REVELLE AND MUIR COLLEGES NEIGHBORHOODS PLANNING STUDY



University of California, San Diego November 2006

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> Prepared by University of California, San Diego Office of Physical Planning

> > With the assistance of BMS Design Group

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he Revelle and Muir Colleges Neighborhoods Planning Study will guide anticipated growth in enrollment and space within these two college neighborhoods. The study is based on current facilities projections as well as previous planning studies: the UCSD 2004 Long Range Development Plan and the 1989 UCSD Master Plan Study in particular.

The process for developing this neighborhoods study involved extensive consultation with a Planning Advisory Committee, the UCSD Design Review Board, Campus/ Community Planning Committee, Committee on Campus and Community Environment and representatives of various administrative units. In addition, a day-long Visioning Session was held which resulted in a wide range of concepts and strategies that have informed this planning document. Participants included faculty, staff, students, and Design Review Board members.

Program

University of California, San Diego (UCSD), an outgrowth of the Scripps Institution of Oceanography, was founded in 1960 and is one of ten University of California general campuses. It currently has an enrollment of about 25,000 and a total campus population of 47,000. As with most UC campuses, continuing growth is being planned for at UCSD; a significant portion of the growth anticipated for the campus in the 2004 Long Range Development Plan will be directed to the 105 acre site of these two colleges.

The colleges will retain their focus as residential colleges that also accommodate classrooms, laboratories, student services and facilities, and other support space. The programs identified for the two colleges will result in a significant expansion of facilities in each.

Revelle College will see the greatest amount of growth in the foreseeable future. Student housing and dining will be upgraded through a major new housing project and a significant renovation of the dining commons. Revelle will add approximately 700,000 gross square feet of new academic facilities. Muir College add about 200,000 gross square feet of academic space and 275 student housing beds. If needed, additional sites remain for currently unanticipated needs.

In order to provide sites for this growth it will be necessary to 1) remove surface parking from lots and consolidate it in two or more parking structures, and 2) make minor reconfigurations to existing roads and open space to free up additional infill building sites.

Concepts

Growth in the two colleges is seen as an important opportunity to improve the quality of life in each. Concepts fundamental to the plan include:

- Improving adjacencies and opportunities for interaction among faculty and enhance quality of college life for students.
- Improve Ridge Walk as the primary pedestrian walkway that connects the two colleges with the west side of UCSD.
- Improve other walks and paths and configure future facilities and spaces to enhance connections with the center of UCSD, University Center.
- Capitalize on the special La Jolla climate and the regional landscape in improvements to the out-door open spaces of the two colleges.



Neighorhoods of Quads: improve adjacencies and opportunities for interaction



College and Campus Connectivity: improve walks and paths to enhance cross-campus connections



Ridge Walk: improve Ridge Walk as the primary pedestrian walkway of the west side of UCSD



Unique Landscape Expression: use the special local climate and landscape for campus open spaces improvements

Framework for Development

The neighborhoods study identifies the overall layout of buildings, spaces and circulation elements that create the framework for development. Among the most important:

- Parcel Plan. The Parcel Plan identifies specific building sites and their adjoining open spaces.
- Illustrative Plan. The Illustrative Plan portrays the implementation of program described in this document according to the guidelines also articulated.
- Open Space Framework. The Open Space Framework illustrates the system of quads, recreation fields and university-wide gathering spaces that will give the colleges a unique character within UCSD.
- Access Circulation and Parking Framework. This framework establishes the systems of vehicular, bicycle, and pedestrian movement, as well as service and emergency access requirements.

Design Guidelines

Design guidelines are provided for general topics as well as for specific areas of the two colleges. The guidelines express the intentions for the design of buildings, open spaces and landscapes. They generally describe desired outcomes; in some instances they specify critical dimensions, treatments or layouts considered crucial to the success of the plan.

The guidelines are derived from the design context of the two colleges: the unique San Diego environment and the concepts around which the two colleges were conceived and implemented in the 1960s. Guideline topics include:

- Sustainable design and climate responsiveness
- Building location and orientation
- Building design

- Landscape and site design
- Lighting design
- Site furnishings
- Guidelines for specific areas of the two colleges.

Implementation

The programs articulated for Revelle and Muir Colleges will be built out incrementally over the upcoming 10 to 20 years. Phasing diagrams are included for years 2006 – 2012, 2012 – 2016, 2016 – 2020 and 2020 +. The diagrams not only indicate the sequence of building projects, they also include the open spaces, walkways and recreation areas that should be implemented simultaneously in order to assure a livable, attractive college environment.

While funding for some of the non-facility improvements can be difficult to obtain, it is highly important that the university continue to maintain and enhance the public environment of quads, walkways and other open space, not only for the residents and staff of the campus today, but for future students and the community in years to come.

The accompanying Illustrative Plan (Figure 1) portrays the build out of facilities and landscapes that could be achieved with implementation of this plan.

Figure 1 - Illustrative Plan

Legend

Proposed Academic Building
 Existing Academic Building
 Proposed Residential Building
 Existing Residential Building
 Proposed Student Life Building
 Existing Student Life Building
 Proposed Parking Structure





he University of California, San Diego (UCSD) opened for general enrollment in 1960. Planned as a major national research university that would reach an enrollment of 25,000, the university was conceived as comprising as many as twelve residential colleges, where a more intimate living and learning environment would nurture undergraduates within the larger university context. Revelle College was the first to open at UCSD, with construction beginning in 1961 and the first students enrolled in 1964; Muir College accepted students beginning in 1967.

As shown in Figure 2, UCSD occupies 1,200 acres, with Revelle and Muir Colleges comprising 105 acres at the southwest corner of the campus. In 2006 approximately 7,550 students are enrolled the colleges, and they include 1.25 million gross square feet (gsf) of academic, research and support building space and house 1,824 students. The campus lies within the City of San Diego, adjoining the community of La Jolla. The California Coastal Zone, administered by the California Coastal Commission, includes a small portion of the western edge of UCSD, but has no implications for this study.

With adoption of the 2004 Long Range Development Plan (LRDP), the UCSD campus is anticipating growth in enrollment to 32,700 Full Time Equivalent (FTE) students. Hand in hand with this enrollment growth will be the continuing expansion of research activities by faculty and a concomitant growth in laboratory and other research space. In addition, the campus plans to increase the proportion of undergraduate students living on campus from approximately 30% to 50%. Growth will occur throughout the UCSD campus, and Revelle and Muir Colleges will both grow significantly in response to these demands.

Purpose of this Document

This Revelle and Muir Colleges Neighborhoods Planning Study is intended to guide anticipated growth in enrollment and space within the two college neighborhoods. It describes the anticipated academic program and housing growth, identifies sites for new facilities, and a pattern of development intended to enhance the quality of life and character of each college. Guidelines are provided for site development, building design and landscape improvements. A phasing strategy is also presented.

The Neighborhoods Planning Study is intended to accommodate a significant program for change, yet sets a clear plan that will allow for flexibility within a framework of land use, circulation and open space.

Organization of this Document

This Neighborhoods Planning Study is organized into three primary sections:

- Planning Context
- College Plans
- Design Guidelines.

