could be susceptible to wildland fires. Urbanization will not occur in close proximity to these areas under the 2003 LRDP because land along Putah Creek is designated for Open Space and Teaching and Research Fields, and land adjacent to these open areas is designated primarily for Teaching and Research Fields and low density development. The proposed project is within a developed area and would not be subject to wildland fire risk. Therefore, no impact would occur under either project phase. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.9 HYDROLOGY & WATER QUALITY

7.9.1 Background

Section 4.8 of the 2003 LRDP EIR addresses the hydrology and water quality effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.8 of the 2003 LRDP EIR.

Campus

Surface Water Resources

The UC Davis campus is located in the Lower Sacramento watershed. Putah Creek, the principal waterway in the Davis area, originates from springs in the Mayacamas Mountains northwest of the campus, flows into Lake Berryessa, through Winters, along the southern boundary of Russell Ranch, along the southern boundary of UC Davis“ west and south campuses, and eventually into the Yolo Bypass, an overflow channel for the Sacramento River. The North Fork Cutoff and the Arboretum Waterway on campus follow the historic channel of Putah Creek, but currently have no natural flow. The North Fork Cutoff is a typically dry stream channel on the west campus that is currently occupied by sheep and cattle programs in the Department of Animal Science. The Arboretum Waterway serves as the storm water detention basin for the central campus.

UC Davis is a member of the Solano Project, and currently has rights to purchase 4,000 acre-feet of Putah Creek water from Lake Berryessa per year, although reductions in deliveries can occur during drought conditions. The water is delivered to the southwest corner of the campus via an underground pipeline. UC Davis also has rights to surface water from Putah and Cache Creeks. The campus has not used this water in the recent past, but the tenant farmer at Russell Ranch uses approximately 3,750 acre-feet of water per year from Putah and Cache Creeks (via Willow Canal) for irrigation of commercial crops.

The quantity and quality of flows in Putah Creek are highly variable and depend on releases from Lake Berryessa, precipitation, storm water runoff, and treated effluent discharge. The campus“ tertiary level Wastewater Treatment Plant (WWTP) is the largest discharger of treated effluent to Putah Creek. The plant is regulated under a National Pollutant Discharge Elimination System (NPDES) Waste Discharge Requirement (WDR) permit issued by the Central Valley Regional Water Quality Control Board (CVRWQCB).

Groundwater Resources

The campus is underlain by sand and gravel alluvial deposits that include deep and shallow/intermediate depth aquifers. Deep gravel and sand aquifers underlie the campus between 600 to 1,500 feet below ground surface and supply the campus domestic/fire system. Historic annual domestic water use on campus over the past three decades has ranged from less than 600 million gallons per year (mgy) during drought conditions to nearly 900 mgy (UC Davis 1997). Despite the campus“ significant growth in recent decades, the campus“ deep aquifer demands have not significantly increased since the late 1960s (Ludorff and Scalmanini 2003), a trend that reflects the success of the campus“ water conservation efforts.

Shallow/intermediate depth sand and gravel aquifers underlie the campus at depths from 150 to 800 feet below ground surface and supply the campus utility water system, main campus agricultural water needs, and campus and tenant farmer irrigation needs at Russell Ranch. Over the past ten years, an average of approximately 2,657 acre-feet per year of shallow/intermediate aquifer water was used for agricultural purposes on campus, including approximately 1,813 acre-feet on the main campus and approximately 844

acre-feet at Russell Ranch (UC Davis Agricultural Services 2003, UC Davis ORMP 2003c). Water levels in the shallow/intermediate aquifer vary seasonally and strongly correlate to precipitation. A generally upward recharge trend over the period from 1957 to 2002 indicates that there has not been long-term overdraft of the shallow/intermediate depth aquifers (Ludorff and Scalmanini 2003).

Regional groundwater quality is generally characterized as having high mineral content. Calcium, magnesium, and sulfates have been identified as the dominant problematic constituents.

Flooding & Drainage

On campus, the South Fork of Putah Creek, the North Fork Cutoff, and the Arboretum Waterway channels are designated as FEMA 100-year floodplain areas. In addition, a portion of Russell Ranch along County Road 31 and a portion of the west campus along County Road 98 are also subject to flooding during a 100-year storm event.

The central campus drainage system intercepts and collects runoff and directs this water via underground pipes to the Arboretum Waterway. During large storm events, water rises in the Arboretum Waterway, overtops the weir at the west end of the waterway, and flows into the pump pond located north of the weir. From the pump pond, water is pumped through an underground storm drain to the South Fork of Putah Creek. The peak discharge from the Arboretum Waterway to Putah Creek since December 1999 was 65 cubic feet per second (cfs). The majority of land in the west and south campuses and at Russell Ranch is used as teaching and research fields and is not drained by a storm drainage system. Irrigation practices on campus teaching and research fields typically do not generate surface runoff. However, large storm events may result in shallow overland flows that flow to temporary shallow ponds in places such as road and field edges. In addition, developed areas on the west and south campuses include storm water conveyance systems that drain to Putah Creek.

To protect the quality of storm water on campus that ultimately drains to Putah Creek, UC Davis construction and industrial activities are subject to the NPDES storm water requirements. Routine maintenance and minor construction activities on campus are subject to the campus "Phase II Storm Water Management Plan (SWMP).

Project Site

The project site is a developed 3.3-acre residential complex with two parking lots covered with asphalt. Drainage for stormwater at the site is provided by overland flow to drainage inlets in the existing parking lots and adjacent streets with underground drainage pipes that connect to the City of Davis municipal stormwater drainage system.

7.9.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a hydrology and water quality impact significant if growth under the 2003 LRDP would:

- Violate any water quality standards or waste discharge requirements.
- 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.

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on site or off site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on site or off site.
- 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.
- Otherwise substantially degrade water quality.
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury, or death involving flooding.

Additional standards from the CEQA Guidelines“ Environmental Checklist (“g” and “j” in the checklist below) were found not applicable to campus growth under the 2003 LRDP.

7.9.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on hydrology and water quality are evaluated in Section 4.8 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR and significant and potentially significant hydrology and water quality impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR. In addition, Impact 4.8-1, presented below, is considered less than significant prior to mitigation, but mitigation measures were identified in the 2003 LRDP EIR to further reduce the significance of this impact. Other less than significant impacts that do not include mitigation measures are not presented here.

