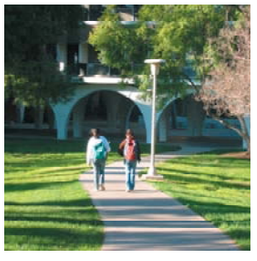
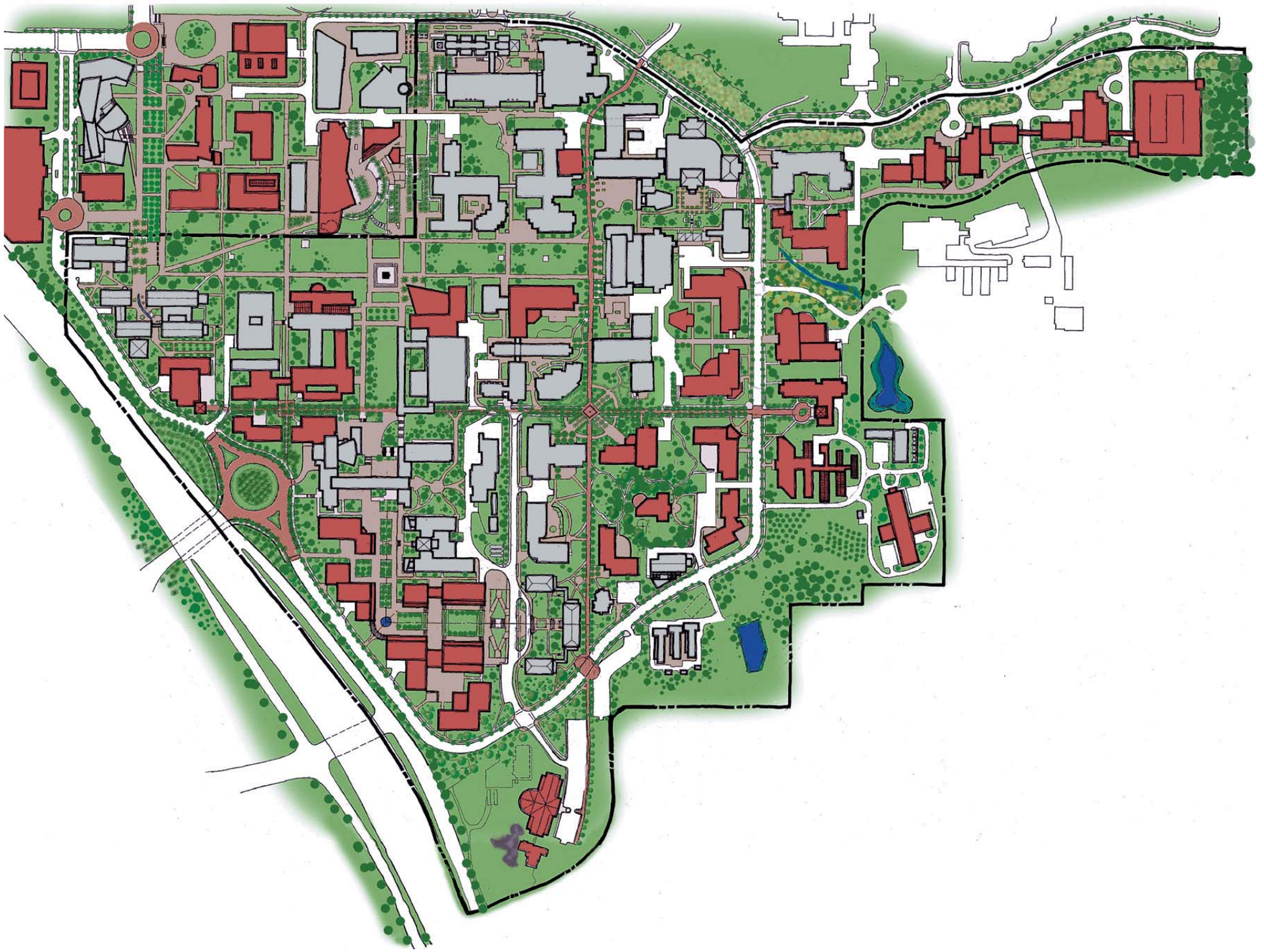
EAST/SOUTHEAST CAMPUS AREA STUDY UNIVERSITY OF CALIFORNIA RIVERSIDE





MAY 2006

EAST/SOUTHEAST CAMPUS AREA STUDY UNIVERSITY OF CALIFORNIA RIVERSIDE

The University of California, Riverside, East/Southeast Campus Area Study, is the result of a collaborative effort led by the University's Planning Team, Hanbury Evans Wright Vlattas + Company, Kennedy-Jenks and Associates and SWA Group. The process included participation by University faculty, staff, and students. The ESCAS incorporates ideas generated through on-site workshops, focus groups, interviews, planning team meetings, presentations and reviews, and the planning consultant's analysis of existing campus conditions.

The entire planning team would like to thank all those who contributed their time and energy to the accomplishment of this task. Their dedication to service and the success of this project are sincerely acknowledged.

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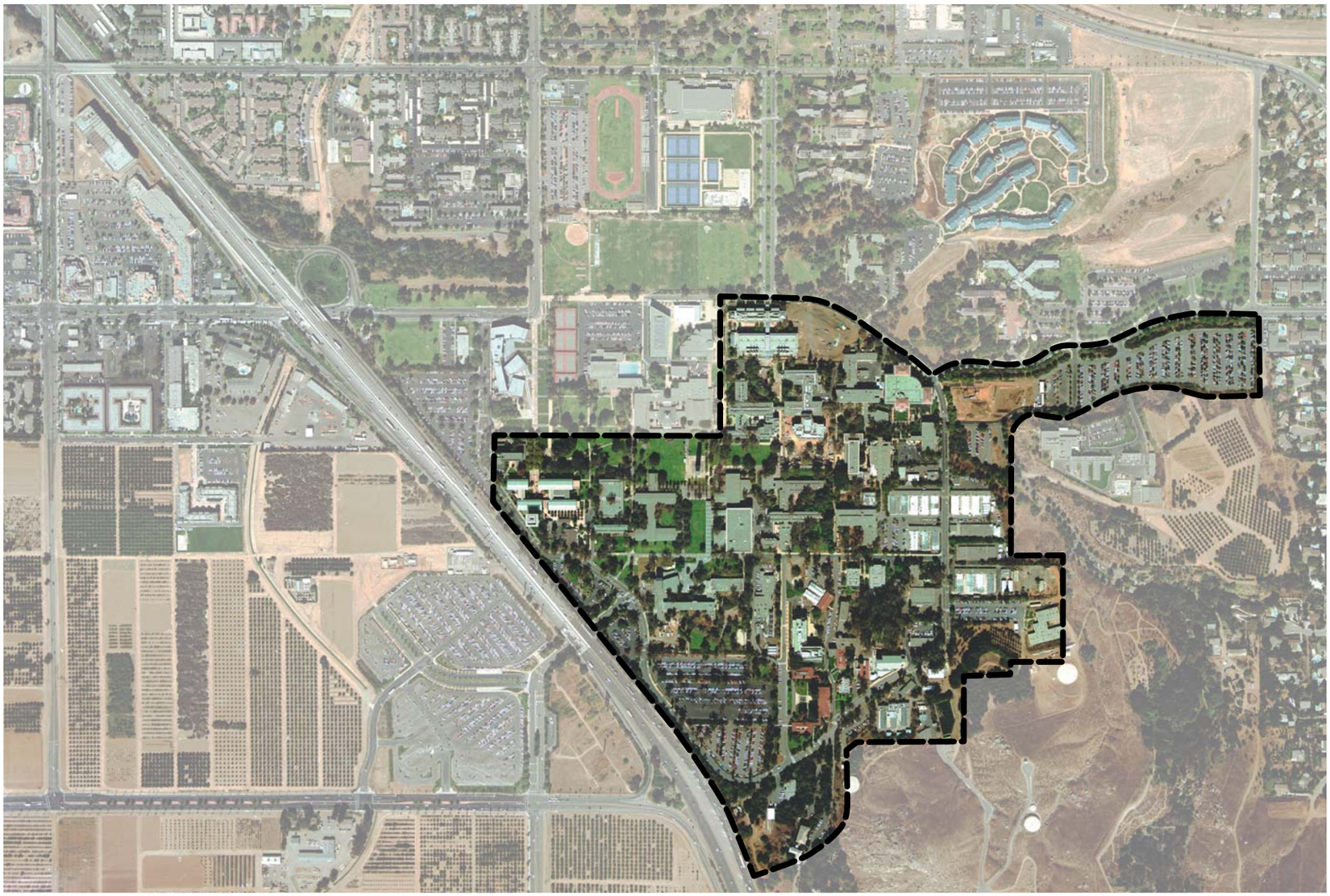
- Bruce Thomas

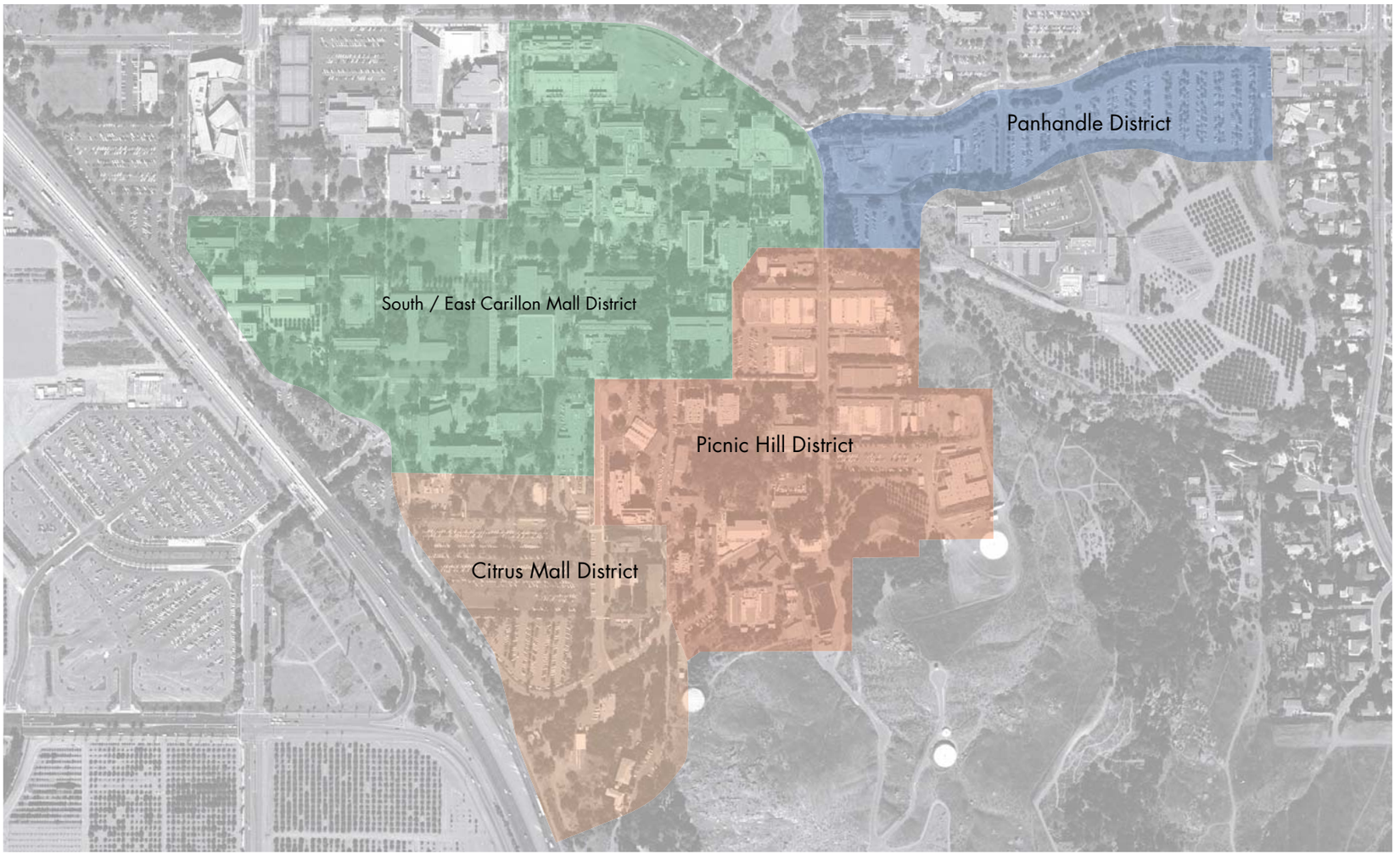
The East/Southeast Campus Area Study presents concepts and guidelines for the long-term, orderly build-out of the East Campus. Expansion to the west, across the freeway, as imagined in the LRDP, is inevitable, given the dramatic enrollment growth projected for the University of California, Riverside (UCR). Yet compact, urban, and well-conceived development of the East Campus becomes critical, due to the proximity and convenience to the overall functioning of the Campus. The heritage of the Citrus Experiment Station needs to be integrated into the Campus fabric, but, at the same time, obsolete land uses should be relocated, redeveloped, or demolished to maximize the opportunity for an integrated plan.

By carefully orchestrating these factors, UCR can realize approximately 2.25 million gross square feet (GSF) of new and critically needed facilities, in addition to the 2.25 million of existing facilities, potentially doubling ultimate program accommodation within the study area.

The East/Southeast Campus Area Study addresses the anticipated growth in student enrollment as projected in the 2005 Long Range Development Plan (LRDP). According to the LRDP, the student population of UCR is expected to grow to 25,000 (headcount) by the 2015-16 academic year. New instructional, research, and support facilities for the College of Natural and Agricultural Sciences (CNAS) and the College of Humanities, Arts and Social Sciences (CHASS) are expected on the East/Southeast portion of Campus. The LRDP has recommended that a higher density would be appropriate. The framework established in this Study defines urban design criteria that preserve and enhance UCR's architectural and open space character, while accommodating the new facilities necessary to keep pace with student enrollment, as well as program growth and change, within the LRDP's timeframe and beyond.



Study Area



District Plan

The Study recognizes four main districts on the East/Southeast Campus where the placement of future buildings needs to respect existing open space or where the LRDP recommends that new open space and movement corridors are critical.

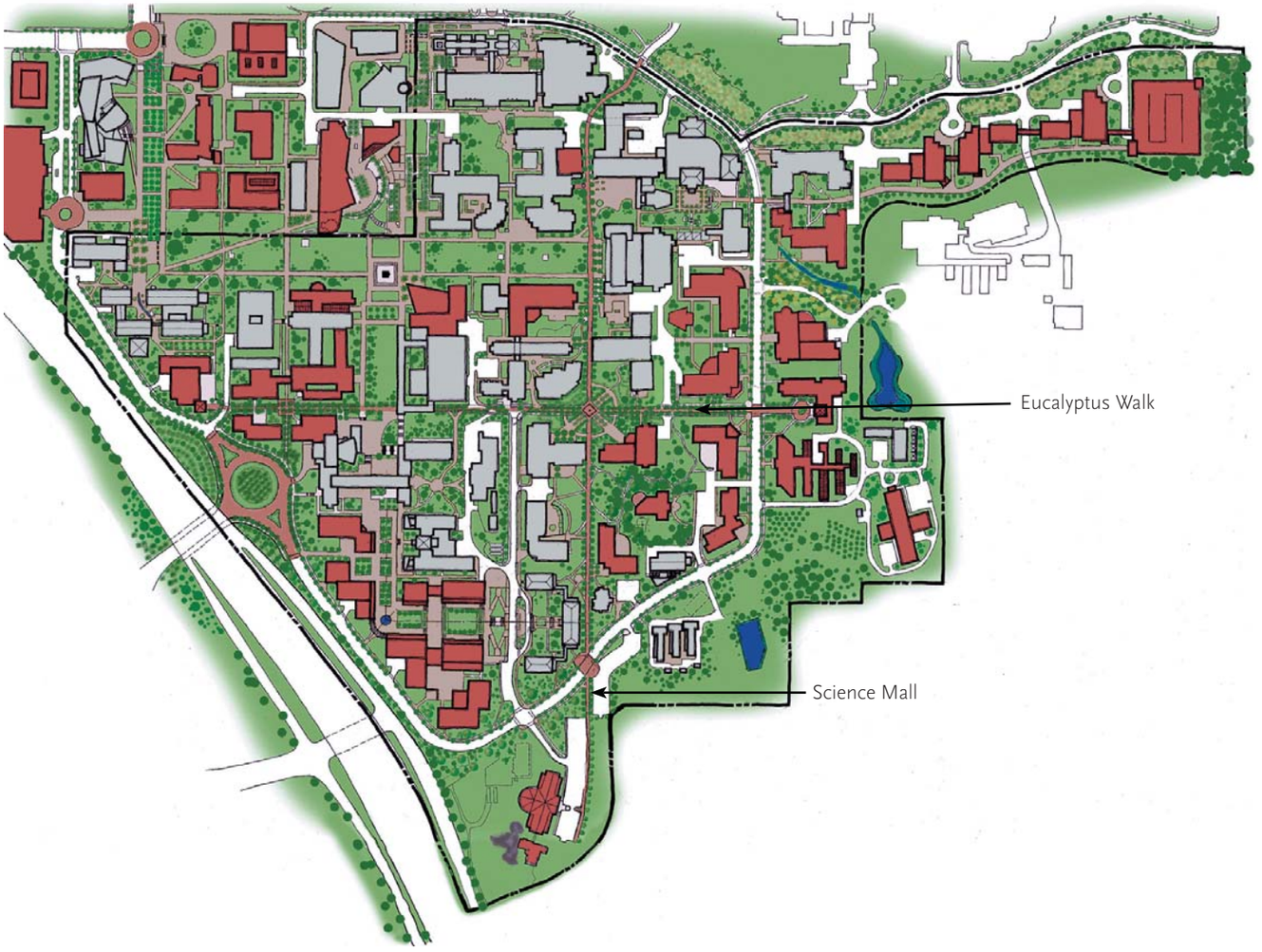
South/East Carillon Mall District

The organization of this area seeks to respect and reinforce the signature green space of the East Campus: the Carillon Mall. Setbacks for new buildings or building additions should respect the existing setbacks established by Sproul Hall, Rivera Library, and Humanities buildings on the south side of the mall and the Science Lab #1 and Pierce Hall on the north. Views to the east and west should be maintained with no new buildings being constructed between Webber and Hinderaker Halls. The Carillon should continue to be the predominant focal point of the views; landscape plantings and new buildings should not compete with it.

The adjoining Library Mall is the physical link between the South/East Carillon District and the new Citrus Mall District. As new buildings or building additions are proposed, the Carillon should remain the dominant feature on the UCR skyline as seen from within the Mall and other points on Campus and from the adjacent I-215/SR60 Freeway. The formal character of the existing Library Mall landscape was identified as a model and as a transition between the informal nature of the Carillon Mall and the Citrus Mall District.

Rivera Library's new Information Commons replaces "Unit-1" of the existing library in one of the University's most prominent sites near the base of the Carillon. The existing library needs a comprehensive assessment, but like other similar libraries of this era, it's inwardly focused, and print technology centered design needs reinvention. By creating a new and welcoming image and entry, Rivera can accommodate new technology and learning modalities of this century. A new facility would provide balance and counterpoint to the new Student Commons across the Mall affording the University a new academic living room for the Campus.

This district will also share the anchor to the connection to the West Campus, particularly in the near term, by connecting to the freeway underpass. This passage will be enhanced and connect to the Eucalyptus Walk that proceeds east up the hill on the old Eucalyptus Drive road bed. Significant demolition, densification, and infill opportunities exist at this juncture.



Preferred Plan

Citrus Mall District

The LRDP recommends that the area south of Olmsted Hall be developed into a new academic district that celebrates the architecture and heritage of the Citrus Experiment Station now known as Anderson Hall which is home to the A. Gary Anderson Graduate School of Management. New buildings form a stepping of courtyards that emulate the formal organization and rich landscape evident in front and to the sides of the Citrus Experiment Station Complex (CESC). Building heights and landscaping should create view corridors from I-215/SR60 into Campus and from Campus towards all the surrounding mountains, in order to maximize UCR's presence within the community.

This district will also co-anchor the connection to the West Campus, particularly as this district develops in the future. A roundabout, designed to calm vehicular traffic and prioritize the pedestrian safety and cognitive experience, will enhance the countless trips by students, faculty, and staff to current and future parking facilities to the west.

The significance of the future Citrus Mall is further defined by the intention to relocate the University's administration and leadership from Hinderaker Hall to the CESC when the Anderson Graduate School of Management relocates to the West Campus. This relocation will make Citrus Mall a critical hinge at the major crossroads of the future Campus.

Picnic Hill District

The land to the east of the CESC, known as Picnic Hill, and its extension down East Campus Drive in the area currently occupied by various growth facilities (greenhouses, lath houses, legacy groves, etc.), constitutes the most significant land use change and program accommodation opportunity in the Study.

Many facilities currently occupying sites in this area should be demolished and/or replaced, over time, as resources and program opportunities present. Simply said, much of UCR's future science research space can be accommodated along East Campus Drive and around Picnic Hill.

A comprehensive growth facility, structured as a central service resource to the research and teaching missions, needs to be developed to allow the relocation of other growth needs. The Avocado and Macadamia tree collection needs to be preserved.

Picnic Hill District

Panhandle District

South / East Carillon Mall District

Citrus Mall District

Along with Citrus Mall, Picnic Hill is a critical civic and open space land use opportunity. It is also a totally unique naturalized open space in a campus setting. Over the years this space has functioned as its name implies and has been impacted by ad-hoc use and benign neglect. We believe it needs to be preserved, valued, given purpose and stewardship. This is a great potential site for a relatively small focused use such as a University Club.

Panhandle District

As UCR expands its research mission, new partnership opportunities with the private sector will emerge that necessitate the need for incubator research/office space with easy access to parking, a location adjacent to the core Campus, and the ability to easily transition between users. The Panhandle District on the south side of Big Springs Road fulfills these requirements. The LRDP recommends the replacement of Parking Lot 13 and the construction of a parking garage with access to Big Springs Road and a dedicated pedestrian path to Campus. Big Springs Road provides service and delivery access to this area while minimizing mixing with Campus-only traffic.

Since Big Springs Road is a major entry to Campus from the communities to the east, care should be taken to present this district within its natural setting of foothills, arroyos, and natural drainage patterns. A new entry to the Botanic Garden should mediate between this district and the Picnic Hill district.

Related Services

Food is a vehicle for socialization. It can activate areas of the campus and provide unique opportunities for the exchange of knowledge and ideas. Creating food and beverage venues that provide outdoor seating in areas that highlight the beauty of the Campus will allow faculty, staff and students to use the outdoors as a break from their daily demands maximizing interactive socialization leading to stronger learning communities. The food service facilities indicated in the Study are located to meet the diverse needs of students, faculty and staff and to take advantage of Campus pathways, destinations and areas of informal gathering.

Food Service Facilities

UCR provides a variety of food service options within the academic core including campus restaurants, cafes and convenience stores.

Campus restaurants are distributed throughout the East/Southeast Campus, including existing facilities such as the Barn, Commons, and Taco Fresco (located on the west side of the Statistics-Computer Building). **Campus cafés** are located along major pedestrian paths into the core Campus such as Ivan's at Hinderaker at the entrance to Hinderaker Hall and the proposed Byte's Café at Engineering 2. Others are proposed in highly active courtyards like that of Life Sciences/Spieth Hall (Sandwichology) and in dynamic new buildings such as the proposed Information Commons (Café TR) at the north end of the Rivera Library. Cafés are retail-based and meant to offer convenience food and beverage products. **Campus convenience stores** are located at the Commons and are proposed in the vicinity of Physical Sciences 1 and in the vicinity of the University Theater courtyard/Olmsted underpass to give the campus community "grab-n-go" flexibility.

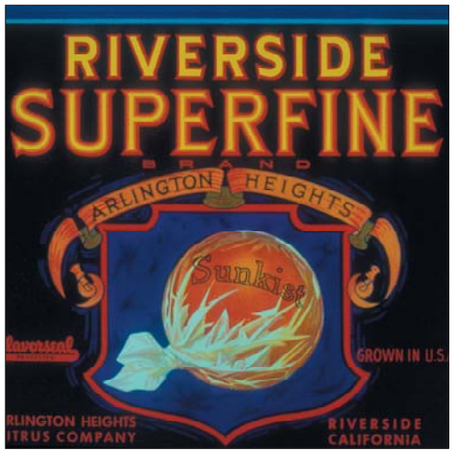
University Club

The Picnic Hill site is an opportunity for the potential Club to take advantage of the excellent views to the Box Spring Mountains to the east and to the wider Campus views to the west as well as make Picnic Hill a Campus destination. The building itself could be used to mitigate the terrain, making the high-point accessible to all.

The Barn site provides for the current needs of the University Club albeit inadequately. Whether a new facility is constructed, or the existing historic structure is renovated and expanded, the site is highly visible, central, identifiable, and easy to find.

The Campus Building North site is the most remote of the three sites, although it boasts the best views of Campus and the surrounding community and is highly visible from both Campus and I-215/SR60. The site offers the most flexibility for the construction of the facility and convenient parking, but easy pedestrian access from Campus is unrealistic.

This Study establishes a vision for accommodating the expected growth in academic programs and student enrollment at UCR for the foreseeable future. It provides a level of planning and organization that is evident on the northern portion of the East Campus by establishing appropriate density and developing a hierarchy of spaces to enhance the pedestrian's experience and preserve and enhance the Campus landscape for years to come.


RIVERSIDE
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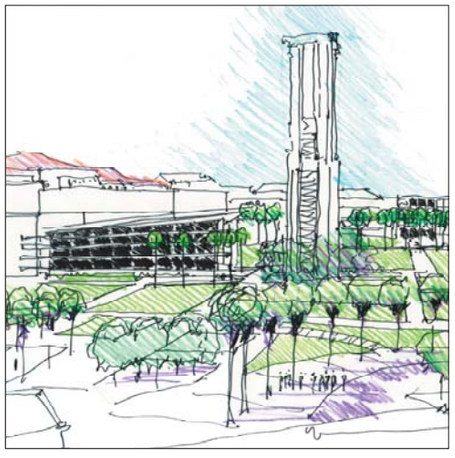

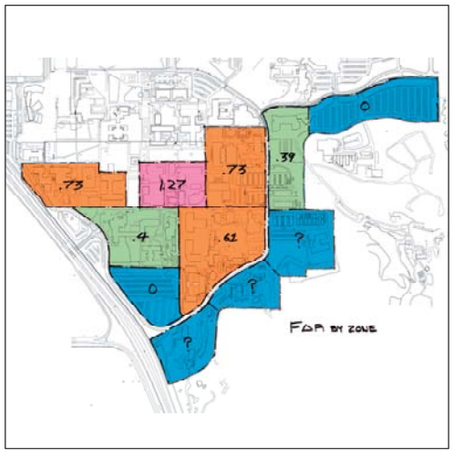
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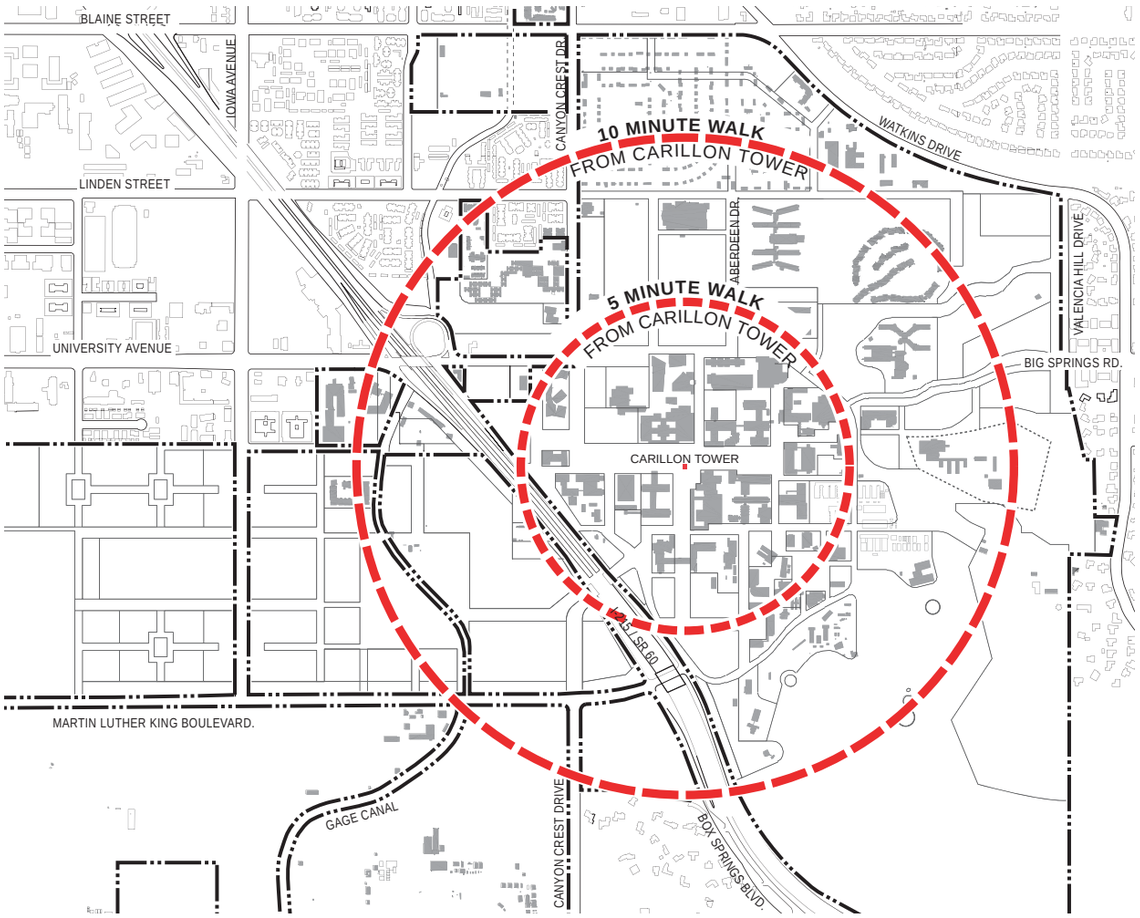
FAR BY ZONE


AVENUE
BRAND
VICTORIA AVENUE CITRUS ASS'N

UCR's expected growth to 25,000 students by 2015-16 will create pressure for new instructional, research, and support facilities within the current boundaries of the East/Southeast Campus. The LRDP has established a goal to increase density within the core campus to an average 1.0 FAR* in order to meet expected demand. The physical changes to campus required to achieve this goal could, if not managed, alter the open space character and beauty that is signature to UCR.

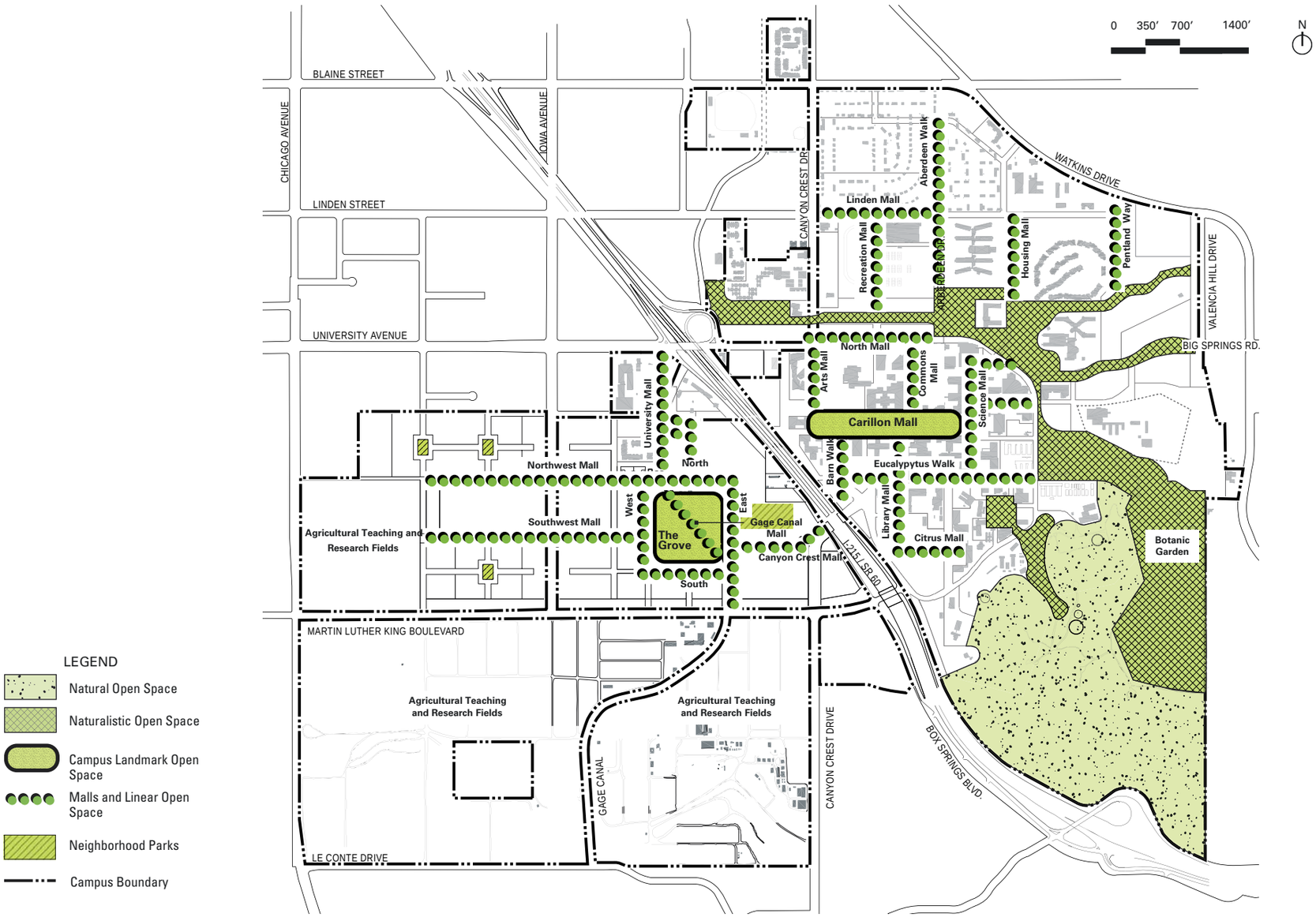


2005 LRDP by BMS Design Group

The East/Southeast Campus Area Study is guided by the following goals and planning objectives. They were developed in cooperation with the Planning Management Team (PMT) and confirmed during discussions with the Planning Committee:

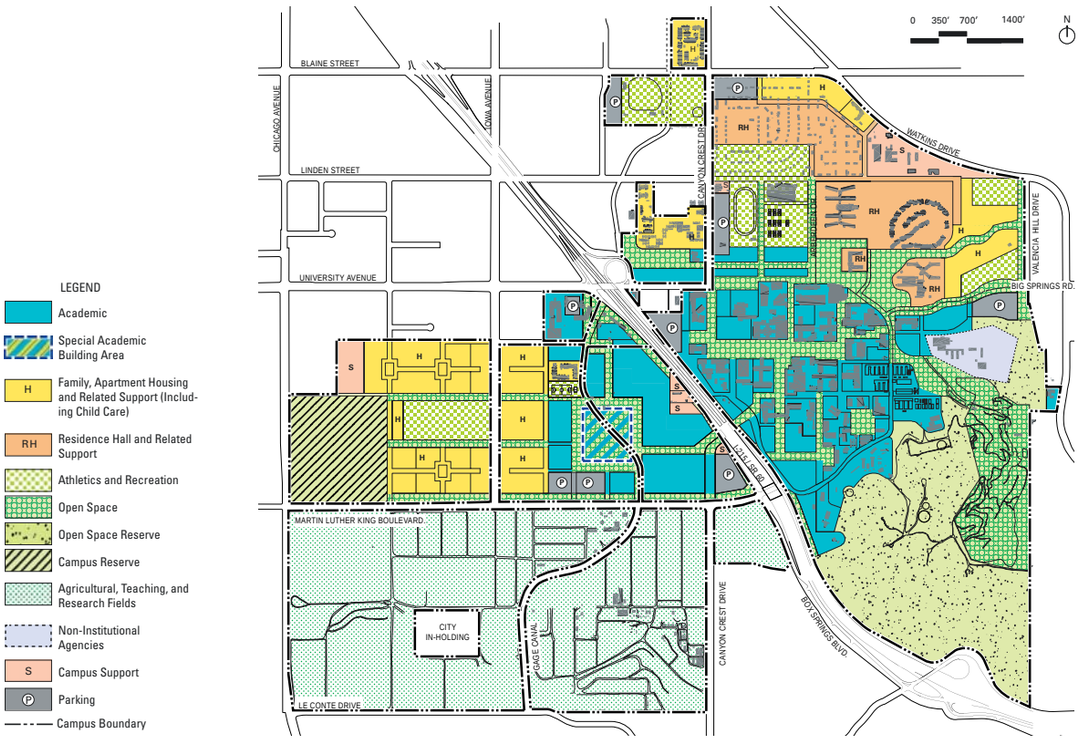
- Evaluate current study area density and establish a reasonable goal for the future
- Develop a hierarchy of spaces to include:
  - Activity and gathering areas
  - Dining opportunities
  - Outdoor seating and shade
  - Identify and preserve important views
- Establish a sense of arrival:
  - Valencia Hill Drive
  - Big Springs Road
  - Canyon Crest Drive I-215/SR60 freeway underpass
- Articulate pedestrian paths
- Evaluate existing buildings for:
  - Demolition
  - Reuse
  - Renovation
- Create an urban design plan with setbacks and build-to lines
- Celebrate the architecture and heritage of the Citrus Experiment Station Complex

**FAR is a standard measurement of density that indicates the ratio of building gross square feet to the land area it occupies. For example, a single story 10,000 square foot building on a 10,000 square foot site has an FAR of 1.0. However, a two-story 10,000 square foot building on the same 10,000 square foot site also has an FAR of 1.0.*



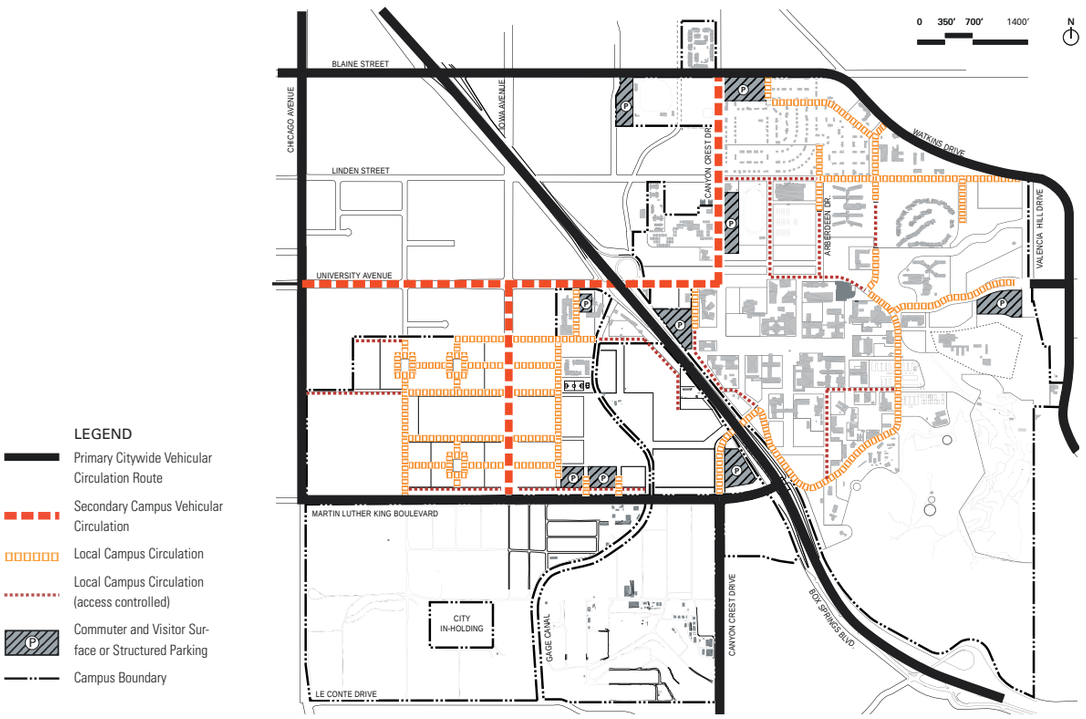
2005 LRDP by BMS Design Group

Land Use Plan LAND USE



2005 LRDP by BMS Design Group

Vehicular Circulation System CIRCULATION AND PARKING



2005 LRDP by BMS Design Group

The East/Southeast Campus Area Study was under-taken to advance the recommendations of the 2005 Long Range Development Plan (LRDP) that quantified anticipated campus growth and established priorities for meeting expected demand for instructional and support spaces.

The LRDP established the following broad goals:

- Enhance UCR image and identity
- Accommodate planned growth for UCR to 25,000 students while retaining flexibility for unanticipated future needs
- Recognize teaching and research change and encourage interdisciplinary endeavors by identifying a flexible academic zone
- Improve University/town interactions and synergy
- Emphasize strong connections and ease of access within campus and with the surrounding community
- Create a regional model of planning, design and environmental stewardship, protecting the natural environment and incorporating sustainable planning and design principles.

The LRDP provides a series of detailed goals and objectives to be accomplished by the Study:

- Plan to an FAR of 1.0 or higher
- Realize critical open space structure in balance to desired density
- Redeploy land use through evaluation, relocation, redevelopment, demolition, and infill
- Preserve natural areas and legacy
- Celebrate the historic origins of the campus
- Deploy food and services as activators
- Recognize pedestrian safety, amenity and convenience
- Promote multi-modal transportation system
- Move parking to structures at perimeter
- Eliminate cut-through vehicular traffic
- Provide reasonable access for service, disabled, emergency and necessary program support

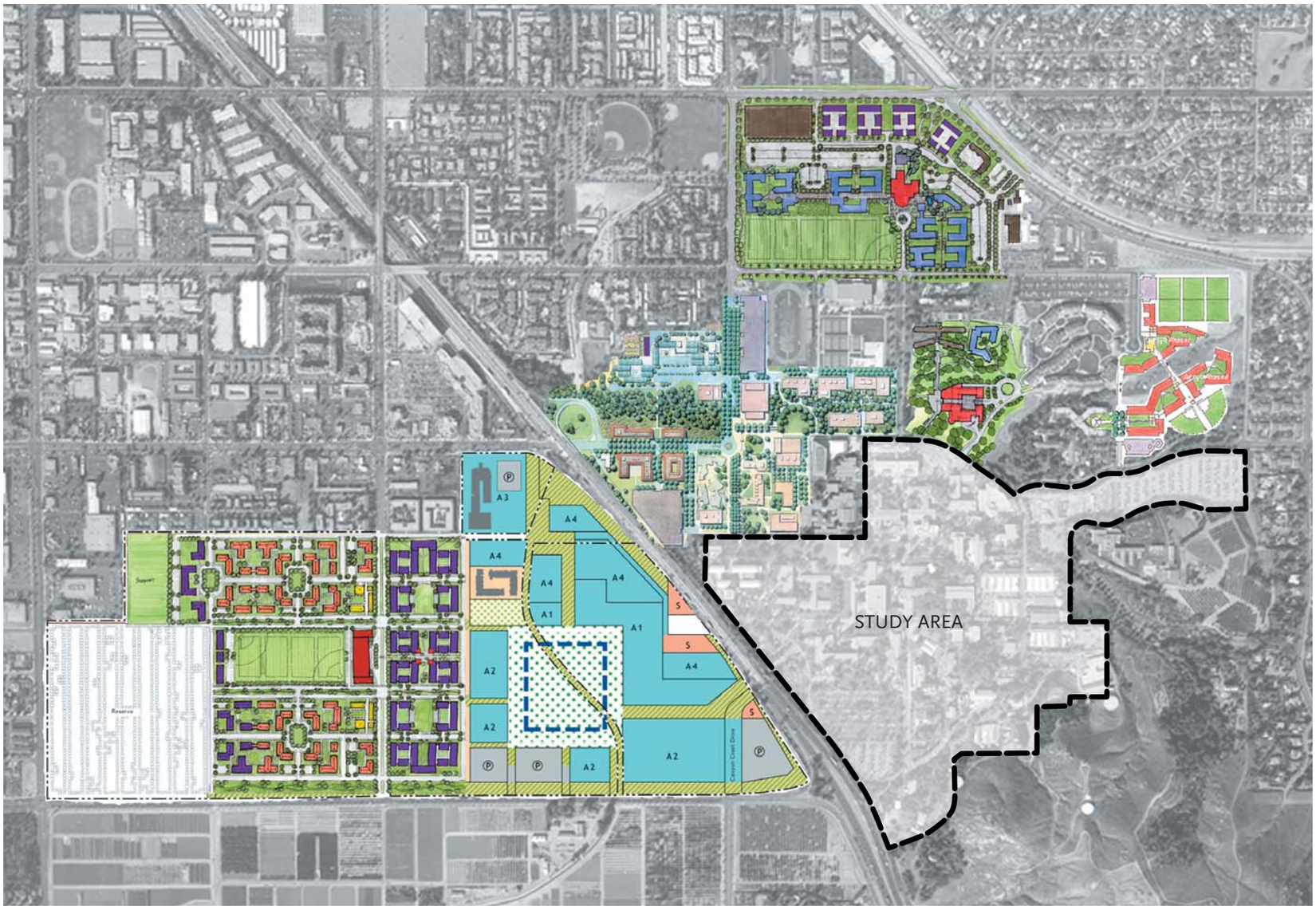
Study Area

The study area is located on the east and southeast portion of UCR's East Campus including the area currently adjacent to and occupied by Parking Lot 6, the area east of I-215/SR60 and West Campus Drive as well as areas south of South Campus Drive. The area extends northward to North Campus Drive, east including East Campus Drive and its surrounds, and includes the area along the south side of Big Springs Road occupied by Parking Lot 13.

Related Studies

The UCR East/Southeast Campus Area Study has been developed in concert with other campus sponsored studies and UCR's current planning guideline documents:

- 2005 Long Range Development Plan
- 2005 Draft CNAS Vision and Master Space Plan
- 2004 East Campus Entrance Area Plan
- 2004 UCR Multi-modal Transportation Management Strategy
- 2003 West Campus Area Plan
- 2003 Strategic Plan for Housing
- 2003 The Genomics and Biological Sciences Secondary Effects Report
- 2003 CNAS Building Evaluation
- 2002 East Campus Infrastructure Detailed Project Program
- 2002 CHASS Master Space Plan
- 1996 Campus Design Guidelines
- 1996 Campus Landscape Guidelines



In February 2005, UCR commissioned Hanbury Evans Wright Vlattas + Company (HEWV) to assist in the development of the East/Southeast Campus Area Study. Hanbury Evans in association with SWA (Landscape Architects) and Kennedy-Jenks and Associates (Civil Engineers) (Design Team) took up the challenge to define a framework for how future growth within a portion of the Campus would shape UCR in the coming years.

This undertaking included input from a cross section of UCR's faculty, staff, and students. Between March and June of 2005, the Design Team led a series of workshops with various campus constituency groups to understand needs and expectations, as well as the aspirations for what the campus could become. Oversight of the day-to-day aspects of the Study was provided by members of the University's planning and executive staff on the Project Management Team (PMT); Juanita Bullock, Timothy Ralston and Trisha D. Trasher. The Design Team regularly reported its findings to the members of the University's planning staff, executive staff, and senior faculty on the Planning Committee to create a consensus of realistic expectations for the Study and to provide critical review and guidance of its conclusions. UCR's Design Review Board and Capital Coordinating Committee (C-3) provided meaningful input regarding larger campus issues at both the preliminary concepts and final design stages. A meeting of the Capital Programs Advisory Committee (CPAC) engaged the campus at-large in a "town hall" format to review the process, conclusions and elicit comments. The resulting Study is a framework for development of the East/Southeast Campus in keeping with the vision of the 2005 Long Range Development Plan that creates a pedestrian oriented campus accommodating necessary academic expansion while preserving UCR's characteristic open space.

The following groups or individuals provided critical input to the proposals contained herein:

- Academic Senate
- Agricultural Operations
- Anthropology Group
- Associated Students of UC Riverside (ASUCR)
- Campus Grounds
- Campus Physical Plant
- Campus Police
- Campus Environmental Health & Safety
- CNAS Master Space planner (RFD)
- Dining Services
- Greenhouse Focus Group
- Library Group
- New Student Commons Planning Group
- Parking and Transportation Services
- Staff Assembly
- Student Special Services
- Vice Chancellor for Diversity

The Study Team thanks them for their input.

Site Features

Environmental Issues

The primary landscaped habitat is made up of highly manicured lawn, tree, and shrub areas. Naturalistic or native habitats occur primarily at the Southeastern Hills, Botanic Gardens, and Southeast Campus open spaces such as "Picnic Hill." There is also a small pocket of riparian habitat below the Botanic Gardens near Parking Lot 10. In addition, there are legacy agricultural collections.

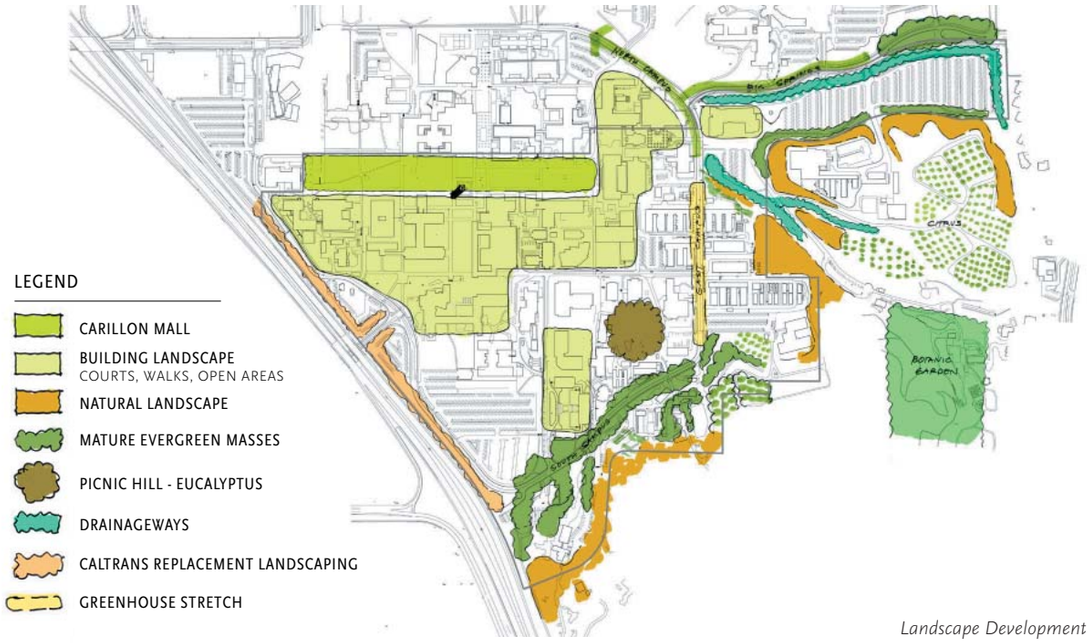
The Study boarders on, and engages, the Southeast Campus area designated by the LRDP as a protected natural open space reserve. The Southeast area includes the largest extent of natural or native habitats including a relatively large stand of undisturbed coastal scrub mixed with a wild grass lands and provides an important native habitat.

Topography

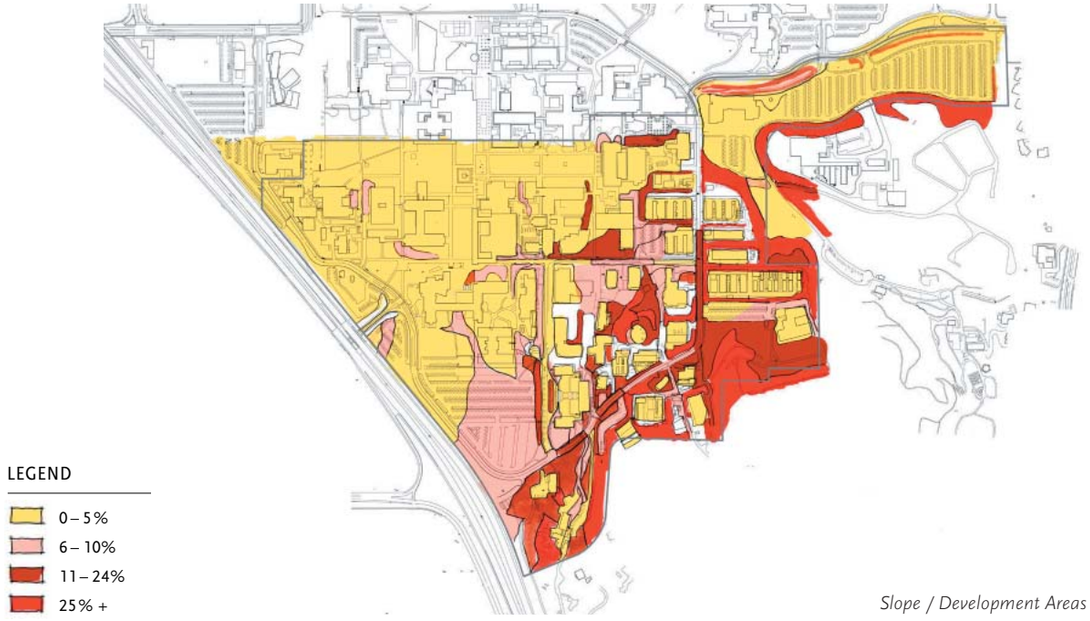
The East/Southeast Campus area consists of a relatively flat area toward the northwest, the freeway, and the panhandle but rises significantly from Parking Lot 6 to the CESC and along Eucalyptus Drive. It includes steeper areas around Picnic Hill and straddles the moderate to steep slopes at the edge of the Box Springs Mountains. The average rise in elevation from west to east is about 75-feet. Building pads have flattened out many areas, with retaining walls and steep side slopes used to take up grade. Due to topography and orientation, good views of the city and mountains are seen from Picnic Hill, the CESC, and the sites of the Computing and Communications Center to the north, as well as College Building North and South. This landform provides opportunities in terms of views and perceptive open space. It also presents challenges in terms of access and perception of distance and connection. Solutions need to be developed that mitigate these concerns.

