

University of California, San Diego
Science Research Park

Development Concept

May 2002

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Acknowledgments

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Executive Summary

UCSD Science Research Park Development Concept

Executive Summary

Background and Objectives

The University of California, San Diego (UCSD) has designated a 30-acre parcel on the eastern perimeter of the East Campus for development of a Science Research Park (SRP). The SRP will augment and enhance the instructional and research base of the University. The SRP will also create an intellectual resource for the interaction among industrial and academic research activities, enhance retention of outstanding researchers, and enhance private support for UCSD's graduate and undergraduate fellowships, training, research, and collaboration. The land will be made available under long term ground leases.

Programmatic criteria for prospective ground lessees require that research activity be industrial, scientific, or technological in nature and provide clear demonstration of UCSD-linked research or instruction. Federal Government-designated classified programs are not eligible for inclusion in the SRP. Permitted tenant activities include research and product development; production, assembly, and testing of prototypes; pilot plant facilities, and research-related support.

The design and construction of SRP improvements will proceed under UCSD's standard design and construction review processes.

Site and Planning Context

The UCSD Long Range Development Plan (LRDP) and the UCSD Master Plan guide the development of the SRP and establish the context, planning principles, and design guidelines for all the campus neighborhoods.

The physical context of the SRP includes the UCSD Park, canyons, and other native habitats, campus housing, and the East Campus Health Sciences (ECHS) neighborhood, as well as student parking, recreation facilities, and open space. The SRP also borders community commercial and residential uses.

Vehicular circulation and access into the SRP will occur from three directions, including Campus roads from the north and west, and site entry from the east. UCSD will coordinate with the San Diego Metropolitan Transit Development Board to locate a new light rail transit segment serving UCSD, its East Campus, and the University Town Center vicinity. A landmark design bridge with vehicular, pedestrian, and bicycle lanes will be constructed across Interstate 5 and connect to the SRP via Medical Center Drive South.

Development Concept and Planning Principles

The canyon landform at the site's western edge provides the SRP with its defining feature. Planning principles have been established to guide the development of the SRP by creating a "sense of place", integrating the canyon's rustic landscape while maintaining the discrete urban landscape at the center of the site, and promoting views into the canyon from the research buildings.

The pedestrian experience and exterior landscape terraces defined by the buildings form the development concept of the SRP. The Terraces descend along the natural slope of the canyon edge, and an extension of the canyon landscape provides the focal point of the development. Secondary pedestrian Walks cross the Terraces, and link to pathways joining the ECHS pedestrian system.

Development Capacity and Configuration

The site has been designed with five building lots, three shared parking facilities, open space, and landscape areas. Total buildable area on each lot ranges from 80,000 to 130,000 gross square feet (gsf), comprising a total SRP development capacity range of 400,000 to 550,000 gsf, on approximately 15 acres. The remaining 15 acres support the Terraces and Walks, streets, parking, and open space. Lots may be subdivided to construct smaller buildings if development capacity targets are met on the lot. Pedestrian bridges at the second level may be permitted between lots to allow a larger aggregation of area than a single lot may provide.

Development Concept

The SRP site concept provides for a grouping of five 2 to 4 –story buildings around the Terraces and Walks, set at elevations that follow the sloping contour of the canyon edge. Vehicular circulation on Street C loops the site at the perimeter, where parking and service bays are located. An Entry Plaza provides an arrival experience to the SRP, and a link to pedestrian Terraces and Walks. Shared parking areas, including a future parking structure, are located outside the Street C perimeter. Landscaped open space links the Terraces with the canyon in the canyon extension.

Parking in the SRP will require approximately 1,800 spaces for the full building capacity build out. Parking on building lots during stages of developing of the SRP is intended to augment SRP parking needs by providing surface lots and limited structured parking below research buildings.

Infrastructure on the site, including grading and drainage improvements, water, sewer, reclaimed water, data, and electric and gas utilities will be constructed in the first phase of development.

Subsequent phases of development will allow buildings to be constructed in any order. The final phase that includes the fifth building lot will also require the construction of a freestanding parking structure along Regents Road, the eastern site boundary.

Design Guidelines

The SRP Design Guidelines form the basis for project design throughout the design process. They are descriptive recommendations and evaluation criteria guiding the quality of each building project.

The guidelines build on the development concept of a rich “sense of place”, integration of the rustic landscape, and reinforcement of the pedestrian experience. Building siting and setbacks control the placement of buildings on each lot, the location of Terraces and Walks, and provide landscape zones for each lot. The massing of buildings on each lot suggests a maximum of four story structures that balance vertical and horizontal composition, and provide relief and interest through varying the building heights and massing.

Pedestrian circulation and entry into buildings will be guided through careful location of building entries and the use of arcades and colonnades along the Terraces and Walks.

The design of architectural fenestration, roof elements, penthouses, and services bays is guided by recommendations that reinforce the principles of simplicity, balance, and harmony with the building, site, and landscape.

Materials, finishes, color, and glazing recommendations also reflect the desire to complement and harmonize with the natural environment of the SRP, and avoid highly individualized design statements.

Lighting and signage will conform to the UCSD Campus Standards, and reflect the importance of pedestrian safety, wayfinding, and integration into the site landscape.

Vehicular Circulation Access and Design

The main perimeter loop road in the SRP, Street C, will be a 40-foot wide, two-lane road. It will connect to the east site entry feature on Street B, a 4-lane divided street intersecting at Regents Road. Both streets will include sidewalks and bike lanes. Access for vehicles, shuttles, pedestrians, and bicyclists to the West Campus will be augmented by the construction of the I-5 Bridge at the west end of the ECHS neighborhood. Emergency and maintenance access to buildings will occur on selected Terraces and paths, as well as perimeter parking lots and streets. Campus shuttle bus stops will be located as the SRP develops.

Parking

Parking bays must meet identified Campus dimensional standards for landscape islands, pedestrian paths, and driveway configurations. Parking beneath each building is strongly encouraged and will be accessed from Street C. At the final phase of development, a freestanding 4 to 5-level parking structure with approximately 650-800 spaces will be constructed on Parking Lot 2 adjacent to Regents Road. Access to this structure will be from Street C.

Landscape Guidelines

The rustic canyon landscape of eucalyptus, native, and indigenous species forms the basis for the integration of the natural and built environment of the SRP. The natural landscape of the canyon is balanced with the more urban, discrete landscape of the Terraces and Walks.

The Terraces provide the primary social interaction spaces of the SRP, and each of the three levels is representative of the transition to the canyon extension. The use of evergreen elm, Torrey pine, strawberry tree, and three distinct types of ground covers will define this discrete, man-made character.

The Walks provide the visual integration from the Terraces to the buildings, and are intended to be light and airy, utilizing bottle tree, flowering pear, golden trumpet tree, and purple crown robinia to provide color, interest, and a varied experience along the Walks.

Neighborhood edges will integrate with other ECHS palettes through the use of similar enhanced paving, street furniture, and drought-tolerant plant materials. Entry theme trees include the Torrey pine; street trees include flowering and other eucalyptus species, canary island pine, coast live oak, and Brisbane box tree.

Building lot and parking lot landscaping should blend into the indigenous landscape environment; the use of aleppo pine, bottle tree, the Brisbane box tree, and tipu tree in random placement will encourage this integration.

Street furnishings and lighting should be complementary to building, landscaping, and paving. Recommendations include coordinated 'design' sets or 'systems' of seating and benches, bicycle parking racks, waste containers, and planters.

Landscape lighting should comply with UCSD standards and be placed strategically and minimally for pedestrian safety and access, as well as integrate with signage and landscape.

1. Introduction

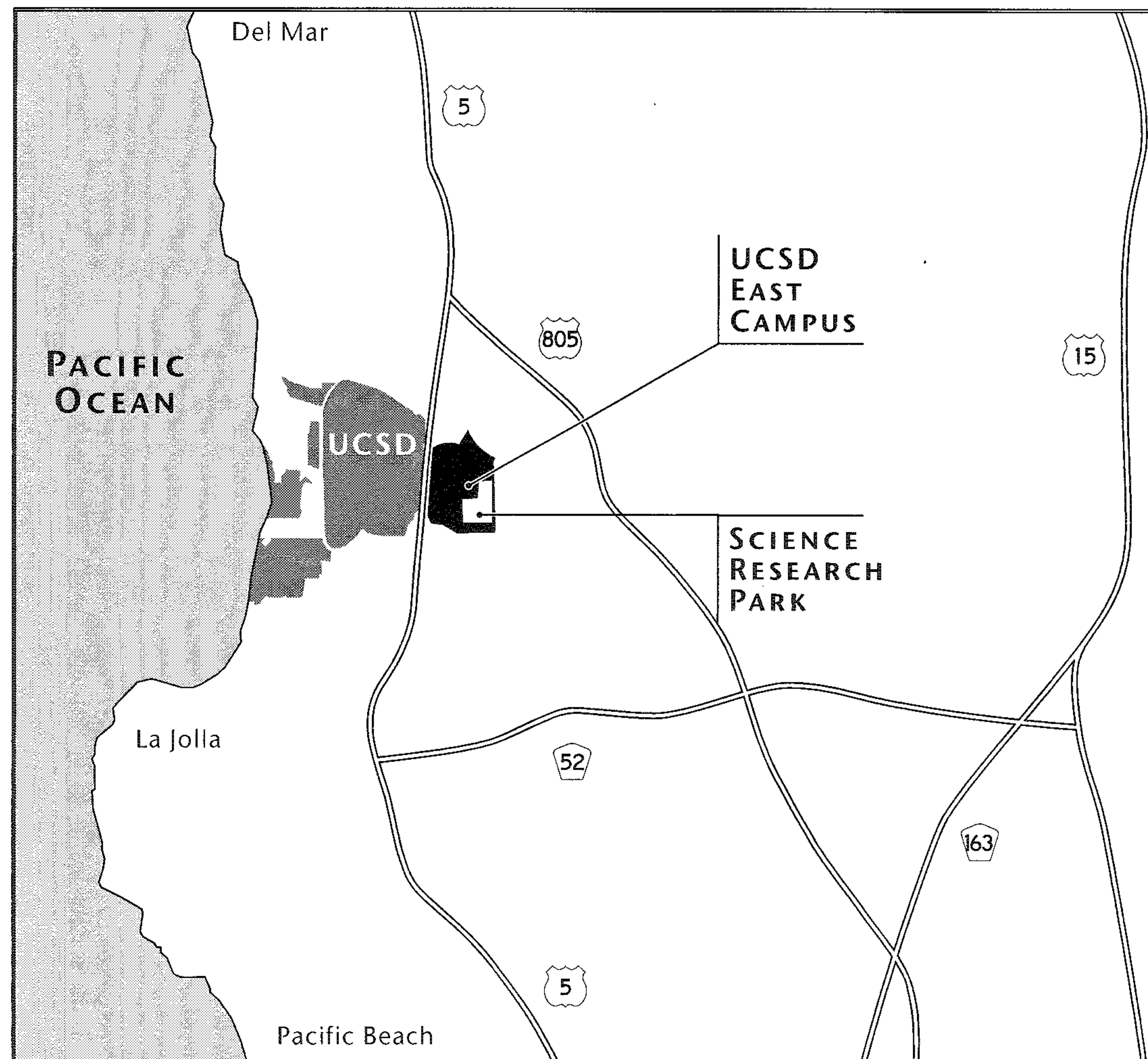


Figure 1.1 SRP Location

1.1 Background

The University of California, San Diego (UCSD) has designated 30 acres of land on the eastern perimeter of campus for development of a Science Research Park (Figure 1.1). Originally acquired by the University in 1964 as part of a land grant from the Department of the Navy, the University received approval from Congress in 1982 to amend the education-related deed restrictions for this parcel to allow its development for "industrial scientific or technological research purposes."

1.2 Objectives

The objectives of the proposed Science Research Park (SRP) are to augment and enhance the instructional and research base of the University, and provide added flexibility for UCSD to meet changing program requirements by:

- Creating an intellectual resource to enhance UCSD's instruction and research programs by providing opportunities for interaction between outstanding industrial and academic research activities;
- Creating an intellectual resource to enhance UCSD's ability to continue to attract and retain top researchers and scientists;
- Creating a climate that enhances the private support for University research, graduate fellowships, undergraduate and graduate student training, and collaborative faculty and private sector industrial research projects; and
- Creating a financial resource.

1.3 Programmatic Criteria

In support of these objectives, research companies, institutes and government agencies (tenants) that meet the following program-

matic criteria may lease land (under long-term ground leases) or facilities in the SRP:

- The nature of the firm's research activity must be industrial, scientific or technological (deed restriction);
- Significant linkages between research programs conducted in the SRP and current or proposed campus research and/or instruction must be clearly demonstrated; and
- Programs may not include research designated by the Federal Government as classified.

1.4 Permitted Uses

Permitted activities for prospective tenants who meet the Programmatic Criteria include:

- Research, product development, prototype testing, and consulting, along with the offices, laboratories or other facilities that support these activities;
- Production or assembly of prototypes and pilot facilities that are related to on-site research and development activities or the testing of production processes located elsewhere; and
- Provision of research-related services that support research programs within the SRP or the UCSD campus.

Tenants will reflect multiple industry sectors that support and enhance UCSD's academic programs.

1.5 Project Review

The design and construction of all improvements within the SRP neighborhood will undergo UCSD's standard review processes, whether development is implemented by the Campus or a private developer or company.

1.6 Report Framework

The SRP Development Concept (Concept) has been prepared to define the development capacity, development areas, the character of the SRP neighborhood and the set of conditions to guide development. The Concept recommends development of approximately 550,000 gross square feet of research space with associated open space, circulation, and parking facilities. The SRP neighborhood will emulate the campus character of UCSD: buildings will be clustered around pedestrian terraces and walkways providing a place for social interaction and quiet contemplation, while streets and parking will be located around the perimeter of the development. Specific design elements and a coordinated palette of building materials, landscape materials and site furnishings will promote a cohesive neighborhood appearance yet also allow individual identity for each research facility.

This report documents the framework for the design and development of the SRP and is organized as follows:

Chapter 1 introduces the Development Concept.

Chapter 2 addresses the planning context for the SRP. It provides an overview of UCSD and the planning guidelines for the Campus, a description of the East Campus setting and a summary of the SRP's existing site conditions.

Chapter 3 describes the Development Concept for the site, grading, utility infrastructure and construction phasing.

Chapter 4 discusses the design concept and guidelines for architecture, circulation and access, parking, open space and landscaping, lighting, and signage.

Chapter 5 includes appendices with more detailed information regarding landscape.

2. Planning Context

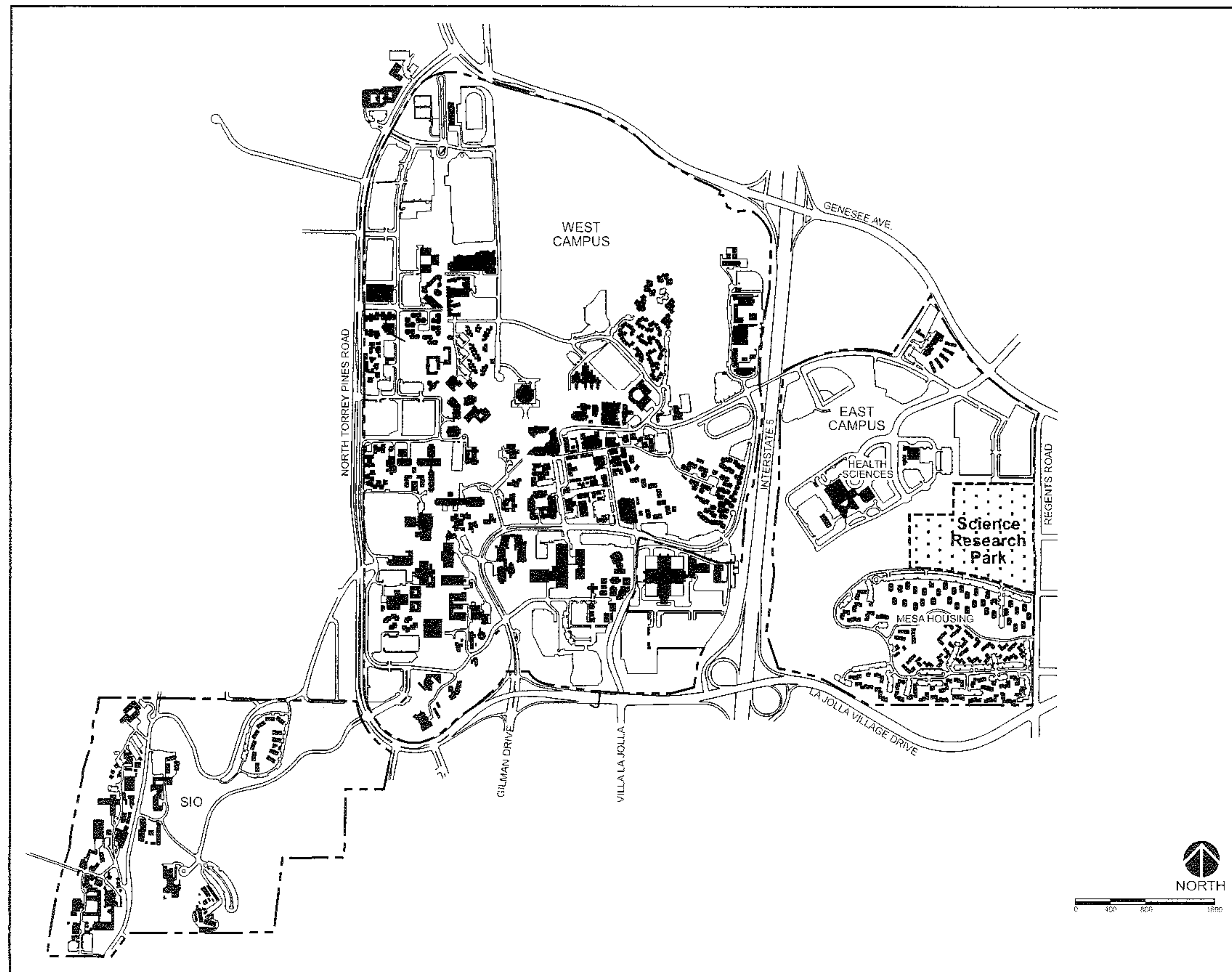


Figure 2.1 Campus Context

2.1 UCSD Campus Context

The UCSD campus extends across 1,200 acres of land from the Pacific Ocean to inland parcels east of Interstate 5. Bisected by the Interstate 5 freeway and major roads, the Campus is divided into three primary land components: Scripps Institution of Oceanography (SIO), West Campus, and East Campus. The Science Research Park (SRP) is located within the East Campus adjacent to Regents Road. (Figure 2.1).