2003 LRDP EIR Impacts		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
HYDROLOGY & WATER QUALITY			
4.8-1	Campus construction activities associated with implementation of the 2003 LRDP would not contribute substantial loads of sediment or other pollutants in storm water runoff that could degrade receiving water quality.	LS	LS
4.8-2	Development under the 2003 LRDP would increase impervious surface on the campus and could alter drainage patterns, thereby increasing runoff and loads of pollutants in storm water, which could affect water quality.	PS	LS
4.8-3	Implementation of the 2003 LRDP could alter drainage patterns in the project area and increase impervious surfaces, which could exceed the capacity of storm water drainage systems and result in localized flooding and contribution to offsite flooding.	PS	LS
4.8-5	Campus growth under the 2003 LRDP would increase the amount of water extracted from the deep aquifer and would increase impervious surfaces. This could result in a net deficit in the deep aquifer volume or a lowering of the local groundwater table but would not interfere substantially with recharge of the deep aquifer.	S	SU
4.8-6	Campus growth under the 2003 LRDP could increase the amount of water extracted from the shallow/intermediate aquifer and would increase impervious	SU	SU

2003 LRDP EIR Impacts		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
HYDROLOGY & WATER QUALITY			
	surfaces. Extraction from the shallow/intermediate aquifer could deplete groundwater levels and could contribute to local subsidence, and increased impervious coverage could interfere substantially with recharge. This could result in a net deficit in the intermediate aquifer volume or a lowering of the local groundwater table.		
4.8-9	Development under the 2003 LRDP could place non-residential structures within a 100-year floodplain, which could expose people and structures to risks associated with flooding and/or impede or redirect flows, contributing to flood hazards.	PS	LS
4.8-10	Development under the 2003 LRDP, in conjunction with construction activities, increased impervious surfaces, and alterations to drainage patterns associated with other development in the region that would increase impervious surface coverage in the watershed, could increase storm water runoff, and could provide substantial sources of polluted runoff, which could affect receiving water quality.	S	SU
4.8-11	Implementation of the 2003 LRDP in combination with regional development could alter drainage patterns and increase the rate or amount of surface runoff, which could exceed the capacity of storm water drainage systems and result in flooding within the Putah Creek watershed.	PS	LS
4.8-12	Growth under the 2003 LRDP and other development in the region would increase discharge of treated effluent to the Putah Creek watershed, which could degrade receiving water quality.	PS	LS
4.8-13	Growth under the 2003 LRDP and other development in the region would increase the amount of water extracted from the deep aquifer and increase impervious surfaces. This could result in a net deficit in the deep aquifer volume or a lowering of the local groundwater table but would not interfere substantially with recharge of the deep aquifer.	S	SU
4.8-14	Growth under the 2003 LRDP and other development in the region would increase the amount of water extracted from shallow/intermediate aquifers and increase impervious surfaces. This could contribute to local subsidence, substantially deplete groundwater supplies, and could interfere substantially with recharge of the shallow/intermediate depth aquifer, resulting in a net deficit in the shallow/intermediate aquifer volume or a lowering of the local groundwater table.	S	SU

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Certain mitigation measures may be applicable to the phase 1 demolition portion of the project and/or to the phase 2 redevelopment portion of the project. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted in this Initial Study or EIR. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

2003 LRDP EIR Mitigation Measures

HYDROLOGY & WATER QUALITY

- | | |
|-------|---|
| 4.8-1 | The campus shall continue to comply with the NPDES state-wide General Permit for Discharge of Storm Water Associated with Construction Activity by implementing control measures and BMPs required by project-specific SWPPPs and with the Phase II SWMP to eliminate or reduce non-storm and storm water discharges to receiving waters. |
|-------|---|

2003 LRDP EIR Mitigation Measures

HYDROLOGY & WATER QUALITY

- 4.8-2 The campus shall comply with the measures in the Phase II SWMP to ensure that project design includes a combination of BMPs, or equally effective measures as they become available in the future, to minimize the contribution of pollutants to receiving waters.
- 4.8-3(a) Prior to approval of specific projects under the 2003 LRDP, the campus shall perform a drainage study to evaluate each specific development to determine whether project runoff would exceed the capacity of the existing storm drainage system, cause ponding to worsen, and/or increase the potential for property damage from flooding.
- 4.8-3(b) If it is determined that existing drainage capacity would be exceeded, ponding could worsen, and/or risk of property damage from flooding could increase, the campus shall design and implement necessary and feasible improvements. Such improvements could include, but would not be limited to, the following:
- (i) The expansion or modification of the existing storm drainage system.
 - (ii) Single-project detention or retention basins incorporated into project design with features including but not limited to: small onsite detention or retention basins; rooftop ponding; temporary flooding of parking areas, streets and gutters; landscaping designed to temporarily retain water; and gravel beds designed to collect and retain runoff.
 - (iii) Multi-project storm water detention or retention basins.
- 4.8-5(a) The campus shall continue to implement water conservation strategies to reduce demand for water from the deep aquifer. Domestic water conservation strategies shall include the following or equivalent measures:
- (i) Install water efficient shower heads and low-flow toilets that meet or exceed building code conservation requirements in all new campus buildings, and where feasible, retrofit existing buildings with these water efficient devices.
 - (ii) Continue the leak detection and repair program.
 - (iii) Continue converting existing single-pass cooling systems to cooling tower systems.
 - (iv) Use water-conservative landscaping on the west and south campuses where domestic water is used for irrigation.
 - (v) Replace domestic water irrigation systems on the west and south campuses with an alternate water source (shallow/intermediate or reclaimed water), where feasible.
 - (vi) Install water meters at the proposed neighborhood to encourage residential water conservation.
 - (vii) Identify and implement additional feasible water conservation strategies and programs including a water awareness program focused on water conservation.
- 4.8-5(b) The campus shall continue hydrogeologic monitoring and evaluation efforts to determine the long-term production and quality trends of the deep aquifer.
- 4.8-5(c) To the extent feasible, new water supply wells in the deep aquifer should be located on the west campus in sands and gravels that are not used by or available to the City of Davis for deep water extraction.
- 4.8-5(d) If continued hydrogeologic monitoring and evaluation efforts identify constraints in the deep aquifer's ability to provide for the campus' long-term water needs, the campus will treat shallow/intermediate aquifer and/or surface water from the Solano Project to serve domestic water demand.
- 4.8-6(a) The campus shall continue to implement water conservation strategies to reduce demand for water from the intermediate aquifer. Utility water conservation strategies shall include the following or equivalent measures:
- (i) Landscape, where appropriate, with native, drought resistant plants and use lawns only where needed for pedestrian traffic, activity areas, and recreation.
 - (ii) Install efficient irrigation systems including centrally controlled automatic irrigation systems and low-flow spray systems.
 - (iii) Apply heavy applications of mulch to landscaped areas to reduce evaporation
 - (iv) Use treated wastewater for landscape irrigation where feasible.
- 4.8-6(b) The campus shall continue to monitor shallow/intermediate aquifer water elevations at existing campus wells to ascertain whether there is any long-term decline in water levels.