Open Space Structure and Landscapes

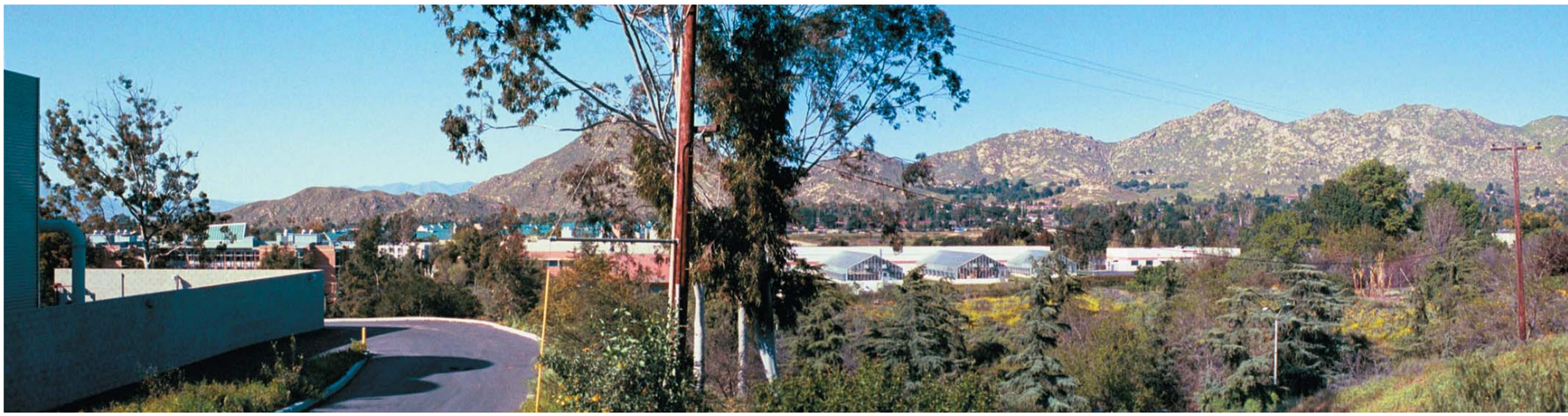
Several distinct landscape zones characterize the landscape of UCR. These are manicured and man-made, agricultural and natural, or naturalistic open spaces. The manicured lawn and mature trees, which create the park-like setting of the Carillon Mall, Library Mall, and other areas of the Campus core, are valued signature open spaces and create a positive image for the Campus. The Campus abuts the natural rugged grassland and scrub open space of the Box Springs Mountains and two riparian arroyos, bringing views and nature close to the Campus. The citrus groves of the West Campus, and the Avocado and Macadamia tree collection located west of the Computing and Communications Center, pay tribute to the unique agricultural role of the Campus and have an important historical image. The UCR Botanic Gardens, although not within the study area, contains more than 40 acres of which two thirds contains a diverse variety of planting; the remaining one-third is unplanted. The East/Southeast Campus area includes all of these diverse landscape features within or adjacent to the study area.

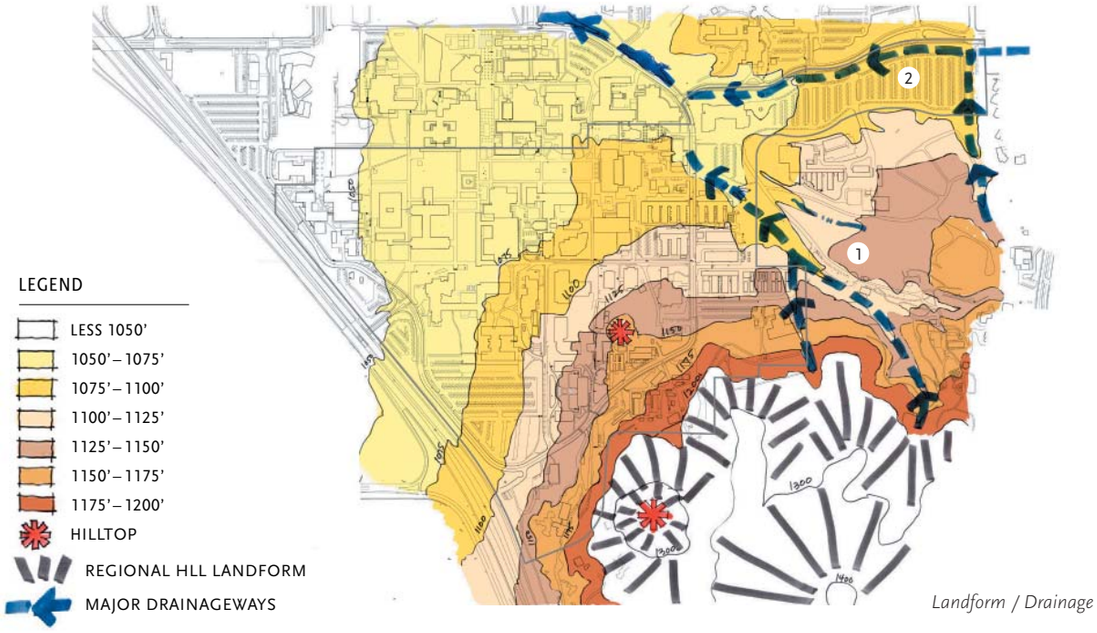


Landscape Development



Slope / Development Areas





Landform / Drainage

Drainage

Storm water runoff is collected and discharged through a combination of overland flows, underground pipes, and natural channels or arroyos. For most of the area, drainage flows from the southeast landform and primarily enters a series of underground storm drains. In addition, there are two significant open drainage ways, which collect water in the northeast part of the study area, the Botanic Gardens tributary (1), and the University Arroyo (2). These two systems connect at the west end of Physical Sciences. Portions of the University Arroyo drainage are in the 100-year flood plain. A detention pond is also planned below the Botanic Gardens.

Climate

UCR is located in a semi-arid interior valley. The climate is influenced more by the desert climates to the east with little influence from the Pacific Ocean. The average rainfall is 10 inches per year. Summers are warm to hot and rainless, with mild winters and light rainfall. Summer daytime highs are frequently over 95 degrees, with evening temperatures dropping below 65 degrees. Winter temperatures occasionally fall below freezing but are relatively frost free. Prevailing winds are from the Northwest. Intermittent Santa Ana winds blow from the Northeast and bring hot dry conditions typically in the fall and winter. Summer breezes generally flow from the West.

Geological Conditions

The Campus is sited partly on an alluvial fan, with the eastern portion located on the Box Springs Mountains. While no active faults are known to exist on the Campus, the area is subject to seismic activity from four nearby major faults. The proximity of these faults could cause major damage. Campus facilities must be designed under the Uniform Building Code to Seismic Zone 4 standards.

Air Quality

Located within the South Coast Air Basin, the Riverside area has been plagued with marginal air quality for a number of years, especially during the summers. Due to efforts to upgrade air quality over the last 15 years, there has been a significant improvement in the quality of the air. However, the Riverside area does not yet meet government standards, particularly for ozone and suspended particulates.

Utilities Infrastructure

Existing Campus infrastructure will need to be modified and expanded throughout the East/Southeast Campus area, to accommodate that area's share of the total campus student population of 25,000 by the beginning of the 2015 – 2016 academic school year. System shortfalls are identified in general terms in the LRDP and in detail in the East Campus Infrastructure Detailed Project Program (DPP) prepared by Bechard Long & Associates, Inc. in June 2002. Several projects recommended in the DPP have been designed, constructed, or are under construction at the time of this Study. These projects are primarily those identified for construction during the first phase, from 2002 to 2005, to accommodate planned construction during that period on the East Campus.

View to Box Springs Mountains from East Campus Drive

The following infrastructure systems are addressed as they were in the LRDP and the DPP:

- Chilled Water
- Steam and Condensate Return
- Domestic Water
- Sanitary Sewer
- Electrical Distribution
- Natural Gas
- Storm Drain

Chilled Water System

The LRDP described in general terms the capacity of the chilled water system upon completion of previously scheduled projects through the fall of 2002. The projects, as originally planned at that time, included the addition of 2,000 tons of chiller capacity and the construction of an additional 2-million gallons of thermal energy storage (TES). Prompting these improvements was limited chiller capacity, limited TES capacity, restricted distribution capacity due to pipe sizes, and the lack of a looped configuration to balance flow and pressure.

The DPP determined a Central Utility Plant capacity of nearly 6,000 tons in 2002; however, the piping configuration at the plant limited the deliverable capacity to 4,600 tons. As described in the DPP, construction through 2003 included the installation of a 2.4-million-gallon TES tank rather than the 2-million gallons proposed in the LRDP, construction of a Satellite Chiller Plant east of East Campus Drive, with two new 2,000 ton chillers, and new loop piping in East Campus Drive to improve the flow capacity and balance pressure conditions.

Since 2003, DPP projects scheduled for completion in 2005, as part of the East Campus Infrastructure Improvements project (designated by their DPP project numbers such as W-12 for a certain water project), included:

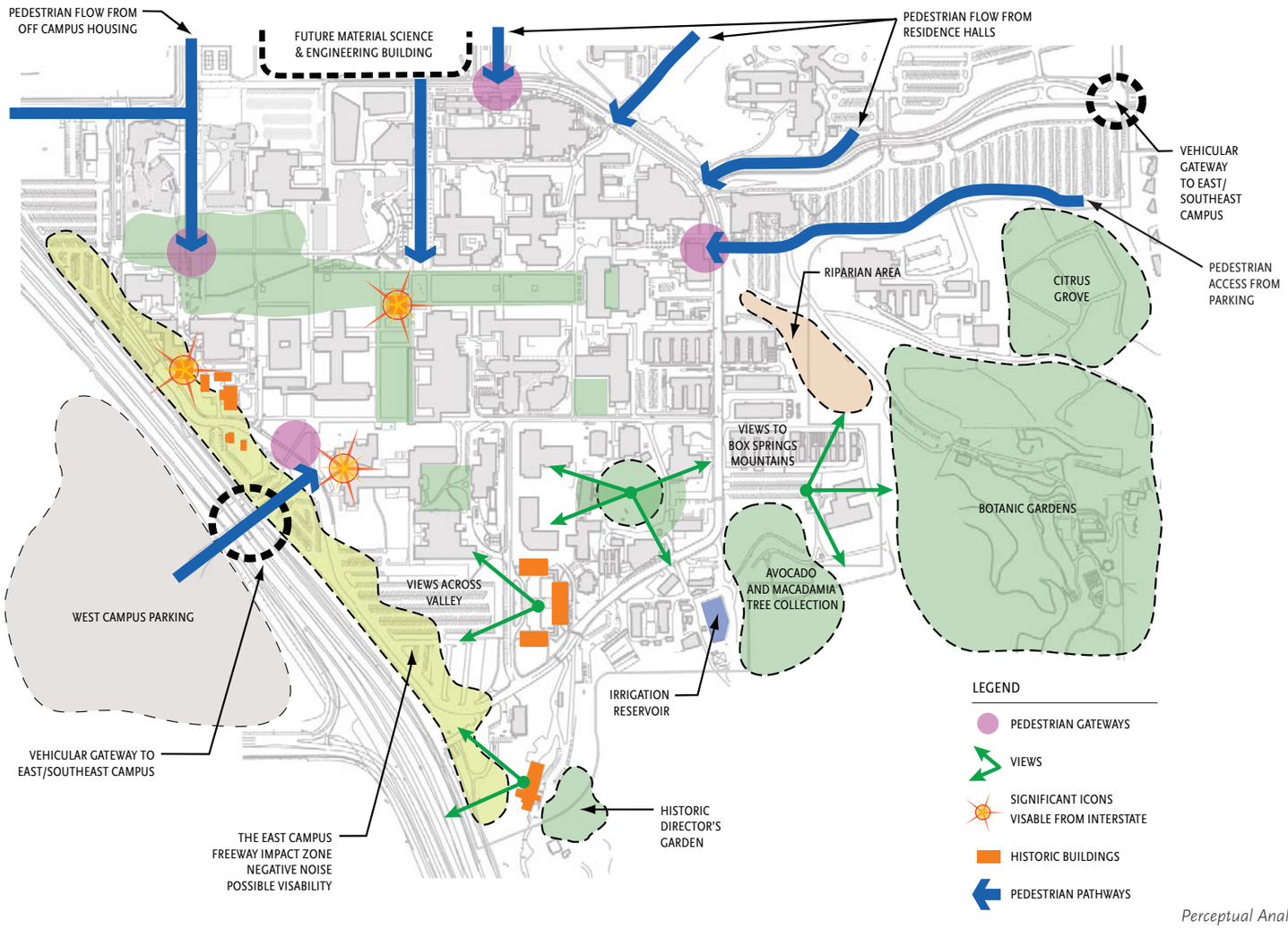
- Piping additions and modifications in the Central Chiller Plant, to allow utilization of available chiller capacity (CH-12)
- Replacement of an existing chiller with a larger capacity chiller (CH-12A)
- Replacement of tertiary distribution pumps serving several existing buildings (CH-13)
- Connection of a 20-inch diameter extension to the existing 20-inch distribution piping for improved distribution to the new UCR Alumni Visitor Center (CH-14)
- Provide completion of the chilled water system loop in North Campus Drive (CH-21)

According to the DPP, these improvements bring the combined Central Utility Plant and Satellite Chiller Plant capacity to 10,060 tons and the TES capacity to 4.4-million-gallons. The DPP diversified demand projections for 2005 for the entire East Campus are 7,802 tons. The diversified demand is estimated in the DPP using a diversity factor of 75 percent of the calculated peak demand due to fact that all buildings do not reach their peak cooling load demands at the same time.

DPP project CH-22, identified with the 2002–2005 projects, provided 12-inch mains to originally supply approximately 185,000 GSF of classroom space. This service will accommodate the 173,000 GSF of class room proposed in the Preferred Plan for Buildings 22, 23 and 24.

Steam and Condensate Return

As described in the DPP, the existing steam supply and condensate return system serving the East/Southeast Campus area consists primarily of the equipment located in the Central Utility Plant steam distribution and condensate return lines. In addition to heat, the system also provides for domestic hot water, cooking and sterilization needs. The Central Utility Plant heating systems serves the East/Southeast Campus. Some future projects will serve buildings on the north side of University Avenue which will be outside the East/Southeast Campus area. The LRDP and DPP do not exactly agree on the system's capacity as of 2002, with the LRDP establishing the capacity at 138,000 pounds per hour (lbs/hr) and the DPP indicating 132,000 lbs/hr. The existing capacity at that time was less than the total boiler capacity due to restricted make-up water supply line sizing to accommodate water softening equipment. The LRDP calculated a corresponding total demand at 55,000 lbs/hr while the DPP figures indicate that the total demand at that time was 60,000 lbs/hr. These differences are not, however, significant to the long-range planning of the East/Southeast Campus area. In any case, the existing system at that time had a greater capacity than required, although some 29,000 lbs/hr of that capacity was considered by the DPP as backup capacity.



Perceptual Analysis Diagram

Initial improvements proposed by the DPP for construction during the 2002 – 2005 period as part of the East Campus Infrastructure Improvements project included project ST 12, which increased the feed-water capacity and allows for the maximization of steam generating capacity of the Central Utility Plant. This project was completed, along with two projects proposed for construction between 2006 and 2010. Those two projects were ST 21 and ST 22. ST 21 extended the steam supply to the north side of the East Campus outside the East/Southeast Campus area and therefore had no impact on the Preferred Plan. ST 22 called for the construction of a 6-inch high pressure steam (HPS) line to the south to serve the projected CHASS Building #2 and future construction in Parking Lot 6.

One condensate return project was proposed and constructed in the East/Southeast Campus area, CR 22, which provided condensate return piping associated with the steam supply in project ST 22.

The existing (2005) capacity of the steam supply and condensate return system is approximately 138,000 lbs/hr serving a demand of approximately 80,000 lbs/hr, according to calculations presented in the DPP.

Domestic Water

Domestic water supply to the East Campus originates from an existing, City of Riverside, 5-million gallon (MG) reservoir located south of University Avenue near the intersection of University Avenue and I-215/SR60. Water is pumped from this reservoir into the Campus distribution system that is connected to two Campus storage tanks (50,000 gallons and 1 million gallons respectively) located in the southeast corner of the Campus. A second connection exists on the north side of the East Campus at the intersection of Linden Street and Florida Street through a 12-inch connection to a City main in Linden Street. This second connection is normally closed but can be used for backup to the Campus when required. Nearly all of the existing developed portion of the East/Southeast Campus area lies within an existing water distribution loop comprised of 6- and 8-inch pipe connected to a 12-inch main in Eucalyptus Drive. Currently Parking Lot 6 and the nearby Humanities/Olmsted Hall and Parking Lot 13 are not within the existing distribution loop.

Prior to 2005, the existing booster pump station pumping water from the 5 MG reservoir into the distribution system and existing campus reservoirs, was limited in pumping capacity to 3,000 gallons per minute (gpm) according to the DPP. A project recommended by the DPP (W-14) for early implementation,

recommended increasing that capacity to at least 8,000 gpm, in order to meet fire flow requirements. This project was part of the East Campus Infrastructure Improvements constructed in 2005. Two other projects included in the East Campus Infrastructure Improvements project (W-11 and W-13) improve the systems capacity to serve future Preferred Plan projects. W-11 and W-13 both add distribution piping forming a secondary loop in their respective service areas.

Sanitary Sewer

Existing sewer lines serving the East/Southeast Campus area, as well as those serving the northeast section of the Campus and off-campus neighborhoods to the east and north of Campus, all flow to a University-installed 15-inch trunk sewer located in North Campus Drive that extends to the west into University Avenue. The City and UCR have an agreement from 1961 allowing the Campus to use an 8-inch equivalent capacity of this 15-inch line east of Canyon Crest Drive. Also, as part of the agreement, the University pays no connection fees to this trunk in return for the University installing the trunk and maintaining it. The capacity had reportedly been calculated at 1.55 cubic feet per second (cfs). Actual flow being contributed to this trunk line by the University proper has not been specifically determined. There is conflicting information between what is represented in the LRDP and that being represented in the DPP. Based on flow measurements conducted by PBS&J, a consulting firm conducting flow measurements for the City of Riverside in late 2001, the total University sewer discharge from the south and north sides of the East Campus was 0.97 MGD (ap-proximately 1.5 cfs). The LRDP estimated that approximately half of this flow discharged into the trunk line east of Canyon Crest Drive and, therefore, the Campus was currently utilizing approximately 0.5 MGD or 0.75 cfs, which was roughly half of the agreed upon discharge to this section of the trunk sewer.

The DPP, also based on other flow measurements taken in 2001, and through review of actual invert elevations and calculated slopes of the 15-inch trunk line, determined the slope was less than previously reported and, as a result, an 8-inch equivalent capacity is approximately 50 percent less than the 1.55 cfs previously used. Visual observation of the manholes on the west end of North Campus Drive at the intersection of Canyon Crest Drive, and of the manhole in University Drive at the west end of the Campus, indicated flow levels in the 90 percent full range. The trunk line was inspected with video cameras in February 2001 and significant blockages were observed and recommended for removal prior to beginning implementation of any replacement of the trunk sewer at that time. Project SS-21 originally was recommended by the DPP for the first phase of construction but was later recommended for the DPP's second phase from 2006 to 2010.

Within the East/Southeast Campus area, several sections of the sanitary sewer experiences chronic blockages and were recommended for replacement by the DPP and implemented as part of the East Campus Infrastructure Improvement project. These projects (SS-12, 13, 14, 15, 17, and 19) improve localized building service.

DPP project SS -11 also was implemented with the East Campus Infrastructure Improvement project and replaces an existing 8-inch sewer serving Eucalyptus Drive conveying flows to the north on West Campus Drive where it connects to the City's 15-inch trunk sewer on University Avenue. Project SS-11 was designed to accommodate existing and future GSF in the central Campus area but will also provide improved flow capacity.

DPP project SS–23, constructed with the East Campus Infrastructure Improvements project, provides an 8-inch service to CHASS Building #2 and connects to the existing 8-inch line in West Campus Drive. This service also will provide adequate service for the planned buildings on the south side of the Citrus Mall District.

Electrical

The City of Riverside provides two 69kV feeders to the Campus' main substation. The substation has two 27-million volt amps (MVA) transformers and associated hardware that distribute power to the Campus at 12.47 kilovolts (kV). At current loading conditions, should one of these transformers go down, the second can meet University demand, providing full redundancy. As the Campus grows, however, this full redundancy capability will diminish.

The existing electrical distribution system serving the Campus is a combination of two systems. For one, 12.47 kV power is fed to the East Campus from the existing substation. On the East Campus, power is distributed to parts of the Campus through a 12.47 kV dual-radial system and to other areas through a 4.16 kV radial system. The DPP indicates that parts of the 4.16 kV system are over 50 years old. A 1986 study, conducted by Sampson, Randall & Press, Inc., determined that the system would not be able to keep up with future growth. In the 1990's, the University began replacing the 4.16 kV system with 12.47 kV circuits. Several DPP projects impacting this East/Southeast Campus area were constructed with the East Campus Infrastructure Improvements project. These all called for the replacement of the existing 4.16 kV systems with new 12.47 kV systems.

Gas

Gas service to the Campus is supplied by Southern California Gas through a 4-inch medium pressure (25 psi) service connecting to the East/Southeast area of the Campus at South Campus Drive. A 4-inch line conveys the gas to the Central Utility Plant. From the Central Plant three 4-inch service lines distribute low pressure (5 psi) gas to the East/Southeast Campus area. The LRDP estimated that in 2002 the Campus demand was 12,000 Therms/day.

Storm Drainage

Storm drainage from the East/Southeast Campus area is collected in catch basins currently located fairly evenly throughout the area, except for localized surface flow areas such as Parking Lot 6 and Parking Lot 13. Grade, and therefore the storm drain system, slopes primarily to the north and west. Main storm drains consist of 12-, 15-, 18-, 21- and 24-inch piping that all eventually convey the captured storm water to the main 72-inch campus drainage piping north of North Campus Drive. Here the flow joins with flow from the University Arroyo Watershed, which collects storm water from a 2,300 acre watershed located primarily east of the Campus. A major on-campus system improvement project has been initiated to accommodate this drainage across the Campus for discharge to the Gage Basin while reducing the extent of the 100-year flood plain in that area.

The only impact to the East/Southeast Campus area associated with this on-campus Arroyo project will be the construction of a new detention basin downstream from the Botanic Gardens just east of the East/Southeast Campus area boundary, north of the Computing and Communications Center.

Movement Systems

UCR is located approximately three miles east of downtown Riverside. Regional vehicular access to UCR is provided via I-215/SR60. The East/Southeast portion of Campus is accessible via University Avenue and Aberdeen Drive on the north, Valencia Hills Drive and Big Springs Road on the east, and Martin Luther King Boulevard via the Canyon Crest Drive freeway underpass on the west. Campus Drive provides a partial loop giving perimeter access to Campus.

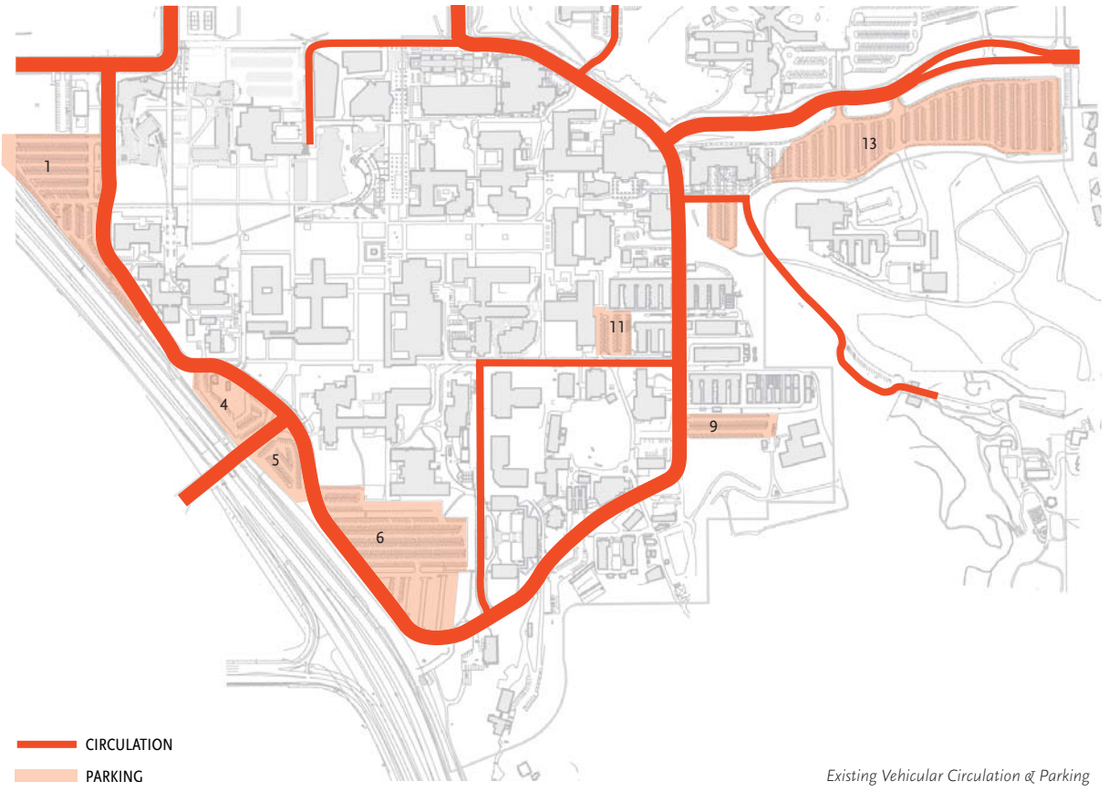
Automobile / Parking

Upon arriving on the East/Southeast portion of Campus, automobile traffic is destination specific. The Campus Loop Road and Citrus and Eucalyptus Drives provide access to various parking lots for visitors, faculty, and staff. Commuter students, faculty, and staff are accommodated on the West Campus in Parking Lot 30 and on the East Campus in Parking Lots 1, 4, 5, 6, 9, 11, 13 and 24 with various other small lots scattered throughout Campus. The entry at Big Springs Road is the most developed and appropriate vehicular entry to the Campus from the east. Its parkway section and mature landscape create a differentiation to the surrounding community. The large Parking Lot 13 stretches south of Big Springs Road and is accessed at multiple points.

The Canyon Crest Drive freeway underpass is a significant challenge in defining the daily entry experience for thousands of students, faculty, and staff. A traffic signal at the intersection of Canyon Crest Drive and West Campus Drive has just been installed. Extremely heavy pedestrian flows still will present significant delays and potential conflicts during class-change periods. Access to the balance of Campus is via Campus Drive. As one perceives the Campus from the windshield, this experience is critical to first-time visitors. The conditions along this Drive continuously change in dimension and perception, from the freeway frontage, to the top of the hill, to the "back of the house," image of the greenhouses, to the arroyos and manicured urban campus. The entry to one of the Campus' "crown jewels," the Botanic Gardens, is buried in the parking lot south of Physical Sciences #1.

Pedestrian

Pedestrians arrive at the UCR campus from many directions. Sidewalks along University Avenue and Canyon Crest Drive on the northwest are heavily used in the mornings and afternoons. Aberdeen Drive, on the north, is the primary path of on-campus residents from Aberdeen and Inverness residence halls and off-campus students coming from the Blaine Street and Watkins Drive intersection. Campus residents living in Lothian and Pentland Hills residence halls arrive from the northeast, crossing East Campus Drive at the Engineering 2 Building and at the Science Library. Users of Parking Lot 13 arrive via a sidewalk on the south side of the Physical Sciences Building. Pedestrians entering Campus from the east side of Valencia Hills Drive use a sidewalk on the south side of Big Springs Road. Users of Parking Lot 30 on the West Campus arrive at Campus by crossing the three-way intersection at West Campus Drive and Canyon Crest Drive, after they emerge from the freeway underpass.



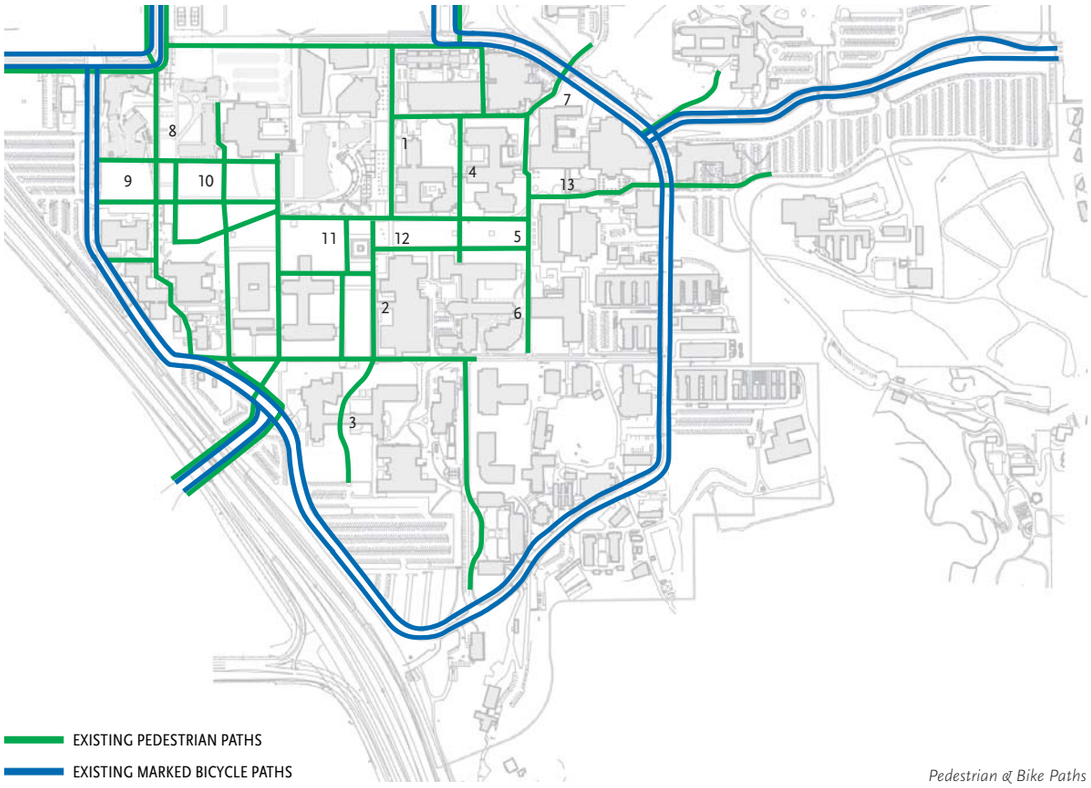
Existing Vehicular Circulation & Parking

1. Approaching the underpass from West Campus

2. Freeway Underpass

3. Emerging from the Freeway Underpass

4. Pedestrian Crossing at West Campus Drive



Pedestrian & Bike Paths

Once on Campus, the primary north/south pedestrian paths are between:

- Pierce Hall and the Commons (1)
- Rivera Library and Watkins Hall (2)
- University Theater and Humanities/Olmsted Hall (3)
- Geology and Physics (4)
- Spieth Hall and Webber Hall (5)
- Life Sciences, Biological Sciences, and Bachelor Hall (6)
- The east side of Engineering 2 (7)
- The east side of the Arts Building and Hinderaker Hall (8)

The primary east/west pedestrian paths are between:

- Arts Building and Hinderaker Hall (9)
- Physical Education and Humanities (Carillon Mall) (10)
- The Commons and Watkins Hall (Carillon Mall) (11)
- Pierce Hall and Spieth Hall (Carillon Mall) (12)
- The Science Library and Statistics **(13)**

Science Laboratories

Humanities and Social Sciences

Students using a Campus Open Space

University Theater/Olmsted Plaza

The predominant sidewalk material is broom-finish concrete, although some walks have brick banding. Most sidewalks are landscaped with shade trees to provide a comfortable environment for users. Informal gathering areas are associated most often with building entries or courtyards but few benches are located along the sidewalks. No consistent furniture palette exists, although some can be found in the following locations:

- Outdoor dining furniture at the Commons, the Barn, and Taco Fresco on the west side of the Statistics-Computer Building
- Rectangular concrete benches along the colonnade on the north side of the Humanities & Social Sciences Building
- Concrete benches in the courtyard at Humanities/ Olmsted Hall
- Wooden picnic tables at Picnic Hill
- One concrete bench at a door on the south side of the Life Sciences Building
- Teak benches and site walls that can be used for seating on the south side of the Science Library

Much of Campus Drive is without sidewalks. There are few sidewalks at the south end of the study area. None moving up the hill towards Anderson Hall are contiguous. Some occur along Eucalyptus Drive. Pedestrians weave through large lots and walk along the edges of Eucalyptus Drive and Citrus Drive. Picnic Hill is accessed by a series of paths and ad-hoc trails. Much of this zone of Campus is not accessible to the handicapped, although care has been used to make parking, path, and building entries accessible.

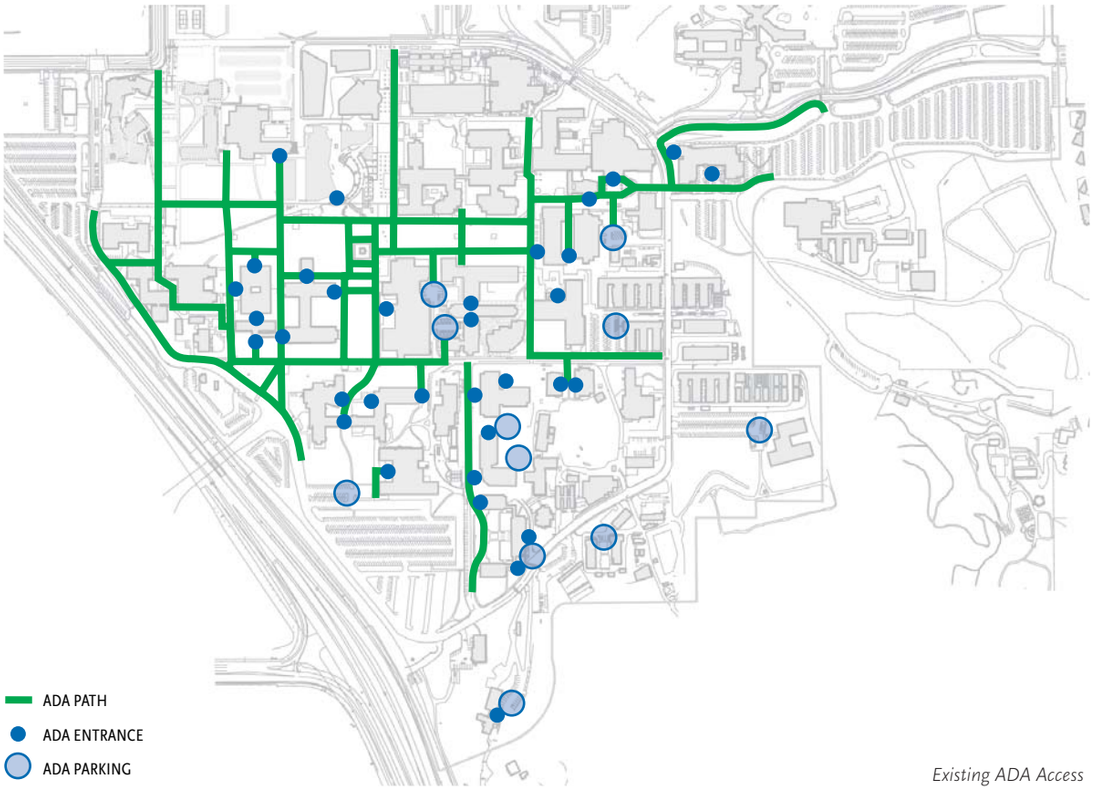
Universal Accessibility

There are many sidewalks on the East/Southeast Campus that are accessible to people with disabilities. Where sidewalks with steeper grades exist, they can be accessed by those using power wheelchairs and scooters. Some discover negotiable routes on their own. For others, services are provided by Campus Student Special Services, albeit these are not available at all hours and are available only for students. Sidewalks with seating areas located at regular intervals provide relief for those who cannot walk long distances without periodic rest stops. The importance of sidewalks with these seating areas increases as parking lots are pushed to the Campus perimeter due to infill building construction.

Curb cuts exist along many paths of travel, although some are problematic due to their position along the slope of the street. One person with a wheelchair with a specific clearance will be able to negotiate it, while another with a different type wheelchair might not. Consistency in curb-cut placement that addresses these variations is advised.

UCR requires that fully automatic doors be provided at most main entrances to buildings, but many lack the upper and lower switch plates to make them completely usable. Within the East/Southeast Campus area building entries that provide universal access include:

- Anderson Hall
- Batchelor Hall
- College Building North
- Engineering 1 & 2
- Entomology Building
- Genomics
- Life Sciences Building
- Physical Sciences Building



Existing ADA Access

- Psychology
- Rivera Library
- Science Library
- Spieth Hall
- Sproul Hall
- University Lab Building
- University Office Building
- University Theatre
- Watkins Hall
- Webber Hall

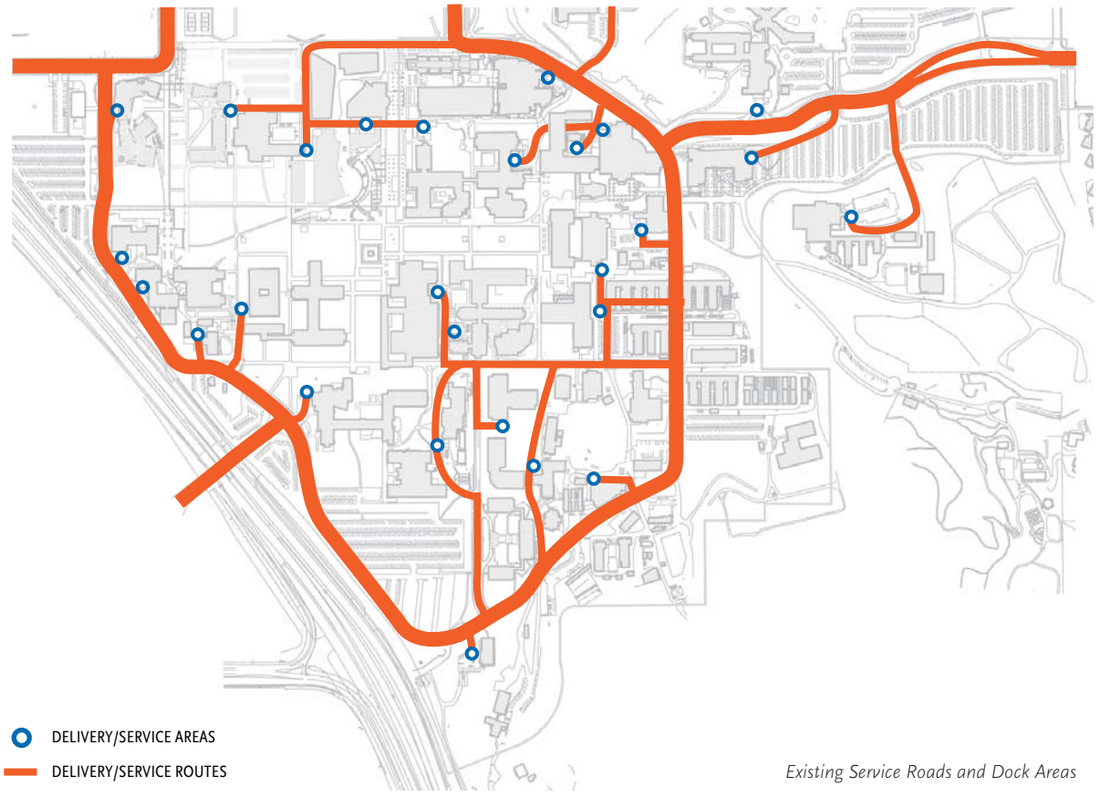
Parking spaces designated for persons with disabilities are provided in a number of locations adjacent to buildings including:

- Anderson Hall
- Boyce Hall
- College Building North
- Computing and Communications Center
- Environmental Health and Safety
- Herbarium
- Rivera Library
- Greenhouses

Bicycle

Dedicated, striped bicycle lanes currently are provided on both sides of University Avenue, Aberdeen Drive, Campus Perimeter Road, and Big Springs Road. Once on Campus, bicyclists share sidewalks with pedestrians and roadways with automobiles. Bicycle parking is provided at various locations on Campus, usually in proximity to building entries. According to the LRDP, and observations made in the Multi-modal Transportation Management Strategy (MMTMS), the current percentage of bicycle users is less then expected for a campus the size of UCR. Two reasons are thought to contribute to this:

- The lack of separation on heavily used pedestrian paths
- Heavy traffic during peak hours on Campus Drive and at the freeway underpasses on University Avenue and Canyon Crest Drive



Existing Service Roads and Dock Areas

Transit/Shuttle

The LRDP and MMTMS indicate UCR is served by three public transit services routes as well as three Campus shuttle routes. The Riverside Transit Authority routes include:

- UCR/downtown terminal to the West Corona Metrolink via Blaine Street
- UCR to the Galleria at Tyler – Riverside via Blaine Street and Canyon Crest Drive
- Main Street and Russell Street to March Air Force Base via University Avenue, Iowa Avenue, Martin Luther King Boulevard, and South Canyon Crest Drive

The campus shuttle or "Highlander Hauler" routes include:

- The Gold Line serving the North/Northwest Campus via Watkins Drive, Blaine Street, Linden Street east of Canyon Crest Drive, Canyon Crest Drive, Rustin Avenue, University Drive, and Iowa Avenue
- The Blue Line serving Northwest/Southwest portions of Campus via Chicago Avenue, Iowa Avenue, University Avenue, Linden Street west of Canyon Crest Drive, Canyon Crest Drive between University Avenue and Linden Street, and Martin Luther King Boulevard
- The Trolley Express serving the East/Southeast Campus in a loop route via Iowa Avenue, Linden Street, Aberdeen Avenue, University Avenue, and Canyon Crest Drive

According to the MMTMS, as UCR's population increases, and as on-campus parking is moved to the perimeter, additional campus shuttle routes will be needed:

- The North Campus Loop will provide access via Canyon Crest Drive, Linden Street, Big Springs Road, Blaine Street, Iowa Avenue, and University Avenue
- The South Campus Loop will provide access via Martin Luther King Boulevard, Iowa Avenue, South Canyon Crest Drive, South Campus Drive, Eucalyptus Drive, and Citrus Drive

Emergency/Service/Delivery

Emergency, service, and delivery access to the East/Southeast Campus is dependent on an existing campus road system that is already overburdened. Several factors contribute to this:

- The steady increase in UCR's population
- A lack of a master plan for infill development on East/Southeast Campus
- The increasing pace of infill construction and the congestion it creates
- The increasing demand for on-campus parking spaces, while demand for convenient parking to buildings by faculty, staff, and the disabled, increases
- The demand on existing service areas to accommodate not only deliveries but parking for the disabled and easy access for emergency vehicles

UCR's goal is to alleviate these conditions and the strategies for achieving this are defined in the LRDP and the MMTMS. These include:

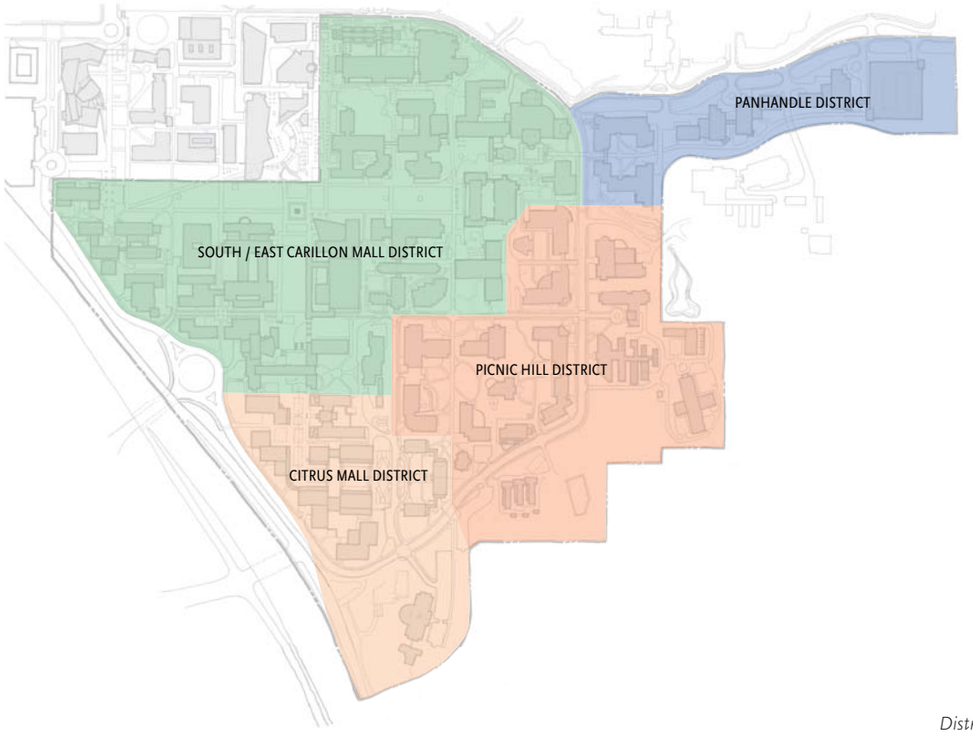
- Limited access to Campus Loop Road, Eucalyptus Drive, and Citrus Drive by personal vehicles
- Redesign campus streets to accommodate vehicles, bicycles, and pedestrians
- Provide a reliable shuttle system from parking facilities on the perimeter to drop-offs adjacent to the core of Campus
- A new centralized receiving location away from the core Campus to consolidate deliveries and minimize the number of delivery vehicles on Campus
- Routine distribution to Campus buildings will be by staff in vehicles appropriately sized for the task and who schedule delivery for off-peak times
- Access control during daytime hours that prohibit private vehicles from parking in loading areas, insuring that loading zones are available for service and delivery needs
- Provide a limited number of access cards for access control gates to students, faculty, and staff who must work on Campus after 6 pm to Campus Loop Road
- Allow limited use of parking spaces in loading zones only after 6 pm to those who hold permits issued by Campus Transportation and Parking Services (TAPS)

Land Use

Extensive analysis of the type and density of land use was completed and the areas generally to the north of Carillon Mall are built out to suitable densities. The areas to the south of Carillon Mall and west of the Library Mall are critical to the potential of the East/West Campus portal at the Canyon Crest underpass. Several infill sites exist and there are several one- and two-story buildings that should be considered for demolition and replacement. The area to the east of Library Mall and south of Carillon Mall is one of the most appropriately dense areas of the Campus. The areas south of the Library and beyond Olmsted Hall and the University Theatre are large parking lots. A new psychology building is funded, the first new building in this area in many years. The impact of I-215/SR60 is most dramatic in this area of Campus. Although sound walls and other mitigation will occur, care needs to be taken to further moderate the freeways' acoustical and visual impact. The CESC is another significant asset of the Campus that the foreground must respect and celebrate. There is significant slope up to the CESC. Behind the CESC is Picnic Hill, a unique landscape and promontory that is surrounded by marginal structures with the exception of the new Insectary/Quarantine Building, Entomology Museum, and new Entomology Building. North of Picnic Hill along East Campus Drive are an array of growth facilities, greenhouses, lath houses, temporary buildings, and maintenance facilities that promote a "back of house" perception. From the corner of Big Springs Road and East Campus Drive, east past Physical Sciences 1 lies the "panhandle." Currently the Physical Sciences Building 1 and a large surface parking lot occupy this area. This area affords significant opportunities to site new buildings. Critical entries to the Salinity Lab and Botanic Garden occur here, but better entries to both should be explored.

Because a variety of conditions exist in the East/Southeast Campus, the Design Team has identified the following "sub-districts" as follows:

- South/East Carillon Mall District
- Citrus Mall District
- Picnic Hill District
- Panhandle District



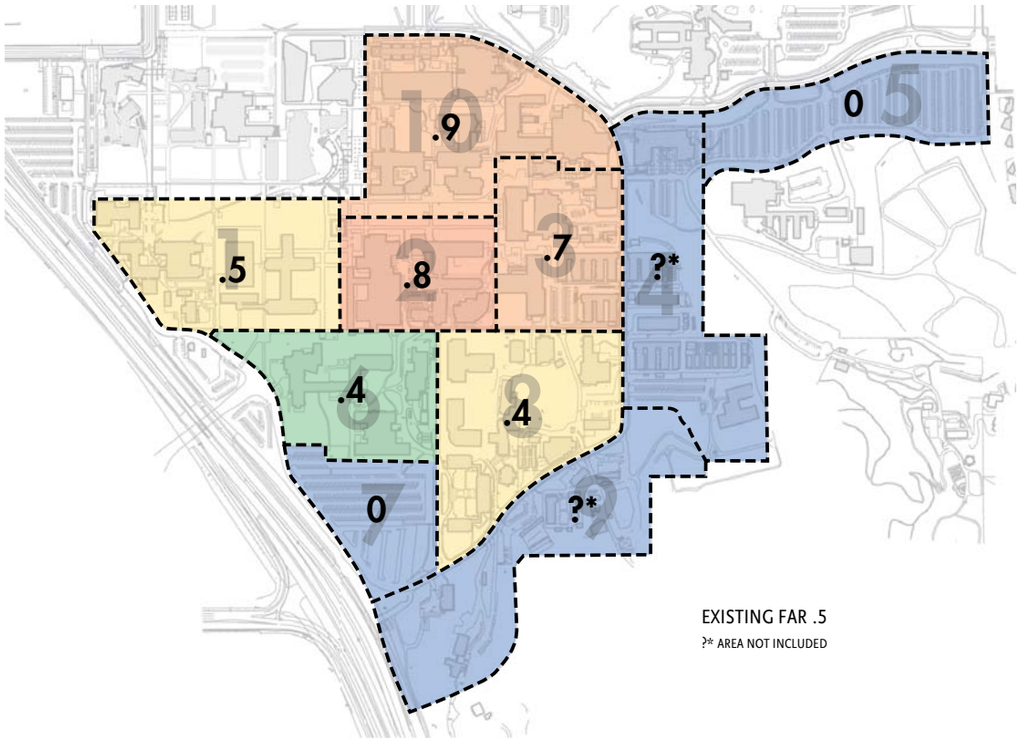
District Plan

South/East Carillon Mall District

Panhandle District

Citrus Mall District

Picnic Hill District



Tomas Rivera Library

Science Library

Building Use, Status & Condition

Buildings discussed in this section are done so relative to their function on the East/Southeast Campus and are not in-depth building evaluations. The discussion is based solely on the existing building's use as it impacts future academic and physical planning. Sources of this information include:

- Available campus mapping
- Interviews with UCR's faculty and staff conducted by Hanbury Evans Wright Vlattas + Company
- The Genomics and Biological Sciences Secondary Effects Report by SRG Partnership, Inc., June 2003
- The College of Natural and Agricultural Sciences Buildings Evaluation by SRG Partnership, Inc., October 2003

Tomas Rivera Library

The Tomas Rivera Library (1960) is located at the junction of the Campus' two primary open space malls and represents the academic crossroads of the Campus. Juxtaposed to UCR's social hub represented by the Student Commons, the two engage all of student life at the symbolic center of Campus. The Library's north edge establishes the maximum encroachment line that should be allowed along the Carillon Mall to maintain its LRDP required 200-foot width. The library's covered walkway establishes the eastern edge of the Library Mall and contrasts to the naturalistic, but nonetheless formal, organization of the tree-lined walk adjacent to Watkins Hall on the west.

Rivera Library's collections focus on the Humanities, Arts, and Social Sciences with a current inventory of approximately 2.5-million volumes. Adding some 64,000 volumes and 35,000 new titles each year, the library's director estimates they will be out of space by 2008, as no dense storage is possible within the library due to limitations in the building's structural capacity. The University of California system operates two remote storage facilities for overflow, one in the north (Berkely) and one in the south (UCLA), with a turn-around time of two to three days for both hard copy and e-mail data retrieval. Special events currently are held in the Special Collections area of the library but food and drinks are problematic. Consensus exists among facilities and library staff that Unit 1, a one-story structure on the north end of the building, needs to be removed so the land can be used for a higher density, more intensive use. However, this is complicated by the fact that all utility lines serving the library are routed through Unit 1, so a careful infrastructure analysis needs to occur. Other challenges include:

- Service dock is difficult for semi-tractor-trailer access
- First floor (basement level) housing serials, books, and microformats is below grade of the Mall and periodically floods, because storm drains in the adjacent courtyards become clogged with debris
- Covered walk on the west side of the building leaks
- Lack of outdoor seating or other usable outdoor space

Although expansion of the library has been discussed for some time and did occur during the seismic renovation in 1998, a library space planner has not yet been engaged to address space concerns. The University Librarian indicated that an RFP is being developed for this purpose and the Libraries and the University are strongly encouraged to proceed with this evaluation.