Planning Process and Participants

This planning study has been prepared with the guidance of the UCSD Physical Planning staff and a Revelle / Muir Colleges Neighborhoods Planning Advisory Committee (PAC). Seven meetings of the PAC and numerous individual meetings with committee members and others such as representatives of the Stuart Collection, the Fire Marshall, campus engineers, City of San Diego staff, Revelle and Muir College students, and the La Jolla Playhouse were instrumental in shaping the recommendations of this plan. In addition, the Design Review Board (DRB), Committee on Campus and Community Environment (CCCE), and Campus/Community Planning Committee (C/CPC) were consulted throughout the process. A highlight of the process was a Visioning Session, conducted over a six hour period, which included members of the PAC, DRB, CCCE, C/CPC, students and administration representatives.







History and Development of Revelle and Muir Colleges

ounded in 1960, UCSD is one of ten University of California system campuses. An outgrowth of the Scripps Institution of Oceanography (SIO), which was originally established as a marine research laboratory in 1903 and which subsequently became a part of the University of California at its present location in La Jolla in 1912, UCSD accepted its first undergraduates in 1964. It now includes three geographic areas: the West Campus, the Scripps Institution of Oceanography, and the East Campus, containing the Medical Center.

The UCSD campus comprises six colleges. The colleges were established to provide a more human-scaled environment for students within the larger research university and include residential and dining facilities as well as academic and research buildings. Additional academic facilities, large classrooms and auditoria, administrative offices, and the primary student service facilities are located in the University Center area of the General Campus.

Named after Roger Revelle, noted oceanographer and director of the Scripps Institution of Oceanography, Revelle College, the first college at UCSD, was founded in the early 1960's in response to national academic interest in the humanities as well as growing interest in science and mathematics curricula. As the College notes on its web site: "The original Revelle College faculty believed that the educated American should be acquainted with the specific and fundamental disciplines: all graduates should know some of the literature, art, science and social issues that define our culture." Revelle College is known for the breadth, depth and rigor of its General Education requirements with extensive lower-division requirements in Mathematics, Humanities, Language, Sciences, Social Science and Writing.

Revelle College was built around a large public space, Revelle Plaza, which served as UCSD's central gathering and event space, and during the turbulent 1960s and early 1970s was the location of speeches and demonstrations. Student residence halls, a dining hall, and academic buildings were all located nearby. Galbraith Hall, which fronts on Revelle Plaza, served as the University Library



JCSD Campus in 1966



Undergraduate Science Building (now York Hall) ca. 1965

until the Central Library, later renamed Geisel Library, was opened in 1970.

Revelle College remains focused around Revelle Plaza, which no longer serves as a campus-wide gathering or event space but is used for a variety of college events and traditions, including Revelle's Birthday Party, the annual watermelon drop, dances, concerts and fairs. Revelle College lies directly north of the major campus entry near North Torrey Pines Road, Torrey Pines Road, and La Jolla Village Drives, and lies immediately adjacent to the Theatre District, which includes the Mandell Weiss The-



Watermelon Drop - Revelle College 1960s.

atre, Mandell Weiss Forum, Potiker Theatre, and Wagner Dance Facility. While Revelle Plaza was for many years the geographic center of the college, two new academic buildings, Pacific Hall and Natural Sciences, which are located at the western edge of the campus along Scholars Drive, have shifted the center of activity to some extent. In addition, the development of facilities in the University Center area, such as the Price Center, has led to this area becoming the focus of student activity for the campus as a whole.

Two student housing complexes are found in Revelle College: Fleet Housing, a set of six four-story concrete block residence halls, and two larger halls, Argo and Blake. All residence halls are directly adjacent to the Revelle Dining Commons, which includes a commissary kitchen that serves the entire UCSD campus, a dining hall, meeting rooms and various offices and support rooms.



Harold Urey, Nobel Laureate, at dedication of Urey Hall.

Parking lots dominate the southwestern portion of the college, although parking also can be found in limited quantities near Pacific Hall and Natural Sciences, near the Commons, and in other isolated locations. The UCSD Central Plant, which serves the western portion of UCSD, is found directly east of Galbraith Hall.

Muir College opened in 1967 and is named after the renowned naturalist, conservationist, and founder of the Sierra Club, John Muir. Founded at a time when the modern environmental movement was emerging, Muir emphasizes the "spirit of self-sufficiency and individual choice." Muir enjoys a reputation within UCSD as one of the most popular colleges, with a strong student college life.

Muir College consists of an assemblage of buildings with a strong architectural consistency. Muir College students

are housed in a complex of residence halls and apartments, all of which surround a green commons area and the Muir Commons, a focus of student activity and dining.

Located between the two colleges are several important facilities that serve the entire UCSD campus. These include the Main and Recreation Gyms and Natatorium; recreation fields, which host soccer and other field sports; the Original Student Center, which is currently being expanded and renovated; and Mandeville Center, an arts and performance complex. Directly to the east of this area is University Center, home to the Price Center, Geisel Library, Student Health Services, Career Services, the soon-to-be-completed Student Academic Services Facility, and other facilities used by the entire UCSD population.



Architect's model of John Muir College, 1960.



Figure 3 - Study Area

Legend Existing Building Study Area Boundary

0′ <u>25</u>0′ 50

Revelle and Muir Colleges host elements of the nationally-recognized Stuart Collection, site-specific public sculptures by contemporary artists. Richard Fleischner's La Jolla Project, an installation of pink and grey granite elements, sits south of Galbraith Hall. Jenny Holzer's Green Table occupies a courtyard at Muir College. Muir College also includes one of the most iconic images of the UCSD campus – the Sun God statue designed by French artist Nikki de Saint-Phalle. Other nearby pieces include Red Shoe by Elizabeth Murray, just south of Revelle College Drive, and Two Running Violet V Forms, by Robert Irwin, in the Eucalyptus Grove just east of the Sun God Lawn. Each piece sits within an area intended to be protected known as its "area of influence" (see Figure 4).



La Jolla Project



Green Table



Red Shoe



Two Running Violet V Forms



Sun God



Program

he UCSD campus currently enrolls 26,626 students (Fall 2005 Headcount), with a faculty, researcher and staff count of approximately 10,500, bringing the total campus population to over 37,000. The 2004 LRDP, which sets the planning context and strategy for the campus, projects a future enrollment for UCSD of 32,700 students by 2020-21. The total projected campus population during the regular academic year will be 49,700.

The LRDP projects that total development at UCSD will grow from 10,082,000 gross square feet (gsf) in 2002-03 to 19,159,000 gsf in 2020-21. Of this, 6,045,000 will be directed to the West Campus area. Revelle and Muir Colleges, which currently accommodate 1,573,308 gsf of academic space; are projected in the LRDP to grow by 764,823 gsf to 2,338,131 square feet of academic space.

The LRDP also projects significant growth in housing. In response to regional housing costs, and the desire to reinforce student life and community at UCSD, the campus will target housing 13,300 students, or 50% of those eligible (from the current 30%) in campus-owned facilities. An addition of 800 student beds to Revelle (which will allow for the ultimate demolition of the outdated Fleet Housing) and 275 student beds to Muir are planned.

The following table summarizes the existing and planned facilities program for Revelle and Muir Colleges.

Nearly all buildings at Revelle and Muir Colleges will remain into the indefinite future. Most have been built since the mid-1960s and have been upgraded over the years. The academic buildings all represent significant investments and generally can continue to function well for the colleges.

In Revelle College, only the Fleet Housing residence halls, which are over 40 years old, will be removed, since they are of low density and efficiency, and since college housing will be provided by the future apartments. Revelle Commons, of a similar vintage, while still functional and in parts well-designed, does a poor job of engaging students and creating an active center of student life. It is, therefore, identified for either a significant renovation or for replacement in the same location.