2003 LRDP EIR Mitigation Measures

HYDROLOGY & WATER QUALITY

- 4.8-6(c) The campus shall continue to participate in regional subsidence monitoring, including by installing an extensometer, to determine the vertical location of local subsidence.
- 4.8-6(d) If shallow/intermediate aquifer monitoring or subsidence monitoring indicate that campus water use from the intermediate aquifer is contributing to a net deficit in aquifer volume and/or significant subsidence, the campus will reduce use of water from the aquifer by using surface water and/or treated wastewater effluent to irrigate campus recreation fields.
- 4.8-6(e) The campus shall incorporate the following or equally effective measures into project designs under the 2003 LRDP where feasible, to increase percolation and infiltration of precipitation into the underlying shallow/intermediate aquifers:
- (i) Minimize paved surfaces.
 - (ii) Use grassy swales, infiltration trenches, or grass filter strips to intercept storm water runoff.
 - (iii) Implement LRDP Mitigation 4.8-3(b), which specifies construction of detention and infiltration facilities in those areas that do not discharge storm water to the Arboretum.
- 4.8-9(a) Prior to final design, the campus will review the plans for all structures to be constructed in the 100-year floodplain for compliance with the following FEMA requirements for non-residential structures:
- (i) Elevate the lowest floor (including the basement) to or above the base flood level; or
 - (ii) Together with attendant utility and sanitary facilities, design so that below the base flood level, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
 - (iii) Require that fully enclosed areas below the lowest floor that are subject to flooding be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for entry and exit of flood waters.
- 4.8-9(b) For structures placed within the 100-year floodplain, flood control devices will be designed to direct flows toward areas where flood hazards will be minimal.
- 4.8-10(a) Implement LRDP Mitigation 4.8-1 and 4.8-2.
- 4.8-10(b) Jurisdictions within the Putah Creek watershed should comply with Phase II NPDES Municipal Storm Water Permit requirements for small municipalities in order to minimize the contribution of sediment and other pollutants associated with development in the region.
- 4.8-10(c) Comprehensive SWPPPs and monitoring programs should be implemented by all storm water dischargers associated with specified industrial and construction activities, in compliance with the state's General Permits. Such plans shall include BMPs or equally effective measures.
- 4.8-11 The campus shall implement LRDP Mitigation 4.8-3(a-c) in order to prevent flooding on campus.
- 4.8-12 The campus shall implement LRDP Mitigation 4.8-4(a) and (b) to minimize the potential for degradation of receiving water quality.
- 4.8-13(a) Implement LRDP Mitigation 4.8-5(a-d).
- 4.8-13(b) The City of Davis is expected to implement measures to reduce the amount of water withdrawn from the deep aquifer consistent with policies adopted in its General Plan.
- Give priority to demand reduction and conservation over additional water resource development (Policy WATER 1.1)
 - Require water conserving landscaping (Policy WATER 1.2)
 - Provide for the current and long-range water needs of the Davis Planning Area, and for protection of the quality and quantity of groundwater resources (Policy WATER 2.1)
 - Manage groundwater resources so as to preserve both quantity and quality (Policy WATER 2.2)
 - Research, monitor and participate in issues in Yolo County and the area of origin of the City's groundwater

2003 LRDP EIR Mitigation Measures

HYDROLOGY & WATER QUALITY

that affect the quality and quantity of water (Policy WATER 4.1)

- 4.8-14(a) The campus should implement LRDP Mitigation 4.8-6(a-e) to minimize its withdrawal from the shallow/intermediate aquifer and maximize the potential for infiltration.
- 4.8-14(b) Consistent with current water planning policies, the City of Davis is expected to implement measures to reduce impervious surfaces and reduce the amount of water withdrawn from the shallow/intermediate aquifer, consistent with, but not limited to, the water policies listed in LRDP Mitigation 4.8-13(b).

7.9.4 Environmental Checklist and Discussion

HYDROLOGY & WATER QUALITY

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a,f) Construction

The 2003 LRDP EIR found that construction on campus under the 2003 LRDP construction would not contribute substantial loads of sediment or other pollutants to storm water runoff (Impact 4.8-1). Construction on campus is covered under the NPDES state-wide General Permit for Discharge of Storm Water Associated with Construction Activity. As part of this permit, campus construction projects managed by outside contractors and/or disturbing over one acre (including the proposed project) must implement Storm Water Pollution Prevention Plans (SWPPPs), which specify Best Management Practices (BMPs) to reduce the contribution of sediments, spilled and leaked liquids

from construction equipment, and other construction-related pollutants to storm water runoff. All routine maintenance activities and any construction projects disturbing less than one acre that are not managed by outside contractors are covered under the campus' Phase II Municipal Storm Water Management Plan, which requires BMPs to reduce contribution of pollutants to storm water runoff. Because the UC Davis campus is required to comply with the NPDES state-wide permit and Phase II requirements, the water quality effects associated with construction activities on campus are considered to be less than significant. In addition, LRDP Mitigation 4.8-1, included as part of the project for both phase 1 demolition and phase 2 redevelopment, requires the campus to implement BMPs to reduce construction-related water quality impacts. No further analysis is required. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

Operation

The phase 2 redevelopment portion of the project would result in up to 275 students living at the site and increasing the water consumption and associated wastewater effluent up toward the levels previously encountered when the site provided housing for 500 students. The City of Davis wastewater system previously handled the higher level of effluent from 500 students and the effluent from the 275 students would be accommodated by the same conveyance, treatment, and discharge system. With levels expected to be below the prior levels, the potential impact is expected to be less than significant.

The 2003 LRDP EIR found that growth under the 2003 LRDP and other development in the region would increase the cumulative discharge of treated effluent to the Putah Creek watershed, which could degrade receiving water quality (LRDP Impact 4.8-12). However, UC Davis is currently the largest discharger of treated effluent to Putah Creek, and no other major dischargers are expected in the future. LRDP Mitigation 4.8-12, included as part of the project, requires implementation of LRDP Mitigation 4.8-4(a-b), discussed above, which would reduce the impact of increased effluent discharge from the campus WWTP to Putah Creek to a less-than-significant level. Therefore, with implementation of LRDP Mitigation 4.8-12, which is included in the proposed project, the cumulative impact would be less than significant.

b) Aquifer

The proposed project would increase the demand for domestic and fire suppression water from the City of Davis water system. The project would need water for up to 275 residents and the prior Castilian Hall buildings utilized water for 500 residents. With the project needing less water than previously utilized at the project site and the incorporation of water conservation measures, the project is not expected to result in a significant impact to water demand from the deep aquifer. The potential impact is expected to be less than significant. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

c, d,e) The project site is fully developed as an apartment complex within a developed portion of the City of Davis. The proposed project would result in no change to drainage patterns or the quality of

stormwater runoff. The project would have no effect on a stream or river and would have no effect on the existing drainage pattern of the site or an area around the site. The existing level of development results in stormwater runoff that is captured by the adjacent City of Davis stormwater system and conveyed in pipes to a discharge point. The redevelopment of the project site would include a detailed drainage design to route stormwater from the site into the same pipes that currently serve the site. The amount of water is not expected to change because the amount of impervious surface at the project site is not expected to increase. The project would not create stormwater runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff because the site characteristics in terms of stormwater runoff will have no increase to stormwater runoff.

Storm water runoff pollution is evaluated further in items (a,f) above.

- g) Under the 2003 LRDP, housing (including on-campus student housing and housing within the proposed neighborhood) would be constructed outside the 100-year flood zones on campus (see 2003 LRDP EIR, Figure 4.8-4, 100-Year Floodplain) and the project site is outside of 100-year flood zones. Therefore, no impact would occur and no further analysis is required. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.
- h, i) The 2003 LRDP EIR found that development under the 2003 LRDP could place non-residential structures within a 100-year floodplain, which could expose people and structures to risks associated with flooding and/or could impede or redirect flows, contributing to flood hazards (LRDP Impact 4.8-9). However, the project site is not located within the 100-year floodplain, and no further analysis is required.