Engineering 2

Humanities & Social Sciences

University Theater

Current library space needs include:

- Increasing the number of scholar's workstations on each floor with appropriate software, scanning, and print-cueing capability
- A 24-hour study room and information commons areas
- Team-based learning areas with comfortable seating and access to meeting rooms
- A courtyard/balcony for social events
- A coffee bar in the lobby
- An entrance that is open and inviting, where security measures do not "overpower" the sense of welcome
- Upgrades to the internal environment of the building with attractive color, floor coverings, attention to paths of traffic, and open spaces similar to the environment in the Science Library
- Serious consideration of the flipping of services and departments to ensure that those library services that are most heavily used are located on the main floor to support easier use, accessibility, and visibility
- Extensive renovation or demolition of Unit I
- A satellite library facility for fine arts and multimedia that has a 24-hour study room with multimedia technology for student and faculty use

Science Library

The Science Library occupies a significant position at the corner of Big Springs Road and North Campus Drive. Opened in 1998, it is a very handsome building, both architecturally and proportionally. It creates a well-defined street edge and appropriate focal point as the eastern portal into the Campus proper. The well-proportioned courtyard on the south side of the building provides one of the most user-friendly areas on Campus, accommodating both pedestrians and bicyclists via a system of separated walks. Outdoor sculpture, abundant landscaping, and seat walls and benches, make this a model space for future development on Campus.

Engineering Buildings 1 & 2

Engineering 1 (Bourns Hall) is located at the southern terminus of Aberdeen Drive at the northern boundary of the East/Southeast Campus; Engineering 2 is located immediately to the east. These four-story brick and glass buildings establish the academic persona of the Bourns College of Engineering at the major portal by which most of the on-campus residents enter and support the density target established in the LRDP.

Sproul Hall

Sproul Hall is located on the south side of the Carillon Mall between the Humanities & Social Sciences Building and Watkins Hall. Built in 1965, its northern edge reinforces the build-to lines established by Rivera Library, Watkins Hall, and the Humanities & Social Sciences Building.

Humanities & Social Sciences Building

The Humanities & Social Sciences Building occupies a position on the western-most edge of the East/Southeast Campus and is one the most visible of UCR's structures from the freeway, with the exception of the Carillon Tower. It reinforces the building limit line on the Carillon Mall established by the Rivera Library and provides a significant focal point from Canyon Crest Drive on the West Campus. Opened in 1996, its architectural character resembles a modernist interpretation of a barn, with curved metal roofs and rectangular proportions. The interior covered walks, small courtyards, and well-landscaped paths create a pleasant pedestrian scale.

Watkins Hall

Watkins Hall is valued by CHASS faculty who were interviewed. Opened in 1953, it provides comfortable office and instructional space in a central Campus location. Even though it is well-liked by those who use it, it is one of the lowest density academic buildings on Campus, with the central building at two-stories and the wings at one-story each. With the density target of a 1.0 FAR for the Campus set by the LRDP, some combination of demolition and infill will be required.

University Theatre

The University Theatre is located at the intersection of West Campus Drive and the Canyon Crest Drive freeway underpass. Due to its location, the blank wall of its loading dock and fly loft is the predominant view of both pedestrians and those in vehicles as they emerge from the underpass from the West Campus.

Humanities/Olmsted Hall

Humanities/Olmsted Hall (1963) is a terminus on the south end of the Library Mall. Its precast concrete colonnade, a tribute to the covered walk of Rivera Library, is provided on three sides of a hard-surface courtyard shared with the University Theatre. Pedestrian access south to the proposed Psychology Building and Parking Lot 6 is provided under Olmsted via the colonnade. The courtyard is predominantly concrete with a few mature shade trees. Mature landscaping covers large portions of the building facade. A major seismic retrofit and major renovation was completed in 2004.

Humanities/Olmsted Hall

Science Laboratory 1

Spieth Hall

Campus Buildings North and South

Campus Building North was built in 1963 and is currently occupied by the CNAS Dean and an entomology research laboratory. College Building South, built in 1916, is currently being occupied by CHASS research centers and laboratory space. These two buildings, located just below Weathertop Mountain at the southern tip of the East/Southeast Campus, are highly visible from I-215/SR60 and command excellent views of the Campus and surrounding area. Both buildings are wood frame and have been renovated. The site is a potential location for the University Club or some other campus support building or function that would benefit from high visibility. Campus Building South is the Historic Station Director's House and should be preserved.

Pierce Hall

Pierce Hall, built in 1966, establishes the northern build-to line. A seismic upgrade was undertaken in 2000, which took place at the same time as the construction of Pierce Addition (Chemical Sciences). A moderate upgrade to the HVAC system was executed in 2003 to address deficiencies of the building supply and exhaust systems. The Chemistry Department, which was the primary occupant of the building, has, with the exception of the lower division class laboratories and Chemical Sciences, vacated the building. The latter occupants also will vacate upon completion of the Materials Science & Engineering (MS&E) Building. The future use of these buildings is currently being evaluated as part of the CNAS Master Plan. Although the original Pierce Hall is three-stories to the north and west, the south end facing the Carillon Mall is two-stories and Chemical Sciences, three-stories.

Geology Building and Science Lab 1

The Geology Building was built is two phases, the south portion in 1953 and the north portion in 1959. A wing was demolished in 2000, to accommodate the three-story Science Laboratories Building. The latter was completed in 2003. The Geology Building currently is undergoing refurbishment of the building systems infrastructure and renovation to all laboratory, office, and support areas. Upon completion of the final phase of this project in 2009, the building's life will be significantly extended. The location of the Geology Building's loading dock impacts the northern terminus of the LRDP proposed Science Mall that will link the instructional space on the southeast corner of Engineering 2 to the Carillon Mall. Due to the slope and path necessary to access the loading dock, a conflict is created for pedestrian traffic and people with mobility challenges. Science Lab 1 connects the Geology Building to the Carillon Mall and complements the density recommended by the LRDP. Science Lab 1 also respects the build-to line established by Pierce Hall and maintains the historic building/pedestrian path relationship.

Webber Hall

Webber Hall (1953) is the eastern terminus of the Carillon Mall. Its three-story mass is appropriate to the scale of other buildings on the Mall, and it is appropriately scaled to contribute to the density recommended by the LRDP. Recently proposed renovations will reconfigure instructional and research space to better support research collaboration and teaching in the life sciences. Additionally, academic offices and related administrative support areas will be updated with modernization of the building's infrastructure systems and life safety code compliance.

Spieth Hall / Life Sciences Building

Spieth Hall (1958) is located on the southern side of the Carillon Mall between Webber and Batchelor Halls and the Rivera Library. Building function is primarily devoted to lab space, but a classroom is located on the first floor of the northwest end of the building. Spieth is off-set from the build-to line established by the Rivera Library and the Humanities and Social Sciences Building and does not positively contribute to the density target proposed by the LRDP at a predominance of only two-stories. Building evaluations done in 2003 found that Spieth can be upgraded effectively for continued use as instructional and research laboratory space.

The Life Sciences Building is located at the intersection of Citrus and Eucalyptus Drives. Although the Psychology wing of the building presents a blank wall as a terminus for Citrus Drive, this building, as well as the new Biological Sciences Building, reinforce the urbanized character of the street. Dining Services currently plans to provide a new retail food service venue in the first floor of the north wing of the building at the courtyard shared with the Biological Sciences Building.

Boyce Hall

Boyce Hall (1974) is located on the east side of Webber Hall and forms the southwestern edge of the Science Library quad. Webber shields Boyce's six-story mass from the Carillon Mall, and the generous setback it occupies from the street and the many mature shade trees in the foreground minimize its presence on East Campus Drive. Planned renovations are intended to modernize its research and teaching facilities, academic offices and related support areas, while updating its infrastructure and life safety code compliance. Boyce contributes to the density targets for the Campus and should be retained as it meets UCR's academic mission.

Physics

Physical Sciences 1

Life Sciences

Physics Building

The Physics Building (1965) is located between the Geology Building and Engineering 2 Building and south of the Science Library. At three-stories, it is appropriately scaled to contribute to the density recommended by the LRDP and helps provide pedestrian scale for the Science Library courtyard and frame the portal by which student residents of Lothian and Pentland Hills enter and leave the academic core. The Physics Building's service zone, accessed directly from North Campus Drive, also provides service access to the Geology Building. This is problematic, due to the desire to complete the LRDP recommended Science Mall that links pedestrians between academic buildings located south and the instructional space located at the southeast end of Engineering 2. The building is undergoing a renovation project to recapture under-utilized and obsolete space and redevelop this space to achieve higher efficiencies and utilization. The scope of the project will also create net new academic research and support space by adding a mezzanine to an obsolete high-bay laboratory. The Physics 2000 classroom is a one-story component that forms the western end of the Science Library courtyard. Although providing appropriate scale, it presents a high blank wall to the courtyard.

Statistics-Computer Building

The Statistics-Computer Building (1974) defines the southern edge of the Science Library courtyard and contributes to the western street edge of East Campus Drive. It creates a pedestrian portal with the Science Library, for those entering the academic core from Parking Lots 10 and 13. The parking lot immediately south of the building is dedicated to both handicapped parking and access to the Statistics-Computer Building loading area. At three-stories, with an at-grade exit at the basement level, the building provides offices, classrooms, and computer labs. It is anticipated that the Statistics-Computer Building will remain, requiring only regular upgrades to accommodate changes in technology. Taco Fresco, a retail food service venue operated by Dining Services, is located on the western side of the building contributing to pedestrian use both as a "grab-n-go" food outlet and a destination with outdoor furniture for casual dining and gathering.

Physical Sciences Building 1

The Physical Sciences Building 1 opened in Spring 2005 and extends UCR's academic zone across the heretofore ceremonial boundary of East Campus Drive. Located at the western end of Parking Lot 13, at the intersection of Big Springs Road and East Campus Drive, this four-story lab building is the first phase of anticipated expansion of the Campus into the "panhandle" of the East/Southeast Campus. Mature landscaping and the building's green space courtyard provide a gateway to Campus, helping to transition pedestrians from the wide-open nature of the parking area to the reasonably scaled confines of the academic zone.

Batchelor Hall

Batchelor Hall (1965) is a four-story office and laboratory building located on the north side of Eucalyptus Drive and east of Spieth Hall/Life Sciences. With the exception of a complete renovation to the north wing (Keen Hall) in 2002 to create a permanent home for the Core Instrumentation Facility and a seismic upgrade to the building structural systems, the building systems infrastructure and laboratory space have reached, and in most cases surpassed, their normal service life. A renovation project is currently planned to renew and upgrade the building systems infrastructure. Future projects will renovate obsolete laboratory, office, and service space. The Core Instrumentation Facility, a shared-use, multi-discipline service facility, is located on the north end of Batchelor Hall. This facility requires easy access for both pedestrians and delivery vehicles between it and surrounding buildings. Currently, access to the loading area of both Batchelor Hall and the Core Instrumentation Facility are problematic.

Biological Sciences

The Biological Sciences Building (2006) is located east of the corner of Eucalyptus and Citrus Drives. This three-story research building is comprised of office and laboratory space. Physically connected on the third floor to the Life Sciences Building with which it shares a pedestrian courtyard, it also benefits from the adjacent green space on the west side of Batchelor Hall. Handicap parking and loading dock/deliveries are shared with Spieth Hall and the Life Sciences Building. Although not ideal, other options do not exist, due to the tight confines of surrounding buildings. The Biological Science Building reinforces the urbanized character of Eucalyptus Drive and supports the density target proposed in the LRDP.

Head Houses, Greenhouses, Lath Houses, the Arabidopsis Facility and other Service Buildings

UCR's heritage of plant research is evident in the number of head houses, greenhouses, lath houses, the Arabidopsis Facility and other service buildings located on the East Campus. With the exception of greenhouse #15, which is used as the nematode quarantine facility, greenhouses are used for keeping plants under tightly

Entomology

Fawcett Laboratory

Greenhouse

controlled conditions. Head houses are joined to groups of greenhouses and provide linkage, support, and lab space. Lath houses are used for storage and to harden off plants prior to moving them to the research fields. The largest amount of greenhouse square footage is used for growth of large quantities of plants. The Department of Botany and Plant Science is the most frequent user. Updated in the 1980's, some of the greenhouses are constructed of wood and some of aluminum. The wood houses have been systematically replaced by aluminum houses that have effective lifespans of 40 years. Proximity between preparation areas for labs referred to as "dirty labs," and lab spaces, greenhouses, and growth chambers is vital because multiple visits are required per day. Interviews conducted with Physical Plant staff indicate that the greenhouses suffer from many deficiencies, including structural issues, asbestos, lead paint, antiquated utilities, and aging HVAC systems. The Arabidopsis Facility, which is relatively new, supports the genome research performed on-campus, while other service buildings provide storage and support functions.

Genomics Building

The Genomics Building (Fall 2008) is located on the southeast corner of the Eucalyptus and Citrus Drive intersection. This four-story research building, comprising laboratory, office, and auditorium space, is appropriately scaled to contribute to the density recommended by the LRDP. It reinforces the urbanized character of Citrus Drive, by providing the setback and similar streetscape improvements of the Entomology Building to the south. The two buildings share a service/delivery area. Genomics completes the northern boundary of the green space established on the east side of Entomology. Its adjacency to the Science Mall to the east ensures that pedestrians have a direct path of travel between Genomics, Entomology, and the core areas of Campus. Genomics defines the southwest corner of the intersection of the Science Mall and the Eucalyptus Walk, helping to define the urban nature of the space as a significant crossroads of Campus.

Entomology

The Entomology Building (2002) is located between Chapman Hall and Genomics. This three-story research building comprises laboratory and office space. It is a significant presence on the Citrus Drive streetscape, and contributes to the density recommended by the LRDP. It is visible from the freeway but could play a more significant role architecturally with removal of the vegetation on the west side of Citrus Drive.

Fawcett Laboratory

Fawcett Laboratory (1963) is located on the southwest corner of the East Campus Drive and Eucalyptus Drive intersection. According to the CNAS Building Evaluation, completed in October 2003, it is primarily a one-story concrete slab-on-grade building with a two-story research facility wing and basement. The building has been renovated to bring it into current seismic code compliance (2002), but the building does not have an emergency generator recommended to power its fume hoods in case of a power outage. The conclusion of the building evaluation is that Fawcett Lab "greatly under-utilizes a prominent East Campus site". With the LRDP's proposed target for density of 1.0 FAR, this Study recommends demolition with relocation of its programs to another facility.

Boyden Laboratory

Boyden Laboratory (1960) is a two-story wood frame building located on the east side of Entomology and Genomics at the foot of Picnic Hill. It currently houses the Entomology Cooperative Extension researchers, but interviews with building occupants, College administration, and service personnel, suggest that Boyden should be considered for demolition to make way for more productive academic space.

University Lab/University Office Building

The University Lab Building (1994) and the University Office Building (1991) are located on the south side of Eucalyptus Drive between Fawcett Lab and Genomics. Both are considered "developer-grade" in that they were constructed as surge buildings to meet an immediate need for office and laboratory space. According to the campus Physical Plant staff, they are in good condition, and interviews with the users indicate that they function well. However, they don't meet the end goals of the Campus for the type of space needed and do not effectively use the land in order to meet the density target set by the LRDP.

University Laboratory

Insectary and Quarantine

Old Insectary and Quarantine

Entomology Museum

Old Entomology

Old Insectary and Quarantine Buildings

Both Old Entomology (1932) and Old Insectary & Quarantine (1959) were evaluated in a historic building assessment in 1998. Having been deemed seismically inadequate, they are vacant, and awaiting demolition.

Insectary and Quarantine Facility

Built in 2001, the Insectary and Quarantine Facility is located on the south side of Picnic Hill and fronts on South Campus Drive. This facility is a state-of-the-art quarantine facility, one of a small number of facilities in the state that can be authorized to handle exotic species of pests.

Entomology Research Museum

The Entomology Research Museum (1993) is located on the east side of Anderson Hall. Its contemporary architectural style stands in stark contrast to the Spanish-style of the Citrus Experimentation Station, but it fits comfortably into the perceived boundary of the academic core. At one-story, this structure would be difficult to justify if it were being proposed to meet UCR's current academic needs. However, because of its unique function and perimeter location, it positively contributes to UCR's overall mission.

The Citrus Experiment Station Complex (A. Gary Anderson Hall)

The Citrus Experiment Station Complex (CESC) is a reminder of the Campus' long heritage as a leader in research. Perched on a hill overlooking the I-215/SR60 freeway, the West Campus and valley beyond, these elegantly proportioned two-story buildings in the Spanish-style are relatively obscured by mature landscaping and evergreen trees. Consisting of Anderson Hall (built in two phases, the main building in 1917 and the south wing in 1926) and Chapman Hall (1931), the CESC is often referred to simply as AGSM referring to Anderson Hall's current tenant, the A. Gary Anderson Graduate School of Management. While Anderson Hall (the middle and south wing) has been renovated to meet current building codes, Chapman Hall has not and currently is used as dry lab space and entomology offices. The Genomics and Biological Sciences Secondary Effects report, completed in June 2003, indicates that Chapman is to be vacated. Significant renewal of all systems is required, although seismic upgrades are not. There is no universal accessibility between floors, and there is no exterior access to the second floor. The report indicates that once renovated, Chapman will be used for instructional, research, and office. The LRDP recommends the West Campus as the home of UCR's graduate schools, therefore it is anticipated that when the AGSM relocates there the University executive offices will move to the three buildings in this complex.

Hinderaker Hall

Hinderaker Hall (1960) is the terminal view at the western end of the Carillon Mall and is home to the University executive offices and student services such as registrar, financial aid, and outreach. Its place on Campus is not only a destination that is easy to find with convenient visitor parking, but also a western portal into Campus for students and visitors alike, and a pedestrian crossroads with major north/south and east/west paths intersecting at its front doors. This four-story structure is appropriately scaled to contribute to the density goals of the LRDP and helps to frame the views from the Carillon Mall west. It is anticipated that when AGSM relocates to the West Campus, the executive offices will be moved to the CESC. Once this occurs, Hinderaker is intended to be academic offices, instructional, and research space for CHASS.

The Barn and University Cottage

The Barn (1916) is located on the western perimeter of East Campus on the south side of the Humanities and Social Sciences Building. It is considered a campus historic resource and has been renovated and converted into a food venue operated by Dining Services. The Barn is a popular campus gathering place for students, faculty, and staff, with a pleasant outdoor eating patio and easy access for service and delivery. University Club gatherings are held in a small private dining room in the Barn, and University Club staff hold the liquor license use for the facility. Campus groups have considered the Barn site as the permanent home for the University Club but interviews with the interested faculty and staff and the Faculty Assembly indicated that the Barn doesn't meet the Club's desired programming goals in its current configuration and the potential historic nature of the Barn building may limit renovation and infill options.

The Cottage (1916) is a one-story wood structure located south of the Barn between West Campus Drive and I-215/SR60 and currently houses the office of the University Ombudsman. Although relocated from its original location, it is designated a potential campus historic resource. Its isolation from the Campus and the impact of freeway noise on its users render it a good candidate for relocation.

Statistics / Computing

Custodial & Grounds

Anderson Hall

University Office Building

Chemical Sciences

Webber Hall

Steam Plant and Satellite Chiller Facility

The Steam Plant (1949) is located on the southwest corner of Eucalyptus and Citrus Drives. Although centrally located and screened from street-level view by vine covered fences, this one-story block structure detracts from the architectural integrity of surrounding buildings. The Plant is sited in an unfortunate location, considering the growth pressures being brought to bear on the Campus, but this central location also makes it ideal for extending services to future buildings on the East/Southeast Campus. Concepts for relocating the plant were discussed, but interviews with Physical Plant staff indicate that relocation of the facility is financially unrealistic.

The Satellite Chiller Facility (2003) is located on the eastern perimeter of the academic core on a knoll overlooking the Botanic Garden on the east, with views to the Box Springs Mountains. Future plans anticipate expansion of the facility to the west.

The Computing and Communications Center

The Computing and Communications Center (2003) is a one-story modular structure located on the eastern perimeter of the academic core, just south of the Satellite Chiller Facility, and provides technical support personnel for the Campus. Its location, at the perimeter of Campus, allows academic intensive functions to be located on the core Campus, although interviews with the Center's staff indicate that a more central Campus location would result in improvements in response time for their clients. For future planning, the site should be considered a prime location for a signature building that will contribute to the density target established by the LRDP and take advantage of the excellent views of the Botanic Garden, to the Box Springs Mountains, and north across the valley

Psychology Building

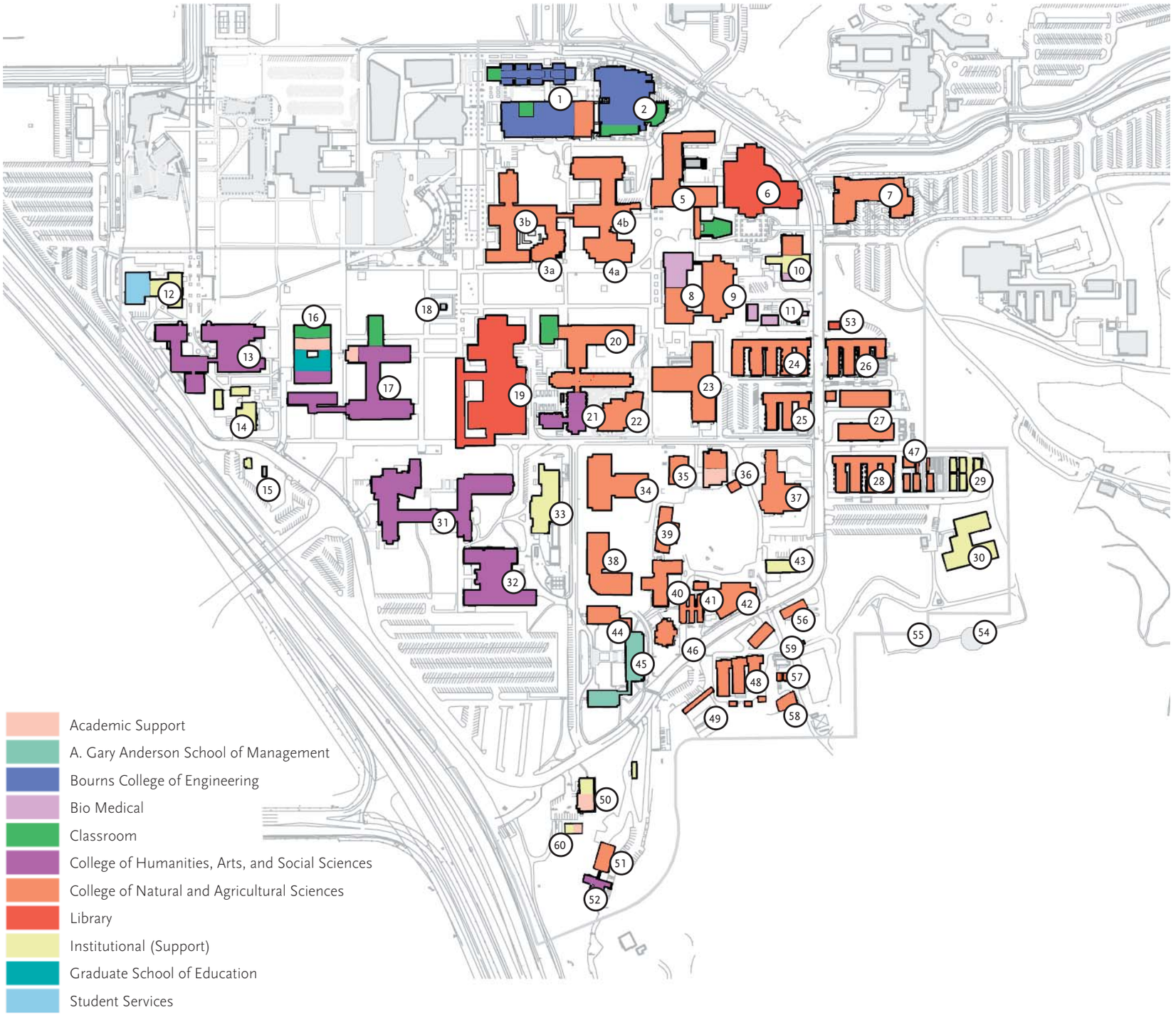
The Psychology Building currently is designed as a three-story office, research laboratory, and support building to be located on the south side of Olmsted and help to extend the pedestrian link from the Library Mall to the new Citrus Mall. This building provides for the interdisciplinary instruction and research space needs for the Psychology Department's Developmental, Social/Personality, and Cognitive disciplines in CHASS and vivarium space to support life sciences research across the campus. A future addition is planned on the south side of the new building to consolidate other departmental functions.

Custodial & Grounds and Environmental Health and Safety

Custodial & Grounds is located on the southeast side of Picnic Hill at the corner of East and South Campus Drives; Environmental Health and Safety (EH&S) is located on the south side of South Campus Drive, at the bottom of the slope beneath Campus Buildings North and South. Both Grounds and EH&S occupy aging one-story buildings and have been identified by Campus Planning and Physical Plant staff for relocation to other sites, freeing up their sites for demolition and/or academic expansion.

BUILDING NAMES

1. Bourns Hall
2. Engineering 2
3a. Chemical Sciences
3b. Pierce Hall
4a. Science Laboratories 1
4b. Geology Building
5. Physics Building
6. Science Library
7. Physical Sciences Building 1
8. Webber Hall
9. Boyce Hall
10. Statistics-Computer Building
11. Biomedical Teaching Complex
12. Hinderaker Hall
13. Humanities and Social Sciences
14. Barn Group
15. University Cottage
16. Sproul Hall
17. Watkins Hall
18. Carillon Tower
19. Rivera Library
20. Spieth Hall
21. Life Sciences
22. Biological Sciences
23. Batchelor Hall
24. Head House and Greenhouses
25. Head House, Greenhouses, and Nematode Isolation Facility
26. Head Houses and Greenhouses
27. Lath Houses
28. Greenhouses
29. Satellite Chiller Plant
30. Computing and Communications Center
31. Humanities/Olmsted Hall
32. Psychology Building
33. Steam Plant (Central Utility Plant)
34. Genomics
35. University Laboratory Building
36. University Office Building
37. Fawcett Laboratory
38. Entomology
39. Boyden Laboratory
40. Old Entomology
41. Old Insectary and Quarantine
42. Insectary and Quarantine (New)
43. Grounds/Maintenance
44. Chapman Hall
45. Anderson Hall
46. Entomology Museum
47. Portable Structures
48. Plant Transformation Facility and Greenhouses
49. Horticulture Building
50. Environmental Health and Safety
51. College Building North
52. College Building South
53. Arabidopsis Facility
54. TES Tank #2
55. TES Tank #3 (future)
56. Herbarium
57. Deionization Facility
58. Head House and Lath House
59. Shed
60. Modular/Trailers



Building Use Diagram

University Office Building

University Laboratory Building

Old Entomology

The proposed East/Southeast Campus Area Study plan is the result of input from a wide cross section of the UCR community: students, faculty, and staff at both the planning and executive levels. The plan provides a framework that meets the overall campus density target of the LRDP, recommending an average 1.0 FAR to accommodate projected Campus growth up to 2015 and beyond. The plan relies on several factors:

- Demolition of outdated campus buildings
- Removal of buildings that do not adequately contribute to space needs and density targets for a specific site within the study area
- Relocation of existing uses appropriate to the West Campus environment, such as professional and graduate schools
- New programming models for research and information service facilities
- Infill and new building development that creates a hierarchy of open spaces, preserves campus views, and maintains a compact walkable campus

Demolition and Obsolescence

Current growth projections suggest that UCR will have 25,000 students enrolled by the fall of 2015, with an overall Campus population of 34,000 including faculty, staff, and visitors. In order to keep pace with this unprecedented growth, UCR's academic programs have undertaken an evaluation of existing facilities to determine use and potential, while embarking on a frenetic building program to develop new instructional, research, and housing space on Campus. Concerns for meeting the University's academic needs, and a desire to preserve the Campus' pedestrian character of rich open spaces and intimate courtyards, led to the recommendations of the LRDP that an appropriate campus-wide density of 1.0 FAR or higher be achieved.

Interviews with faculty and staff groups identified several existing buildings for demolition, based on factors that not only included their physical condition but the potential density they contributed to Campus and whether or not the programmatic function they served was in the long-term best interest of the Campus in its present location. The Study concluded that the following buildings be demolished over time and their users moved to new or renovated spaces on Campus:

- Biomedical Teaching Complex
- Fawcett Laboratory
- Campus Building North
- Unit 1 of the Rivera Library
- Watkins Recital Hall
- University Office building
- University Laboratory building
- Spieth Hall
- South end of Watkins Hall
- South end of Sproul Hall
- Computing and Communications Center
- Boyden Labs
- Old Entomology (already slated for demolition)
- Old Insectary (already slated for demolition)

The following buildings also have been identified for demolition, with replacement facilities provided elsewhere on the Campus:

- Grounds Maintenance
- Lath Houses 1 & 2
- Greenhouses 4 through 21

The amount of demolition in terms of space is 500,000 gsf.

The LRDP identifies the Barn Group and the University Cottage as campus historic resources; the Barn Group is considered to be of historic significance. However, their current locations are primary sites for either greater density or new use. The Barn site has been identified as a potential University Club location. The programmatic needs of the Club may be able to be met if the two small auxiliary structures on the north side of the Barn are removed to accommodate a larger footprint, with the Barn itself incorporated through renovation. While this would preserve the Barn's historic place on Campus, it has yet to be determined if this is the appropriate solution; this evaluation needs to occur during the programming phase of the new facility.

The University Cottage, originally constructed in 1917 as a residence on the original Citrus Experiment Station, has served a variety of other functions since 1954. The 2005 LRDP states that it was relocated to its present site, although no specific date was given, suggesting there is precedent for its relocation to a site yet to be determined.

Greenhouses

Rivera Library Unit 1

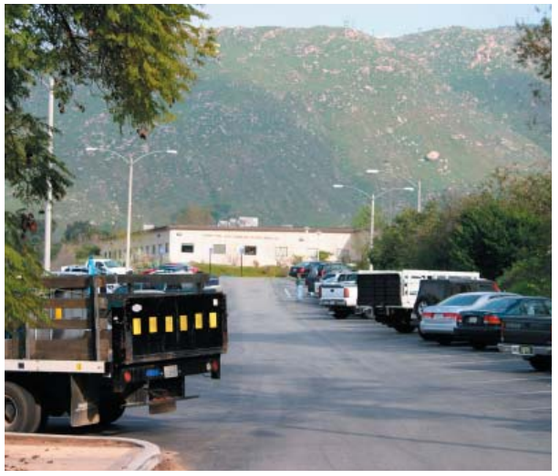
Barn

Grounds/Maintenance

Fawcett Laboratory

Spieth Hall

Sproul Hall

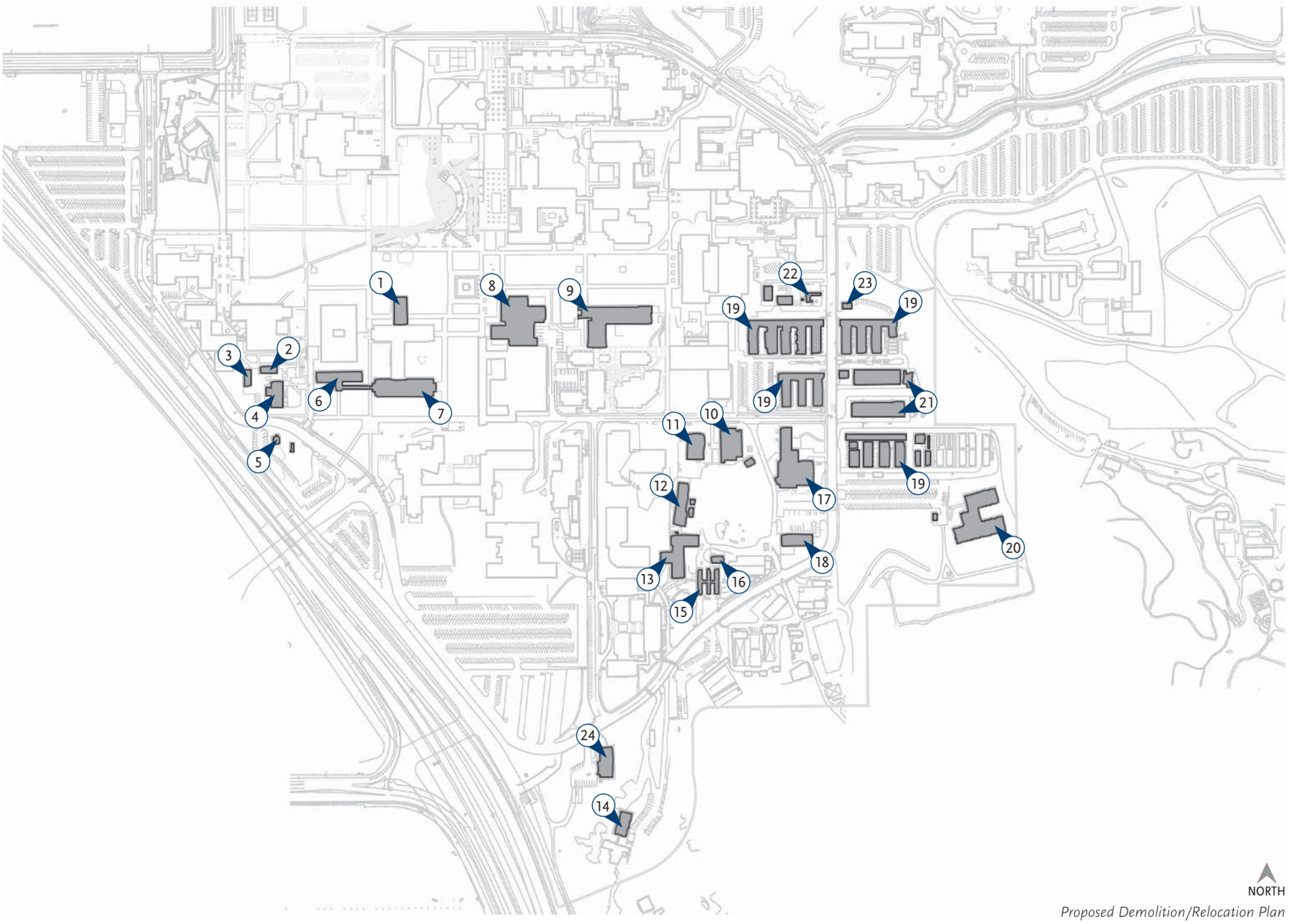


Computing and Communications Center

Watkins Hall

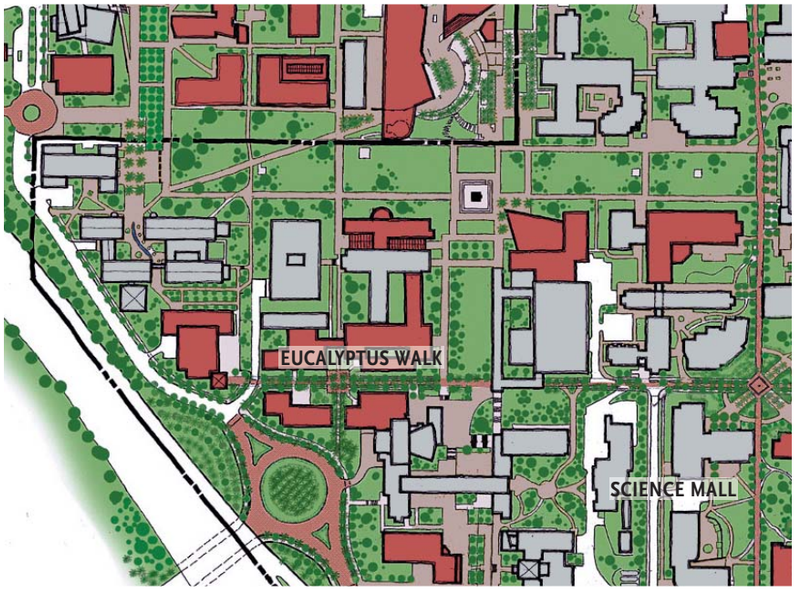
RECOMMENDED DEMOLITION

1. Watkins 1000
2. Barn Theater (Relocate)
3. Barn Stable (Relocate)
4. Barn (Relocate)
5. University Cottage (Relocate)
6. South wing of Sproul Hall
7. South wing of Watkins Hall
8. Rivera Library–Unit 1
9. Spieth Hall
10. University Office Building
11. University Laboratory Building
12. Boyden Laboratory
13. Old Entomology
14. College Building North
15. Old Insectary
16. Biology Central Culture
17. Fawcett Laboratory
18. Grounds Maintenance
19. Greenhouses
20. Computing and Communications Center
21. Lath House A&B
22. Biomedical Teaching Complex
23. Arabidopsis Growth Facility (relocate)
24. Old Environmental Health and Safety Building



Proposed Demolition/Relocation Plan

Computer Animation of Eucalyptus Walk



Eucalyptus Walk Plan

Plan Elements

The plan for the East/Southeast Campus Area seeks to replicate the organization and scale in evidence on the north side of the Carillon Mall and to complement recent studies, such as the 2003 Strategic Plan for Housing, 2004 East Campus Entrance Area Study, and the 2005 LRDP. The plan achieves this and fulfills the following goals:

- Creates a density of development opportunity to accommodate UCR's growth projections
- Develops a hierarchy of gathering spaces for activities and dining
- Identifies and preserves important views
- Establishes a sense of arrival at key points of Campus/community interface
- Articulates pedestrian paths that reinforce connections to the broader Campus
- Evaluates existing Campus buildings for demolition, reuse, and renovation
- Creates an urban design plan with setbacks and build-to lines that create opportunities for enhancing UCR's sense of place
- Celebrates the architecture and heritage of the Citrus Experiment Station

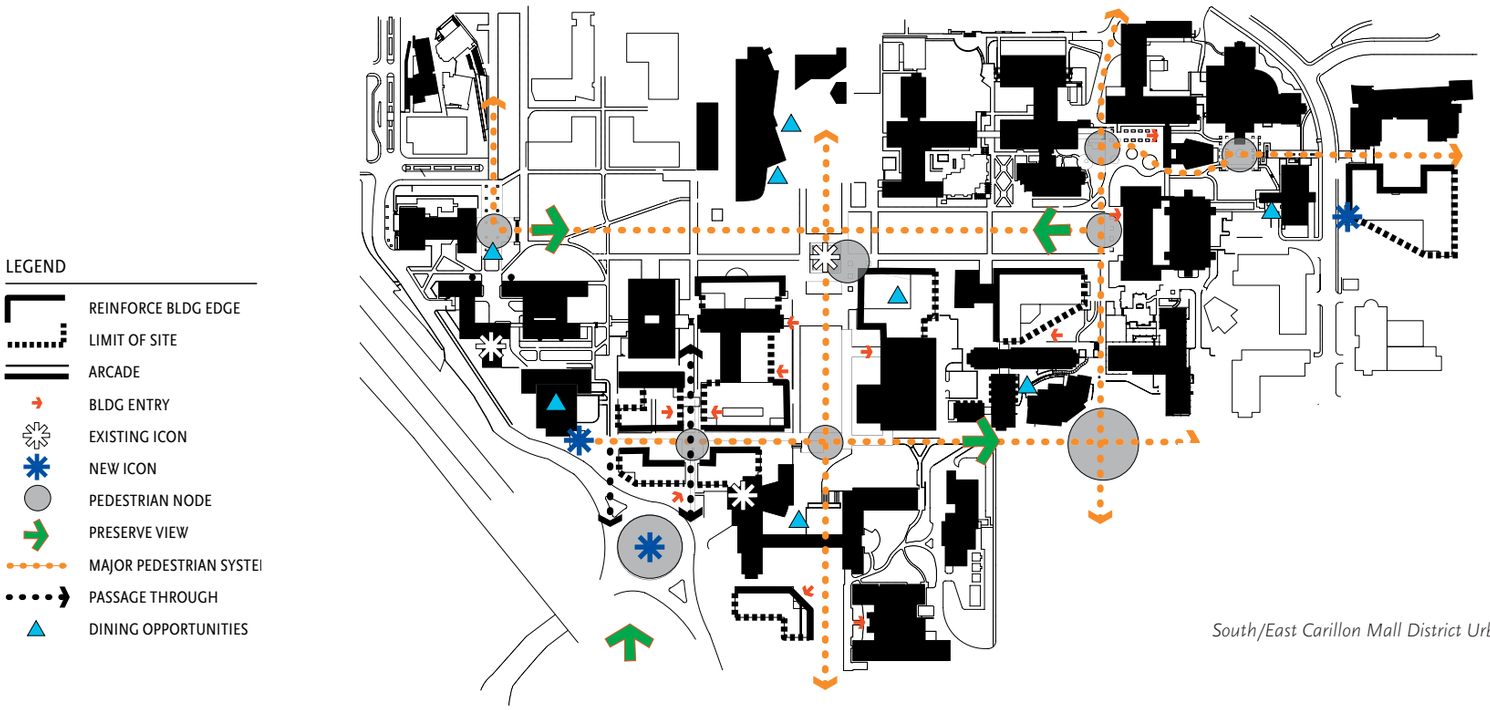
The plan can best be understood by subdividing it into sub-districts. These districts allow for a brief explanation of the plan's individual components and highlight changes to specific buildings and/or sites:

South/East Carillon Mall District

The South/East Carillon Mall District preserves the current configuration of both Hinderaker Hall and the Humanities and Social Sciences Building. Dining Services has installed a prefabricated coffee kiosk at the first floor entrance to Hinderaker Hall beneath the second floor overhang. It is called "Ivan's at Hinderaker," remembering UCR chancellor Ivan Hinderaker. Ivan's serves pedestrians coming from the Canyon Crest Drive/University Avenue intersection and from the future parking garage intended to be located on Parking Lot 1. The most significant demolition, renovation, and infill construction is proposed for Watkins Hall to increase the building's density and to establish a more significant building element on the south side of the Carillon Mall opposite the Commons. Demolition and infill also is recommended for the south side of Sproul Hall, to provide not only increased density but to help frame the western end of the proposed Eucalyptus Walk. One option for the placement of a conceptual University Club is on the site currently occupied by the Barn Group. If this site is chosen, it is anticipated that either the Barn will need to be relocated, or significantly renovated and incorporated into a larger facility to accommodate the Club's program needs. It also would be desirable for the building occupying this site to provide an icon capable of terminating the Eucalyptus Walk and mark its origins to the Canyon Crest underpass.

The plan also envisions the demolition of Unit-1 of the Rivera Library, replacing it with a three-to-four-story Information Commons, to serve the Library's need for up-to-date technology and increased capacity. This new element will provide a welcoming entrance, with comfortable seating and a retail coffee venue in the lobby and provide a place for receptions and other social functions outside the confines of the stacks.

This district preserves the psychology wing of Life Sciences, the Spieth Hall wing of Life Sciences and the Biological Sciences Building, but proposes that the northern two-story portion of Spieth be demolished and replaced by a new three-to-four-story building at the build-to line established by the Humanities and Social Sciences Building and



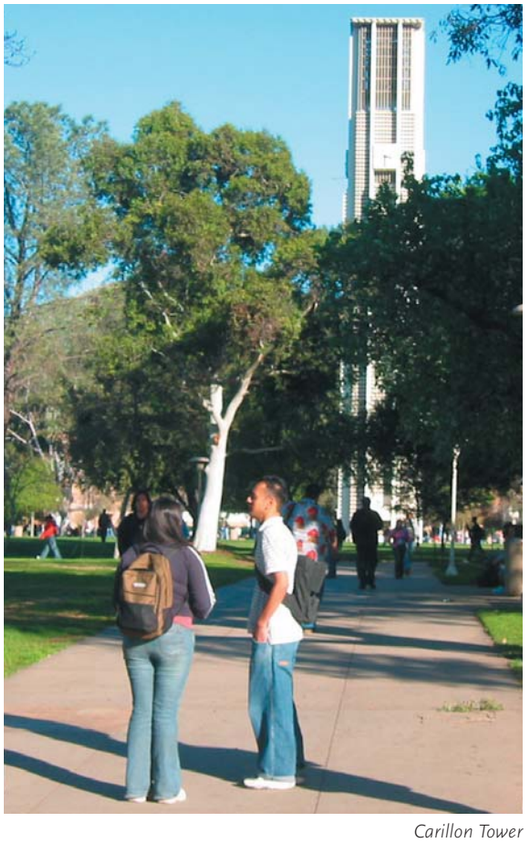
South/East Carillon Mall District Urban Design Diagram

Sproul Hall. Dining Services has explored a concept they call "Sandwichology," a retail food venue to be located in the first floor of Life Sciences Building.

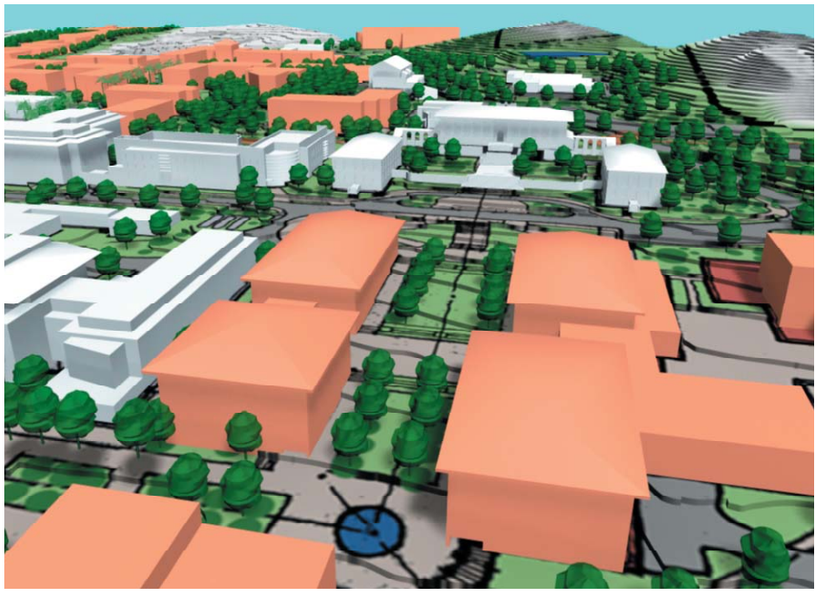
The South/East Carillon Mall District is the western gateway into the East Campus. The Study recommends a roundabout to simplify traffic movement and minimize conflicts with pedestrians by directing pedestrians away from a single crossing point on West Campus Drive to two points; one on the south side of the University Theatre and one on the south side of the Barn. The LRDP and the 2004 MMTMS recommend access-controlled vehicular traffic between the Canyon Crest freeway underpass and University Avenue. This action will eliminate the number of private vehicles using West Campus Drive as a shortcut around Campus, reducing the amount of vehicles. The circle will slow the vehicle traffic that remains and enable pedestrians to cross safely into the northeast part of Campus and the Citrus Mall.

Two new three-to-four-story buildings are located at the western end of the Eucalyptus Walk. They create a portal for pedestrian flow emerging from the Canyon Crest freeway underpass into the northeast academic zone of campus. Dining Services anticipates placing a retail "grab-n-go" food venue at this location.

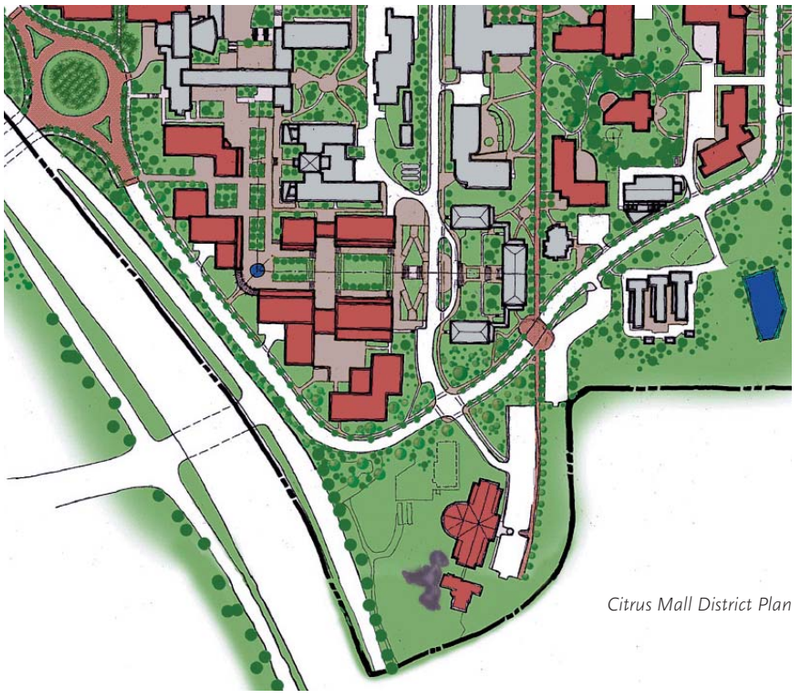
The east end of the district includes Engineering, Physics, Webber, Boyce, the Science Library, Geology and Statistics-Computer. Dining Services operates a campus restaurant called Taco Fresco on the west side of the Statistics-Computer Building. An outdoor dining area is provided that is well-used by students and should be expanded and reconfigured to respond to new buildings and to the increased student population as buildings come on-line. The density of this existing area establishes an acceptable density to meet the LRDP target. However, one of the challenges presented here is the desire to make the instructional space on the southeast end of Engineering 2, the northern terminus of the Science Mall. Currently, the Geology Building's service zone is located on the east side of the building, a placement that creates a conflict between service vehicles and a desired pedestrian path with handicapped accessible grades. The Study proposes a small building addition to the east side of the Geology Building that relocates the service access to the north face of the building at a lower elevation, allowing the Science Mall to be sloped appropriately and made of a material and width that supports its role as a primarily pedestrian linkage.



Carillon Tower



Computer Animation of Citrus Mall District



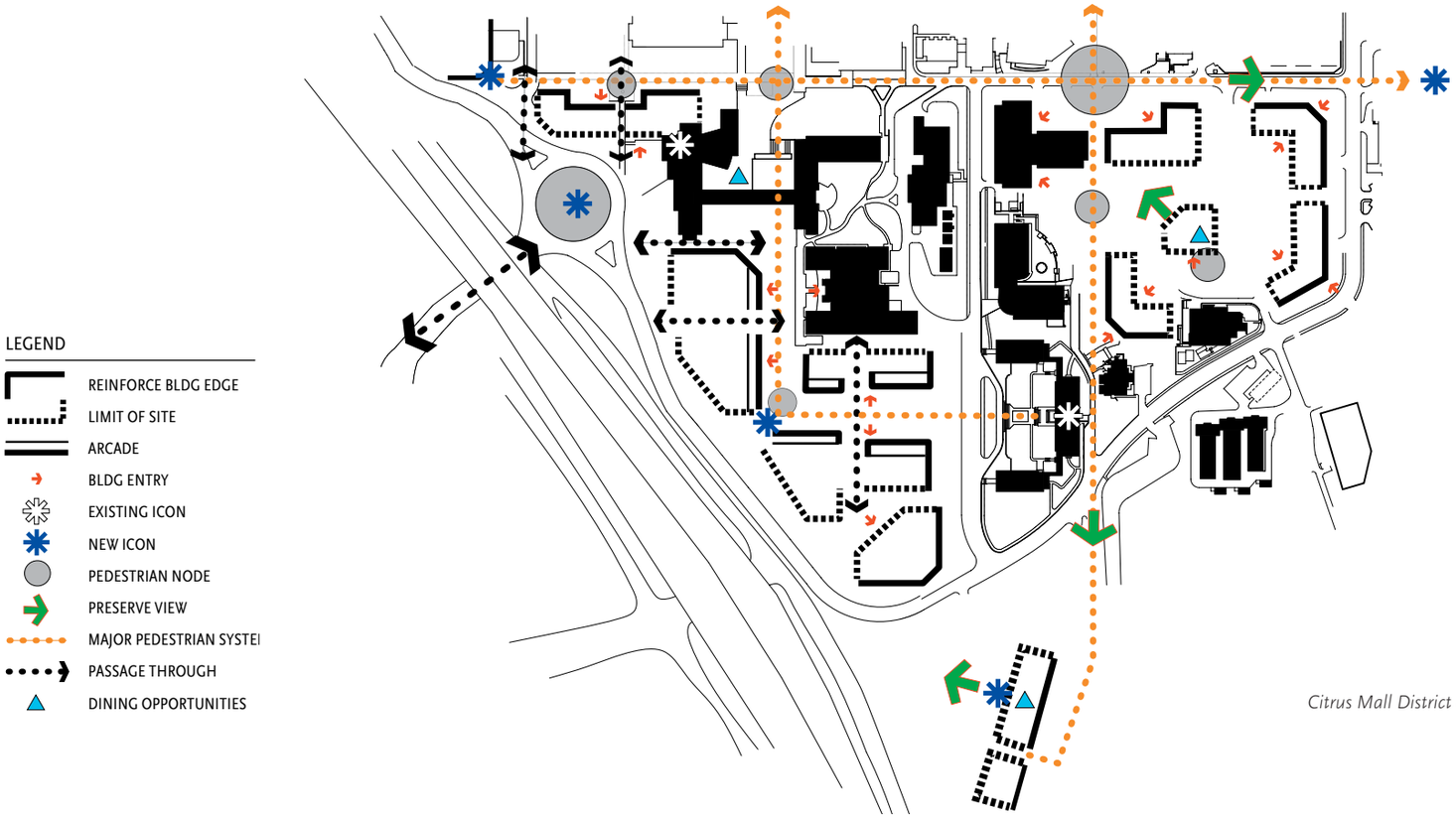
Citrus Mall District Plan

Citrus Experiment Station

Citrus Mall District

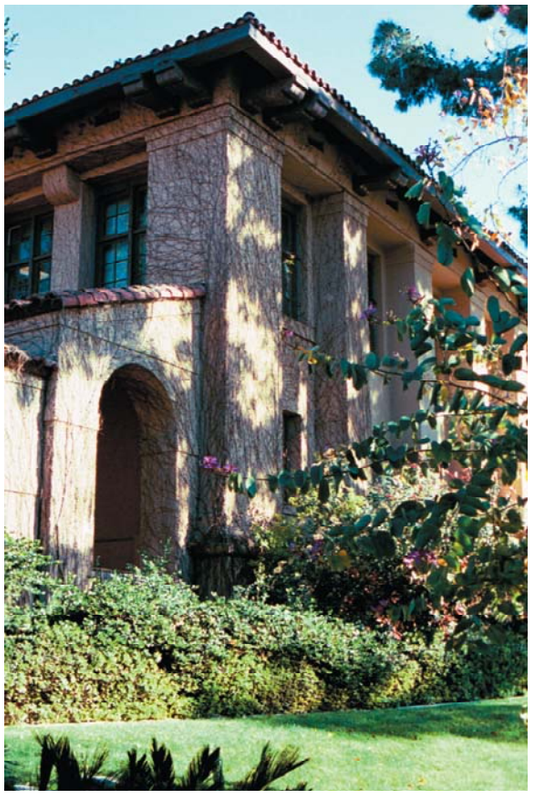
The LRDP recommends that Parking Lot 6 be removed and its parking capacity replaced in a parking garage to be located on the West Campus to make way for the creation of a new academic district referred to as the Citrus Mall District. The LRDP anticipates several new three-to-four-story buildings aligned with the Anderson and Chapman Halls, creating a central green space. The Study recognizes the unique opportunity of this area's topographic character using the new buildings to form a series of stepped courtyards, accentuating the views to and from the historic CESC. The Study further recommends that the architectural style of the new buildings be sympathetic to the Spanish-style architecture of the historic CESC, which suggests that gabled roofs and shaded arcades along the mall space are appropriate responses. The western end of the Citrus Mall provides an opportunity for a significant public plaza, with a focal point such as a grand fountain or public artwork. It will serve both as an organizing campus feature and a visual icon and campus identifier from the freeway. A new three-to-four-story building placed on the south side of Olmsted Hall creates the western perimeter of the extension of the Library Mall. The new building helps to create a portal for pedestrians emerging from the Canyon Crest freeway underpass into the Citrus Mall area. Dining Services proposes a retail café to serve this area.