The UCSD Long Range Development Plan (LRDP) and the UCSD Master Plan study guide development on the Campus. In general, the LRDP identifies the Campus land uses, development areas and open space preserves; and the Master Plan study outlines planning principles and design guidelines for Campus development. Together they provide a framework to manage growth and physical development in an orderly fashion to conserve and enhance the functional effectiveness, environmental quality and ambience of the Campus.

The LRDP delineates development of a variety of land uses on the East Campus, including: academic, clinical, science research, housing, recreation and parking facilities as well as Campus open space reserves. These land uses are discussed in more detail in Section 2.2 - East Campus Context. A summary of the Master Plan principles and guidelines common to all Campus development and particularly pertinent to the East Campus and the SRP neighborhood includes the following:

- Development will occur within definable neighborhoods with clear boundaries and character.
- The shoreline, canyons, eucalyptus groves, and large areas of native habitats will remain interconnected and constitute the UCSD Park, a prominent natural resource to be respected and

preserved. The Park designation of open space extends through the East Campus and includes three finger canyons that exist east of the I-5 corridor.

- Connections, consisting of roads, paths, public entries, and view corridors will provide critical links between different neighborhoods and Campus zones and thereby enhance the coherence of the Campus.
- Clear pedestrian paths will be created between West Campus and East Campus neighborhoods.
- Pathways are proposed along the canyon edges which will create pleasant walks for the Science Research Park and adjacent East Campus neighborhoods.
- Buildings will be arranged in compact clusters surrounding interconnecting courtyards. Building forms should be simple and compatible with the cluster as a whole.
- Large areas of blank walls or buildings that are excessively large are to be avoided. Arcades or colonnades, recessed windows, balconies, and variation in massing are encouraged.
- Buildings should be oriented to take advantage of distant views to the campus, foothills and adjacent canyons.

2.2 East Campus Context

The East Campus is comprised of approximately 270 acres of land on the east side of Interstate 5. Although its original topography and vegetation were modified by past landowners, the basic landform of a mesa bisected by three canyons still remains. This physical form is being maintained as the East Campus develops with urban land uses primarily sited on the mesa top and the majority of the canyon land preserved as open space in the UCSD Park.

The majority of East Campus acreage was undeveloped as recently as 1990; however, since that time, this Campus has been steadily urbanizing (Figure 2.2). Existing and planned development immediately surrounding the SRP includes:

- A new Campus entrance road (Health Sciences Drive) and a surface parking lot are located north of the SRP. The parking lot contains approximately 1,770 spaces and is used as remote parking for the West Campus.
- The East Campus Health Sciences (ECHS) neighborhood located northwest of the SRP is in the process of being developed. The existing buildings consisting of Thornton Hospital, Perlman Ambulatory Care Center, and Shiley Eye Center, will undergo future expansion, and new facilities will be constructed for clinical outpatient services, clinical research, and specialized health institutes. Several parking structures are also planned for development in this neighborhood (Figure 2.3).

In addition, the street system will be modified by terminating Campus Point Drive at the northern perimeter of the ECHS neighborhood, rather than extending through the neighborhood to an intersection with Medical Center Drive. A loop road will also be completed around the ECHS Neighborhood. Health Sciences Drive will be extended to intersect this loop road, completing the new East Campus entrance from Regents Road.

- The UCSD Park also adjoins a portion of the western edge of the SRP parcel, but is not contiguous with SRP development. This condition is discussed in greater detail in Section 2.3 – SRP Site Context.
- Mesa Housing, a residential neighborhood for UCSD's graduate and married students, is situated south of the SRP. This neighborhood consists of 600 two-story units sited in a park-

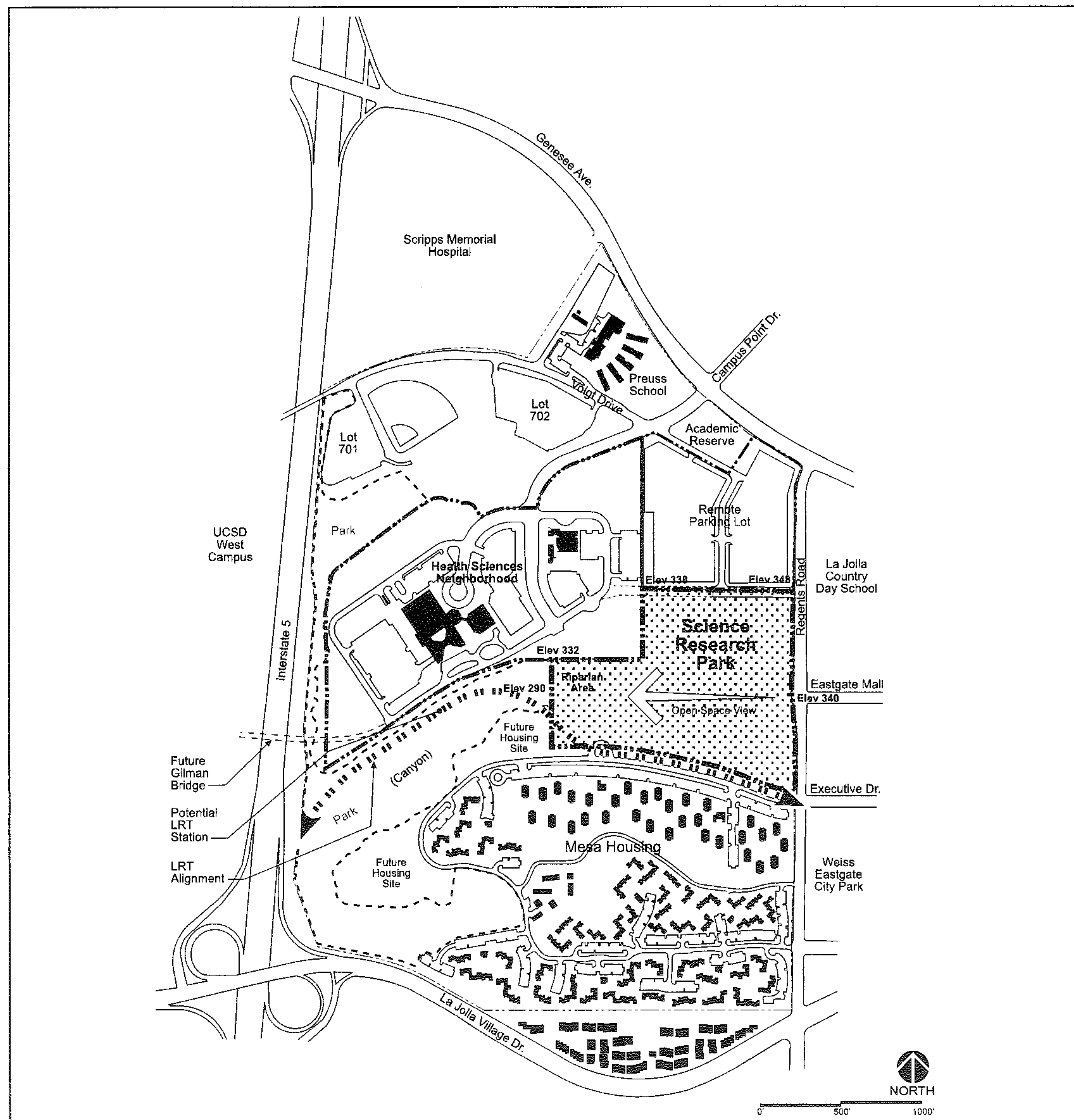


Figure 2.2 Existing and Future Conditions

like setting. Additional housing will be developed within this neighborhood with one potential site located on undeveloped land adjacent to the southwest corner of the SRP.

- UCSD is currently coordinating a segment of the future Mid-Coast (LRT) project with the San Diego Metropolitan Transit Development Board. This segment will serve UCSD and the University Town Center vicinity. The project is anticipated for construction in 2010. A potential alignment through East Campus would parallel the SRP's southern boundary, although a portion of the alignment would cross the southwest corner of the SRP. The consequences of this crossing are addressed in Section 2.3 - SRP Site Context.

Additional existing and planned development on the East Campus, but not contiguous to the SRP, includes:

- UCSD will construct a new bridge across Interstate 5 (east of Gilman Drive near the VA Medical Center) to provide additional vehicular, bicycle and pedestrian connections between the East and West Campus areas. It is anticipated to be implemented by the year 2003. The bridge will have a unique design consisting of a cable-stay structure incorporating advanced composite materials. In addition to its functional purpose, the bridge will serve as a visual and symbolic landmark for UCSD and the City of San Diego.
- The Preuss School, a UCSD charter school for students in grades 6-12, is located southwest of Genesee Avenue and Campus Point Drive.
- A Campus parcel southeast of Genesee Avenue and Campus Point Drive is designated by the LRDP as a reserve for a future academic use. It may be a potential site for the relocation of

the Extended Studies Public Programs facility (formerly called UCSD Extension). There is no date set for development of this land.

- Development located immediately east of Regents Road and the SRP that is not a part of the UCSD Campus includes La Jolla Country Day School, Mandell Weiss Eastgate City Park, and further to the east and south, University City commercial development (Figure 2.4a).

2.3 SRP Site Context

The SRP parcel consists primarily of undeveloped land located at the eastern end of a large canyon that bisects the East Campus. The canyon landform to the west of the SRP is generally undisturbed, although the natural vegetation has been modified in some areas by introduction of non-native plant species.

In contrast, the landform and vegetation within the SRP parcel has been extensively modified by past military use, subsequent Campus use of a portion of the site as a golf driving range and recent grading. One of the remaining modifications by the military includes a manufactured earth berm, which separates all but 1.67 acres of the SRP parcel from the main canyon. The SRP acreage to the east of this berm will be developed, while the remaining 1.67 acres of the parcel on the west side of the berm will be preserved as open space. The preserved land will be contiguous to the UCSD Park, and is intended to provide an open space and visual amenity for the SRP development.

The original canyon landform of the SRP parcel requires grading and filling to accommodate development. The variation in the original site topography provides the opportunity to vary the grades of the site development and capitalize on the view corridor to the west as well as distant views of the West Campus (Figure 2.4b).

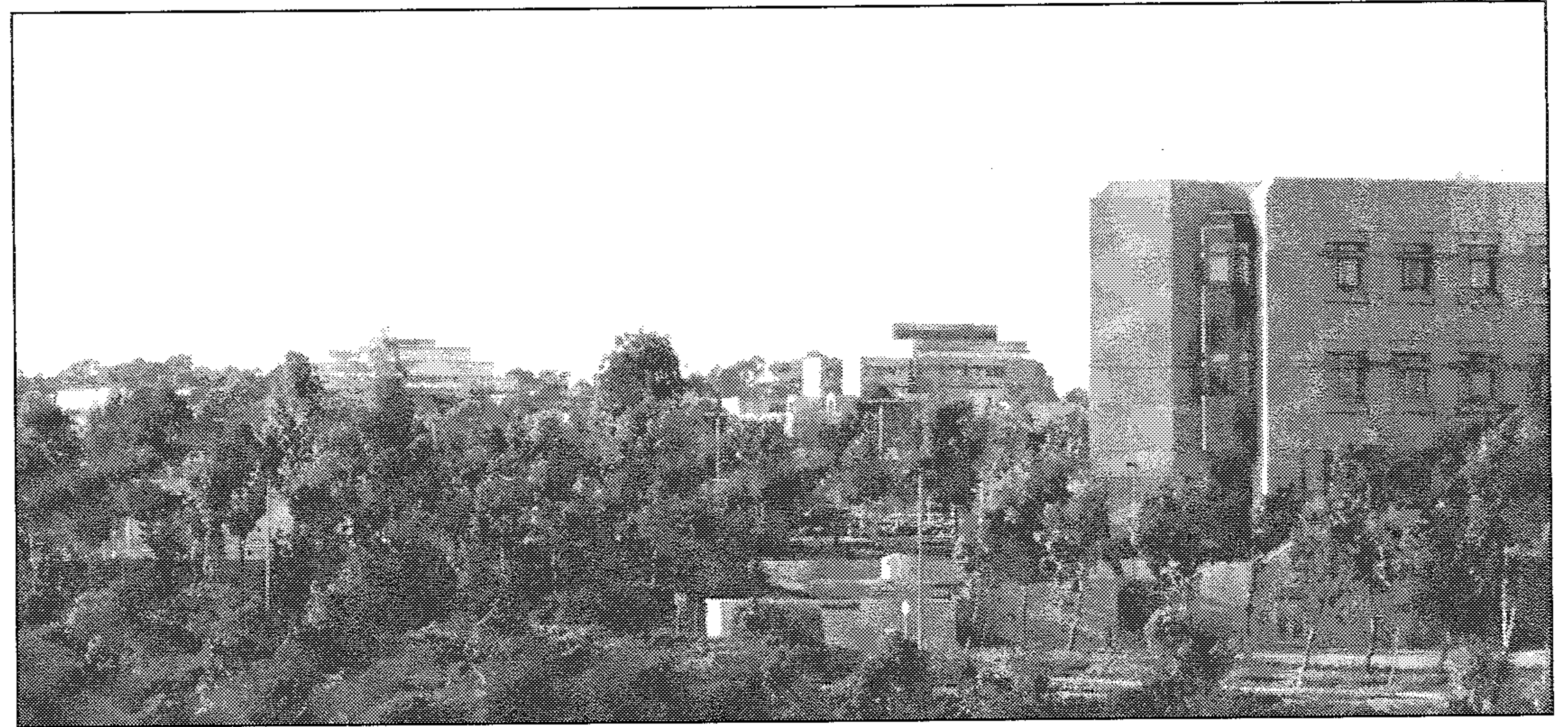


Figure 2.3 Health Sciences neighborhood views (foreground) and West Campus beyond

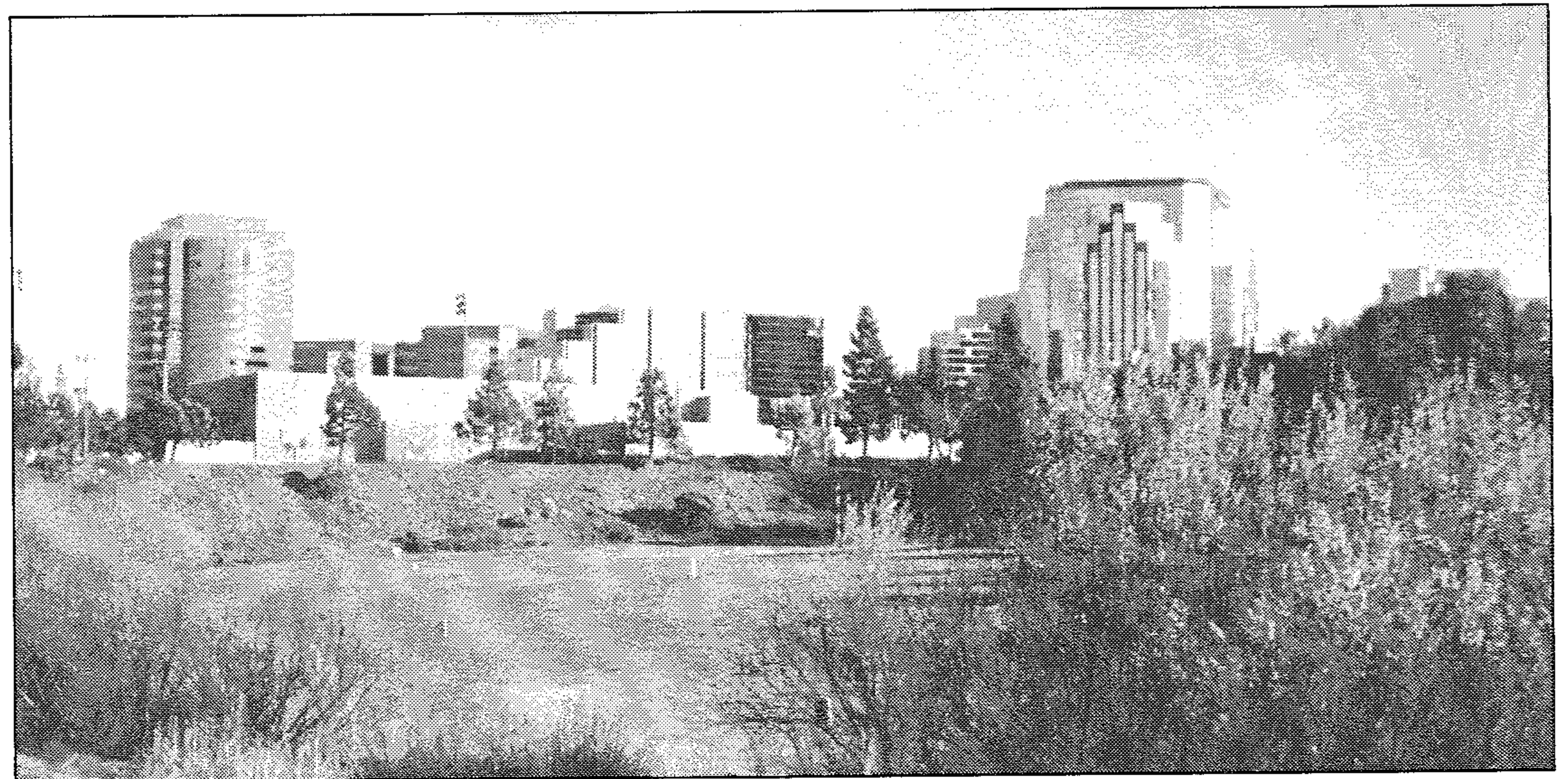


Figure 2.4a Development in University City seen from the site

A wetland habitat meanders along the length of the canyon bottom within the UCSD Park open space preserve, and it originally extended into the SRP parcel. This habitat was initially created and supported by urban runoff emanating from development east of UCSD and discharged into the Campus from a City storm drain outlet on the west side of the Regents Road/Eastgate Mall intersection.

