

**UC DAVIS**  
**HOSPITAL SEISMIC DEMOLITION AND OFFICE**  
**REPLACEMENT**

Tiered Initial Study

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

**Prepared By:**

**ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY**

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**July 2015**

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## **1 PROJECT INFORMATION**

Project title:

Hospital Seismic Demolition and Office Replacement

Project location:

University of California, Davis Sacramento Medical Center  
Sacramento 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 Sacramento Campus 2010 Long Range Development Plan (2010 LRDP) (State Clearinghouse No. 2009112060). The 2010 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 year 2025. Section 2.2 provides additional information about the tiering process. The 2010 LRDP and its EIR are available for review at the following locations:

- UC Davis Health Center, Facilities Design and Construction, 4800 Second Avenue, Suite 3010, Sacramento, CA 958178.
- UC Davis Office of Environmental Stewardship and Sustainability, 436 Mrak Hall on the UC Davis campus
- Online at <http://www.ucdmc.ucdavis.edu/facilities/contractors/LRDP.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.

### 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 2010 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 Sacramento Campus 2010 LRDP EIR in accordance with Sections 15152 and 15168 of the CEQA Guidelines and Public Resources Code Section 21094. The 2010 LRDP EIR is a Program EIR that was prepared pursuant to Section 15168 of the CEQA Guidelines. The 2010 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 year 2025. The 2010 LRDP EIR analyzes full implementation of uses and physical development proposed under the 2010 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 2010 LRDP and evaluated in the 2010 LRDP EIR.

By tiering from the 2010 LRDP EIR, this Tiered Initial Study will rely on the 2010 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 2010 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 2010 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 2010 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 2010 LRDP. Therefore, those 2010 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 2010 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 July 8, 2015 to August 12, 2015 and is available at the following locations:

- UC Davis Health Center, Facilities Design and Construction, 4800 Second Avenue, Suite 3010, Sacramento, CA 958178 (Initial Study and the 2010 LRDP, and the 2010 LRDP EIR are available for review at this location) .
- Sacramento Colonial Heights Library, 4799 Stockton Boulevard, Sacramento, CA 95820.
- UC Davis Office of Environmental Stewardship and Sustainability in 436 Mrak Hall on the UC Davis campus, Davis, CA 95616 (Initial Study and the 2010 LRDP, and the 2010 LRDP EIR are available for review at this location) .
- Reserves at Shields Library on the UC Davis campus, Davis, CA 95616.
- Online at:  
[http://sustainability.ucdavis.edu/progress/commitment/environmental\\_review/index.html](http://sustainability.ucdavis.edu/progress/commitment/environmental_review/index.html)

On July 15th at 6:00 pm in Room 1101 of the Auditorium of the UC Davis Cancer Center at 2279 45th Street, Sacramento, CA 95817, 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 August 12, 2015 and can be e-mailed to [environreview@ucdavis.edu](mailto: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 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 Regents may consider approval project elements in November 2015 and that subsequent approvals for portions of the proposed project will occur in 2016 or 2017.

## 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 2010 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 2010 LRDP:** describes the consistency of the proposed project with the 2010 LRDP and 2010 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 2010 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 2010 LRDP EIR. This section also presents a background summary for each resource area, the standards of significance, relevant impacts and mitigation measures from the 2010 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 INTRODUCTION AND REGIONAL LOCATION**

The University of California system (UC system) consists of 10 campuses, 5 of which support health sciences programs that include teaching hospital facilities affiliated with medical schools: San Francisco, San Diego, Irvine, Los Angeles, and Davis. At the Davis Campus, the affiliation between the teaching hospital and the medical school is a single organization called the UC Davis Health System. UC Davis Health System includes UC Davis Medical Center, UC Davis School of Medicine, Betty Irene Moore School of Nursing, and UC Davis Medical Group.

The Regents acquired the Sacramento County Hospital in 1973 to develop the UC Davis Medical Center Sacramento campus located approximately 17 miles east of the UC Davis campus. In 1978, the facility was officially named by The Regents as the University of California, Davis Medical Center. At that time, the existing hospital facility had several seismically deficient buildings and did not have enough space to meet the medical center's patient care, educational, and research responsibilities. Since then, major construction and remodeling projects have transformed the medical center to a state-of-the-art 613-licensed-bed regional health care center that serves as the principal clinical teaching and research site for the UC Davis School of Medicine.

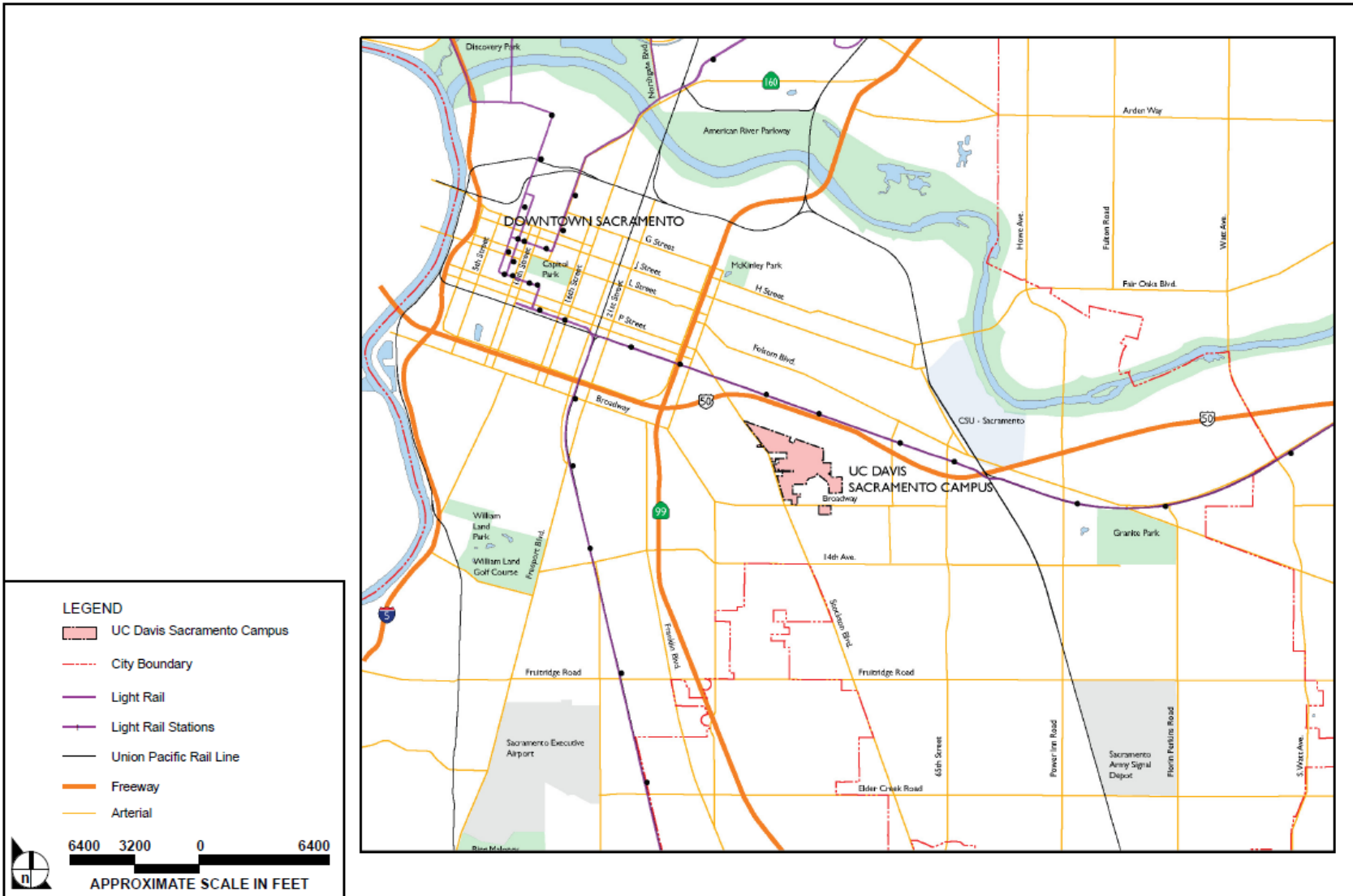
The approximately 142-acre UC Davis Sacramento campus is located in the City of Sacramento, approximately 2.5 miles southeast of downtown Sacramento, 17 miles east of the UC Davis campus in Davis, and 90 miles northeast of San Francisco. The Sacramento campus is bound by V Street on the north, Stockton Boulevard to the west, Broadway to the south, and a residential neighborhood to the east.

#### **3.2 PROJECT OVERVIEW**

UC Davis proposes to complete a series of construction projects that will comprise the Hospital Seismic Demolition and Office Replacement Project (the project) for improved seismic safety and replacement office space at the Sacramento Medical Center. The proposed project includes multiple components consisting of construction of the North Addition 130,000 square foot office building, demolition of the 235,000 square foot North/South Hospital Wing, and demolition of the 20,000 square foot Housestaff building. In total, the project would reduce building area by approximately 125,000 square feet.

The North Addition office building would provide replacement office space for staff currently working in the North/South Wing of the hospital. The proposed building would be a six-story building located along the northern edge of the medical center between V Street and the Main Hospital Complex just north of the East Wing and the Davis Tower. Between V Street and the proposed North Addition building, a landscaped area of approximately 40 feet would be installed.

The North/South Hospital Wing would be demolished as part of the proposed project in order to remove seismically deficient facilities. With removal of the North/South Wing of the hospital, the remaining western edge of the hospital would have no exterior wall and a new façade on the western face of the hospital would be constructed to provide a finished exterior to the remaining building. Upon removal of the North/South Hospital Wing, the site would be landscaped to create a plaza area. The Housestaff building was constructed in 1916 and currently provides administrative support and faculty offices. The two-story building has a seismic safety rating of very poor and would be demolished as part of the project. The construction and demolition periods are expected to take place from 2016 through 2022 with construction access provided from Stockton Boulevard via Colonial Way and no construction access allowed on V Street.



**Figure 1. Regional Location**

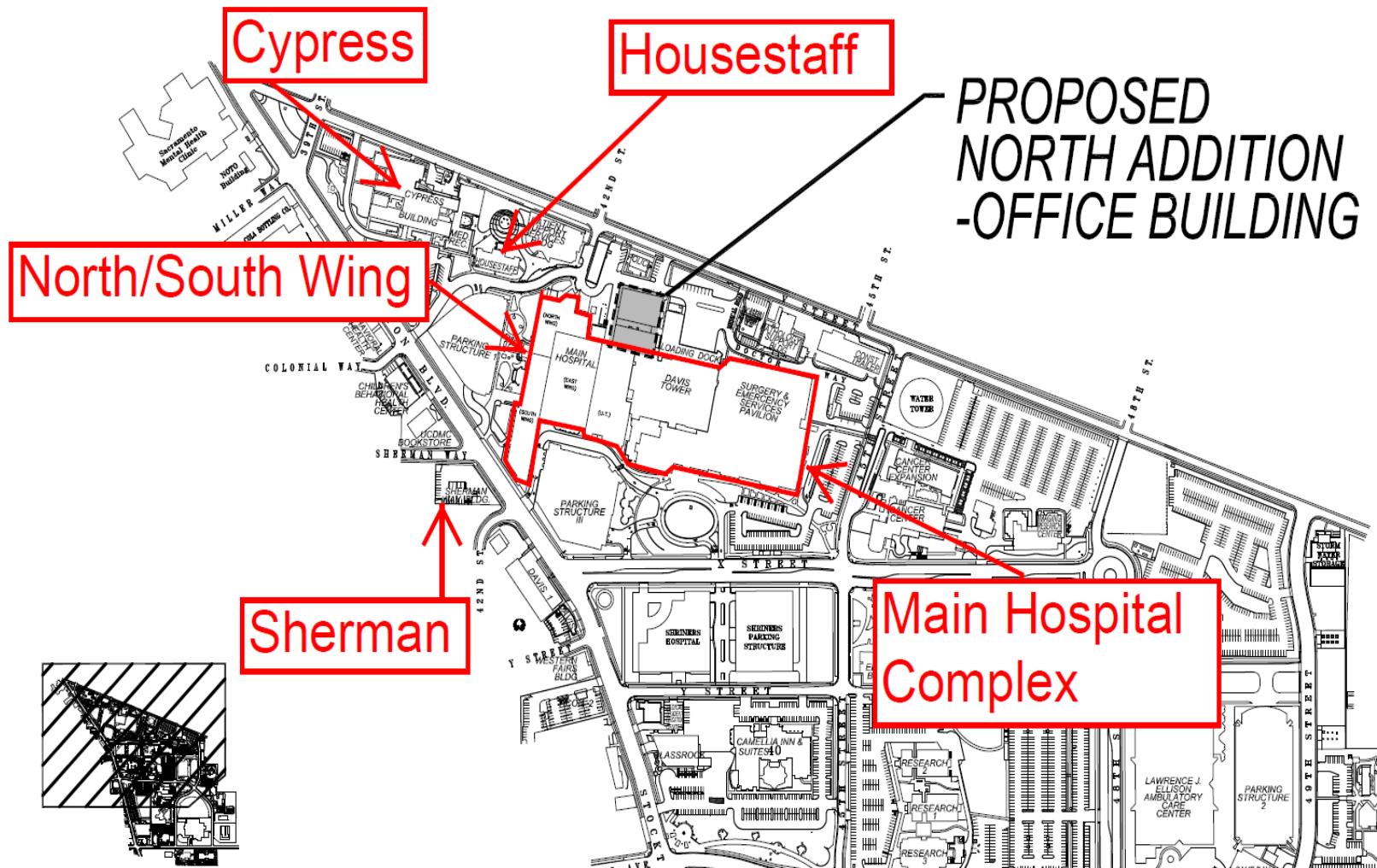


Figure 2: Project Location



Notes: Aerial photo with blue, red, and green markups showing proposed project components of demolition and proposed construction. View is from northeast looking toward southwest.

Figure 3:  
Photo Simulation of Proposed Project



### 3.3 PROJECT SITE

The proposed project includes work on three sites (North Addition, Housestaff, and North/South Hospital Wing). Details of these sites are provided below.

**North Addition:** The North Addition will be constructed north of the Main Hospital on the site formerly occupied by the 30,000 square foot, single-story temporary building used as the Trauma Nursing Unit and will be demolished in late 2015. The footprint of the proposed building will consist of approximately 21,000 square feet with additional site area being redeveloped as an entry plaza and courtyard for the south side of the building and walkway space around the perimeter of the building. The existing building site consists entirely of impervious surfaces with asphalt and concrete surfacing. The project site and proposed building location for the North Addition are shown on Figure 3. The Project site is bounded on the south by the continuous north face of the Main Hospital, on the east by loading docks and on the west by an asphalt service driveway for the hospital. The Project site's north edge will be defined by a reconfigured service road and related landscaped buffer that will both be constructed as part of the Project. Vacant modular buildings and portions of the former emergency department will be demolished as part of the Project's scope and budget.