The campus is located approximately 23 miles downstream of the Monticello Dam (forming Lake Berryessa) and approximately 15 miles downstream of the Putah Diversion Dam. An inundation study prepared by the U.S. Bureau of Reclamation shows that, in the highly unlikely case of a dam breach, the campus (as well as the City of Davis) would be inundated under a maximum of 3 to 9 feet of water approximately 3.5 to 4 hours following the breach (USBR 1998). However, the probability of such a release is far less than one in one million (USBR 2000). As of June 2000, Monticello Dam was determined to be in satisfactory condition, and the dam exhibited no unusual cracks, seeps, or deformations. In addition, the State Department of Dam Safety evaluates dams regularly, which would give adequate time to respond to any deterioration in the safety of the structure. Therefore, the risk of flooding on campus as a result of a dam failure is considered to be a less-than-significant impact. No additional analysis is required. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- j) The campus is not subject to inundation by seiche, tsunami, or mudflow. The campus is generally flat and is not located in close proximity to any large water bodies. Therefore, no impact would occur and no further analysis is required. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will

focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.10 LAND USE & PLANNING

7.10.1 Background

Section 4.9 of the 2003 LRDP EIR addresses the land use and planning effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.9 of the 2003 LRDP EIR.

Campus

The approximately 5,300-acre UC Davis campus is located within Yolo and Solano counties. Local land use is predominantly agricultural, with small cities and towns. The campus is surrounded by extensive agricultural uses to the west and south and by residential, institutional, and commercial land uses in the City of Davis, to the north and east. The City of Davis is a university-oriented community with over 62,000 residents. The UC Davis campus consists of four general units: the central campus, the south campus, the west campus, and Russell Ranch. In addition, the University of California owns several properties in the City of Davis, including buildings in downtown Davis and buildings and vacant parcels in the South Davis Research Park, located south of I-80.

As a state entity, UC Davis is not subject to municipal policies such as the City of Davis General Plan. Nevertheless, such policies are of interest to the campus. The campus has a tradition of working cooperatively with the local communities and it is University policy to seek consistency with local plans and policies, where feasible.

The 2003 LRDP is the campus“ primary land use planning guide. It designates campus lands for the following uses through 2015-16: *Academic and Administrative* (High and Low Density); *Teaching and Research Fields*; *Teaching and Research Open Space*; *Parking*; *Physical Education, Intercollegiate Athletics, and Recreation* (PE/ICA/Recreation); *Research Park* (High and Low Density); *Formal Open Space*; *Community Gardens*; *Faculty/Staff Housing*, *Student Housing*; *Mixed Use Housing*; and *Elementary School*.

Project Site

The Castilian Hall complex covers approximately 3.3 with two buildings and associated parking lots at the intersection of Wake Forest Drive and West 8th Street in Davis, north of the central campus and separated from it by Russell Boulevard, single-family and student housing, and Oxford Circle Park, a small municipal park. The site is accessed from driveways on West 8th Street and Guava Lane, and from pedestrian walkways along Wake Forest Drive.

The complex is surrounded by existing development on the northern, southern and eastern sides. It is bordered by single-family residences to the north; single-family residences and apartment buildings to the east; a surface parking lot, public park, and multi-family residences to the south; and a vegetated area along the slope which descends to the edge of State Route 113 to the west. The areas east and south of the site are residential neighborhoods that include some student housing complexes. North of the project site is a residential area with primarily detached residences.

7.10.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a land use and planning impact significant if growth under the 2003 LRDP would:

- Conflict with any 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.
- Result in development of land uses that are substantially incompatible with existing adjacent land uses or with planned uses.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

An additional standard from the CEQA Guidelines“ Environmental Checklist (“a” in the checklist below) was found not applicable to campus growth under the 2003 LRDP.

7.10.3 2003 LRDP EIR Impacts and Mitigation Measures

Land use and planning impacts of campus growth under the 2003 LRDP through 2015-16 related to land use and planning are evaluated in Section 4.9 of the 2003 LRDP EIR. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. The 2003 LRDP EIR did not identify any potentially significant or significant land use and planning impacts. The less than significant land use and planning impacts identified in the 2003 LRDP EIR do not require mitigation.

7.10.4 Environmental Checklist and Discussion

LAND USE & PLANNING	Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...		
a) Physically divide an established community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in development of land uses that are substantially incompatible with existing adjacent land uses or with planned uses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) The proposed project would have no potential to physically divide an established community. The proposed project would demolish existing student residential buildings and redevelop the site with student residential buildings. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

b) The 2003 LRDP is the guiding land use planning document for the UC Davis campus. The 2003 LRDP land use designation for the project site is *Student Housing*. The proposed project would redevelop the site for student housing purposes and would be consistent with the 2003 LRDP land use designation. In the interim period between demolition of the existing buildings and construction of the redevelopment project, the parking lots that would remain on site and the related landscaped areas are allowed uses under this LRDP land use designation. Although the phase 1 of the proposed project would remove student housing from the site, it would not change the land use designation for the site nor does it propose a non-residential use for the site. Further, phase 2 of the project would replace the

removed housing. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- c) The campus does not fall within the boundaries of, nor is it adjacent to, an adopted regional HCP or NCCP. The campus has implemented two low effects HCPs for VELB at Russell Ranch. The project is located approximately 5 miles from the Russell Ranch. Therefore, the proposed project would not conflict with an adopted HCP or NCCP. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- d) The 2003 LRDP EIR identifies that an impact could result if land uses are developed under the 2003 LRDP EIR that are substantially incompatible with existing adjacent land uses or with planned uses. The phase 1 demolition portion of the project would result in a cleared site that would be maintained in a housing reserve status pending consideration of the phase 2 redevelopment portion of the project. If phase 2 is delayed, the on-going maintenance of the property in a housing reserve status would be compatible with the surrounding uses. The vacant land would be landscaped and maintained to fit with the well-kept appearance of the surrounding neighborhood. The phase 2 redevelopment of the proposed project would be compatible with the adjacent land uses because the proposed residential use for up to 275 graduate students is compatible with the surrounding residential land uses. The prior use of the site for 500 first-year and transfer students did not conflict with the adjacent uses and the proposed redevelopment with a decreased number of students would be less intensive than the prior use. The proposed project would have no external effects that could restrict use of the adjacent land. The adjacent areas are extensively developed residential areas of the City of Davis adjacent to the UC Davis central campus. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.11 MINERAL RESOURCES

7.11.1 Background

Section 4.6, Geology, Soils, and Seismicity, of the 2003 LRDP EIR briefly addresses mineral resources issues. The 2003 LRDP EIR concludes that development on campus would not impede extraction or result in the loss of availability of mineral resources.

Sand and gravel are important mineral resources in the region (CDOC 2000). However, natural gas is the only known or potential mineral resource that has been identified on campus. Natural gas can be extracted at wells placed considerable distances from deposits. No other known or potential mineral resources have been identified on the UC Davis campus. Therefore, development on campus would not impede extraction or result in the loss of availability of mineral resources.