UCSD received permits from the U.S. Army Corps of Engineers and the California Department of Fish and Game in 1993 allowing removal of 1.5 acres of habitat within the SRP parcel pursuant to completion of mitigation. The required mitigation entailed the enhancement of 2.1 acres of wetland habitat in the adjacent canyon preserved within the UCSD Park and preservation of 1.67 acres of wetland (a riparian habitat) within the western portion of the SRP site. A water supply to the habitat west of the SRP is maintained by a subsurface storm drain which extends beneath the SRP from the outlet at Regents Road/Eastgate Mall intersection to a new outlet that discharges into the preserved habitat.

The Campus has completed the required mitigation and proceeded with the habitat removal and associated grading and drainage improvements within the SRP during Summer 1999. Additional grading will be needed to prepare the site for development.

There are no streets currently within the SRP parcel; the only circulation improvement within the parcel is a combined pedestrian and bicycle path extending between Mesa Housing and the ECHS neighborhood (Fig 2.5). This circulation corridor will be preserved, however realigned to accommodate SRP development.

The street system that will be developed in the SRP neighborhood will integrate with the East Campus and off-campus street system. Three intersections on the north, east, and west sides of the

parcel will become the entrances to the SRP neighborhood. The primary entrance into the neighborhood will be from the east at the intersection of Regents Road and Eastgate Mall. Secondary entrances will be located at the north perimeter of the SRP neighborhood at the intersection of Health Sciences Drive and Voigt Drive, and at the northwest corner of the neighborhood at the realigned intersection of Medical Center Drive and Street C (formerly noted as Campus Point Drive in the UCSD Master Plan study). Street C will be extended through the SRP neighborhood and will connect with each of the entrances. A new street name indicative of the SRP (e.g. Science Research Drive) will be coordinated with the UCSD Naming Committee.

The future alignment of the LRT across UCSD has not yet been finalized; however a potential alignment is depicted in Figure 2.2. This alignment would span over the southwest corner of the SRP. Therefore, tall structures could not be built within that area, but low development such as surface parking would be feasible. It should also be noted that this alignment of the LRT would require modification of the vegetation that currently serves as a buffer between the SRP and Mesa Housing. Although the LRT would likely provide some landscape screening along its alignment, the SRP development concept should also provide landscaping along this edge to augment the buffer.



Figure 2.4b Views to the west of canyon, wetlands and riparian areas, and West Campus buildings beyond

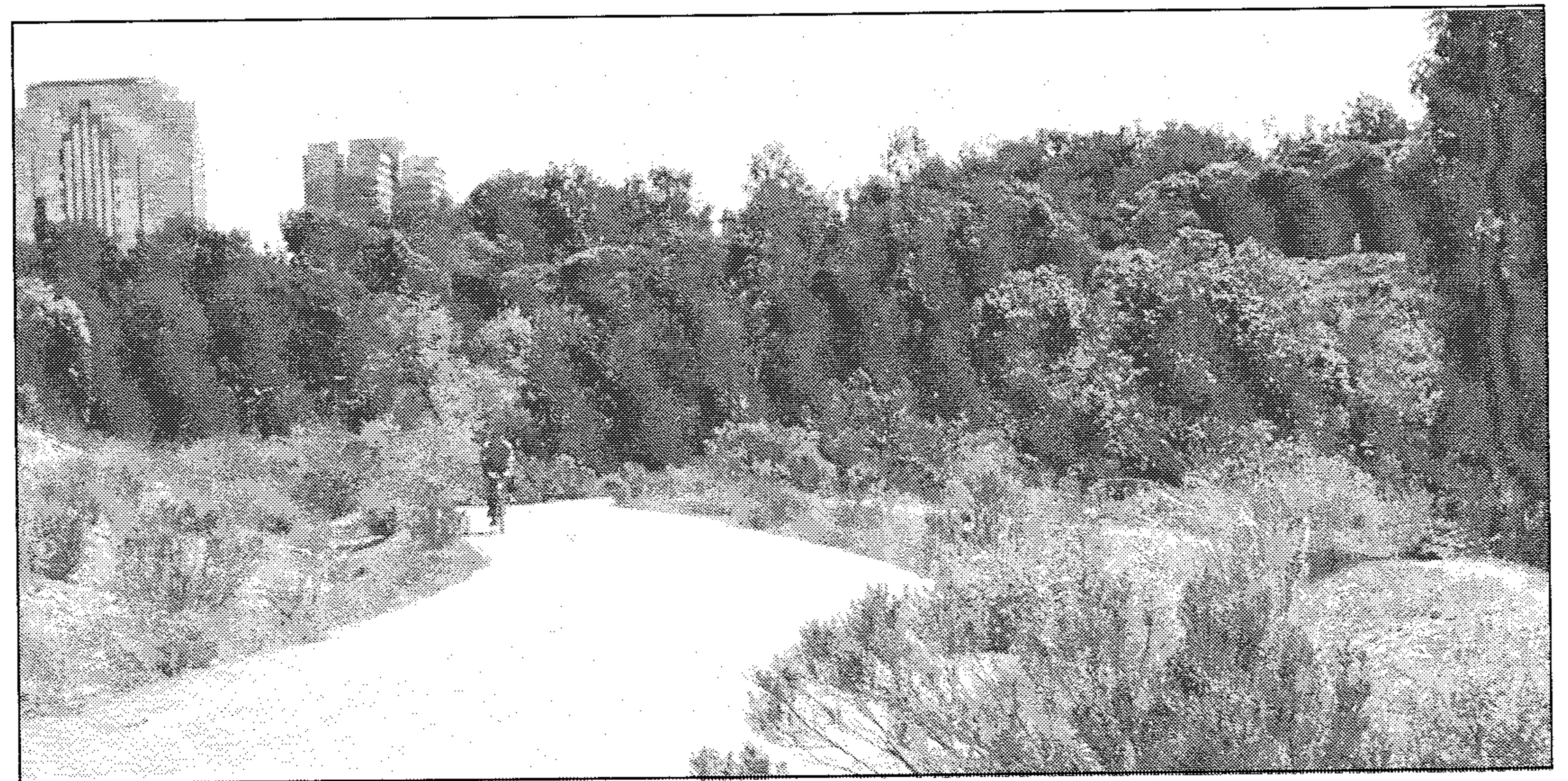


Figure 2.5 Pedestrian/bike paths along the western edge of the site

3. Development Concept

3.1 Planning Principles

Guiding Planning Principle: The canyon landform adjacent to the western edge of the SRP provides the neighborhood with its defining landscape feature. The juxtaposition of the rustic landscape of the canyon with structured urban gathering spaces, formed by the placement of the various buildings along central terraces and walkways is the guiding principle of the Development Concept.

Informing Planning Principles: Several informing planning principles have been established to support the Guiding Principle. These principles are intended to relate the contrasting “landscapes” to each other within the context of the development of the project.

- Create a neighborhood identity that is visually rich and promotes a “sense of place,” both physically and intellectually;
- Integrate the rustic landscape to balance and ground the “place” in its canyon-mesa context while maintaining the discrete, urban landscape of the neighborhood core;
- Maximize view orientation from buildings to the west canyon;
- Provide the neighborhood with a sense of unity by reinforcing the pedestrian experience. The voids created and bounded by the various research buildings form the urban spaces or exterior rooms of the neighborhood. The careful assemblage of the various buildings around these open spaces is intended to create a campus character resulting in a pedestrian oriented development. These primary open spaces form the gathering places for the neighborhood and are interlocked through a series of terraces. The Terraces step down from east to west toward the canyon, orienting the neighborhood to the canyon and the West Campus beyond. Secondary open spaces include the Entry Plaza, the North Walk and the West Walk; and

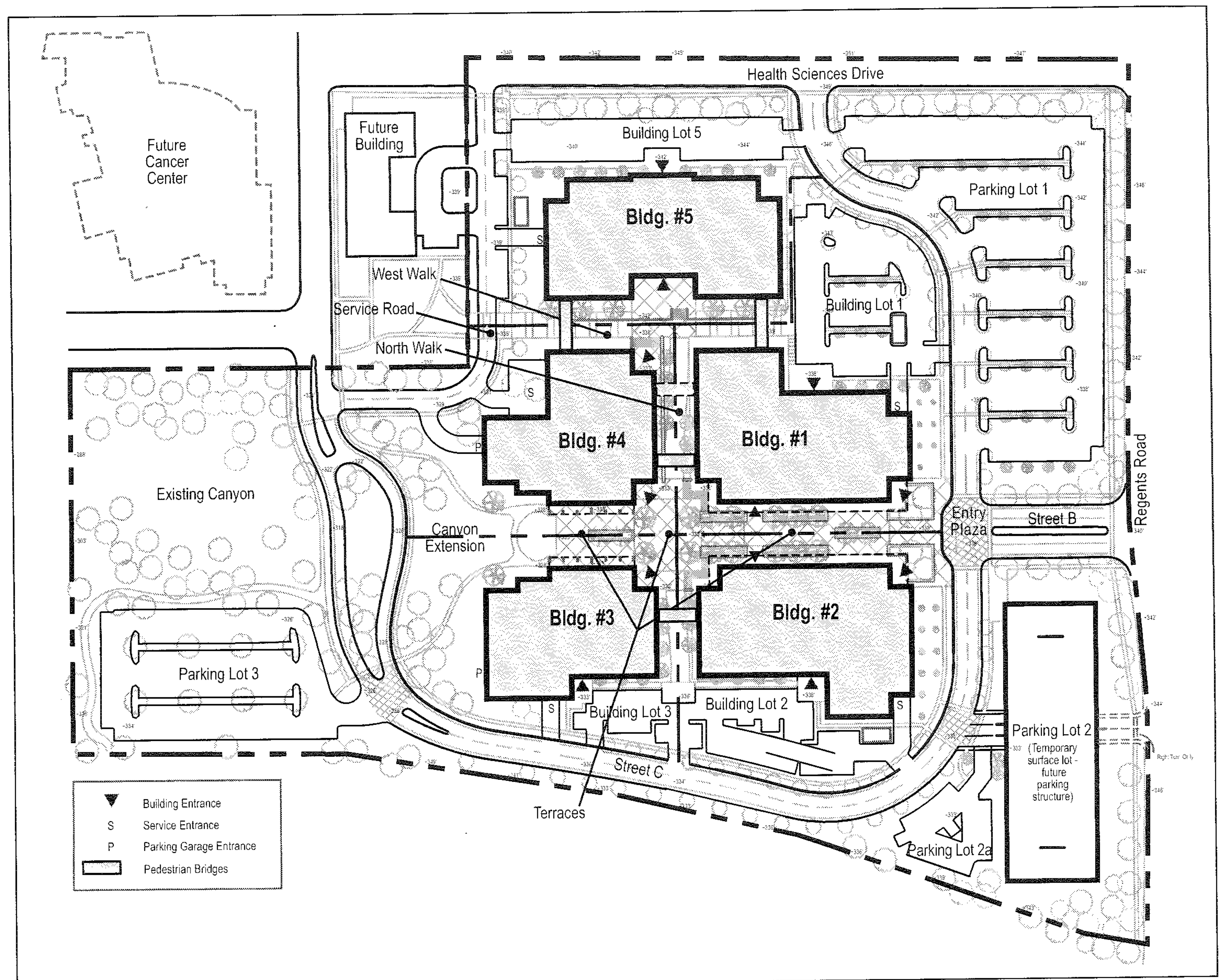


Figure 3.1 Illustrative Site Plan

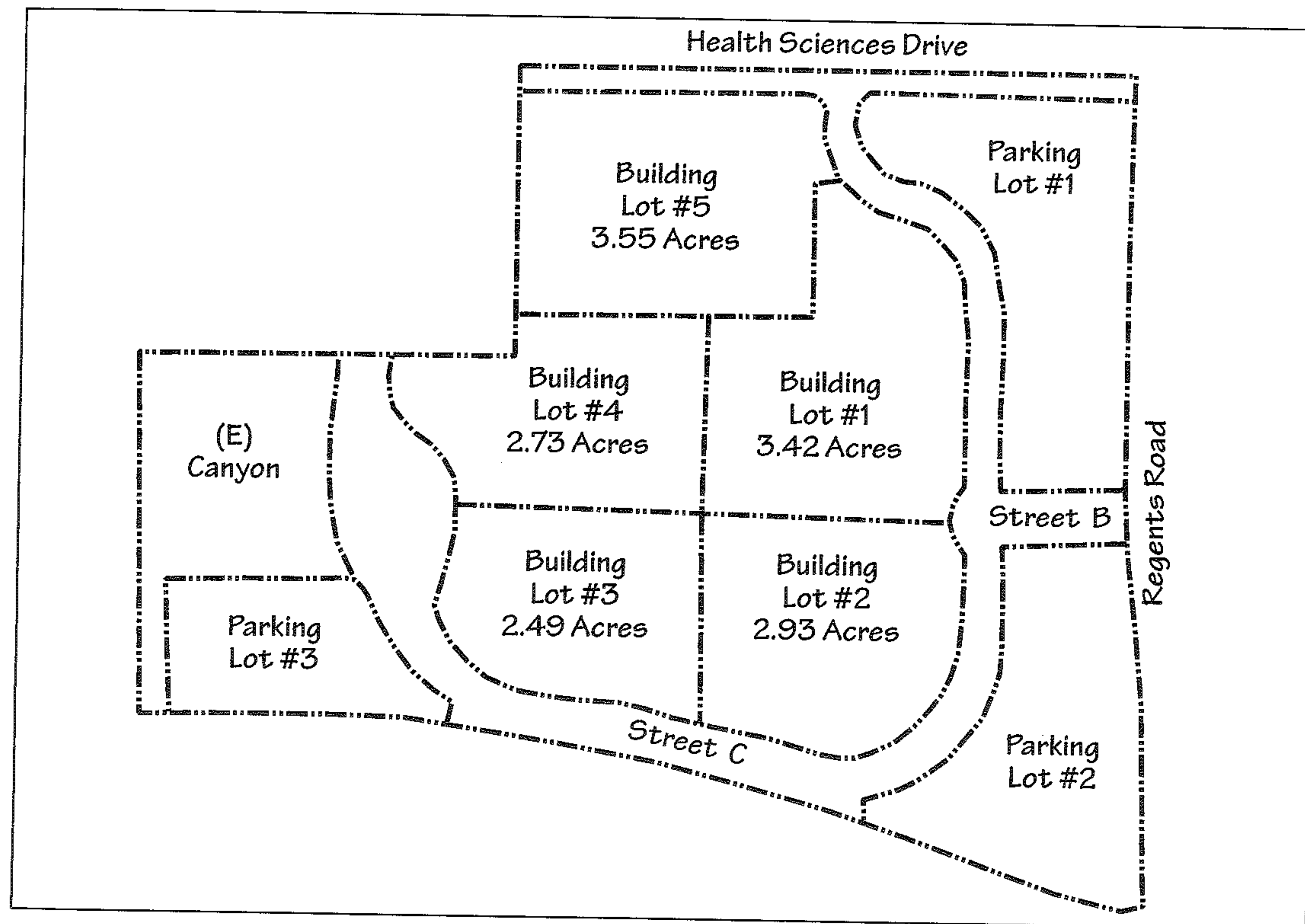


Figure 3.2 Lot Configuration

Table 3A SRP Development Capacity

	Total Lot Area		Buildable Lot Area	Open Space % of lot	Total Bldg. Area GSF
LOT 1	3.42 Acres	148,975 sq.ft.	99,900 sq.ft.	33%	80,000 - 110,000
LOT 2	2.93 Acres	127,630 sq.ft.	80,200 sq.ft.	37%	80,000 - 110,000
LOT 3	2.49 Acres	108,464 sq.ft.	62,860 sq.ft.	42%	80,000 - 100,000
LOT 4	2.73 Acres	118,919 sq.ft.	59,050 sq.ft.	50%	80,000 - 100,000
LOT 5	3.55 Acres	154,638 sq.ft.	100,560 sq.ft.	35%	80,000 - 130,000
TOTAL	15.12 Acres	658,626 sq.ft.	402,570 sq.ft.		400,000 - 550,000
Total Parking Lot Area:			8.32 Acres		
Total Roads & Open Space Area:			6.56 Acres		
Total SRP Area:			30 Acres		

- Permit phased development of the neighborhood in such a way as to maintain the principles established above in each phase.

The planning principles establish the structure of the SRP neighborhood concept by utilizing the built form of the research buildings to define the open spaces and their hierarchy, and contrast them with the naturalistic setting of the canyon edge. Figure 3.1 illustrates these principles applied to the site.

3.2 The SRP Development Program

3.2.1 Development Capacity

An overall development capacity and density of 550,000 gross square feet (gsf) has been established by the University for the SRP research buildings to achieve an appropriate balance of built space, open space, parking, and landscape amenities to be comparable to current local research facilities.