**Housestaff:** The Housestaff Facility project site appears as an existing developed area with a two-story structure on a site of approximately 10,000 square feet. The site is adjacent to Colonial Way, a two-lane road within the developed portion of the UC Davis hospital complex. To the east and west of the site are two-story existing hospital support buildings and a landscaped courtyard area is located on the north side of the project site.

**North/South Wing:** The six-story building extends from Stockton Boulevard to Colonial Way on a site of approximately 50,000 square feet. The east side of the site is the portion of the building attached to the main hospital. The west side of the building is a landscaped area of approximately 75 feet width that separates the North/South Wing from the parking structure to the west of the building. The north side of the project site includes the two-lane Colonial Way road and is approximately 200 feet from the northern edge of the Sacramento campus.

### 3.4 PROJECT NEED AND OBJECTIVES

The combined three projects of constructing the North Addition Office building, demolishing the North/South Wing of the hospital, and demolishing the Housestaff building will provide modern replacement space for seismically deficient and outdated facilities. The North Addition Office Building project will provide new space to allow for the relocation of critical operational support from the North/South Wing of the Main Hospital and the Housestaff Facility. This project must be completed by 2020 to address seismic safety mandates required by the State of California. Projects to address the seismic safety of all hospital buildings have been prioritized based on funding availability with seismically inadequate acute care and hospital beds spaces replaced or renovated in prior years, leaving at this time, the need to address seismic deficiencies in building space for other operational functions of the hospital.

The North/South Wing of the UC Davis Main Hospital complex is a "Structural Performance Category 1" structure per California Office of Statewide Health Planning and Development (OSHPD) standards. To comply with state seismic mandates and maintain hospital licensure, the UC Davis Health System (UCDHS) intends to vacate and disconnect the North/South Wing from the adjoining Main Hospital complex. To clear the North/South Wing and prepare the structure for disconnection, several key hospital

administrative units must be relocated. To house the displaced hospital administrative units, UC Davis is proposing to construct the North Addition Office Building, a six-story office structure of approximately 130,000 gross square feet.

The Housestaff Facility, located just north of the North/South Wing, contains 20,000 square feet of seismically deficient space. Certain functions currently housed in the Cypress and Sherman buildings would move to the proposed North Addition building. The space vacated in the Cypress and Sherman buildings would be occupied by units from the Housestaff Facility, allowing that seismically deficient Housestaff Facility to be fully vacated and ready for demolition.

The overall Project objectives are to:

- Provide replacement space for offices and support functions in the seismically deficient North/South Wing.
- Promote synergy and consolidate departments focused on enhancing quality and the patient experience.
- Foster highest and best use of space adjacent to the hospital.
- Provide modest amount of growth space for academic offices.
- Replace the hospital command center displaced by the Tower 1 renovation project.
- Achieve UC sustainability goals for energy performance.
- Create high quality office environment at reasonable cost.
- Provide office space as non-OSHPD space separate from hospital building.
- Complement the aesthetic and operational aspects of the existing hospital buildings.
- Respect the residential neighborhood to the north.
- Create adjacent outdoor plaza/garden space.

Following the deadly 1994 Northridge earthquake, hospital acute care facilities in California are subject to seismic safety mandates outlined in the State of California Senate Bill (SB) 1953. Compliance with SB 1953 has been an integral component of UCDHS facility planning, and significant progress toward meeting state seismic mandates has occurred in recent years. The construction of the Davis Tower (May 1999), and the subsequent build-out of its six floors of shelled space (1999-2009) for inpatient beds, as well as the completion of the Surgery and Emergency Services Pavilion (October 2010), has made way for virtually all of UCDHS's inpatient beds and critical systems to be located in facilities that are seismically compliant. Over the past four years, patient care spaces have been relocated to the Surgery and Emergency Services Pavilion Project, including the Operating Room Suite, Emergency Department, Clinical Lab, Radiology, and Dietary Services.

The North /South Wing of the UC Davis Main Hospital complex contains approximately 235,000 square feet of seismically-deficient space, which must be disconnected from the Main Hospital complex by the 2020 deadline. At present, the North/South Wing is home to two acute care units (Apheresis and Dialysis unit, and Children's Surgery Center and Hospitalists); some support units (such as Environmental Services, Child Life Program, and Gift Shop Storage); and several key administrative units which directly serve the Main Hospital complex. The key administrative units located within the North/South Wing are:

- Hospital Administration and Operations
- Heart and Vascular Center
- Patient Care Services
- Pharmacy Operations
- Physical Medicine & Rehabilitation Therapies
- Performance Excellence



- Neurology
- Infection Prevention
- Pastoral Services (limited to only a portion of this program, with most of the space located in the Housestaff Facility)

The remaining Apheresis and Dialysis units, and Children’s Surgery Center and Hospitalists have approved projects for relocation to other areas of the Main Hospital complex (University Tower 1st Floor and Surgery and Emergency Services Pavilion, respectively).

The proposed Project addresses the relocation of the key hospital administrative units from the North/South Wing, along with the certain units from the Cypress and Sherman buildings, which will have a secondary effect of allowing relocation of units out of the seismically deficient Housestaff Facility.

### **3.5 PROJECT ELEMENTS**

#### **3.5.1 North Addition Construction**

The proposed North Addition Office Building would construct a six-story building of approximately 130,000 gross square feet to provide administrative space for units that oversee Main Hospital operations. The new building will be linked to the Main Hospital by a single-story passage to an existing east/west corridor located in the Davis Tower. The building will be connected to the existing utilities infrastructure serving the overall Main Hospital complex.

The new office and support space in the North Addition building would house programs relocated out of seismically-deficient space or being brought into the structure to create better programmatic alignment and operational efficiencies. The building will include office and departmental space along with support spaces such as conference rooms, restrooms, storage space, pharmacy operations space, auditorium/conference space, administrative space, and space for the emergency operations center.

#### **3.5.2 Housestaff Demolition**

Demolition of the approximately 20,000 square foot Housestaff building will include an abatement phase to meet asbestos and lead removal requirements, a demolition phase consisting of building deconstruction and removal by trucks, and a site restoration phase consisting of grading and landscaping installation.

#### **3.5.3 North/South Wing Demolition**

Demolition of the North/South wing of the hospital will include the following central activities:

- Utility disconnection
- Building decommission and abatement
- Building demolition
- Hospital façade construction
- Site restoration

### **3.5.4 Parking and Roadways**

Construction access for all project components would take place from Stockton Avenue with primary access to each site provided by Colonial Way. During certain phases of the North/South Wing demolition, a temporary access point for truck traffic carrying demolition debris may be provided on Stockton Avenue approximately at the location of Sherman Way.

### **3.5.5 Utilities and Infrastructure**

The proposed project would reduce building square footage by approximately 124,000 gsf. The existing buildings currently receive utility services from the Sacramento campus and the proposed North Addition building would be served by campus utilities. Connections to the campus utilities are within the existing site of the proposed North Addition building or along the periphery of the project site. The decreased amount of building square footage is expected to decrease the overall utility loads.

### **3.5.6 Population**

The proposed project primarily replaces space and relocates existing personnel. The project would not increase the expected population of visitors or patients at the Sacramento campus and is not expected to increase the employee population at the Sacramento campus.

## **3.6 CONSTRUCTION SCHEDULE AND STAGING**

Construction of the North Addition office building would occur beginning as early as 2016 and continuing through 2018. Upon occupancy of the North Addition building, the North/South Wing of the hospital would begin the staged process of decommissioning, demolition, façade replacement, and site redeveloped as a plaza area with an expected timeline of 2018 through 2022 for project completion. Demolition of the Housestaff building could take place beginning in 2016. Construction staging would take place on site area surrounding the North Addition building, on the Housestaff site, and/or around the North/South Wing in areas between the existing building and the adjoining parking structure.

#### 4 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 2010 LRDP EIR.

- |  |   |   |
|--|---|---|
| <input checked="" 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 checked="" 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 and Recreation       | <input type="checkbox"/>                                      |
| <input checked="" type="checkbox"/> Transportation & Circulation | <input checked="" type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance   |

## 5 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 2010 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 2010 LRDP EIR. A TIERED ENVIRONMENTAL IMPACT REPORT will be prepared to address new impacts not previously identified in the 2010 LRDP EIR.**

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A. Sidney England

Assistant Vice Chancellor – Environmental Stewardship and Sustainability

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Date

## 6 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 2010 LRDP EIR no additional analysis beyond that provided in the 2010 LRDP EIR or the Initial Study is necessary.

## 6.1 AESTHETICS

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

a-d) The Draft EIR will evaluate the changes to aesthetic conditions that will result from the proposed project in compared to existing conditions. The project site is located in a developed area within the existing hospital complex. The project will include new structures, removal of existing structures, and new lighting that could potentially affect aesthetic conditions. For items a-d, the Draft EIR will evaluate the potential project impacts, cumulative impacts, and, if necessary, propose mitigation measures to address project impacts.

## 6.2 AGRICULTURAL AND FORESTRY RESOURCES

The Initial Study for the 2010 LRDP EIR addressed the agricultural resources effects of campus growth under the 2010 LRDP. As a redevelopment project in an urbanized area, the project has no connection to agricultural resources as briefly described below.

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.		
b) The proposed project would take place in an urbanized setting with no relation to agricultural land use and no relation to lands subject to Williamson Act contracts. The project site is designated as Urban and Built-Up Land by FMMP. 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 proposed project.		
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 proposed project.		
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 proposed project.		
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.		

### 6.3 AIR QUALITY

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 addition.
- e) The proposed project would not produce unusual odors because the proposed redevelopment would not result in industrial processing, 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 proposed project.



## 6.4 BIOLOGICAL RESOURCES

This section describes the impacts to biological resources that could result from implementation of the proposed project as a part of implementing the 2010 LRDP. Biological resources include all flora, fauna, and associated habitats (including wetlands) that would be affected by project implementation. Information and analysis presented in this section are based on a technical report prepared for the proposed project by Pacific Biology in 2009 and 2010. These technical reports are on file with the campus.

### 6.4.1 Environmental Setting

The Sacramento campus is located in the Sacramento Valley, which is characterized by a Mediterranean climate with hot, dry summers and mild, rainy winters. The campus is within the City of Sacramento, approximately 2.5 miles southeast of downtown Sacramento, 17 miles east of the UC Davis Main Campus in Davis, and 90 miles northeast of San Francisco. At its closest point, the campus is located approximately 1.5 miles southwest of the American River. It is located in an urbanized area in the City of Sacramento and is surrounded by residential and commercial development.

The Sacramento campus is located in an urban area and is heavily developed. The campus includes existing hospital facilities, support buildings, paved parking areas, a central campus major open space area, walkways, lawns, other landscaped areas, and isolated areas of undeveloped land. Planted trees are present throughout the campus, including large specimens and groupings of trees. Planted tree species include eucalyptus (*Eucalyptus globules*), oak (*Quercus wislizeni*, *Q. kelloggii*), Monterey pine (*Pinus radiata*), and sycamore (*Plananus* sp.).

The campus has a large open space area located in the central portion of the campus. The central campus major open space area was established in compliance with a mitigation measure in the UCMDC 1989 LRDP EIR for impacts of campus development on urban wildlife. This area contains plantings of various species native to California, including blue elderberry (*Sambucus mexicana*), interior live oak, valley oak (*Quercus lobata*), willow (*Salix* sp.), and cypress (*Cupressus* sp.). Non-native species are also present in the central campus major open space area, including various non-native, annual grasses and ornamental flowering species. The central campus major open space is not in a naturally occurring condition.

In addition, there is an undeveloped area in the eastern portion of the campus. This area is dominated by storksbill (*Erodium botrys*) and various non-native, annual grass species. The area also contains ruderal (i.e., weedy) plant species such as mustard (*Brassica nigra*) and yellow-star thistle (*Centaurea solstitialis*).

#### Special-Status Species

For purposes of this analysis, special-status wildlife species are defined as those that are state or federally listed as Threatened or Endangered, proposed for listing as Threatened or Endangered, designated as state or federal candidates for listing, a federal Bird of Conservation Concern, a state Species of Special Concern, a state Fully Protected Animal, or that may otherwise be considered “rare” under Section 15380 of the *California Environmental Quality Act (CEQA) Guidelines*. Special-status plants include those species that are state or federally listed as Rare, Threatened, or Endangered; federal candidates for listing; proposed for state or federal listing; or included on Lists 1, 2, 3, or 4 of the California Native Plant Society Inventory of Rare and Endangered Plants of California (CNPS Inventory).

The latest version of the California Natural Diversity Data Base (CNDDDB) was reviewed for the project area. Based on the review of the CNDDDB, the following special-status species have been documented in the project area (i.e., within 2 miles of the campus): valley elderberry longhorn beetle, vernal pool tadpole shrimp, California linderiella, American badger, white-tailed kite, bank swallow, Cooper’s hawk, purple

martin, burrowing owl, and Sanford's arrowhead. The potential of each of these special-status species to be in areas that may be affected by implementation of the 2010 LRDP is discussed below.

### **Special-Status Wildlife Species**

**Valley elderberry longhorn beetle** (*Desmocerus californicus dimorphus*) is a federally Threatened species. This beetle occurs in association with blue elderberry (*Sambucus mexicana*) and is known to occur in riparian habitats along the American River. The central campus major open space contains approximately nine blue elderberry shrubs. These elderberry shrubs are not part of a riparian habitat and were planted as part of a display of locally occurring native plant species. The shrubs were checked by a qualified biologist and no "exit holes" created by the valley elderberry longhorn beetle (VELB) were observed, indicating that no beetles had emerged from the shrub prior to the survey. The closest documented occurrence of VELB to the campus is located approximately 2 miles to the north along the American River. Studies indicate that the VELB is expected to be a poor disperser (Collinge et al. 2001). This lack of dispersing capability, and the fact that the on-site elderberry shrubs are separated from known VELB occurrences by approximately 2 miles of dense urban development, makes the potential of the species to disperse from the American River and to colonize the on-site elderberry shrubs very low. Therefore, VELB is not expected to occur on the campus.

**Vernal pool tadpole shrimp** (*Lepidurus packardii*) is a federally Endangered species and **California linderiella** (*Linderiella occidentalis*) is included on the Special Animals list maintained by the California Department of Fish and Game (CDFG). These species occur in vernal pools, seasonal wetlands, and potentially other seasonal impoundments of water. Suitable habitat (i.e., vernal pools, seasonal wetlands) is not present on the campus, and, therefore, these species are not expected to occur.