7.11.2 2003 LRDP EIR

Because development on campus would not impede extraction or result in the loss of availability of mineral resources, the 2003 LRDP EIR did not identify any standards of significance, impacts, or mitigation measures associated with mineral resources. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR.

7.11.3 Environmental Checklist and Discussion

MINERAL RESOURCES		Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...			
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a, b) Natural gas is the only known or potential mineral resource that has been identified on campus. Natural gas can be extracted at wells placed considerable distances from deposits. Therefore, development on campus would not impede extraction or result in the loss of availability of a known mineral resource. No impact would occur and no further analysis is required. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.12 NOISE

7.12.1 Background

Section 4.10 of the 2003 LRDP EIR addresses the noise effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.10 of the 2003 LRDP EIR.

Campus

The primary noise source in the vicinity of the campus is vehicular traffic using I-80, SR 113, and local roads. Other sources of noise include occasional aircraft over-flights associated with the University Airport located on the west campus and another small airport in the vicinity, agricultural activities, railroads, and landscaping activities. Land use surrounding the campus is primarily agricultural, with residential, commercial, and other uses concentrated along the northern and eastern boundaries of the main campus.

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB), and the decibel scale adjusted for A-weighting (dBA) is a special frequency-dependent rating scale that relates to the frequency sensitivity of the human ear. Community noise usually consists of a base of steady “ambient” noise that is the sum of many distant and indistinguishable noise sources, as well as more distinct sounds from individual local sources. A number of noise descriptors are used to analyze the effects of community noise on people, including the following:

- L_{eq} , the equivalent energy noise level, is the average acoustic energy content of noise, measured during a prescribed period, typically one hour.
- L_{dn} , the Day-Night Average Sound Level, is a 24-hour-average L_{eq} with a 10 dBA “penalty” added to noise occurring during the hours of 10:00 PM to 7:00 AM to account for greater nocturnal noise sensitivity.
- CNEL, the Community Noise Equivalent Level, is a 24-hour-average L_{eq} with a “penalty” of 5 dB added to evening noise occurring between 7:00 PM and 10:00 PM, and a “penalty” of 10 dB added to nighttime noise occurring between 10:00 PM and 7:00 AM.

Noise monitoring over a 24-hour period in 2003 at sites located in urban areas on and adjacent to the campus (including areas next to freeways, roads, residences, and academic buildings) reflected CNEL levels ranging from 63 to 65 dBA CNEL. Ambient noise levels measured over a short period at various urban sites on campus varied from 49 to 63 dBA L_{eq} .

Project Site

The project site is in an established residential neighborhood that includes a mixture of low-density residential structures and medium density residential structures. A public park is located approximately 50 yards from the project site and the nearest commercial area, the University Mall development, is located approximately 1,500 feet from the site. The project site is adjacent to State Route 113, a state highway along the west side of the project site.

7.12.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a noise impact significant if growth under the 2003 LRDP would result in the following:

- Exposure of persons to or generation of noise levels in excess of levels set forth in Table 7.11.2.

Table 7.11.2: Thresholds of Significance for Noise Evaluations

Noise Source ^a	Criterion Noise Level ^b	Substantial Increase in Noise Level ^b
Road Traffic and Other Long-Term Sources	65 dBA CNEL	>=3 dBA if CNEL w/project is >= 65 dBA >=5 dBA if CNEL w/project is 50-64 dBA >=10 dBA if CNEL w/project is < 50 dBA
Railroad	Within 750 feet of railroad line ^d	
Construction (temporary)	80 dBA L _{eq(8h)} ^e daytime (7:00 a-7:00 p) 80 dBA L _{eq(8h)} evening (7:00 p-11:00 p) 70 dBA L _{eq(8h)} nighttime (11:00 p-7:00 a)	Not Applicable

Source: 2003 LRDP EIR

^a The 2003 LRDP would not substantially increase rail activity; therefore, a threshold of significance for rail noise is not included in this table.

^b At noise-sensitive land use unless otherwise noted. Noise-sensitive land uses include residential and institutional land uses.

^c L_{eq(h)} is an average measurement over a one-hour period.

^d Screening analysis distance criterion from FTA 1995.

^e L_{eq(8h)} is an average measurement over an eight-hour period.

- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- For a project 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, exposure of people residing or working in the project area to excessive noise levels.

7.12.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 related to noise are evaluated in Section 4.10 of the 2003 LRDP EIR. The Draft EIR for the project will evaluate the proposed Castilian Redevelopment to consider whether the project is within the scope of analysis in the 2003 LRDP EIR and whether any project-specific noise impacts are associated with the proposed project. The DEIR will identify significant and potentially significant noise impacts that were identified in the 2003 LRDP EIR and that are relevant to the proposed project with their corresponding levels of significance before and after application of relevant mitigation measures identified in the 2003 LRDP EIR.

7.12.4 Environmental Checklist and Discussion

NOISE		Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...			
a)	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a,b,c,d) Project activities would result in noise effects from demolition and redevelopment of the project site. The impact from these effects will be evaluated in the project EIR and will include detailed analysis of noise impacts from demolition, construction impacts during redevelopment, and operational impacts after construction of the new housing.

e) The project site is located over one mile from the University Airport. The 2003 LRDP, including the proposed project, does not propose changes to University Airport operations, nor does it propose occupied uses within the airport's 65 CNEL noise contour. Therefore, the project would not expose people to excessive noise levels associated with this public use airport, and the impact is less than significant and no additional analysis is required. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

f) The University Airport is a public use airport, not a private airstrip. No other private airport facilities are within the immediate vicinity of the campus. No impact would occur and no additional analysis is required. Refer to item e) above for discussion of potential noise impacts associated with the campus' public use airports. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.13 POPULATION & HOUSING

7.13.1 Background

Section 4.11 of the 2003 LRDP EIR addresses the population and housing effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.11 of the 2003 LRDP EIR.

The on-campus population at UC Davis includes students, faculty/staff, and non-UC Davis affiliates working on campus. The current and projected campus population figures are presented in Table 1 of this Tiered Initial Study. As of 2003, approximately 80 percent of the student population and 50 percent of the employee population lived in the Davis area, and approximately 94 percent of students and 90 percent of employees lived within the three-county area of Yolo, Solano, and Sacramento counties. Outside the City of Davis, the predominant residence locations of students and employees are Woodland, West Sacramento, Winters, Dixon, Vacaville, and Fairfield (UC Davis ORMP 2003d).

Vacancy rates in the City of Davis are considered low, and housing costs in the City are generally higher than those elsewhere in the region. Since 1994, the campus has been working toward the goals of maintaining a UC Davis housing supply that can accommodate 25 percent of the on-campus enrolled students and can offer housing to all eligible freshmen. The 2003 LRDP focuses on providing additional on-campus student housing that will accommodate a total of approximately 7,800 students on the core campus (or 26 percent of the peak student enrollment through 2015-16) and an additional 3,000 students in a west campus neighborhood. The campus currently offers one faculty and staff housing area (Aggie Village), which includes 21 single-family units (17 of which have cottages) and 16 duplexes. The 2003 LRDP plans to provide an additional 500 faculty and staff housing units within the west campus neighborhood through 2015-16.