The Citrus Mall District south of Campus Drive is predominantly a low-intensity use area because of its distance from the academic core and its topography. Environmental Health & Safety has been identified for relocation, so the building it occupies is recommended for eventual removal. Consideration has been given to the current site of the College Buildings North and South as a potential site for the University Club. Due to its prominent location on the hill below Weathertop Mountain, it boasts some of the best views of the campus and surrounding community of Riverside. The site also presents an excellent opportunity for the design of a significant architectural icon that would act as a gateway and beacon of the campus to motorists on the adjacent freeway and to users of the West Campus academic zone.



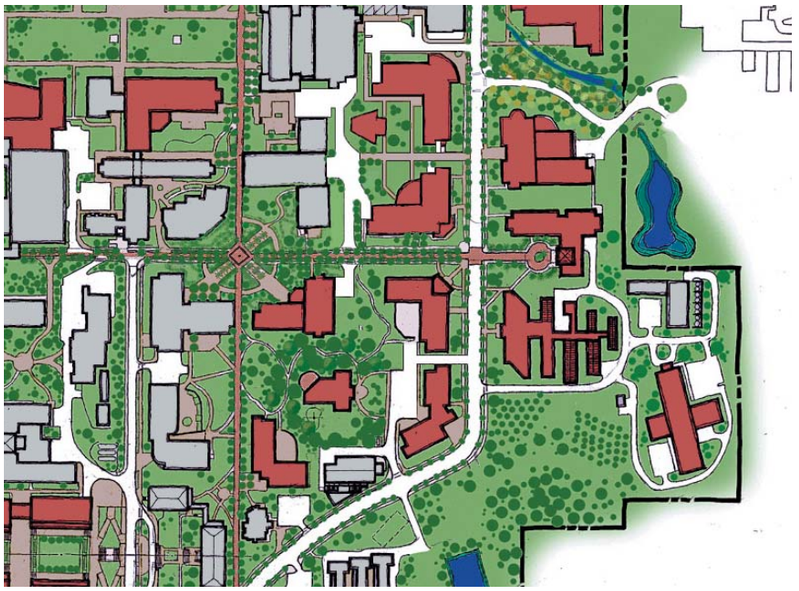
Citrus Mall District Urban Design Diagram

Citrus Mall District Bird's Eye View



Chapman Hall

Computer Animation of Picnic Hill District



Picnic Hill District Plan

Picnic Hill District

Significant demolition and replacement is anticipated in the Picnic Hill District. Previous studies and interviews with campus staff by the Design Team identified many of its existing buildings as good candidates for demolition, because they are either antiquated or were intended as temporary facilities resulting in an inefficient use of valuable campus space. It is anticipated that the greenhouses, lath houses, and Grounds/ Maintenance Building will be relocated, primarily to the West Campus, and that other displaced uses will be relocated into new or existing remaining buildings. The Avocado and Macadamia tree collection, irrigation reservoir, and Greenhouses 1-3 were identified in interviews as functions to be preserved on the East/Southeast Campus.

New four-story buildings are recommended as replacements on the west side of East Campus Drive. The setbacks of these new buildings will respect the setback of the Statistic Computer Building. They include:

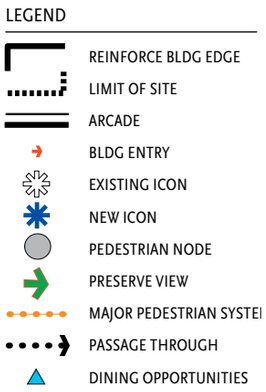
- Two on the east of Batchelor Hall. The service/delivery area on the east side of Batchelor is shown reconfigured to facilitate easier access
- One to the northeast of the Insectary and Quarantine Facility
- Two are proposed on the south side of the Eucalyptus Walk, reinforcing the crossroads of the Science Mall and the Eucalyptus Walk
- A small one-story classroom building is recommended at the convergence of the pedestrian paths in the courtyard between the proposed buildings and between Boyce and Batchelor Halls

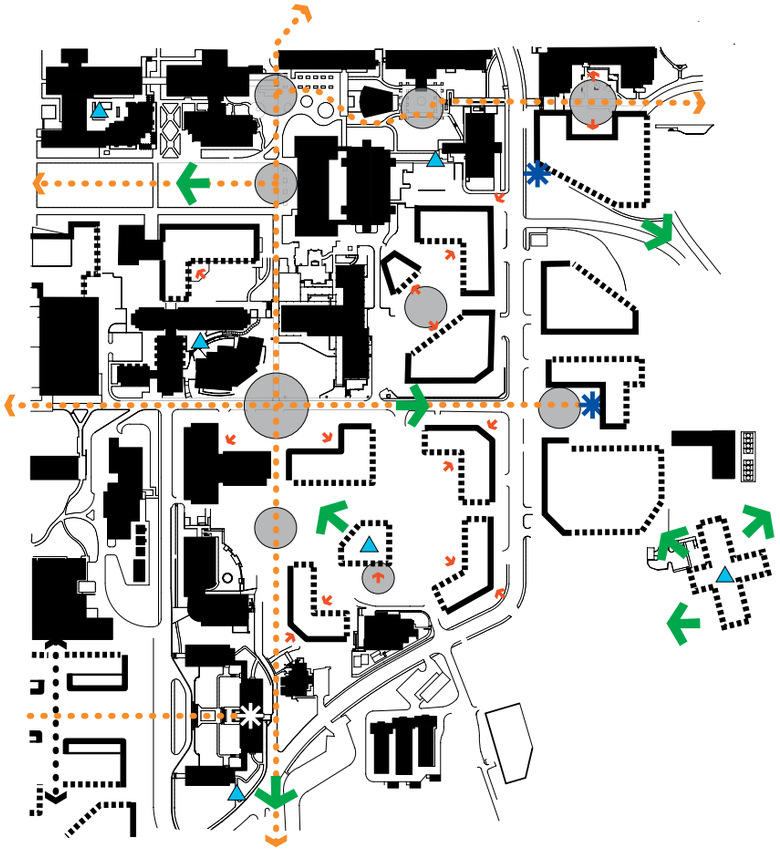
New four-story buildings proposed on the east side of East Campus Drive include:

- A building for a Growth Facility Service Center that provides a three-to-four-story research lab building on the street with greenhouses and growth chambers behind
- Two, as yet, unprogrammed buildings help to define the street. It is expected they will be three-to-four-stories, accommodating programs that would be appropriate as campus perimeter uses; the building located at the eastern end of Eucalyptus Walk should have a focal point appropriate as a terminal view. One suggestion that emerged from interviews with campus staff is that one of these building might be a University office building
- The site where the Computing and Communications Center currently sits eventually will become available and could provide an excellent site for a special events facility or a hotel/conference center, or university lodge, taking advantage of the excellent views of the Box Springs Mountains. If one of these scenarios is chosen, Dining Services anticipates the opportunity to provide a dining venue

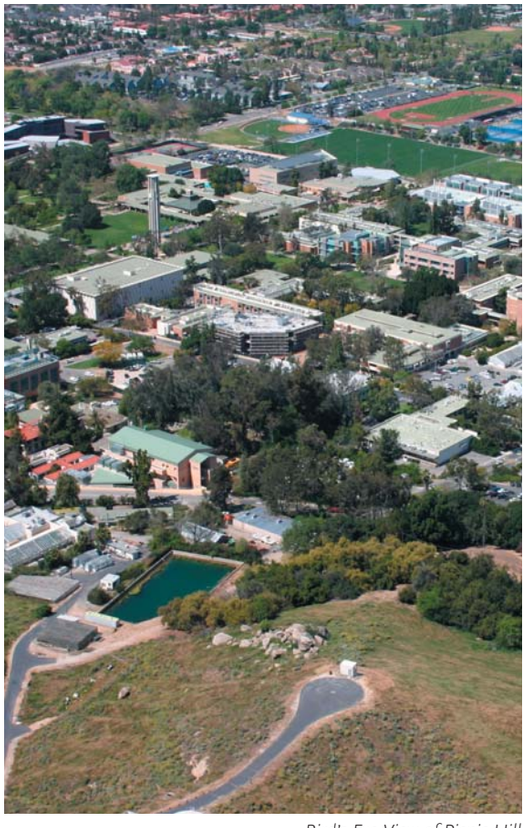
Interviews with both staff and faculty revealed the Picnic Hill site as an under-utilized campus asset with great potential. Some suggested it as a potential site for the University Club because of the significant views it affords of Campus and the surrounding mountains. A sensitively placed building in this location would help to solve the accessibility problems that currently exist, allowing access to the top of the hill and providing ownership of the space insuring that it would be well-maintained. Care to preserve the essential character of the site is paramount as Picnic Hill is one of the last forested sites on the campus.

Currently, vehicular access to the Botanic Garden is either from Big Springs Road through Parking Lot 13 or via East Campus Drive via Visitor Parking Lot 10, but as the panhandle is developed, and if a Physical Sciences 2 project is built, this access will be eliminated. A new access road is planned with a curb cut on East Campus Drive on the south side of a potential Physical Sciences 2. This new road will be sized appropriately to accommodate service, delivery, emergency, and visitor access. It will be located to provide a minimum impact to the existing riparian and drainage area and will connect to the existing Botanic Garden access road, perhaps via a bridge.





Picnic Hill District Urban Design Diagram



Bird's Eye View of Picnic Hill

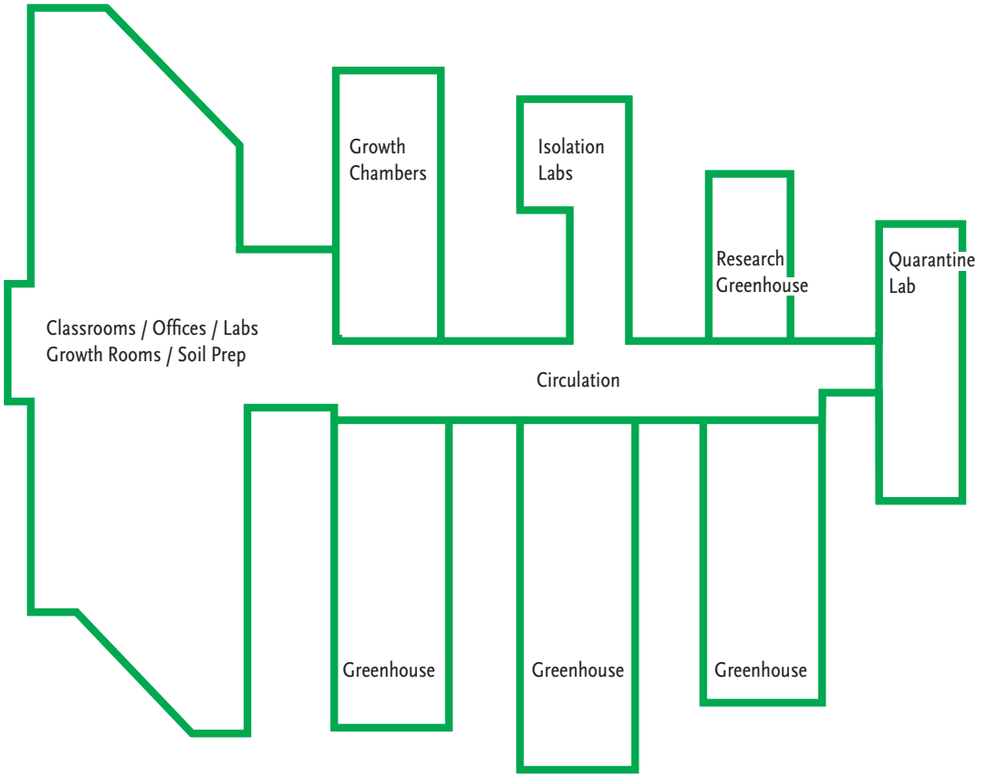
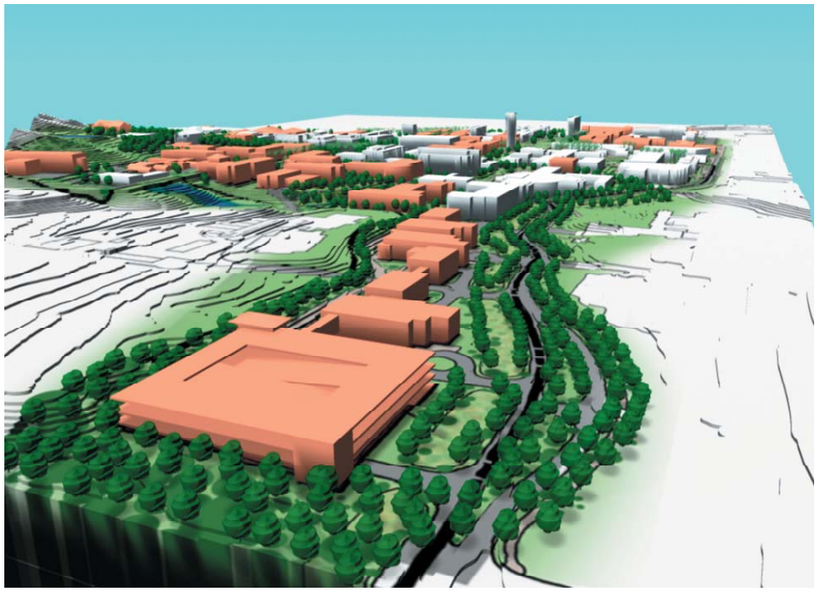
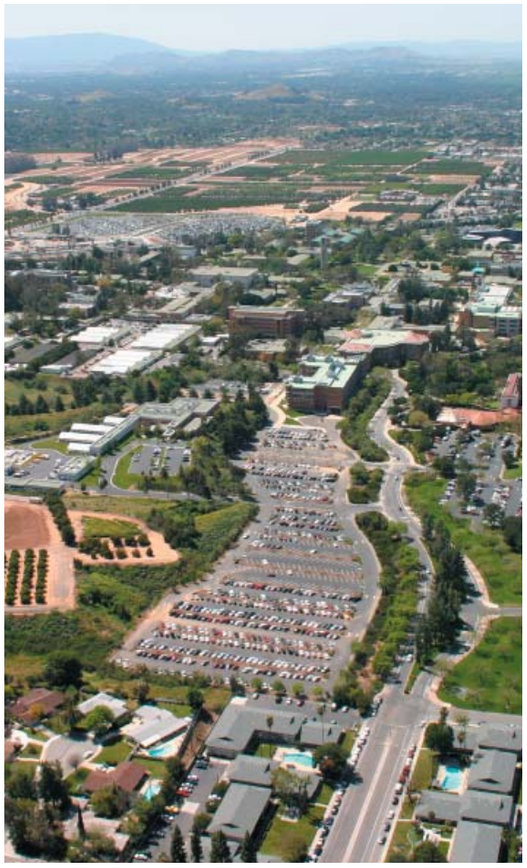


Diagram of Plant Growth Facility

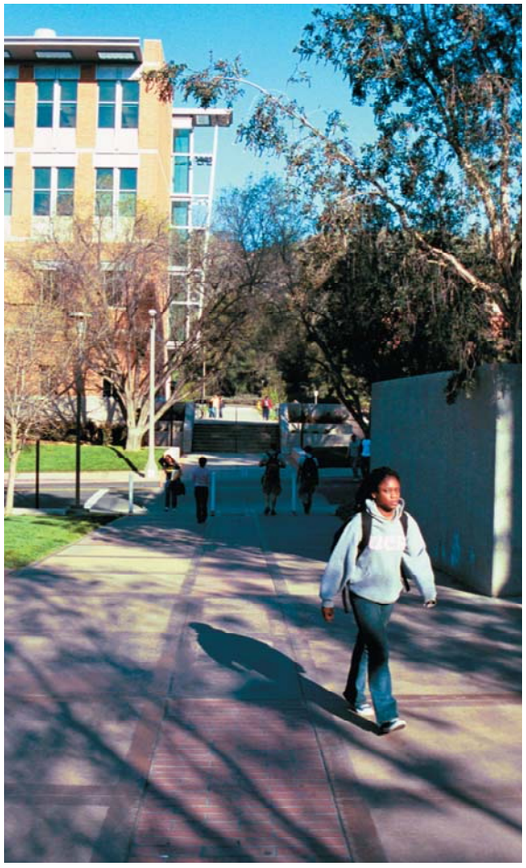


Computer Animation of Panhandle District

Panhandle District Plan



Aerial View of Panhandle District



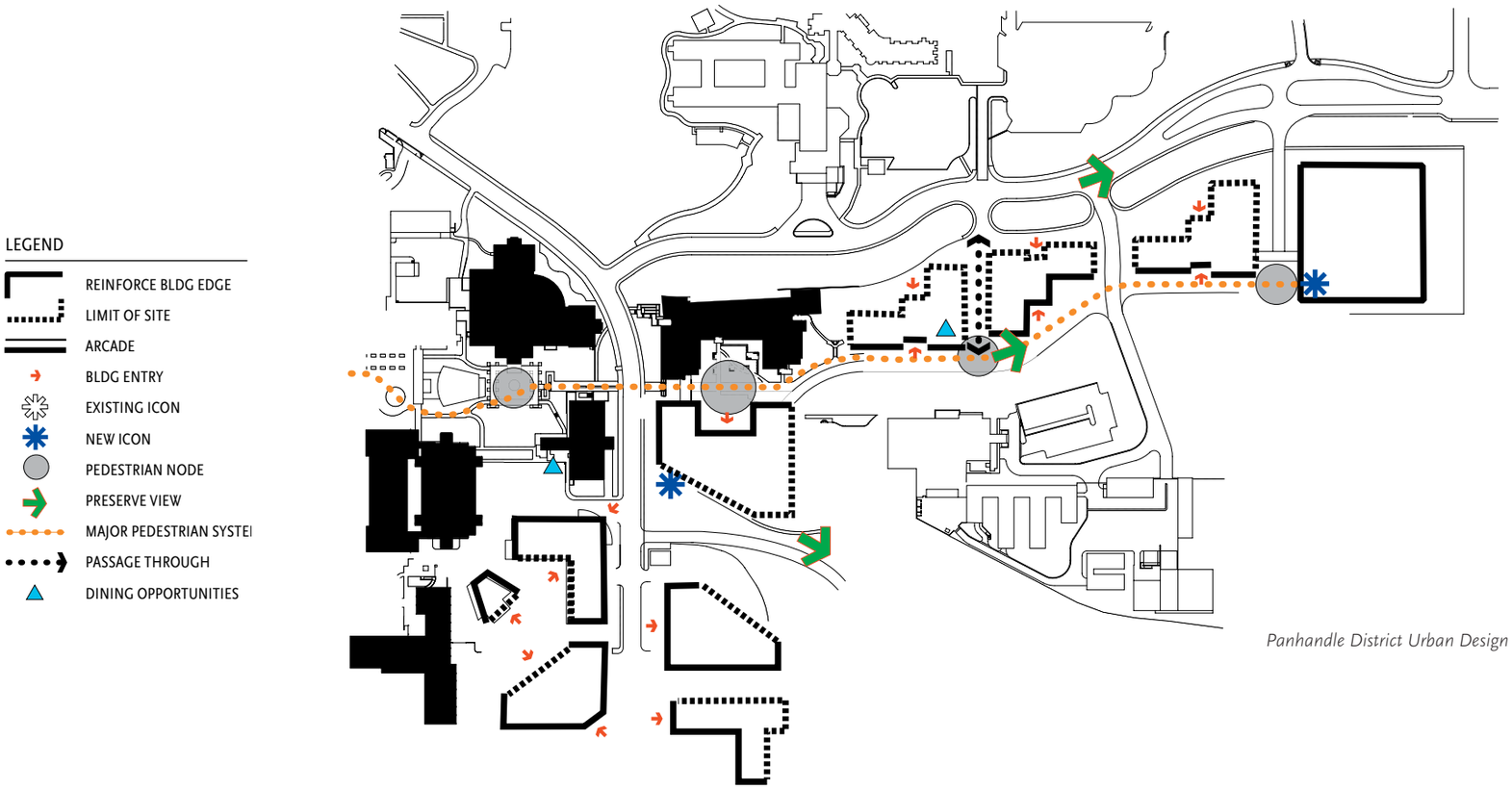
View East from Science Library Courtyard

Panhandle District

The Panhandle District is named for its long slender appearance on the plan in relation to the mass of the academic core of the campus. Currently, this area is dedicated to parking, but the LRDP indicates that a parking garage will be constructed at the eastern end, and the parking lot will be replaced with academic buildings. The future Physical Sciences 2 is proposed on the south side of Physical Sciences 1. The new building will need to accommodate setbacks for the existing drainage swale and riparian area. Interviews with UCR staff revealed the desire for a campus location where public/private partnership research ventures could be explored. The Panhandle is ideal for the following reasons:

- Distinct and separate location, yet in proximity to core campus
- Good access to local streets without mixing with campus only traffic
- Adjacency to planned parking garage site for convenient parking

A pedestrian path is proposed along the southern edge of the site between East Campus Drive and the proposed parking garage. Dining Services intends to operate a café and market in the first floor of one of the buildings to serve both users of the path and building tenants.



Panhandle District Urban Design Diagram

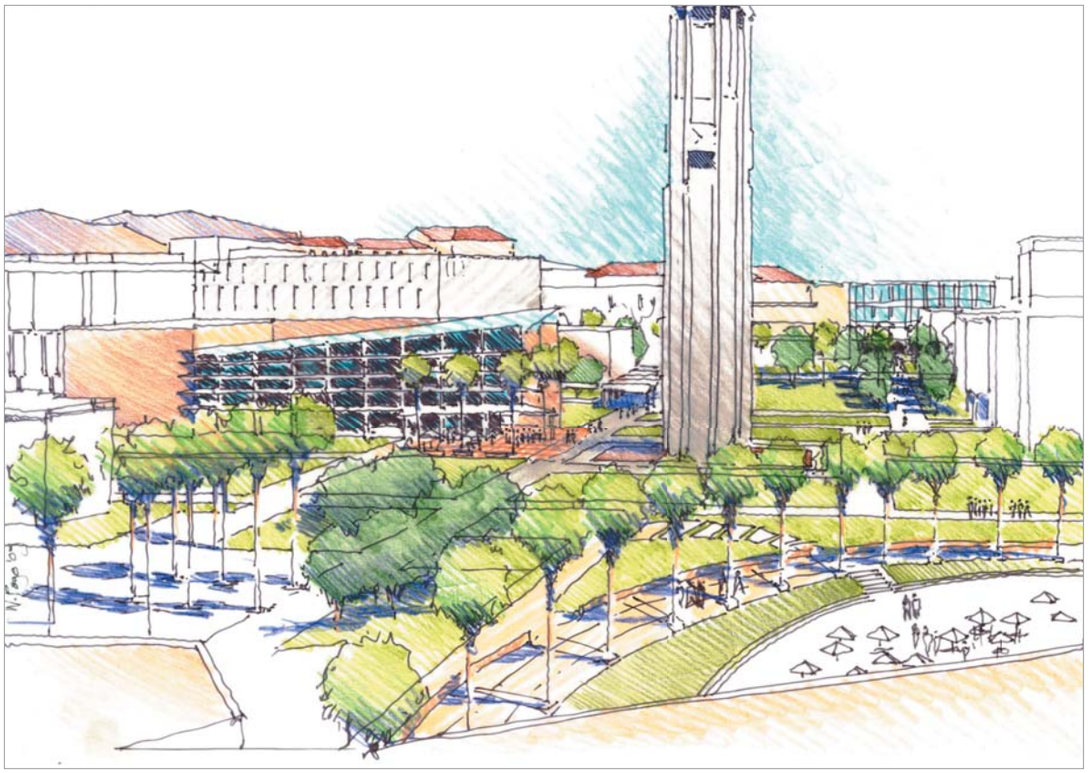
Pedestrian Path from Parking Lot 13

View East of Box Springs Mountains

Program Assumptions and Opportunities

The LRDP suggests that UCR's student population will reach 25,000 students by 2015 and establishes goals and priorities necessary for meeting this immediate need. The East/Southeast Campus Area Study looks to this event, and beyond, by establishing a framework for the academic expansion and creating a vision for UCR that enables future sites to be chosen and new buildings located that preserve the character of the Campus and the views it holds dear. In-depth programming discussions for specific future buildings was not accomplished during this Study. However, several programming opportunities were identified by staff and faculty that will insure UCR makes the best use of its land area and provides the necessary opportunities for academic excellence and achievement. These include:

- Library Information Commons
- Theory Center
- Fine Arts and Multi-Media Library
- Growth Facility Service Center
- Public/Private Partnerships
- University Club
- Dining Services Venues



Rivera Library Proposed Information Commons

Library Information Commons

Rivera Library's primary location at the base of the Carillon is its greatest asset. Set directly across the Carillon Mall from the Student Commons, it has the potential to become a vibrant hub of academic life. The Unit-1 wing on the north side previously has been discussed as a candidate for demolition, creating the opportunity to refocus the Library's main entry through an Information Commons. The Information Commons would be designed to impress, but not overwhelm. Focused on providing support for new information technologies and teaching/learning modalities, new research tools and team- based learning will form the basic programmatic structure of the Information Commons. The Information Commons can become a significant beacon and living room for the academic life of the campus in direct juxtaposition to the Student Commons.

Theory Center

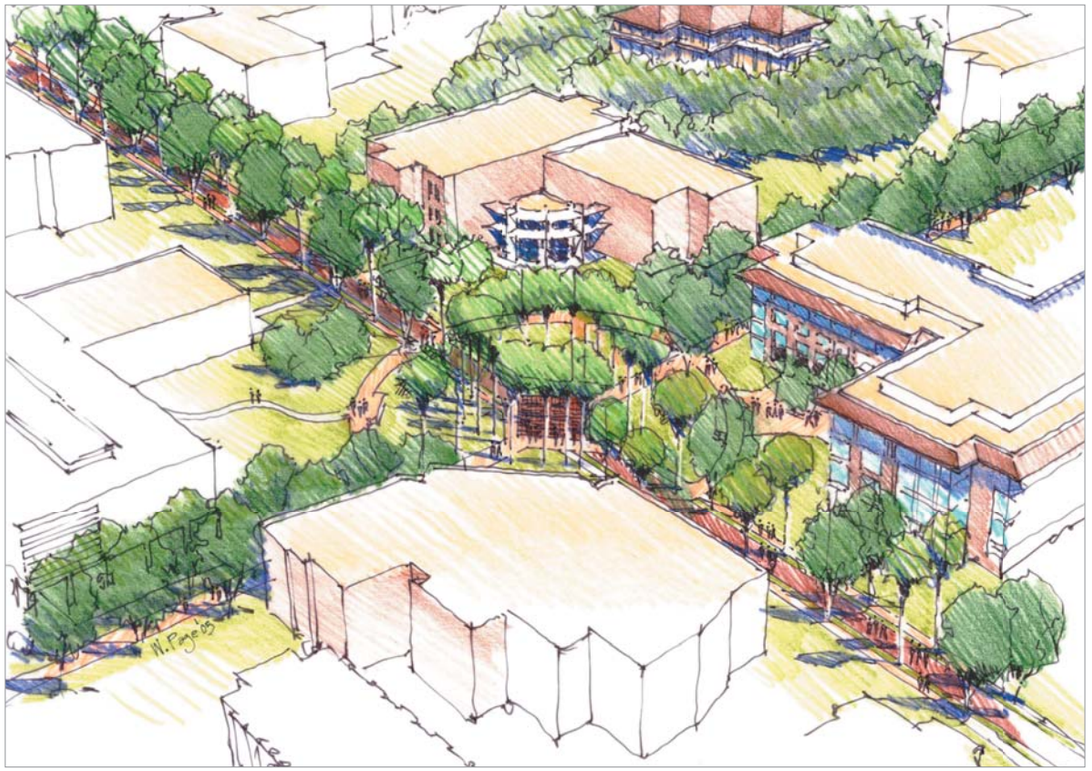
As UCR emerges through its graduate and research mission as a major player in the creation of new knowledge, the validation and dissemination of knowledge will become a significant challenge and opportunity. The hosting of scholarly conferences, major presentations of discovery, and scientific peer organizations could position the Campus at the forefront of certain bodies of knowledge. UCR is already a leader in research and discovery in many areas of inquiry, yet often the faculty travel to other institutions to pursue this scholarly dialogue. Celebrating and hosting this dialog becomes the space program generator for this building. One potential location for this building is the site currently occupied by College Building North, which is not only a prominent location overlooking I-215/SR60 but also boasts excellent views to the west.

The Fine Arts and Multi-Media Library

The Fine Arts and Multi-Media Library was discussed with the University Librarian early in the Study's development. A "bridge" Media Library (approximately 4,455 ASF) is being planned for the new Instruction and Research Building coming on line for CHASS to be opened by 2008. This "bridge" Media Library facility will be a tremendous improvement over the Media Library housed in the Humanities and Social Sciences Building. The "bridge" facility is being designed jointly by the Libraries and CHASS to include a general multimedia lab/user area with 30 seats and state of the art workstations; a 16 seat media viewing room (430 ASF); four (4) individual viewing rooms; a media equipment room (255 ASF); a faculty editing room (400 ASF); and 1300 assignable square feet of space to house the media collections. A small section of compact shelving is planned to further expand storage for the collections.

The current Media library is very small (approximately 1,819 ASF), crowded, and maintains a seating capacity of 37, with largely outdated and inadequate furnishings. Both furnishings and equipment will be replaced in the new facility. The current collections are comprised of approximately 23,000 audio cassettes, tapes, CDs, DVDs, Laser disks, films, video disks, selected kits, and other materials used by students and faculty. The Media Library was absorbed into the administrative structure of the University Libraries at the request of the Assistant Vice Chancellor for Computing and Communications in FY2003-4.

The concept of a more expansive multi-media and fine arts facility might be considered by the University to support student and faculty access to more comprehensive multi-media services, involving the capacity to support instructional development, media preparation, video streaming from head-end equipment, full media design consultation



Science Mall / Eucalyptus Walk Intersection

services, a microcomputer lab, more expansive listening/viewing areas, slide library area, and other resources related to the fine arts. As a satellite library facility, the Fine Arts and Multi-media Library would incorporate the latest technology for information access and capacity to support media, instructional, and fine arts production. As envisioned by the University Librarian, incorporated into this library and learning center would be the:

- Media Library with a working collection of 30% of the 95,000 volumes of art, art history, exhibition catalogs, theatre, film and visual culture, and dance books and journals currently housed in the Rivera Library and collection
- the Photography Collection and the Slide Library
- relevant digital resources with editing facilities
- well equipped viewing, listening, and conference rooms with video conferencing capability
- space and equipment for developing teaching and presentation tools
- 1-2 model electronic classrooms
- 1-2 instructional production studio with editing facilities
- facilities for public and technical scanning
- an exhibit area
- a small media presentation auditorium
- a variety of comfortable and flexible user work and study spaces for working alone or with others with adequate sound and light control for study and computer use

Open laboratory services to support media design, presentation development, and production consultation in all disciplines, for students and faculty would be available, including computer-based design, and the capacity for multimedia viewing distribution (video steaming and University digital assets) on a campus wide basis would be normal services of the Library. Currently, no one location on the UCR campus is equipped to provide these services. Staffing of the Fine Arts and Multi-Media Library would include librarians, computer personnel, technicians, and instructional designers with expertise in appropriate areas to work with students and faculty. Such a facility might also be designed to ultimately house the University's Center for Teaching Excellence and the Student Learning Center for the long term. Whereas, without a specific program, the square footage is not being recommended at this time, the least space the facility should have is 13,000 ASF.

Such a facility would enhance UCR as one of the premier evolving and dynamic digital service programs within the UC System. One option may be to incorporate it or certain program elements of it into the proposed Information Commons. Functional components such as student access to media production, the Center for Teaching Excellence, and a Student Learning Center could be shared between the Rivera Library the new facility.

Growth Facility Service Center

Historically, growth facilities (greenhouses, lath houses, containment, etc.) have played a large roll in UCR's programs. The LRDP has determined that many, if not most, of the greenhouses must move to the West Campus to free land for denser, mission-critical facilities. However, it is clear that accommodations of fewer but critically adjacent growth facilities still will be needed to directly serve teaching and research. A number of strategies were explored, including attaching them to buildings or building them on rooftops. A model emerged for such facilities that is in use at Montana State and is included in on page 7-9. The basic premise is to provide a centrally supported "service center" for growth, similar to how many universities treat animals (vivarium) or instrumentation. The Growth Facility would be programmed and designed to support a wide range of research methodologies and limited teaching support through a "pay-to-play" business strategy. This facility can move to the outside of East Campus Drive in proximity to the other growth facilities, such as the Insectary and Quarantine Facility.

Public/Private Partnerships

As the breadth and scope of UCR's research enterprise continues to grow, it will be presented continuously with opportunities to partner and quickly solve a variety of space challenges. Some of these have been responded to through lease space in the community or in the University Research Park. A careful study of policy and procedure should be undertaken, to determine how to fully capitalize on this land use opportunity. UCR can provide incentives through land leases or shell space to attract projects, programs, and industry research and development to the Campus and its faculty. Two basic types of space have been identified, light laboratory and basic office space. If undertaken by UCR, or its foundation, shell space could be created to allow for a rapid response to opportunity.

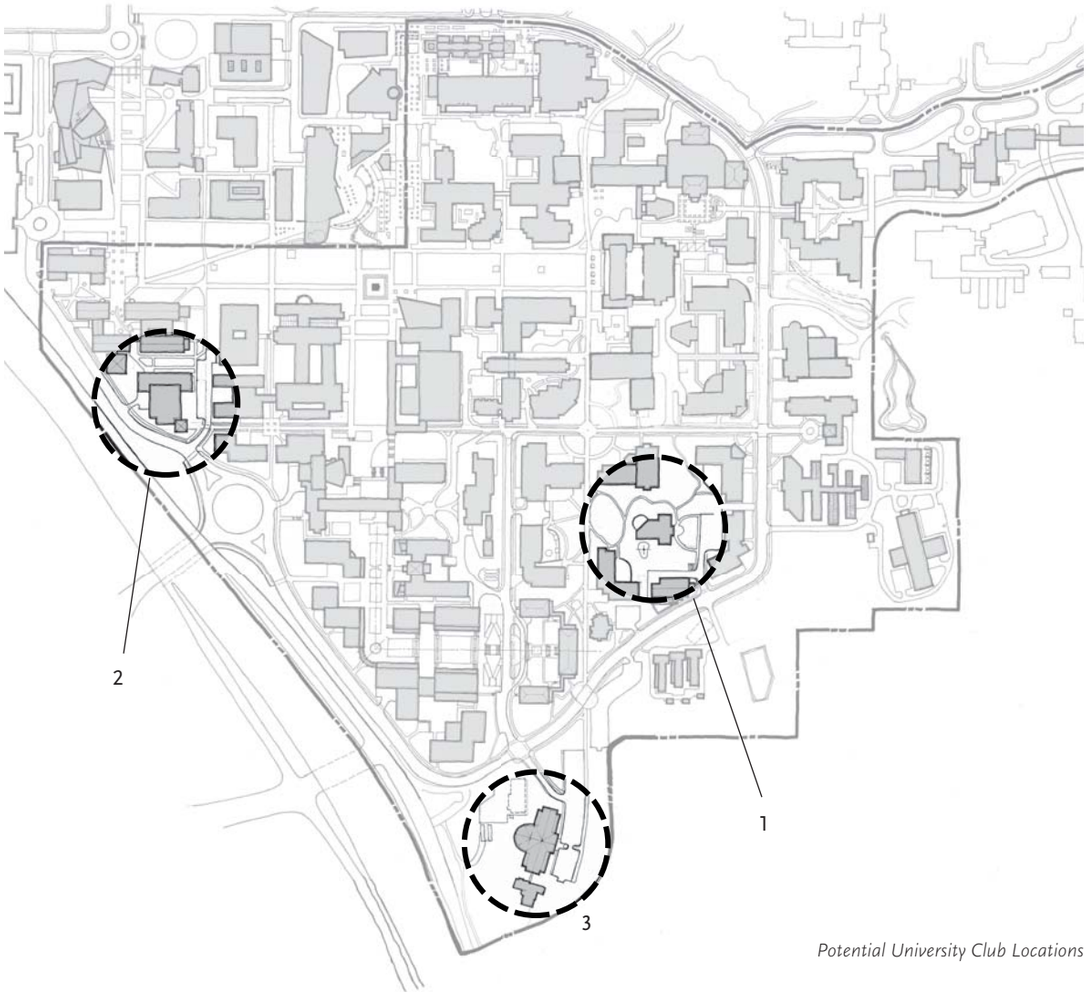
University Club

A persistent and consistent theme has run through the program discussion surrounding the Study about the need for enhancements to the academic dialogue and sense of community. Great learning and discovery institutions are largely created by a strong community founded in a profound and expansive dialogue. The history of UCR is one of a young university that has grown dramatically in a relatively brief period. It is not surprising that in this context the Campus is searching for a variety of ways to come together as a community. Models were discussed, ranging from food service venues to theory centers, with the most persistent idea being a University Club. Precedent exists for this idea in the form of a Faculty Club that previously existed on the west slope of Picnic Hill, accessed from Citrus Drive. This facility served the needs of the expanding community until the last decade when land for the new Entomology Building necessitated its demolition. Currently operating from the Barn, a group of old and new Club members are attempting to focus on the more inclusive idea of a University Club; basically a food service venue and "watering hole" conducive to discussion, formal/informal presentations and receptions. More grandiose visions include all of the above in a University Lodge or Conference Center. A range of ideas about the nature of this concept and its location have been explored. Three sites have been considered within this planning effort:

1. The Historic Site (on or near Picnic Hill). Tremendous views from this site are possible, but it would be compromised by its limited size and a shared parking scheme. Creating a destination at Picnic Hill would provide much needed ownership to this public space and would enhance the picnic function of the Hill. Imbedded in the sciences and a short walk (less than 5 minutes) from most locations on the east academic Campus, this site also would provide a much needed food venue on the south side of Campus near Citrus Mall.

2. The Crossroads at the Barn. This location, although central to the existing Campus, would need to be enhanced significantly. Proximity to the Commons, however, fails to significantly diversify the food offering on the East Campus. This central location is thought to be a positive and negative, based on point of view.

3. The Director's House and Garden (College Building South). Currently under consideration as an interim location, this historic site also offers prominent long views. Possibly the most remote of the three from origins and destinations of the East and West Campuses, this site has the most opportunity for convenient parking and a generous build-out, if the demolition of College Building North can be accomplished. More suitable as a retreat location, the Director's House needs advocacy but is challenged by a potentially high cost to renovate and maintain.



Potential University Club Locations

UCR is fortunate to have these alternative opportunities. A concerted effort, in the form of a professionally prepared business plan, programming, feasibility, and site selection process needs to be undertaken, while at the same time, membership and fundraising need to be considered to advance this community asset.

Dining Services Venues

Dining Services operates three types of food service venues on campus in a variety of locations:

- Campus Restaurants in the residence halls and at the Commons, and satellite restaurants at the Barn and Taco Fresco at the Statistics-Computer Building
- Campus Cafés located at Hinderaker Hall (Ivan's at Hinderaker)
- Campus Convenience Stores located in the residence halls and at the Commons

Interviews with Dining Services staff indicate an intent to expand all aspects of their operations. Dining Services prefers to move into shell space in a new building that has power, potable water, and sanitary sewer hook-ups readily

CAMPUS RESTAURANTS

1. COMMONS
2. THE BARN
3. TACO FRESCO

CAMPUS CAFÉS

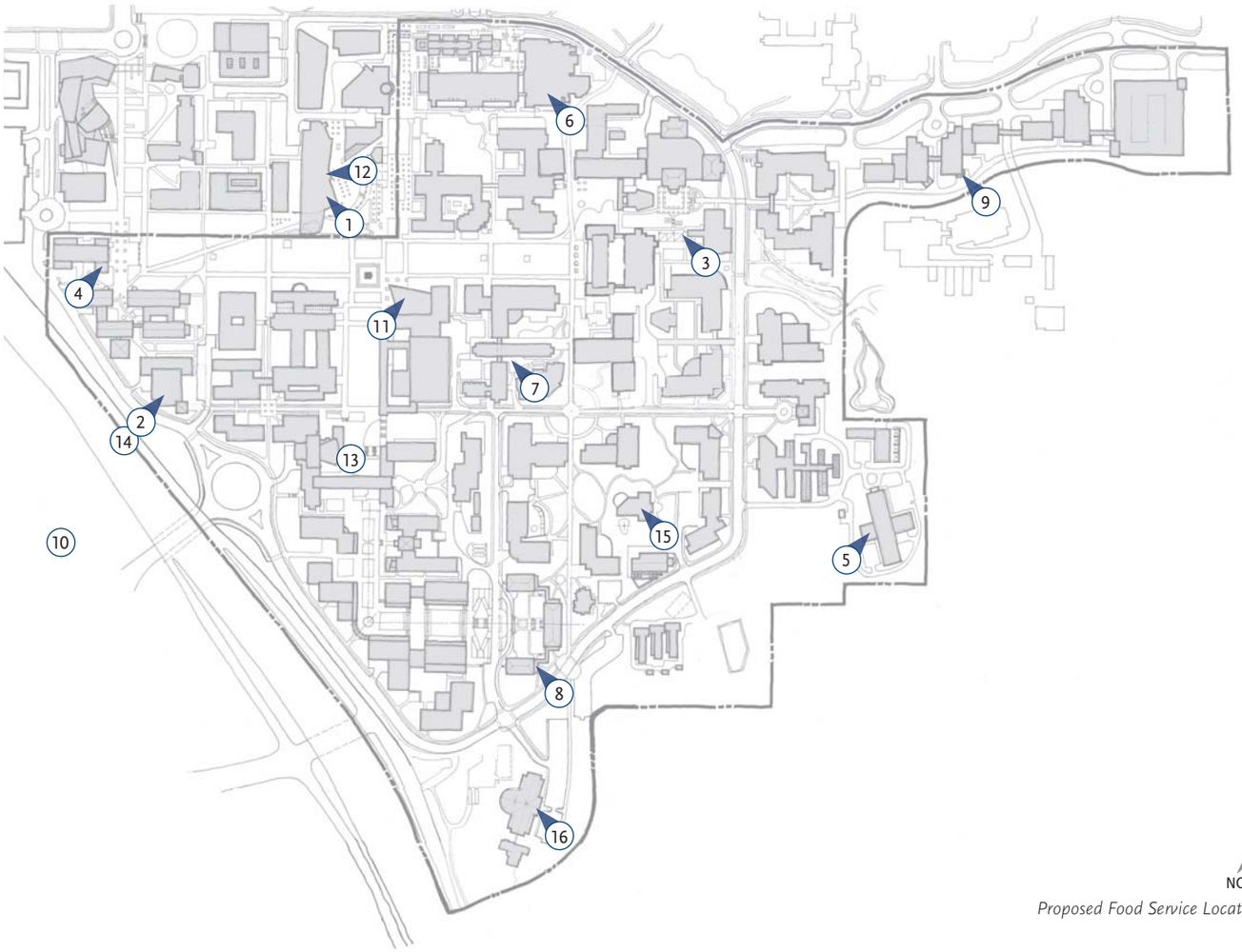
4. IVAN'S AT HINDERAKER
5. FUTURE CAFÉ
6. BYTE'S CAFÉ
7. SANDWICHOLOGY
8. CITRUS CAFÉ
9. ELEMENTS CAFÉ & MARKET
10. THE HUB COFFEE HOUSE
11. CAFÉ TR

CONVENIENCE STORES

12. BEAR NECESSITIES
13. CROSSROADS C-STORE

FACULTY CLUB (POTENTIAL SITES)

14. THE BARN
15. PICNIC HILL
16. CAMPUS BUILDING NORTH SITE



Proposed Food Service Locations

available. Their research has found that outdoor concepts are popular with students, and new outdoor spaces that draw people between classes, and at lunchtime, are good locations for new food venues. They recognize the potential market that exists at the major entrances to Campus and at key pedestrian intersections within the East/Southeast Campus. New dining opportunities have been identified on the plan that attempt to capture the locations where need will arise and where venues will be successful.

Urban Design Criteria

Density

The density recommended by the LRDP was the driving force in the development of the proposed land use plan for the East/Southeast Campus. While the density of specific zones varies, an overall 1.0 FAR was achieved by recommending that most new buildings be a minimum of four stories in height. However, it should be noted that as new buildings are proposed to meet specific demand, it is logical to assume that these heights will necessarily change to meet specific program requirements. The density recommended must also be understood in terms of both current and future space inventory. A tabulation comparing existing to potential future space inventory reveals that approximately 2,250,000 square feet of gross floor area will be added to the existing land area of the East/Southeast Campus with a net gain of almost 1,443,000 square feet.

See page A-3 for the Proposed Study Area FAR diagram.

Current Space
- GSF 2,457,147
- NSF 1,523,201

Proposed Demolition
- GSF 499,447
- NSF 344,750

Proposed New Buildings
- GSF 2,750,447
- NSF 1,787,750

Future Space
- GSF 4,708,147
- NSF 2,966,201

Net Gain of Space
- **2,251,000 Gross Square Feet**
- **1,443,000 Net Square Feet**

Open Space Structure

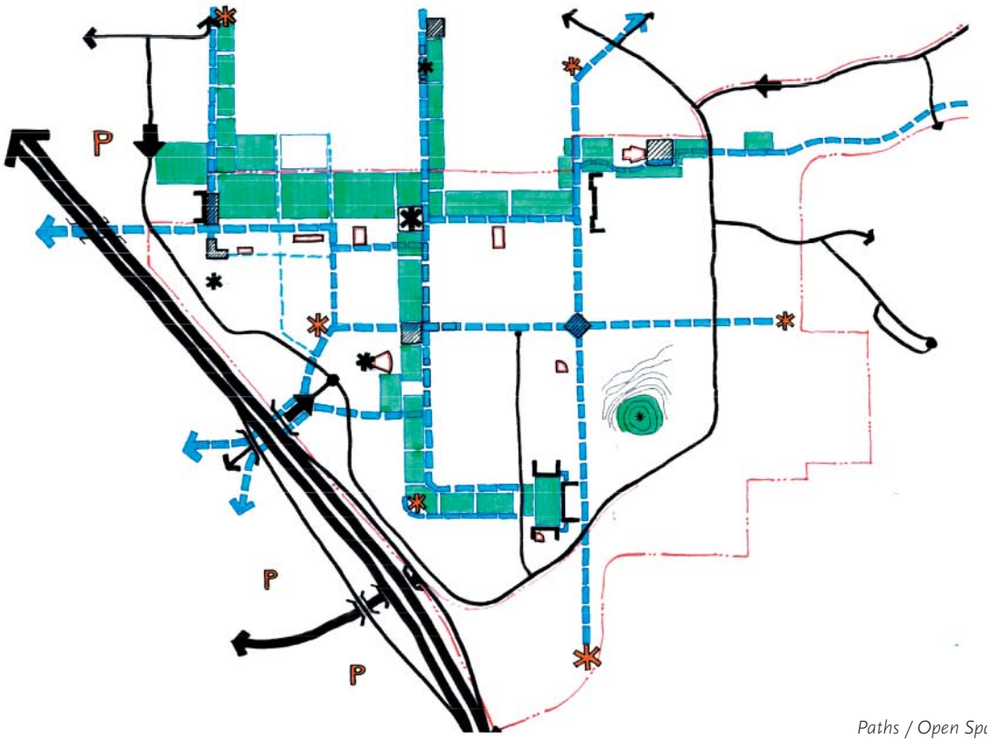
UCR's open spaces define the character of the campus. Juxtaposed to the rugged Box Springs Mountains to the east, UCR's malls and open spaces reflect the order of eastern college campuses. The regularity of these spaces allows the design of its academic zone to be flexible insuring the growth necessary to meet projected enrollment demand. This established pattern reduces pressures to expand the East/Southeast Campus beyond its current boundaries, as the north and west are rigidly defined by existing development while the freeway and the east and south are designated as an open space reserve valued for its natural beauty.

Carillon Mall

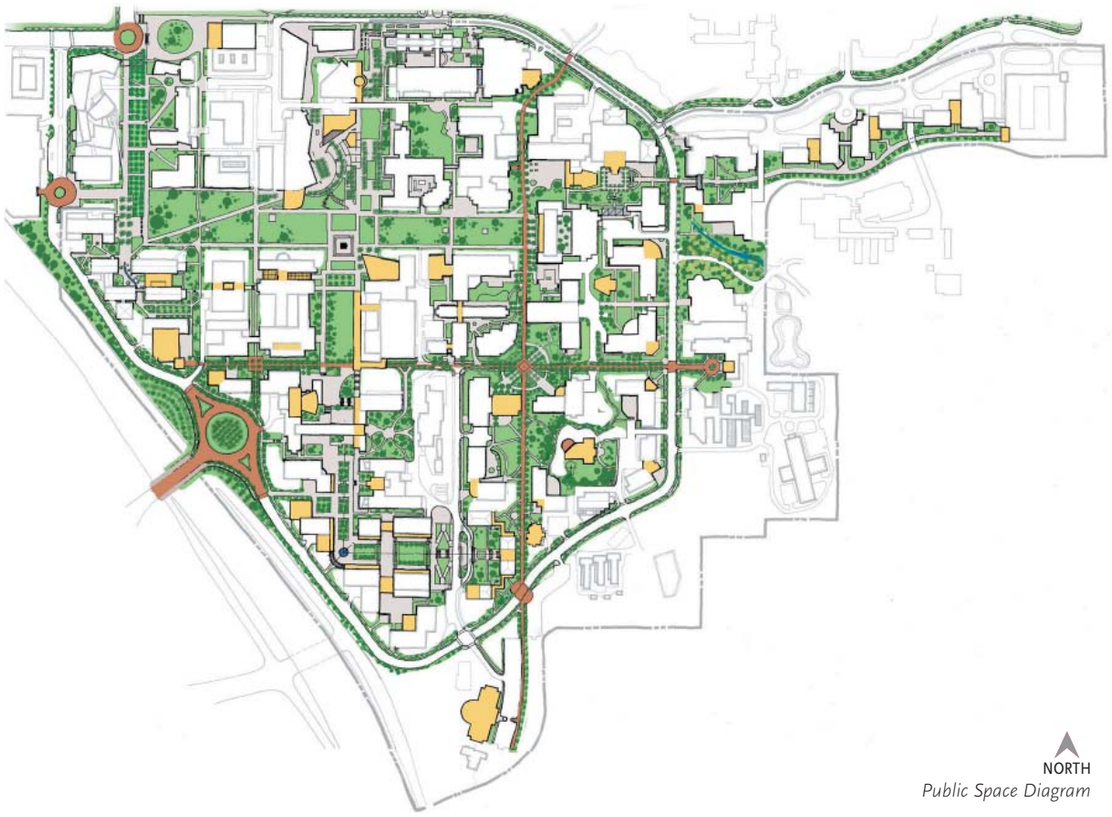
The signature open space on the East Campus is the Carillon Mall. It provides the central organizing framework for the East/Southeast Campus and creates relief for an increasingly dense academic core. Its primary icon and namesake is the Carillon Tower which is highly visible from most anywhere on campus and provides the campus' primary identifying feature from the freeway. Originally designed as an oval, this now rectilinear lawn is used as a "Jeffersonian great lawn" of the academic core where students pass or gather informally or organize for events. It absorbs pedestrian flows from the Arts Mall and Commons Mall on the north, parking areas on the west via the Library Mall on the south, and ultimately from development associated with the Citrus Mall. Although defined by a rigid pattern of sidewalks, the seeming casual placement of large shade trees alters the pedestrian's view of the space allowing the preservation of mountain views to the south and east and California sunsets in the west. Building additions on the south side of the mall at Watkins, the Library, Spieth Hall and anticipated growth outlined in the East Campus Entrance Area Study will respect the setbacks established by existing buildings and as defined by this Study and the LRDP.