**American badger** (*Taxidea taxus*) is a state Species of Special Concern. This species occurs in drier open stages of shrub, forest, and herbaceous habitats with friable soils where they dig burrows. Suitable habitat is not present on the campus and, therefore, this species is not expected to occur.

**White-tailed kite** (*Elanus leucurus*) is a California Fully Protected Species. This species typically nests in trees, often in isolated stands, surrounded by open foraging habitat. Nests are built on top of oaks, willows, or other dense broad-leaved deciduous trees within partially cleared or cultivated fields, grasslands, marsh, riparian, woodland, and savanna habitats. This species has been documented nesting along the American River. However, the species is not expected to nest on the campus given the extent of development on and surrounding the campus and the lack of adjacent or nearby foraging habitat.

**Bank swallow** (*Riparia riparia*) is a state Threatened species. This species requires vertical banks/cliffs with fine textured/sandy soil to dig nesting holes. Bank swallows have been documented nesting along the American River. However, the species is not expected to nest on the campus given the absence of suitable nesting habitat.

**Cooper's hawk** (*Accipiter cooperii*) is included on the Special Animals list maintained by the CDFG. Breeding pairs generally select nest sites within dense stands of live oak woodland, riparian habitats, or other wooded areas. Nesting also occasionally occurs in sparsely wooded areas, including suburban areas and parks. This species has been documented nesting in an urban area near the campus. The larger trees on the campus provide potential nesting habitat for this special-status bird species.

**Purple martin** (*Progne subis*) is a state Species of Special Concern. This colonial species generally inhabits Douglas fir, ponderosa pine, and Monterey pine woodlands, but the species is also known to use human-made structures for nesting. Purple martins have been documented nesting at several locations in the project area in freeway and street overpass weep holes (holes constructed into the underside of some freeways and overpasses to relieve air pressure and drain condensation). Given the known nesting of the species in the project area, it is possible that the species could nest on the campus within trees with suitable cavities or within openings in buildings (e.g., open drains).

**Burrowing owl** (*Athene cunicularia*) is a federal Bird of Conservation Concern and a state Species of Special Concern. This species occurs in grasslands and other habitats characterized by low-growing vegetation. This species is a subterranean nester and is dependent on burrowing mammals, most notably California ground squirrel (*Spermophilus beecheyi*), to excavate the burrows that it inhabits. The only undeveloped area on the campus potentially large enough to be occupied by burrowing owls is located along its eastern boundary. However, this area does not contain ground squirrel or other small mammal burrows suitable for burrowing owls. Additionally, areas bordering the campus, including Greenfair Park and Marian Anderson School, do not provide suitable habitat for burrowing owls given the absence of suitable burrow sites, scattered trees that provide potential roosts for burrowing owl predators (burrowing owls generally avoid such habitats), and irrigated lawns. Therefore, burrowing owls are not expected to occur on or in areas bordering the campus.

### **Special-Status Plant Species**

**Sanford's arrowhead** (*Sagittaria sanfordii*) is a CNPS Inventory 1.B.2 species that is associated with marshes and swamps. This species has been documented at several locations in the project area. Suitable habitat for this plant species is not present on the campus, and, therefore, Sanford's arrowhead is not expected to occur.

No other special-status plant species is expected to occur on the campus given its developed and highly disturbed condition.

### **Jurisdictional Resources**

Wetlands, creeks, streams, and permanent and intermittent drainages are subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under Section 404 of the Federal Clean Water Act. CDFG also generally has jurisdiction over these resources, together with other aquatic features that provide an existing fish and wildlife resource pursuant to Sections 1602 and 1603 of the California Fish and Game Code. CDFG asserts jurisdiction to the outer edge of vegetation associated with a riparian corridor.

No creeks, wetlands, riparian areas, or other resources potentially under the jurisdiction of USACE and/or CDFG are present directly within the locations of building sites and other infrastructure improvements associated with the implementation of the 2010 LRDP.

### **Wildlife Movement Corridors**

Wildlife corridors are described as pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or manmade obstacles such as urbanization. The campus is completely surrounded by dense urban development. Therefore, the campus does not provide habitat connectivity between open space areas and is not considered to be part of an established wildlife movement corridor.

### **Federal Regulations**

#### Federal Endangered Species Act

Under the Federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 United States Code [USC] 1533[c]). Pursuant to the requirements of the FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the project region, and whether the proposed project would result in a "take"<sup>1</sup> of such species. The "take" provision

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<sup>1</sup> "Take," as applied in Section 9 of the FESA, means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect or to attempt to engage in any such conduct." "Harass" is further defined by the USFWS (50 CFR Section 17.3) as an intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, and sheltering. "Harm" is defined as "an act which actually kills or injures wildlife." This may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

of the FESA applies to actions that would result in injury, death, or harassment of a single member of a species protected under the FESA. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the FESA, or result in the destruction or adverse modification of critical habitat for such species (16 USC 1536[3][4]). If it is determined that a project may result in the take of a federally listed species, a permit from the U.S. Fish and Wildlife Service (USFWS) would be required under Section 7 or Section 10 of the FESA.

Species proposed for listing are granted limited protection under the FESA and must be addressed in Biological Assessments (under Section 7 of FESA); proposed species otherwise have no protection from take under federal law, unless they are emergency-listed species. Candidate species are afforded no protection under FESA. However, the USFWS recommends that candidate species and species proposed for listing also be considered in informal consultation during a project's environmental review.

#### Clean Water Act

The Federal Water Pollution Control Act of 1972, often referred to as the Clean Water Act (CWA), is the nation's primary law for regulating discharges of pollutants into waters of the United States. The objective of CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The regulations adopted pursuant to CWA deal extensively with the permitting of actions in waters of the United States, including wetlands. CWA statutory sections and implementing regulations provide more specific protection for riparian and wetland habitats than any other federal law. The U.S. Environmental Protection Agency (U.S. EPA) has primary authority under CWA to set standards for water quality and for effluents, but USACE has primary responsibility for permitting the discharge of dredge or fill materials into streams, rivers, and wetlands.

#### Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (16 USC, Section 703, Supplement I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. The Act encompasses whole birds, parts of birds, and bird nests and eggs.<sup>2</sup>

### **State Regulations**

#### California Native Plant Protection Act

State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed CDFG to carry out the legislature's intent to "preserve, protect, and enhance endangered plants in this state." NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare and to require permits for collecting, transporting, or selling such plants. The California Endangered Species Act (CESA) expanded upon the original NPPA and enhanced legal protection for plants. CESA established threatened and endangered species categories, and grandfathered all rare animals—but not rare plants—into NPPA as threatened species. Thus, there are three listing categories for plants in California: Rare, Threatened, and Endangered.

#### California Fish and Game Code

The California Fish and Game Code provides a variety of protections for species that are not federally or state-listed as Threatened, Endangered, or of Special Concern.

- Section 3503 protects all breeding native bird species in California by prohibiting the take,<sup>3</sup> possession, or needless destruction of nests and eggs of any bird, with the exception of non-native English sparrows and European starlings (Section 3801).

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<sup>2</sup> The Act covers hundreds of birds, including varieties of loon, grebe, albatross, and booby, pelican, cormorant, heron, stork, swan, goose, duck, vulture, eagle, hawk, falcon, fail, plover, avocet, sandpiper, phalarope, gull, tern, murre, puffin, dove, cuckoo, roadrunner, owl, swift, hummingbird, kingfisher, woodpecker, swallow, jay, magpie, crow, wren, thrush, mockingbird, vireo, warbler, cardinal, sparrow, blackbird, finch, and many others.

<sup>3</sup> "Take" in this context is defined in Section 86 of the California Fish and Game Code as to "hunt, pursue, catch, capture, or kill, or to attempt to hunt, pursue, catch, capture, or kill."

- Section 3503.5 protects all birds of prey (in the orders Falconiformes and Strigiformes) by prohibiting the take, possession, or killing of raptors and owls, their nests, and their eggs.
- Section 3513 of the code prohibits the take or possession of migratory nongame birds as designated in the Migratory Bird Treaty Act or any parts of such birds except in accordance with regulations prescribed by the Secretary of the Interior.
- Section 3800 of the code prohibits the taking of nongame birds, which are defined as birds occurring naturally in California that are not game birds or fully protected species.
- Section 3511 (birds), Section 5050 (reptiles and amphibians), and Section 4700 (mammals) designate certain wildlife species as fully protected in California.

### **Local Plans and Policies**

The Sacramento Campus is a University of California campus that conducts work within the University's mission on land that is owned or controlled by The Regents of the University of California. As a state entity, the University is generally exempt from compliance with local land use regulations by the State constitution, including general plans, zoning and ordinances. The only local plan applicable to the campus is the LRDP. The following subsections summarize objectives and policies from the 2010 LRDP. As background information, the City of Sacramento's tree preservation ordinance is also presented below.

#### UC Davis Sacramento Campus 2010 LRDP Planning Principles

The 2010 LRDP proposes six fundamental planning principles to guide implementation of development under the 2010 LRDP. Because sensitive biological resources are generally not present on the campus, the 2010 LRDP planning principles do not address biological resources.

#### City of Sacramento Tree Preservation Ordinance

According to City policy, all trees, regardless of size, should be retained if possible. The City of Sacramento therefore has adopted the Tree Preservation Ordinance to protect trees as a significant resource for the community. Permits are required to remove trees that are within City jurisdiction. In addition, the ordinance includes a definition for a "heritage tree" and mandates protection of heritage trees during construction activities. According to the ordinance, trees are considered heritage trees if the following applies:

- The tree has a trunk circumference of 100 inches or more, is of good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species.
- The tree is a native species with a circumference of 36 inches or greater and in good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species. Protected native species include valley oak, interior live oak, blue oak, coast live oak, California sycamore, and California buckeye.

### **6.4.2 Impact Evaluation Process**

#### **Significance Criteria**

The impacts on biological resources from the implementation of the 2010 LRDP would be considered significant if they would exceed the following Standards of Significance, in accordance with Appendix G of the *State CEQA Guidelines* and the UC CEQA Handbook:

- 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 CDFG or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFG or USFWS;

- 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;
- 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 the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

**6.4.3 2010 LRDP EIR Impacts and Mitigation Measures**

Impacts of campus growth under the 2010 LRDP through 2025 on biological resources are evaluated in Section 4.3 of the 2010 LRDP EIR. The proposed project is within the scope of analysis in the 2010 LRDP EIR and the significant and potentially significant biological resources impacts identified in the 2010 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 2010 LRDP EIR.

<b>2010 LRDP EIR Impacts</b>		<b>Level of Significance Prior to Mitigation</b>	<b>Level of Significance After Mitigation</b>
Biological Resources			
BIO-2	Implementation of the 2010 LRDP could have a substantial adverse effect on nesting birds, including Cooper’s hawks or Purple martins.	PS	LS

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

A mitigation measure from the 2010 LRDP EIR that is applicable to the proposed project is presented below. Since this mitigation measure is already being carried out as part of implementation of the 2010 LRDP, it is 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 2010 LRDP EIR mitigation measures.

**2010 LRDP EIR Mitigation Measures**

Biological Resources

- BIO-2      If a construction project is proposed on the campus that would commence anytime during the nesting/breeding season of native bird species potentially nesting on the site (typically February through August in the project region), a pre-construction survey of the project vicinity for nesting birds shall be conducted.
- This survey shall be conducted by a qualified biologist (i.e., experienced with the nesting behavior of bird species of the region) two weeks prior to the commencement of construction activities. The intent of the survey would be to determine if active nests of special-status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present within the construction zone or within an area surrounding the construction zone as determined by the biologist. The survey area shall include all trees and shrubs in the construction zone and the surrounding area. The survey area shall also include a search of any buildings/structures to be demolished or near the construction zone, for nesting purple martins. The survey shall be timed such that the last survey is concluded no more than two weeks prior to initiation of construction. If ground disturbance activities are delayed following a survey, then an additional pre-construction survey shall be

**2010 LRDP EIR Mitigation Measures**  
**Biological Resources**

conducted such that no more than two weeks will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly affected or are within 500 feet of construction and would be subject to prolonged construction-related noise and/or vibration, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with CDFG, taking into account factors such as the following:

- Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;
- Distance and amount of vegetation or other screening between the construction site and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or another appropriate barrier and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas of special status bird species to ensure that no impacts on these nests occur.

**6.4.4 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 2010 LRDP EIR identified that the Sacramento campus contains no sensitive plant species. The proposed project site is fully developed and does not support habitat for sensitive plants, and the project could have no effect on sensitive plant species. No impact would occur. No additional analysis is needed. See item (e) below for details related to removal of urban landscaping trees.

**Wildlife**

The 2010 LRDP EIR found that development under the 2010 LRDP could result potential impacts to nesting birds (LRDP Impact BIO-2) including Cooper's hawks and Purple martin. The 2010 LRDP EIR identified mitigation measure BIO-2 to reduce potential impacts to Cooper's hawks and Purple martin and requiring that if a construction project is proposed on the campus that would commence anytime during the nesting/breeding season of native bird species potentially nesting on the site (typically February through August in the project region), a pre-construction survey of the project vicinity for nesting birds shall be conducted. The proposed project could include construction commencing during the nesting season and, if so, a pre-construction nesting bird survey would be conducted in accordance with the requirements of mitigation measure BIO-2. With implementation of BIO-2, the potential impacts to Cooper's hawks and Purple martin would be less-than-significant. No additional impacts would occur to special status species. Accordingly, no additional analysis of this issue would be needed for the components of the proposed project.

- b, c) The project site is located in a heavily developed urban area and does not contain riparian, native, or sensitive habitats as defined by CDFG or USFWS. Additionally, no sensitive habitats are identified as occurring on the campus in any local plans. The project site is developed with the existing campus buildings and related infrastructure. There are no jurisdictional wetlands or water courses on the campus site. No impact would occur. Accordingly, no additional analysis of this issue is needed.
- d) The project site is surrounded by residential and commercial urban and suburban uses. Given the existing developed land uses, that the site is surrounded by developed uses, that the site does not provide connectivity between open spaces, and the proximity to US 50, it is unlikely that the site is used as a migratory wildlife corridor or nursery site. No impact would occur. Accordingly, no additional analysis of this issue is needed.
- e) The proposed project would remove ornamental landscaping trees but would not remove large heritage trees. The proposed project would have no impact on large heritage trees. No impact would occur and no additional analysis is needed.
- f) There are no Habitat Conservation Plans or Natural Community Conservation Plans that encompass the project area. No impact would occur. Accordingly, no additional analysis of this issue is needed.