Project Site

The project site is currently developed with apartment buildings that have been vacant since June 2011. The complex previously provided housing for 500 first-year and transfer students.

7.13.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers an impact related to population and housing significant if growth under the 2003 LRDP would:

- Directly induce substantial population growth in the area by proposing new housing and employment.
- Create a demand for housing that could not be accommodated by local jurisdictions.
- Induce substantial population growth in an area indirectly (for example, through extension of roads or other infrastructure).

Additional standards from the CEQA Guidelines“ Environmental Checklist (“b” and “c” in the checklist below) was found not applicable to campus growth under the 2003 LRDP.

7.13.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on population and housing are evaluated in Section 4.11 of the 2003 LRDP EIR. As discussed in Section 7.13.4, below, the proposed

project will not impact population levels resources. For this reason mitigation measures identified in the 2003 LRDP EIR are not relevant to the Project.

7.13.4 Environmental Checklist and Discussion

POPULATION & HOUSING		Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...			
a)	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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Create a demand for housing that cannot be accommodated by local jurisdictions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a)	The proposed project would not increase the campus enrollment at UC Davis. Phase 2 of the project would increase the campus residential population with the maximum addition of housing for up to 275 students allowing more of the existing number of UC Davis students to live in on-campus housing rather than living in the City of Davis or in surrounding communities. Accordingly, the project would not contribute to additional population growth and would not induce substantial population growth. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.		
b, c)	The proposed project would not permanently displace any existing housing. Upon completion of phase 2, the project would increase the amount of available student housing at UC Davis. The student housing expansions in recent years have increased the overall availability of on-campus housing so that each incoming class of new students has more available housing than existed a few years ago. Therefore, even if only phase 1 is approved (demolition) and during construction of phase 2 of the project, no students would be displaced from existing housing and no students would shift from campus housing to seek housing in surrounding communities. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.		
d)	The project would not increase student enrollment, faculty, or staff and would therefore not create a demand for housing in and of itself. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.		

7.14 PUBLIC SERVICES

7.14.1 Background

Section 4.12 of the 2003 LRDP EIR addresses the public services effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.13 of the 2003 LRDP EIR.

In accordance with the CEQA Guidelines, this Public Services analysis evaluates the environmental effects associated with any physical changes required to meet increases in demand for public services, including police, fire protection, schools, and libraries. Project-level public services impacts are addressed by evaluating the effects of on-campus population growth on public services that directly serve the on-campus population (primarily UC Davis services). Cumulative public services impacts are addressed by evaluating the effects of off-campus population growth on the public services in the Cities of Davis, Dixon, Winters, and Woodland.

UC Davis provides most public services needed on campus, including fire protection, police protection, and library services. The Davis Joint Unified School District serves the City of Davis and portions of Yolo and Solano counties. These services are discussed further below:

- **Fire Protection:** The UC Davis Fire Department provides primary fire response and prevention, natural disaster response, hazardous materials incident response, and emergency medical service to the main campus. The fire department’s goal is to respond to 90 percent of campus emergency calls within 6 minutes (Trauernicht 2010). As of 2010, the UC Davis Fire Department achieves its stated standard of response (Trauernicht 2010).
- **Police:** In 2009-2010, the UC Davis Police Department employed 38 sworn officers to provide 24-hour service to the Davis and Sacramento campuses and facilities owned and leased by UC Davis. 19 officers provide law enforcement services at the Davis Campus with an estimated daytime population of 40,185 (including UC and non-UC employees, students, and dependents living in on-campus housing). Although the campus does not currently rely on any level-of-service standards, the Police Department has indicated that it would like to reach and maintain 1 sworn officer per 1,000 population on the Davis Campus. The Police Department is currently staffed at a level of approximately 0.5 officers per 1,000 on the Davis Campus (Souza 2010).
- **Schools:** In 2001-02 prior to adoption of the 2003 LRDP EIR, a total of approximately 8,677 students were enrolled in the DJUSD’s nine elementary schools, two junior high schools, two high schools, one continuation high school, and one independent study program. The DJUSD estimates student enrollment based on a rate of 0.69 student per single-family residential unit and 0.44 student per multi-family residential unit in its service area. Since 2003, enrollment has decreased slightly with the 2008-09 academic year containing a total enrollment of 8,573 students.
- **Libraries:** UC Davis currently has four main libraries, distributed among the academic centers of the central campus, which serve students, faculty, staff, and the general public, including: Shields Library (the main campus library located centrally on the core campus), the Carlson Health Sciences Library, the Law Library, and the Physical Sciences and Engineering Library.

Project Site

The project site is currently developed with the Castilian Hall complex and there are no existing or planned public service facilities (fire, police, schools or libraries) on or adjacent to the site.

7.14.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a public services impact significant if growth under the 2003 LRDP would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.

Effects associated with recreation services are evaluated in Section 7.15, Recreation, and effects associated with the capacity of the domestic fire water system to provide adequate fire protection are evaluated in Section 7.17, Utilities.

7.14.3 2003 LRDP EIR Impacts and Mitigation Measures

The 2003 LRDP EIR considers a public services impact significant if growth under the 2003 LRDP would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.

Effects associated with recreation services are evaluated in Section 7.14, Recreation, and effects associated with the capacity of the domestic fire water system to provide adequate fire protection are evaluated in Section 7.16, Utilities.

7.14.4 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on public services are evaluated in Section 4.12 of the 2003 LRDP EIR. As discussed in Section 7.13.4, below, the proposed project will not impact public services. For this reason mitigation measures identified in the 2003 LRDP EIR are not relevant to the Project.

7.14.5 Environmental Checklist and Discussion

PUBLIC SERVICES	Impact to be Analyzed in the EIR	No Additional Analysis Required
<hr/> Would the project...		
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:		
i) Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | |
|-----------------------------|--------------------------|-------------------------------------|
| iv) Parks? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| v) Other public facilities? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
-

a, i&ii) **UC Davis Fire and Police Protection**

The proposed project would not increase the enrollment at UC Davis or the regional population levels. The project would increase the number of students living on-campus. This increase is not expected to increase service levels for fire and police protection because the overall regional population would be unchanged and UC Davis fire and police services are already provided to the project site. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

Regional Fire and Police Protection

As described above, no increase to regional population levels and no increased to service levels for police and fire protection are expected. Therefore, no impact would occur.

a, iii) **Schools**

The proposed project would not contribute to the regional school-age population because it is creating on-campus housing for single, university graduate students and accordingly, would have no effect on regional schools. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

- a, iv) Effects associated with parks are evaluated in Section 7.14, Recreation. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

a, v) **Libraries**

The proposed project would increase the on-campus residential population by 225 to 275 students but would not increase the overall regional population. No increases to utilization of libraries are expected. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.15 RECREATION

7.15.1 Background

Section 4.13 of the 2003 LRDP EIR addresses the environmental effects associated with modifying recreational resources to meet campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.13 of the 2003 LRDP EIR.