Table 3A, SRP Development Capacity summarizes the total planned capacity of the site for each of the proposed five building lots in the SRP, defined as follows:

- Total lot area: the total gross square footage of the lot.
- Total buildable area of the lot: the total gross square footage of the lot less required landscaped setbacks.
- Total open space requirement of each lot. This is expressed as a percent of the total land area for each individual lot that is not covered by building footprint and parking.
- Total building area square footage capacity of each lot. This figure is expressed as a range.

see note/BMD

Separate lots are dedicated to parking to accommodate the building density permitted on the five building lots. Each ground lessee will lease, in addition to its building lot, a proportionate share of the common areas of the SRP, including the shared perimeter parking lots and future parking structure. The phased parking and development plans are described in Sections 3.3.4 and 3.3.5, and shown in Figures 3.4, 3.5, and 3.6.

3.2.2 Lot Configurations

The lot configurations shown in Figure 3.2 and summarized in Table 3A are delineated to provide maximum flexibility, access, and the highest possible development capacity. The established lot lines may be combined to form larger parcels, as provided for in Section 3.2.3. Lots may be subdivided into smaller parcels for the purpose of building two smaller buildings on one lot, if the requirements of Table 3A are met.

Lots outside of the loop road, including Parking Lots 1, 2, and 3 are dedicated for shared parking for all SRP buildings and will not be building sites. Lots inside of the loop road are dedicated to buildings and private parking for them. These are identified as Building Lots 1 through 5.

3.2.3 Pedestrian Bridges Between Buildings

Elevated pedestrian bridges connecting the second levels of buildings on adjacent lots are acceptable as a means to provide a tenant with a larger aggregation of space than may be constructed on a single lot. Bridges are allowed to connect Lots 1, 4, and 5, and Lots 2 and 3. Bridges are not permitted to cross the Terraces between Lots 1 and 2, and between Lots 3 and 4. Bridges in these locations will restrict the expansive canyon views from the Terraces. Acceptable bridge locations are shown in Figure 3.1, Illustrative Site Plan. Bridge design guidelines are presented in Section 4.3.8.

3.3 The Development Concept

3.3.1 Concept Description

The planning principles presented above are integrated into a cohesive concept for the SRP neighborhood. The site concept strives to convey the visual appearance of a seamless campus neighborhood without noticeable division between building lots. Figure 3.2 presents a scheme for subdividing the SRP parcel into five developable building parcels. The concept is summarized as follows:

- The core of the site consists of a grouping of 2 to 4 story buildings forming a central pedestrian campus.
- Vehicular circulation within the SRP is via a perimeter loop road. Parking and service areas are located along this perimeter roadway.
- Building massing is sensitive to and complements the East Campus Health Sciences buildings to the west.

3.3.2 Open Space Concept

The neighborhood open space (Figure 3.1 Illustrative Site Plan) consists of the following primary elements:

- The Entry Plaza: A landscaped entry plaza at the intersections of Streets B and C provides a drop off area for the SRP, a gateway to the Terraces, and access to building entries to Building Lots 1 and 2.
- Terraces: Three outdoor rooms (Upper, Middle, and Lower - indicated in Figure 4.13) define the central urban open space of the SRP. They are formed by the exterior walls of the research buildings and landscape, axially aligned with the canyon, and descending in elevation down to the extended canyon edge.

- Rustic Canyon Edge: The preserved canyon and an extension of the canyon habitat and vegetation along the southwest side of the neighborhood, up to the westernmost edge of the Terraces.
- Research Building Arcades and Colonnades: These structures link the Terraces to the research buildings.
- Secondary Pathways: The North and West Walks provide additional pedestrian connections between research buildings, Terraces, and adjacent neighborhoods.

The Terraces serve as the primary pedestrian, social and recreational area for the neighborhood, and create visual and circulation links from the Entry Plaza down through the Upper, Middle, and finally the Lower Terrace. The Lower Terrace is most important hierarchically as it looks beyond into the canyon open space, and forms the terminus of the pedestrian space.

Each building visually, physically and functionally connects with the Terraces via the colonnades and orientation of building en-

trances, plazas, secondary walkways and view corridors. The colonnades create covered exterior spaces, ideally containing activity areas that form a transition zone between the Terraces with the activities located at the ground floor of the research buildings.

Additional public neighborhood open spaces include North Walk and West Walk. The North Walk intersects the midpoint of the Middle Terrace. It serves as the major physical and visual connection to Building 5, and provides an additional open space amenity for functional gathering areas (e.g. small, intimate seating and eating areas) and possibly entrances along the sides of Buildings 1-4. The West Walk extends from Building 5 to a plaza located in the adjacent ECHS Neighborhood.

The SRP site steps down toward the west and the preserved canyon area. The canyon landscape is brought into the neighborhood via a canyon extension that connects to the Lower Terrace. This expanded canyon zone will form a visual focal point within the SRP and resulting link to the West Campus.

In addition to the public, neighborhood open spaces, each building will have discrete open spaces such as building entrances, outdoor eating areas and seating areas. Each building will have a minimum of two entrances: an arrival entrance oriented towards the street and an interior entrance oriented toward the Terraces.

3.3.3 Grading Concept

The original canyon land form of the SRP parcel requires grading and filling to accommodate development; however, the site concept creates a series of gradual, stepped terraces recalling the natural canyon land form (Figure 3.3). To achieve this, the site will be rough graded to accommodate stepped building pads which will descend in elevation from north to south and from east to west toward the natural low point of the site at the rim of the preserved

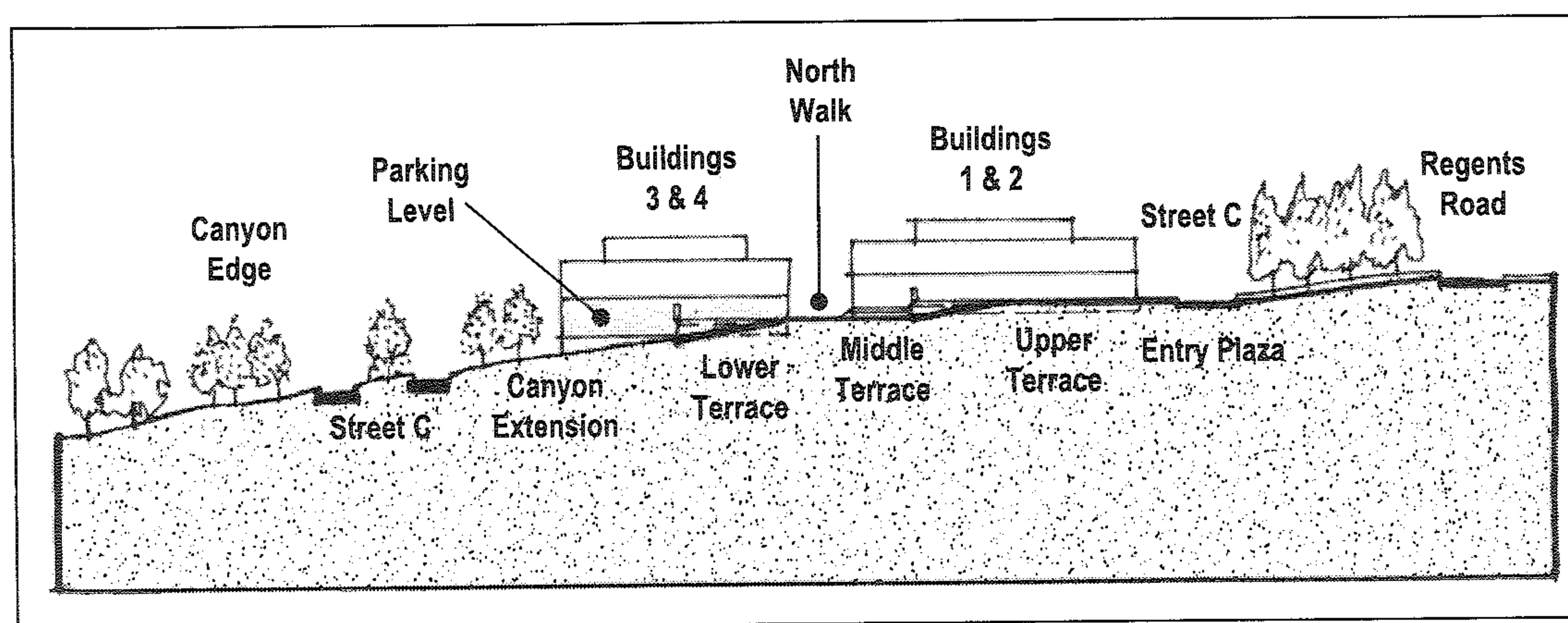


Figure 3.3 Grading Concept (section through terraces, looking north)

canyon. Building Lot 5 will be the highpoint of the SRP neighborhood (approximate elevation 340) with Building Lots 1 and 2 at the midpoint (approximate elevation 338) and Building Lots 3 and 4 at the lowest elevation (approximately 333).

Each of the Building Lots initially will be rough graded to be level, but pad grading may be modified to accommodate the ultimate design and construction of each building, within the context of the terrace concept. For example, the level pads on Building Lots 1, 2 and 5 may accommodate construction by tilt-up methods. Building Lots 3 and 4 would better accommodate a level of structured subgrade parking that can be naturally ventilated. The pads for Lots 3 and 4 will most likely require some regrading in the future to accommodate a building design with a partial subgrade parking level.

The Terraces in the center of the SRP development will also step down in elevation from east to west. The Upper Terrace between Building Lots 1 and 2 will be the high point at approximately elevation 338 and will transition to the Middle Terrace at elevation 333, and then the Lower Terrace at elevation 330. From this Lower Terrace, landscaped open space that is characteristic of a canyon extension will descend down to Street C at the low point of the site.

The west leg of Street C adjoins the preserved canyon and is located within the canyon extension. This roadway is divided and grade separated in this area to enhance the canyon character. The lower lane of Street C will be only slightly higher than the top of slope of the canyon so as not to produce additional sloping terrain next to the canyon rim.

3.3.4 Circulation and Parking Concept

The primary entrance to the SRP (Street B) will be located on the east side of the neighborhood at the intersection of Regents Road and Eastgate Mall. This entrance will require the project to upgrade the intersection and traffic signal to accommodate a fourth leg. Secondary entrances to the neighborhood will be located on the north neighborhood edge at the intersection of Health Sciences Drive and Street C, and at the west neighborhood edge adjacent to the intersection of Street C and Medical Center Drive.

Street C will provide the primary circulation through the SRP neighborhood. The street will include bicycle lanes and sidewalks, and will be aligned around the perimeter of the SRP to create a pedestrian-oriented building core. Each building lot and perimeter parking lot will be accessed from Street C.

The SRP site plan will accommodate a parking ratio of 3.5 spaces per 1,000 square feet (s.f.) of rentable building space. Based on a full buildout of 550,000 gross s.f. (522,000 rentable s.f.), 1,830 parking spaces will be required. Surface parking lots will accommodate the majority of the parking requirement. These will include small lots adjacent to buildings for disabled, visitor, reserved/executive spaces, as well as shared perimeter parking lots. Structured subsurface parking below three or more buildings and a free-standing parking structure will augment surface lot capacity. On-street parking will not be allowed on Streets B and C.

3.3.5 Phased Development Concept

The University's research affiliations and the space requirements of its research partners will guide the development schedule for the SRP. Therefore, it is somewhat difficult to predict the demand for development or preference for lots within the SRP. The SRP neighborhood may take an extended period of time to fully build out, so a flexible phasing strategy is necessary.

Phase 1 Infrastructure Development

The phasing strategy assumes that primary infrastructure development, such as site grading and drainage improvements, primary neighborhood streets and associated landscaping, the backbone utility infrastructure, and utility stub-outs to the edge of each lot, will be implemented in Phase 1.

The SRP development will connect to Campus water, sewer, storm drain, reclaimed water and data lines. Electric and gas utilities will be provided by SDG&E infrastructure. Phone service will be accessed from Pac Bell infrastructure.

Phase 1 will also include the landscape and hardscape along the streets and Entry Plaza at the east neighborhood entrance. These improvements will also include directional signage and street lighting. Minor modifications to the edge of the riparian area may also be implemented to enhance its visual appearance.

Phases 2, 3 and 4 Building Lots and Associated Parking

Construction of research buildings and parking facilities will comprise the subsequent phases of the neighborhood development. The buildings may be constructed in any order, and the following discussion outlines one representative example of a possible phasing scenario.

- Phase 2 will consist of the development of three research buildings in any order and associated surface parking on the building lots, as well as construction of all three perimeter parking lots. Figure 3.4 suggests an example of development using Building Lots 1, 3, and 4 in Phase 2.
- Phase 3 will consist of the development of a fourth building and temporary parking constructed on the remaining building lot as illustrated in Figure 3.5.

- Phase 4, the final build-out of the neighborhood, will consist of the replacement of temporary surface parking on Parking Lot 2 with a parking structure, and the construction of the fifth research building (Figure 3.6).

The provision of an adequate parking supply will be closely tracked as part of the development phasing. While Building Lots 1, 2, and 5 may support tilt-up construction, the development of the parking structure early in the phasing may be avoided if adequate parking is developed below each research building to augment the surface parking supply.

Responsibility for development of the various phases of the SRP is to be determined. The SRP may be developed by a master developer, in part by the University in conjunction with a master developer, or by the University and individual lot ground lessees.