## **6.5 CULTURAL RESOURCES**

This section evaluates the potential impacts to cultural resources from the implementation of the 2010 LRDP. Section 4.4 of the 2010 LRDP EIR addresses the effects of campus growth under the 2010 LRDP on cultural resources. Information and analysis presented in this section are based on information from technical studies prepared for the project area, including archival research at the California Historical Resources Information System's (CHRIS) North Central Information Center conducted for the entire Sacramento campus site, a burial ground excavation completed by Pacific Legacy in 2005, the Sacramento Campus 2010 LRDP, and the City of Sacramento 2030 General Plan Master Environmental Impact Report (EIR).

### **6.5.1 Environmental Setting**

#### **Early Regional and Local History**

The Sacramento Valley has been occupied by humans for at least 5,000 years. The location within a valley and at the confluence of two rivers, the Sacramento River and the American River, shaped its early and modern settlements. It is likely that Paleo-Indian populations occupied villages located near watercourses, although archaeological record of such use is limited due to recurring natural flood events.

The campus lies in the ethnographic territory of the Plains Miwok. The Plains Miwok, one of five separate cultural and linguistic groups of the Eastern Miwok, occupied the lower reaches of the Mokelumne, Cosumnes, and Sacramento rivers. Linguistic studies indicate that the Plains Miwok was a distinct linguistic entity for the last 2,000 years, which suggests that the tribe inhabited the Sacramento Delta for a considerable amount of time. Native American village sites in the Sacramento Valley were often located on high points of land along rivers, creeks, and sloughs that provided water and food sources. As the campus is located approximately 1.5 miles from the nearest river, it is in an area of low prehistoric and historic archaeological sensitivity. It is unlikely that village sites occur in low-sensitivity areas, although it is possible that a small resource such as a temporary campsite or special use site could exist (NCIC 2010).

The formal founder of the City of Sacramento, John Sutter Jr., arrived at the confluence of the Sacramento and American Rivers in 1839 and established his fort on a Nisenan tribal mound. Beginning in 1824, land in California was divided into large parcels known as ranchos or Mexican land grants. The first settlement in the Sacramento area, New Helvetia, was granted to John Sutter in 1839. In 1848, Sutter hired William Warner to conduct a survey, which imposed a grid pattern on the land east of the riverfront with north-south streets designated by numbers and east-west streets by letters. The original grid, which still exists, extends east from the Sacramento River (Front Street) to just beyond the fort and south from Sutter's Slough (near 6<sup>th</sup> Street and I Street) to where Broadway is today (City of Sacramento 2005). The 1849 Gold Rush saw a huge inrush of people to the Sacramento area, with extensive travel on the Sacramento River.

Following the end of the Mexican-American War of 1848, California was annexed to the United States on September 9, 1850. The location of the City of Sacramento along river ports, and later the railroad, played an important role in making the city the mining, commercial, agricultural processing, and transportation center of the Central Valley. In 1854, Sacramento became the state capital.

#### **Development of Sacramento County Hospital and UC Davis Sacramento Campus**

The first building of the county hospital was built in 1871, but it burned down and was rebuilt in 1878. The new hospital that replaced the building was determined inadequate by 1908 due to sanitary problems and overcrowded conditions. Architect Rudolph A. Herold developed plans by 1914 for a pavilion-style hospital with 10 separate wards connected by porches and underground tunnels. Remaining buildings were demolished prior to construction of the new hospital. The new facility was built in stages and

completed in 1926. The administration building, designed by the same architect, was completed in 1928. In 1934, Sacramento County was awarded a federal public works grant and loan to construct a new building annex for a home for aged women. The building, designed by Harry J. Devine, became known as Camellia Cottage. The County added several buildings to the east side of the facility, including two detention buildings and a one-story ward. The Mental Health Building located on the southwest corner of 45<sup>th</sup> Street and V Street, which was designed by Harry J. Devine and built around 1945 to serve as a juvenile detention home, is the only one of these buildings that remains. In 1950, the County commissioned the construction of a large addition on the west side of the administration building designed by George C. Sellon. The addition increased the height of the building to six stories and heavily altered the front façade to a modern style. In 1964, a new eight-story tower designed by Starks, Jozens, and Nacht was added onto the east side of the main hospital building. By this time, the main hospital designed by Herold was no longer visible as it was enclosed within new additions (UCDMC 2002).

### **University of California Davis Sacramento Campus**

The University of California (the University) became affiliated with Sacramento County Hospital in 1966, when the creation of Medi-Cal and Medicare resulted in an agreement that allowed the University to use Sacramento County Hospital as its primary teaching facility for the new UC Davis medical school. By 1973, the County of Sacramento transferred ownership and operational responsibility of the hospital to UC Davis. At that time, the buildings were in need of repair and expansion to meet the patient care, educational, and research responsibilities of the University (UCDMC 2002).

The University added another eight-story tower, a Magnetic Resonance Imaging (MRI) facility, and Ambulatory Surgery Unit to the south wing of the Main Hospital in the 1980s, and emergency and operating rooms on the north and northeast sides of the Main Hospital in the 1990s. The 14-story Davis Tower was constructed in 1999 to the east of the Main Hospital. The M.I.N.D. Institute, an education building, the surgery center, and surgery and emergency services pavilion were built in the 2000s.

### **Archaeological Resources**

In 2004, during excavation for the addition of a radiation oncology lab in the Cancer Center, workers discovered a human cranial bone fragment and several other bones. Ground-disturbing activities were halted and the county coroner was notified of the discovery. The human remains were found in what was determined to be part of a long-forgotten burial ground at the former Sacramento County Hospital that was in use between 1891 and 1927. The Burial Ground Excavation conducted by Pacific Legacy archaeologists identified 78 burials within the project area. Three burials consisted of casket remnants, and three others were isolated bone fragments. The excavation was limited to the area comprising the footprint of the planned radiation oncology lab, and therefore, only established the location of a portion of the burial ground. The human remains and associated artifacts were transported to Pacific Legacy's lab, and examined for data. After the lab work, all recovered human remains and associated artifacts were placed in caskets and were placed in a single mass grave at the St. Mary's Cemetery and Mausoleum in Sacramento (Pacific Legacy 2005).

It is estimated that between 899 and 1,174 individuals were interred at the hospital burial ground (Pacific Legacy 2005). Excavation revealed that perhaps dozens of burials within the radiation oncology lab footprint had been destroyed by previous ground-disturbing activities dating from 1927. It is likely that many burials outside of the lab area have been disturbed or destroyed by ground-disturbing activities since 1927, reducing the number of remaining intact burials.

### **Historical Resources**

As part of the environmental analysis for the 2002 Surgery and Emergency Services Pavilion EIR, JRP Historical Consulting Services prepared a Historic Resources Inventory and Evaluation to evaluate eight buildings scheduled for demolition within the Hospital/Ambulatory services zone. The report concluded that Camellia Cottage, built in 1931, was the only building that potentially met the criteria for listing in

the National Register of Historic Places as an architecturally significant example of the Spanish Revival style designed by architect Harry J. Devine (UCDMC 2002). However, two seismic evaluations conducted in 1996 and 1998 rated the building as “very poor” and additional analysis determined that retrofit expenses could cost twice as much as the estimated value of the refurbished building, so Camellia Cottage was demolished in 2003 (RGA Environmental Inc. 2005).

### **Archival Search Results**

Archival research at the CHRIS’s North Central Information Center was undertaken in January 2010 to determine whether any prehistoric archaeological resources or historic resources have been discovered on the campus. Review of State of California Office of Historic Preservation records, base maps, historical maps, and literature for Sacramento County indicated that the campus contains no recorded prehistoric archaeological resources or historic resources. The North Central Information Center has indicated that there is a “low potential for prehistoric or ethnohistoric-period Native American sites in the project area” and thus a low possibility of identifying Native American or historical-period archaeological deposits in the project area (NCIC 2010). Additionally, five reports conducted at various times within or adjacent to the project area have not encountered any archaeological resources. Native American archaeological sites in this portion of Sacramento County tend to be situated adjacent to streams or on ridges or knolls, especially those with southern exposure. The Sacramento campus is situated 1.5 miles west of the American River in what was previously undulating prairie and is subject to open exposure (NCIC 2010). Therefore, there is a low potential for Native American sites to be present on the campus site.

The North Central Information Center has determined that state and federal inventories list no historic properties (buildings, structures, or objects) within the campus. Two historic era buildings are located immediately adjacent to the campus—the Pacific Bell Building adjacent to the northwest corner and the Warner Building adjacent to the southwest border. Given the known burials excavated from the project area in 2005, the recorded resources, and the known pattern of local historic land use, there is a moderate potential for identifying historic-period cultural resources on the campus site.

### **National Register of Historic Places**

The National Register of Historic Places (NRHP) is the nation’s central inventory of known historic resources. The NRHP is administered by the National Park Service (NPS) and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. There are three officials that can nominate properties into the NRHP: the State Historic Preservation Officer of the state in which the property is located, the Federal Preservation Officer for federally owned or controlled property, or the Tribal Preservation Officer for tribally owned property. In order to be considered eligible for listing in the NRHP as a significant historic resource, a structure, site, building, district, or object must be at least 50 years old or “exceptionally important.”

### **State Office of Historic Preservation**

The State Office of Historic Preservation maintains the California Register of Historical Resources (CRHR), an authoritative listing of the state’s significant historic resources as well as architectural, archaeological, and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register, pursuant to Section 4851(a) of the Public Resources Code, and also lists selected California Registered Historical Landmarks. The State Office of Historic Preservation also maintains the *Directory of Properties in the Historic Property Data File*; however, properties on the Property Data File are not protected or regulated.

The State Office of Historic Preservation sponsors the CHRIS, a statewide system for managing information on the full range of historical resources identified in California. CHRIS is a cooperative partnership among the citizens of California, historic preservation professionals, 11 information centers, and various agencies (Office of Historic Preservation 2003). CHRIS provides an integrated database that

furnishes site-specific archaeological and historical resources information on known resources and surveys to government, institutions, and individuals. CHRIS also supplies a list of qualified consultants. Information for the project area is available through CHRIS’s North Central Information Center.

**Local Plans and Policies**

The Sacramento campus is a University of California campus that conducts work within the University’s mission on land that is owned or controlled by the University’s Board of Regents. As a state entity, the University is exempt by the state constitution from compliance with local land use regulations, including general plans and zoning. Therefore no local plans are applicable to the proposed project. The 2010 LRDP proposes six fundamental planning principles to guide implementation of the LRDP. Because significant cultural resources are generally not expected to occur on campus, none of the planning principles set forth in the 2010 LRDP are directly applicable to the preservation of cultural resources.

**6.5.2 Impact Evaluation Process**

**Significance Criteria**

The impacts on cultural resources from the implementation of the 2010 LRDP would be considered significant if they would exceed the following Standards of Significance, in accordance with Appendix G of the *State CEQA Guidelines* and the UC CEQA Handbook:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

**6.5.3 2010 LRDP EIR Impacts and Mitigation Measures**

Impacts of campus growth under the 2010 LRDP through 2025 on cultural resources are evaluated in Section 4.4 of the 2010 LRDP EIR. The proposed project is within the scope of analysis in the 2010 LRDP EIR and the significant and potentially significant cultural resources impacts identified in the 2010 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 2010 LRDP EIR.

<b>2010 LRDP EIR Impacts</b>		<b>Level of Significance Prior to Mitigation</b>	<b>Level of Significance After Mitigation</b>
Cultural Resources			
CUL-1	Implementation of the 2010 LRDP could cause a substantial adverse change in the significance of a historical resource.	PS	SU
CUL-2	Implementation of the 2010 LRDP could cause a substantial adverse change in the significance of an archaeological resource or result in disturbance to Native American remains.	PS	LS
CUL-3	Implementation of the 2010 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

A mitigation measure from the 2010 LRDP EIR that is applicable to the proposed project is presented below. Since this mitigation measure is already being carried out as part of implementation of the 2010 LRDP, it is 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 2010 LRDP EIR mitigation measures.

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## 2010 LRDP EIR Mitigation Measures

### Cultural Resources

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- CUL-1a Before altering or otherwise affecting a building or structure 50 years of age or older, the University shall retain a qualified architectural historian to record it on a California Department of Parks and Recreation DPR 523 form or equivalent documentation. Its significance shall be assessed by a qualified architectural historian, using the significance criteria set forth for historic resources under *State CEQA Guidelines* Section 15064.5. The evaluation process shall include the development of appropriate historical background research as context for the assessment of the significance of the structure in the history of the campus and the region.
- CUL-1b For a building or structure that qualifies as a historic resource, the architectural historian and the University shall consult to consider measures that would enable the project to avoid direct or indirect impacts to the building or structure. These could include preserving a building on the margin of the project site, using it “as is,” or other measures that would not alter the building. If alteration of a historic building or structure cannot be avoided, necessary alterations shall be carried out in a manner consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties (Section 15126.4(b)(1)). If the removal of a historic building or structure cannot be reasonably avoided, the University shall ensure that a qualified architectural historian thoroughly documents the building and associated landscaping and setting. Documentation shall include still and video photography and a written documentary record of the building to the standards of the Historic American Building Survey (HABS) or Historic American Engineering Record (HAER), including accurate scaled mapping, architectural descriptions, and scaled architectural plans, if available.
- CUL-2a For all project sites, site-work contractor crews shall be required to attend an informal training session prior to the start of earth moving, regarding how to recognize artifacts and human remains. Prior to disturbing the soil, contractors shall be notified that they are required to watch for potential artifacts and to notify the University if any are found. In the event of a find, the University shall implement **LRDP Mitigation Measures CUL-2b** and **CUL-2c** below.
- CUL-2b If an archaeological resource is discovered during construction, all soil disturbing work within 100 feet of the find shall cease. The University shall contact a qualified archaeologist within 24 hours to inspect the site. If a resource within the project area of potential effect is determined to qualify as a unique archaeological resource (as defined by CEQA), the University shall devote adequate time and funding to salvage the material. Any archaeologically important artifacts recovered during monitoring shall be cleaned, catalogued, and analyzed, with the results presented in a report of finding that meets professional standards.
- CUL-2c 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 University shall contact a qualified archaeologist within 24 hours to determine whether the bone is human. If the qualified archaeologist determines the bone is human, or if a qualified archaeologist is not present, the University will notify the County Coroner of the find before additional disturbance occurs. Consistent with California Health and Safety Code Section 7050.5(b), which prohibits disturbance of human remains uncovered by excavation until the Coroner has made a finding relative to PRC Section 5097 procedures, the University 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 University will comply with the provisions of PRC Section 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD).
- If human remains cannot be left in place, the University 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 University 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 University shall ensure that human remains and associated artifact

**2010 LRDP EIR Mitigation Measures**  
**Cultural Resources**

recovered from campus projects are repatriated to the appropriate local tribal group if requested.