UC Davis contains many park-like areas and recreation facilities. Park facilities at UC Davis range in size from small picnic and landscaped areas within campus housing areas to extensively landscaped areas in the academic core of the central campus, such as the Arboretum. Areas such as the Quad, the landscaped areas along A Street and Russell Boulevard, the Putah Creek Riparian Reserve in the west campus, and many areas within the Arboretum are used regularly by members of the UC Davis campus and visitors to the campus.

Recreation facilities on the campus include structures, bike paths, and fields used for physical education, intercollegiate athletics, intramural sports, sports clubs, and general recreation. Recreation structures include Hickey Gym, Recreation Hall, the Recreation Swimming Pool, and Recreation Lodge. In addition, two major campus recreation facilities have been completed since the adoption of the 2003 LRDP: the Activities and Recreation Center and the Schaal Aquatic Center. The general public may purchase privilege cards to use some campus recreation facilities, or may join community or campus organizations that have access to some facilities.

Project Site

The project site is currently developed with the Castilian Hall student housing complex and there are no existing or planned recreation facilities on or adjacent to the site.

7.15.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a recreation impact significant if growth under the 2003 LRDP would:

- Increase the use of existing neighborhood and regional parks or other recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Propose the construction of recreation facilities or require the expansion of recreation facilities, which might have an adverse physical effect on the environment.

7.15.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on recreation resources are evaluated in Section 4.13 of the 2003 LRDP EIR. As discussed in Section 7.13.4, below, the proposed project will not impact recreation resources. For this reason mitigation measures identified in the 2003 LRDP EIR are not relevant to the Project.

7.15.4 Environmental Checklist and Discussion

RECREATION

Would the project...

Impact to be
Analyzed in
the EIR

No Additional
Analysis
Required

- | | | |
|--|--------------------------|-------------------------------------|
| a) 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
-

- a,b) The proposed phase 2 of the project would increase the on-campus residential population by 275 students which would contribute to demand for parks and recreation facilities on and off campus. The proposed project would not demolish existing recreational facilities and would not construct new recreational facilities. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.16 TRANSPORTATION, CIRCULATION, & PARKING

7.16.1 Background

Section 4.14 of the 2003 LRDP EIR addresses the transportation, circulation, and parking effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the „Setting“ subsection of Section 4.14 of the 2003 LRDP EIR.

Campus

UC Davis is served by six main campus roadways or “gateways” that connect the campus to residential and downtown areas in the City of Davis, and two gateways that provide direct access to regional freeways (I-80 and SR 113). Circulation within the central campus is accommodated primarily by the campus “loop” roadway system, which includes Russell Boulevard, A Street, New and Old Davis Roads, California Avenue, and La Rue Road. Other roadways within the core campus area are restricted to transit and emergency vehicles, bicyclists, and pedestrians. Primary vehicular access to the south campus is provided by Old Davis Road, to the west campus by Hutchison Drive, and to Russell Ranch by Russell Boulevard.

Level of service (LOS) is a general measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned to roadway intersections. These grades represent the comfort and convenience associated with driving from the driver’s perspective. To assess the worst-case traffic conditions, LOS is measured during morning (7 to 9 AM) and afternoon (4 to 6 PM) peak commute times. The LOS of campus roadways varies. Monitoring of campus intersections during peak hours in Fall 2001 and Fall 2002 found that the Hutchison Drive/Health Sciences Drive intersection (with LOS E during the PM peak hour) was the only study intersection to operate below the campus’ operation standard (standards are identified in the following section). The campus is planning on installing a traffic signal at this intersection by fall 2006.

Bicycles are a major component of the transportation system at UC Davis and in the City of Davis. UC Davis has an extensive system of bicycle paths, which makes bicycles a popular form of travel on campus. The UC Davis Bicycle Plan (UC Davis 2002) estimates that 15,000 to 18,000 bicycles travel to the campus on a typical weekday during the Fall and Spring sessions when the weather is good.

Parking at UC Davis is provided by a combination of surface lots and parking structures. UC Davis Transportation and Parking Services (TAPS) oversees parking services on campus including selling parking passes, providing traffic control at special events, ticketing violators, and measuring parking utilization throughout campus on a quarterly basis. Approximately 11,500 parking spaces were provided on campus as in Fall of 2008.

Project Site

The project site is an existing developed parcel within a developed residential neighborhood. Road access for vehicles, bikes, and transit service is provided via Wake Forest Drive and Eighth Street. These streets have two vehicle lanes, sidewalks and on-street parking. Bike access and pedestrian access is also available via an off-street bike/pedestrian path linking the Guava Lane sidewalks at the southeast edge of the project site to Russell Boulevard. The physical modifications of the project would not result in modifications to the area roadways, bike, or pedestrian facilities. In addition, no changes are proposed for transit service at the site.

7.16.2 2003 LRDP EIR Standards of Significance

The following significance criteria were used to identify significant transportation and circulation impacts. For the purpose of this analysis, potentially significant traffic impacts are defined when the project causes any of the following:

- A conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

For intersections at UC Davis; pursuant to the 2003 LRDP EIR, LOS D is the minimum acceptable LOS.

- For signalized intersections, deteriorated peak hour intersection operations from an acceptable level (LOS D) to an unacceptable level (LOS E or worse).
- For unsignalized intersections, deterioration of the average of all movements from an acceptable level (LOS D) to an unacceptable level and meet the California Manual on Uniform Traffic Control Devices (MUTCD) peak hour signal warrant.
- For signalized and unsignalized intersections that operate unacceptably without the project, the addition of 10 or more vehicles to the intersection's volume.

For intersections in the City of Davis, pursuant to the City of Davis General Plan, LOS E is the minimum acceptable LOS for the City of Davis, LOS F is acceptable for the City for the Davis Core Area (LOS F is acceptable and considered a "congested condition" for Core Area intersections); all City of Davis intersections analyzed in this study are Core Area intersections.

- For signalized intersections, exacerbated unacceptable (LOS F in the weekday AM or PM peak hour; LOS E or F in the Saturday peak hour) operations by increasing an intersection's average delay by five seconds or more.
- For Core Area intersections that operate at congested conditions (LOS F in the weekday AM or PM peak hour or the Saturday peak hour), exacerbate operations by increasing an intersection's average delay by five seconds or more.
- For unsignalized intersections that operate unacceptably (LOS F in the weekday AM or PM peak hour; LOS E or F in the Saturday peak hour; and meet MUTCD's peak hour signal warrant without the project), exacerbate operations by increasing the overall intersection's volume by more than one percent.
- For unsignalized intersections that operate unacceptably but do not meet MUTCD's peak hour signal warrant without the project, add sufficient volume to meet the peak hour signal warrant.

These significance criteria for City of Davis intersections are consistent with those applied in the Second Street Crossing (Target Store) Project Draft Environmental Impact Report (SCH# 2005062142) and the Covell Village Project Draft Program Level EIR (SCH# 2004062089).

- A conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads and highways.