In Muir College, all college buildings will remain. A temporary structure, the Imaging and Spectroscopy Center Phase 1 (the "NMR") will be removed when it is replaced within the State-funded Sciences building.

Parking Table

Revelle College	
Existing Parking	
Total Existing Parking	972
Existing Parking to be Removed	879
Subtotal (Existing Parking to Remain)	93
New Structured Parking	1,700

Total Revelle College Parking 1,793

Total Muir College Parking	2,030
New Structured Parking	1,800
Subtotal (Existing Parking to Remain)	230
xisting Parking to be Removed	998
Total Existing Parking	1,228
Existing Parking	
Muir College	

Program Table

Existing to Remain	GSF	ASF	Beds
Academic			_
Bonner	120,749	62,718	
Galbraith	146,390	70,442	
Mayer	98,566	56,100	
Natural Sciences	173,184	104,882	
Pacific	184,539	106,826	
Urey	172,605	98,096	
Urey Addition	15,217	11,635	
York	96,891	69,526	
Residential/Dining/Student Life			
Argo/Blake	97,851	79,654	448
Revelle Commons	33,947	27,289	
Subtotal	1,139,939	687,168	448
New Facilities	GSF	ASF	Beds
Academic			
Sciences	172,414	100,000	
Biology	86,207	50,000	
Center for Brain and Mind	83,333	50,000	
Center for Computational Science	83,333	50,000	
Center for Advanced Spectroscopies	41,739	24,000	
Physical Sciences Education Center	10,000	6,000	
Physical Sciences	172,414	100,000	
Revelle Provost	17,650	12,000	
Theatre Office	46,153	30,000	
Residential/Dining/Student Life			
Revelle Apartments	260,000	208,000	800
Revelle Plaza Pavilion	2,500	2,000	
Catering Kitchen	10,800	8,000	
Housing/Dining Services Offices	10,800	8,000	
	007 242	649 000	000
Subtotal	997,343	040,000	000

Muir College			
Existing to Remain	GSF	ASF	Beds
Academic			
Applied Physics & Math	178,540	100,433	
Biology	81,915	72,016	
Mandeville	115,769	72,016	
McGill	108,019	61,925	
Humanities/Social Sciences	80,924	50,550	
Residential/Dining/Student Life			
Muir Apartments	73,519	58,185	297
Tenaya/Tioga	167,200	131,214	635
Muir Commons	27,831	21,747	
Original Student Center: Porters Pub	6,140	4,070	
Original Student Center: Student Resource	4,200	3,643	
Original Student Center: Groundworks	1,324	1,144	
Original Student Center: Main Bldg/Conf	20,662	13,865	
Original Student Center: Bldg B	9,866	8,099	
Recreation			
Main Gym	51,534	37,615	
Natatorium	11,750	8,999	
Subtotal	939,193	645,521	932
New Facilities	GSF	ASF	Beds
Academic			
Muir Biology Building Addition	12,727	7,000	
Social Science Research	96,774	60,000	
Humanities & Social Sciences Offices	95,400	62,000	
Residential/Dining/Student Life			
Muir Apartments	89,375	71,500	275
Recreation			
Wellness Center	58,550	35,130	
Recreation Gym	14,838	12,851	
Subtotal	367,664	248,481	275

1,306,857

Total Planned Program

894,002 1,207

Goals of the Neighborhood Study

he projected program growth at Revelle and Muir Colleges provides an important opportunity to correct existing deficiencies and enhance the character, functionality and image of each college.

Extensive discussions with the PAC at the regular committee meetings, and in the Visioning Session which included members of the DRB, C/CPC, additional students and administrative staff, led to a list of primary goals of this study.

Overall

- Clarify individual identities of Revelle and Muir Colleges.
- Contribute to the overall public image of the campus.
- Accommodate projected building program for colleges, retaining additional long term flexibility if possible.
- Promote sustainable development.
- Coordinate a phased development approach to optimize land and financial resources.
- Design and locate buildings to respect the importance of human scaled environments.

Academic

- Build on existing adjacencies among academic uses.
- Cluster academic buildings to foster collaboration and interaction.

Student Life

- Improve the student life and cohesiveness of Revelle College.
- Protect and extend the strong student life and collegiality at Muir College.
- Accommodate the existing recreation and athletic facilities in Muir and Revelle Colleges.

Site

- Create a variety of open spaces that allow for active and contemplative uses.
- Improve Ridge Walk pedestrian connection from Thurgood Marshall College through Muir and Revelle Colleges.
- Improve pedestrian connections to University Center, Price Center, Geisel Library, and the Theatre District.
- Clarify vehicular circulation and minimize pedestrian and bicycle conflicts.
- Identify necessary campus entries.
- Improve bicycle circulation to other parts of campus.
- Minimize conflicts with pedestrians and bicycles at service and loading dock areas.



he following discussion describes the plans that will direct the expansion and development of Revelle and Muir Colleges. The plans include:

- Plan Concepts: four guiding principles that establish the overall plan direction; they highlight themes of particular importance in establishing the pattern of development in the two colleges.
- Facilities Development Framework: sites for future development, and illustrative and parcel plans that establish the development pattern.
- Open Space Framework: the strategy for all open spaces types in the colleges.
- Access, Circulation and Parking Framework: the system of vehicular, pedestrian, bicycle and service access.
- Utilities: key issues regarding required infrastructure.
- Phasing: concepts for the logical phasing of new facilities and site improvements.

The Design Guidelines section that follows The College Plans details design guidelines for sites, buildings and open spaces based on these plans.

Plan Concepts

Neighborhoods of Quads

Central to the University mission of instruction, research, and public service, is the education and socialization of students through their living and learning environments, and support for the ongoing collaborations among faculty engaged in teaching and research. Adjacencies among related and complementary uses are essential to these ends.

The relation of these facilities to open spaces is key to this concept, since the benign climate of La Jolla is ideally suited to the use of outdoor spaces for informal gathering and meeting. Revelle and Muir Colleges are already built around a system of quads and defined open spaces. Some of these are successful; others are poorly defined and do not support the variety of important daily interactions key to the university's mission.

A key concept, therefore, is to build upon this existing framework, and use the planned program to improve and strengthen this framework of quads. A variety of types of quads are envisioned, such as academic, residential and recreational. Each can be unique in its design, but each is located so as to reinforce linkages from each college to the center of UCSD at University Center.

For both Revelle and Muir Colleges, clustering academic uses around specially designed quads or plazas will improve adjacencies among academic facilities and promote informal encounters that can lead to collaboration and interaction, important in today's increasingly interdisciplinary research environment.



Ridge Walk

In the 1963 Long Range Development Plan, the first colleges were to be located on a plateau at the west edge of the 1,200 acre site, following a ridge that ran north-south through the campus, occupied at that time by Highway 101. Campus planners suggested that the road alignment be replaced with a "Champs Elysees" or grand pedestrian promenade, which would connect the colleges and major destinations arrayed along its length.

Today, as planned, Ridge Walk connects the north entry to UCSD at the information kiosk to Revelle Plaza at the south. However, it has been implemented incrementally, without a vision for its design clarity. It is not necessary or appropriate that Ridge Walk be designed along the model of a grand boulevard, but it does need to be identifiable as one of the most important pedestrian walks at UCSD. Reinvigorating and clarifying Ridge Walk to a level commensurate with Library Walk, is an important element of the plans for the neighborhoods. Like Library Walk, this suggests that certain consistent elements such as lighting and planting be used to establish its identity and create a more consistent appearance.