- CUL-3a As a first step during the project’s environmental review, the University shall determine whether the proposed project is in the portion of the campus where human remains associated with the former burial ground could likely be encountered. If the project site is in or near that area, the University will retain a qualified archaeologist to review the project information and as necessary develop and implement a subsurface testing program to check for human remains. If no human remains are encountered, the project may proceed to construction.
- CUL-3b In the event that human remains are encountered during subsurface testing, the area of the project site will be excavated under the supervision of the archaeologist and all human remains and associated artifacts will be removed from the site and examined for data. After the lab work, all recovered human remains and associated artifacts will be placed in caskets and buried in a single mass grave at a local cemetery.
- CUL-3c Implement **LRDP Mitigation Measure CUL-2a.**
- CUL-3d Implement **LRDP Mitigation Measure CUL-2c.**

**6.5.4 Environmental Checklist and Discussion**

<b>CULTURAL RESOURCES</b>	Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...		
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"/>
e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) The proposed project would result in the demolition of the North/South Wing of the Main Hospital (constructed in 1929 and 1951) and demolition of the Housestaff building constructed in (1916). An evaluation of these structures was completed in compliance with LRDP Mitigation CUL-1a in 2015 (JRP 2015 a and b) determined that neither building qualifies for listing as state or federally listed historical resources. There would be no impact from the proposed project to historic resources. No additional analysis is needed.

b) The Sacramento campus has been subject to extensive ground disturbance in conjunction with the construction of existing and former buildings and access roads. Based on archival research for the 2010 LRDP EIR, there are no known recorded archaeological resources associated with the campus site and the potential for Native American sites, including Native American burial sites to exist on the campus site is considered low and the impact is considered less than significant. However, in the unlikely event that archaeological resources are encountered during implementation of the proposed project, the resources could be adversely affected. The impact is considered potentially significant. 2010 LRDP mitigation

CUL-2a (training for construction workers conducting earth moving); CUL-2b (cessation of work and evaluation if resources are discovered); CUL-2c (proper archaeologist and coroner follow-up for any suspected human bone discovery) would occur. Implementation of this mitigation measure would ensure that a unique archaeological resource is not inadvertently destroyed and Native American remains, if encountered, are handled maintaining appropriate dignity, and the impact would be reduced to a less than significant level.

c) Implementation of the 2010 LRDP would have no impact on a unique paleontological resource or geological feature, as extensive excavation activities for buildings and infrastructure have taken place on the campus and no unique paleontological or geologic resources have been encountered.

d) As discussed above it is likely that historic human remains would be encountered during ground-disturbing activities, especially in the northern portion of the campus where a burial ground associated with the Sacramento County Hospital was located. The burial ground excavation conducted in 2005 identified 78 burials within the footprint of the Radiation Oncology Expansion Project, and estimated that an additional 821 to 1,096 individuals were interred within the long-forgotten burial ground of the Sacramento County Hospital. Many of these burials may have been damaged or destroyed by ground-disturbing activities that occurred since the burial ground was last used in 1927. However, intact burials could still be encountered on the campus which could be destroyed by construction activities. The impact on human remains would be potentially significant. However, implementation of LRDP Mitigation Measures CUL-3a through CUL-3d would ensure that any human remains, including those interred outside of formal cemeteries, are handled maintaining appropriate dignity. With the implementation of LRDP Mitigation Measures CUL-3a through CUL-3d, the potential impact to human remains would be reduced to a less than significant level.

e) The proposed project would demolish existing buildings and construct a replacement building on a site that currently is developed. No tribal cultural resources have been previously identified as part of the planning efforts at the UC Davis Medical Center. No impact is expected. No additional analysis is proposed for the EIR.

## **6.6 GEOLOGY, SOILS, & SEISMICITY**

### **6.6.1 Background**

This section describes the geologic conditions and soils on the project site. A discussion of the regulatory setting follows the description of the environmental setting. The section evaluates and discusses the consequences associated with implementation of the UC Davis Sacramento Campus (Sacramento Campus) 2010 Long Range Development Plan (LRDP). Section 4.5 of the 2010 LRDP EIR addresses the geology, soils, and seismicity effects of campus growth under the 2010 LRDP.

### **6.6.2 Environmental setting**

The Sacramento campus is located in the Great Valley of California. The Great Valley is a flat alluvial plain approximately 50 miles wide and 400 miles long in the central portion of California. Its northern part is the Sacramento Valley drained by the Sacramento River, and its southern part is the San Joaquin Valley drained by the San Joaquin River. It is surrounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, the Coastal Range to the west, and the Cascade Range to the north (City of Sacramento 2009).

The City of Sacramento is situated at the confluence of the American and Sacramento Rivers. The topography of the city ranges from flat to gently rolling. With the exception of the stream banks along the American River, Morrison Creek, and other local drainages, ground slope within the City does not exceed 8 percent and in most places is between 0 and 3 percent (UCDMC 1989). The campus site is quite flat. At its closest point, the campus is located approximately 1.5 miles southwest of the American River.

#### **Soils**

The site has been mapped as underlain by soils assigned to the San Joaquin Urban Land complex (Natural Resources Conservation Service 2010). However, because the site has undergone extensive grading, an intact soil profile may not be present. In particular, topsoil is likely to be absent or highly disturbed.

The upper layer of soils at the Sacramento campus consists of loose, fine to coarse sandy silt. These are underlain by hard, silty, and fine sandy clay soils that correlate with the Victor Plain, which is characterized by well-drained, moderately deep to deep, fine sandy silt soils that are underlain by a cemented hardpan. Below the hardpan are medium-dense to very dense silt, fine to medium gravel, and fine sandy silt. The San Joaquin complex exhibits a moderate shrink-swell potential (or the potential for volume change with losses and gains in moisture). Erosion potential is generally low in these soils (UCDMC 1989).

#### **Seismicity**

The Sacramento campus is not within or traversed by any Alquist-Priolo Earthquake Fault Zone defined by the State of California under the Alquist-Priolo Earthquake Fault Zoning Act. The site is therefore not considered subject to surface fault rupture hazard. However, like much of California, it is located in a seismically active area and is therefore subject to other hazards associated with seismicity, discussed in the following paragraphs.

#### **Alquist-Priolo Earthquake Fault Zoning Act**

The Alquist-Priolo Earthquake Fault Zoning Act (California Public Resources Code Sec 2621 et seq.) charges the State of California with defining hazard corridors (Earthquake Fault Zones) along active faults, within which local jurisdictions must strictly regulate construction; in particular, the Act prohibits construction of structures intended for human occupancy (defined for purposes of the Act as more than 2,000 person-hours per year) across active faults. The Act establishes a legal definition for the term *active*, defines criteria for identifying active faults, and establishes a process for reviewing building



proposals in and adjacent to defined Earthquake Fault Zones, to be implemented by the State's local jurisdictions (cities and counties), who typically do so through the building permit review process.<sup>4</sup>

## **Seismic Hazards Mapping Act**

The Seismic Hazards Mapping Act of 1990 (California Public Resources Code Sections 2690–2699.6) addresses secondary earthquake-related hazards, including liquefaction and seismically induced landslides. Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act charges the state with mapping areas subject to hazards, and makes cities and counties responsible for regulating development for human occupancy within mapped Seismic Hazard Zones. In practice, as with the Alquist-Priolo Act, local jurisdiction building permit review serves as the primary mechanism for controlling public exposure to seismic risks, since cities and counties are prohibited from issuing development permits for sites within Seismic Hazard Zones until or unless appropriate site-specific geologic/geotechnical investigations have been carried out and measures to avoid or reduce damage have been incorporated into the development proposal.<sup>5</sup> Like the Alquist-Priolo Earthquake Fault Zone Maps, the maps produced by the Seismic Hazards Mapping Program are useful as a first-order risk assessment tool for liquefaction and seismically induced landslide risks to projects of all types, although the Seismic Hazards Mapping Act, like the Alquist-Priolo Act, actually regulates only construction for human occupancy.

### **Local Plans and Policies**

The Sacramento Campus is a University of California campus that conducts work within the University's mission on land that is owned or controlled by The Board of Regents of the University of California. As a state entity, the University is exempt under the state constitution from compliance with local land use regulations, including general plans and zoning. Therefore local plans and policies are not applicable to development on the campus. The 2010 LRDP is the applicable plan and that proposes six fundamental planning principles that form the basis for the LRDP's planned program. None of the planning principles set forth in the 2010 LRDP are directly related to geology and soils.

Issues related to geologic hazards and soils conditions—ranging from seismic safety to the stability of cuts and fills and the potential for foundation damage as a result of expansive soils—are addressed through the building codes, which are adopted at the local jurisdiction (city or county) level and enforced through the building permit review process. The University of California is exempt from the requirement for local jurisdiction building permits, but has adopted and self-enforces the California Building Code (CCR Title 24) for all new construction. The University of California also has a Seismic Safety Policy that specifically addresses the design and rehabilitation of structures and facilities. The California Building Code and the University of California Seismic Safety Policy are discussed further in the following sections.

### **California Building Code**

Design and construction of University of California projects follows the current (2013) California Building Code (CBC), which is based on the 2012 International Building Code but among other modifications includes more stringent provisions for seismic design of structures. Like its predecessor the Uniform Building Code, the International Building Code was developed to provide a uniform, widely applicable set of minimum standards to ensure building safety.

#### **6.6.3 University of California Seismic Safety Policy**

The guiding principle (Basic Policy) of the UC Seismic Safety Policy is as follows.

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<sup>4</sup> UC projects are not subject to the local jurisdiction building permit process. The University serves as lead agency responsible for the seismic safety of UC projects.

<sup>5</sup> For University of California projects (which are not subject to local jurisdiction permit review) the University is responsible for enforcing these provisions.

*It is University policy—to the maximum extent feasible by present earthquake engineering practice—to acquire, build, maintain, and rehabilitate buildings and other facilities which provide an acceptable level of earthquake safety, as defined in this policy, for students, employees, and the public who occupy those buildings and other facilities at all locations where University operations and activities occur. It is also University policy to repair University buildings and other facilities damaged in an earthquake ... Feasibility is to be determined by weighing the practicability and cost of protective measures against the gravity and probability of injury resulting from a seismic occurrence.*

The University of California Seismic Safety Policy requires that all “new buildings ... comply with the current provisions of the California Building Code, or local seismic requirements, whichever is more stringent” and that “no new University structures ... be constructed on the trace of a known active fault.” The Seismic Safety Policy also establishes a system-wide program for the abatement of seismic hazards in existing buildings and facilities. Responsible officials (i.e., the Chancellors, the Senior Vice President for Business and Finance, the Vice President for Agriculture and Natural Resources, and the Directors of the Lawrence Berkeley, Lawrence Livermore, and Los Alamos Laboratories) are charged with evaluating buildings for seismic safety and establishing a priority ranking for seismic hazards abatement projects.

#### **6.6.4 Impact Evaluation Process**

The impacts from the implementation of the 2010 LRDP related to geology and soils would be considered significant if they would exceed the following Standards of Significance, in accordance with Appendix G of the *State CEQA Guidelines* and the UC CEQA Handbook:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault (refer to CGS Special Publication 42);
  - Strong seismic ground shaking;
  - Seismic-related ground failure, including liquefaction; or
  - Landslides.
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Be located on expansive soil, as defined in the California Building Code, creating substantial risks to life or property; or
- 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.

#### **6.6.5 2010 LRDP EIR Impacts and Mitigation Measures**

Impacts of campus growth under the 2010 LRDP through 2025 on geology, soils, and seismicity are evaluated in Section 4.5 of the 2010 LRDP EIR. The proposed project is within the scope of analysis in the 2010 LRDP EIR and the significant and potentially significant geology, soils, and seismicity resources impacts identified in the 2010 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 2010 LRDP EIR.

<b>2010 LRDP EIR Impacts</b>		<b>Level of Significance Prior to Mitigation</b>	<b>Level of Significance After Mitigation</b>
Geology, Soils, and Seismicity			
GEO-1	Implementation of the 2010 LRDP could result in exposure of people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving liquefaction.	PS	LS

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

A mitigation measure from the 2010 LRDP EIR that is applicable to the North Addition component of the proposed project is presented below. Since this mitigation measure is already being carried out as part of implementation of the 2010 LRDP, it is 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 2010 LRDP EIR mitigation measures.

<b>2010 LRDP EIR Mitigation Measures</b>	
Geology, Soils, and Seismicity	
GEO-1	A site-specific, design-level geotechnical investigation shall be conducted during the design phase of each building project under the 2010 LRDP. This investigation shall be conducted by a licensed geotechnical engineer and include a seismic evaluation of ground acceleration under the design event as well as relevant soil conditions at the site. Geotechnical recommendations shall subsequently be incorporated into the foundation and building design.

### 6.6.6 Environmental Checklist and Discussion

<b>GEOLOGY, SOILS, &amp; SEISMICITY</b>		Impact to be Analyzed in the EIR	No Additional Analysis Required
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 Sacramento 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 40 miles away. The proposed project would remove buildings that are seismically inadequate. Therefore, no impact would occur and no further analysis is required. Accordingly, no additional analysis of this issue would be needed.		
a,ii)	The nearest recognized active fault is more than 40 miles away from the site. Therefore, fault rupture within the campus site is unlikely. The proposed project would remove buildings that are seismically inadequate. The Sacramento Campus will continue to reduce hazards associated with damage or destruction to buildings and other structures from seismic groundshaking by reviewing and approving all draft building plans for compliance with the CBC, which includes specific structural provisions for seismic safety.		
a,iii)	See the discussion in item (c) below.		
a,iv)	The UC Davis Sacramento campus and the surrounding area are characterized by flat topography and therefore would not be subject to landslides. No impact would occur. No additional analysis of this issue would be needed for the proposed project.		
b)	The campus is extensively developed and has a long history of urban development and use. Therefore, topsoil in the area has either been already removed or extensively altered in conjunction with previous development. Implementation of the 2010 LRDP would therefore not result in significant loss of topsoil. No additional analysis of this issue would be needed for the proposed project.		

- c) As discussed under Seismic Hazards in the Environmental Setting section of this chapter, portions of Sacramento are underlain by materials potentially subject to liquefaction (City of Sacramento 2009). Geotechnical investigations conducted on the Sacramento campus in conjunction with other recent building projects identified no substantial liquefaction risk for those sites (UCDMC 2002), but liquefaction hazard has not been comprehensively evaluated campus-wide, and no site specific-information is available for the project site. In addition, the water table at the project site is known to be 18–32 feet below ground surface. Thus there may be some potential for liquefaction at the site, and structural damage and the associated life and safety hazard could rise to the level of a significant impact. Implementation of the following mitigation measure would reduce impacts consistent with the prevailing geotechnical engineering standard of care; residual impacts, if any, would be less than significant. A site-specific, design-level geotechnical investigation shall be conducted during the design phase of each building project under the 2010 LRDP. This investigation shall be conducted by a licensed geotechnical engineer and include a seismic evaluation of ground acceleration under the design event as well as relevant soil conditions at the site. Geotechnical recommendations shall subsequently be incorporated into the foundation and building design. With implementation of LRDP Mitigation Measure GEO-1, which would require implementation of the recommendations of geotechnical investigations, impacts related to liquefaction would be reduced to a less-than-significant level. The potential impact would be less-than-significant. Accordingly, no additional analysis of this issue would be needed for the proposed project.
  