- A change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increased hazards due to a design feature (e.g., sharp curves or dangerous intersections) incompatible uses (e.g., farm equipment).
- Inadequate emergency access.
- A conflicts with applicable adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

7.16.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on traffic, circulation, and parking are evaluated in Section 4.14 of the 2003 LRDP EIR. The Draft EIR for the project will evaluate the proposed Castilian Redevelopment to consider whether the project is within the scope of analysis in the 2003 LRDP EIR and whether any project-specific transportation and circulation impacts are associated with the proposed project. The DEIR will identify significant and potentially significant traffic, circulation, and parking impacts that were identified in the 2003 LRDP EIR and that are relevant to the proposed project with their corresponding levels of significance before and after application of relevant mitigation measures identified in the 2003 LRDP EIR.

7.16.4 Environmental Checklist and Discussion

TRANSPORTATION, CIRCULATION, & PARKING	Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...		
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads and highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a,b,d,e,f)

Phase 1 activities will include trips from employees and hauling activities associated with site demolition. Phase 2 Project activities would result in traffic and circulation effects from redevelopment of the project site. The impact from these effects will be evaluated in the project EIR and will include detailed analysis of intersection operations at Russell Boulevard/Anderson Road, Sycamore Lane/Russell Boulevard, Russell Boulevard/Northbound 113, and Russell

Boulevard/Southbound 113. In addition, the evaluation will consider project effects on bike/pedestrian facilities and safety along Wake Forest Drive, Eighth Street, Sycamore Lane, and Russell Boulevard.

- c) The proposed project would result in no change to air traffic patterns. The UC Davis airport is the closest airport and the proposed project would have no effect on the number of flights or the operation of the airport. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the phase 1 demolition or the phase 2 redevelopment portions of the project and this impact issue will not be carried forward for additional analysis in the forthcoming Draft EIR. The Draft EIR will focus on issues related to air quality, greenhouse gas emissions, noise, traffic, and utilities so that potential impacts in these areas receive detailed analysis.

7.17 UTILITIES & SERVICE SYSTEMS

7.17.1 Background

Section 4.15 of the 2003 LRDP EIR addresses the effects of campus growth on utility systems under the 2003 LRDP. The campus provides the following utility and service systems to campus projects:

- **Domestic/Fire Water**
- **Wastewater**
- **Electricity**
- **Utility Water**
- **Solid Waste**
- **Natural Gas**
- **Agricultural Water**
- **Chilled Water**
- **Telecommunications**
- **Storm Drainage**
- **Steam**

Project Site

The proposed project would use campus utilities and service systems including: domestic water, utility water, sanitary sewer, storm drainage, electricity, natural gas, and telecommunications. These utilities and service systems are discussed below:

- **Domestic Water:** Domestic water for the redevelopment will be obtained from the existing City of Davis water main located in Wake Forest Drive. The required supply to serve up to 275 residents is expected to be less than the supply previously provided to the 500 residents. This issue will be evaluated in detail in the Draft EIR.
- **Sanitary Sewer:** Sanitary sewer service for the redevelopment will be obtained from the existing City of Davis sewer main located in Wake Forest Drive. The required capacity to serve up to 275 residents is expected to be less than the amount previously provided to the 500 residents at Castilian Hall. This issue will be evaluated in detail in the Draft EIR.
- **Storm Drainage:** The project would continue to route stormwater to the existing City of Davis stormwater drainage system. The existing connections are expected to be adequate to serve the redevelopment. This issue will be evaluated in detail in the Draft EIR.
- **Electricity:** Electricity for the redevelopment will be obtained from the existing Pacific Gas and Electric electrical supply located at the project site. The required supply to serve up to 275 residents is expected to be less than the supply previously provided to the 500 residents. This issue will be evaluated in detail in the Draft EIR.
- **Natural Gas:** Natural gas for the redevelopment will be obtained from the existing Pacific Gas and Electric gas supply located at the project site. The required supply to serve up to 275 residents is expected to be less than the supply previously provided to the 500 residents. This issue will be evaluated in detail in the Draft EIR.
- **Telecommunications:** The redevelopment phase will connect to the AT&T telecommunication infrastructure for network and telephone service. This issue will be evaluated in detail in the Draft EIR.

7.17.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a utilities and service systems impact significant if growth under the 2003 LRDP would:

- Exceed the Central Valley Regional Water Quality Control Board’s wastewater treatment requirements.
- Require or result in the construction or expansion of water or wastewater treatment facilities, which would cause significant environmental effects.
- Require or result in the construction or expansion of storm water drainage facilities, which could cause significant environmental effects.
- Result in the need for new or expanded water supply entitlements.
- Exceed available wastewater treatment capacity.
- Be served by a landfill with insufficient permitted capacity to accommodate the project’s solid waste disposal needs.
- Fail to comply with applicable federal, state, and local statutes and regulations related to solid waste.
- Require or result in the construction or expansion of electrical, natural gas, chilled water, or steam facilities, which would cause significant environmental impacts.
- Require or result in the construction or expansion of telecommunication facilities, which would cause significant environmental impacts.

7.17.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on traffic, circulation, and parking are evaluated in Section 4.14 of the 2003 LRDP EIR. The Draft EIR for the project will evaluate the proposed phase 2 redevelopment to consider whether the project is within the scope of analysis in the 2003 LRDP EIR and whether any project-specific utility impacts are associated with the proposed project. The DEIR will identify significant and potentially significant utility impacts that were identified in the 2003 LRDP EIR and that are relevant to the proposed project with their corresponding levels of significance before and after application of relevant mitigation measures identified in the 2003 LRDP EIR.

7.17.4 Environmental Checklist and Discussion

UTILITIES & SERVICE SYSTEMS	Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...		
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- | | | |
|--|-------------------------------------|--------------------------|
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) 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? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h) Require or result in the construction or expansion of electrical, natural gas, chilled water, or steam facilities, which would cause significant environmental impacts? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| i) Require or result in the construction or expansion of telecommunication facilities, which would cause significant environmental impacts? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
-

a-i) Project activities would result in utility and service system effects from demolition, construction, and occupancy of the project site by the proposal for up to 275 graduate students. The impact from these effects will be evaluated in the project EIR and will include detailed analysis of effects on City of Davis utility systems and utility systems provided by other entities.

7.18 MANDATORY FINDINGS OF SIGNIFICANCE

MANDATORY FINDINGS OF SIGNIFICANCE		Impact to be Analyzed in the EIR	No Additional Analysis Required
<hr/>			
Would the project...			
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<hr/>			
a)	The proposed project would not significantly affect fish or wildlife habitat and would not affect archaeological resources because the site has been previously developed and would not contain intact cultural deposits. No further analysis is required		
b,c)	The cumulatively considerable project impacts will be assessed and summarized in the EIR. In addition, the potential for the project to have adverse environmental effects on human beings will be described in the EIR.		

8 FISH & GAME DETERMINATION

Based on the information presented in this Tiered Initial Study, the project has a potential to adversely affect wildlife or the habitat upon which wildlife depend. Therefore, a filing fee will be paid.

Certificate of Fee Exemption

Pay Fee

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10 AGENCIES & PERSONS CONSULTED

None

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