College and Campus Connectivity

As UCSD has matured, facilities that are major destinations for students, faculty and staff are increasingly being found in University Center. Easy connections between Revelle and Muir Colleges and University Center are critical; many classes are located in University Center as are major dining and events spaces. The plans for Revelle and Muir Colleges have, therefore, been developed to reinforce existing walkways, and to create complementary new pedestrian movement corridors and connections.

In many areas of both colleges, situations exist where potentially dangerous conflicts between pedestrians and vehicles occur. In the north, the alignment of Scholars Drive corresponds to the alignment of Ridge Walk, resulting in a confusing situation for pedestrians and drivers. The strategy for mitigating these issues is twofold. First, parking will be moved to the periphery of the colleges; second, wherever possible, Scholars Drive and other roads will be realigned to eliminate or minimize conflicts.

The locations of new facilities and open spaces have been configured to support connectivity between the colleges and University Center. In particular, facilities are used to frame quads, either in academic or residential areas, that are the center of college life. The paths between them also serve as a path to the broader campus, including destinations such as Price Center and the Library.



Unique Landscape Expression

The 1989 UCSD Master Plan identified three types of open space that characterize the campus: the rustic (Eucalyptus groves, canyons and other areas typically at the edges of the campus), discrete (quads, plazas and courtyards) and transitional (other open spaces, typically between the other two). This Neighborhoods Plan further refines this concept for the two colleges.

The two colleges sit high on a ridge within a larger landscape environment where coastal and inland zones meet. The natural landscape in this area is a coastal chaparral that is unique to the San Diego area, and that includes species such as the Torrey Pine that are native to the area. Over time, this landscape has been supplemented with species such as Eucalyptus, which are compatible with but not native to the area. At the same time, however, other materials have been introduced that are derivative of the eastern/mid-western "collegiate" landscape of lawns and manicured spaces

The concept for the landscape at Revelle and Muir Colleges is to:

- Reintroduce and strengthen the coastal landscape to the maximum extent possible.
- Expand the Eucalyptus Grove plantings adjacent to the Park area in the colleges.
- Focus the discrete landscape the manicured, collegiate landscape of lawns and other plantings in the quad areas of the campus.



Facilities Development Framework

he Facilities Development Framework consists of the plans that will guide the placement of buildings to accommodate program growth. The Facilities Development Framework includes a description of:

- Opportunity Sites for Facility Development
- Illustrative Plan and Parcel Plan
- Parcel Matrix
- Phasing Plans.

Opportunity Sites

An assessment of the two colleges was made to identify the full range of potential sites for the new facilities identified in the program. Given the large program contemplated for accommodation in the colleges, this early assessment was aggressive in its approach to considering major alterations to the current pattern of facilities and open space. In several cases, large open spaces such as the northern portion of Sun God Lawn and Revelle Plaza were considered candidate sites for strategically placed development. Overall, however, retention of most open space was considered an important resource to be conserved wherever possible..

Opportunity sites are illustrated in Figure 5 and fall into three categories:

- Least Constrained: Included are sites that are currently underutilized open areas, open space, or parking lots, where relocating parking is the primary barrier to their development, or where their development will not significantly alter the character or functionality of that part of campus. These sites consist are mostly the large parking lots, but also include smaller sites in the northern part of the study area.
- Moderately Constrained: These include sites that could be utilized but that would have a significant impact on the appearance or use of nearby campus spaces and that require careful study and potential reconfiguration of adjoining areas.
- Most Constrained: These are sites that would require relocating or replacing a use elsewhere due to the importance of the use to the colleges or campus as a whole, such as the recreation fields or academic and housing uses.



Figure 5 - Opportunity Sites



250′

0'

500′

Illustrative Plan and Parcel Plan

The Illustrative Plan (Figure 6) establishes a vision for the accommodation of the projected program for the two colleges, based on implementation of the plan concepts noted above, as well as improvements to the circulation and open space networks that are described in the sections that follow. The plan is an illustration of the campus if the concepts and guidelines of this plan are followed. Actual design will undoubtedly vary somewhat as specific projects are planned and designed.

The Parcel Plan (Figure 7) defines specific building parcels, and describes key criteria regarding setbacks and site area needed to:

- Accommodate the prescribed building program.
- Ensure an attractive and usable open space system.
- Optimize adjacencies for learning, research and student life.

The Parcel Plan describes key dimensions, alignments, and required setbacks in order to define the maximum development area that will be allowed at any give site. It should be noted that the Parcel Plan does not define actual building footprints; in most cases, the parcels shown are larger than typical building footprints are likely to be. Within some parcel areas multiple buildings or uses may be located. The parcels define the configuration and maximum development envelope in order to protect and enhance the open space environment of the colleges.

As the Illustrative and Parcel Plans show, the program elements planned for Revelle and Muir Colleges can be accommodated in the available sites. There is some excess capacity beyond the projected program in Muir College, however, every major site in Revelle College will be required for its large planned program. In addition, all sites will need to be utilized efficiently, built out at densities that are near their capacity, so as to not waste the limited land area that can be made available. Although there will be significant new program space added to the two colleges, the required size and scale of new facilities overall will be consistent with that already existing, as well as with other parts of UCSD. In Revelle, the largest academic buildings will be similar in scale to Pacific Hall and Natural Sciences, but residential buildings will be more dense than those existing, on the scale of the residences at Muir College. In Muir College, the new academic buildings and the new residences will be similar in scale to those existing. Academic buildings will range from four to seven stories; residential buildings will range from four to twelve stories.

The following discussion summarizes the key land use and facility siting decisions embodied in the Illustrative and Parcel Plans.

Academic

Academic uses are located to optimize adjacencies with other academic uses. At Muir College a new academic cluster (Parcels 16, 17, and 18) is located on the current eastern parking lot (P207), reinforcing the Muir entrance and flanking, with Thurgood Marshall buildings, this portion of Ridge Walk. An additional academic site is located adjacent to the Faculty Club (Parcel 15), framing and defining the Sun God space and Ridge Walk.

In Revelle College there are three primary academic clusters created or reinforced by this plan. A new academic building on the site of the recreation gym (Parcel 11) completes an academic quad defined by Mayer, Urey and Pacific Halls. To the west, a new building at the southwest corner of the recreation fields (Parcel 10) joins the academic quad fronted by Pacific Hall, Natural Sciences and Urey Hall. Finally, a third and new academic quad is located at the southern edge of Revelle College, at the terminus of Revelle College Drive (Parcels 2,3,5). This academic quad, which will serve as the new formal entry to the College, is created by three significant new academic facilities.

Figure 6 - Illustrative Plan

Legend

Proposed Academic Building
 Existing Academic Building
 Proposed Residential Building
 Existing Residential Building
 Proposed Student Life Building
 Existing Student Life Building
 Proposed Parking Structure



Residential and Student Life

In Muir College, residential units will be added immediately adjacent to Muir Apartments (Parcel 13), linking them with the existing quad and housing complex. In Revelle College, a new residential neighborhood will be created with new residential and apartment buildings (Parcel 6), focused around a new residential quad. Revelle Commons (Parcel 8) will be renovated to provide a more active, engaging and up-to-date facility. As a complement to the Commons, a small café pavilion will be located in Revelle Plaza (Parcel 9), which will attract students at all hours as well as faculty and staff moving from parking to academic destinations throughout the day.

Recreation and Athletics

The new Wellness Center is combined with a relocated Recreation Gym, and will be located north of the existing Main Gym/Natatorium on Parcel 12. The recreation fields are retained as currently located, with minor modifications to their layout necessitated by the addition of nearby service roads. This location will allow continuing adjacencies among the fields and courts, the Main Gym, the newly combined Recreation gym and Wellness Center, and the nearby Original Student Center.