- d) The soils underlying the campus are characterized as being moderately expansive, i.e., exhibiting a moderate shrink-swell potential or the potential for volume change with losses and gains in moisture. Thus, there would be some potential for damage to improperly designed or constructed structures and facilities. However, the CBC includes detailed provisions to ensure that foundation design is appropriate to site conditions. It also limits the characteristics of materials that are acceptable for use as fill, ensuring against reuse of inappropriate site soils as fill. With adherence to the CBC, as required by the University of California for all new construction, expansive soils would be addressed consistent with the current engineering standard of care. The impact would be less than significant. No additional analysis would be required and no project-specific mitigation measures are proposed.
  
- e) The proposed project would use no septic tanks or alternative wastewater disposal systems. No impact would occur. No additional analysis of this issue would be needed.

## 6.7 GREENHOUSE GAS EMISSIONS

<b>Greenhouse Gas Emissions</b>	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 construction equipment and long-term operation of the project and the impact from these emissions will be evaluated in the Draft EIR. The removal of buildings and associated reduction in energy usage will be evaluated in comparison the expected energy use and associated greenhouse gas emissions from the proposed demolition, construction, and operation of the new North Addition building to determine whether the project would result in a net increase or decrease to greenhouse gas emissions. 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. The Draft EIR will evaluate the potential project impacts, potential cumulative impacts, and, if necessary, propose mitigation measures to address project impacts.

## 6.8 HAZARDS & HAZARDOUS MATERIALS

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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 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 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-d) The Draft EIR will evaluate transport, use, disposal and potential accidents related to hazardous materials that would be associated with the project. Each project component and construction could involve different construction equipment and demolition of different types of building structures. The Draft EIR will evaluate the potential project impacts, cumulative impacts, and, if necessary, propose mitigation measures to address project impacts.
- e,f) The proposed project would replace an existing building with a shorter building. The proposed project would not create an airport or private airstrip hazard for people residing or working in the project area. No impact would occur. No additional analysis will be provided in the Draft EIR.
- g,h) The proposed project would have occur in an urbanized area and would have no impact on wildland fires. The proposed construction and demolition sites would be fenced to allow continued operation of the UC Davis hospital including the provision of emergency services. The proposed project would have no impact on emergency response plans or emergency evacuation plans. No impact would occur. No additional analysis will be provided in the Draft EIR.

## **6.9 HYDROLOGY & WATER QUALITY**

Section 4.8 of the 2010 LRDP EIR addresses the hydrology and water quality effects of campus growth under the 2010 LRDP. This section describes the existing environmental conditions pertaining to the hydrology and water quality on the project site and its vicinity. The description of the existing conditions is followed by a discussion of the regulatory setting. The section evaluates and discusses the consequences associated with implementation of the proposed project.

### **6.9.1 Environmental Setting**

The Sacramento campus is located in City of Sacramento, in the middle-eastern portion Central Valley of California, and is surrounded on the east by the Sierra Nevada Mountains, coastal ranges to the west, the Klamath Mountains to the north and the Sacramento-San Joaquin River Delta to the south (City of Sacramento 2006). The land surrounding the campus consists of flatland and is mostly developed.

The climate in the City of Sacramento is arid to semi-arid with dry, hot summers and mild winters. The long-term mean annual rainfall for the city is approximately 17 inches per year, while temperatures average around 61 degrees Fahrenheit (Western Regional Climate Center 2010).

#### **Surface Water Resources**

The campus is located approximately 1.5 miles south of the American River, and 3 miles east of the Sacramento River, and is within the 27,000-square-mile Sacramento River Basin. This basin is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Sacramento-San Joaquin Rivers Delta to the southeast. The Sacramento River Basin is the largest river basin in California and captures on average approximately 22 million acre-feet of annual precipitation. The Sacramento Valley portion of the basin contains the largest population, concentrated in the cities of Sacramento, West Sacramento, Chico, Red Bluff, and Redding. The river is regulated by dams for power generation, flood control, water supply, recreation, fisheries, and wildlife management (City of Sacramento 2008).

The American River watershed encompasses approximately 1,900 square miles and is a tributary to the Sacramento River. The American River watershed is situated on the western slope of the Sierra Nevada mountain range, extending from the spine of the Sierra Nevada westward to the City of Sacramento. The river is regulated by dams, canals, and pipelines for power generation, flood control, water supply, recreation, fisheries, and wildlife management. Folsom Dam, located on the American River, is owned and operated by the US Bureau of Reclamation. Folsom Lake and its afterbay, Lake Natoma, release water to the lower American River and to the Folsom South Canal. The operation of Folsom Dam directly affects most of the water utilities on the American River system (City of Sacramento 2006).

The City, including the Sacramento campus, uses surface water from the Sacramento and American Rivers, and groundwater pumped from the North American and South American subbasins to meet its water demands. The City has surface water entitlements, consisting of five appropriative water right permits issued by the State Water Resources Control Board, pre-1914 rights and a water rights settlement contract with the US Bureau of Reclamation (City of Sacramento 2006).

#### **Groundwater Resources**

The campus is located within the South American groundwater subbasin, within the larger Sacramento Valley Groundwater Basin, as delineated in the California Department of Water Resources (DWR) Bulletin 118 (2003 Update). The South American groundwater subbasin includes land west of the Sierra Nevada, east of the Sacramento River, and south of the American River. The subbasin is bounded on the south by Cosumnes and Mokelumne Rivers, which are perennial rivers that create a groundwater divide in the subsurface (DWR 2004).



The water-bearing units in the South American subbasin are composed of continental deposits of Late Tertiary to Quaternary age. The deposits include flood basin deposits, dredger tailings, stream channel deposits, older alluvium, and Miocene and Pliocene volcanics. These deposits include younger alluvium (consisting of flood basin deposits, dredge tailings and Holocene stream channel deposits), older alluvium, and Miocene/Pliocene volcanics. These formations include an upper, unconfined aquifer system, and a lower, semi-confined aquifer. The upper aquifer system consists of the Modesto, Riverbank, Turlock Lake, Victor, Fair Oaks, and Laguna Formations, along with Arroyo Seco and South Fork Gravels; the lower aquifer consists primarily of the Mehrten Formation. These deposits form a wedge that generally thickens from east to west to a maximum thickness of about 2,500 feet along the western margin of the subbasins (DWR 2004).

A collection of municipalities, cities, water districts, farmers, and private users overlying the subbasin have historically pumped groundwater from the South American subbasin. As described in Bulletin 118 Update 2003, subbasin groundwater levels declined by approximately 20 feet from the mid-1960s to 1980, recovered by 10 feet from 1980 through 1983, and declined by about 15 feet from 1987 to 1995. From 1995 to 2000, most water levels recovered by up to 20 feet. Wells in the vicinity of the City of Sacramento, however, fluctuated less than 10 feet overall since the mid-1970s (DWR 2004). The Sacramento Campus owns and operates two on-site wells which supply irrigation water to campus grounds. Approximately 33.8 million gallons of water are pumped from these wells per year.

### **Storm Water Drainage**

The existing 142-acre campus land area consists of approximately 75 percent impervious and 25 percent pervious surfaces. Under existing conditions, the peak flow rate for a 10-year storm is 178 cubic feet per second (cfs), while the 100-year peak flow is 301 cfs (Jacobs 2009).

Storm water flows from the campus are collected in the drain inlets, catch basins, and gutters, before being discharged into the City of Sacramento's storm drain system. Storm water from the western half of the campus site is held in an underground storm water detention facility that was constructed on the campus by the City of Sacramento, before it is discharged into the City's combined sewer system. The combined sewer system accommodates both domestic sewer discharge and storm water runoff and combined flows are treated at the Sacramento Regional Wastewater Treatment Plant (SRWTP). The storm water detention facility is designed to accommodate runoff from 10-year storm events generated by impervious surfaces on the Sacramento campus. The City designed and constructed the detention system to handle flows from the development of more than 6 million gross square feet of building space on the campus (Jacobs 2009). Storm water from the eastern half of the campus is collected in a separate storm drain system that discharges into the American River. During large storm events which produce runoff that cannot be handled by the separate storm drain system, to avoid localized flooding, excess storm water from the eastern half of the campus is held in separate chambers in the storm water detention facility to then be discharged into the storm drain system at a rate that the system can handle. If flows are very high, the excess storm water is pumped from the separate storm water chambers to the City's combined sewer system, and treated at the SRWTP.

### **Surface Water Quality**

Surrounding land uses largely affect surface water quality, with both point-source and nonpoint-source discharges contributing contaminants to surface waters. The land surrounding the campus generally consists of developed flatlands. Runoff from urban areas is characterized by constituents such as fertilizers, herbicides, and pesticides, and often contains bacteria, high nutrient content, and dissolved solids. "First flush" storm events, during which pollutants that have accumulated throughout the dry season are concentrated with little dilution by the initial storm event of the season, are thought to have the largest impact on receiving waters.

The impacts of nonpoint-source pollutants on aquatic systems are many and varied. Small soil particles washed into streams can smother spawning grounds and marsh habitat. Suspended particulates can restrict

light penetration into water and limit photosynthesis of aquatic biota. Metals and petroleum hydrocarbons washed off from roadways and parking lots, and fertilizers, pesticides, and herbicides from landscaped areas may cause toxic responses in aquatic life or contaminate possible water supply sources such as reservoirs or aquifers.

As stated above, storm water flows from the western half of the campus and excess flows from the eastern half are detained on site before they are discharged into the City's combined sewer system or to the American River. The combined sewer system is considered at or near capacity and the City requires all additional inflow into the system to be offset. During smaller storms, the City sends up to 60 million gallons per day (mgd) of wastewater to the SRWTP, which treats storm water and sanitary sewage prior to discharge into the Sacramento River. When the flows in the City's combined sewer system exceed 60 mgd, flows are routed to Pioneer Reservoir, a 22-million-gallon storage and primary treatment facility adjacent to the Sacramento River just north of the Pioneer Bridge (US Highway 50). Once the capacity of Pioneer Reservoir is reached, flows are routed to the City's Combined Wastewater Treatment Plant (CWTP) to maximize available storage, before flows are sent to the Pioneer Reservoir treatment facility for treatment and discharge to the Sacramento River. The CWTP provides primary treatment with disinfection of up to 130 mgd of combined wastewater. The system may also store water in the CWTP basins, such that up to 250 mgd of combined wastewater can receive primary treatment with disinfection before it is discharged to the Sacramento River. Under extreme high flow conditions, discharge of untreated combined wastewater from the combined sewer system may occur (City of Sacramento 2009).

The City of Sacramento, Sacramento County Water Resources Division, and the Sacramento Regional County Sanitation District (SRCSD) formed the Sacramento Coordinated Water Quality Monitoring Program (CMP) which monitors long-term ambient water quality in both the Sacramento and American River. The latest water quality results from December 1992 to June 2003 show that water in both rivers consistently met applicable water quality regulations (City of Sacramento 2006).

### **Groundwater Quality**

Groundwater quality within the South American subbasin generally meets the primary and secondary drinking water standards for municipal use, including levels of iron, manganese, arsenic, chromium, and nitrates. The groundwater in the subbasin is described as a calcium magnesium bicarbonate with minor fractions of sodium magnesium bicarbonate (DWR 2004). Concentrations of iron, manganese, and total dissolved solids (TDS) tend to be higher in the lower aquifer system. As a result, the upper aquifer system is usually the preferred source of groundwater. The TDS concentration in most wells is within secondary drinking water standards, but varies from 21 to 657 milligrams per liter (mg/L), with an overall average of 221 mg/L (City of Sacramento 2006).

### **Federal and State Laws**

The California SWRCB is the state agency with the primary responsibility for implementation of both state and federally established regulations relating to water resource issues. Typically, all regulatory requirements are implemented by the SWRCB through regional boards established throughout the state.

#### Clean Water Act

In 1972, the Federal Water Pollution Control Act—also known as and hereafter referred to as the Clean Water Act (CWA)—was amended to require NPDES permits for discharge of pollutants into the “waters of the United States” that include oceans, bays, rivers, streams, lakes, ponds, and wetlands from any point source. In 1987, the CWA was amended to require that the US Environmental Protection Agency (US EPA) establish regulations for permitting under the NPDES permit program of municipal and industrial storm water discharges. The US EPA published final regulations regarding storm water discharges on November 16, 1990. The regulations require that municipal separate storm sewer system (MS4) discharges to surface waters be regulated by an NPDES permit.

In addition, the CWA requires the states to adopt water quality standards for water bodies and have those standards approved by the US EPA. Water quality standards consist of designated beneficial uses—e.g., wildlife habitat, agricultural supply, fishing, etc.—for a particular water body, along with water quality criteria necessary to support those uses. Water quality criteria are prescribed concentrations or levels of constituents—such as lead, suspended sediment, and fecal coliform bacteria—or narrative statements that represent the quality of water that supports a particular use. Because California has not established a complete list of acceptable water quality criteria, the US EPA established numeric water quality criteria for certain toxic constituents in the form of the California Toxics Rule (40 CFR 131.38).

Water bodies not meeting water quality standards are deemed “impaired” and, under CWA Section 303(d), are placed on a list of impaired waters for which a Total Maximum Daily Load (TMDL) must be developed for the impairing pollutant(s). A TMDL is an estimate of the total load of pollutants from point, nonpoint, and natural sources that a water body may receive without exceeding applicable water quality standards (with a “factor of safety” included). Once established, the TMDL is allocated among current and future pollutant sources discharging to the water body.

Both the Lower American River and the Sacramento River (from Knights Landing to the Delta) are listed on the 303(d) list as being impaired for mercury and unknown toxicities (SWRCB 2002).

#### Safe Drinking Water Act

The 1986 federal Safe Drinking Water Act requires each state to develop a wellhead protection plan to describe how areas around wells will be protected from potential contamination. A major element of a wellhead protection program is the determination of protection zones around public supply wellheads. Within these zones, potential protection measures could include limitations on land uses to preclude industrial or agricultural uses with the potential to result in spills of chemicals or overuse of fertilizers and other chemicals.

#### Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act), which is the state’s clean water act, provides the statutory authority for SWRCB and the RWQCBs to regulate water quality and was amended in 1972 to extend the federal CWA authority to these agencies (see **Clean Water Act**, above). The Porter-Cologne Act established the SWRCB and divided the state into nine regions, each overseen by a RWQCB. The SWRCB is the primary state agency responsible for protecting the quality of the state’s surface and groundwater supplies, but much of the daily implementation of water quality regulations is carried out by the nine RWQCBs.