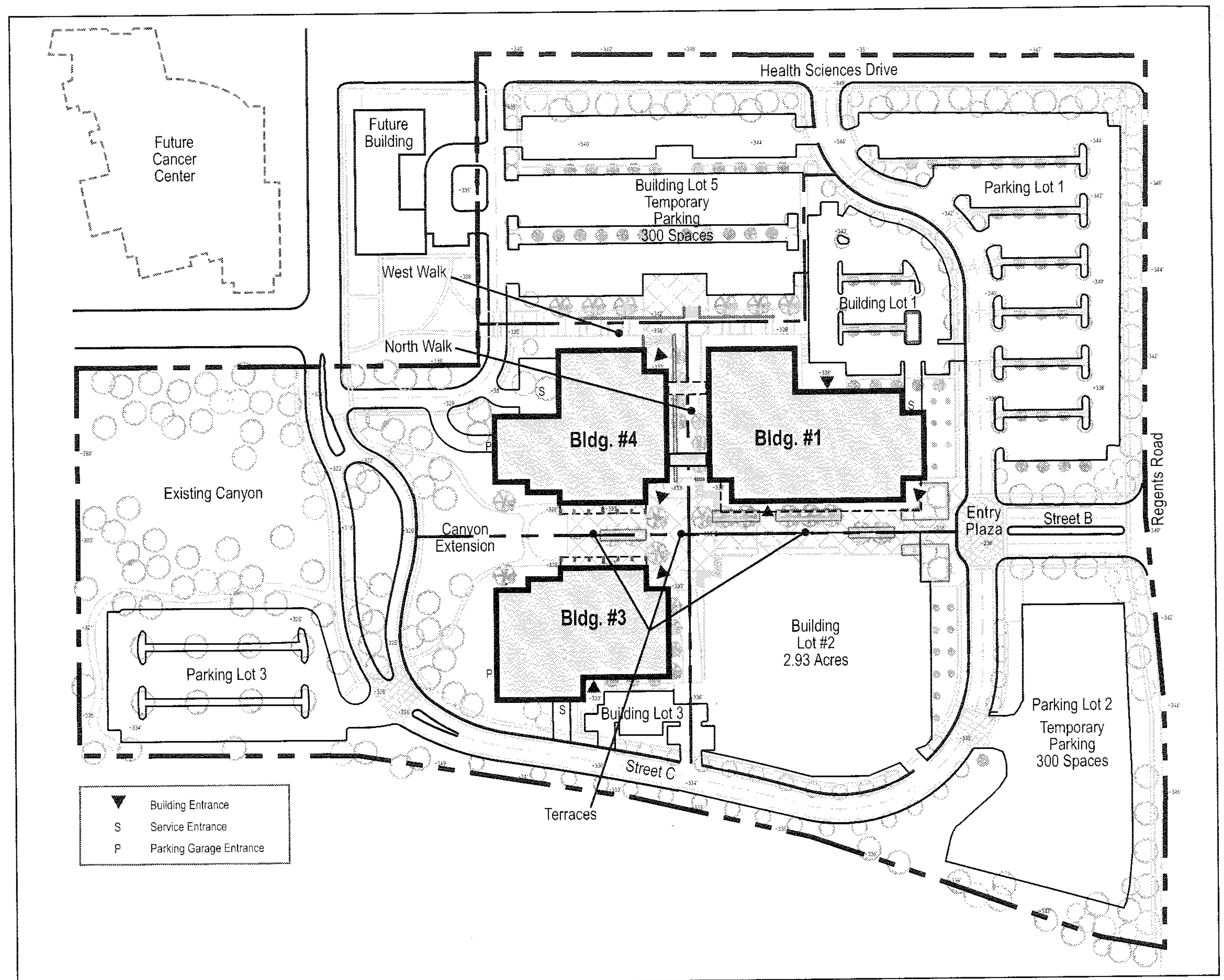


Figure 3.4 Phase 2 possible development scenario

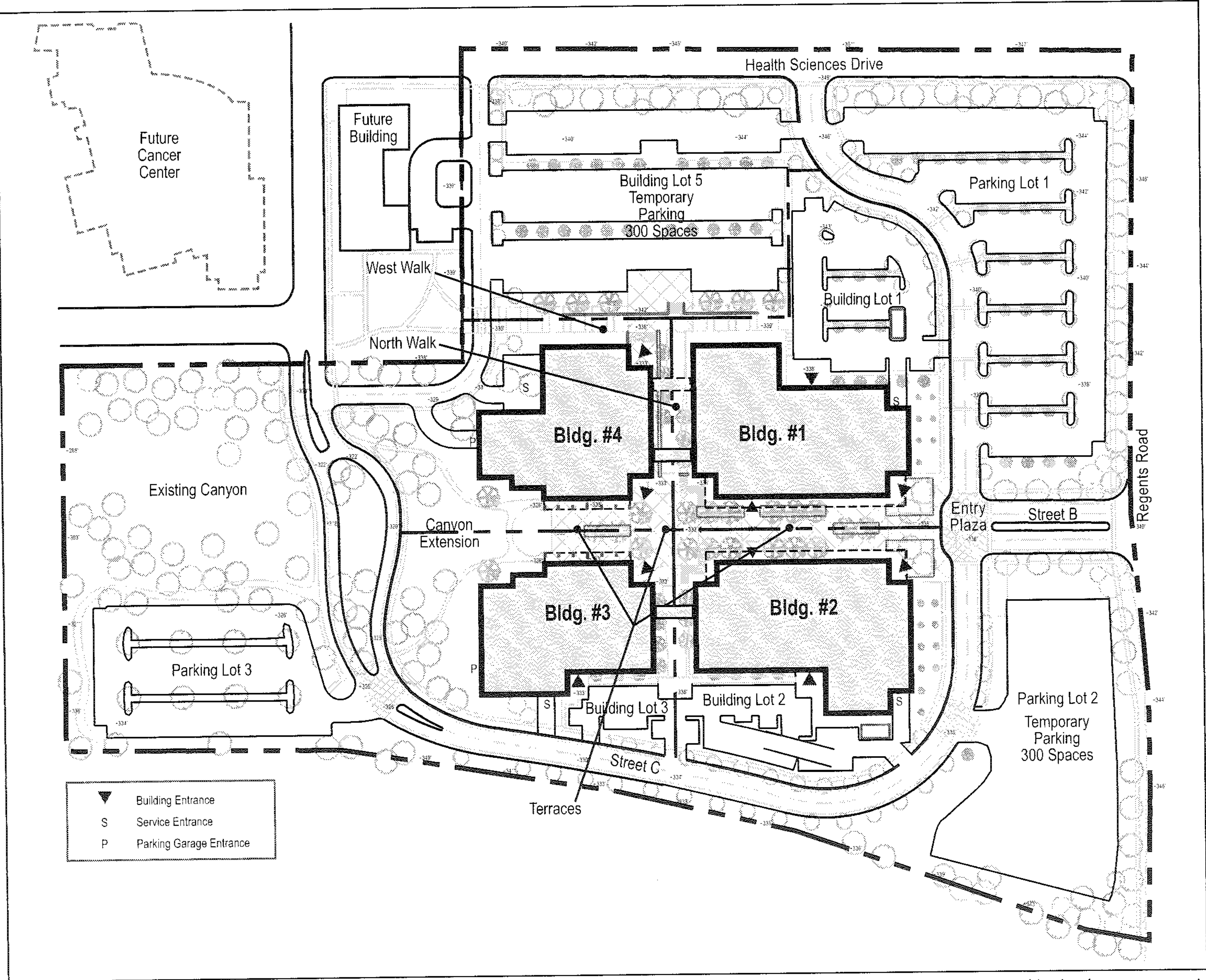


Figure 3.5 Phase 3 possible development scenario

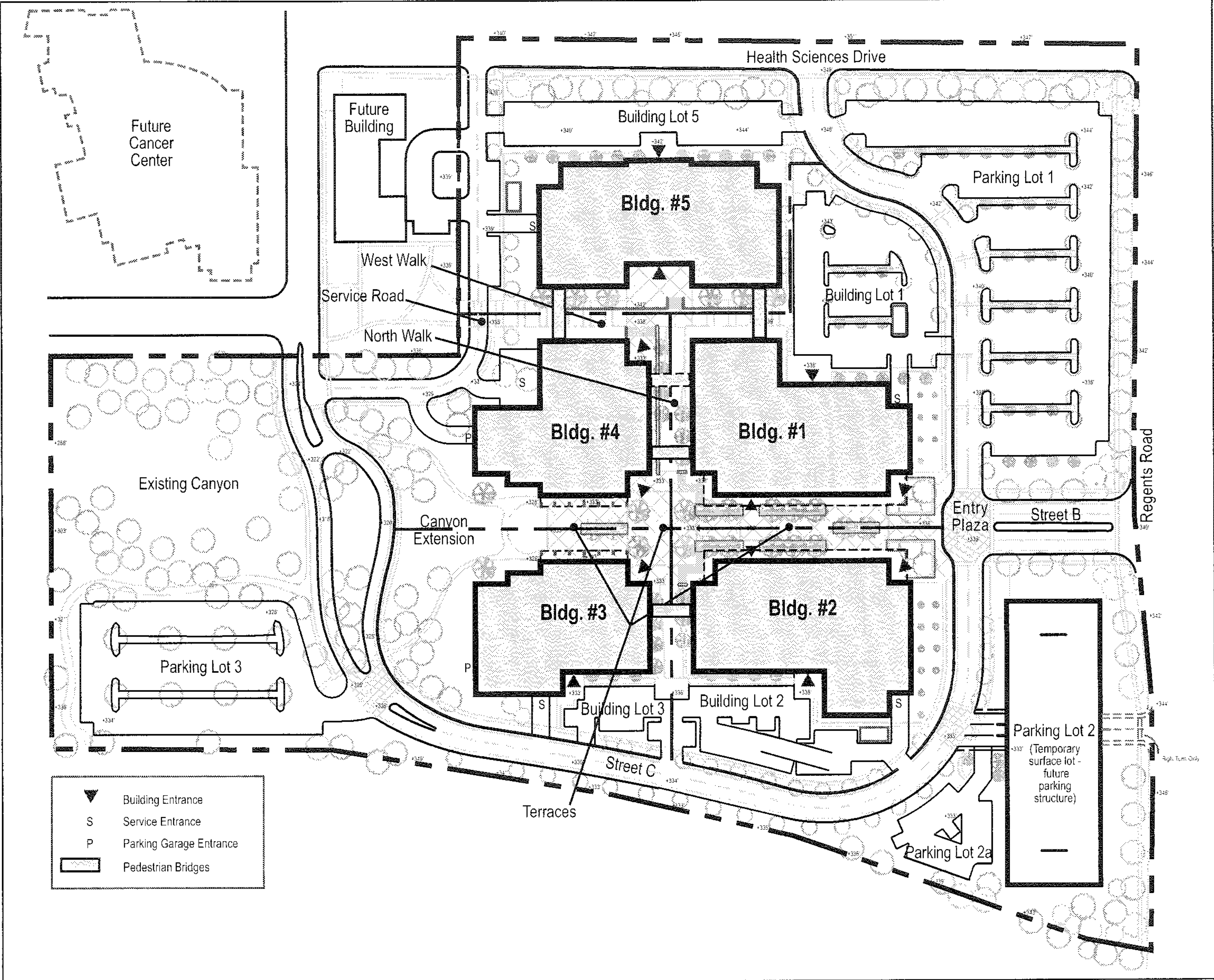


Figure 3.6 Phase 4 possible development scenario

4. Design Guidelines

4.1 Intent

The Design Guidelines for the SRP neighborhood provide the framework for its development according to the four key planning principles established for the SRP:

- Create a neighborhood identity which is visually rich and promotes a “sense of place,” both physically and intellectually;
- Integrate the rustic landscape to balance and ground the “place” in its canyon-mesa context while maintaining the discrete, urban landscape of the neighborhood core;
- Provide the neighborhood with a sense of unity by reinforcing the pedestrian experience; and
- Permit phased development of the neighborhood in such a way as to maintain the principles established above in each phase.

4.2 Using the Guidelines

In the planning and design of SRP sites, the Guidelines should be the basis for establishing project criteria in the beginning of the project design process, and frequently revisited for compliance throughout the development and documentation of the design.

Guidelines are presented below as *descriptive recommendations* that guide the quality of the outcome for each site. While not requirements, the Guidelines will be utilized as the basis for evaluation of the planning and design of projects in the SRP neighborhood.

The Guidelines are presented in a manner intended to meet the planning principles while providing the opportunity for innovation and design excellence in the siting and design of facilities and site elements. The creative use of site and building materials, and the enhancement of the spatial experience and orientation of the pedestrian in the SRP are strongly encouraged in the Guidelines.

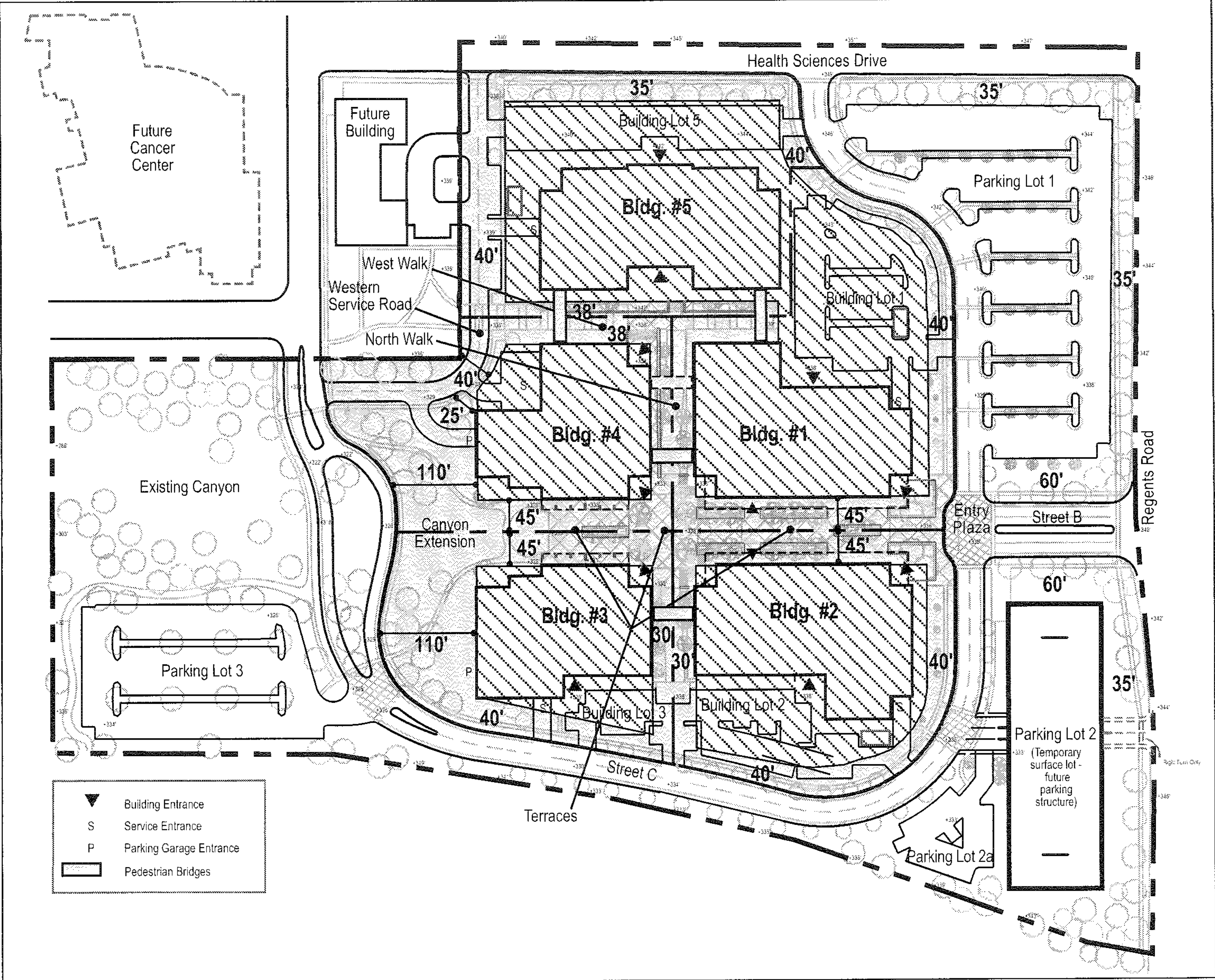


Figure 4.1 Neighborhood setbacks

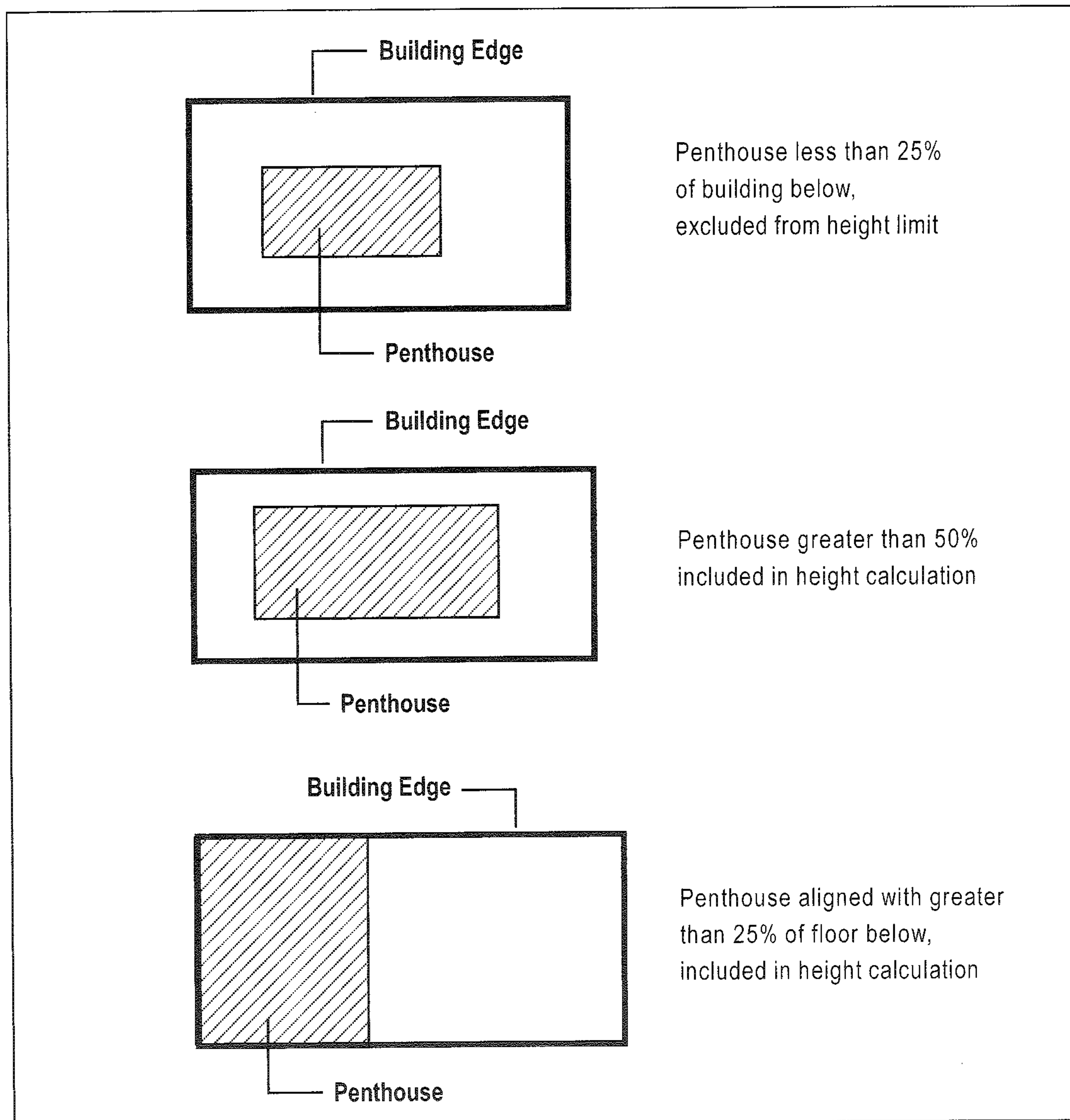


Figure 4.2 Building heights - rooftop mechanical penthouses

4.3 Architectural Design Guidelines

4.3.1 Building Design Principles

The design of buildings in the SRP follows the principles established for the development concept:

Strengthen the neighborhood identity to create a visually richer "sense of place":

- Buildings should participate and relate to other buildings visually without necessarily adopting existing form and materials of other buildings. Visual richness of form, materials, and color is encouraged.

Integrate the rustic landscape to balance and ground the "place" in its canyon-mesa context;

- Buildings should integrate with the site and landscape context as "emerging out of the site," rather than appearing to be imposed upon it. Hardscape, planters, and other architectural elements should be used to enhance this integration.

Provide the neighborhood with a sense of unity by reinforcing the pedestrian experience;

- Buildings should be designed as an integral part of the neighborhood pedestrian experience as the first priority of design; the "place" that they create and define is significant. The "place" includes terraces, plazas, and walkways.

Permit phased development of the neighborhood in such a way as to maintain the principles established above in each phase.

- Buildings should reflect a consistent architectural theme throughout the development in terms of design, color, and finish, as well as signage and landscaping.

4.3.2 Building Setbacks

The SRP neighborhood building setbacks are established by the perimeters of the Terraces, the Walkways, canyon edges, and the roadway system in the neighborhood as described in Section 4.8. These project site boundaries provide the landscaped open space, regulatory separations, and visual and spatial control of the environment. Setbacks are established for the Neighborhood as indicated in Figure 4.1.

Setbacks and Terraces

All buildings facing the Terraces between Building Lots 1 to 2 and 3 to 4 will maintain a 45-foot setback from the centerline of this open space. An exception to this setback is a colonnade element at the edge of these buildings that may encroach up to 15 feet into the Terraces. See Section 4.3.7.

North Walk

A minimum 30-foot setback from the centerline of the North Walk to any building is required. Encroachments for building entry features such as canopies or overhangs providing weather protection may be permitted at the discretion of the University.