Parking

In order to gain sites for new facilities, all parking with the exception of disabled access parking, service parking, and limited special permit parking will be relocated from central areas and consolidated into two structures located at the northern and southern extremes of the study area (parcels 1 and 18). These structures replace existing parking and projected parking needs for both colleges consistent with the LRDP. The structures are located so as to minimize pedestrian/vehicular conflicts while releasing sites for good academic and student life adjacencies.

Parcel Matrix

The Development Parcel Capacity Matrix (Figure 8)provides information on each parcel illustrated in the Parcel Plan. For each parcel, key information is provided regarding the size of the site, the maximum allowable building ground floor area and building height. Although most sites are readily accessed from Scholars Drive, some are more constrained and will, therefore, be less suitable for uses that may entail deliveries by large trucks or where particularly generously sized internal or external loading and service areas may be required; these considerations are also noted.

The Development Program Matrix (Figure 9) indicates site capacities and program elements that would be suitable for each site, recognizing that over time the projected programs may change and that flexibility will be required. It will be important, however, to ensure that sites are not developed with programs significantly smaller than their capacity. Due to the limited land availability in the Revelle and Muir neighborhoods, this could jeopardize the ability of the colleges to accommodate the entire projected programs in the future.

The Development Program Matrix takes each projected facility program elements described earlier and indicates where they would most appropriately be located. Generally these determinations have been made based on site size and ability to accommodate large program, on the size and configuration of service and loading areas, or where adjacencies to other uses suggest most suitable potential sites. In all cases, the assignment of facility program to site has also been determined to maximize the efficient use of limited land or site resources.



Figure 8- Development Parcel Capacity Matrix

Parcel No.	Location	Parcel Area SF	Assumed Building Footprint ¹	Max. No. Floors Above Grade ²	Max. GSF ³	Appropriate for Large Vehicle Service	Appropriate for Vivarium	Appropriate for Parking Structure
1	Revelle College Drive 4,5	97,150	59,250 19,100	6	860,000			•
2	Scholars Drive at new Entry Quad	62,120	46,220	5	280,000	•	•	
3	Scholars Drive at new Entry Quad	16,930	15,500	4	77,500			
4	South edge of Galbraith Hall	15,250	12,200	3	48,000			
5	West of Galbraith Hall at new Entry Quad	26,380	22,000	7	176,000	•	•	
6	Existing Fleet Housing site ⁶	66,430	33,320	12	260,000			
7	West of Revelle Commons	14,190	10,900	6	65,400	•		
8	Existing Revelle Commons	41,200	30,000	3	90,000	•		
9	Revelle Plaza ⁷	9,100	3,000	2	4,500			
10	Scholars Drive at La Jolla Shores Drive	34,650	26,000	6	182,000	•	•	
11	North edge of Urey Green	40,220	30,700	6	215,000	•	•	
12	North of Main Gym	36,890	25,100	4	100,000	•		
13	East of Muir College Apartments ⁶	23,410	12,000	12	90,000			
14	East Face of Biology Building	3,150	3,000	5	15,000			
15	West of Faculty Club	30,330	25,000	6	175,000			
16	North of Muir College Entry Quad East	31,500	21,500	6	150,000			
17	North of Muir College Entry Quad West	23,060	17,800	6	125,000	•	•	
18	South of Marshall College Provost Office	42,500	32,000	5	192,000	•	•	
19	Muir Lane north of Tenaya Hall ⁴	92,600	83,000	5	600,000			•

Notes:

¹ Assumed building footprint gross square footage is similar to footprints depicted in the Illustrative Plan. Actual footprints and gross square footage to be determined during programming and design.

² Additional building height may be allowed upon review if required by building program. Floor-to-floor heights assumed as follows: Labs: 17'; Offices: 12'; Housing: 10'.

³ Full basement level on academic building parcels assumed in max. GSF calculations.

⁴ Parking structures assumed to have multiple levels below grade in order to reduce above-grade impact. Maximum number of floors for non-parking structures on these parcels to be equivalent in height to Maximum Number Floors Above Grade column.

⁵ Building Footprint gross square footage for Parcel 1 depicts Revelle Parking Structure (59,250 gsf) and potential attached academic, office or housing space (19,100 gsf).

6 Residential building height assumed to be variable, up to maximum.

⁷ Building square footage and max. gsf smaller than parcel area to allow flexibility in building location and configuration of building envelope.

Figure 9 - Development Program Matrix

Development Program	College	Appropriate Parcel	Total Building GSF	Large Vehicle Service Access Required	Potential Vivarium	Potential NMR
Sciences Building	Revelle	2, 5, 10, 11	172,414	•	•	•
Biology Building ^{1, 2}	Revelle	2, 5, 10, 11	86,207	•	٠	
Center for Brain & Mind ^{1, 2}	Revelle	2, 5, 10, 11	83,333	•	•	
Revelle Provost ³	Revelle	2, 3, 5, 11	17,650			
Center for Computational Science 4,5			83,333			
Center for Advanced Spectroscopies 4,5	Revelle	2, 5	41,739			•
Physical Sciences Education Center 4, 5			10,000			
Physical Science Building	Revelle	2, 10, 11	172,414			
Theatre Office	Revelle	3, 4	46,153			
Revelle Apartments	Revelle	6	260,000			
Catering Kitchen	Revelle	7	10,800	•		
Housing/Dining Services	Revelle	7	10,800			
Revelle Parking Structure	Revelle	1	552,500			
Revelle Plaza Pavilion	Revelle	9	2,500			
Wellness Center	Muir	12	72 200			
Recreation Gym ⁶	wun	12	73,300			
Social Science Research Building	Muir	15, 16, 17, 18	96,774			
Muir Biology Building Addition	Muir	14	12,727			
Humanities & Social Sciences Offices	Muir	15, 16, 17, 18	95,400			
Muir Apartments	Muir	13	89,375			
Muir Parking Structure	Muir	19	585,000			

Notes:

¹ Biology and CBM can be constructed together or as separate facilities.

² Site capacity of Parcels 5, 9 and 10 requires Biology & CBM to be combined in one facility.
 ³ The Revelle Provost program would be appropriate on these sites in combination with other uses.

⁴ These program elements assumed to be one project, although they may be phased.

⁵ Site capacity of Parcel 2 allows for potential combination of these program elements with others (e.g., Biology or CBM), constructed together or as separate facilities.

⁶ Recreation Gym replaces existing Gym displaced by program to be developed on Parcel 10.

Open Space Framework

espite the significant planned building densities of the colleges, there is an important opportunity to create a memorable and functional system of generously-sized quads and other open spaces. Scaled to complement the surrounding built environment, these open spaces must be of an adequate scale and design to provide relief from the built environment while providing human-scaled places for socialization or contemplation.

As illustrated in Figure 10, there are three types of major open space in the Revelle and Muir Colleges neighborhoods:

- Quads
- Recreation open space
- The Grove Reserve.

These are the outdoor spaces that have a defined functional role, and are intended to be designed as a coherent whole and managed to provide a distinct sense of place. These open spaces are connected by a system of pedestrian linkages and landscaped spaces that combine to create a continuous and interlocking system.

Figure 10 indicates the type and general configuration of the open spaces planned for Revelle and Muir Colleges. Dimensions of these open spaces will be set by the parcel dimensions established in Figure 7.