The Porter-Cologne Act provides for the development and periodic review of water quality control plans (also known as basin plans). The basin plan for the Sacramento River Basin designates beneficial uses and water quality objectives for water bodies in the region. The Sacramento River Basin Plan identifies beneficial uses for the area’s surface and groundwater. The groundwater basin that underlies the campus is the South American groundwater subbasin.

#### **Water Quality Objectives**

The Central Valley Regional Water Quality Control Board (CVRWQCB) has set water quality objectives for all surface waters in its region, including the Sacramento and American Rivers. Specific objectives are provided for the larger water bodies within the region as well as general objectives for surface and groundwater. In general, narrative objectives require that degradation of water quality not occur because of increases in pollutant loads that will impact the beneficial uses of a water body. Water quality criteria apply within receiving waters and do not apply directly to runoff; therefore, water quality criteria from the Sacramento Basin Plan are used as benchmarks for comparison in the quantitative assessments and are also examined in the qualitative assessments in the discussion of project impacts below. Basin plans are

primarily implemented by using the NPDES permitting system to regulate waste discharges so that water quality objectives are met.

Specific objectives for concentrations of chemical constituents are applied to bodies of water based on their designated beneficial uses (CVRWQCB 2007). Water quality objectives applicable to all groundwaters have been set for bacteria, chemical constituents, radioactivity, tastes and odors, and toxicity (CVRWQCB 2007). One method the CVRWQCB uses to implement Basin Plan criteria is through the issuance of waste discharge requirements (WDRs). WDRs are issued to any entity that discharges point-source effluent to a surface water body. The WDR permit also serves as a federally required NPDES permit (under the federal CWA) and incorporates the requirements of other applicable regulations.

#### **CWA Permits for Discharge to Surface Waters**

CWA Sections 401 and 402 contain requirements for discharges to surface waters through the NPDES program, administered by the US EPA. In California, SWRCB is authorized by the US EPA to oversee the NPDES program through the Regional Water Quality Control Boards (RWQCBs) (see related discussion under **Porter-Cologne Water Quality Control Act**, below). The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits. The permit contains requirements of allowable concentrations of contaminants contained in the discharge.

#### **City of Sacramento Stormwater Quality Improvement Program**

The City of Sacramento's municipal storm water NPDES permit regulates the discharge of all wet and dry weather urban runoff within the City of Sacramento and requires the City to implement a storm water management program to reduce pollutants in storm water to the maximum extent practicable. The City of Sacramento established the Stormwater Quality Improvement Program (SQIP) in 1990 to reduce the pollution carried by storm water into local creeks and rivers in compliance with the municipal storm water NPDES permit. The comprehensive plan includes pollution control measures for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. The program also includes an extensive public education effort, target pollutant reduction strategy, and monitoring program. The SQIP outlines the priorities, key elements, strategies, and evaluation methods of the City's storm water management program for 2007–2011.

#### **Stormwater Quality Design Manual for Sacramento and South Placer Regions**

In addition, the County of Sacramento and the cities of Sacramento, Folsom, Citrus Heights, Elk Grove, Rancho Cordova, Galt, and Roseville collaborated and published the Stormwater Quality Design Manual for Sacramento and South Placer Regions (May 2007) to meet the regulatory requirements of their respective municipal storm water NPDES permits. The manual provides locally adapted information for design and selection of three categories of storm water quality control measures: source control, runoff reduction, and treatment control.

#### **City of Sacramento General Plan**

The Sacramento Campus is a University of California campus that conducts work within the University's mission on land that is owned or controlled by The Regents of the University of California. As a State entity, the University is exempted by the state constitution from compliance with local land use regulations, including general plans and zoning. However, the University seeks to develop its property in a manner that minimizes potential land use conflicts with the policies and plans of local jurisdictions to the extent feasible. The City of Sacramento 2030 General Plan includes the policies summarized in Section 4.8 of the 2010 LRDP EIR that are related to flood protection. Because the Campus is not subject to local land use regulations, references to the City's General Plan are solely to provide context for the impact analysis.

## 6.9.2 Impact Evaluation Process

### Significance Criteria

The impact of the proposed project on hydrology and water quality would be considered significant if it would exceed the following Standards of Significance, in accordance with Appendix G of the *State CEQA Guidelines* and the UC CEQA Handbook:

- 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 (e.g., the production rate of the 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);
- 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;
- 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;
- 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 housing or structures within a 100-year floodplain or place structures that would impede or redirect flood flows;
- 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; or
- Inundation by seiche, tsunami, or mudflow.

## 6.9.3 2010 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2010 LRDP through 2025 on hydrology and water quality are evaluated in Section 4.8 of the 2010 LRDP EIR. As identified in Section 9.6.4 (below), the 2010 LRDP EIR did not identify potentially significant hydrology and water quality impacts that could result from implementation of the 2010 LRDP. As a component of the 2010 LRDP, the proposed project may contribute to impacts previously identified as less-than-significant impacts and Section 6.9.4 evaluates the potential for such impacts to exceed the previously identified levels.

## 6.9.4 Environmental Checklist and Discussion

HYDROLOGY & WATER QUALITY	Impact to be Analyzed in the EIR	No Additional Analysis Required
Would the project...		
a) Violate any water quality standards or waste discharge requirements?	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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) The Draft EIR will update the stormwater pollution requirements for projects at the UC Davis Sacramento Medical Center in order to examine the redevelopment and demolition projects for potential impacts that could occur.

b,d,e) The proposed project would not interfere with groundwater recharge and would not exceed capacity of stormwater runoff systems. The proposed project would increase the area of permeable ground coverage on sites that currently have no permeable coverage so that more stormwater could infiltrate through the surface to assist with aquifer recharge and reduce flows into stormwater conveyance facilities. The project is expected to result in an increase of approximately 30,000 square feet in permeable ground coverage. The project would have no impact on groundwater recharge and no impact to the capacity of stormwater runoff systems. No additional analysis would be needed.

c) The project sites are fully developed areas of the hospital complex. The project includes removal of two buildings with one project site left redeveloped as a landscaped area and one project site redeveloped as a plaza and landscaped area. The proposed project is expected to 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 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 with the proposed new landscape areas reducing the amount of expected runoff. No impact would occur. No additional analysis would be needed. Storm water runoff pollution is evaluated further in items (a,f) above.

- g,h, i) The proposed does not include residential uses that could be affected by flooding and the site is not located in a 100-year floodplain, as defined by the Federal Emergency Management Agency (FEMA 2008) and would not place residences or any other type of structure in a 100-year floodplain. The project site is not located near a levee or dam and would not be subject to risk of flooding due to failure of one of these structures. No impact would occur. No additional analysis is needed.
- 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.

## **6.10 LAND USE & PLANNING**

Section 4.9 of the 2010 LRDP EIR addresses the land use and planning effects of campus growth under the 2010 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.9 of the 2010 LRDP EIR. Within the impact assessment, the planned land uses for the proposed project are assessed for potential conflicts with existing land uses at the Sacramento campus and for conflicts with land uses adjoining the campus. UC Davis is not required to be consistent with the land development policies in the City of Sacramento General Plan because the University of California (the University), as a state entity, is not subject to municipal regulation.

### **6.10.1 Environmental Setting**

The approximately 142-acre UC Davis Sacramento campus is located within the City of Sacramento, approximately 2.5 miles southeast of downtown Sacramento, 17 miles east of the UC Davis main campus in Davis, and 90 miles northeast of San Francisco. The UC Davis Sacramento campus is bounded by V Street on the north, Stockton Boulevard on the west, Broadway on the south, and a residential neighborhood to the east.

The University owns some of the properties that surround the campus site, including buildings along Stockton Boulevard and on Broadway. The University also leases off-site facilities in Sacramento for clinics and offices totaling over 500,000 square feet. Over time, approximately half of the programs currently in leased spaces are expected to be relocated to the Sacramento campus in order to achieve efficiencies in operations and to reduce costs. The remainder of the programs would remain off site. The space needed to accommodate programs that would relocate to the Sacramento campus is included within the proposed building space growth included in the 2010 LRDP.

#### **2010 LRDP Land Use Designation**

The existing array of buildings and land uses result from prior campus planning efforts that were largely continued as a result of the adoption of the 2010 LRDP to guide the development of campus facilities for the foreseeable future and accommodate demand for growth of facilities and enrollment. Five objectives were identified in the 2010 LRDP:

- Improve site organization
- Improve site circulation
- Correct existing physical deficiencies
- Provide for site development that would be compatible with the neighborhood
- Allow for future growth.

To achieve the five objectives, the 2010 LRDP identified the following land use zones:

- Administrative and Parking
- Hospital
- Ambulatory Services
- Central Utilities
- Mixed Use
- Instruction & Research
- Administrative Support
- Specialized Clinical Services
- Plant and Support Services
- Future Development



### **Existing Project Site**

The project proposed project includes work on three sites (North Addition, Housestaff, and North/South Hospital Wing). All of these sites are within the 2010 LRDP *Hospital* land use designation. Details of these sites are provided below.

**North Addition:** The North Addition will be constructed north of the Main Hospital on the site currently occupied by the 30,000 square foot, single-story temporary building used as the Trauma Nursing Unit and scheduled for demolition in 2015. The footprint of the proposed building will consist of approximately 21,000 square feet with additional site area being redeveloped as an entry plaza and courtyard for the south side of the building and walkway space around the perimeter of the building. The existing building site consists entirely of impervious surfaces with asphalt and concrete surfacing. The Project site is bounded on the south by the continuous north face of the Main Hospital, on the east by loading docks and on the west by an asphalt service driveway for the hospital. The Project site's north edge will be defined by a reconfigured service road and related landscaped buffer that will both be constructed as part of the Project. Vacant modular buildings and portions of the former emergency department will be demolished as part of the Project's scope and budget.

**Housestaff:** The Housestaff Facility project site appears as an existing developed area with a two-story structure on a site of approximately 10,000 square feet. The site is adjacent to Colonial Way, a two-lane road within the developed portion of the UC Davis hospital complex. To the east and west of the site are two-story existing hospital support buildings and a landscaped courtyard area is located on the north side of the project site.

**North/South Wing:** The six-story building extends from Stockton Boulevard to Colonial Way on a site of approximately 50,000 square feet. The east side of the site is the portion of the building attached to the main hospital. The west side of the building is a landscaped area of approximately 75 in width that separates the North/South Wing from the parking structure to the west of the building. The north side of the project site includes the two-lane Colonial Way road and is approximately 200 feet from the northern edge of the Sacramento campus.

### **Existing Adjacent Land Uses**

Surrounding uses around the Sacramento campus include regional commercial uses, low-density suburban neighborhoods, and a high-density traditional neighborhood. Stockton Boulevard, along the western boundary of the campus, is lined mostly with one- to three-story office buildings and a small amount of retail. A Shriners Hospital is located on Stockton Boulevard just south of X Street across from the UC Davis Health System Main Hospital.

The Elmhurst neighborhood to the north and east of the campus is a residential neighborhood consisting primarily of single-family homes. To the west (west of commercial business buildings along Stockton Boulevard) is the North Oak Park neighborhood, also residential, with a mix of single-family and multi-family residences. These neighborhoods can be characterized as pre-World War II traditional neighborhoods. Multi-family residential uses predominate in the Fairgrounds neighborhood to the southwest of the campus.

Between the southern edge of the campus and Broadway are located several public institutions and offices, including Marian Anderson Elementary School, and County and state office buildings. These public office uses continue south of Broadway as well. The Broadway Office Building owned by the Sacramento Campus houses the campus's administrative offices.

### **6.10.2 Impact Evaluation Process**

### Significance Criteria

The impacts from the implementation of the 2010 LRDP and projects undertaken as part of implementing the 2010 LRDP related to land use and planning would be considered significant if they would exceed the following Standards of Significance, in accordance with Appendix G of the State CEQA Guidelines and the UC CEQA Handbook:

- Physically divide an established community.
- 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.
- Conflict with existing and future adjacent land uses.
- Conflict with any applicable habitat conservation program or natural community conservation plan.

### Methodology

The analysis in this section focuses on the compatibility of the proposed project with existing and planned land uses within and near the site. The project area consists of the project sites for each of the proposed project components and land nearby each site. The surrounding land uses under consideration are typically within one city block of the project site with an increased radius beyond the one-block area for land use compatibility issues that could exceed the one-block distance. Potentially significant land use conflicts are those that could conflict with the implementation of an adopted plan or conflict with an existing use of affected land.

### 6.10.3 2010 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2010 LRDP through 2025 on land use and planning are evaluated in Section 4.9 of the 2010 LRDP EIR. The proposed project is within the scope of analysis in the 2010 LRDP EIR and the significant and potentially significant land use and planning impacts identified in the 2010 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 2010 LRDP EIR.

2010 LRDP EIR Impacts		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
LAN-2	The proposed 2010 LRDP would not result in development that would conflict with existing and future adjacent land uses. ( <i>Less than Significant</i> )	LS	LS

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

A mitigation measure from the 2010 LRDP EIR that is applicable to the North Addition component of the proposed project is presented below. Since this mitigation measure is already being carried out as part of implementation of the 2010 LRDP, it is 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 2010 LRDP EIR mitigation measures.

**2010 LRDP EIR Mitigation Measures**

Land Use and Planning

LAN-2 Prior to design approval for or authorization to proceed with development projects located along the campus boundary, the University will review project siting and design to ensure that the project conforms to LRDP height limits.

**6.10.4 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 hospital facilities and construct a new hospital office building. The proposed demolition and construction projects would not divide an established community because the project sites would create no barriers for any existing communities. No impact would occur.
- b) The 2010 LRDP is the guiding land use planning document for the UC Davis Sacramento campus. The 2010 2010 LRDP land use designation for the project site is Hospital. The proposed project would demolish existing hospital facilities and add a new hospital support building (the North Addition office building) which would be consistent with the adopted Hospital land use designation. To ensure that a development project is compatible with existing and future land uses, the University adopted in the 2010 LRDP EIR, a specific height limitation for buildings near the north side of the Hospital land use designation. The height of new development along the northern edge of the campus in the Hospital area is limited to three stories for buildings setback between 40 and 100 feet from the northern property line. For buildings 101 to 180 feet from the northern property line, heights are restricted to six stories and to 14 stories for buildings setback 180 feet or more from the northern property line. LRDP EIR mitigation measure LAN-2 adopted these height limitations and required that the University evaluate building heights for consistency with these restrictions prior to project approval. The proposed North Addition office building would be setback approximately 115 feet from the northern property line and would therefore be restricted to a height of six stories. The North Addition building is proposed as a six-story structure and would therefore, be consistent with the adopted height limitation. As a six-story structure, the proposed construction the new North Addition office building would be consistent the adopted policy and mitigation measure of the 2010 LRDP EIR. The potential impact would be less-than-significant as identified in the 2010 LRDP and no additional analysis would be needed.