Library Mall

The size and scale of the Library Mall makes it an ideal model for the development of a successful campus space. This simple lawn is defined on one side by the formal architecture of the Rivera Library arcade and on the west by a walk with two rows of mature trees. The south end the Mall is absorbed by the plaza shared by Olmsted Hall and the University Theatre (Humanities). This view focuses on the idyllic Carillon Tower. Pedestrians travel on walks to either side of the Mall viewing the open space from the perimeter, preserving its grass panel

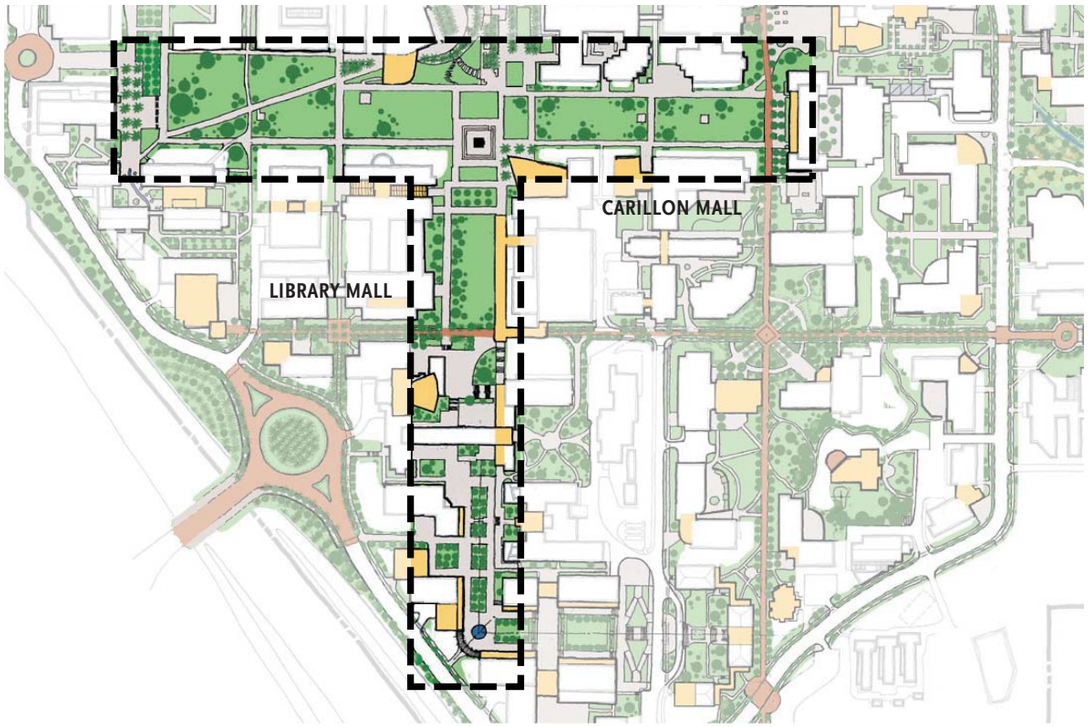


Paths / Open Space Analysis

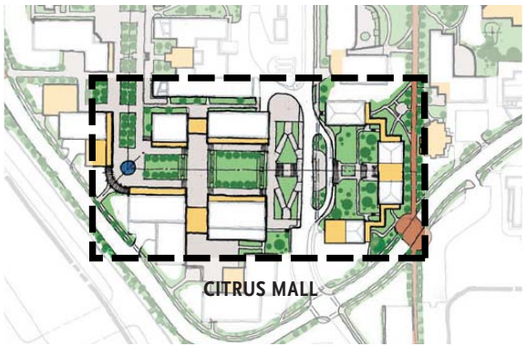


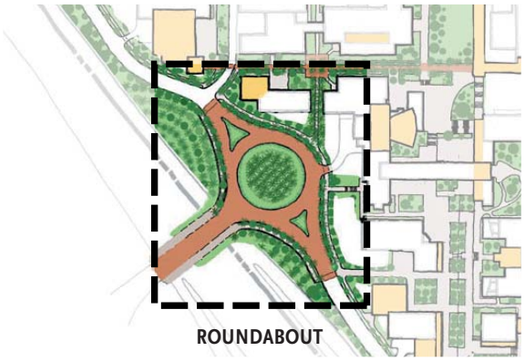
NORTH

Public Space Diagram



Carillon Mall / Library Mall





for passive recreation. Building additions recommended at Watkins Hall and the Rivera Library will respect current building setbacks.

The LRDP recommends the Library Mall extend to the south creating a link between the Carillon Mall and the future Citrus Mall. On the south side of Olmsted Hall, the Library Mall changes from open lawn to a narrow, linear courtyard, to accommodate new buildings to be constructed along West Campus Drive. The nature of this courtyard has been patterned after that of the Science Library, where landscaping and the close proximity of building entrances create a vibrant pedestrian environment.

Citrus Mall

The Citrus Mall was envisioned by the LRDP as an appropriate organizing feature for a new academic zone on the East/Southeast Campus. The topography of the site necessitates that the open space be designed as a series of stepped land forms resulting in a distinctly unique campus space. Named for the Campus' citrus heritage, the Mall is organized to be a visual link to the CESC at the top of the hill. Buildings on the Mall should celebrate the Spanish-style architecture of the CESC. Exactly how this is interpreted will be explored as the area is developed, but it is highly desired by UCR that new buildings incorporate the following elements in their design:

- Building program that does not require rooftop mechanical units
- Gabled roofs, preferably of terra cotta clay tile
- Arcaded walks at the ground floor of buildings facing the open space
- A public plaza and focal point element at the intersection with the Library Mall

Streetscapes

The East/Southeast Campus Area Study reflects UCR's desire to change the way current campus streets are used, in order to reduce traffic congestion and minimize conflicts between pedestrians and vehicles. The character of campus streets will change to accommodate multiple modes of transportation, while new buildings will change the way in which streets are viewed.

Campus Drive

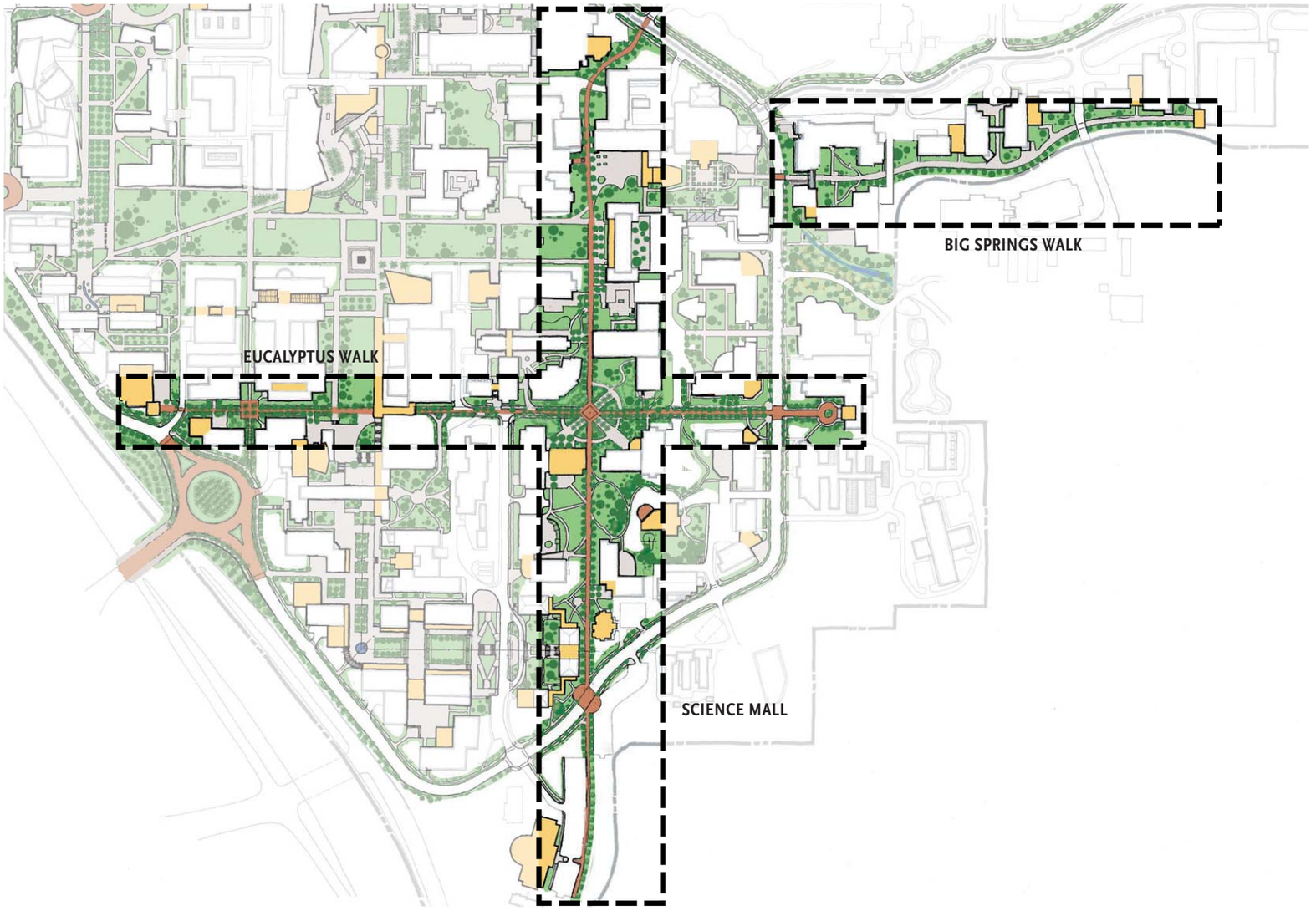
Campus Drive will continue to provide access to the perimeter of the academic core, but the road section will accommodate two lanes of vehicular traffic as well as designated bicycle lanes in both directions. The outboard edge of either side of the street will provide an edge for a formal planting of shade trees. Sidewalks will link new buildings to interior campus paths. New buildings will establish a consistent setback, giving the perimeter of campus an appropriate urban character.

Big Springs Road

Big Springs Road serves as the eastern gateway to the East Campus. The existing character of its tree-lined meandering roadway will remain unchanged. The arroyo along the southern edge of the road will remain a naturalized landscape buffer to the development of the Panhandle District. An entrance sign at the intersection with Valencia Hill Drive, as defined by the 2004 MMTMS, should be a priority to help identify the Campus to visitors.

Canyon Crest Freeway Underpass and Roundabout

Improvements by Caltrans to the Canyon Crest Drive freeway underpass have helped to provide a safe grade-separated pathway between the East and West Campus for pedestrians



and bicyclists. The Study's proposed roundabout at the intersection with West Campus Drive distributes pedestrians and bicyclists away from the areas of vehicular turning movements to appropriate portals into campus on the north and south of Campus Drive where street crossing distances are shortest. The roundabout is also intended to serve two landscape-specific roles:

- Create a signature landscape as part of the arrival sequence for students, staff, faculty, and visitors emerging from the underpass
- Provide a landscape specific element to "announce" the Campus to motorists on the freeway. It is anticipated that a similar element will be developed on the West Campus side of the freeway to establish a landscape gateway zone for UCR that could be used as a wayfinding tool for visitors

Walks and Civic Space

A well-established network of walks already exists on the East Campus and UCR's Campus Design Guidelines define their construction specifications and maintenance requirements. However, the role of walks is to connect pedestrians to campus civic spaces accommodating not only pedestrians but service and emergency vehicles as well. Civic spaces are building entries and lobbies, social gathering areas, dining venues, and instructional spaces. The expansion of the civic realm of Campus, as defined in this Study, provides opportunities to strengthen existing campus connections and establish new links between the Campus core and planned development on the East/Southeast Campus. Two central walks are discussed in the LRDP: the Science Mall and Eucalyptus Walk.

Science Mall

The LRDP suggested the Mall would extend from the northern edge of the East Campus at the Engineering 2 Building proceeding south, intersecting Eucalyptus Drive, then shifting over to Citrus Drive. Upon evaluation, the Design Team recognized that Citrus Drive would not be as successful a pedestrian corridor, as conceived by the LRDP, due to the following:

- The location of the central steam plant on the west side of Citrus Drive prevents creating a streetscape on both sides of the path
- Topography associated with the site that made it unsuitable for universal accessibility

- The service zone between the Entomology and Genomics Buildings will require Citrus Drive to be used daily not only by service and delivery vehicles but to accommodate on-street temporary parking for faculty who need to make daily trips between the East and West Campus for their research projects

A more reasonable opportunity is for the path to continue directly south from the intersection with Eucalyptus Drive to South Campus Drive. This route allows for a pedestrian path to be developed; one that will not require access by delivery vehicles, preserving it primarily for pedestrians. A richly-detailed pedestrian experience is intended along this path, with distinctly unique landscaping as a campus identity tool.

Eucalyptus Walk

The LRDP recommended that Eucalyptus Drive become a significant east/west pedestrian oriented corridor. As landscape options were considered during this Study, University staff expressed concerns about the use of Eucalyptus trees on campus; they requested that proposed plantings exclude this particular species.

The walk is envisioned as a primary pedestrian corridor linking the sciences area in the eastern half of campus to the social sciences dominated area on the western half of the East Campus. Significant architectural elements are recommended to be included in the design of new buildings at either end of the walk to serve as focal points.

Big Springs Walk

Big Springs Walk is intended to provide a well-lighted, shade-tree-lined path between the proposed parking garage at the east end of Parking Lot 13 and the gateway into the academic zone created by the Physical Sciences Building 1 and the potential Physical Sciences 2. The path also will serve the entries of the partnership/venture buildings and be universally accessible and sized to accommodate pedestrians as well as emergency vehicles. Design of the path will include regularly spaced benches or furniture to provide opportunities for informal gatherings.

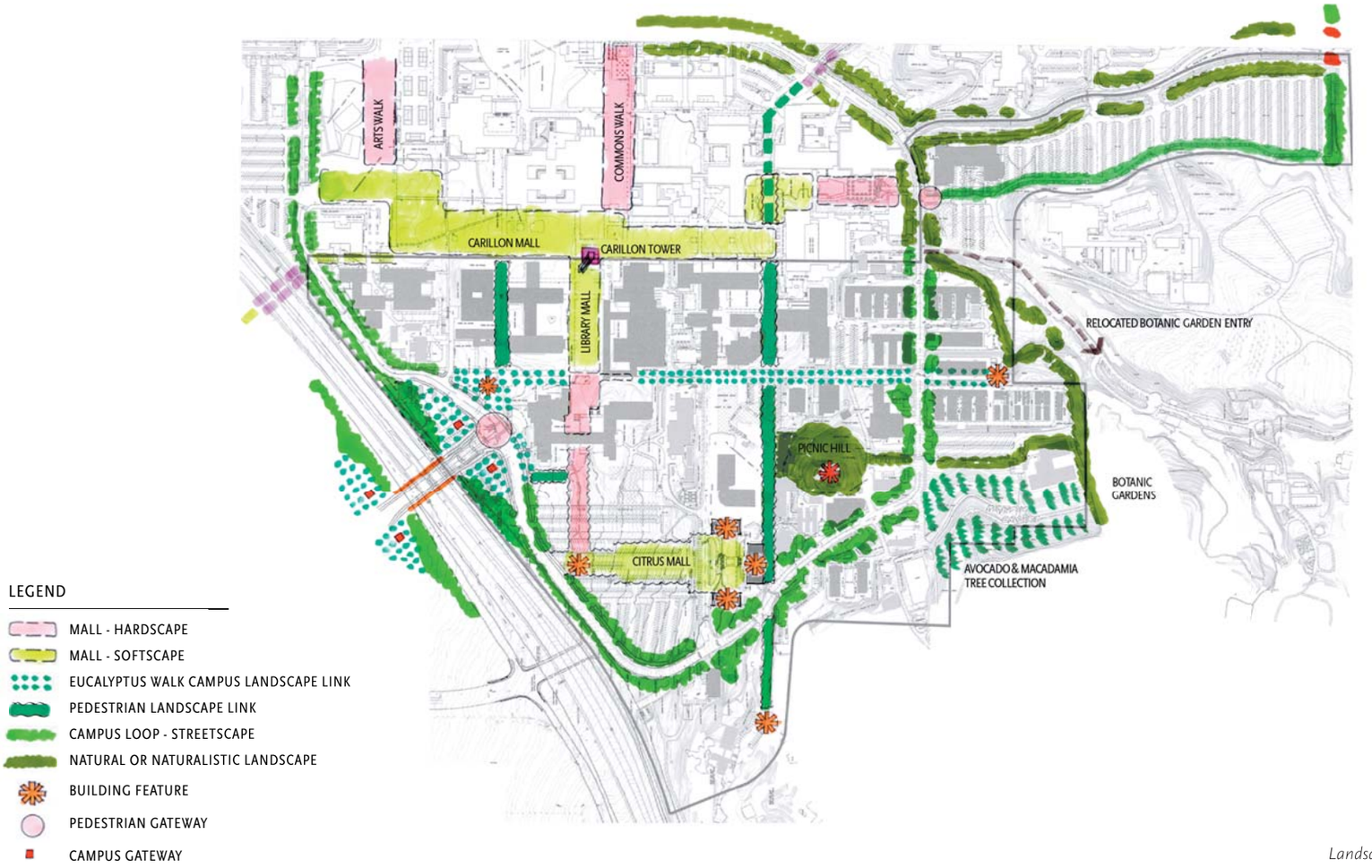
Building Design Criteria

Specific design of the new buildings described in this Study will be the purview of individual project architects and planners guided by UCR's Campus Design Guidelines. However, specific consideration should be given to the following areas:

- Building entry. Building entries should be easily recognizable, scaled with proper proportion to total building mass. Where designated as a focal point opportunity, special attention should be given to make appropriate material choices with evening visibility. Locations where this is particularly important are:
  - Library Information Commons
  - Buildings at the eastern and western terminus of the Eucalyptus Walk
  - Stair tower of the proposed parking deck on Parking Lot 13
  - Panhandle District buildings along Big Springs Walk
- Building scale. In order to accommodate the growth necessary to meet a campus-wide target of 1.0 FAR, buildings with a minimum height of three or four-stories will be required. However, as individual building programs and proposed sites are considered, flexibility in the number of stories must be allowed to address budget and phasing while achieving 1.0 FAR on average
- Building setbacks and build-to lines. Maintaining setbacks and build-to lines are essential to establishing new and preserving existing campus open space and views. Areas where this is critical include:
  - Carillon Mall
  - Library Mall
  - Citrus Mall
  - Campus Drive
  - Valencia Hill Drive landscape buffer (minimum of 100')
- Building materials. UCR's Campus Design Guidelines address specific building material standards. Building architecture and mix of materials often are dictated by individual budgets, but every effort should be made to insure that the campus maintains a high degree of architectural integrity. Specific areas where building material choices are critical include:
  - Freeway frontage: The public perception of the Campus will be established here. This also will be a visual link between the West and East Campuses
  - Panhandle District: This area will be highly visible to neighborhoods east of Valencia Hill Drive
  - Library Information Commons: This will be a significant icon on the Carillon Mall and juxtaposed to the Commons
  - Buildings located along East Campus Drive: It is critical that the character of the academic zone be carried to completion along the perimeter road
  - Citrus Mall: These buildings need to celebrate UCR's citrus heritage and be seen as contributing to and completing the gesture made by CESC. They also will be the first and potentially lasting impression seen of the Campus for motorist traveling north on the freeway

Science Library

Proposed Traffic Circle at Canyon Crest Drive & West Campus Drive Intersection



Landscape Framework

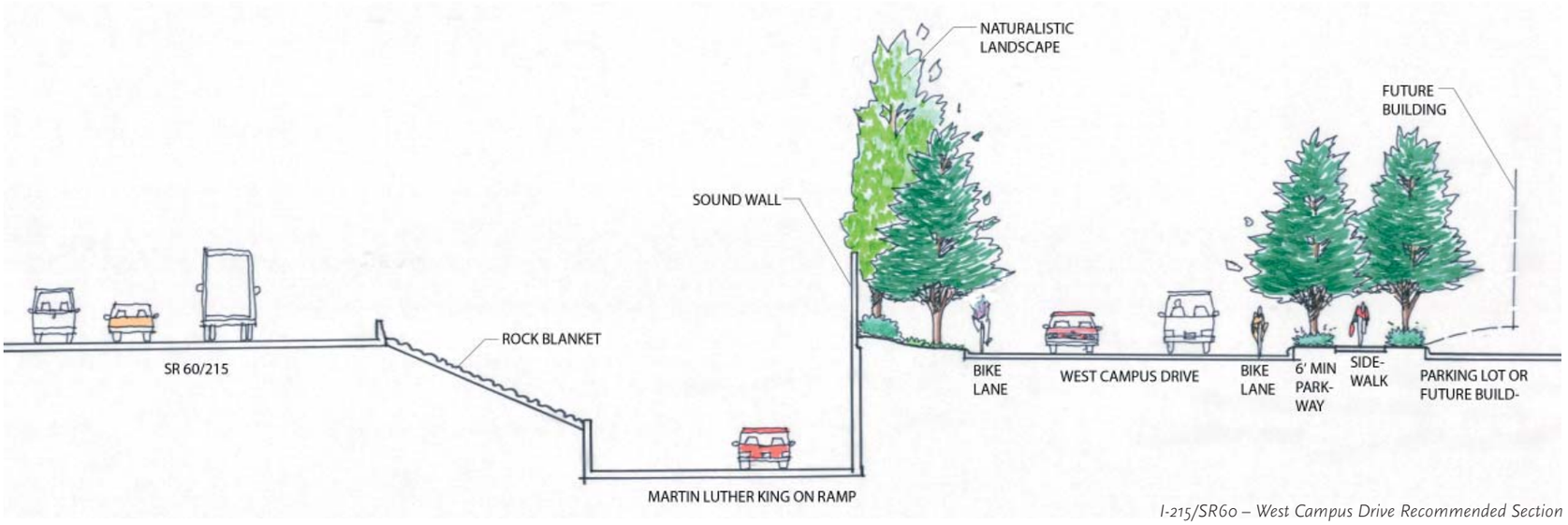
Landscape Concept

Campus open spaces require as much planning and thoughtful consideration as do facilities and infrastructure projects. The quality and character of campus open space can have a greater impact on a university's sense of identity than any other physical construction.

The Landscape Concept Plan for the East/Southeast Campus Area Study builds upon the existing open-space framework, while introducing a more sustainable landscape palette as a transition to the Box Spring Mountains. To achieve a balance between the many factors influencing the organization and character of the campus, several guiding principles have been established:

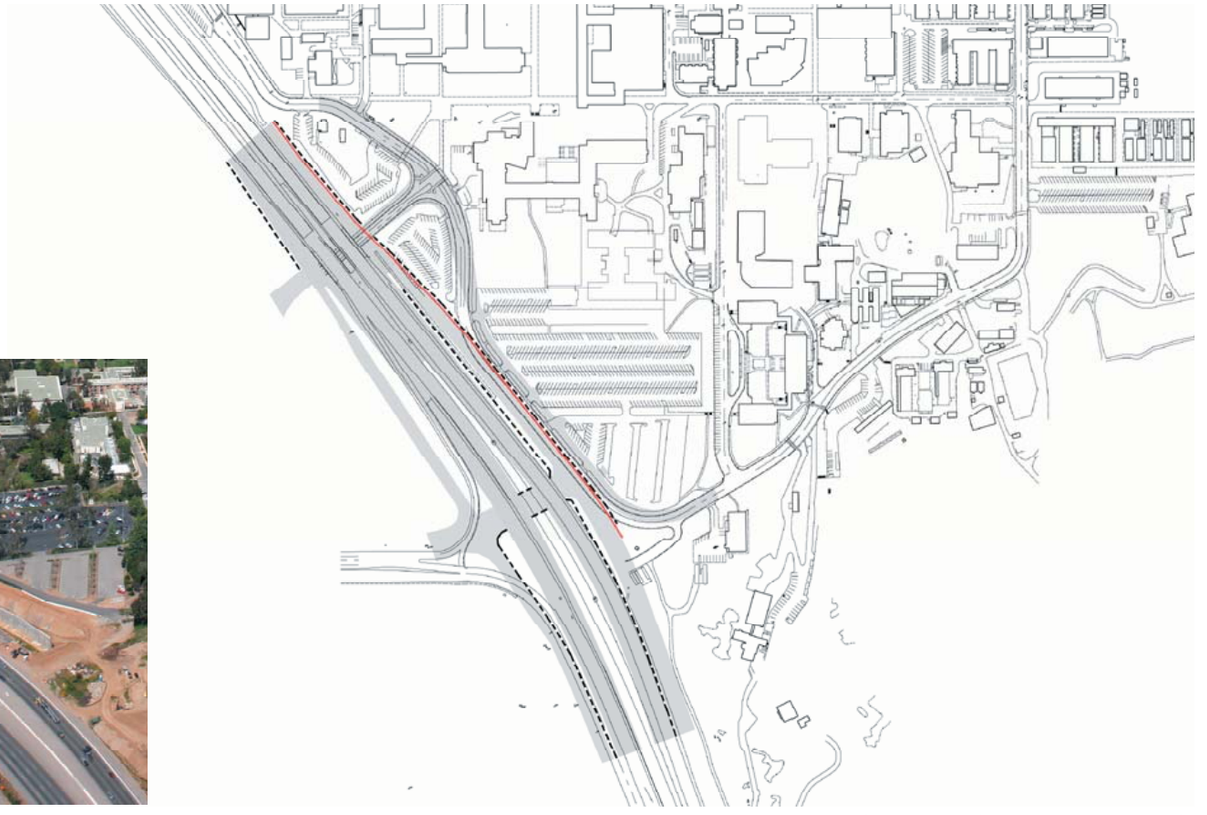
- Mark campus gateways for automobiles, pedestrians, and bicyclists creating a strong sense of arrival to the campus with landscaping and buildings
- Create a campus road system that visually connects the campus and provides wayfinding and traffic calming
- Create a strong visual link to the Campus core between East and West Campus, reinforce the urban design structure, define major campus corridors, and link campus areas to each other
- Enhance the unique features of the East/Southeast Campus area, Picnic Hill, and Citrus Experiment Station Complex, among others
- Give variety, interest, and diversity tailored to each building or groups of buildings with landscaping in front of buildings and in courtyards
- Preserve and enhance views
- Develop a family of common elements
- Recognize the need for sustainability, water conservation, and ease of maintenance

Based on these principles, an open space/landscape framework has been developed. It not only will enhance the quality of the campus environment and reinforce the identity of the Campus, but also will establish a framework for future growth and development of the Campus. Key components of the Landscape Concept Plan are described in detail in the following sections.

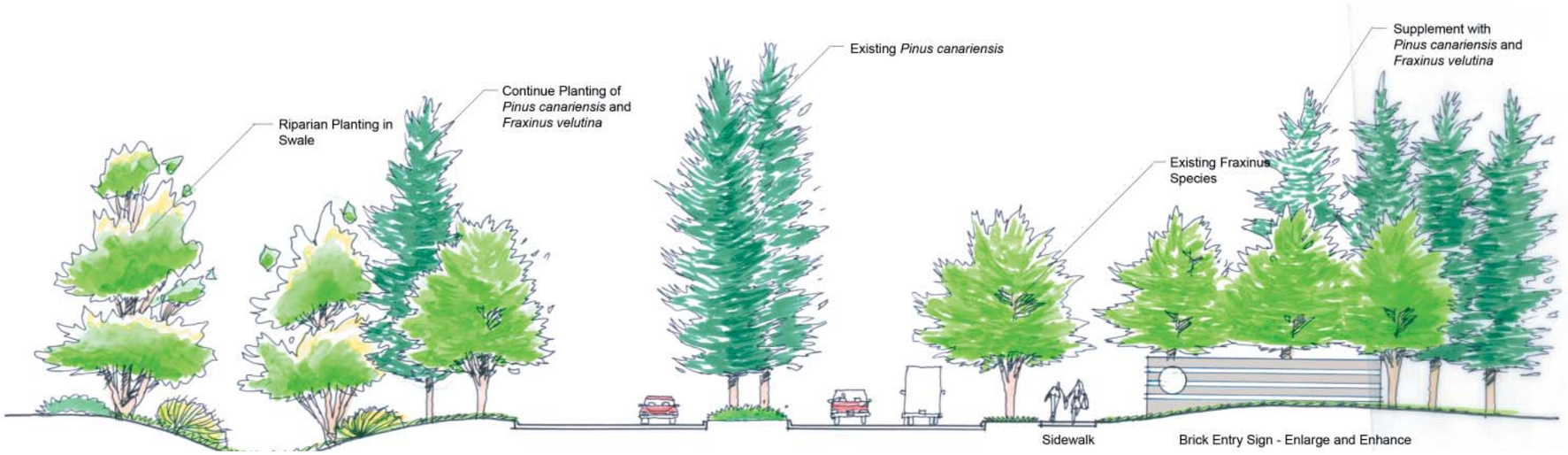


I-215/SR60 – West Campus Drive Recommended Section

I-215/SR60 Road Improvements



CalTrans Proposed Freeway Improvements Plan



Proposed Big Springs Road Entry Section

Campus Edges and Gateways

Canyon Crest Freeway Underpass

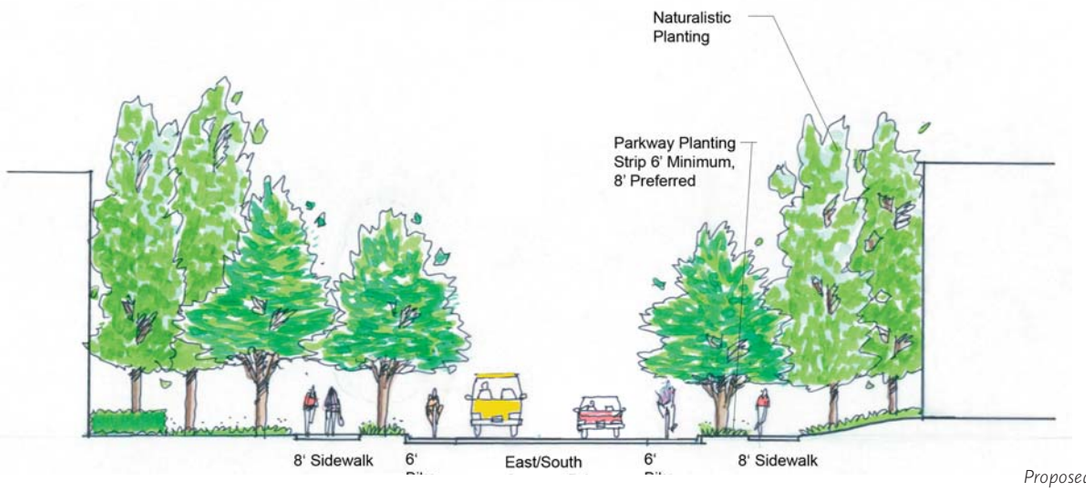
A significant part of the East/Southeast Campus fronts on the I-215/SR60 freeway. With the recent widening of the freeway and demolition of mature plantings, development of an identifiable edge for the Campus, and visually connecting the East and West Campus, will assist in creating a stronger presence for UCR. The landscape should be bold and easily identifiable from the freeway. Plans currently proposed by Caltrans will need to be significantly enhanced to achieve this. Plant species should capture the historic cultural landscape of Riverside and UCR. This gateway is also an important visual link to the East and West Campus. Key features include:

- Bosques of Washingtonia robusta (Mexican fan palm) set within and around a roundabout as a University icon. Similar plantings of fan palms should be located on the west side of the freeway at Canyon Crest Drive
- Establish a set of identifiable arrival images or icons for the Campus at this location, such as lighting, signage, or campus banners. Signage, or UCR icons, should be incorporated into the face of the theatre wall or new buildings that have high freeway visibility
- Landscape planting should be consistent on both sides of the freeway
- Plant material should screen the edges of the freeway from inside the Campus, but take care not to block views from the freeway to the CESC, Carillon Tower, and West Campus

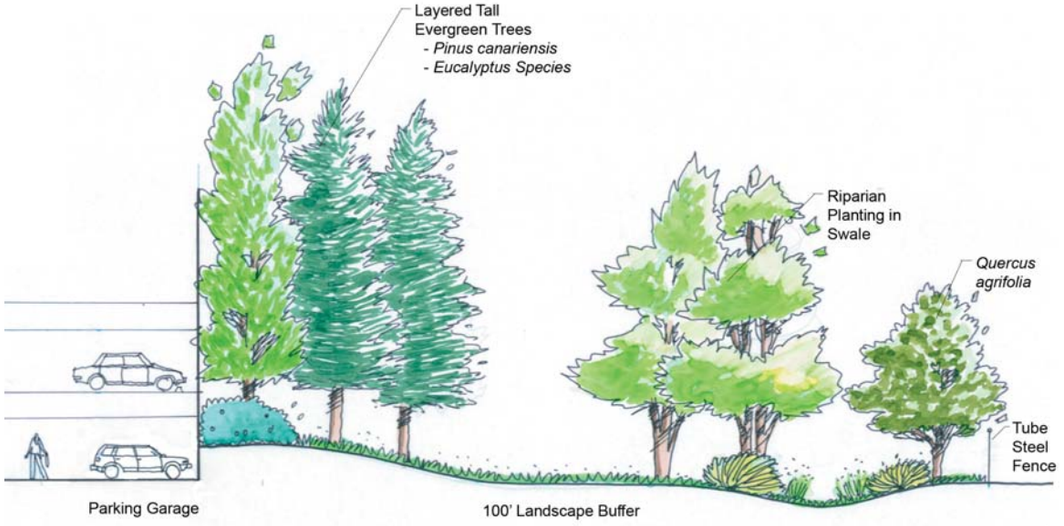
Valencia Hill Drive and Big Springs Road

The eastern edge of the study area is located next to a residential neighborhood and needs to respect this relationship while also clearly distinguishing the boundary of UCR. A significant buffer of 100 feet has been established along Valencia Hill Drive, including the proposed parking garage at the Big Springs Road intersection. Design should include:

- A consistent landscape buffer along the entire eastern edge
- Incorporation of a bioswale system
- A layered landscape along the swale consisting of riparian plants such as Sycamore, Cottonwoods, and Willow, and a second layer of tall evergreen plant material to screen the garage, consisting of Eucalyptus grandis, Pinus canariensis and Sequoia sempervirens
- Shrubs and vines to screen and soften the parking structure
- Design of the parking structure should reinforce the gateway concept
- Continue the existing planting of Pinus species and Fraxinus (Ash)



Proposed East/South Campus Drive Section

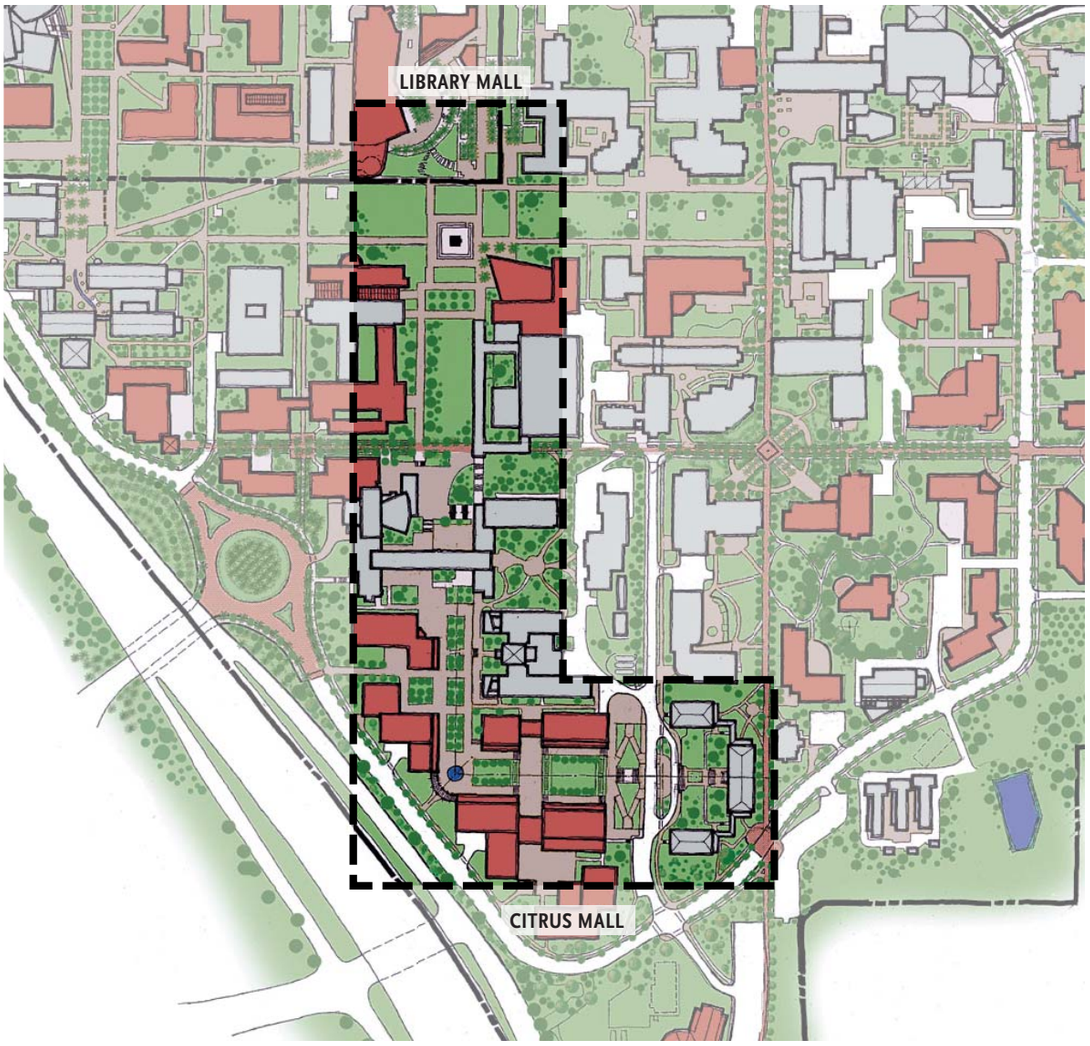


Proposed Parking Garage Landscape Buffer Section

East/West/South Campus Drive

East, West, and South Campus Drives serve as the primary internal roadway for the East/Southeast Campus and are an important component of the arrival sequence onto Campus. The 2005 LRDP and the 2004 MMTMS indicate that these will become controlled vehicular access roads in the future. Currently these roads lack a unifying landscape theme. To reinforce the Campus Drive identity and create a pedestrian-oriented space, the continuation of the naturalistic planting of Eucalyptus, Pines, and Ash is proposed to be extended from the CESC to the intersection of Big Springs Road and all along West Campus Drive. Important elements reinforcing this as a pedestrian space include:

- Consistent landscape character with limited species
- A sidewalk with a parkway introduced as a planting strip should be provided along the entire drive, to provide traffic calming and visually decrease the road width
- Bike lanes on both sides
- Distinctly marked crossings for pedestrians with special paving or speed tables at key pedestrian crossings



Computer Animation of Proposed Library Mall

Computer Animation of Proposed Citrus Mall

Campus Open Space Corridors

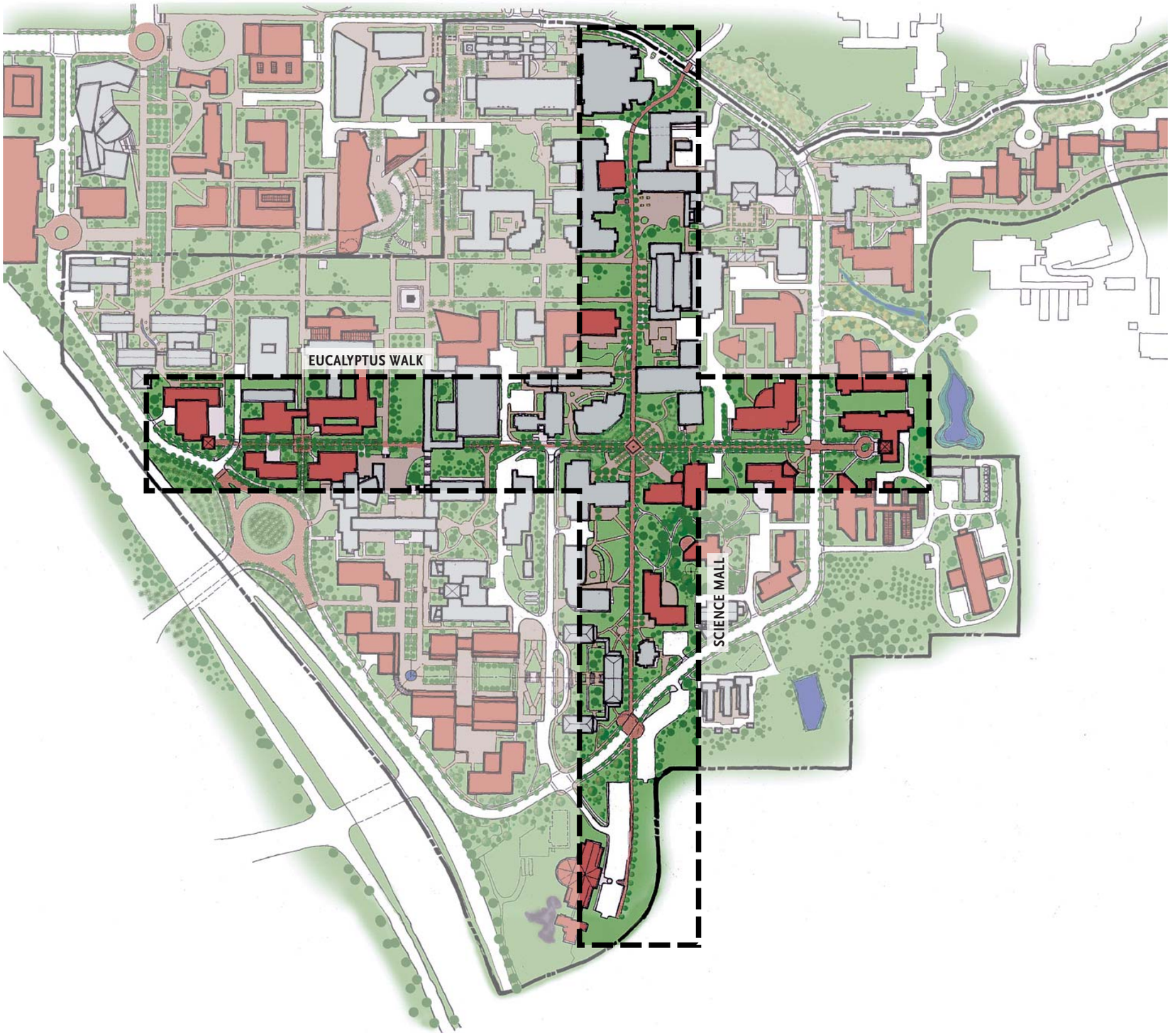
The existing open space of the Campus currently is focused on a hierarchy of malls and walkways characterized by a series of pedestrian malls complimented by secondary systems of walks and paths. The wider malls are scaled to accommodate groups of students traveling between classes, as well as fire trucks and service vehicles. Malls should be treated with a consistent quality of landscape, hardscape, signage, and lighting. Pedestrian-scale lighting and formal plantings of canopy and flowering trees reinforce the hierarchy of the malls within the pedestrian network, orienting pedestrians to the circulation patterns. Openings in the planting shall be permitted at building edges and entries. Specific tree species are identified for each mall and secondary walk, to create a unique character and identity for each corridor.

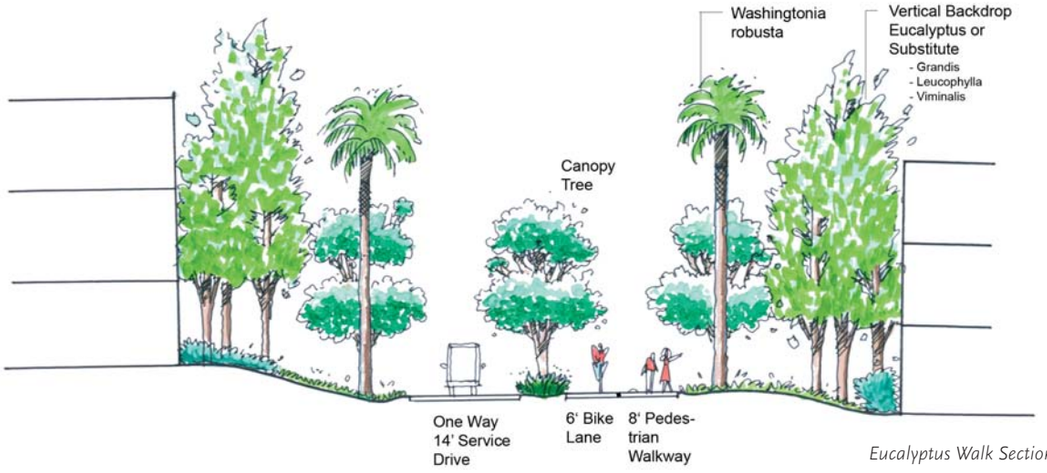
Library Mall

The system of malls begins with the Carillon Mall. The Library Mall extends south from this and is continued as a pedestrian system to connect with the Citrus Mall. The existing Library Mall contains a straightforward planting of a double row of Elm trees and a simple lawn panel. The regular planting of Elms is proposed to continue, although the lawn will give way to a series of large geometric planting areas consisting of low water using shrubs and ground covers. The Science Library is a good example of what this space could look like. The Library Mall terminates at the Citrus Mall with a focal point such as a water element, art piece, or building icon.

Citrus Mall

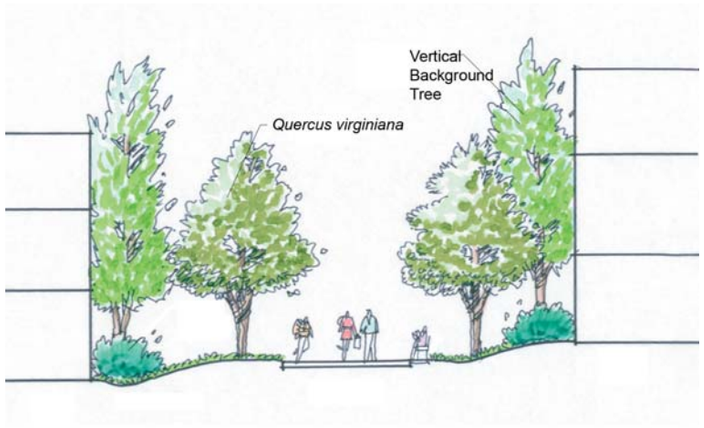
It is anticipated that Citrus Mall will become a signature feature of the East/Southeast Campus area. The landscape draws from the classic campus mall, with open lawn panels maintained as a ceremonial open space framed by rows of trees. The intent is to frame the architecture of the CESC and create a timeless landscape with historic references to UCR's agricultural past. The tree planting would consist of alternating Phoenix Canariensis (Canary Island date palm) and citrus trees. The varieties of citrus could vary, serving as a living outdoor education and historic resource. In addition to the agricultural landscape proposed for this Mall, commemoration of the citrus heritage, such as engravings of UCR's significant role in the industry, or tile mosaics of packinghouse crate labels, could be incorporated in the design.


EUCALYPTUS WALK
SCIENCE MALL



Eucalyptus Walk Section

Computer Animation of Eucalyptus Walk



Science Mall Section

Computer Animation of Science Mall

Eucalyptus Walk

The Eucalyptus Walk performs two important functions. It links buildings from the roundabout to the eastern edge of the Campus at a reasonable and accessible grade, and visually links the East Campus landscape of skyline palms across the freeway to the West Campus. The LRDP proposes fan palms and canopy trees for the West Campus Canyon Crest Mall and Grove. Key features include:

- A skyline planting of Washingtonia robusta (Mexican fan palm) alternating with a canopy shade tree. Washingtonia robusta is taller at maturity with greater tolerance of disease, soil, and drainage conditions than Washingtonia filifera and will more effectively compete for prominence with the existing eucalyptus trees
- Eucalyptus ficifolia as the preferred shade tree, but with recent pest infestations of some varieties of Eucalyptus, alternative trees may be considered such as Melalueca, Linariifolia, or Tipuanu Tipu
- A diverse series of spaces should be incorporated, including courtyards and small quads, to provide for a diversity of uses such as interactive gathering areas, dining terraces, outdoor classrooms, and small amphitheatres, passive/informal areas, and quiet personal spaces such as reading gardens

Science Mall

A second important connection links the far southern area of the Campus east of Citrus Mall, through the Carillon Mall, and ultimately providing connections to Veitch Student Center (Health Service Building) and the residential neighborhoods further north. This walkway is also tangent to grade and links many different academic programs. This promenade provides the following:

- Opens up Picnic Hill to a major walk, providing more exposure and direct access
- Formal planting of majestic and long-lived Quercus virginiana (Southern Live Oak), connecting the two natural edges of Campus. Used for its pyramidal growth habit and greater tolerance for urban campus conditions than Coast Live Oak, this tree is widely grown and planted commercially in Southern California
- A major intersection and gathering area with the Eucalyptus Walk

As with the Eucalyptus Walk, individual courtyards and building entries should be planned along the walk and should seek individuality in expression while maintaining a common visual link. Small gathering areas should be provided at key building entries and key pedestrian intersections, to encourage increased social interaction between students, faculty, and staff.

Big Springs Walk

Connecting the proposed parking structure and the partnership/panhandle area to the East Campus academic core will be Big Springs Walk. Since this walk is on the edge of a natural open space, the landscape for this walk should be more naturalistic. Native and hybrids are encouraged, such as Live Oaks, Pines, Sycamores, Toyon and Buckeye. Drought tolerant, natural planting styles are best suited for this area. As feasible, "bio-swales," which handle the first flush of storm run-off and discharge, should be incorporated in the design of this landscape.

Yards and Courtyards

Academic and social interaction should be encouraged with the provision of formal and informal seating areas in the form of front yards and courtyards. Seating areas, with ample shade and lighting, should be located at key intersections and primary entries to buildings.

The landscape of courtyards and quads should respond to Riverside's climate of hot summers and mild winters. Planting of deciduous trees, providing shade in the summer and sunny light spaces that take advantage of mild winter days, are desirable. Selected and limited use of water in key gathering areas can provide a cool retreat or oasis in hot summer months. Low shrubs and groundcovers should be planted adjacent to buildings to soften the edges of the structures.

The manicured, somewhat more formal character of these courtyards and quads will consist of trees, shrubs, and groundcover, planted in either a formal or informal manner. Additional bosques of flowering and canopy trees should be planted as appropriate to create focal areas. Special accent planting, such as flowering trees and shrubs, should be used to highlight entries and visual interest in outdoor gathering spaces. The use of seat walls and other special landscape elements also will be encouraged to define spaces and create focal points.

Unique Landscape Features

Several special landscape features exist in this area of the Campus that could be preserved and enhanced to provide places to entertain donors, dignitaries, gather members of the greater campus community, and host official functions. Picnic Hill and College Building North Gardens could fulfill this role, which is currently lacking on Campus.

Picnic Hill

Picnic Hill is largely a hidden natural open space containing a Eucalyptus forest with good views across the Campus and City. It has been neglected over the years and should be enhanced by providing clear and accessible pathways directly connected to the Science Mall. New buildings proposed adjacent to Picnic Hill should engage the space with patios and courtyards nestled into the landscape to encourage ownership of the space. The landscape character should include:

- Plantings that emphasize the natural character, with thinning or removal of weak and diseased trees, and removal of overgrown shrubs
- Introduction of more "pastoral" landscape reminiscent of the natural landscape of Southern California that emphasizes grasses and openness
- Introduction of a more "sustainable" landscape, with long-lived, low-maintenance, drought-tolerant plants that also provide a different landscape experience close by
- Unique casual facilities, such as a hilltop gathering space, that is view-oriented with a well-designed rustic shade structure, seating, informal dining, and BBQ facilities
- Carefully sited picnic tables and benches

Campus Building North Gardens

A hidden garden exists behind College Building North and is nestled into the base of the Box Springs Mountains. This was the former director's residence and garden dating from 1916. The building site has some of the best views on Campus and the opportunity exists to restore the building and the gardens into a unique Campus feature. Currently there is little connection from the building to the garden. The garden contains a wide variety of mature trees and shrubs, rock walls, planted terraces, small water features, and seating areas. The garden sadly has been neglected for a number of years and is overgrown. Opportunities exit to:

- Restore the garden to a casual retreat for outdoor classrooms, dinners, picnics, weddings, and receptions for local and visiting dignitaries
- Utilize the project as a demonstration garden for advancing technology such as a state-of-the-art water-efficient irrigation
- Partner with private local enterprises to provide funds for restoration

Picnic Hill

Citrus Experimentation Station Main Building

Avocado and Macadamia Tree Collection

Citrus Experiment Station Complex (CESC)

The Citrus Experiment Station was commissioned in 1907 and became instrumental in maintaining southern California's citrus industry as the worldwide leader. The landscape surrounding this important historic icon has matured, hiding areas of the buildings. The landscape should be thinned and maintained to frame and increase views of the building from the freeway and from within the Citrus Mall. The grounds adjacent to the building should be maintained in the period style of the building, with geometric beds and borders with informal massing of trees.

Avocado and Macadamia Tree Collection

The Avocado and Macadamia tree collection is a remnant of the early agricultural heritage of the Campus. It should be maintained as a tribute to this agricultural history of the Campus. An informal walk could be extended through the grove, providing a connection between adjacent Campus buildings and the Botanic Garden.

Common Site Elements

Hardscape, landscape, and site lighting play an important role in establishing a safe and secure environment for students, staff, faculty, and visitors. These materials should be utilized in ways that promote actual, as well as perceived, safety of Campus areas, including parking structures and surface lots, pedestrian pathways, Campus open spaces, and building entries.

Lighting contributes to campus identity, safety, and ambiance. Lighting should provide illumination for Campus entries, parking areas, and pedestrian corridors. Outdoor lighting should be designed to minimize light spilling onto adjacent, non-University property, to enhance natural color rendition, and to provide the required illumination for safety. Lighting in open areas should create balanced illumination such that both the perception of and actuality of safety is assured.

The use of consistent site furniture, lighting, and signage will help to unify the Campus as a whole and enhance architectural and open space character. Site furniture consists of bicycle racks, loose and fixed seating, tables, benches, and trash receptacles.