West Walk

A minimum 38-foot setback from the centerline of the West Walk to any building is required.

Health Sciences Drive and Regents Road

A minimum 35-foot setback from the curb of the roadways to any building or surface parking lot is required.

Street "B"

A minimum 60-foot setback from the curb of the roadway to any parking lot or structure should be maintained.

Street "C"

Typically a minimum 40-foot setback from the curb of the roadway to the building face will be maintained. The exception to this setback is located along the western leg of Street "C" as it traverses the canyon edge. The eastern setback for Building Lots 3 and 4 along this edge is 110-feet, measured to the nearest curb. No encroachments into the setback are permitted.

Western Service Road

A minimum 25-foot setback from the curb of this service road to the adjacent building is required.

4.3.3 Building Height

The building height limit is two to four stories throughout the SRP neighborhood. The actual height of each building may vary depending upon the floor to floor height dictated by the functional requirements, although the maximum assumed floor-to-floor height is 18 feet. This limitation is intended to support the pedestrian scale of the spaces along the Walks and Terraces, and to avoid the "canyon effect" of multistory elevations on both sides of these pedestrian spaces. The building lots are planned in such a way as to achieve the permitted density in the neighborhood with a mix of 2 to 4 story structures.

Building heights exclude basements or other below grade floors unless those floors are visible from the entry grade. Roof parapets 3 feet or lower are also excluded.

Building heights include rooftop mechanical penthouses if they cover more than 50 per cent of the area of the floor below, or are aligned with the face of an elevation of the building for more than 25 percent of the length of the elevation. See Figure 4.2.

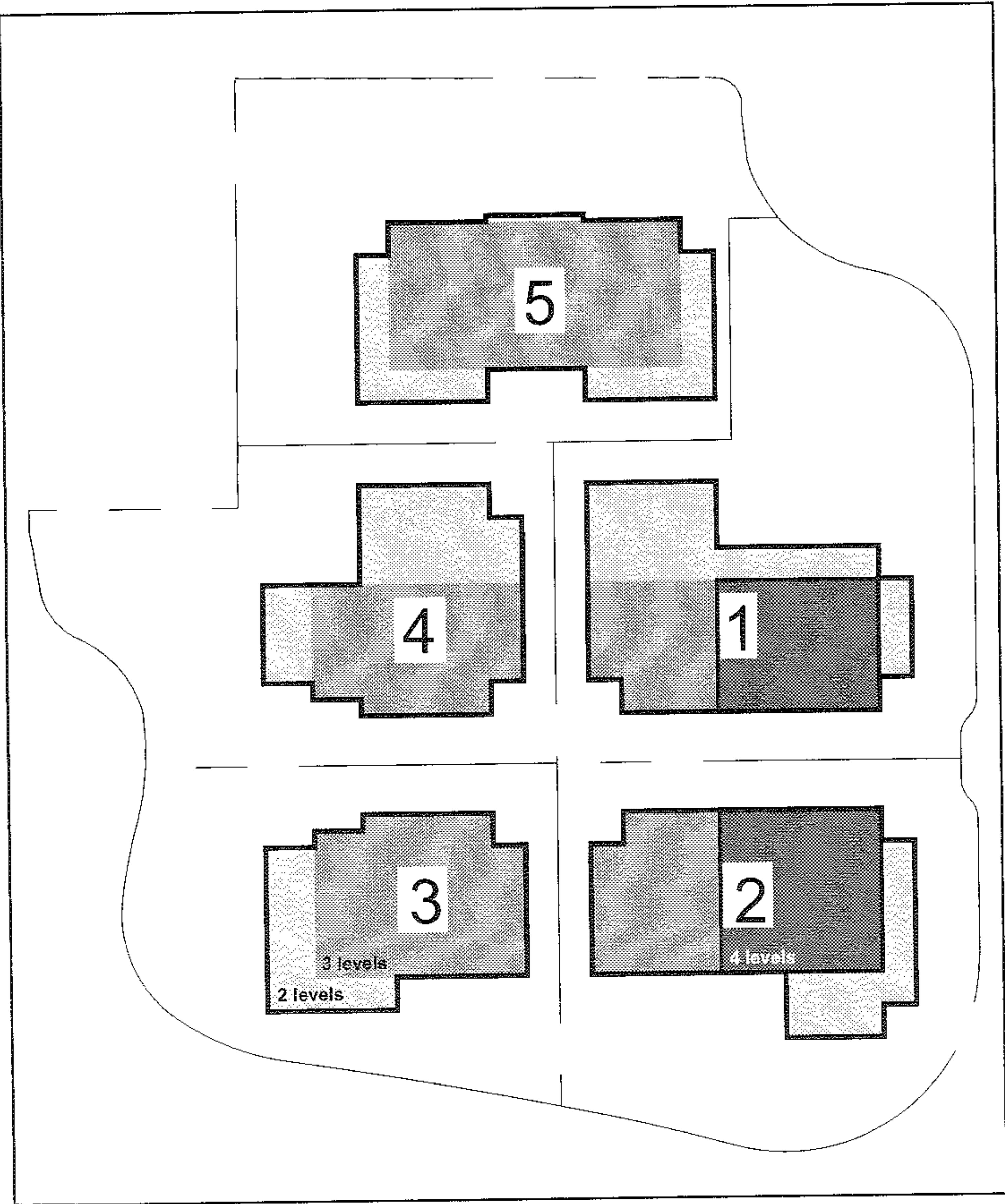


Figure 4.3a Example of massing (plan)

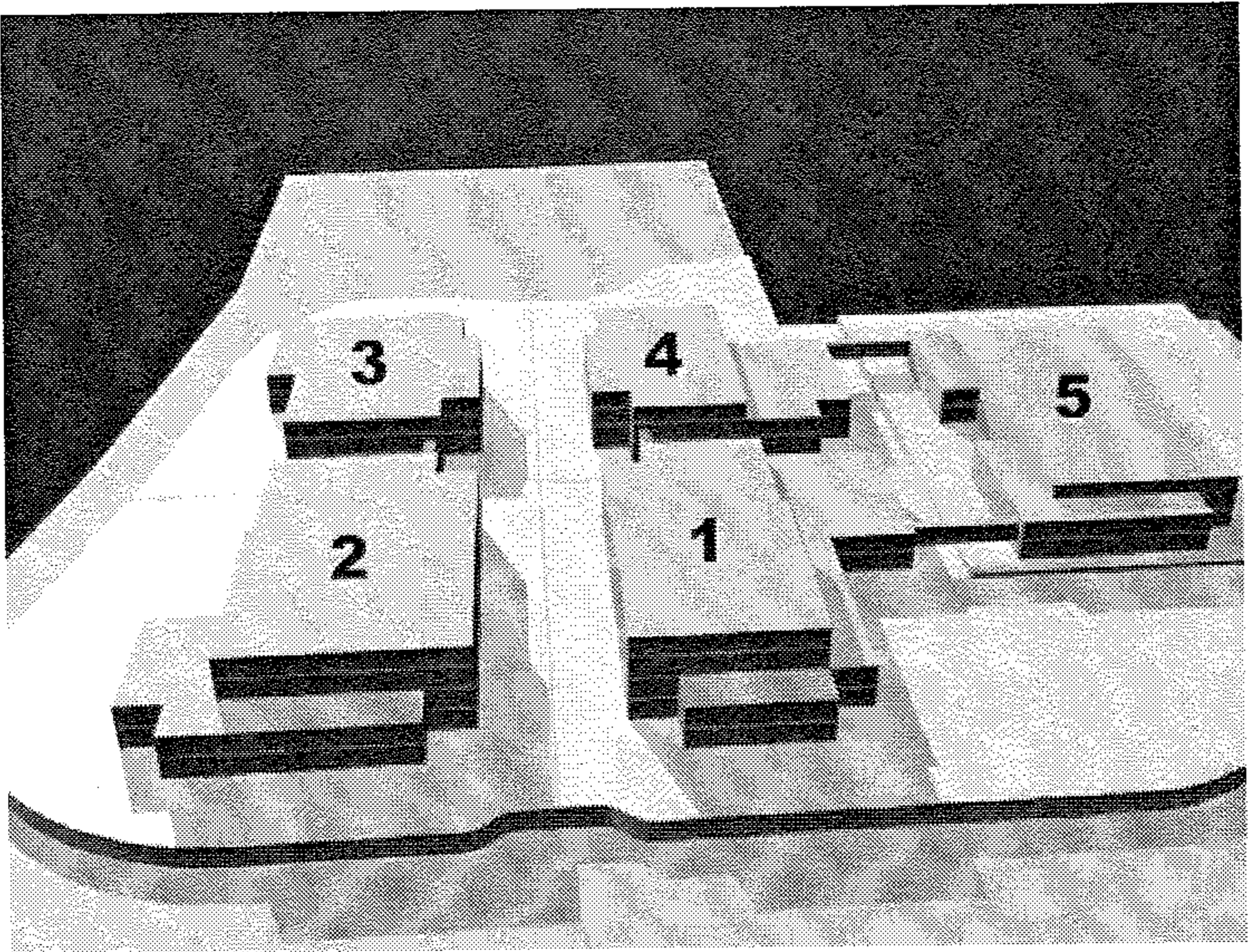


Figure 4.3b Massing - view to west

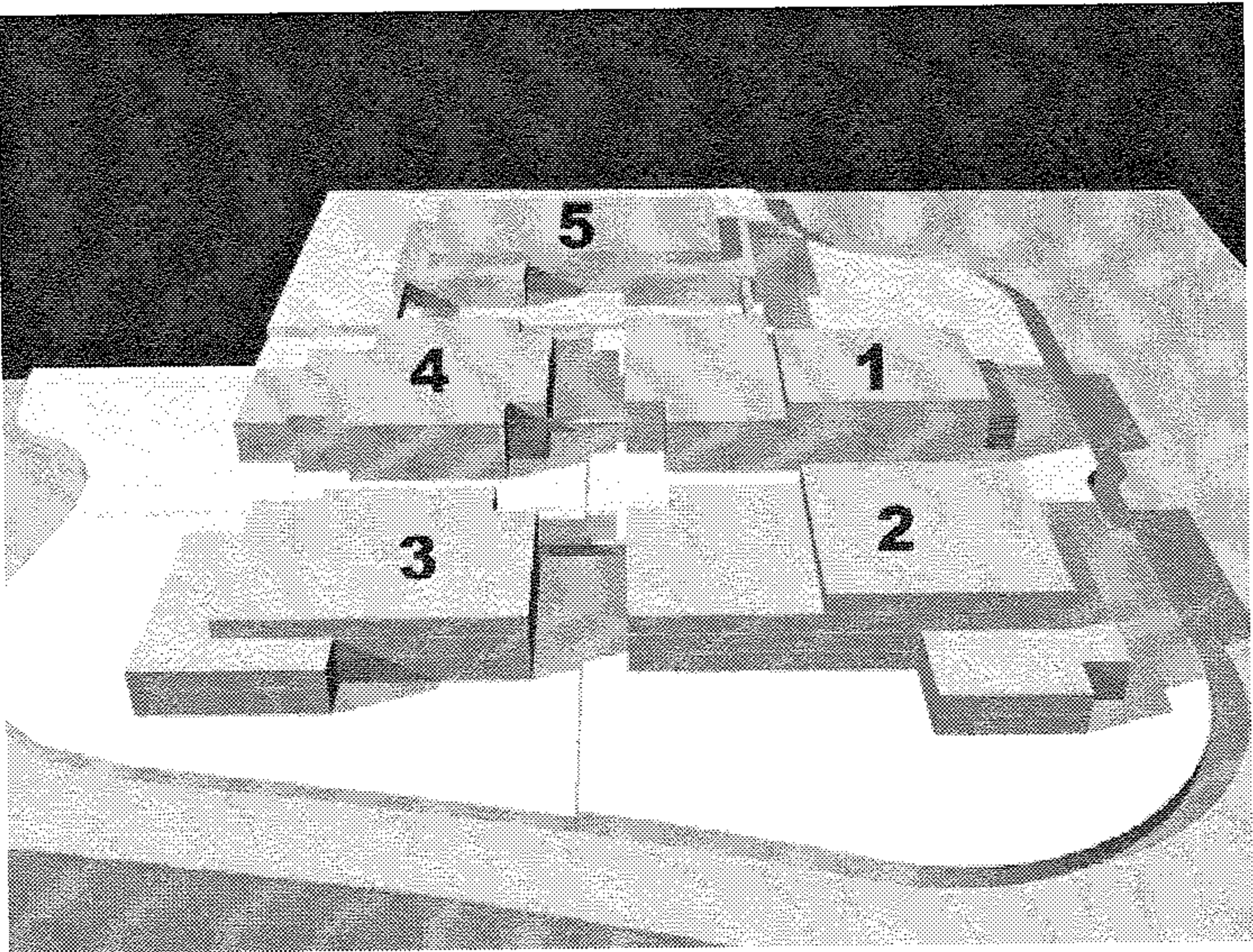


Figure 4.3c Massing - view to north

4.3.4 Form and Massing Typologies

The building massing in the neighborhood suggests a horizontal orientation, defined as appearing more layered than vertical. This orientation is consistent with the low plane of the mesa landform and the adjacent ECHS neighborhood. An example of massing is suggested in Figures 4.3a, 4.3b, and 4.3c. Structures should generally conform to this horizontal massing. Significant building features may be composed to be more vertically oriented, providing a visual counterpoint. Vertical fenestration or repetitive smaller vertical massing elements, as part of the overall horizontal massing is consistent with this orientation.

The architectural image or “signature” of the building should come from the detail rather than its overall mass and form. Buildings should frame and reinforce the mesa landscape, rather than obscure it.

4.3.5 Building Siting

Buildings may be sited in any location within the setback requirements in Section 4.3.2. The placement of the entire facade or significant portions of the building facade at the edge of setbacks along the Terraces, the North and West Walks is strongly encouraged to strengthen the identity of these public areas as “exterior rooms.” In addition, the following recommendations are noted:

- Encourage both foreground views and background vistas to the canyon area and views onto the Terraces, Walks, and open space networks from all buildings.
- Building orientation should generally follow the grid established by the Terraces and Walks to reinforce the edges of the pedestrian network. Building facades on canyon edges, however, are encouraged to alter the orientation to promote a more informal and diffused edge.

- Access to sunlight is of strong importance in the integration of the landscape and the built environment. Sunlight should be maximized in all exterior spaces by the careful modeling of roof forms, building floor setbacks, and through composition of the building program components to minimize large expanses of shaded ground plane.

4.3.6 Entries

Entry features are encouraged in the SRP to strengthen and clarify wayfinding. Entry elements for individual buildings are to be of a scale for identification from both roadways and the pedestrian network. Encroachments into street setbacks for building entry features such as canopies or overhangs providing weather cover may be permitted at the discretion of the University.

The building sites encourage entry from multiple sides. Program requirements could dictate that buildings have multiple occupants, each requiring some identity at the entry. Building planning and design should address the issue of multiple entries and multi-occupant identity.

Key entry features should be identified for all buildings facing the Terraces and North and West Walks. Recommended building entry points in the SRP are shown in Figure 4.4.

4.3.7 Colonnades and Arcades

As a means of integrating the public circulation spaces, landscape, and buildings, two architectural elements are to be integrated into the design of all SRP buildings: colonnades and arcades. The intent of the use of these devices is to define exterior circulation elements and entries, provide environmental control (i.e., shade, weather protection), and to add visual and special interest to building elevations along the Terraces, and North and West Walks.

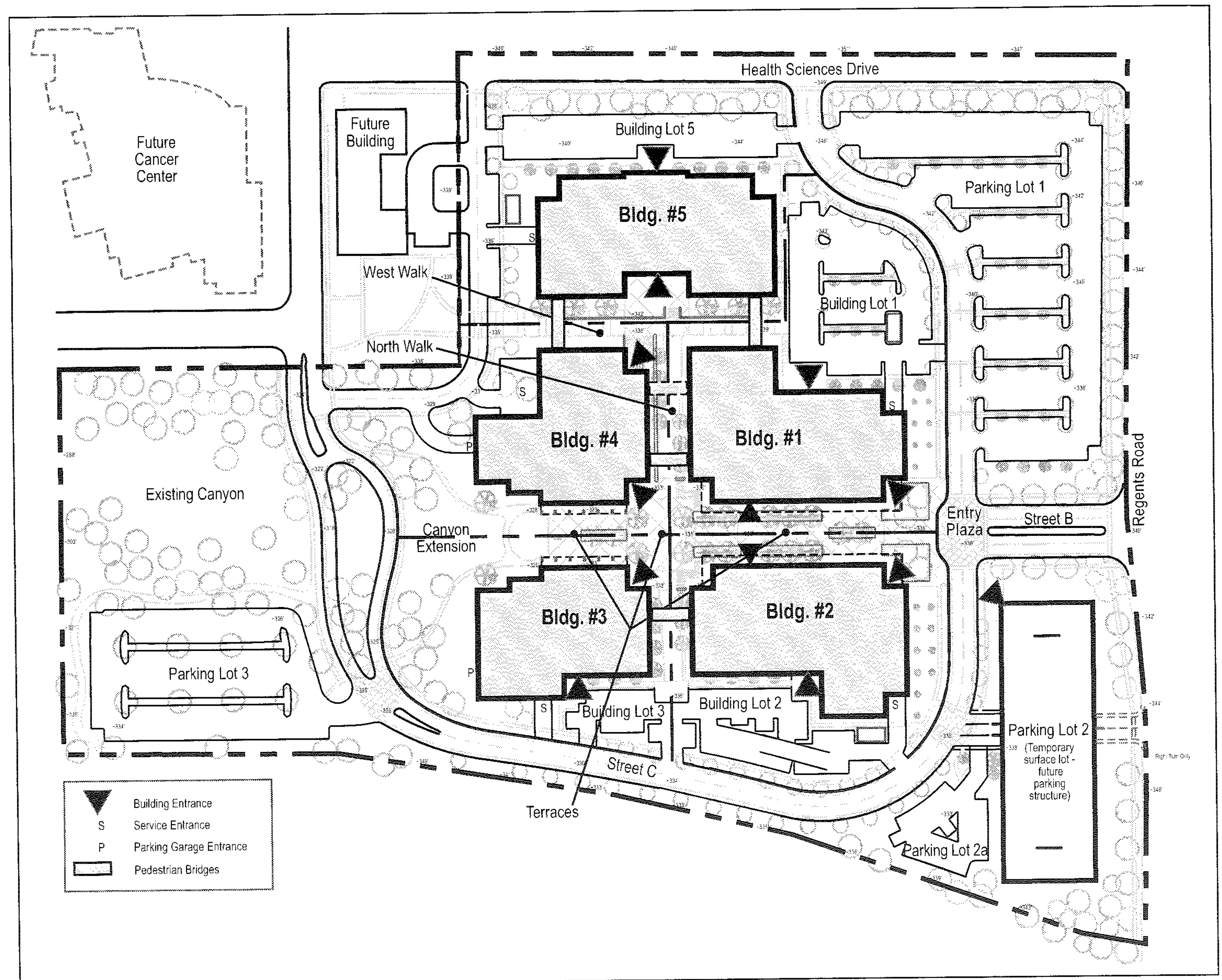


Figure 4.4 Building entry points

Colonnades are defined as an open, exterior space formed by a row of columns at the outermost edge of a building (Figure 4.5). Arcades are defined as freestanding colonnades, detached but visually integrated into the building behind them (Figure 4.6).