The approach to the landscape of each of these open space types is described in the Landscape Guidelines section (page 78).

Quads

Academic and residential quads are the building block of the social outdoor spaces of Revelle and Muir Colleges. The plan organizes new academic and residential uses around these quad spaces, with building entries and active uses oriented toward them. They thus become places for running into a colleague, sitting with a cup of coffee, or "hanging out" and people-watching. The quads will provide a rich venue for the interaction and socialization that is so important in a college environment.

Detailed design recommendations for all quads where significant changes are envisioned are described in detail in the Specific Area Design Guidelines section (page 98) of this document.

Entry and Gateway Quads

There are two new Entry and Gateway Quads in the Revelle and Muir Neighborhoods. These quads serve to provide a front door to each of the colleges as well as to enhance the image of the campus at key visitor entry points to UCSD.

The Revelle Gateway Quad (open space a in Figure 10) is entirely new, located on the current parking lot site at the terminus of Revelle College Drive. It will denote the primary public gateway to Revelle College as well as providing a major open space at a primary entry to the campus as a whole.

The Muir Entry Quad (open space l in Figure 10) is an expansion and enhancement of the existing pedestrian entry from Muir Lane. It will be reinforced and improved with complementary buildings across Muir Lane and with a cul de sac turnaround for drop-off.

The Muir Gateway Quad (open space m in Figure 10) is a new quad that will be defined by the existing Muir Applied Physics & Math building and a new building on Parcel 15. This quad will serve as a gateway to and from the center of Muir College from Ridge Walk.



The Thurgood Marshall Gateway Quad (open space p in Figure 10) is an enhancement of a space that currently does not take full advantage of the configuration of its adjacent buildings. The future building on Parcel 18 will complete the edges of this quad, creating a gateway to and from Thurgood Marshall College from Ridge Walk.

Academic Quads

There will be four Academic Quads where concentrations of academic uses will found in the two colleges. Generally, these quads are defined by clusters of academic buildings that surround them and contribute to the character of these spaces, both physically and functionally.

Most of these quad areas are new or will be significantly altered with the addition of adjoining academic facilities. The proposed landscape treatment of each quad is described in the Landscape Guidelines and in the Specific Area Guidelines. Some, like Urey Green, require very little intervention. This is one of the most attractive and well-defined existing open spaces at Revelle, a cool green open space on the traditional quad model. Modifications to Urey Green will be limited to, accommodation of a new academic building on Parcel 10, improved direct pedestrian connections to Pacific Hall and the Revelle Natural Science Quad beyond, and improvements associated with Ridge Walk.

Two of the academic quads also function as gateway quads: Revelle Gateway Quad and Muir Gateway Quad. In each case these quads lie along Ridge Walk at major pedestrian gateways to the colleges. Surrounded by academic buildings, they will be active spaces, designed and furnished to promote conversation and interaction.

The Academic Quads include:

- Revelle Sciences Quad
- Urey Green
- Revelle Gateway Quad
- Muir Gateway Quad.

Residential Quads

The two residential quads, one each in Revelle and Muir Colleges, are planned as the focus of residential student life. The residential quad at Muir will remain essentially as currently configured, with an expansion to incorporate the new apartment complex on Parcel 12 on the southeast.

An entirely new residential quad will be developed in concert with the new Revelle residences. This quad will be of a similar scale to that at Muir and will focus activity between Revelle Commons and the residential buildings.

University Open Spaces

These are the major open spaces of university-wide importance that function in a role beyond Revelle or Muir College alone. Two – Sun God Green and the Student Center "hump" will remain largely as currently configured, with some modifications associated with more clearly defining Ridge Walk. Two will undergo major redesign: the Wellness Center Quad will be redesigned with construction of the new Wellness complex, and Revelle Plaza will be redesigned as a major project to reinvigorate this historic UCSD gathering and event space.

Recreation Open Space

Active Recreation

The recreation fields and tennis courts currently located between Revelle and Muir Colleges, west of the Main Gym and Natatorium, will be slightly modified to accommodate surrounding development, but will remain sized to suit a variety of field sports.

Informal Recreation

A new complex of courts will be added between the north Muir College academic buildings and the Muir College parking structure. In addition to the recreation fields and courts, additional informal recreation areas will be found in each college. Both are located in close proximity to the student residences: one is near Muir College (Figure 10, open space n), across Scholars Drive, south of the new parking structure on Parcel 16, the other (Figure 10, open space b) is located adjacent to the new Revelle housing between Parcels 6 and 2.

The Grove

The Grove is the primary natural open space in or adjacent to the neighborhoods. Pursuant to the Grove Development Guidelines, the Grove cannot be diminished in size; in the Revelle and Muir neighborhoods, planting consistent with the Grove will be extended wherever possible to make this tremendous campus asset more prominent in the colleges. In addition, two types of improvements to the Grove are proposed:

- Removal or clean-up of service and trash collection locations, removal of unnecessary roads and/or parking. A thorough review of at these conditions within the Park is needed to improve its overall appearance.
- Improvements to pathways through the Park. Several paths connect Revelle and Muir Colleges through the Park with destinations to the east, including Geisel Library, Price Center and other student-oriented facilities in University Center.

Access, Circulation and Parking Framework

S ustainable transportation practices are an increasingly important part of university activities. The University of California has adopted Sustainable Transportation Practices in conjunction with those associated with building and site design. UCSD is taking actions on many fronts, such as increasing use of low or zero-emission vehicles, monitoring travel patterns, supporting transit, carpool and other alternate modes of travel.

Modifications to the roads, walkways, parking locations and shuttle and bicycle routes will also facilitate circulation on campus, discouraging the use of autos for intra-campus trips by making other means of movement equally convenient.

Vehicular Circulation

Campus Entries

Currently there are three signalized entries to the university from North Torrey Pines Road within the Revelle and Muir College areas: at Revelle College Drive in the south, at La Jolla Shores Drive in the middle, and at Muir College Drive on the north. The north and south entries will be retained. They are well-located and provide good access to important destinations, parking, and to internal campus circulation along Scholars Drive.

The La Jolla Shores Drive entry will be closed. It is poorly configured, requiring Scholars Drive to shift eastward in order to accommodate stacking for inbound and outbound turning movements. This layout results in significant conflicts between autos, service vehicles, bicycles and pedestrians, and consumes a significant amount of land in an area where efficient land use is essential. Traffic studies conducted in the course of this planning study determined that the La Jolla Shores Drive entry is not necessary to the efficient operations of the campus circulation system, especially the Scholars Drive loop road. As a consequence, this entry will be closed to vehicular traffic. Bicycle and pedestrian access across North Torrey Pines Road from La Jolla Shores Drive will be retained through bike lanes and signalized crosswalks. Operations of La Jolla Shores Drive to the west of North Torrey Pines Drive will not be affected.

An additional entry-only, if needed, will provide direct access to the Revelle parking structure, facilitating ingress to this structure and minimizing potential congestion on Revelle College Drive. This is described further in the following section of this document - Parking.