Bicycle racks should be located along pedestrian "promenades" at key building entries, preferably to the side of buildings. Care should be taken to ensure that these racks do not impede entry to the building or create a visual blight at the building entrance.

Fixed seating includes benches and seating of comfortable height incorporated into planters, low dividing walls, and/or the façade of buildings. Appropriate site furniture supporting pedestrian activity should be placed throughout the Campus and should be designed, chosen, and located to reinforce the programmed uses of the open space area: eating, outdoor classrooms, solitary relaxation or study, and social interaction.

Landscape Sustainability

The cost of installation and the efficiency of on-going maintenance and care for the pavement, planting, and site furniture are critical ingredients in the creation of a successful campus landscape. These considerations can be implemented in a phased manner as each new building, open space, and pedestrian component is developed.

For the bulk of the pedestrian network, colored concrete, "UCR Tan," with simple broom finishes is proposed. The use of this material allows simple repairs and patches, reducing the contrast between new and old concrete, and allowing contiguous projects, which frequently occur over an extended period to have a consistent look and feel. Special pavement could be used in accent areas, such as intersections, building entries, and courtyards.

The proposed planting strategy is to concentrate more maintenance-intensive landscapes in manicured courtyards and quads, while encouraging a more sustainable landscape around the Campus perimeter and within secondary open spaces. Shrubs and groundcover are proposed within this more informal or pastoral landscape, due to low maintenance and irrigation requirements. Where shrubs are used, species that require ongoing pruning and care to maintain their form should be avoided.

Implementation

Landscape improvements are essential components of the overall plan. The intent is to enable future building development, while simultaneously creating a system of open space and landscape improvements. A key obstacle of this is the traditional funding mechanisms for building construction that often only allow for limited site and landscape improvements. Implementation of key elements of the plan will require a significant level of funding beyond that typically allocated for building construction. To ensure development of these elements, specific strategies should be explored. To the extent possible, landscape improvements can be associated with adjacent building programs. In addition, a separate fund-raising program should be considered to support the construction of improvements where funding cannot logically be associated with a specific building project.

FUTURE CONDITIONS – UTILITIES AND INFRASTRUCTURE

Comparison of the total area to be served in the East/Southeast Campus area by the year 2015, as projected by the East Campus infrastructure DPP prepared by Bechard Long & Associates, against the currently proposed area in the Preferred Plan results in an actual, though small, decrease in gross square feet (GSF), when all the proposed demolition is taken into account. The Preferred Plan proposes approximately 280,000 GSF more new construction than did the DPP; however, the Preferred Plan also proposes considerably more buildings for demolition and realignment with higher density development. Area by area there are differences in proposed GSF and/or use of the space. These areas will need to be addressed in the detailed planning of infrastructure, as discussed herein.

Each of these infrastructure systems was evaluated against their capacity to serve anticipated construction of future buildings that would be needed to accommodate projected growth. Except for the natural gas and storm drainage systems, the DPP projected specific projects for each infrastructure system to serve future development in the various areas of the East Campus. The projected systems were sized to serve the building sizes, locations, and construction schedule anticipated by the Office of Academic Planning and Budget and presented in the DPP.

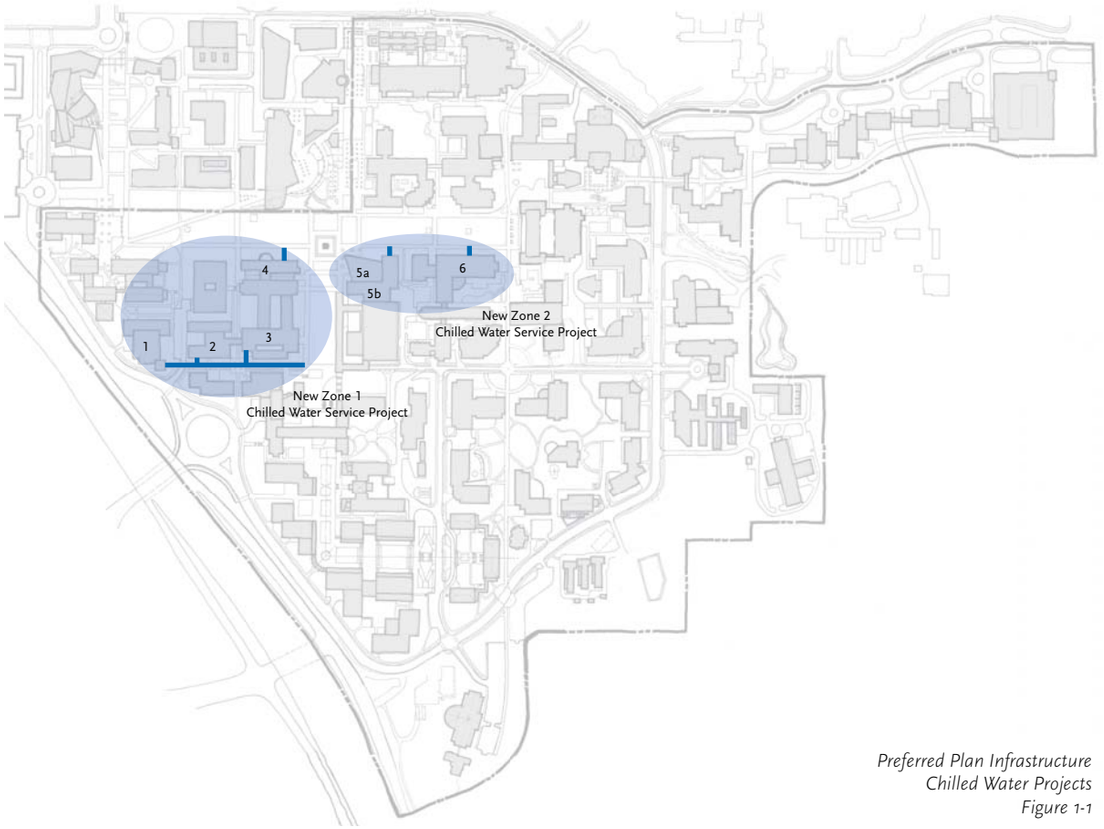
The DPP included no new structures or utility projects specific to the South/East Carillon Mall District after 2005, while the Preferred Plan calls for the future construction of buildings in this area that will result in a net increase of approximately 355,000 GSF (square footages shown on page A-1). Therefore, new infrastructure projects will be needed to accommodate proposed building construction from the Preferred Plan.

The following discussions of future construction address DPP projects within the East/Southeast Campus area. DPP projects for the north area of the East Campus are outside of the study boundary and are not included in these discussions. DPP projects completed with the East Campus Infrastructure Improvements were included with the discussion of existing conditions for each system.

Chilled Water

The LRDP projected that to accommodate East Campus growth through the year 2015, the chilled water system would need to provide 26,000 tons chiller capacity to accommodate full thermal storage (12 hour). The DPP calls for 15,000 tons for six-hour storage; 6 million gallons of TES and a distribution system flow capacity of 25,000 gallons per minute. The LRDP also called for the installation of a satellite chiller plant and distribution piping to complete a looped system around the south section of the East Campus. The DPP continued with these recommendations in more detail, identifying specific projects based on proposed building construction. DPP project CH-23 increased the Satellite Chiller Plant capacity by 2,000 tons and adds TES #3 which provides for an additional 2-million-gallons of storage. This DPP project contributes to the overall capacity of the Chilled Water System serving the East/Southeast Campus.

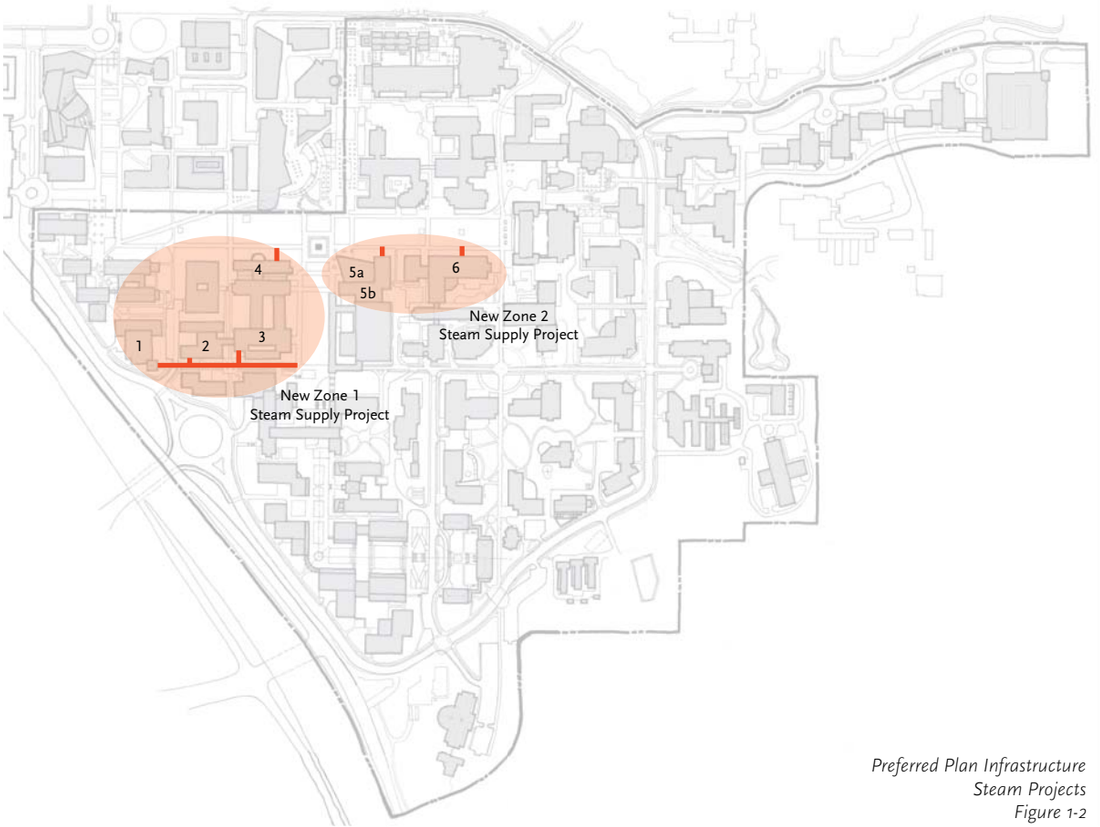
The greatest load demand for cooling and heating originates from laboratory space. Laboratory demand is approximately twice that for classroom space and three times that for administrative space. The overall East/Southeast Campus projected laboratory space is approximately the same for both the DPP and the Preferred Plan. On a district-by-district basis, however, building use is significantly different for some areas as addressed in the following.



Preferred Plan Infrastructure
Chilled Water Projects
Figure 1-1

The following changes to the DDP projected projects should be evaluated as they may be required as a result of implementation of the Preferred Plan:

- New projects will be required to provide chilled water supply piping to the proposed Buildings 1, 2, 3, 4, 5, 6, 22, and 23. These buildings add approximately 355,000 GSF demand to the existing demand in this area and the DPP did not account for any specific new projects in this area. These projects would include:
  - A buried extension of a line to the west from the west end of the existing tunnel in Eucalyptus Drive to serve Buildings 1, 2, 3, 22, and 23 and a buried extension south from the tunnel north of Building 4. (Ref. Fig. 1-1)
  - Buildings 5 and 6 comprising new classroom and general use space are encircled by the existing utility tunnel, which should provide for the connection of future chilled water laterals to each of the new buildings. (Ref. Fig. 1-1)



Preferred Plan Infrastructure
Steam Projects
Figure 1-2

- DPP project CH-31 calls for buried 8-inch chilled water lines to the east from a connection to the 24-inch line in East Campus Drive to serve three proposed structures in the Parking Lot 13 area with a projected total of 360,000 GSF. This space would have been primarily physical science classrooms under the DPP. The Preferred Plan identifies this area as the Panhandle District to include 450,000 GSF (the parking structure, Building 21, is not included, as there are minimal cooling demands for parking) approximately 50 percent of which will be classroom space and the other 50 percent light lab. With the increase of approximately 25 percent in GSF over the DPP, and the increase lab space demand, detailed design should re-evaluate the size of the future chilled water supply and return piping from East Campus Road for the Panhandle District.
- DPP project CH-32 serves the area north of the East/ Southeast Campus area and therefore the Preferred Plan has no impact on that project
- DPP project CH-33 was proposed 10-inch and 8-inch extensions to serve several classroom buildings in the existing Parking Lot 6 area, designated as the Citrus Mall District in the Preferred Plan, totaling approximately 500,000 GSF. The Preferred Plan proposes Buildings 25 through 29 and Building 35 in this area, which will provide approximately 450,000 GSF of classroom space. CH-33, as proposed, will be able to accommodate the Preferred Plan projects but will require a 4-inch extension of the supply line to serve Building 35
- DPP project CH-34 was proposed to serve approximately a net increase of 806,000 GSF of laboratory and classroom space by extending the existing 24-inch main in East Campus Drive to the south with a new 8-inch supply to provide laterals to the new building sites. The Preferred Plan now identifies approximately 745,000 GSF of net new space in this area most of which is laboratory space. Although the total net increase in GSF for this Science District decreases with the Preferred Plan, the chilled water demand increases nearly 20 percent as a result of the increased laboratory space. Therefore, detailed design of CH-34 should address this increase in demand in sizing line extensions and lateral sizes to accommodate this increased demand in the Science District

Steam/Condensate Return

The LRDP projected a full build-out steam demand of 96,000 lbs/hr and that the existing (2002) steam generation capacity would be adequate. Projections for future demand made in the DPP process are higher indicating a total future demand for the East Campus of approximately 104,000 lbs/hr.

Preferred Plan impacts to the DPP projects for steam and condensate return are similar to those discussed for the chilled water. Load demands for steam heat and also subsequent condensate return are relatively the same as for chilled water in that laboratories have the highest demand. Therefore, changes in building use and GSF addressed for chilled water also apply to steam supply and condensate return.

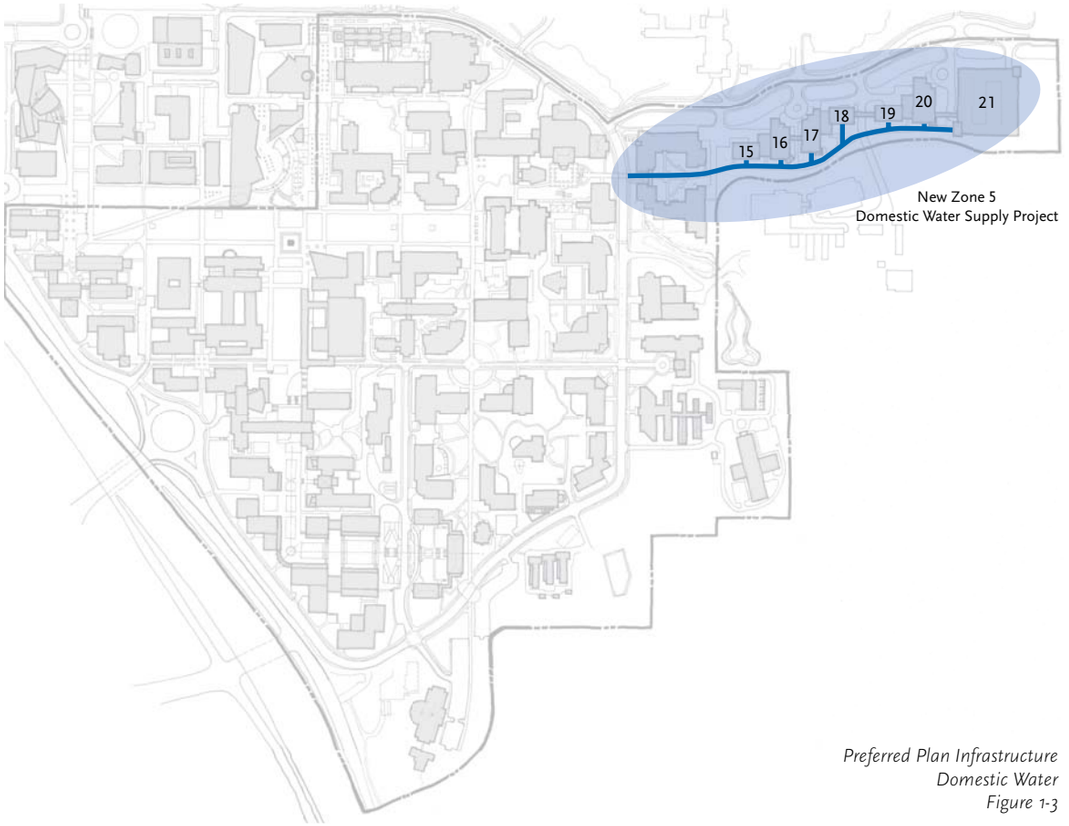
The following changes to the DDP projected projects would be required as a result of implementation of the Preferred Plan:

- DPP projects ST-24 and ST-34 call for improvements at the Central Plant, which will improve services throughout the East/Southeast Campus area. ST-24A adds a new boiler, increasing capacity by 50,000 lbs/hr, and ST-24B and ST-34 each replace existing boilers with new boilers, providing an increase of 30,000 lbs/hr, for a total increased capacity of 80,000 lbs/hr. These improvements should adequately address the overall area demands as proposed in the Preferred Plan
- DPP projects ST-23, ST-24 and ST-34 call for improvements at the Central Plant, which will improve services throughout the East/Southeast Campus area. ST-23 replaces the steam header system, while ST-24 and ST-34 each replace existing boilers with new boilers for a total increased capacity of 40,000 lbs/hr. These improvements should adequately address the overall area demands as proposed in the Preferred Plan.
- Further study will be required for the new projects that may be required to provide steam and condensate return piping to the Preferred Plan Buildings 1, 2, 3, 4, 5, 6, 22, and 23. These buildings add approximately 355,000 GSF demand to the existing demand. The DPP did not account for any specific new projects. These projects would include:

- A buried extension of a line to the west from the west end of the existing tunnel in Eucalyptus Drive to serve Buildings 1, 2, 3, 22, and 23 and a buried extension south from the tunnel north of Building 4. (Ref. Fig. 1-2)
- Similarly, new projects will be required to serve Buildings 5 and 6 comprising approximately 238,000 GSF of new classroom and general-use space. The existing network of pipes should provide for the future connection to steam and condensate return laterals for each of the new buildings. (Ref. Fig. 1-2)

- DPP projects ST-11 and ST-32 call for installation of a direct buried 6-inch steam line to connect to the existing 8-inch line in the tunnel near the Statistic-Computer building. Funding and construction of this ST-11 piping was proposed to be included with building construction in the area, specifically the Physical Science #1 project. This ST-11 project would run east under East Campus Drive and north to serve Physical Science #1 and future connection to the ST-32 project. The total GSF to be served by these two projects according to the DPP was 360,000 GSF, of which approximately 50 percent would have been laboratory and 50 percent classroom. The Preferred Plan identifies this area as the Panhandle District, to include 450,000 GSF (the parking structure, building 21, is not included, as there are minimal heating demands for parking) approximately 50 percent of which will be classroom space and the other 50 percent light lab. With the increase of approximately 25 percent in GSF over the DPP and the increase lab space demand, detailed design should re-evaluate the size of the future steam supply and return piping from East Campus Road for the Panhandle District

- DPP project ST-31 serves future construction north of University Drive and is therefore outside this Study



Preferred Plan Infrastructure
Domestic Water
Figure 1-3

Domestic Water

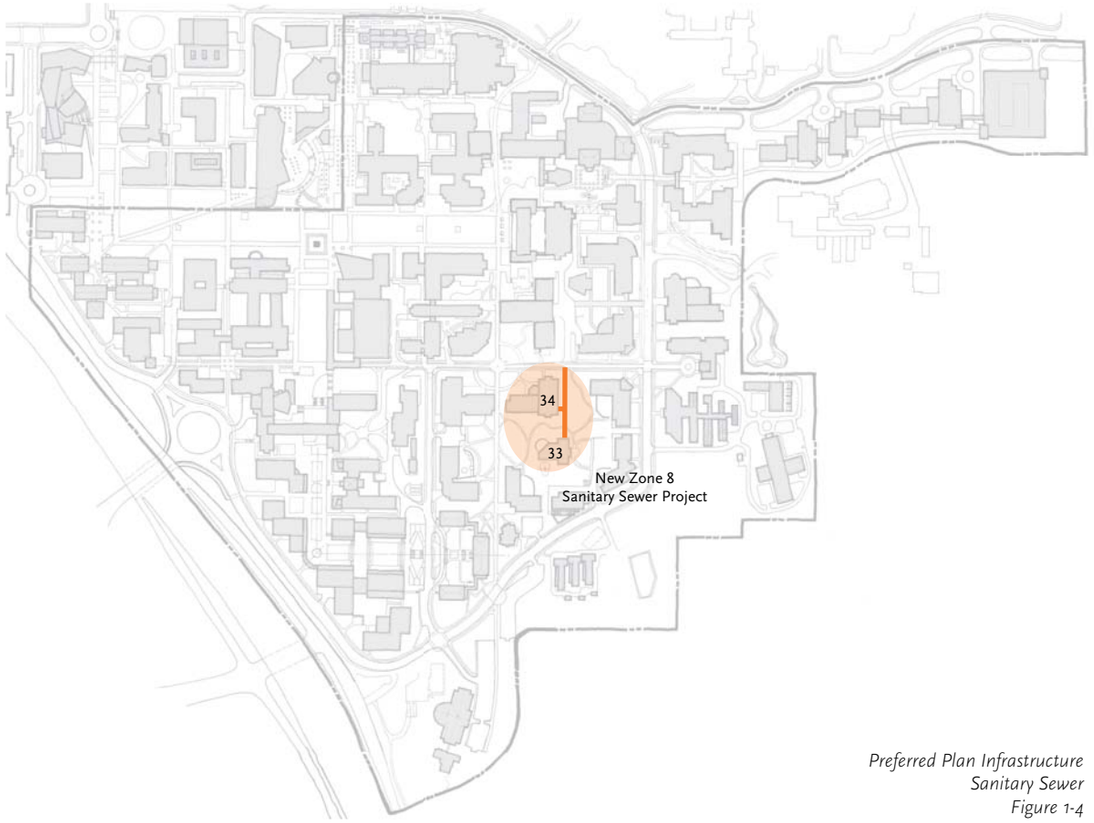
Future Demand

The LRDP projects for build-out an average daily demand of 3-million-gallons (MG) and the DPP projects a peak daily demand at build-out of 7.5 MG. Both are based on total campus growth to 25,000 students and 15,000 faculty and staff. The LRDP average demand for the East Campus is based on recorded water-use for existing campus conditions and sustainability factors on a per-capita use basis for future average demand. The DPP projected peak demand is based on historical peak-hour use as determined from a recorded peak-hour sewer flow for the Campus. The sewer flow was factored by 90 percent to determine domestic water use and the total demand determined by adding required flows for cooling towers, boiler make up water, and greenhouse flow requirements. It is typical practice to determine peak demand by doubling average demand, which would result in an LRDP peak daily flow of 6-million-gallons. The additional 1.5 MGD used in the DPP is likely the result of the fact that the LRDP used sustainability use factors for future average demand calculations, while the DPP used historical use values on a GSF basis projected over the planned future construction, to determine peak demand.

Future Storage

There is a significant discrepancy between the LRDP and the DPP regarding projections for the storage capacity required for the University system to meet operations, emergency, and fire-flow demands. The LRDP estimated an operations (equalization) storage based on the average daily demand times a factor of two, which equates to 6 MG of equalization storage. Additionally, a fire-flow demand should be stored and was calculated at 1.9 MG based on a four-hour flow at 8,000 gpm, per the 1998 California Fire Code. The total storage to meet these two requirements is nearly 8 MG of storage. There is some flexibility in determining equalization storage, as described in the American Water Works Association (AWWA) Manual M-31, but some multiplier between 1.5 and 2.0 times the average daily demands is commonly used for planning purposes. The LRDP assumed that the existing City connections would provide emergency flow requirements. The LRDP projection equips the University with a stand-alone system for operations and fire-flow, while depending on the City supply to meet emergency demands.

The DPP calculated future storage requirements by using the current ratio of campus storage capacity to the historic daily water demand resulting in a total storage capacity requirement of approximately 3 MG. This is not a typical method for determining this type of storage. The DPP storage system determination may have depended on the two existing City connections to provide emergency, equalization, and fire-flow storage beyond the 3 MG capacity. It is possible that the two connections to City water adequately replace the need for the University to provide storage beyond the 3 MG. The City of Riverside Public Utilities department reported that they do not



Preferred Plan Infrastructure
Sanitary Sewer
Figure 1-4

have such an understanding with the University for the East Campus to replace storage requirements, but they do have a general understanding that these demands can be met without independent University storage for the West Campus.

It is beyond the scope of this Study to resolve the storage discrepancy issue, but as detailed design moves forward to address storage needs to meet future growth, this question should be addressed with the City, University Operations, and the Fire Marshal. It is recommended that once consensus is reached with Fire Marshal and the City, the water system should be modeled using the required conditions to determine system flow and storage improvements.

The following changes to the DDP projected projects would be required, as a result of implementation of the Preferred Plan:

- Water supply to South/East Carillon Mall District proposed facilities in the Preferred Plan can adequately be provided from the existing piping loops serving this district. Project by project laterals can be connected to the existing system as required for each structure
- DPP project W-21 calls for the installation of a 6-inch mainline extension that will provide for two fire hydrants for CHASS Building #2 and also provide the first section of a future loop providing water to facilities constructed in Parking Lot 6, which will primarily comprise the Citrus Mall District, as defined in the Preferred Plan. The Preferred Plan calls for the construction of approximately 534,000 GSF in the Citrus Mall area and the DPP proposed approximately 500,000 GSF. Project W-21 will be adequate in meeting the Preferred Plan projected demands for domestic water
- DPP projects W-22 and W-23 serve the area north of the study area covered in this Study and therefore have no impact
- DPP project W-31 includes the construction of a 2 MG storage tank and adjacent tank piping interconnects to build-out total campus storage to 3.05 MG. As noted in the above discussion regarding future storage, the implementation of new storage facilities needs to reconcile the level of equalization and emergency storage capacity required by the University, in light of what can be provided through the two City connections and what is required by the Fire Marshal
- DPP project W-32 includes the construction of an 8-inch line to increase flow from the new tank installed in W-31. This new line will be constructed parallel to the existing 12-inch main line running north from the existing storage tanks to East Campus Drive, which passes through the Campus along East Campus and Eucalyptus Drives. The new line also extends further to the north paralleling the existing 8-inch line to the north, where it will then connect to the existing 8-inch which continues on to Big Springs Road. Therefore, this project helps to supply water from additional storage to Science District and Panhandle District, while at the same time increasing supply to the existing system loops. Comparison of proposed DPP development in these areas to that of the Preferred Plan results in a net increase from the DPP of only 28,000 GSF. This is insignificant in the total scope of GSF served by the loop and therefore, DPP project W-32 does not require any modification to meet the Preferred Plan projections
- DPP project W-33, like W-32, provides for additional flow capacity from the Campus storage tanks. The project constructs an 8-inch line to supply South Campus and West Campus Drives, which will run north to make connection with the existing 12-inch main in Eucalyptus Drive forming a new distribution loop and increase available water and pressure balance. This line will provide for future lateral connections on a project-by-project basis; the Citrus Mall District does not require modifications to meet the Preferred Plan scenarios
- DPP project W-34 is an 8-inch line designed for construction to the east in Big Springs Road from East Campus Drive to Valencia Hill Road and is intended to serve the northeast portion of the Campus outside of the East/Southeast Campus Study area. The DPP also planned for this line to provide for lateral connections to serve three classroom buildings in the Parking Lot 13 area. The Preferred Plan calls for three laboratory buildings, three office buildings, and a parking structure in the Panhandle District. Because of this change in the number of buildings and building uses, it is recommended that a new project be planned that will construct a 6-inch water line from East Campus Drive to the east to serve the new structures (Ref. Fig.1-3)

Sanitary Sewer

Proposed sewer projects included in the DPP overall adequately provide for the projects recommended in the Preferred Plan, as discussed below with some minor, zone-specific modification.

- With project specific lateral construction for the connection of individual buildings, the DPP improvements serving the South/East Carillon Mall District will adequately address future construction called for in the DPP. In particular project SS-11, already constructed in the first phase of the East Campus Infrastructure Improvements project, provides for these zones as well as portions of the Science District
- Project SS-21 will replace the existing 15-inch trunk sewer in North Campus Drive as discussed under existing sewer condition above, with an 18-inch trunk line. It is recommended that existing flow conditions in the 15-inch line be measured and verified, since the line was cleaned as a preliminary design step prior to finalizing the required supplemental line size. Negotiation with the City as to fiscal responsibility for this new line, as recommended in the DPP should also be conducted in as much as off-campus flow from the east contributes to the flow conditions of this trunk sewer
- DPP project SS-31 replaces two smaller lines in East Campus Drive with a new 12-inch line during the last phase of the DPP. This improvement provides the required capacity for Preferred Plan growth in the Science District
- DPP project SS-32 installs an 8-inch service to the Citrus Mall District. GSF growth projections from the DPP and the Preferred Plan for this zone are approximately the same and therefore this project will adequately accommodate the Preferred Plan scenario
- A new project in the Science District will be required to construct an 8-inch service to convey flow from the Preferred Plan Buildings 33 and 34 to the north for connection to the existing line in Eucalyptus. (Ref. Fig. 1-4)

Preferred Plan Infrastructure
Storm Drain System
Figure 1-5

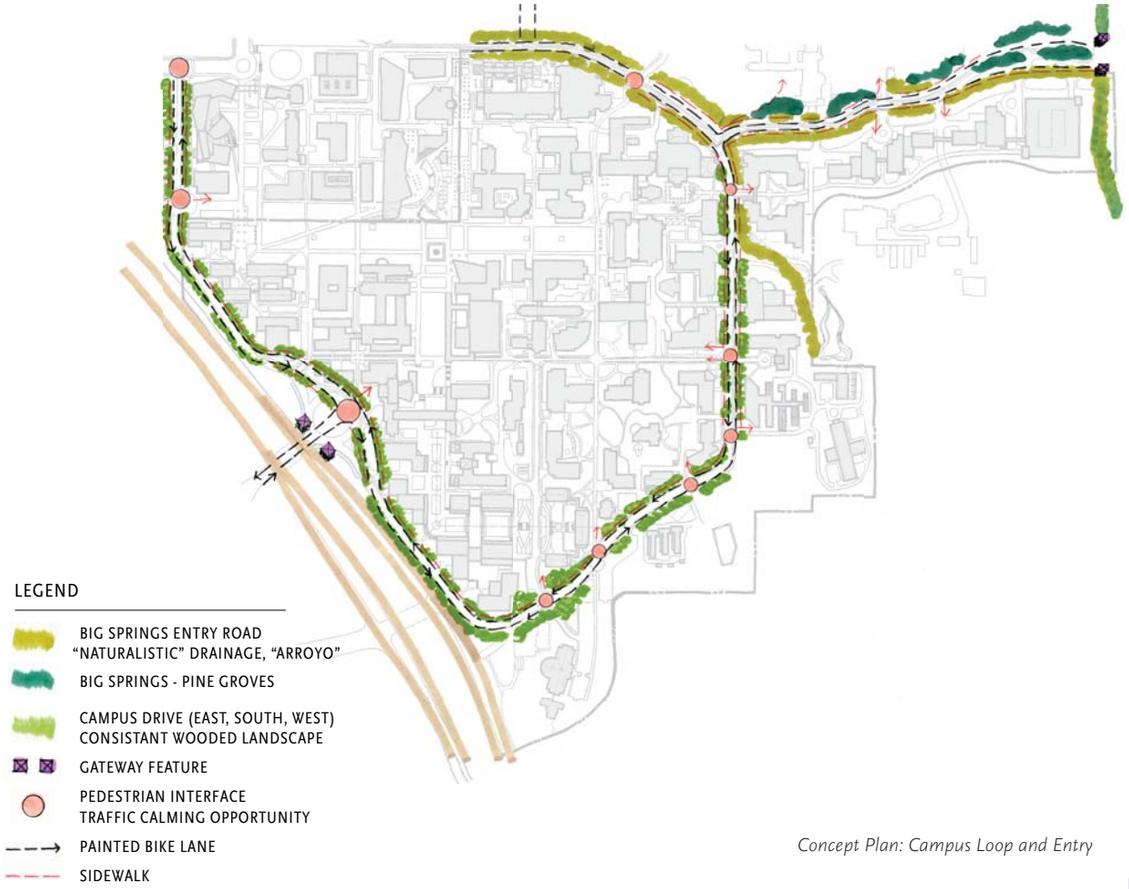
Electrical

General

The LRDP projects a campus build-out demand through 2015 of 39 MVA using conventional design factors and a build-out demand of 32 MVA using sustainable design standards. The DPP projected a build-out demand of 49.6 million watts (MW), which equals approximately 44.6 MVA and is 14 percent higher than the load projected in the LRDP. This discrepancy will need to be resolved, as the University contemplates maintaining the redundancy to their basic supply.

The proposed DPP projects through 2015 adequately provide for the projects proposed in the Preferred Plan. Building by building project service connections from several of the 12kV circuit extensions provided in the DPP will be required as noted below:

- DPP project E-31 provides for the replacement of existing 4.16 kV systems to several existing structures with new 12.47 kV systems plus the extension of several hundred feet of the 12.47 kV circuit in a buried duct bank that will provide power to future facilities in the Citrus Mall District. As noted earlier, the DPP projected GSF growth in the Parking Lot 6 area matches the Preferred Planned GSF growth
- DPP project E-33 serves the area north of the East/Southeast Campus and therefore does not have impact to this Study
- DPP project E-34 is an extension of the 12.47 kV system to the east in Big Springs Road and is intended to serve DPP projected structures in Parking 13 as well as new facilities north of the East/Southeast Campus area. The three laboratory buildings, three office buildings, and parking structure projected in the Preferred Plan for the Panhandle District can be served by this DPP project
- DPP project E-35 would serve the area north of the East/Southeast Campus and therefore does not have impact to this Study
- DPP project E-36 provides for the replacement of existing 4.16 kV systems to several existing structures, with new 12.47 kV systems throughout the South/East Carillon Mall District. The East Campus main feeder is located in the tunnel in Eucalyptus Drive which provides ample connections for buildings planned in the South/East Carillon Mall District and the Science District
- DPP project E-37 provides for the replacement of existing 4.16 kV systems to several existing structures with new 12.47 kV systems at various locations in the



Concept Plan: Campus Loop and Entry

Science District. Existing 12.47 kV feed also exists in these areas for future building connection

- The LRDP discusses the substation redundancy and that the use of aggressive sustainable design factors will allow full redundancy up to 2015. However, the LRDP says that eventually full redundancy will not be available. The DPP does not identify any projects regarding the installation of additional transformer capacity. Given the DPP projected 44.6 MVA load demand, the University will only be left with approximately 25 percent redundancy at build-out without adding additional transformers. It is therefore recommended that future planning address the issue of redundancy

Gas

The DPP does not comment on the availability of gas to accommodate projected growth, however, the LRDP states that SCG has indicated that sufficient gas supplies are available to accommodate a three-fold increase in projected campus-wide demand from the current 12,000 Therms/day to 36,000 Therms/day. The LRDP indicates that additional supply piping into campus will be required for the north side of the East Campus and for the West Campus areas, however, it does not appear that any additional feeders will be required for the East/Southeast Campus area.

Storm Drain System

The DPP does not identify any storm drain improvement projects for the East Campus, other than to discuss the University Arroyo Flood Control and Enhancement Project. The DPP acknowledges that the stormwater discharge from the areas of proposed construction will realize an increase, due to the greater runoff coefficient of roofs and hardscape compared to currently undeveloped areas. This increase should be minimal, given that many of the new buildings are proposed for construction where current buildings will be demolished, or where the land is currently paved for parking. This flow generation condition applies to the proposed development recommended in the Preferred Plan, except that construction of some specific systems should be included in future detailed planning as follows:

- Development of buildings in the Citrus Mall District, where Parking Lot 6 is currently located, should be approached with an overall drainage plan prior to final site design of each of the structures planned for this area. This area could be drained to an extension south of the existing 18-inch drain in West Campus Drive. (Ref. Fig. 1-5)
- Development of buildings in the Panhandle District where Parking Lot 13 is currently located, also should be approached with an overall drainage plan prior to final site design of each of the several structures planned for this area. This localized drainage would be conveyed to the existing 48-inch drain system in East Campus Drive. (Ref. Fig. 1-5)
- Based on development on the Science District and reported undersized flow conditions in the past, replacement of the existing 8-inch storm drain in East Campus Drive should be evaluated. This could possibly be done during the construction of future sanitary sewer (SS-31) and future water line construction (W-32) in East Campus Drive proposed in the DPP. (Ref. Fig. 1-5)

Movement Systems

The LRDP and the 2004 Multi-Modal Transportation Management Strategy (MMTMS) establish parameters for vehicular circulation on campus. Interviews with UCR planning staff refined the implementation strategies of these broader studies and helped to refine this Study's interpretation of them to reflect the following goals:

- Control access by private automobiles in order to minimize conflicts between pedestrians and vehicles
- Move parking lots to the perimeter of the academic core to enable pedestrians to have priority on campus
- Create clearly identifiable hierarchy of pedestrian corridors to improve campus wayfinding and universal accessibility
- Establish a hierarchy of use for campus roadways that allows vehicles and bicycles to share access routes within the Campus
- Improve established gateway/portals to maximize University identity

Vehicular Circulation and Parking

The LRDP and the 2004 MMTMS recommend that access by private vehicles to the UCR Campus will be controlled to reduce congestion and minimize conflicts with pedestrians. Access control mechanisms are intended at the following locations:

- Canyon Crest Drive on the west side of the I-215/SR60 freeway underpass (1)
- West Campus Drive on the north side of Hinderaker Hall (2)
- Aberdeen Drive south of the Aberdeen/Inverness Residence Hall (3)
- Big Springs Road at the western entrance from Parking Lot 14 to Campus Drive (4)

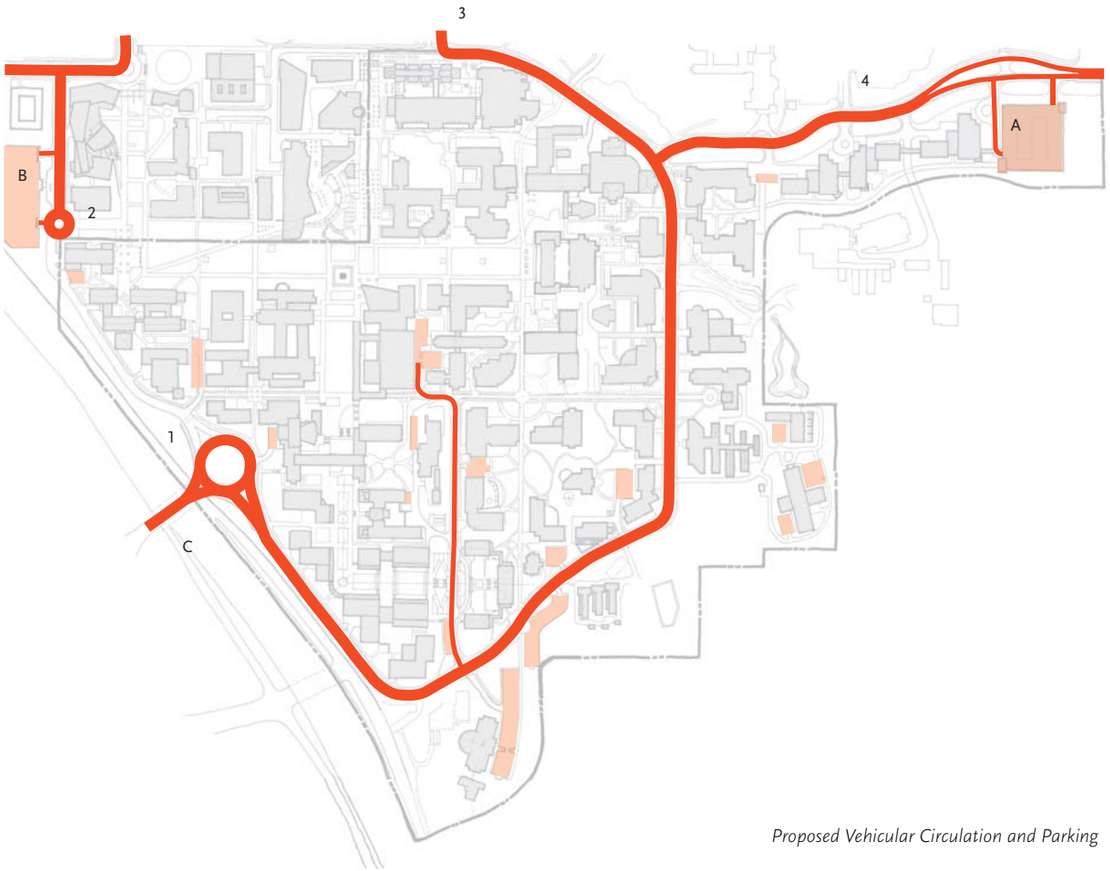
The ultimate goal is that access to the inner Campus by private vehicles will be limited to those who hold a permit issued by Campus Transportation and Parking Services (TAPS) and/or to visitors who have made prior appointments. In the near term, it is anticipated that automobile access will remain open between Valencia Hill Drive and the Canyon Crest Drive freeway underpass via East, South and West Campus Drives. The majority of private automobiles will be directed to parking structures in the following locations:

- The east end of Parking Lot 13 (A)
- Parking Lot 1 (B)
- On the West Campus (C)

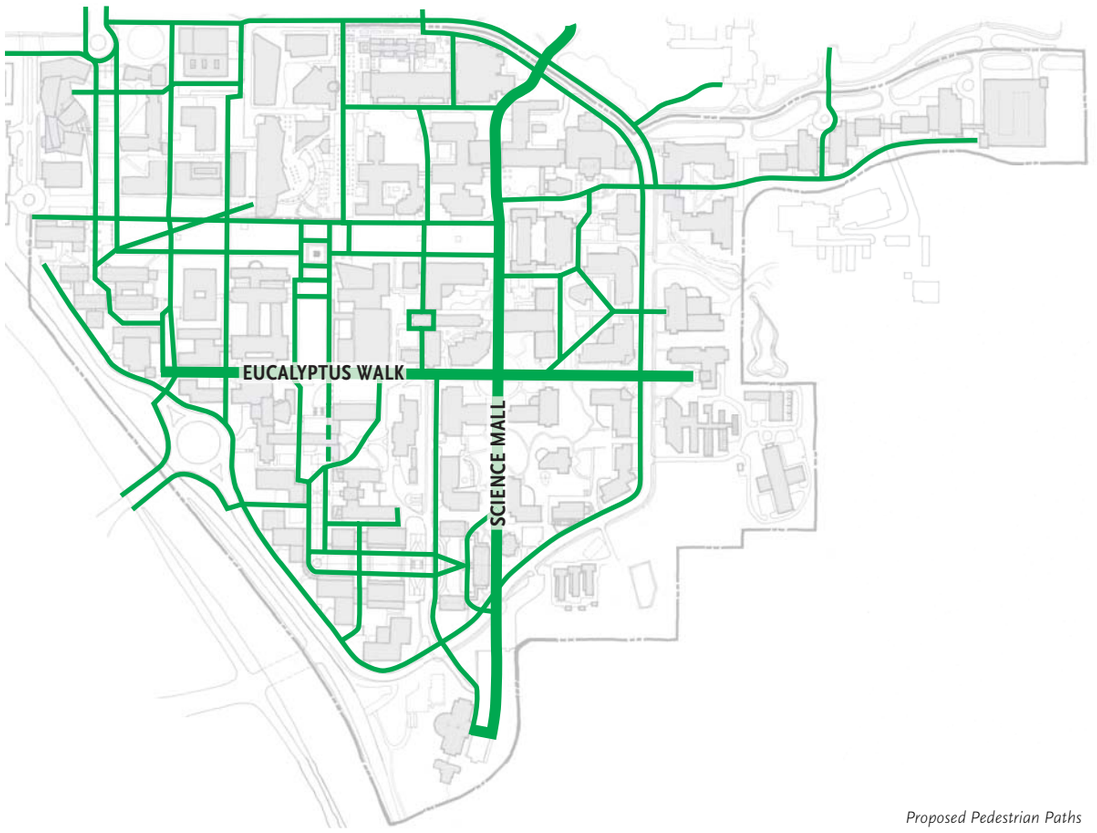
Smaller parking lots will continue to be used on the Campus to provide for special needs, service, and handicapped accessible spaces.

Pedestrian

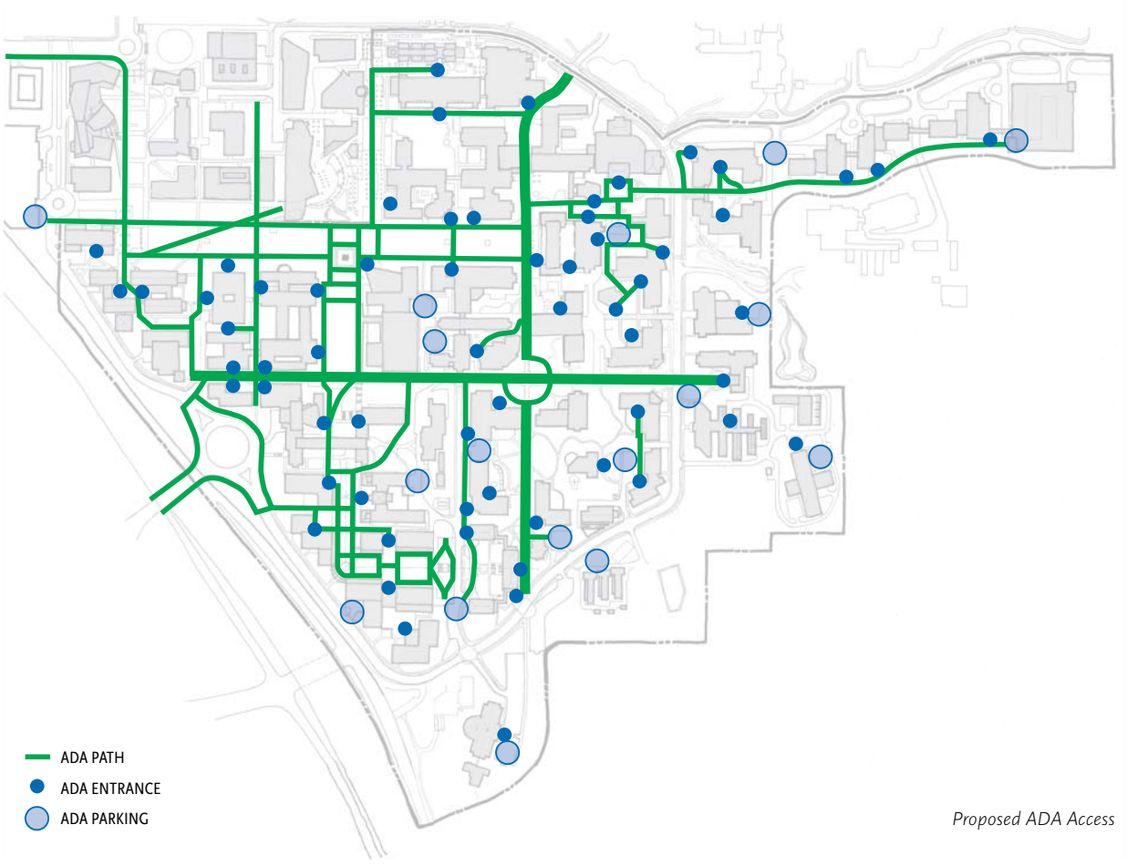
Pedestrian flow into campus will increase significantly with rising enrollment. With the majority of bulk parking located at the perimeter of the academic core, there will be increasing levels of foot traffic focused at the existing portals. Once on campus, the number of destinations will increase as new buildings are added to provide needed instructional space on the East/Southeast Campus. This combination of factors will increase foot-travel times between destinations and make pedestrian distribution on clearly defined paths essential.



Proposed Vehicular Circulation and Parking



Proposed Pedestrian Paths



Proposed ADA Access

The existing network of campus paths will remain in place with necessary additions to access the Citrus Mall, Picnic Hill, and the Panhandle districts. However, two new walks have been defined that will provide a significant improvement to the movement of pedestrians from both the north/south and east/west directions.

Eucalyptus Walk

The LRDP recommends that a new primary east/west pedestrian corridor be established along the current Eucalyptus Drive right-of-way extending past the intersection at Citrus Drive and terminating at West Campus Drive adjacent to the Barn Group. This Study implements the idea envisioning it as a 24-hour, shade-tree-lined path sized to accommodate pedestrians, service, transit, emergency vehicles, and a dedicated bicycle path. It will be well-lighted for safe evening use, with regularly spaced seating and other site amenities to enhance its potential for informal gathering. The path will intersect the Science Mall on the south side of Batchelor Hall where there is a large public plaza that not only mitigates the topographic differential between the paths but provides a moment of engagement between users.

Science Mall

A primary pedestrian path is envisioned that connects an existing pedestrian portal on the eastern end of the Engineering 2 Building all the way to the CESC and south up to College Buildings North and South. This Science Mall would the primary connector to a majority of sciences buildings on campus.

The Science Mall will be sized to accommodate the large volume of pedestrians, as well as emergency and service vehicles. Although not a designated bicycle route, it is anticipated that bicyclists will mingle with other users. It will be well-lighted for safe evening use with regularly spaced seating and other site amenities to enhance its use as a place for informal gathering. The path will intersect the Eucalyptus Walk on the south side of Batchelor Hall at the large public plaza as described above.

Universal Accessibility

One of the considerations of this Study is that as many new paths as possible are not only accessible but take users to their destinations in as straightforward a manner as possible. Many sidewalks on the East/Southeast Campus are already accessible to people with disabilities. Others with steeper grades due to the topographic character of the Campus cannot be altered. Where feasible, existing problem areas have been addressed; for persisting areas, the Study recognizes that Student Special Services provide transport, albeit these are not available at all hours and are not available to staff, faculty, or visitors. New sidewalks, such as described above, are sized for the vans used by Student Special Services. They are intended to have benches located at regular intervals to accommodate those with endurance issues. Where possible existing building service areas have been expanded and new buildings have been provided with service areas, in order to accommodate short- term accessible parking. Proposed parking structures will be required to designate a percentage of their spaces for handicapped parking, and the campus shuttle will make regular stops in order to take the campus community and visitors as close to their destinations as possible.

In some areas, street curb cuts exist along direct paths of travel that are problematic due to their position along the slope of the street. These can be difficult to negotiate for wheelchair users. One person with a wheelchair with a specific clearance will be able to negotiate it, while another with a different type wheelchair might not. Consistency in curb cut placement that addresses these variations is recommended.

As indicated in the analysis section of this report, UCR currently requires that fully automatic doors be provided at most main entrances to buildings. It is the intention of this Study that all new buildings be equipped with both upper and lower switch plates to make them completely accessible.

Bicycle

The 2004 MMTMS indicates that bicycle routes are a priority alternative transportation mechanism at UCR. In order to make bicycling on campus streets safer, the MMTMS and the LRDP recommend that campus roadways be access controlled to reduce the amount and frequency of traffic during peak hours. This Study recommends changing the character of campus roadways to reflect a primarily pedestrian, bicycle, and mass transit use with improved landscaping and dedicated sidewalks.

Dedicated, marked bicycle routes are intended to be provided on the following campus roadways:

- Canyon Crest Drive on the West Campus (1)
- Aberdeen Drive (2)
- North/East/South/West Campus Drives (3)
- Big Springs Road (4)

It is also intended that a marked bicycle lane be provided on the Eucalyptus Walk. Bicycle storage areas are identified in the MMTMS.