Arcades and colonnades should extend a minimum of 25% of the total length of each building elevation located along the Terraces, and North and West Walks.

Colonnades and arcades may encroach into the 45-foot setback along the Terraces no more than 15 feet in depth. Arcades are preferred along the narrower North and West Walks. Design solutions that integrate arcades with the building using alternative materials such as landscape structures, tensile/fabric, and glazed structures are encouraged.

4.3.8 Pedestrian Bridges Between Buildings

Bridges crossing over the North and West Walks must conform to all code and regulatory requirements for clearance, fire access, fire protection, and egress.

Bridge locations in plan should be located within 20-feet of the nearest corner of the building, to enhance the scale of outdoor rooms in the North and West Walks. One bridge connecting each two lots is recommended (Figure 4.7), except two bridges may be provided between Buildings 1 and 4.

Bridges should be no wider than 10 feet in total exterior width, measured from the outside finish on each side, (Figure 4.8) The overall height of the parapet of the roof of a bridge should not exceed that of the parapet of the adjacent building; the bridge roof may be lower in height than the receiving wall.

Exterior finish materials should complement the fenestration of both connecting buildings through the sensitive incorporation of

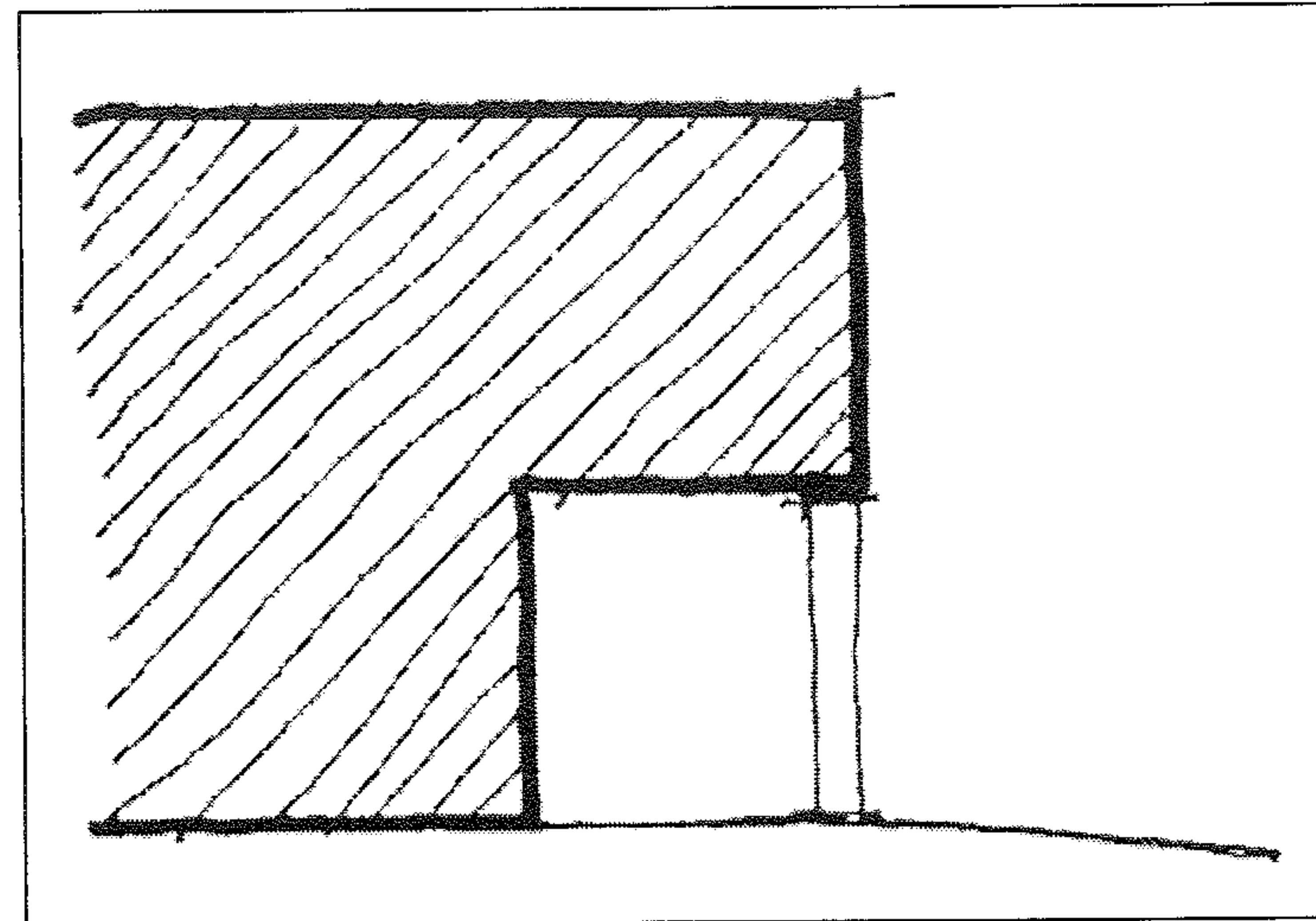


Figure 4.5 Colonnade section

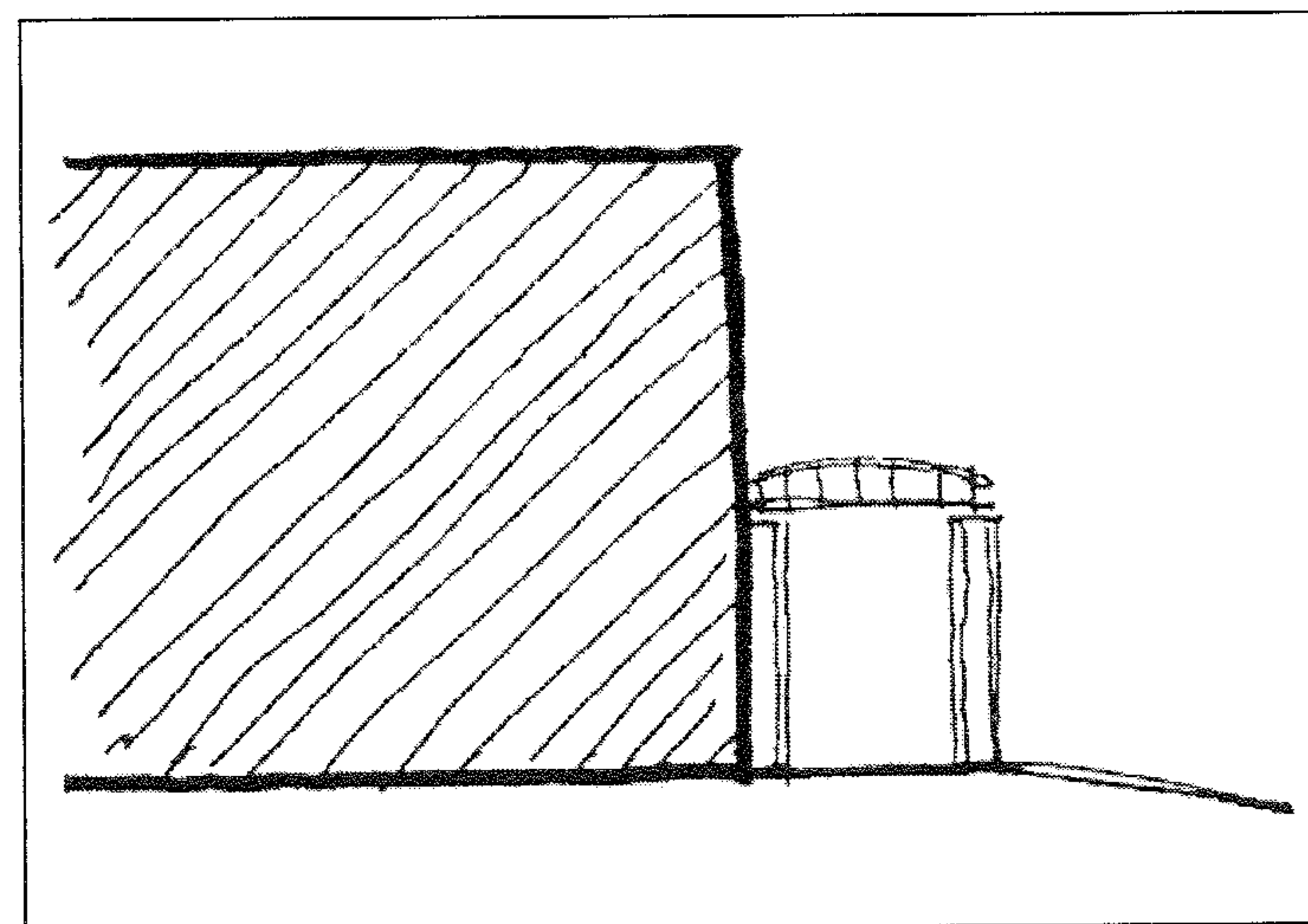


Figure 4.6 Arcade section

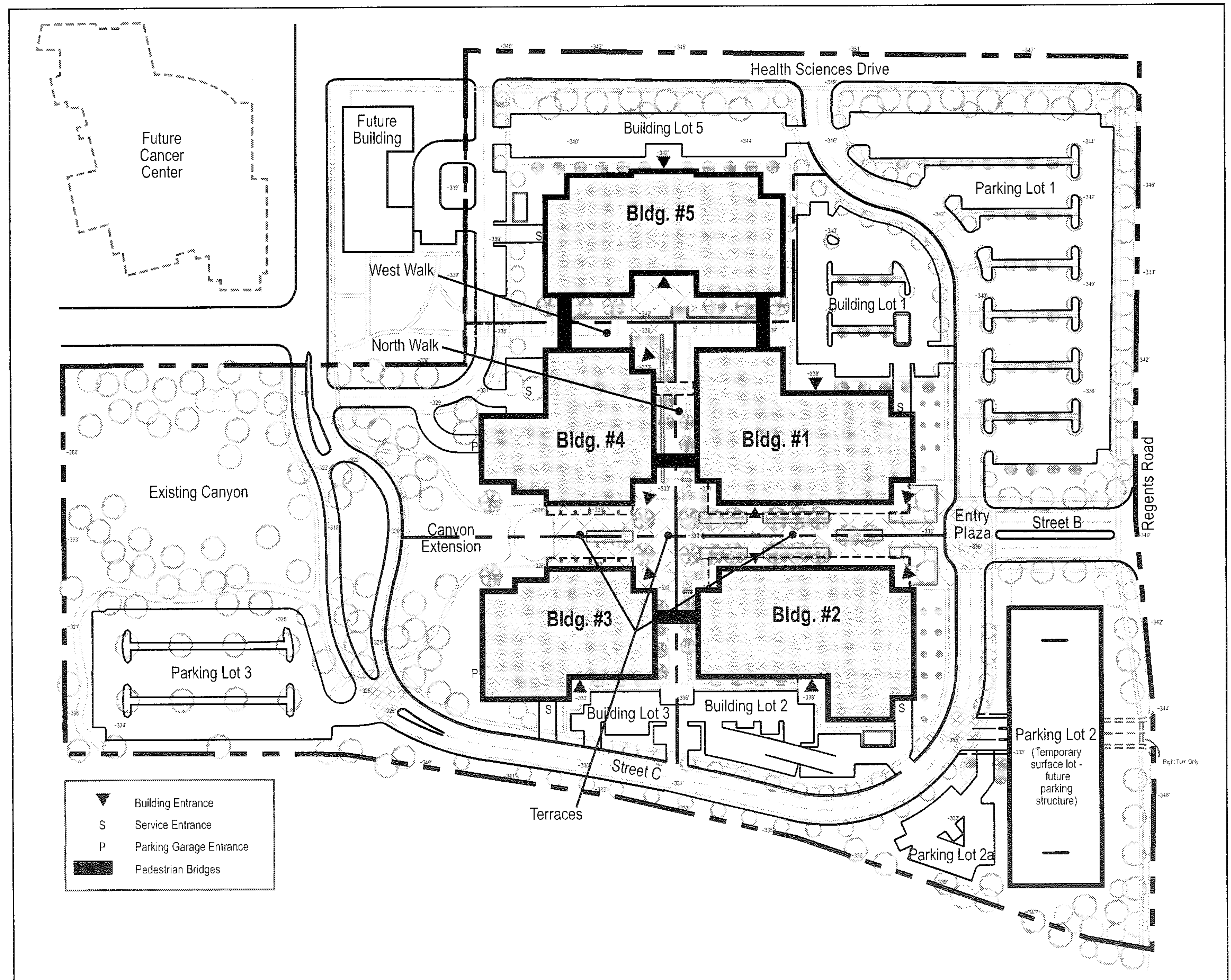


Figure 4.7 Pedestrian bridge locations

materials that are common to the palettes of each building. Glazed fenestration allowing views into the North and West walks are encouraged. An example is suggested in Figure 4.9.

4.3.9 Fenestration

The architectural expression of building facades should be complementary to the building form, the function of the building, and express the hierarchy of entry, horizontal and vertical circulation, and interior spaces.

Fenestration should relate to the context of the building, and strike a balance between complexity and simple volumetric planes and forms. Detailed expression should relate to the treatment of openings, environmental control, and of the play of light and color, shadow and interior lighting.

Ground-level fenestration at colonnades, arcades, and building entries should be as large and open as practically possible to emphasize indoor/outdoor relationships and open space connections.

The photo matrix (Figure 4.10) of existing UCSD buildings and other examples is suggested to illustrate high quality fenestration.

4.3.10 Roof Elements

The design of roofs should be considered of equal importance to that of elevations of the building. Most roof planes in the SRP will be visible from both adjacent and off-site locations and the roof profile has a strong impact on building form and design.

Roof forms should be balanced with the overall building composition, fenestration, and building details.

Continuous, uninterrupted horizontal roof forms such as flat roofs with parapets, though inherent in this building type, are to be interrupted and articulated as much as possible.