Scholars Drive

Scholars Drive is an essential campus loop road which accommodates general vehicular circulation, service and shuttle trips. Three improvements will be made to Scholars Drive:

- As described above, the La Jolla Shores Drive entry will be closed. By eliminating this entry, it will be possible to straighten Scholars Drive, simplify vehicular circulation, and eliminate confusion regarding movements to the service and parking areas associated with Pacific Hall, Urey Hall, and the Natural Sciences Building. It will also provide a major new academic parcel for the college. A traffic study should be undertaken to consider potential impacts of this closure on and off campus, including at the Scripps Institution of Oceanography. If necessary, traffic mitigation measures or improvements should be made to ensure safe and efficient vehicular circulation.
- Scholars Drive will be realigned in Muir College. Today it extends east into the campus, with most eastern portion running north-south along the alignment of Ridge Walk. This segment, especially at the southern end where traffic crosses Ridge Walk to access the Faculty Club parking lot and the Thurgood Marshall turnaround, presents significant conflicts for pedestrians. The north-south portion of Scholars Drive will be realigned to the west to be in direct alignment with that within Thurgood Marshall College. The abandoned portion will be transformed into an entry drive with turnaround for Muir College, and a limited access road for use solely by those with a specific desti-





Proposed New Building Site

250′

0'

500′



nation to the east, such as the Faculty Club. Access to the Faculty Club will be controlled by the use of a rolled curb, special paving, special access permit, or with a gate or bollards.

• A realignment to establish a more nearly 90 degree, right-angle turn at the southwest corner of Revelle College near the parking structure, may be undertaken if needed to recapture additional development site space, and should not materially affect vehicular movements.

As illustrated in Figure 11, those roadways not considered Primary Traffic Routes (primarily Scholars Drive) will be considered Restricted Access. In these instances, general traffic will be discouraged through signage and physical means such as narrowing, change of paving, or curb treatments. Access will be restricted to service vehicles or others with special reason to be in these areas. By limited access in this way, conflicts between pedestrian, bicycle and vehicles will be minimized.

Parking

Currently, parking for faculty, staff, students and visitors is accommodated in large surface lots located in the north and south of the study area. An additional surface lot, which parks 144 cars, is located immediately west of the Faculty Club. Small areas of parking for disabled drivers and for service vehicles are found scattered throughout the study area.

The 2004 UCSD Long Range Development Plan consolidates parking throughout the campus into structures, locating them along the Loop Road. The intent is to keep the interior of campus pedestrian-oriented and keep vehicles at the perimeter. Two parking structures can be sited within Revelle and Muir Colleges and are anticipated to accommodate as many as 3,500 spaces in total. This study recommends an approximately equal split of parking spaces between the two colleges for the following reasons:

- The "center of mass" of potential users is midway between the two colleges.
- The expected population growth in Revelle College is such that providing 1,700 spaces here would maintain the current proportion of spaces to persons.
- A larger structure at Revelle College may create queuing problems along Revelle College Drive that could impact city streets.

However, further study will be required for the structures; if for financial or planning reasons it becomes necessary, this distribution of parking could be altered. Assuming that these improvements would be funded by the UCSD Parking System, the costs to replace this parking would result in substantial fee increases to the faculty, staff, students and visitors of UCSD. Financial studies that would define the financial effects and viability of implementing the parking components of this neighborhood planning study have not been completed as a part of this physical development study.

The surface parking lots represent significant opportunity sites for the campus and the colleges. As shown in the Illustrative Plan and Vehicular Circulation Plan, with the parking lots consolidated into two parking structures, both located at the periphery of the developed areas and immediately adjacent to Scholars Drive, major development sites become available that are conveniently located in proximity to other academic and residential sites.

Revelle Parking Structure (Figure 12, Site A): The Revelle Parking Structure is planned to accommodate 1,700 cars in nine levels. The structure can be entered and exited via either Revelle College Drive or via Scholars Drive. In addition, a dedicated right turn entrance lane from North Torrey Pines Drive may be necessary to mitigate possible congestion on Revelle College Drive in peak hours.

While a previous study proposed a circular configuration for the garage, this study proposes a more traditional rectangular structure, which makes possible the



addition of office space or residential uses along two sides to screen the garages bulk and appearance.

Muir Parking Structure (Site B): The Muir Parking Structure is illustrated as accommodating 1,800 cars in eight levels. Located immediately east of North Torrey Pines Road on the site of existing parking lot P208, the structure will be accessed from three points: Muir College Drive from the north, and two locations along Scholars Drive on the south and east sides. The parcel indicated for the Muir College parking structure is also adequate to accommodate informal recreation fields or courts along the southern edge in proximity to the Muir College housing.

Optional Muir Recreation Fields Parking (Site C): Additional parking could be provided in the future, if needed, under the Muir recreation fields. While well located to be convenient for many users, the parking would be more expensive to provide on a per-space basis than a typical parking structure, since development of recreation fields on the roof would add significantly to the cost of the structure. Removal of the fields to provide lower cost parking is not an option because of the importance of these fields to the students residing in the area and to the operations of the campus-wide recreation programs.

Optional Faculty Club Parking Replacement/Reconfiguration (Site D/E): Currently 144 parking spaces are provided in Lot P206 directly west of the Faculty Club. These spaces, a mix of metered, handicapped, and special permit, provide event and club activity parking for faculty and visitors. The metered spaces attract drivers (many of them students) hoping to park throughout the day, increasing traffic levels and compounding the conflicts between cars and pedestrians at the lot and at Ridge Walk.

Two options exist for this surface parking lot. In the short run, elimination of the metered parking, coupled with improvements to pedestrian walks, will limit the number of vehicles searching for parking throughout the day and will minimize the pedestrian and vehicular conflicts that currently plague the lot. In the long run, this parking lot could be replaced and relocated in a way that would further minimize conflicts. Options include:

- Locating parking under the new academic building sited directly west of the faculty club, with parking managed to prohibit general parking which would limit the number of trips, or
- Constructing a new parking structure under the Sun God Lawn/Faculty Club area, accessed from Mandeville Lane to the southeast. This alternative would eliminate the traffic / pedestrian conflicts at Ridge Walk, but requires careful site planning to minimize impacts to the Sun God Lawn and art work, and to the adjoining Park area to the east. Any relocation of the Sun God piece, even temporary, is likely to be very expensive and difficult to accomplish. As with potential parking under the recreation fields, this parking would be more expensive than a typical, above-grade structure.

If needed for larger events, shuttles or valet parking could be provided to assist visitors at special events who would be able to park in the Muir Parking Structure. In any scenario a minimum of 75 spaces shall be provided adjacent to the Faculty Club to support its operations. Similarly, access to the Faculty Club must remain open.

Pedestrian Circulation

On a university campus such as UCSD, the ease of movement of students, faculty and staff is tremendously important. Pedestrian walkways provide not only a means of moving between destinations efficiently, but also are places where a significant part of the social life of the campus occurs. Within Muir and Revelle Colleges there are three particularly important elements of the pedestrian circulation system that are illustrated in Figure 13.

The most important type of routes are the Primary Pedestrian Connectors. There are three of these that are of direct relevance to the colleges:



- Ridge Walk, which links several of the quads, academic areas and activity centers. It also connects Revelle and Muir Colleges to the colleges to the north.
- Mandeville Walk, which is an important connector between the Revelle and Muir Colleges, especially the Original Student Center, and the center of the campus including Price Center. These two student complexes are central to student life and connections between them need to be clear, convenient and safe.
- Library Walk, while not located within the colleges, is a key pedestrian link and destination for Revelle and Muir students.

Major Pedestrian Connectors, which primarily run eastwest, are also illustrated. There routes provide intra-college access and link to the Primary Pedestrian Connectors. These routes are similar to the function of a collector street in the hierarchy of a roadway system.

Bicycle Circulation and Parking

Providing for bicycle access is important due to the significant size of UCSD, which can create a challenge for pedestrians traversing the campus, especially during class change periods. Bicycling is a good compliment to the campus shuttle system, and the climate and relatively flat terrain at the main UCSD campus are also conducive to bicycling.