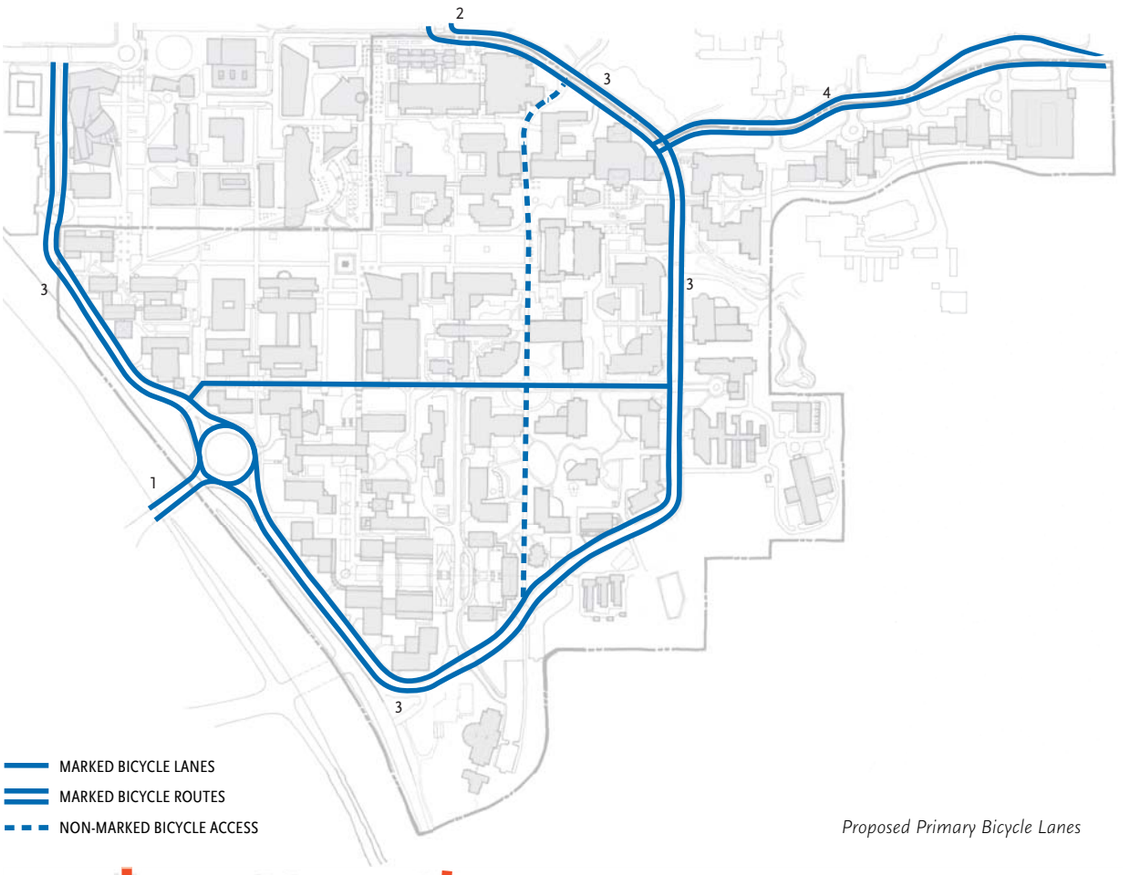
Transit

Interviews with campus transportation staff indicated that the existing campus shuttle system will be expanded to include regularly scheduled routes between campus and the surrounding community with stops at:

- Current and future parking areas
- The southeast side of the Science Library (1)
- The east end of the Eucalyptus Walk (2)
- The south side of the CESC (3)
- South of the future roundabout at Canyon Crest freeway underpass (4)
- North of the future traffic roundabout at the Canyon Crest freeway underpass (5)
- The flag pole on the northwest side of Hinderaker Hall (6)

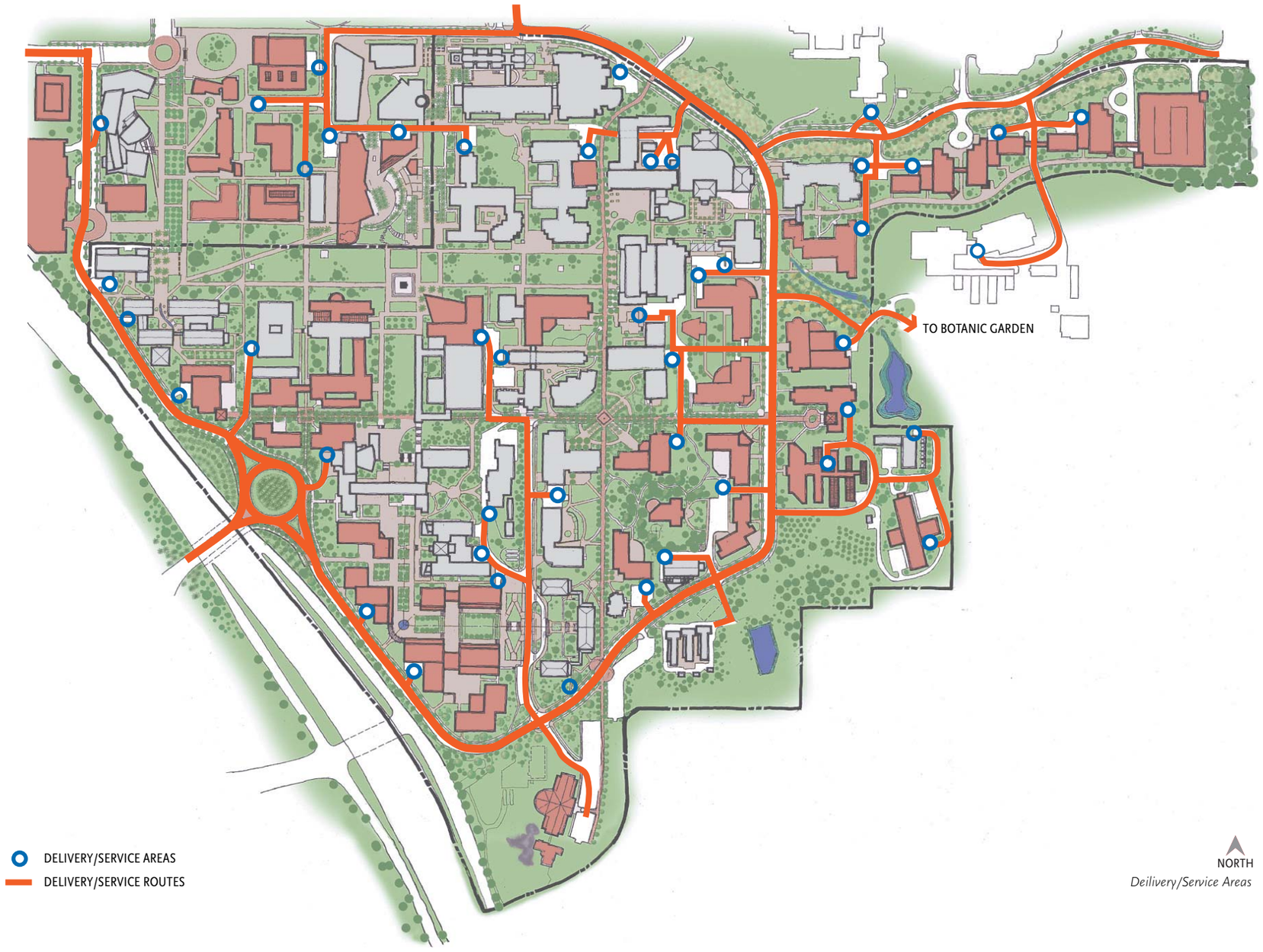
The interviews further revealed the need for dedicated turnouts to provide shuttles a place to safely provide ingress and egress of passengers. The anticipated route for the shuttles is intended to move in a clockwise fashion on campus on the following path:

- Canyon Crest Drive via the freeway underpass from West Campus to West Campus Drive at the proposed roundabout
- West Campus Drive to University Avenue and Canyon Crest Boulevard
- Canyon Crest Boulevard to Linden Street and Aberdeen Drive



Proposed Primary Bicycle Lanes

Proposed Transit Route



Deilivery/Service Areas

- Aberdeen Drive to Campus Drive and back to the roundabout at Canyon Crest Drive underpass
- Alternate routing would continue service onto Blaine and Watkins Drive to enter campus via Watkins Drive and Big Springs Road

Service, Delivery, and Emergency Access

Assumptions about the means of service and delivery for the East/Southeast Campus have been informed by the LRDP and MMTMS. These previous studies recommend that controlled access to campus by private vehicles will reduce traffic congestion during peak hours of the day and facilitate better access to campus. The MMTMS recommends that a central receiving facility be developed on the perimeter of campus to limit the amount and frequency of deliveries by private vendors. The MMTMS anticipates that regular deliveries will then be made by campus staff in vehicles better suited for specific tasks reducing the competition for already crowded loading areas and reducing the need for large loading areas for new buildings. However, this Study recognizes the likelihood of periodic deliveries to the large science buildings necessitating the use of oversized vehicles such as semi-tractor trailer rigs and has made allowances for this in the Preferred Plan.

The Study recognizes Campus Drive as the primary route for service and delivery vehicles. The South/East Carillon Mall District will be accessed from North Campus Drive via Aberdeen Drive and from University Avenue via West Campus Drive. The Citrus Mall District will be accessed from West Campus Drive via the Canyon Crest Drive freeway underpass. The Picnic Hill and Panhandle Districts

will be accessed from Watkins Drive via Big Springs Road and East Campus Drive. Specific conditions to mention include, service and delivery conditions in the area between Engineering 2, Physics and the Geology Building, and at Batchelor and Boyce Halls. Existing conditions in these areas were found to be in conflict with pedestrian connectivity and the density of academic growth defined in the LRDP.

Engineering 2, Physics, and Geology

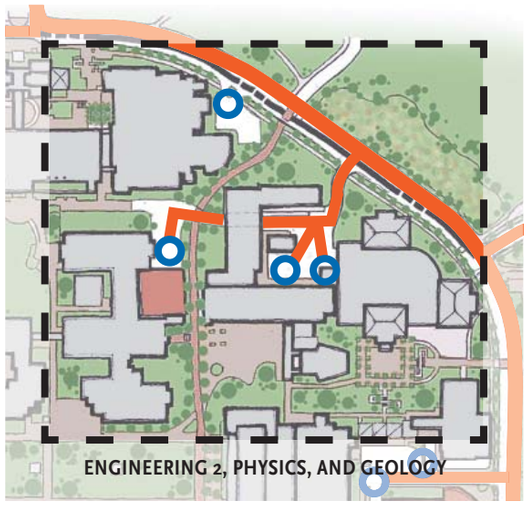
The existing service and delivery area of Geology is located on the east side of the building and is accessed through the Physics Building service area. This conflicts with the LRDP that indicates the northern end of the Science Mall extending to Engineering 2 and connecting to pedestrian paths to Lothian on the opposite side of North Campus Drive. The Preferred Plan indicates a building addition to Geology creating a new service and delivery dock still accessed from Physics but entered from a lower elevation. This new condition separates pedestrians and vehicles allowing the Science Mall to be primarily a pedestrian path.

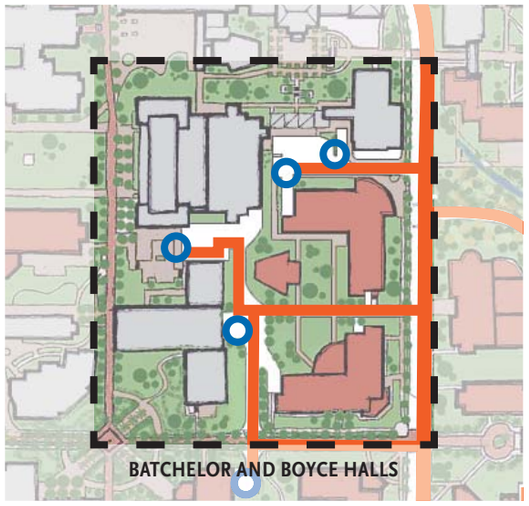
Batchelor and Boyce Halls

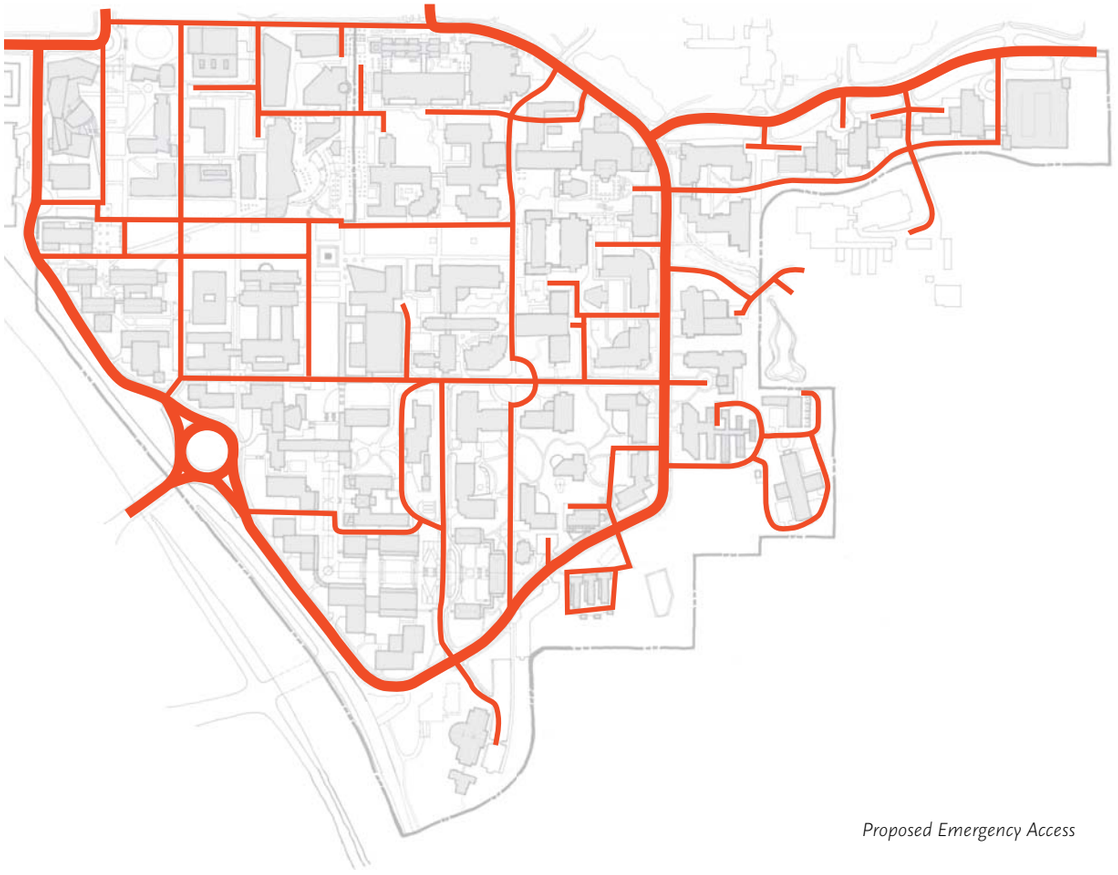
The Preferred Plan calls for the removal of the greenhouses, nematode isolation facility, and associated parking on the east side of Batchelor Hall, and in their place the construction of two new multi-story academic buildings and a one-story classroom building similar to the Physics 2000 classroom. Service and delivery access to Boyce and Batchelor will continue to function similarly but with better designed roadways to allow greater flexibility and access to the new academic building on the south. Access to the proposed building on the north will be from the Boyce/ Statistics parking lot.

Emergency Access

University Avenue, Canyon Crest Drive, Aberdeen Drive, and Big Springs Road are the main routes from which City of Riverside emergency vehicles arrive on campus with Campus Drive providing the primary loop road to all portions of the South/Southeast Campus. Emergency access routes on campus are very similar to service and delivery, with the exception that many of the pedestrian paths are also sized to provide access for both small service and emergency vehicles in times of need. The Science Mall and Eucalyptus Walk are both designated primarily as pedestrian paths but allow great flexibility for emergency vehicles in accessing a large portion of the campus core.







Proposed Emergency Access

Sustainable Design

The University of California Regents have approved the 2005 Draft Policy on Green Building Design and Clean Energy Standards for UC system-wide implementation. This policy seeks to reduce environmental impact of both renovation and new construction and increase energy efficiency as a means of stabilizing campus budgets. Among others, the primary goals of this policy include:

- All new buildings in the UC system will outperform the required provisions of the California Energy Code Title 24 by at least 20 percent
- All new buildings, except for laboratory buildings, will strive to achieve a level equivalent to a Silver LEED rating or higher
- All laboratory buildings will be designed to achieve the equivalent of LEED Certification and the Laboratories for the 21st Century Environmental Performance Criteria, with special attention given to energy-efficient systems not addressed by the California Energy Code, Title 24

The University of California, Riverside desires to maximize the environmentally responsible opportunities on the East/Southeast Campus. This Study offers multiple project sites and may be viewed as an opportunity, within each individual project's respective budget, to test and implement, over time, those strategies that yield the greatest performance for the University.

This plan reinforces several strategies, consistent with the University's 2005 LRDP, that contribute greatly toward achieving an environmentally responsible academic zone. In general, this Study reinforces, through layout and planning principles, the following actions that contribute to sustainable opportunities at UCR:

- Site selection and development that supports efficient land use, effective storm water management, and a pedestrian focused campus with easy access to transit routes, bike paths, and campus connections
- Preservation and enhancement of natural land features and vegetation
- Building masses that contribute to shading exterior spaces, opportunities for natural day lighting at interior spaces, and preservation of significant view corridors
- Opportunities for the establishment of landscapes composed of native species
- Project sites that allow the Campus flexibility in material and building system choices on a per-project basis, allowing the Campus to evaluate the life-cycle costs, principles of sustainable development, and the social impact of each option

In specific response to environmental opportunities presented on the East/Southeast Campus, this Study recommends the following actions for consideration by UCR:

1. Utilization of finish materials that the students can see and touch, that provides visible and physical evidence of the Campus' commitment to the environment, and "pride of place" for the students.

The Campus should consider creating opportunities for students to understand that environmental consciousness is a lifestyle, not a special action. Examples of this include:

- Finishes that promote the use of recycled materials, such as tiles made from recycled soda bottles
- Finishes that use rapidly renewable materials sources that are also highly durable in the student environments, such as cork or bamboo flooring
- Lighting that mitigates light pollution, in particular site lighting standards and exterior building lighting
- Natural outdoor environments that encourage habitats for birds, butterflies, and other visible evidence that the environment is desired by animals as well as people

2. Develop visible icons that can become sources of campus identity regarding commitment to the environment. The natural features of the surrounding terrain and on specific sites can provide a significant source of campus identity that is aligned with environmentally responsible actions. Examples of this include:

- The naming opportunities for buildings located adjacent to natural features, such as Weathertop Mountain, Picnic Hill, the Botanic Garden, and the Arroyo
- The enhancement of naturalized features such as the Director's Garden, Picnic Hill, sites above the Botanic Garden and adjacent to the Avocado and Macadamia tree collection
- The prominent placement and celebration of physical features that provide visible reminders of UCR's commitment to the environment. Good examples of this include solar-powered lighting translating the student's everyday familiarity of a solar-powered calculator into the physical built environment. Other examples include use of photovoltaics and windmills for wind-driven energy sources

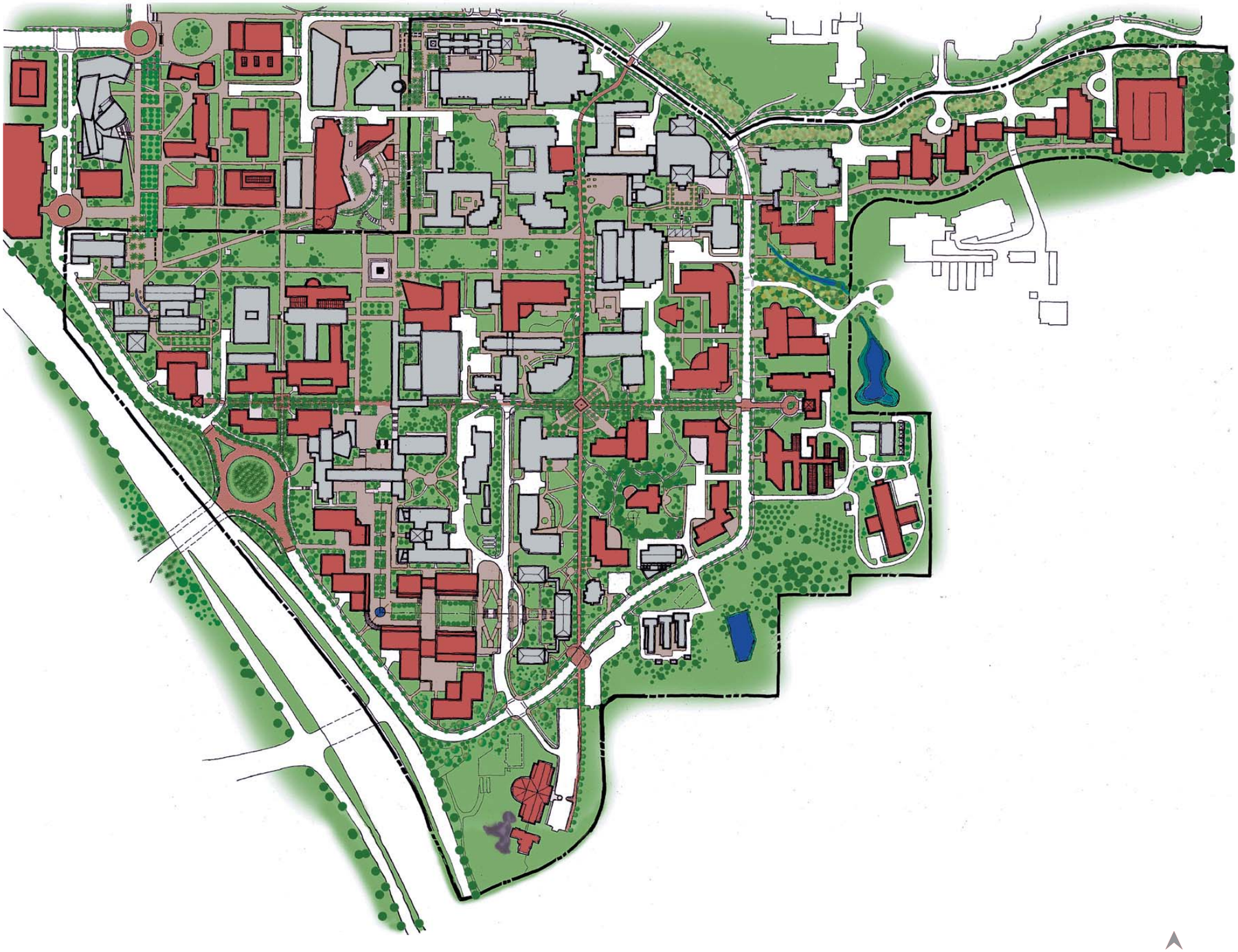
3. Creating an environment of sites and buildings that educate students, staff, and the public.

As an institution of higher education, UCR can use the development of any project as an opportunity to create a three-dimensional textbook out of the built and natural environment. Examples are:

- Design features that can be visible to the students and visitors that communicate, sometimes through written explanation (signage, general literature, etc.), the intent and the commitment of the University
- The natural landscape as an educational tool through the identification and short narrative of the native plant species on site
- Allow project opportunities to test products and processes. While there is always risk associated with using new materials and processes, there can also be rewards. The University is an environment of exploration and discovery, and campus expansion of this magnitude allows testing opportunities even in a limited application within each project

View of Existing Campus from the South

Computer Animation of View of Proposed Campus from the South



NORTH

Preferred Plan

FAR TABULATIONS

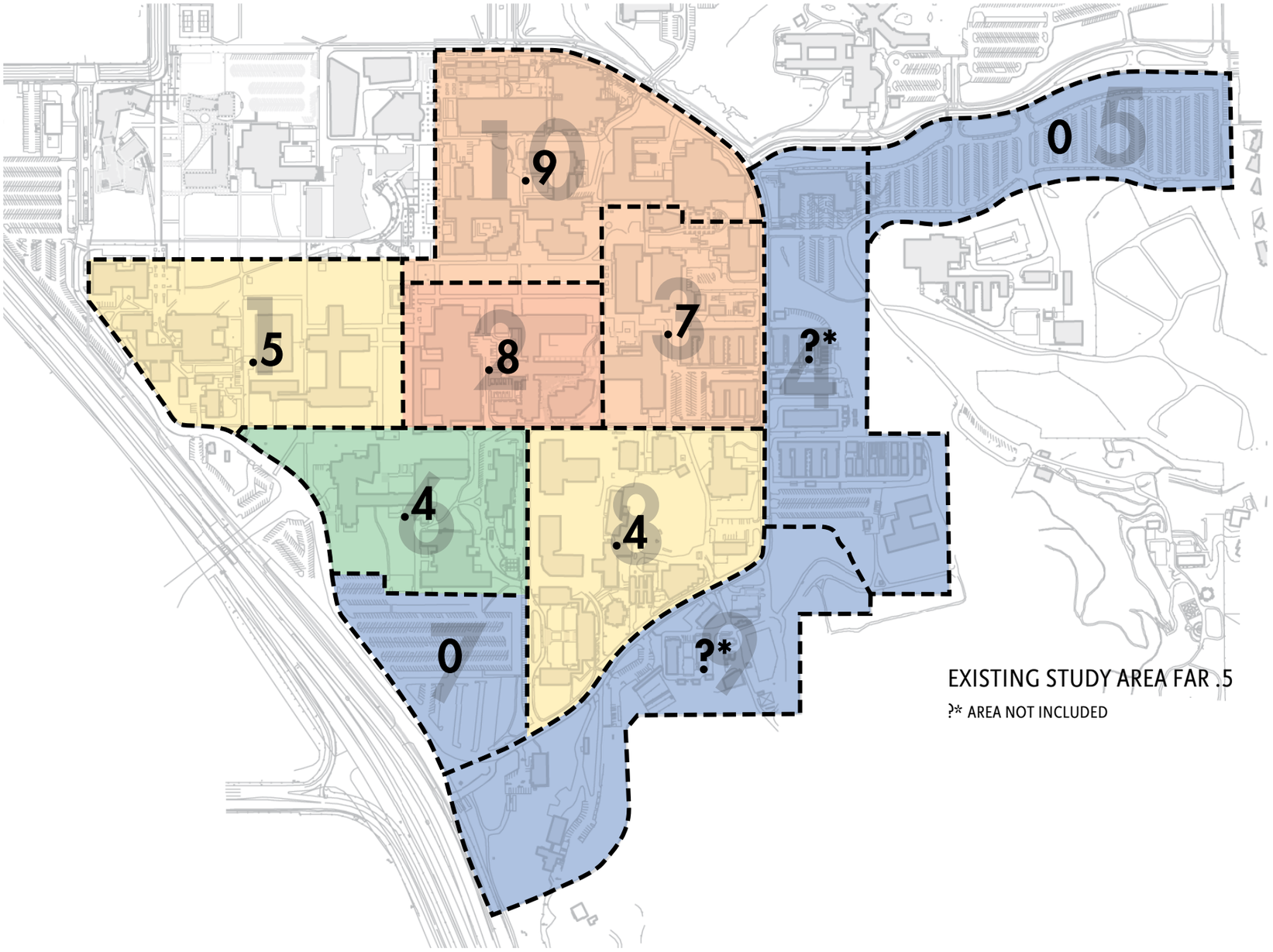
Floor Area Ratios by Zone 6/15/2005

Building *Fig. 3*	Zone	Floors *Fig. 4*	Footprint	Proposed GSF	Existing GSF	TOTAL
1	1	2	26,000	52,000		
2	1	4	15,000	60,000		
3	1	4	30,000	120,000		
4	1	4	14,250	57,000		
5307	1				174,009	
5354	1				82,666	
5480	1				44,694	
5523	1				40,000	
Total GSF						630,369
Land Area						620,725
FAR						**1.02**
5a	2	2	12,290	24,580		
5b	2	5	19,960	99,800		
6	2	4	28,400	113,600		
5316	2				47,101	
5322	2				233,788	
5323	2				55,071	
Total GSF						573,940
Land Area						413,560
FAR						**1.39**
7	3	4	26,400	105,600		
8	3	1	5,300	5,300		
9	3	4	25,000	100,000		
5341	3				118,832	
5342	3				48,565	
5501	3				111,087	
5504	3				8,700	
5588	3				41,938	
Total GSF						540,022
Land Area						490,580
FAR						**1.10**
10	4	4	25,600	102,400		
11a	4	3	14,000	42,000		
11b	4	1	22,300	22,300		
12	4	4	22,200	88,800		
13	4	4	30,900	123,600		
14	4	4	41,500	166,000		
5414	4				129,471	
Total GSF						674,571
Land Area						721,225
FAR						**0.94**
15	5	4	7,200	28,800		
16	5	4	16,400	65,600		
17	5	4	16,400	65,600		
18	5	4	7,200	28,800		
19	5	4	7,200	28,800		
20	5	4	16,400	65,600		
21	5	4	68,200	272,800		
Total GSF						556,000
Land Area						526,460
FAR						**1.06**
22	6	4	11,500	46,000		
23	6	4	14,250	57,000		
24	6	4	17,600	70,400		
5295	6				19,437	
5497	6				85,030	
5498	6				28,343	
5574	6				86,000	
Total GSF						392,210
Land Area						508,260
FAR						**0.77**

Floor Area Ratios by Zone 6/15/2005

Building *Fig. 3*	Zone	Floors *Fig. 4*	Footprint	Proposed GSF	Existing GSF	TOTAL
25	7	4	20,550	82,200		
26	7	4	22,350	89,400		
27	7	4	21,350	85,400		
28	7	4	21,350	85,400		
29	7	4	23,150	92,600		
Total GSF						435,000
Land Area						316,690
FAR						**1.37**
30	8	4	22,200	88,800		
31	8	4	19,300	77,200		
32	8	4	16,500	66,000		
33	8	2	10,000	20,000		
34	8	4	15,200	60,800		
5215	8				12,681	
5256	8				9,264	
5289	8				28,532	
Building	8				120,000	
5325	8				26,424	
5357	8				11,873	
5417	8				64,202	
Total GSF						585,776
Land Area						693,780
FAR						**0.84**
35	9	2	23,500	47,000		
378	9				4,325	
Total GSF						51,325
Land Area						775,930
FAR						**0.07**
5194	10	2	48,572	97,144		
5261	10				166,669	
5335	10				96,019	
5416	10				25,666	
5418	10				157,497	
5504	10				97,772	
5508	10				141,499	
Total GSF						782,266
Land Area						792,207
FAR						**0.99**
Total GSF						5,221,479
Total Land Area						5,859,417
Overall FAR						**0.89**

exclude zone 9	5,170,154
total land area	5,083,487
FAR	**1.02**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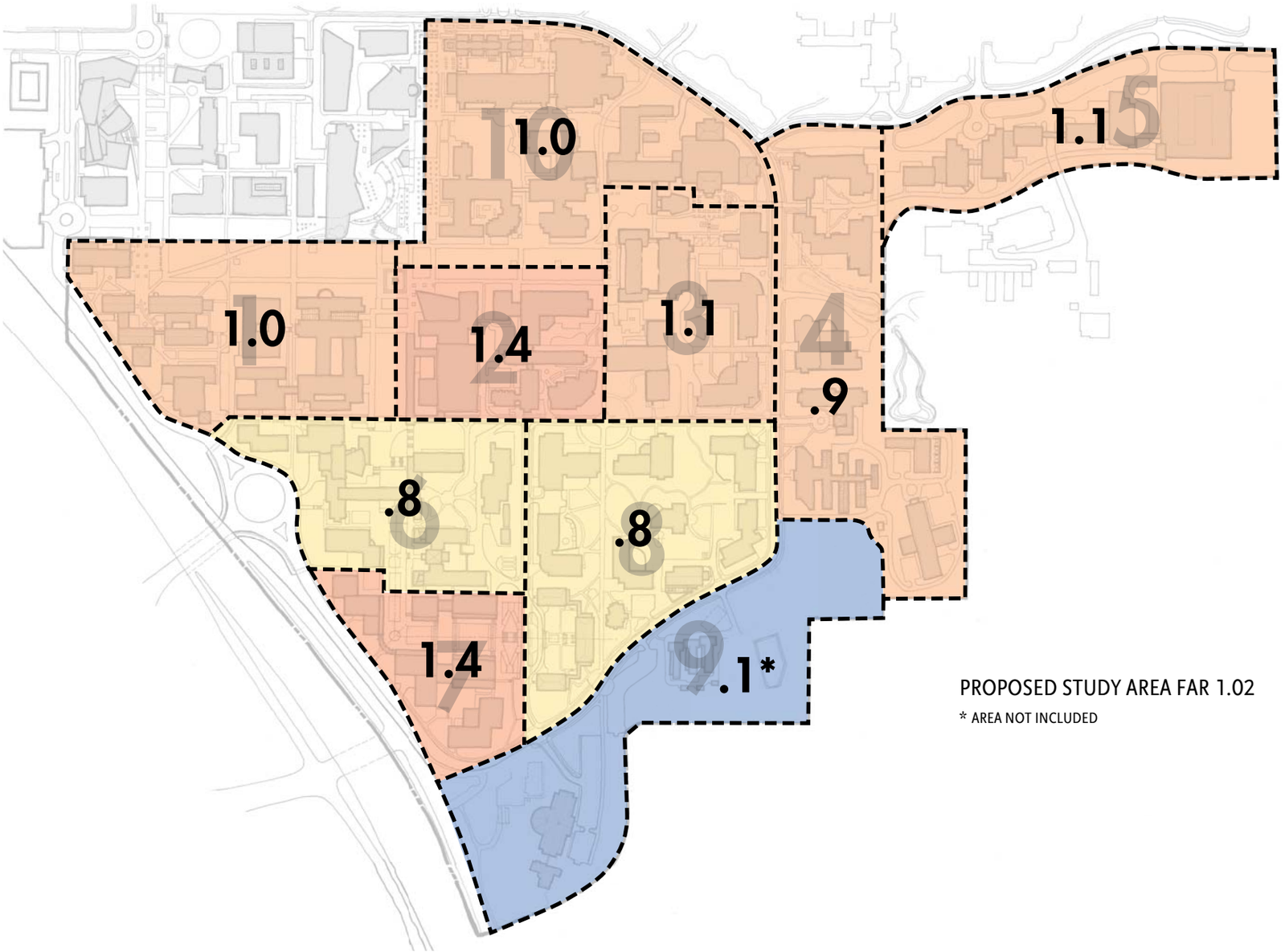
EXISTING STUDY AREA FAR .5
?* AREA NOT INCLUDED

Fig. 1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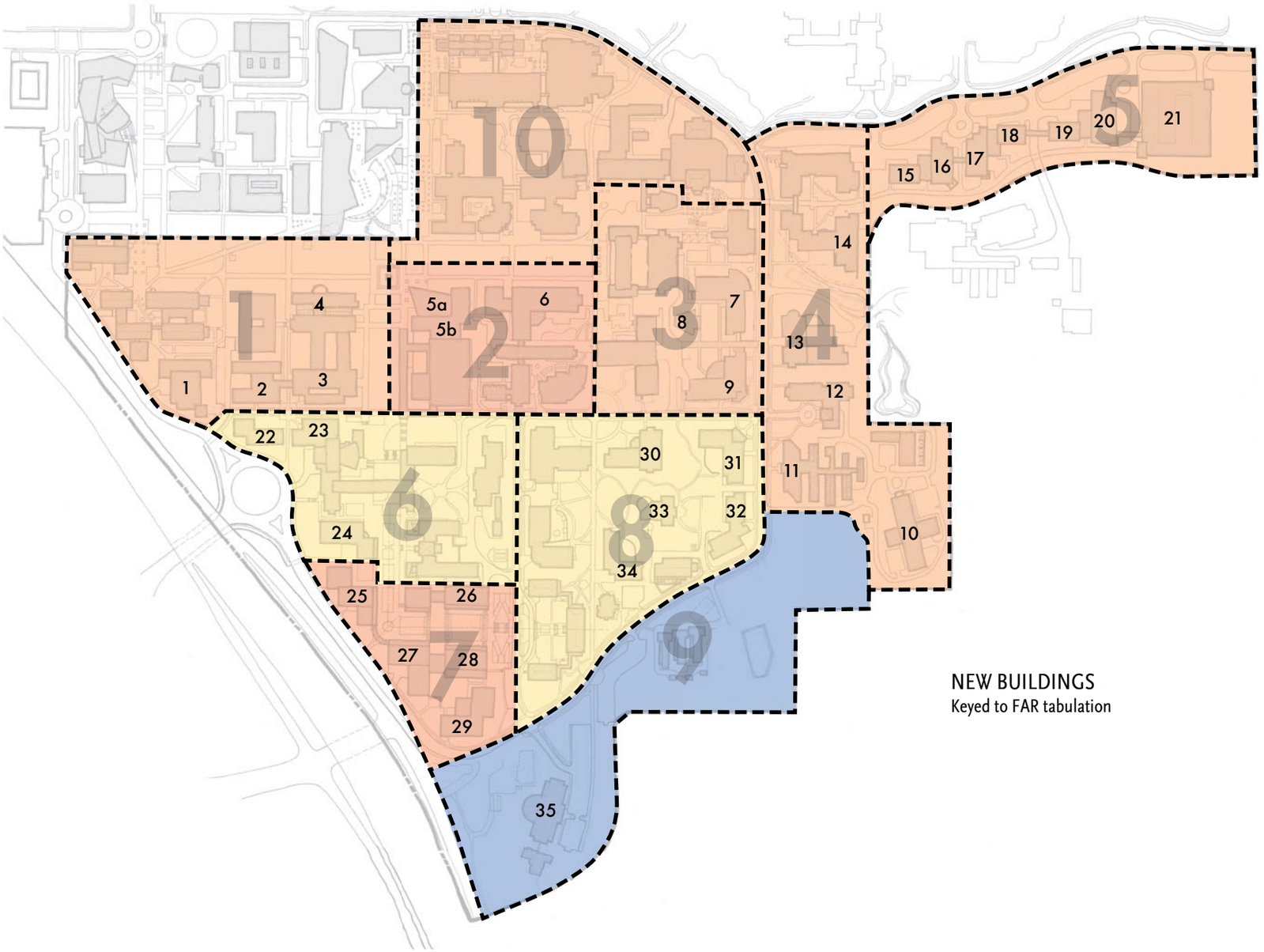
PROPOSED STUDY AREA FAR 1.02
* AREA NOT INCLUDED

Fig. 2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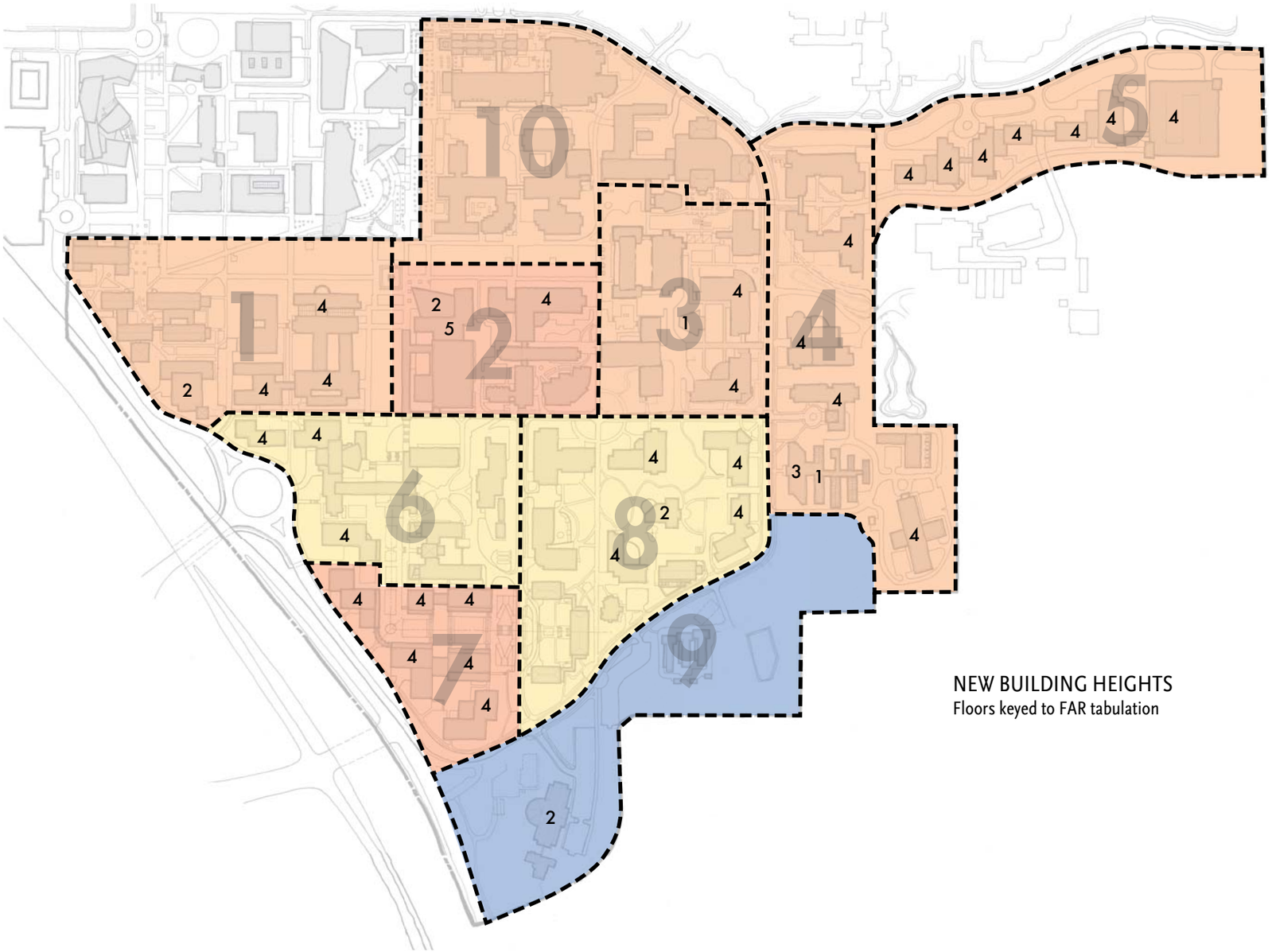
NEW BUILDINGS
Keyed to FAR tabulation

Fig. 3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NEW BUILDING HEIGHTS
Floors keyed to FAR tabulation

Fig. 4

Meeting Minutes: East/Southeast Campus Area Study (ESCAS)

University of California, Riverside; Hanbury Evans Wright Vlattas project #05016.00

March 3, 2005

Workshop #1 – PMT Meeting

At the PMT meeting on March 3, 2005, from 1:00 pm to 3:30 pm the following were present:

UCR	Nita Bullock, Timothy Ralston, Tricia Thrasher
HEWV	Buddy Hall, Steve Gift
SWA	Monica Simpson

The following items were discussed:

1. The agenda for workshop #1 was reviewed.
2. PMT members reviewed the reasons the study was undertaken:
   - Expected rapid growth of the UCR student population – up to 25,000 stuents by 2015;
   - UCR has approximately 1,000 acres of land that is mostly vacant but is constrained by its natural areas;
   - The study needs to:
     a. Consider what's important about campus;
     b. Articulate the pedestrian paths on the east/southeast portion of campus;
     c. Produce an urban design plan with setback and build-to lines;
     d. Evaluate what buildings are available for reuse, renovation and demolition (old Insectary and old entomology already identified for demolition;
     e. Establish a level of planning and organization as evidenced on the northern portion of the east campus to include various student support services like 24-hour study rooms, food, etc.
     f. Celebrate the architecture and heritage of the Citrus Experiment Station;
     g. Establish a sense of arrival at Valencia Drive and Big Springs Road as well as at the Martin Luther King underpass;
     h. Evaluate the impacts of the proposed parking garage at Big Springs Road site and determine the impact of the setback and buffers
     that will be required on the capacity of the garage;
     i. Evaluate the impact to the east campus of increasing building density to accommodate expected growth in academic programs and student population
     j. Identify and preserve important views and vistas to the Carillon Tower, the Box Springs Mountains, and the surrounding area;
     k. Establish the highest and best use of existing campus buildings; and
     l. Evaluate the area's current density with the goal of establishing density that is appropriate to the campus location.
3. The PMT indicated that Caltrans intends to construct a 12-foot sound wall along the southwest perimeter of the east campus adjacent to the interstate. Nita Bullock will provide an electronic copy of the drawings to the Design Team.
4. The document format will be 8.5 x 11 inches, landscape with a spiral binding. Nita Bullock requested that there be an executive summary and Tricia Thrasher requested that it consist of a highly graphic nature

March 4, 2005

Workshop #1 – Vice-Chancellor's Meeting

At the Vice-Chancellor's meeting on March 4, 2005, from 9:00 am to 9:45 am the following were present:

UCR	Nita Bullock, Timothy Ralston, Tricia Thrasher, Kieron Brunelle, Kipp Dougherty, Jim Sandoval, Joel Martin, Doug Ethell, Don Cooksey, Mike Webster
HEWV	Buddy Hall, Steve Gift, Jane Wright
SWA	Monica Simpson
Kennedy Jenks	Bruce Thomas

The following items were discussed:

1. Nita Bullock provided an introduction to the East Southeast campus area study and indicated that the goal was to establish a vision for the next 50-100 years for UCR
2. Throughout the study the committee will forward all questions to Nita who will forward them to the design team
3. It is the intent of the schedule for the administrative draft of the document to be completed by June 10, 2005. The Chancellor will approve the final plan.
4. Workshop #2 will be held on March 14 – 16. The entire committee will not need to be engaged all three days but will meet on Wednesday afternoon from 1:00 – 4:00 pm.
5. The focus of workshop #2 will be to hold focus groups meetings with east campus constituent groups. These groups will include faculty, staff and students.
6. The goals of the LRDP for the east campus must guide the conclusions of the study:
   - Enhance both image and identity;
   - Provide flexibility in accommodating the planned 25,000 student population;
   - Promote UCR's mission of teaching, research and public service in an interdisciplinary academic zone;
   - Enhance the University/Town interaction
   - Be a regional model of planning, design and environmental stewardship
7. Mike Webster recommended the Committee and Design Team consider the following as they move forward:
   - UCR should be a "place of places" not a place of buildings
   - UCR should remain a campus dominated by its landscape
   - The study should respond to the freeway impacts in the position and orientation of buildings
   - The study should define both aspirations and goals for the east campus
   - Evaluate the aesthetic of the existing greenhouses and their location on campus
8. The committee recommended the following be considered:
   - Integrate new food service concepts taking advantage of the beauty of campus
   - Evaluate the placement of new spaces for socialization, both outdoor and indoor focused on the academic neighborhoods and communities—not on the Commons
   - Identify space concepts that can be defined in new building programming
   - Consider using the architectural character of the Citrus Experiment Station and the citrus heritage of the campus as a theme for the east, southeast campus
   - Develop aspirations for the entry sequence at Big Springs Road and at the freeway underpass

March 4, 2005

Workshop #1 – Committee Meeting

At the Committee meeting on March 4, 2005, from 10:00 am to 1:00 pm the following were present:

UCR	Nita Bullock, Timothy Ralston, Tricia Thrasher, Kieron Brunelle, Kipp Dougherty, Jim Sandoval, Joel Martin, Doug Ethell, Don Cooksey, David Rios
HEWV	Buddy Hall, Steve Gift, Jane Wright
SWA	Monica Simpson
Kennedy Jenks	Bruce Thomas

The following items were discussed:

1. The Committee indicated that the Design Team consider ways that the freeway frontage be used to market the university
2. The Design Team shall review the recommendations of the Multi-Modal Transportation study regarding signage and visibility along the freeway and at the corner of Valencia Hills Drive and Big Springs Road.
3. Faculty offices and graduate and faculty research buildings currently occupy the southeast portion of campus. The Design Team shall consider ways to increase the sense of community among graduate students and faculty such as a graduate student union or a faculty/university club.
4. The Design Team should seek to:
    - Understand how graduate students use this portion of campus both during the day and at night;
    - Identify classrooms and other destinations with their campus connections and the paths most traveled in order to determine ways to enhance the most direct paths and create quality spaces
    - Develop ways to enhance the outcomes, both functional and aesthetic of the graduate programs
    - Establish ways to screen or diminish views to and of the steam plant
    - Develop guidelines for the placement of new buildings, preserve views and open space
    - Blur the natural boundaries by creating zones of native landscapes
    - Define areas for conference rooms for 20 persons not shared with classroom use
5. Focus groups for the study will include faculty, staff ands students from:
    - Health Sciences
    - CNAS
    - CHASS
    - ASUCR
    - Geonomics
    - Plant Cell Biology
    - Pest Management Sciences
    - Greenhouse Focus Group briefing by Mike Allen
    - Post Doctorate Students and technical resource staff
    - Public Safety to include environmental health and safety, campus police and the campus fire marshal
    - Dining Services
    - Traffic and Parking
    - Campus Student Special Services
    - Building Operations - campus physical plant
    - Campus infrastructure group
    - Agricultural operations – Steve Cockerham
    - Landscape services
    - Yolanda Moses – as a source person for ides on meeting the campus goals of diversity both in the student body and on the staff and faculty

March 4, 2005

Workshop #1 – Campus Tour

At the Campus Tour on March 4, 2005, from 1:00 pm to 3:30 pm the following were present:

UCR	Nita Bullock, Timothy Ralston, Tricia Thrasher, Kieron Brunelle, Kipp Dougherty, Jim Sandoval, Joel Martin, David Rios
HEWV	Buddy Hall, Steve Gift, Jane Wright, Jimmy Stevens
SWA	Monica Simpson
Kennedy Jenks	Bruce Thomas

The following items were discussed:

1. The Committee, PMT and Design Team participated in a campus tour by tram.

March 4, 2005

Workshop #1 – PMT Meeting

At the PMT meeting on March 4, 2005, from 3:30 pm to 4:30 pm the following were present:

UCR	Nita Bullock, Timothy Ralston, Tricia Thrasher
HEWV	Buddy Hall, Steve Gift, Jane Wright
SWA	Monica Simpson
Kennedy Jenks	Bruce Thomas

The following items were discussed:

1. The Design Team indicated that the following information is needed from the Committee and PMT before Workshop #2:
    - Current campus initiates, growth areas and expansion goals;
    - A census of the number of people in the east, southeast campus area;
    - Freeway expansion drawings in AutoCAD
    - Classroom assignments
    - Current campus aerial photograph and campus topography map in AutoCAD
    - Location of building entries and lobbies in AutoCAD;
    - Proposed buildings/spaces to be vacated as new buildings are opened;
    - Any buildings currently being considered for demolition – Old Entomology, old Insectary, Boyden and Weber were discussed by the Committee;
    - Kipp Dougherty to provide a list of questions to the Design Team on what Dining Services needs asked of the various faculty, staff and student focus groups
2. The Design Team will provide a list of issues and questions that Nita Bullock will distribute to the focus group participants prior to the meetings.

March 14, 2005

Workshop #2 – PMT Meeting

At the PMT meeting on March 14, 2005, from 9:00 am to 9:45 am the following were present:

UCR	Nita Bullock
HEWV	Buddy Hall, Steve Gift, Jane Wright
SWA	Monica Simpson

The following items were discussed:

1. Design Team is to consider that buildings that pre-date campus will be removed and their uses relocated
2. PMT to provide the following to the Design Team:
   - Updated LRDP
   - Caltrans Drawings for the freeway expansion
   - Site plans/floor plans of the new commons, Engineering 2, Chass I & R, and the Arts Building complex
3. The following focus groups were not able to be scheduled:
   - CHASS and CNAS groups
   - Yolanda Moses – Vice Chancellor for Diversity
4. The Design Team is to consider the campus landscape to be predominantly influenced by the southeast hill terrain with the exception of the Carillon Mall.
5. There has been no new campus topographic mapping since 2001

March 14, 2005

Workshop #2 – Campus Police and Environmental, Health & Safety (EH&S) Meeting

At the Campus Police and EH&S meeting on March 14, 2005, from 10:00 am to 10:45 am the following were present:

UCR	Nita Bullock, Hank Rosenfield, Mike Lane, Ross Grayson, Maggie Souder
HEWV	Buddy Hall
SWA	Monica Simpson

The following items were discussed:

1. Nita Bullock provided an introduction to the East Southeast campus area study and indicated that the goal was to establish a vision for the next 50-100 years for UCR
2. Design Team should consider existing campus vehicular circulation issues as follows:
   - Emergency access during peak traffic congestion
   - Proposed traffic light at the Canyon Crest underpass
   - Bike lanes from Martin Luther King Parkway into campus
   - Hazardous materials transport
   - Pedestrian drop-off – additional turnouts are needed (campus transit would circle the campus clockwise so turnouts should be on the Academic Core side of the ring road)
   - A coherent system of gates for emergency and service vehicle access
3. Design Team should consider the following pedestrian issues:
   - A master plan for emergency phones
   - Concerns about the diminished lighting levels as pedestrians move into the southeast campus
   - There is no clearly defined pedestrian experience on the southeast campus
   - Options that include food, gathering spaces and cultural opportunities should be located on the southeast campus
   - Design of pedestrian areas should consider the inevitability of skateboard use. Outdoor furniture and planters shall be skateboard proof.
4. Design Team should recognize the following Environmental, Health and Safety issues:
   - Loading Dock accessibility
   - Landscape design at entries
   - UC system sustainability requirements – LEED Silver equivalency
5. Ross Grayson to provide a marked-up campus plan of the following:
   - Emergency phone location (existing and ideal locations)
   - Ideal campus lighting
   - Campus access

March 14, 2005

Workshop #2 – Student Special Services Meeting

At the Student Special Services meeting on March 14, 2005, from 11:00 am to 11:30 am the following were present:

UCR	Nita Bullock, Suzanne Trotta, Lenita Kellstrand
HEWV	Buddy Hall
SWA	Monica Simpson

The following items were discussed:

1. Nita Bullock provided an introduction to the East Southeast campus area study and indicated that the goal was to establish a vision for the next 50-100 years for UCR
2. Design Team to consider how ADA parking can be accommodated in the planning of new buildings.
3. Design Team to consider how to accommodate ADA access to the Citrus Station.
4. Design Team to consider ways to improve the pedestrian environment along existing and proposed pathways to include:
   - Clear paths for the visually impaired
   - Seating options visible along paths
   - Sense of arrival at Valencia Hill Drive and Box Springs Road
   - Dining opportunities adjacent to pedestrian gathering spaces
5. Suzanne Trotta to provide a mark-up of the campus map provided to her to Nita Bullock by March 23 indicating existing:
   - ADA pathways
   - ADA compliant building entries
   - ADA parking spaces
   - Problem areas
6. Suzanne Trotta and Lenita Kellstrand to return dining questionnaire to Nita Bullock as soon as possible.

March 14, 2005

Workshop #2 – Parking and Transit Services Meeting

At the Parking and Transit Services meeting on March 14, 2005, from 11:30 am to 12:00 pm the following were present:

UCR	Nita Bullock, Andrew Stewart, Lance Danks
HEWV	Buddy Hall
SWA	Monica Simpson

The following items were discussed:

1. Nita Bullock provided an introduction to the East Southeast campus area study and indicated that the goal was to establish a vision for the next 50-100 years for UCR
2. Design Team to consider the following during the planning process:
   - Demand for parking generated by new buildings
   - Shuttle routes as defined in the Multi-Modal Transportation Management Strategy study
   - Campus emergency phone locations – need a master plan
   - Lack of oversight of emergency phone system – falls to parking even though they don't have the operating budget for it
   - Lack of existing infrastructure to support bicycle use – paths, storage racks, etc.
   - Limited number of visitor parking on campus for events – approximately 300 existing with an additional 340 at the sports complex at the corner of Canyon Crest Drive and Blaine Street
   - 500 additional parking spaces to be located on the opposite side of the freeway in the current Caltrans "lay down" area
3. Lance Danks provided a diagram of preferred bus turnout areas to the Design Team.
4. Design Team to recognize that parking citations funds the current transit service limiting growth of the system.