- c) The campus does not fall within the boundaries of, nor is it adjacent to, an adopted regional HCP or NCCP. Therefore, the proposed project would not conflict with an adopted HCP or NCCP. No impact would occur.
  
- d) The 2010 LRDP EIR identifies that an impact could result if land uses are developed under the 2010 LRDP EIR that are substantially incompatible with existing adjacent land uses or with planned uses. The proposed construction of the North Addition office building would continue the existing use of the project as a hospital-related use. The North Addition office building would be compatible with the adjacent hospital uses and has been planned to improve the efficiency of hospital operations and coordination between employees needing office space and needing to retain close proximity to the existing hospital operations. As an office building with activity primarily taking place within the building, the North Addition building would have very few external operational factors that could interfere with nearby land uses. The nearby residential areas to the north of the project site are screened by existing, mature trees and would be expected to have very little interaction with the proposed office building. No impact would occur.

## 6.11 MINERAL RESOURCES

<b>MINERAL RESOURCES</b>	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) The proposed project would demolish existing buildings and construct a new building on the site of an existing building. The project would have components that would affect the availability of mineral resources. No impact would occur and no further analysis is required.

## 6.12 NOISE

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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

- a,b,c,d) Project activities would result in noise effects from traffic, equipment, construction activities, and on-going operation of the proposed facilities. The Draft EIR will evaluate the potential project impacts, cumulative impacts, and, if necessary, propose mitigation measures to address project impacts.
- e,f) The project site is not near an airport or private airstrip and impacts aircraft related noise on people are not expected to result from the proposed project. The Draft EIR will evaluate the potential project impacts, cumulative impacts, and, if necessary, propose mitigation measures to address project impacts.

## **6.13 POPULATION & HOUSING**

This section reviews the existing population and housing conditions for the UC Davis Sacramento campus and the surrounding areas, including the region contained in the six-county area considered to represent the greater-Sacramento metropolitan area. This section describes the increase in campus population directly related to implementation of the 2010 LRDP, and the anticipated changes in regional population and housing that could result from the implementation of the 2010 LRDP.

Changes in population, employment, and housing demand are social and economic effects, not environmental effects. According to the California Environmental Quality Act (CEQA), these effects should be considered in an EIR only to the extent that they create adverse impacts on the physical environment. According to Section 15382 of the *State CEQA Guidelines*, “An economic or social change by itself shall not be considered a significant effect on the environment.”

### **6.13.1 Environmental Setting**

#### **Study Area**

The UC Davis Sacramento campus is near the geographic center of the Sacramento area and the six-county area described above is the geographic area used by the Sacramento Council of Governments (SACOG) the regional Metropolitan Planning Organization to coordinate area land use, transportation, and housing planning.

#### **Campus and Regional Population**

The on-campus population is composed of patients, visitors, and attendants associated with the patient service facilities at the campus, and UC Davis Health System staff, faculty, and other academic personnel, interns, and residents, and medical students associated with both the patient service facilities and the medical school. As of 2008–09, the total average daily patient-related population (patients, visitors, and attendants) was about 5,000 persons, and there were on average about 5,500 staff; 1,000 faculty and other academic personnel; about 630 interns, residents, and fellows; and about 435 medical students present on the campus for a total daily population of approximately 12,565 people.

#### **Campus and Regional Housing**

The UC Davis Sacramento campus provides no on-site housing for students or employees. Employees and students seek housing throughout the Sacramento region.

Housing options throughout the Sacramento region are typical of large metropolitan area with a wide variety of prices and attributes. Projections from SACOG indicate that regional housing options will continue to grow through the LRDP implementation period with the existing base of approximately 800,000 housing units growing by approximately 65 percent to approximately 1,300,000 housing units in

### **6.13.2 Impact Evaluation Process**

#### **Significance Criteria**

The impacts related to population and housing from the implementation of the 2010 LRDP would be considered significant if they would exceed the following Standards of Significance, in accordance with Appendix G of the *State CEQA Guidelines* and the UC CEQA Handbook:

- Induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

**Methodology**

The effects of population growth are evaluated below by comparing the context of the expected regional population growth to the population growth that would be induced through implementation of the proposed project.

**6.13.3 2010 LRDP EIR Impacts and Mitigation Measures**

The 2010 LRDP EIR identified no potentially significant population or housing impacts related to 2010 LRDP implementation and no mitigation measures were identified in the 2010 LRDP.

**6.13.4 Environmental Checklist and Discussion**

**POPULATION & HOUSING**

Would the project...	Impact to be Analyzed in the EIR	No Additional Analysis Required
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"/>
a) The proposed project would not increase the campus enrollment or employee population. The proposed project would reduce building square footage at the medical center and provide efficient space for existing employees. The new space would accommodate employees moving from the space to be demolished and certain portions of the existing space are inefficiently used because of the outdated design. Accordingly, the project is not expected to induce population growth in the area. The project has no unusual factors that would contribute to population inducement. No impact would occur. No additional analysis is necessary for the Draft EIR.		
b, c) The proposed project would not permanently displace any existing housing. The project involves demolition of hospital facilities and replacement of office space. No impact would occur. No additional is necessary for the Draft EIR.		
d) The project would not increase student enrollment, faculty, or staff and would therefore not create a demand for housing. No impact would occur. Accordingly, no additional analysis of this issue would be needed for the Draft EIR.		



## **6.14 PUBLIC SERVICES AND RECREATION**

This section describes the police, fire, schools, and parks that are provided in the project area and analyzes the potential impacts of the proposed project on public services as well as the potential cumulative effects of the proposed project in combination with other regional growth. The objective of this environmental analysis is to determine whether the implementation of the 2010 Long Range Development Plan (LRDP) would result in the need for new or improved public service facilities, the construction of which could produce significant environmental effects. The study area is the project site (the approximately 142-acre UC Davis Sacramento campus, located within the City of Sacramento) and the surrounding six-county Sacramento Area Council of Governments (SACOG) planning area.

### **6.14.1 Environmental Setting**

#### **Fire Services**

The City of Sacramento provides fire protection services to the UC Davis Sacramento campus and all leased campus facilities located off campus. The closest fire station to the project site is Fire Station 4 located at 3145 Granada Way, approximately 1 mile to the north. The City of Sacramento has completed a facility master plan and the City has adopted a 2009–2014 Public Safety Capital Improvement Program. For the long-term needs identified in the City of Sacramento General Plan, the City is expected to need 12 new fire stations through the year 2030 to maintain the existing ratio of 1 fire station for every 16,000 residents. As new areas of Sacramento are developed and existing areas are redeveloped, the City is expected to identify potential locations for the new stations to maintain the ratio. In addition, existing stations may be renovated or relocated as part of the facility expansion process. Renovating or relocating Fire Station 4 has been identified as a potential long-term need.

In addition to the fire services described above, the regional needs for fire services are provided by fire departments and rural fire districts throughout the SACOG region. The Sacramento Metropolitan Fire District provides fire services to much of the unincorporated areas surrounding the City of Sacramento. In addition, individual cities such as Davis, West Sacramento, and Roseville have fire departments that provide fire services within each municipality. Each jurisdiction undertakes service-level planning and associated planning for necessary facilities. As regional population growth takes place, each fire service entity will identify and provide the desired level of facilities to serve the population.

#### **Police Services**

The UC Davis Police Department provides police services for all buildings and facilities either owned or leased by UC Davis Health System. UC Davis Health System operates a substation on the Sacramento campus that provides all needed police services for the campus, including for leased space. As the campus grows, it is expected that either new staff and/or increased crime prevention and operational efficiencies would be needed to serve the increased population at the UC Davis Sacramento Campus. Specific additional facilities have not been identified and could either consist of expansions to the existing public safety building, construction of a new building, or use of space throughout the campus as small substations to provide increased police presence at specific locations. According to the UC Davis Emergency Management Plan, the UC Davis Police Department participates in the California Master Mutual Aid Agreement (UC Davis 2009).

The City of Sacramento provides city police services and the Sacramento County Sheriff provides law enforcement in unincorporated areas of Sacramento County. Similarly, throughout the SACOG region, law enforcement services are provided by municipal police departments within each city and by county sheriff departments in unincorporated areas. Each law enforcement agency sets service standards for staffing levels and conducts facility planning to match the facilities needed for anticipated staffing.

The City of Sacramento maintains a goal of having 2 sworn officers for every 1,000 residents. In addition to the existing four facilities operated by the City of Sacramento Police Department, the City has

identified a potential need for a jail facility and additional facilities, including a permanent facility in the downtown core, a substation in Meadowview, and a substation in North Natomas. In addition, the City expects to remodel existing facilities to partially accommodate additional growth.

### **School Services**

The UC Davis Sacramento campus provides no school services. The UC Davis Sacramento campus provides higher education instruction as a part of the core mission of operating the hospital and professional schools. School services in the campus area are provided by the Sacramento City Unified School District. Because UC Davis Sacramento campus employees live throughout the SACOG area and are not necessarily concentrated near the campus, their families would utilize school services provided by various school districts throughout the region.

School districts throughout the Sacramento region provide school services and each district coordinates facility planning to match the expected student enrollment levels. Additional school facilities are expected to be constructed to serve the expected growth in the Sacramento region.

### **Parks**

The UC Davis Sacramento campus includes no park facilities for organized, active recreation. The existing campus open space areas provide walking paths. These areas are used by employees, patients, and visitors to the hospital. In addition, residents from surrounding neighborhoods utilize the paths and open space areas for recreational purposes.

Parks and recreational facilities are provided throughout the Sacramento region by local, state, and federal land management agencies. The City has established goals for providing park facilities within the City of Sacramento based on population levels. A summary of the City standards and projections of additional needs is provided in **Table 4.12-1, City of Sacramento Park Needs Projection for 2030 Population** in the 2010 Draft LRDP EIR. . Other regional municipalities conduct similar planning efforts for new facilities and are expected to construct new park facilities as the regional population increases.

## **6.14.2 Impact Evaluation Process**

### **Significance Criteria**

The impact on public services and recreation of the proposed project would be considered significant if it would exceed the following Standards of Significance, in accordance with Appendix G of the *State CEQA Guidelines* and the UC CEQA Handbook:

- 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: fire, police, schools, parks, or other public facilities.
- 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.
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

### **Methodology**

This analysis evaluates the potential for adverse physical impacts to occur as a result of the provision of new or altered public service facilities under the 2010 LRDP, including facilities or facility expansions needed to accommodate increases in demand for services and service personnel, or to enable service

providers to maintain level of service standards. Increased demand for public services that would result from implementation of the 2010 LRDP is determined by comparing projected population growth with existing service ratios, response times, capacities, and/or other performance objectives identified for each service to determine whether there would be unmet need. An unmet need for services could indicate that new facilities would be needed or that additional staff would be needed, which could result in a need for new or expanded facilities.

### 6.14.3 Environmental Checklist and Discussion

<b>PUBLIC SERVICES</b>	Impact to be Analyzed in the EIR	No Additional Analysis Required
<hr/>		
Would the project...		
<hr/>		
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) **Fire and Police Protection**

The proposed project would not increase the population at the UC Davis Sacramento campus. The project would remove existing older buildings and provide a new office replacement building. The reduced building square footage and the provision of a new building are expected to reduce the overall demand for fire services and result in no change to the demand for police services. The existing physical facilities for providing fire and police services would be unaffected by the proposed project. No impact would occur. No additional analysis would be provided in the Draft EIR.

#### a, iii-v) **Schools, Parks, and Libraries**

The proposed project would not contribute to the regional school-age population, parks, or libraries because it is a facility redevelopment project with no expected increase to campus or regional population. No impact would occur. No additional analysis is needed.

## 6.15 TRANSPORTATION, CIRCULATION, & PARKING

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 type="checkbox"/>	<input checked="" 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,f) The proposed project would increase traffic during construction from the arrival and departure of construction workers and from the arrival and departure of trucks delivering construction materials and from trucks hauling demolition debris from the site. The proposed project would not utilize V Street for construction traffic but would instead require that all construction traffic enter the hospital complex from Stockton Boulevard. The Draft EIR will evaluate the potential project impacts, cumulative impacts, and, if necessary, propose mitigation measures to address project impacts.
- c) The proposed project would result in no change to air traffic patterns and no increase in air traffic levels. Accordingly, the project would result in no change to safety risks related to air traffic. No impact would occur. No additional analysis is needed.
- e) During construction and demolition, temporary construction fencing would be arranged to maintain emergency access for hospital facilities. One of the primary objectives of the UC Davis hospital is to provide emergency services and the routing needs for emergency access will undergo extensive scrutiny during the project design process to ensure that each phase of the project maintains adequate access. No impact would occur. No additional analysis is needed.

## 6.16 UTILITIES & SERVICE SYSTEMS

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. For each utility system that would be needed for the proposed project, the Draft EIR will evaluate the potential impacts and, if needed, the potential mitigation measures to address project impacts.

## 6.17 MANDATORY FINDINGS OF SIGNIFICANCE

MANDATORY FINDINGS OF SIGNIFICANCE		Impact to be Analyzed in the EIR	No Additional Analysis Required
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"/>
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.		

## 7 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

## 8 REFERENCES

- California Department of Conservation (CDOC), Division of Mines and Geology (currently California Geological Survey). 1996. Probabilistic Seismic Hazard Assessment for the State of California. Open-File Report 96-08. <http://www.consrv.ca.gov/CGS/rghm/psha/ofr9608/index.htm>.
- California Department of Conservation (CDOC). 2000. Map of Principal Mineral Producing Localities.
- California Air Pollution Control Officers Association (CAPCOA). 2008. CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.
- California Air Resources Board (CARB). 2009. California Greenhouse Gas 2000-2006 Inventory by Scoping Plan Category – Summary. <http://www.arb.ca.gov/cc/inventory/data/data.htm>.
- California Building Standards Commission. 2009. 2008 California Green Building Standards Code.
- California Building Standards Commission. 2010. “CALGreen,” <http://www.bsc.ca.gov/CALGreen/default.htm>.
- JRP Historical. 2015a Historic Evaluation of UC Davis Housestaff Building.
- JRP Historical. 2015b Historic Evaluation of UC Davis North/South Hospital Wing.
- UC Davis. November 2010. UC Davis Sacramento Campus Long Range Development Plan.
- UC Davis. November 2010. UC Davis Sacramento Campus Long Range Development Plan Environmental Impact Report.

## 9 AGENCIES & PERSONS CONSULTED

None

## 10 REPORT PREPARERS

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