The challenge in creating an effective bicycle system is two-fold:

- The potential for conflicts between pedestrians is significant; consequently, it is desirable to minimize bicycle route crossings of the Primary Pedestrian Connectors.
- The Loop Road is an appropriate location for cyclists with respect to pedestrian safety, but there are few connections to the roadway from the core areas of the West Campus, and bicycle lanes are provided only in parts of the Loop Road.

The bicycle routing system illustrated in Figure 14 shows a series of routes that largely utilize Scholars Drive, service roads, and existing pathways. Much of the Loop Road in this area already has a designated bike lane, where lanes are missing they should be added by widening the road whenever possible, as when capital projects are adjacent. Outside of the Loop Road, bicycles would share the roadway with other vehicles. This approach is meant to encourage cyclists to ride in the more open/visible areas and discourage them from riding in the narrow areas between buildings.

This bicycle system:

- Creates a backbone system for cross-campus bicycling.
- Avoids conflicts with Major Pedestrian Connectors such as Ridge Walk and Library Walk. Through the use of bollards, bicyclists would be required to dismount or travel very slowly when intersecting these pedestrian corridors.



- Provides east/west bicycle circulation, which is currently lacking.
- Provides a connection to the bike shop.
- Creates a new path through the Grove (north of Mandeville) which does not conflict with any pedestrian or vehicular facilities.

This bicycle route system will be augmented by a strategy of placing bicycle parking facilities along the bicycle routes and adjacent to primary destinations such as student housing and large academic buildings. Safe, visible, and convenient parking areas can be created approximately every 500' (a 2 - 3 minute walk) along the bicycle routes in proximity to major destinations. Bicycle parking should be component of all capital projects on campus.

Transit Circulation and Shuttle Stops

The West Campus is served by nine distinct bus and shuttle systems. Four of these systems serve the Revelle/Muir Colleges area:

- City Shuttle (which will move to the Gilman Transit Hub).
- Coaster Shuttle (from Mandeville Center to/from the regional rail station).
- SIO Shuttle.
- Mesa Parking Shuttle.
- Loop Shuttle (circulates throughout West Campus, using Scholars Drive within Muir/Revelle).

These systems use the Loop Shuttle stops within Muir and Revelle Colleges. Therefore, the recommendations of the Transit Circulation Plan would apply to all four systems. The shuttle stop locations shown in Figure 15 are slightly different than the current locations. A 500' walking radius (which represents a 2-3 minute walking time) is used to identify the optimum location for shuttle stops to best serve the campus population.

The shuttle runs in two directions (clockwise and counterclockwise); therefore, two stops are needed at each location identified in the diagram. The preferred location for the stops is on the "far side" (downstream) of an intersection. A near-side stop reduces visibility of pedestrians crossing the street in front of the bus for motorists in the nearest travel lane.

As the colleges grow, shuttle service and stops will be adjusted to most optimally serve the growing population. Additionally, the planned extension of rail service to the northeast area of the campus may necessitate some modifications to bus service.

Shuttle stops throughout UCSD should have a consistent treatment of site furnishings to make them easily identifiable and comfortable for patrons. Improvements should include:

- Covered and wind-protected shelter structure.
- Information board or kiosk with campus events, shuttle schedules and routes, emergency contact information.
- Lighting.
- Seating and trash receptacles.



Service and Emergency Access

The Service and Emergency Access Plans (Figures 16 and 17) lay out the proposed pattern of vehicular circulation needed to meet emergency access requirements and to provide convenient and adequately sized access to load-ing docks at academic buildings sited according to the Parcel Plan.

Emergency access has been planned to accomplish the following:

- Provide access to all buildings by fire department vehicles on appropriately surfaced access routes with a minimum 20 foot width; where buildings exceed 35 feet in height, these access routes will be 26 feet in width. Also provide rooftop access along one full side of the building.
- Ensure access by vehicular fire apparatus to within 150 feet of all portions of a non-sprinklered building or within 200 feet of a sprinklered building.
- Provide adequately sized cul-de-sac or hammerhead turn around areas for fire apparatus vehicles to limit to the extent possible the need to traverse interior plazas and walkways to exit the site.

Service access is provided by means of existing and new service roads and loading areas. In some locations, service access is provided via facilities shared with general traffic. In other circumstances, service access is accomplished from dedicated roads directly from Scholars Drive. Service/loading areas have been conceptually sized and configured to accommodate the full range of trucks that will be needed to provide service and deliveries, including large tractor-trailer vehicles.





Figure 17 - Emergency Access



Utilities

Phasing

espite the significant building program envisioned for Revelle and Muir Colleges, it currently appears that major upgrades to the Central Utility Plant, located at the southeast corner of Revelle College, will not be needed. The Plant will remain in place within the existing paved area, with minor expansions or improvements occurring over time per the Grove Development Guidelines.

Utility lines for high temperature water, chilled water and telecommunications generally emanate from the Central Utilities Plant to serve the colleges. A tunnel system serves Bonner, Mayer, Urey, York, Galbraith and the Commons, with additional tunnels reaching north to Muir. Electrical and natural gas also are provided from the Central Plant to the colleges, and a network of sewer and water lines are found throughout the colleges. A high pressure water pump station in Muir College is sufficiently sized to supply water for the growth anticipated at Revelle and Muir Colleges and will remain in its current location.

Extension of existing utility lines will be necessary to serve future development sites and facilities. Each facility will be responsible for providing utility service and in some cases the utility lines will need to be increased in size to anticipate future adjacent facilities also to be served by the same extensions. R ecommended phasing of facilities and site improvements are shown on the accompanying plans (Figures 18-21). New facilities and supporting site improvements, such as road improvements, service areas, and open spaces, are shown. It is particularly important that the non-facility improvements keep pace with the construction of academic buildings and housing; plazas, quads, paths, and other improvements will add immeasurably to the colleges' and UCSD's image and competitiveness in attracting the best students and faculty.

Phasing has been conceived based on several key criteria:

- Likely timing of state- and non-state-funded building projects.
- Required timing for parking reconfiguration (surface to structures) to free large site areas for new academic facilities or housing.
- Logical linkages of site improvements (quads, plazas, road improvements) to support the facilities improvements and improve the overall campus environment.

The accompanying diagrams show four possible phases of development, with facilities and site improvements indicated for each phase. While these phasing estimates are necessarily speculative, and timing for various elements may move more quickly or slowly, they illustrate the fundamental strategy for building out the two colleges.



Figure 18 - Phase 1

Phase 1 - 2006 - 2012 Existing Building Study Area Boundary



Phase 2 - 2012 - 2016

tegent Subliding Current Phase Josen Space Current Phase Battalog Exiting Previous Phase Coen Space - Previous Phase Subly Area Soundary





Figure 20 - Phase 3.

- Phase 3 2016 2020
- 🗱 Building Current Phase.
- 🛄 Оран цаха Солоте Ятаче
- enter Elle Roadwer, Current Piess Banding Existing -Principiis Phase

 - Cation Space Revugas Phase
- Turdt of Henricus Phase
- Study area Sourcesty



500'



Figure 21 - Phase 4

Phase 4 - 2020 +

- Legeod
- 🗰 Buhang Correct Phase 🛄 Open Space – Current Phase Ruadway - Editent Phase Bending - Existing 7 Previous Phase

 - Open Strate Previous Priase
 - S Roadway + Previous Phase
 - Study Area Boundary