March 14, 2005

Workshop #2 – Building Operations and Physical Plant Meeting

At the Building Operations and Physical Plant meeting on March 14, 2005, from 1:00 pm to 3:00 pm the following were present:

UCR	Nita Bullock, Mike Terry, George MacMullen, Pat Simone, Earl LeVoss, Jerry Higgins, Walt Griffin
HEWV	Buddy Hall
SWA	Monica Simpson
Kennedy Jenks	Bruce Thomas

The following items were discussed:

1. Nita Bullock provided an introduction to the East Southeast campus area study and indicated that the goal was to establish a vision for the next 50-100 years for UCR
2. George MacMullen indicated that the utility drawings provided on the wall by the design team indicating the current planned infrastructure upgrades were incomplete. George will e-mail the current infrastructure upgrade drawing files to the Design Team
3. The current infrastructure drawings do not show any proposed improvements to the storm water system – it is not clear if the infrastructure DPP addressed storm water
4. Some of the following buildings have been the subject of historic preservation studies:
   - College Building South
   - The Cottage
   - The Barn
   - Citrus Experiment Station (three buildings)
   - Old Citrus Manager's residence (currently used at a staff residence)
5. Physical plant staff provided information on the current status of upgrades to campus buildings located in the east/southeast campus
6. George MacMullen will e-mail to the Design Team the current Facilities Infrastructure Renewal Model (FIRM) indicating the current status of deferred maintenance for all campus buildings
7. Current buildings need to be evaluated on a 10-year, 20-year basis rather than a 50-year basis as technology changes may render them totally obsolete. Buildings that should be considered for demolition in the near term and their uses relocated include:
   - Various green houses
   - Grounds facility
   - Fawcett Lab
   - Boyden Lab
   - Old Insectary
   - Old Entomology
   - Rivera Library Unit 1 (one story – utility connections to Rivera Library currently run through Unit 1 building)
8. All new electrical service should be planned as 12KV
9. New utilities should be placed into tunnels rather than direct buried
10. Planning process should consider the following:
    - A 2-megawatt emergency generator is planned for the Statistics, Boyce, Weber area
    - The satellite chiller plant will expand as campus grows - most likely expansion could be to the south requiring the temporary building currently housing the computer and communications building to move to another location
    - The University Lab building is not designed for lab based programs – it is better suited to office use
    - The building housing Environmental Health and Safety should be considered as a graduate art studio – EH&S will be be relocated
11. Nita Bullock to provide the Design Team with the color-coded plan showing the 5-year increments of the planned infrastructure upgrades

March 14, 2005

Workshop #2 – Dining Services Meeting

At the Dining Services meeting on March 14, 2005, from 3:15 pm to 3:45 pm the following were present:

UCR	Nita Bullock, Kipp Dougherty
HEWV	Buddy Hall
SWA	Monica Simpson

The following items were discussed:

1. Nita Bullock to email dining services questions to focus group members
2. Kipp Dougherty provided a marked-up campus map to the Design Team indicating existing dining locations as well as those currently planned and other desirable locations to include:
   - The Commons
   - "Sandwichology" in the Life Sciences Building
   - The "Barn"

- Citrus Café at the Citrus Station (proposed)
- The "Taqueria" at the Statistic Building
- Picnic Hill (desirable)
- Cart location at the Humanities Building
- Faculty Club at Watkins House (proposed)

3. Dining Services prefers to move into a shell space in a new building that has power, potable water and sanitary sewer hook-ups readily available
4. Currently, 98% of sales at the Tacqueria is in the Latin menu
5. Outdoor concepts should be explored; additional indoor meeting space is needed – consider areas and concepts that will be a draw for people between classes and at lunchtime
6. Design Team to consider the pedestrian traffic into campus to and from the parking lots adjacent to Martin Luther King Boulevard as a critical dining market opportunity

March 14, 2005

Workshop #2 –Grounds Services Group Meeting

At the Grounds Services meeting on March 14, 2005, from 4:00 pm to 4:30 pm the following were present:

UCR	Nita Bullock
HEWV	Buddy Hall
SWA	Monica Simpson

1. No one from Grounds Services attended the meeting (meeting with Bob Giese took place on March 15 – see March 15 meeting minutes)

March 15, 2005

Workshop #2 – Campus Grounds Meeting

At the rescheduled Campus Grounds meeting on March 15, 2005, from 9:00 am to 10:00 am the following were present:

UCR	Nita Bullock, Bob Giese
HEWV	Steve Gift, Jane Wright

The following items were discussed:

1. Nita Bullock provided an introduction to the East Southeast campus area study and indicated that the goal was to establish a vision for the next 50-100 years for UCR
2. Current issues and problems to be considered by the Design Team include:
   - Budget and Maintenance must be balanced with the fact that the landscape is an important first impression of the campus
   - Grounds Department is increasing focus on smaller, more precious landscapes, places for retreat and reflection
   - Native grass, rock mulch and semi-arid ground covers are desirable
   - Landscape irrigation should be reworked to use water from the Gage Canal rather than potable water source
   - Shade is a priority – smaller trees are desirable as they are less prone to damage
   - Infill development is threatening existing vistas within the campus and from the campus to surrounding region
   - New landscapes should be low water use
   - Existing hedges are problematic – security issues are key – campus should be more open
   - Consistency in concrete color for campus walks should be a priority

March 15, 2005

Workshop #2 – Anthropology Group Meeting

At the Anthropology Group meeting on March 15, 2005, from 10:00 am to 10:45 am the following were present:

UCR	Tom Paterson
HEWV	Jane Wright

The following items were discussed:

1. Jane Wright provided an introduction to the East Southeast campus area study and indicated that the goal was to establish a vision for the next 50-100 years for UCR
2. Tom Paterson provided the following observations:
   - Freeway noise is a nuisance
   - There are no places to sit on the central campus – although there has been extensive investment is science buildings
   - Graduate students need a conveniently located lounge
   - Faculty parking is limited adjacent to academic buildings
   - Current facilities have limited room for growth – need equipment more than space
3. Tom suggested the Design Team interview Wendy Ashmore; she has done extensive study of social interaction on campus – she can be reached at 951-686-6853

March 16, 2005

Workshop #2 – Agricultural Operations Meeting

At the Agricultural Operations (Ag Ops) meeting on March 16, 2005, from 10:00 am to 10:45 am the following were present:

UCR	Nita Bullock, Steve Cockerham, Sue Lee
HEWV	Buddy Hall, Jane Wright, Steve Gift

The following items were discussed:

1. Nita Bullock provided an introduction to the East Southeast campus area study and indicated that the goal was to establish a vision for the next 50-100 years for UCR
2. Design Team to recognize the importance of the bio-control groves (Field 21), the botanical gardens and the avocado grove as permanent preserve
3. Ag Ops irrigation reservoir is located south of the Herbarium; it provides irrigation to the avocado grove and Field 21. It is feed via a pipe running under the freeway from a reservoir at the Ag Ops facility on the West Campus
4. Ag Ops provides all planting soil to the green houses on the southeast campus; vehicular access from the West Campus facility to the green houses must be maintained

March 16, 2005

Workshop #2 – Planning Committee Meeting

At the Planning Committee meeting on March 16, 2005, from 12:30 pm to 4:00 pm the following were present:

UCR	Nita Bullock, Tim Ralston, Tricia Thrasher, Kieron Brunelle, Ruth Jackson, Joel Martin, Don Cooksey, David Rios, Susan Hancock
HEWV	Buddy Hall, Steve Gift
SWA	Monica Simpson

The following items were discussed:

1. The Design Team provided an overview of the analysis done to date:
   - Existing southeast campus land area ratio (FAR) is well below the 1.0 target set forth in the 2005 Long Range Development Plan (LRDP)
   - The increased density planned for campus is intended to maintain campus workability by preventing "sprawl" as it increases classroom and lab space to accommodate the planned increase of student population to 25,000 by 2015.
   - The freeway negatively affects the campus in terms of noise, visibility and arrival
2. The Design Team obtained the following observations from the focus groups and from field investigations:
   - Developments east and south of campus loop road should be of low pedestrian uses
   - The loop road needs to be developed into a campus boulevard with significant traffic calming, transit and bicycle lanes
   - Eucalyptus Drive and Citrus Drive needs a pedestrian bias
   - Citrus Experiment Station has minimal impact from freeway
   - If Citrus Station is to become the executive/administration offices an entry sequence needs to be developed
   - Food is a social generator; currently is very limited on the southeast campus
   - Activity areas, studies, seminar space, classrooms; auditoriums are limited on the southeast campus; locating these should be a priority of the planning effort
   - Low water use landscapes need to be a primary strategy for the southeast campus
   - Landscape strategies need to provide functional and aesthetic value; shade and seating are priorities
3. The Design team shall consider the following during the planning process:
   - 4-story minimum height of new buildings – individual buildings can be analyzed based on maintaining views and vistas
   - Caltrans is responsible for addressing how storm drainage is to be handled at the freeway underpass of Canyon Crest Drive
   - Topographic grades of between 6 and 25% on the east/southeast campus provide opportunity for a dynamic campus and challenges to address ADA accessibility
   - The open space between Watkins Hall and the Rivera Library should be considered a model open space
4. Nita Bullock to provide meeting notes from the on-going CNAS master plan process to the Design Team

March 16, 2005

Workshop #2 –PMT Meeting

At the PMT meeting on March 16, 2005, from 4:00 pm to 4:30 pm the following were present:

UCR	Nita Bullock, Tim Ralston
HEWV	Buddy Hall, Steve Gift, Jane Wright
SWA	Monica Simipson

The following items were discussed:

1. Tim Ralston to set up a teleconference between the Design Team and the East Campus infrastructure consultant
2. The Design Team to explore potential road alignments that simplify the Canyon Crest Drive/Campus Drive intersection

March 28, 2005

Workshop #3 – PMT Meeting

At the PMT meeting on March 28, 2005, from 8:00 am to 8:45 am the following were present:

UCR	Nita Bullock, Tim Ralston
HEWV	Buddy Hall, Steve Gift

The following items were discussed:

1. The C-3 meeting has been scheduled for April 29, 2005; PMT to provide the time and place to the Design Team as soon as possible
2. The University Club currently meets in the Barn and University Club holds the liquor license. University Club employees may serve liquor at the Barn, but Barn employees may not.
3. A hotel/conference center is currently planned for the West Campus; The design team recommended a meeting with the Vice-Chancellor of International Relations/UNEX
4. The current hotel/conference function would be associated with the professional schools to be located on the West Campus. The center would be located at the old Ramada Inn site currently Highlander Hall
5. The PMT reiterated the current plan to move the executive offices from Hinderaker to the old Citrus Experiment Station; current AGSM user – Graduate School of Management will be moving to a new facility on the West Campus although there is currently no active plan for this project other than a DPP completed several years ago.
6. Hinderaker Hall is slated to be office space for CHASS when executive management moves
7. PMT to set up meeting with the CNAS master plan consultant on April 5
8. Tim Ralston will forward the meeting minutes from CNAS master plan workshops
9. Steve Gift provided a copy of a growth center model to the PMT currently being considered by Virginia Tech; this particular model originated at Montana State and was mentioned by CNAS representatives during Workshop #2
10. The Design Team will review the 2002 CHASS master plan for CHASS programming information; the document is located on UCR's website

March 28, 2005

Workshop #3 – University Club Group Meeting

At the University Club Group meeting on March 28, 2005, from 9:00 am to 9:45 am the following were present:

UCR Nita Bullock, Andy Plumley, Tom Miller, Connie McGrath, Albert Stralka, Bob Heath

HEWV Buddy Hall, Steve Gift

The following items were discussed:

1. Nita Bullock provided an introduction to the study and the team to the group
2. The group provided the following history of the old faculty club
   - Faculty Club dates back to 1953 with start of the UCR campus and faculty were hired
   - Originally, two WWII buildings were moved to the site; combined and renovated ($360,000) to function as the club
   - The project was funded by William Boyd (benefactor of the Carillon Tower and Deep Canyon Desert Reserve)
   - The are approximately 150 members currently
   - As budgets became tighter membership was opened to all campus staff and became known as the University Club
   - The facility had the following:
     i. First Floor
        1. Dining for 100 – 150
        2. 4 to 5 breakout rooms/meeting rooms
        3. Boyd Lounge (overstuffed chairs, Ansel Adams art, stone fireplace)
        4. Loading dock
     ii. Basement Level
        1. Billiards room
        2. Bar
        3. Gathering space/Party space
   - The facility program included:
     i. Lunch
     ii. Symposium space
     iii. Community use including weddings, parties
     iv. Event catering
     v. Meeting rooms
   - Membership was at its highest percent of membership in the 1960s
   - The original building was removed in 1999 to make way for construction of the Entomology Building
   - University Club now meets in the "Barn"
3. New University Club location should address the following:
   - Convenient parking
   - Outside income is critical
   - Outdoor spaces – patios, plazas, lawn – for "spill over" during events
   - Outdoor recreation spaces – horseshoes, volleyball
   - Shuttle bus drop-off
   - Symposium space
4. Tom Miller to provide to Nita as soon as possible:

- Historical data on old faculty club including photos
- Building program data for new University Club

March 28, 2005

Workshop #3 – Green House Group Meeting

At the Green House Group meeting on March 28, 2005, from 10:00 am to 10:45 am the following were present:

UCR Nita Bullock, Tony Huang, Linda Walling

HEWV Buddy Hall, Steve Gift

The following items were discussed:

1. Nita Bullock provided an introduction to the study and the team to the group
2. The Design Team provided the group with a copy of the Montana State Growth facility model to begin the discussion
3. Linda indicated that the Design Team needed to talk to Phil Roberts and Rob Lennox
4. Nita Bullock to set up a meeting with Phil and Rob for the April 4-5 workshop
5. The Group provided the following information
   - Moving green house research is problematic for some programs due to the necessity of immediate proximity – speedy transfer of living plants is essential; traffic congestion on campus drive is problematic
   - 1/3 of UCR faculty use the green houses for research
   - State (Office of the President) has discouraged placing green houses on the roof of new buildings
   - Linda Walling provided a marked-up drawing of the current locations of the academic programs and their proximity to the existing green houses
   - Current green houses are functional and serve the purpose intended – Rob Lennox is the green house technician and is currently tasked with green house maintenance
   - Growth facilities are currently spread among various buildings; essential to have adequate cooling
   - Current classroom spaces do not provide adequate environments
   - New instructional space needed for undergraduate education
     i. Conference rooms for 10 – 30 persons
     ii. Class Rooms for 30, 60, 100 and 300 persons
   - Faculty office space is needed
6. Linda Walling to provide the following to Nita Bullock:
   - Collect information on current green house use and what could be moved to the west campus
   - Review Montana State Model, provide comments and provide other options
   - CNAS population numbers

March 28, 2005

Workshop #3 – Staff Assembly Group Meeting

At the Staff Assembly Group meeting on March 28, 2005, from 12:00 pm to 1:00 pm the following were present:

UCR Nita Bullock, Kipp Dougherty, Nasser Salomon, Robb Miller, Eric Martin, Kathleen Fariss, Mary Johnson, Aaron Bushong, Sue Anderson

HEWV Buddy Hall, Steve Gift

The following items were discussed:

1. Nita Bullock provided introductions to the study
2. Kipp Dougherty provided an overview of current and future dining venues on the East Campus
    - Lot 30 is a prime opportunity
    - Southeast campus is under served
3. The Group provided the following comments regarding what new dining venues should include:
    - Place to enjoy the weather
    - Perception of safety
    - Wireless connections – current locations can be viewed at the C&C web site
    - Seating
    - Opportunity to watch people
    - Incorporate with a building destination
    - Shade during warm months
    - Proximity to Picnic Hill desirable
4. University Club venue is needed
    - Would increase membership
    - Would bridge current chasm between staff and faculty
5. The Group identified the current problems area:
    - Eucalyptus is perceived as unsafe
    - Pedestrian access on the south side of EH&S is limited due to missing sidewalk
    - Unregulated pedestrian flow at the Barnes intersection is unsafe
    - Parking lot access and availability at the Computing and Communications Building at 3:00 PM when custodial staff arrive
    - Lack of light on campus prevents use at night
    - Lack of adequate lighting in Parking Lot 6
- Conference rooms located on the second floors of building prevent ease of wayfinding – preference for first floor locations for new conference rooms

March 28, 2005

Workshop #3 – Chairman of Academic Senate Meeting

At the meeting with the chairman of the academic senate on March 28, 2005, from 4:00 pm to 5:00 pm the following were present:

UCR Nita Bullock, Manuela Martins-Green

HEWV Buddy Hall, Steve Gift

The following items were discussed:

1. Nita Bullock provided introductions to the study
2. Ms. Martins-Green provided the following comments:
    - University Club location should be a priority - Picnic Hill is the preferred location
        i. The staff and graduate students need a place with which to identify
        ii. The Barn is too noisy
    - Spieth Hall does not function well in its current configuration
    - University Office Building functions well – space is limited due to expansion pressures from the research tenants; would like to expand to University Lab Building
    - Classrooms are needed
        i. At the end of the quarter some classes have to meet on Sunday
        ii. The preferred size should be patterned after B-650 in the Statistics Building
        iii. The technology in the University Lecture Hall and Physics 2000 is very helpful
        iv. Physics 2000 is too steep; dangerous

March 28, 2005

Workshop #3 –ASUCR Group Meeting

At the meeting with the ASUCR Group on March 28, 2005, from 6:00 pm to 7:00 pm the following were present:

UCR Nita Bullock, Mallory Ross, Kipp Dougherty

HEWV Buddy Hall, Steve Gift

SWA Monica Simpson

The following items were discussed:

1. Nita Bullock provided introductions to the study and the Design Team
2. Due to the lack in attendance the hour was spent discussing the issues with Ms. Ross. She recommended that the Design Team return to campus on the evening of April 28 at 7:00 PM to make a full presentation to the ASUCR Senate group. Nita Bullock will provide and introduction to the group on Thursday evening March 31.
3. The Design Team to provide a list of topic to Nita prior to the April 28 meeting
4. Ms. Ross provided the following comments:
    - New dining opportunities should provide outdoor seating option
    - One new dining opportunity should occur in proximity to the Canyon Crest Drive freeway underpass
    - A dining venue behind Olmsted would accommodate theatre events
    - Taqueria is difficult to find
    - Benches should be added to the area around the Bell Tower and along the colonnade at Rivera Library

March 28, 2005

Workshop #3 –ASUCR Group Meeting

At the meeting with the GSA Group on March 28, 2005, from 7:00 pm to 8:00 pm the following were present:

UCR	Nita Bullock, Kipp Dougherty
HEWV	Buddy Hall, Steve Gift
SWA	Monica Simpson

No one from the GSA Group attended the meeting

March 29, 2005

Workshop #3 – Committee Meeting

At the Committee meeting on March 29, 2005, from 9:00 am to 1:00 pm the following were present:

UCR	Nita Bullock, Kipp Dougherty, Tim Ralson, Kieron Brunelle
HEWV	Buddy Hall, Steve Gift
SWA	Monica Simpson

The following items were discussed:

1. The Design Team presented their analysis and preliminary findings including the options to be presented to the DRB on April 5.
   - The lawn between Rivera Library and Watkins Hall is a model open space – most areas lack this clarity
   - Pedestrian paths are typically located to one side of a lawn area providing the user views across open lawns
   - The location of the new Psychology building affects the future configuration of the Citrus Mall
   - Due to the following it is unlikely that Citrus Avenue will be the pedestrian way defined by the LRDP
     i. Steam plant creates a "dead" edge along the west
     ii. Loading dock to be shared by Genomics and Entomology
     iii. On-street parking and drop off at the AGSM
     iv. Dense landscaping along the building façade of new Entomology creates low visibility for pedestrians
   - The proposed Science Mall should be extended from the Biological Sciences building down to the plaza on the east side of Entomology
     v. Works with existing grades
     vi. Unifies campus with Picnic Hill access
   - Boyden Lab should be removed with old Entomology and the old Insectary to provide a future building site adjacent to Picnic Hill
   - Additional landscaping is needed between the loop road and the sound wall proposed by Caltrans
     vii. Proposed 15 feet should be increased to 25 – 30 feet
     viii. Proposed Purple Leaf Plum trees should be augmented with other species
   - Loop road should be unifying element; landscape character found along the south side of the loop road and along Big Springs Road should be used a model
   - As new buildings are constructed their landscape design should be complimentary to the campus as a whole rather than individualistic
   - Funding of campus civic spaces need to be identified; currently only buildings and their immediate surrounds have approved State funding
   - Non-contributing open space provide opportunity for building infill sites
   - Watkins Hall is a site opportunity to increase density in the core campus
2. A meeting with the CNAS master planning consultant is needed to obtain CNAS programming information
3. PMT to provide the Design Team with the current drawings for the low-flow bypass channelization project currently planned on the east side of campus
4. The committee provided the following comments:
   - Proposed building location on the south side of the existing physical sciences building is too big – conflicts with Fish and Wildlife Agencyconcerns for the area
   - New Insectary and Quarantine building may have proximity issues – Kieron Brunelle to research and provide to Design Team
   - Campus administrative uses are to be located to the perimeter of campus
   - All parking garages are to be located per the LRDP and the Multi-modal Transportation Management Strategy
   - The Satellite Chiller Plant will expand to the west not to the south
     i. Current facility has capacity to expand by four more chillers
     ii. Expansion will require construction of an additional thermal energy storage water tank (location will be immediately west of TES Tank #2 located above the C&C building)
   - New Psychology building is fixed – no relocation is possible
   - Design Team shall:
     iii. Review 100-year flood plain map and include as necessary in analysis drawings
     iv. Address Unit 1 of Rivera Library programming with Librarian
     v. Add Pierce Hall addition to the plan (Chemical Sciences 1)
     vi. Provide drawings indicated servicing to new buildings – this will insure that proposed footprints work with existing topography
5. PMT to provide the Design Team with the following:
   - Scope for the effort along the loop road and at the freeway underpass – current understanding of freeway expansion is unclear as to what can be changed - PMT to talk with Lisa Hjulberg to ascertain the potential for changes
   - Location drawings of all environmentally sensitive areas – Design Team to show on future plans
   - Electronic files of the new commons

March 29, 2005

Workshop #3 – PMT Meeting

At the PMT meeting on March 28, 2005, from 1:00 pm to 1:30 pm the following were present:

UCR Nita Bullock, Tim Ralston, Tricia Thrasher

HEWV Buddy Hall, Steve Gift

SWA Monica Simpson

The following items were discussed:

1. The committee meeting scheduled for April 4 is cancelled – a pre-DRB presentation to the committee will occur on April 5 at 9:00 AM
2. Due to the lack of programming data available for new academic space the document will focus on the urban design and landscape structure of the campus
3. A stronger emphasis should be placed on undergraduate spaces on the south side of campus – more classrooms and lecture spaces

April 4, 2005

Workshop #4 – PMT Meeting

During the conference call with Yolanda Moses on April 4, 2005, from 3:00 pm to 4:00 pm the following were present:

UCR Yolanda Moses

HEWV Buddy Hall, Steve Gift

The following items were discussed:

1. Ms. Moses provided the following goals regarding her role at UCR as the Vice-Chancellor of Diversity:
   - Find ways to support students from different social and cultural backgrounds to make their college experience successful
   - How does a research university respond to a culturally diverse surrounding neighborhood?
   - What outcomes are possible when the faculty consists of a wide cross section of the culture?
   - How can residents of the surrounding neighborhood be made to feel a part of the campus community?
   - How can the university partner with the large community outside campus to create an open forum to discuss issues relevant to both?
   - Discover ways to stem the flow of drop outs among minority students
   - Partner with junior colleges to capture upper division students
   - Increase the diversity of faculty by attracting and keeping graduate and post doctorate students and training to be the next generation of UCR faculty
2. The university is a "laboratory"
   - Students come from high schools that were not very diverse
   - University environment exposes students to a wider cross section of society
   - Large student population can be overwhelming to an individual student
   - Student success is dependent on breaking down the large classroom sessions into smaller learning groups – ability to connect as individuals is enhanced
   - Food is important venue for interaction at the small group level
3. UCR is viewed as a model for creating an undergraduate research environment – seeking accreditation from the Western Association of Schools and Colleges
   - UCR's mission is to work with undergraduate students
   - This follows a national trend
4. What opportunities are presented for the ESCAS to support a diverse campus?
   - To develop opportunities for symbolic representations on campus
     i. Gift-giving mandate; naming opportunities
     ii. Corporate gifts
     iii. Significant contributions by local heroes
   - Cesar Chavez
   - Tomas Rivera
   - Native Americans
   - Create places for students and faculty to meet, engage, discuss and interact
   - Create places for celebration and gathering for the larger community; UCR is "a city on a hill" to the residents of the surrounding neighborhood – they are intentionally invited to campus for events

April 5, 2005

Workshop #4 – PMT Meeting

During the PMT Meeting on April 5, 2005, from 8:00 am to 8:45 am the following were present:

UCR Nita Bullock, Tim Ralston

HEWV Buddy Hall, Steve Gift, Wesley Page

SWA Monica Simpson

The following items were discussed:

1. The PMT will try to obtain the Facilities Infrastructure Renewal Model (FIRM) from Catherine Montana.
2. The CHASS I&R building may be the next significant campus building to begin construction – PMT to confirm this within the next month
3. PMT to address the landscape proposal by Caltrans–seek to expand buffer zone and plant species
4. Design Team to provide a list of issues for Nita to submit to ASUCR prior to April 28 meeting
5. Nita requested that all meeting minutes be up to date prior to the scheduled C-3 meeting on April 29.
6. PMT indicated that Boyden Lab could be demolished in the future as part of a new CNAS building project

April 5, 2005

Workshop #4 – PMT Meeting

During the Committee Meeting on April 5, 2005, from 9:00 am to 10:00 am the following were present:

UCR Nita Bullock, Tim Ralston, Tricia Thrasher, Kieron Brunelle, Kipp Dougherty, Ruth Jackson, Steve Angle, Jim Sandoval, Thomas Miller

HEWV Buddy Hall, Steve Gift, Wesley Page

SWA Monica Simpson

The following items were discussed:

1. The Design Team provided the committee a preview of the presentation to be given to the Design Review Board
2. The Committee provided the following comments:
   - Some of the green houses can move to the West Campus
   - Convenient vehicular access between the East and West Campus is essential if green houses are to be useful to researchers
   - Opportunities and strategies to decrease congestion at the freeway underpass is essential

- Montana State growth facility model is appropriate for future research facilities on the East Campus
- Service access to existing and new buildings needs to be studied – all proposed building scenarios need to have reasonable service areas
- DRB is good venue to address concerns about proposed Caltrans landscape improvements at the freeway sound wall
- Options that show closing the south end of the library mall with a future building should be reconsidered
- PMT to set up a meeting between Ruth Jackson and the Design Team to discuss library expansion and the concept of an information commons
- PMT to set up a meeting among Jim Sandoval, the architect for the commons, Liz Chaney and the Design Team
- PMT to provide Design Team with a copy of the Commons PowerPoint presentation
- During DRB presentation the Design Team to refer to the LRDP as the "Proposed Update to the LRDP"

April 5, 2005

Workshop #4 – DRB Meeting

During the DRB Meeting on April 5, 2005, from 12:30 pm to 1:30 pm the following were present:

UCR	Nita Bullock, Tim Ralston, Tricia Thrasher, Cathy Garcia, John Ganim, Tom Stahovich, Duke Oakley, Luis Carrazana, Darius Maroufkhani
HEWV	Buddy Hall, Steve Gift, Wesley Page
SWA	Monica Simpson

The following items were discussed:

1. Nita Bullock provided and overview of the ESCAS and introduced the Design Team
2. The Design Team presented the analysis of the southeast campus and the preliminary concepts developed to date
3. The DRB provided the following comments:
   - The preferred location of the proposed University Club should be in the central part of campus rather than at Picnic Hill or outside the ring road
   - Future growth of campus should be tied to need rather than a strict adherence to an FAR of 1 as defined in the 2005 LRDP
   - Building and space hierarchy for the proposed Citrus Mall needs careful study
   - DRB agrees that the 2005 LRDP suggestion that Citrus Drive be developed as a pedestrian corridor is not realistic – Design Team recommendation that the "Science Mall" extend south to link new Genomics, Entomology and the east entrance of the Citrus Experiment Station is more realistic
   - Picnic Hill should remain an rustic, "funky" open space as a counterpoint to the malls of the East Campus
   - Design Team to refine the use of palms as an organizing plant along Eucalyptus Drive
   - Design Team to carefully consider the type of architectural elements at the opposite ends of Eucalyptus Drive
   - PMT to explore options for landscape change order with Caltrans–Tim Ralston to investigate
   - Design Team to pursue infill development options along the south side of the Carillon Mall
   - Design Team to add service and emergency access diagrams to insure that proposed building scenarios are reasonable
   - Landscape concepts that suggest a rural character for the loop road should be explored - the nature of the road would be symbolic of the rural heritage of the campus

April 5, 2005

Workshop #4 – CNAS Consultant Meeting

During the CNAS consultant meeting on April 5, 2005, from 1:45 pm to 3:30 pm the following were present:

UCR	Nita Bullock, Tim Ralston, John Weinman, Luis Carrazana
HEWV	Buddy Hall, Steve Gift, Wesley Page
SWA	Monica Simpson

The following items were discussed:

1. John Weinman has determined the following from his interviews to date:
   - Instrumentation facilities will be included in existing facilities rather than stand-alone buildings
     i. They are sited in proximity to a particular researcher
   - CNAS researchers recognize that most greenhouse functions will be relocated to the West Campus
   - Greenhouses are changing – they are now considered lab space with glass
   - New greenhouses on the East Campus will be incorporated into new research buildings – greenhouses are an extension of labs
   - Researchers are concerned about traffic congestion at the freeway underpass – delay in transit between East and West Campus
   - Researchers perceive that "the campus" is not committed to using animals in research
   - If Health Sciences Initiative is approved there will be increased use of animals in research – research buildings will be located on West Campus – this makes the freeway underpass and the sense of arrival even more critical
   - New Psychology will have a 1-story vivarium on first floor on the east side of the building; phase 2 will double the size of the vivarium (will occur within 5 years of building opening)
   - Neuroscience is close to using primates in their research
   - Boyden Lab currently houses the collaborative extension staff – these could relocate to Bachelor Hall
2. To provide accurate diagrams on the area plan the Design Team should represent proposed buildings 3 to 4 stories in height and between 100,000 – 150, 000 square feet
3. Luis Carrazana made the following comment regarding the CNAS Building Evaluation and Secondary Effects reports:
   - Consultant's recommendations regarding Bachelor Hall are flawed
   - Consultant assumed a 9'-6" floor to floor height to determine suitability for future use and renovation of the building – the actual floor to floor height is 12'-0"
   - Bachelor service dock is limiting to all surrounding sites – the 2-story portion of the building with the service door at the first level needs to be removed and a new service area constructed
4. The CNAS master space plan will be completed mid-summer; it will provide space planning needs for the southeast campus. If the ESCAS can be delayed until then the programmatic information will inform the site plan options
5. Design Team to review the Draft CNAS Academic Plan
6. The Design Team and John Weinman recommended a meeting with the Vice-Chancellor of Research
   - The PMT recommended that other key vice-chancellors and deans be included in this meeting to broaden the discussion
   - Steve Gift and John Weinman to develop a short "observation statement" and a list of questions that can be delivered to the participants prior to the meeting to help facilitate the discussion – the statement and questions to be submitted to Nita Bullock who will forward to Tim Ralston and Luis Carrazana
7. Tim Ralston to discuss potential delay with Gretchen Bolar prior to the PMT/Design Team conference call on Tuesday, April 12

April 5, 2005

Workshop #4 – PMT Meeting

During the PMT meeting on April 5, 2005, from 3:30 pm to 4:00 pm the following were present:

UCR Nita Bullock, Tim Ralston , Tricia Thrasher

HEWV Buddy Hall, Steve Gift, Wesley Page

SWA Monica Simpson

The following items were discussed:

1. Tim Ralston to recommend to Gretchen Bolar that the Design Team and the CNAS Master Planner meet with the following:
   - Vice-Chancellor Charles Louis, Deans Steve Angle and Joel Martin
2. The topic of the April 12 PMT conference call shall be to determine the likelihood of delay in the study schedule and which if any of the scheduled meetings will be eliminated or rescheduled
3. The Design Team requested that meetings with the following be scheduled for the afternoon of April 28 or on April 29:
   - Ruth Jackson
   - Jim Sandoval and Liz Chaney (Commons architect)
   - Vice-Chancellor Louis and Deans Angle and Martin
4. Tim Ralston to investigate possible change order with Caltrans to increase landscape buffer between the loop road and sound wall
5. Design Team to prepare a letter requesting a change order to the contract for $25,000 to provide the 3d fly through of ESCAS area
6. PMT requested that the area of the ESCAS be expanded to include Hinderaker Hall and the area to include Engineering, Engineering 2, the Science Library, Pierce Hall – the area outside the east campus area entrance study and the ESCAS. The Design Team to evaluate whether this area can be included within the existing fees for the project.

April 28, 2005

Workshop #5 – Commons Group Meeting

During the Commons Group meeting with on April 28, 2005, from 1:30 pm to 2:30 pm the following were present:

UCR Nita Bullock, Tricia Thrasher, Danny Kim, Liz Chaney (Architect for the Commons)

HEWV Buddy Hall

The following items were discussed:

1. The key elements of the new commons design are:
   a. Place of activity
   b. "Flow through" design – porosity of building
   c. Transparent architecture
   d. 24/7 use
   e. Strong building elements – drum on south end of building symbolizes the heart of campus and is intended to be a beacon at night
   f. Provide a "Kodak moment" on campus
2. The quad/courtyard at the science library with the proximity of the Tacqueria has become a satellite commons-type space; other satellite commons are desirable on the southeast campus but will be secondary
3. Program elements that went unrealized in the current design:
   a. Large concert venue
   b. Water feature – fountain in the piazza
   c. More meeting rooms – revenue generator

April 28, 2005

Workshop #5 – PMT Meeting

During the PMT meeting on April 28, 2005, from 2:30 pm to 3:00 pm the following were present:

UCR Nita Bullock, Tim Ralston, Tricia Thrasher

HEWV Buddy Hall

The following items were discussed:

1. CPAC meeting on May 17 is an additional meeting – the design team will also need to make two presentations to the C-3 group
2. The CPAC meeting is a "town hall" type meeting that includes a wider campus audience – the design team to present a modified version of the first DRB presentation. Time frame for the meeting is 10:00 AM to 12:00 PM
3. The pre-CPAC conference call with Vice Chancellors Bolar and Webster will be held on Tuesday May 10 at 9:00 AM (12:00 PM EST) Nita and Tim to use the DRB PowerPoint presentation for the briefing
4. The GSA Group requested that their focus group meeting be rescheduled for Thursday May 5. Nita Bullock to set up a conference call at 12:00 PM PST between GSA representatives and the design team.
5. The meeting with Vice Chancellors Bolar and Louis and Dean Angle will be rescheduled – Nita to try to set this meeting for May 17
6. Nita is processing the proposal for additional services related to the 3D animation
7. Nita to provide the following information to the design team:
   a. Latest site plan with foot print of the new psychology building
   b. Second set of CNAS master plan focus group meeting minutes
8. Nita provided the following comments on the current illustrative plan:
   a. Show additional landscape screening along Citrus Drive at the Steam Plant
   b. Make sure parking is shown in front of the Citrus Experiment Station
   c. Need to provide area for 10-15 parking spaces for Entomology Building

April 28, 2005

Workshop #5 –Meeting with Wendy Ashmore

During the meeting with Wendy Ashmore on April 28, 2005, from 3:00 pm to 4:00 pm the following were present:

UCR Nita Bullock, Tim Ralston, Wendy Ashmore

HEWV Buddy Hall

The following items were discussed:

1. Nita provided a brief introduction to the ESCAS
2. Ms. Ashmore provided the following insight regarding her research into the social use of outdoor spaces on campus
    a. She teaches a course based on the social meaning of space
    b. The primary text is a On the Plaza by Setha M. Low
    c. Her students pick a space on campus to observe over a period of time and report their findings
    d. The students made the following observations
        i. Students seek spaces where they can gather in small groups – tendency is to group themselves by ethnicity
        ii. Sitting space is limited – more is needed
        iii. Areas to "pause" or for solitude are needed
        iv. Shade is important – building overhangs or trees
        v. Food outlets are highly desirable
        vi. The green space around the bell tower is a magnet and major crossroads
        vii. Noise from the freeway is a nuisance
        viii. Need a space similar to the science library quad on the southeast campus
        ix. Areas that can be used after 5:00 PM are needed
        x. Students working on campus at night have the perception that it is unsafe

April 28, 2005

Workshop #5 – ASUCR Group Meeting

During the ASUCR Group meeting on April 28, 2005, from 7:00 pm to 7:10 pm the following were present:

UCR Nita Bullock, ASUCR Members

HEWV Buddy Hall

The following items were discussed:

1. ASUCR indicated that they could only allow a brief presentation
2. Nita provided a brief introduction to the ESCAS and to the design team
3. Buddy Hall gave a brief presentation providing and overview of the process to date and invited comments from ASUCR members
4. The Senate Chairperson requested that the drawings be left up for inspection during the meeting break and indicated a desire to meet with the design team after having time to consider the plan
5. Nita Bullock agreed to set up a meeting on May 17 between interested ASUCR members and the design team
6. Buddy Hall passed around a sign-in sheet and requested that members provide their name and email address – he will email Kipp Dougherty's dining survey

April 29, 2005

Workshop #5 – Green House Group Meeting

During the Green House Group meeting on April 29, 2005, from 9:00 am to 10:00 am the following were present:

UCR Nita Bullock, Phil Roberts, Rob Lenox

HEWV Buddy Hall, Steve Gift (by telephone)

The following items were discussed:

1. Nita Bullock introduced the ESCAS and the design team
2. Steve Gift provided an overview of the design team's understanding of the importance of the green houses and growth facilities to the current research agenda of UCR and discussed the Montana State growth facility model as a jointly used service facility
3. Group indicated that the Montana State model will require a change in the current attitude among the Departments about separation needed for research and the historical ownership of certain facilities
4. It is the design team's understanding from John Wienman that a draft of the CNAS master plan will be available in 1-2 weeks
5. Phil Roberts provided the following comments:
    a. Focus group discussions with the CNAS master planner regarding the status of green houses on campus have recently occurred
    b. It is difficult to say what green houses will stay on East Campus and what will be moved to the West Campus
    c. Any recommendation of relocating green houses to West Campus must be accompanied by an plan that shows how those green houses will be laid out
    d. Nematode quarantine area will have to be addressed – it can move to the West Campus
    e. Proximity of Green House #3 to the Insectary/Quarantine is important
6. Rob Lenox provided the following comments:
    a. Preparation areas for labs and research or "dirty labs" and proximity between labs and green houses and growth chambers is vital
    b. It may be possible to move some labs, the green houses that serve them and the researchers to the West Campus
    c. There is a shortage of classroom/lecture space in proximity to the green houses
    d. Heavily instrumented studies occur on the East Campus
    e. Research experimentation requires multiple visits per day
    f. The largest amount of square footage of green houses are for growth large quantities of plants – these types of green houses could be located on the West Campus
    g. Lathe houses can move to the West Campus
    i. Used hardening off plants and storage
    h. Growth chambers are currently scattered among the departments
        i. Currently scattered - 35 in Botany Department; Others used by individuals; several in the hallway at Bachelor Hall
        ii. Each chamber costs between $25,000 and $30,000

iii. They produce heat, noise and vibration
iv. Prefer that a growth chamber "farm" be located at the current location of parking lot 11
v. Require many visits per day
vi. Require air conditioning for constant temperature, clean environment and service area; automatic irrigation system, emergency generators are to be added
vii. Ideal chamber size is 12' x 20'
viii. Oldest chambers were built in 1966; adding condensing unit to the 1980 versions; seven new chambers added in 1998 – these have ability for temperature to be "ramped" up or down

i. Head houses located at green houses 6-15 and 16-19 – botany and plant science largest users

j. Glass houses were updated in the 1980s – have two uses
i. Keep plants out of the elements
ii. Have tighter control of conditions

k. Aluminum houses have a lifespan of 40 years; wood houses are being replaced as necessary

April 29, 2005

Workshop #5 – Library Group Meeting

During the Library Group meeting on April 29, 2005, from 10:00 am to 11:00 am the following were present:

UCR Nita Bullock, David Rios, Ruth Jackson, Diana Lightfelt
HEWV uddy Hall, Steve Gift (by telephone)

The following items were discussed:

1. Nita Bullock introduced the ESCAS and the design team
2. The Group provided the following comments:
   a. Current library will be out of space in 2-3 years
      i. Current inventory is 2,500,000 volumes
      ii. Too much floor area is devoted to government documents
      iii. Purchase 300 titles per year
      iv. UC system has two remote storage facilities for overflow but they have a limited capacity – these are administered by UCLA and Berkley
      v. Turn-around time for retrieval of research journal information is approximately 2-3 days – original is scanned and forwarded via email – hard copy retrieval is approximately 2-3 days as well
      vi. Automated retrieval system is not employed – all done by hand
      vii. No dense storage is possible in the Rivera Library due to building structural capacity
      viii. Plans have been done for library expansion at the southwest corner of the building
      ix. Special events are currently held in the special collections area of the library – food and drinks are problematic
      x. They have not engaged a library space planner to determine alternatives
   b. Current library space needs:
      i. Scholars' workstations on each floor
      ii. Each station would have software, print cueing and scanner
      iii. 24-hour study room
      iv. Team based learning areas – needs to be a comfortable environment – meeting rooms
      v. Coffee space in the lobby
      vi. Courtyard/balcony for social events
      vii. One entrance that is open and inviting – security can't "overpower" the feeling of welcome
   c. Existing library challenges
      i. Service dock – current dock is difficult for semi tractor trailers to access
      ii. First floor periodic flooding – storm drains in adjacent courtyards clog and water comes in under the windows
      iii. Covered walk leaks during rain
      iv. Small number of endowments
   d. Unit 1 is a good candidate for demolition and replacement – the Lang memorial garden area will most likely need to be relocated
   e. An "information commons" is needed. It would include:
      i. Glass at the front entrance – Atrium
         1. Must be able to mitigate vertical noise transmission
      ii. Comfortable seating
      iii. Coffee place – café
      iv. 24-hour study room
      v. Increase the social "collegiality" of the library's presence on the carillon mall
      vi. Courtyard/balcony for social events
   f. Outdoor spaces around the library are currently underused
   g. A satellite library is needed for fine arts and multimedia
      i. 24-hour study room
      ii. Multimedia are available for students and faculty
      iii. Smaller in GSF than the science library
      iv. Ruth Jackson to send GSF to Nita Bullock

April 29, 2005

Workshop #5 – PMT Meeting

During the PMT meeting on April 29, 2005, from 11:00 am to 11:30 am the following were present:

UCR Nita Bullock, Tim Ralston

HEWV Buddy Hall

The following items were discussed:

1. The CPAC meeting has changed focus from an approval moment by the Chancellor to and informational meeting to the campus at large. The replacement approval process–C3–will be attended by Tim and Nita without the consultants on June 17th. The remaining consultant presentations will be DRB and C3 the total number of consultant presentations in the approval process will remain the same.
2. The pre-CPAC telephone call is scheduled for May 10 between 9:00 AM and 10:00 AM
3. Two C3 meetings will be required in the project
    a. C3 #1 will be held on June 17 from 1:00 PM to 3:00 PM
        i. Nita Bullock and Tim Ralston will make the presentation using the 1st DRB PowerPoint presentation
    b. C3 #2 will be held on July 12 from 1:00 PM to 3:00 PM
4. The second DRB meeting will be scheduled for July 12 from 10:00 AM to 12:00 PM
5. The design team will consider when the next committee meeting needs to occur

May 17, 2005

Workshop #6 – CPAC Meeting

During the CPAC meeting held on May 17, 2005, from 10:00 am to 11:30 am the following were present:

UCR CPAC Group

HEWV Buddy Hall, Steve Gift

SWA Monica Simpson

The following items were discussed:

1. Vice Chancellor Gretchen Bolar provided an overview of the ESCAS process.
2. Nita Bullock introduced the specific goals of the ESCAS and introduced the Design Team
3. Steve Gift presented a brief overview of the project to date:
    a. Committee members
    b. Focus groups
    c. Goals of the study
    d. Site analysis
    e. Preliminary concepts
4. The CPAC Group provided the following comments:
    a. Montana State model of the green house/growth chamber service center is a good model for UCR
    b. Existing and future dining locations should be shown on the final plan
    c. The following should be shown on the plan:
        i. Long-term visitor and ADA accessible parking locations
        ii. University Club location should be convenient to as much of the campus as possible
        iii. Building service docks
        iv. Coordinated location of botanical garden entrance and arroyo drainage area improvements with location of a future building south of Physical Sciences
    d. Freeway noise is a concern especially to the future administration location at the Citrus Experiment Station
    e. Location of a parking deck on the south side of Big Springs Road should be considerate of residences of single family homes to the east – a minimum 100' buffer is planned
    f. Congestion at Canyon Crest freeway underpass will be alleviated by future parking structures
    g. Bike trails will be located per the 2004 Multimodal Transportation Management Strategy and the 2005 LRDP

May 17, 2005

Workshop #6 – PMT Meeting

During the PMT meeting held on May 17, 2005, from 12:00 pm to 1:00 pm the following were present:

UCR Nita Bullock, Tricia Thrasher

HEWV Buddy Hall, Steve Gift

SWA Monica Simpson

The following items were discussed:

1. The Design Team will present to C-3 on June 17; a committee meeting will be scheduled on that day as well
2. The CNAS space planning master plan will probably not be available in time to provide the programming data to inform the ESCAS but the future growth in research will most likely come from Centers and Institutes
3. July 12 is the target date for the 2nd presentations to DRB and C-3
    a. Because of the timing or lack of availability of program data it is acceptable to the PMT to shown a preferred plan that has some areas that are not complete
4. Library programming can proceed with the information obtained from the Library group
5. Monica Simpson to provide to Nita Bullock an overlay of the Design Team's proposal for the landscape buffer along the campus loop road on the Caltrans plan. Nita will forward to VC Gretchen Bolar who will forward to Mike Webster for consultation with Caltrans
6. The next PMT/Design Team conference call will be held on May 26, 2005 at 11:30 AM (PDT)

May 17, 2005

Workshop #6 –Meeting with Vice Chancellors and Dean Angle

During the meeting with the Vice Chancellors and Dean Angle held on May 17, 2005, from 2:00 pm to 4:00 pm the following were present:

UCR	Nita Bullock, VC Charles Louis, VC Gretchen Bolar, Luis Carrazana, Dean Steve Angle, Assist. Dean Don Cooksey
HEWV	Buddy Hall, Steve Gift
SWA	Monica Simpson
RFD	John Weinman, Deirdre Carroll

The following items were discussed:

1. VC Gretchen Bolar provided an overview of the ESCAS and invited each of those present to introduce themselves
2. Luis Carrazana and John Weinman discussed the space planning parameters of the CNAS study
    a. 591,998 SF of existing CNAS program space
    b. Demolition includes:
        i. Boyden Lab
        ii. Fawcett Lab
        iii. Old Insectary
        iv. Old Entomology
    c. New construction includes:
        i. Biological Sciences (2006)
        ii. Genomics (2008)
        iii. Materials Science & Engineering (2008)
    d. Total CNAS ASF for 2010-2011 is projected to be 721,405 SF
        i. Unallocated space total is 170,853 SF
        ii. No growth projections have been done beyond 2011
        iii. Assumed that future growth will be on West Campus
        iv. No projections done for beyond the 25,000 student population
3. CNAS is currently seeking 10 new faculty members for special projects in health sciences with the goal of having a total of 30.
    a. These will be initially accommodated in renovated space
    b. Need proximity to other like-minded scientists for social interaction and information exchange – Dining or coffee venues are ideal
4. Due to existing space allocation CNAS cannot justify state funding for new space
    a. Engineering depends on growth is CNAS; growth of both is linked
    b. Need to build linkages with Health Sciences initiative
        i. Although growth in health sciences is planned for the west campus; their immediate space needs will have to be met on the east campus
    c. Need to reduce CNAS inventory
        i. Decommission existing buildings; some are more suited for general campus use – Weber is a good candidate
5. Site specific program locations were discussed:
    a. Biosciences in the current greenhouse area
    b. Bioengineering could be relocated from its current planned location in the recreation field to the parking lot 10 site or on the Veitch site
    c. Pest Management in the area around Picnic Hill
    d. New growth facilities model in proximity to Pest Management
        i. Locate where newest greenhouse exist on the south side of the avocado groves
    e. Panhandle is good area for Centers and Institutes and incubator space
        i. Centers and Institutes have a 5-10-year life span – meant to be short-lived so spaces need to be flexible
        ii. Primarily office and meeting room space needed with some visitor hosting
        iii. Could be modular space
        iv. Incubator space needs wet lab capability
    f. Humanities incubator space at the Citrus Mall
    g. Conservation Biology needs proximity to Physical Sciences
    h. A theory center with a space to accommodate an 80-200 person event or lecture similar to the Mondavi Center at UC Davis should be located at the east end of Eucalyptus Drive
    i. The University Club should be at a “crossroads” location
    j. Need to locate:
        i. An imaging center
        ii. Campus GIS facility
        iii. Environmental Sciences Center in proximity to the public policy school
    k. One wing of the Physics building is likely to be demolished – this is an opportunity for a new CNAS site
        i. This site needs to accommodate foot-traffic from the residence halls
6. PMT to obtain the Bioengineering “white paper” from Dean Angle and send to the Design Team

June 17, 2005

Workshop #7 – Committee Meeting

At the Committee meeting on June 17, 2005, from 12:00 pm to 2:00 pm the following were present:

UCR	Nita Bullock, Don Cooksey, Kieron Brunelle, Tricia Thrasher
HEWV	Steve Gift
SWA	Monica Simpson

The following items were discussed:

1. The Design Team presented preferred plan to the committee which was based on the following:
   - Coordination with CNAS master planner
   - Input from the library group
   - Demolition and obsolescence of existing buildings
   - To achieve an average FAR of .99
2. The committee offered the following comments:
   - Verify the new road alignment to the botanical garden
   - Investigate the roundabout at the Loma Linda Medical Center as it is similar to the one proposed on the plan
   - Make sure plan indicates the intention to provide small numbers of scattered parking throughout campus
   - Tractor trailer access needs to be considered to the instrumentation building
   - Service and loading dock access needs to be verified on the plan
   - Investigate sections at detention basins at the arroyo crossing
   - Show appropriate screening landscaping at the parking structure at Big Springs Road adjacent to the residential
   - Verify that parking structure is replacing the parking lost in the panhandle
   - Pedestrian walk on the south side of the panhandle should be sized for fire trucks.
   - Study access at Genomics
   - Verify location of retaining walls at Biological Sciences Building
   - Consider removing one wing of Bachelor Hall to help grading and connections on the science walk.
   - Combine service and pedestrian walk with enhanced paving and improve the plaza on the south side of the new Engineering 2 building
   - Show courtyard (not a roof) at the Weber/Boyce courtyard
   - Prepare a matrix of the three site choices for the University Club
     a. Picnic Hill – preserve character of the site – building should not be placed at top – consider bottom of hill
     b. College Building North – not easy to obtain site or to access from campus
     c. Barn is a historic site – may not be isolated enough, may not lend itself to expansion and may be to close to the freeway.
     d. Good example is Davis Buelher Center at Redlands College
   - Review proposed food service locations with Kipp Dougherty
   - Need a strategy for development areas and phasing
   - Complete plan on the south side of the arts building
   - Provide the capacity of buildings, number stories and density
   - Contact Ruth Jackson; obtain media library programming
3. Tricia Thrasher requested that the design team give her a list of buildings for which they want site plans such as Biological Sciences and she will have Pat send them out?

June 17, 2005

Workshop #7 – C3 Meeting

At the Committee meeting on June 17, 2005, from 3:00 pm to 4:00 pm the following were present:

UCR	Nita Bullock, Tim Ralston , Kieron Brunelle, Tricia Thrasher, Gretchen Bolar, Ellen Wartella, Tom Miller, Mike Webster
HEWV	Steve Gift
SWA	Monica Simpson

The following items were discussed:

1. Tim Ralston and Nita Bullock introduced the project to the assembled group.
2. The Design Team presented the plan and the group had the following comments:
   - Concerned about the planned use of Eucalyptus and Pines on the campus loop
   - Planned expansion of research facilities as indicated on the plan meets UCR's current needs
   - Lack of parking structure on southeast side of campus is a safety concern for faculty and graduate students
     a. Plan to indicate locations of smaller parking lots on campus
     b. Satellite parking as indicated in the LRDP is workable if small lots are provided within campus
     c. Goal is to create a safe, pedestrian experience on campus
   - Plan to indicate locations of smaller parking lots on campus
   - General agreement among the group that the current plan is a good direction for the east/southeast side of campus
3. Nita Bullock will set up a conference call to between the design team and facilities to discuss plan maintenance concerns

August 2, 2005

DRB Meeting

During the DRB Meeting on August 2, 2005, from 11:30 am to 12:30 pm the following were present:

UCR	Nita Bullock, Tim Ralston , Tricia Thrasher, Duke Oakley, Tom Miller, Dan Johnson
HEWV	Buddy Hall
SWA	Monica Simpson

The following items were discussed:

1. Nita Bullock provided and overview of the ESCAS and introduced the Design Team
2. The Design Team presented the analysis of the southeast campus and the preferred concepts
3. The DRB provided the following comments:
   a. The plan is well organized and understandable
   b. Building edges should be permeable to the green spaces and malls
   c. Presentation to C3 should include a slide of showing an example of how "build-to" lines will be represented in the final document