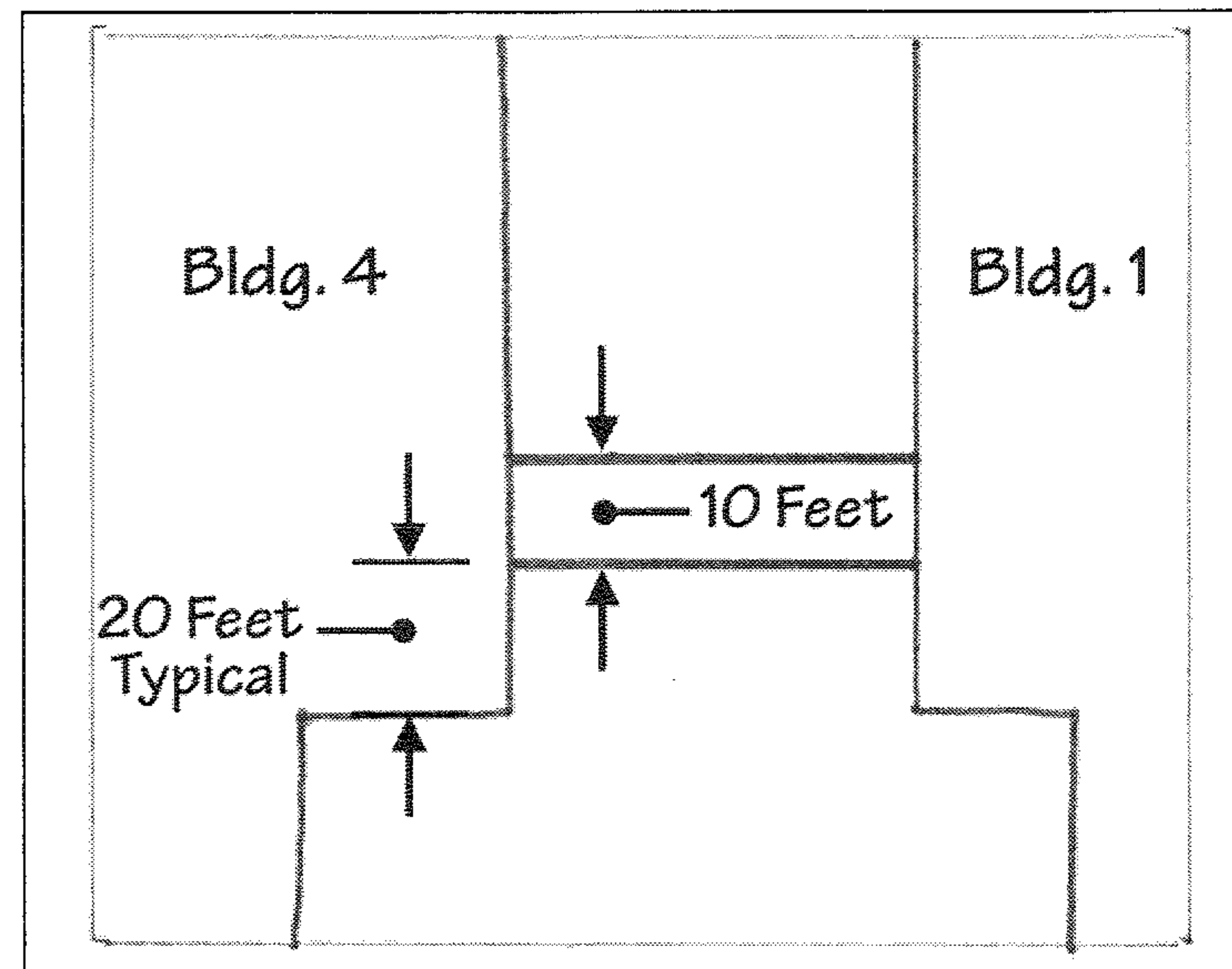


Figure 4.8 Pedestrian bridge dimension

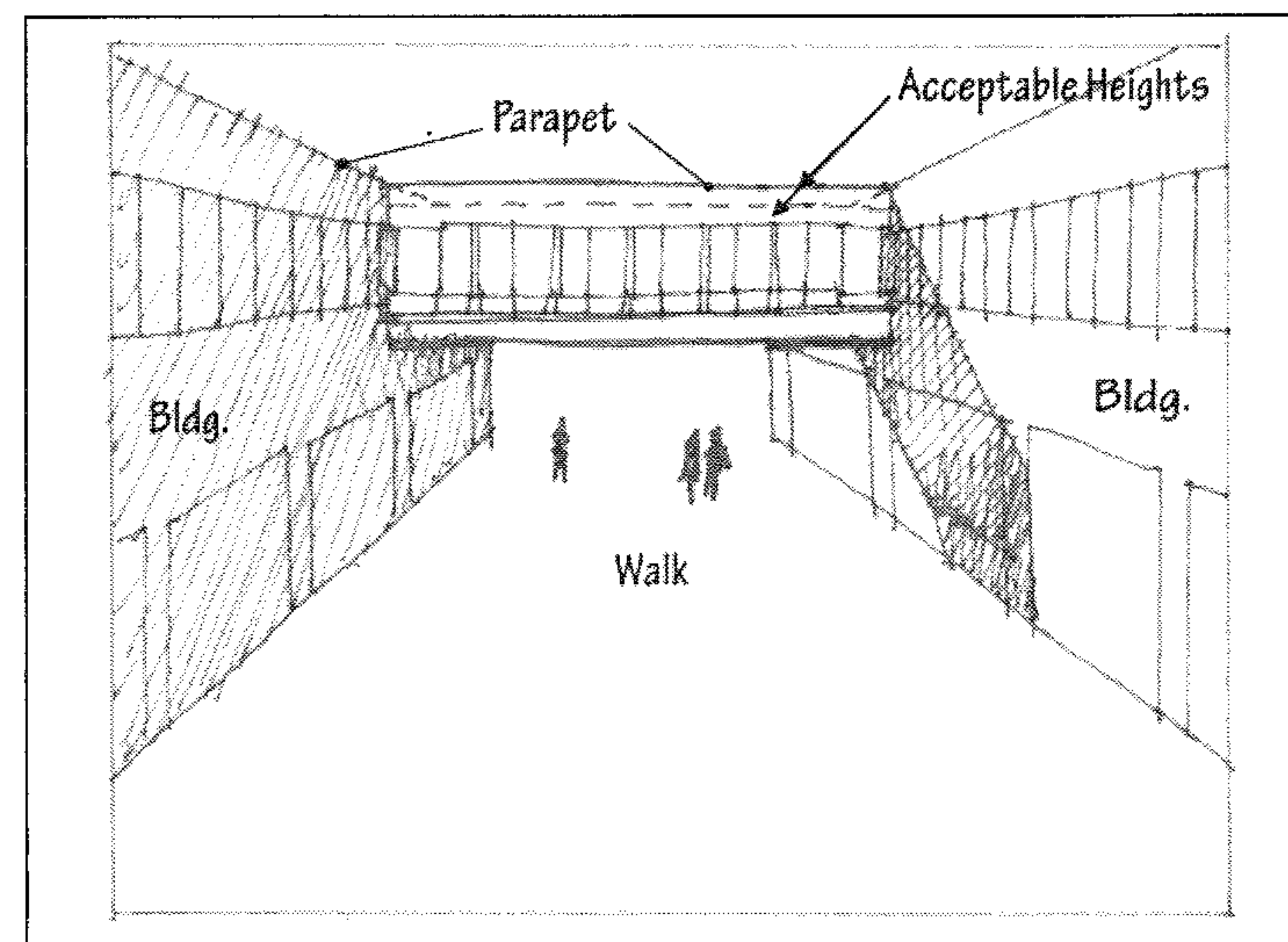


Figure 4.9 Pedestrian bridge illustration

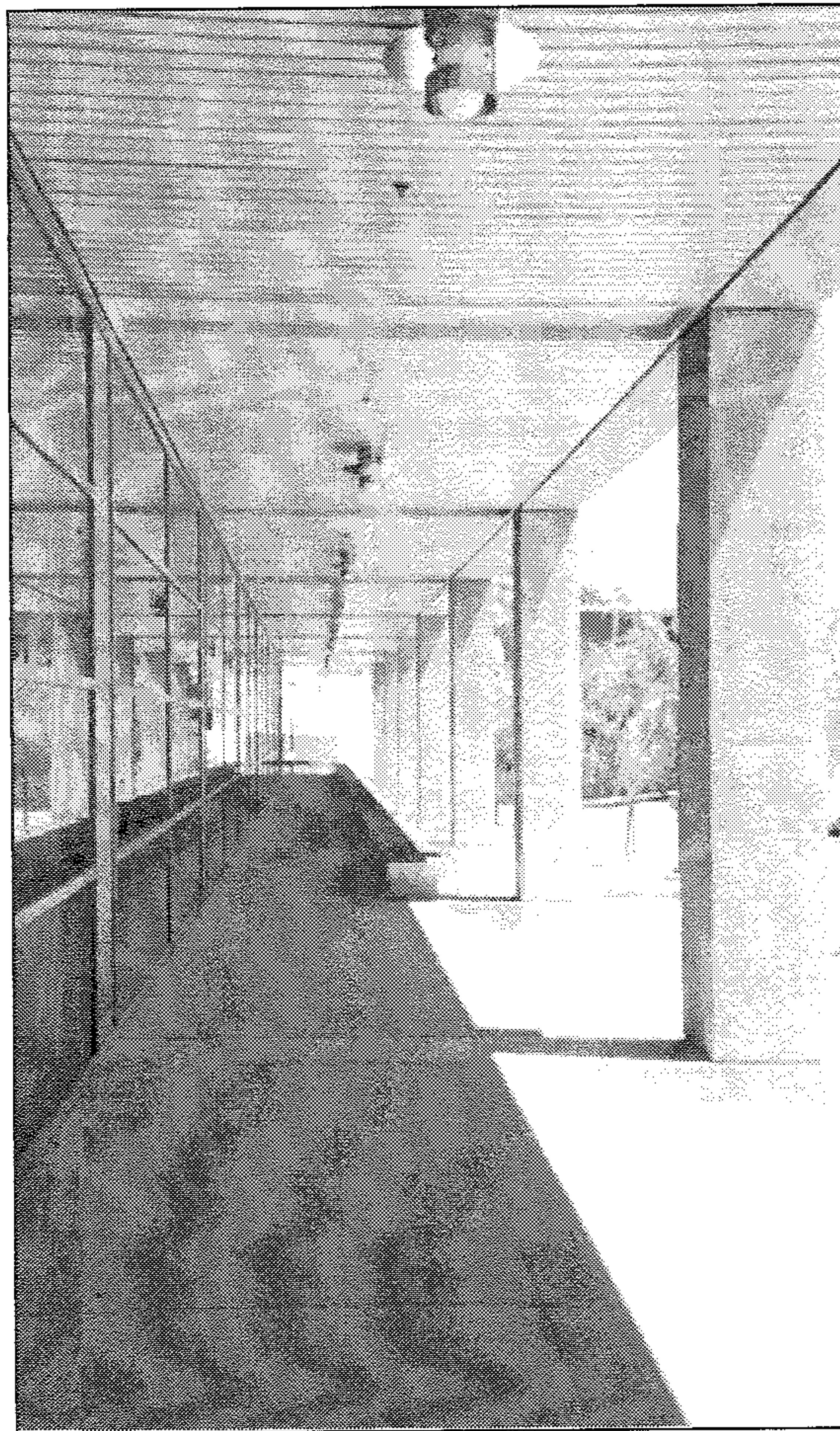


Figure 4.10 UCSD campus fenestration examples

4.3.11 Building Materials and Color Palette

The design of buildings in the SRP follows the principles established for the neighborhood concept that strengthen the neighborhood identity to create a visually richer “sense of place.”

The visual richness of materials and color is encouraged. The materials palette is intended to be subordinate to and harmonious with the natural landscape and its muted character.

Concrete, aluminum, glass, stone, and metal (natural or painted with colors found in the adjacent riparian terrain) should be combined to create buildings uniquely keyed to their specific site. The use of these or appropriate materials is addressed in the SRP Master Exterior Palette, summarized below. The complete report with color samples is available from the UCSD Real Estate Development Office.

- **Concrete** – This dominant material, appropriate to research facilities, includes cast-in-place and panelized systems referred to as ‘tilt-up’, and ‘hybrid’ panel systems such as glass-fiber reinforced concrete (GFRC). If ‘tilt-up’ panel systems are used, their articulation should appear as a panelized system vs. large ‘slab’ articulation. Color admixtures, aggregates, and finishes that enhance the warm natural site colors are encouraged.

The following secondary materials may be used as accents for the concrete buildings:

- **Metal Panel Cladding Systems** – Systems incorporating metal panels may be used as a secondary material. Avoid highly polished surfaces and large expanses of uninterrupted panels. Reflective finishes are prohibited, except as accent materials.
- **Cement Plaster** – This material should emulate concrete and be used as an accent material on buildings. Integral (burned) color

finishes are encouraged over traditional painted cement plaster. Detailing systems should be designed to appear as panelized, rather than large continuous areas of finish material.

- **Wood** – Where allowed by code and building occupancy, wood finishes should appear naturally-finished, as opposed to machine finishes, opaque paint, and composite wood materials.
- **Stone** – Where cost-efficiently applied, stone finishes should appear as natural as possible. Flamed or honed finishes are preferable to highly polished finishes.
- **Glazing** – Clear, energy-efficient glass is strongly preferred for windows. Glazing is not intended to provide a location for strong accent color. Colored glass, except green (trade name Solex), and reflective coatings are unacceptable for use on SRP buildings.
- **Glass Curtain Wall Systems** – Metal-framed glass and structural glass wall systems should be sensitively incorporated into building form and exterior materials design which includes other materials. The use of these systems over the entire exterior envelope of the building is not permitted.

The use of other materials not included on this list may be allowed at the discretion of the University.

4.3.12 Service Bays

Each of the buildings will provide for its own service needs. Loading bays, generally accessed from secondary roadways or parking areas are to be provided for each building. Tank farms and related service yards are also to be integrated into this single service point. These service areas are located on the Illustrative Site Plan (Figure 3.1).

4.3.13 Building Utilities and Systems – Penthouses and Enclosures

Building systems include all mechanical, electrical, plumbing, and drainage supply and distribution systems and their related components. If freestanding, this service equipment must be screened from view in the following manner:

- On-grade site locations must be fully screened by an architectural enclosure and related landscape screen. Architectural enclosures whether composed as an extension of the building form and massing or as freestanding buildings should be constructed of the same materials and color palette used on the building. The use of fencing materials is prohibited. Landscape screening is addressed in Section 4.9.
- Building locations: Building systems equipment and distribution systems must be housed in an enclosure which is integrated with the overall composition of the building and its materials and color palette, rather than an “attachment” or “penthouse”. Equipment enclosures, exposed piping, vent hoods, risers, and other building systems elements that are required to penetrate above the roof should be carefully composed and constructed of permanent materials.

4.3.14 Miscellaneous Structures

Miscellaneous freestanding site structures required for parking control, building services, security, or other uses are subject to all guidelines in this Section.

4.3.15 Building Lighting Design

All neighborhood lighting should conform to the UCSD Campus Outdoor Lighting Policy and Outdoor Lighting Design Guidelines. The policy allows only low pressure sodium (LPS) lighting for campus areas illuminated from 10:00 pm until sunrise in order

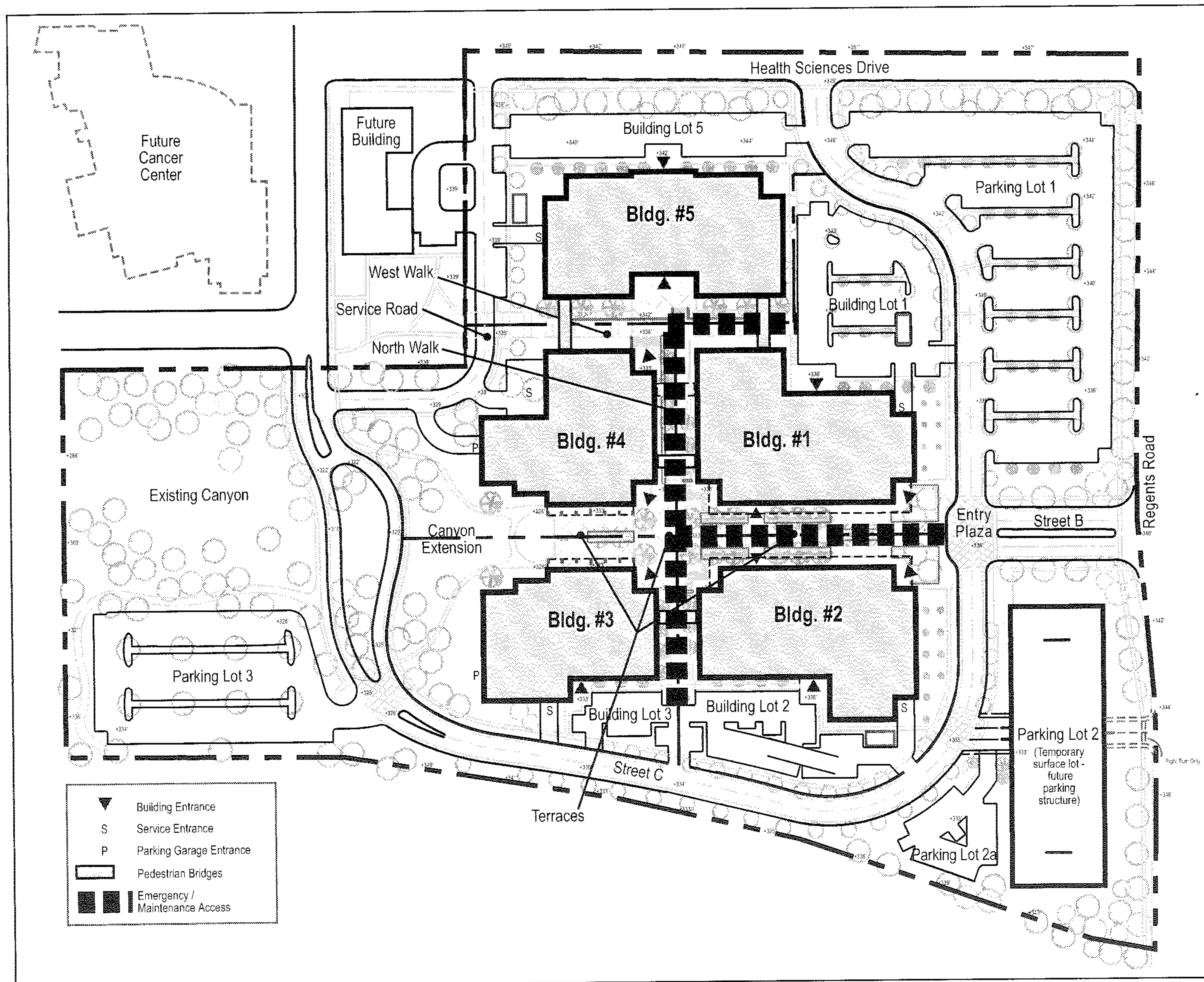


Figure 4.11 Emergency & Maintenance Access

to reduce light pollution impacting astronomical research; there are no restrictions on non-LPS lighting used from dusk to 10:00 pm.

The objective of exterior illumination of the pedestrian areas surrounding buildings is to maintain minimum allowable lighting levels while meeting security and safety standards. This serves to reduce the visual impact of spectral pollution of the nighttime sky on research activities.

The illumination of building exteriors serves the following functions:

- **Wayfinding** – A hierarchy of building lighting types and levels of illumination should reinforce the location of building access and entries; generally higher illumination levels should be used at entry points.
- **Safety and Security** – Building entry and exterior circulation in colonnades, arcades, parking structures, service bays, and other exterior building elements must comply with the UCSD requirements for illumination levels.
- **Aesthetics** – The design of exterior lighting enhances the experience of the building, creates a sense of place, and reinforces the perceptual understanding of its spaces.

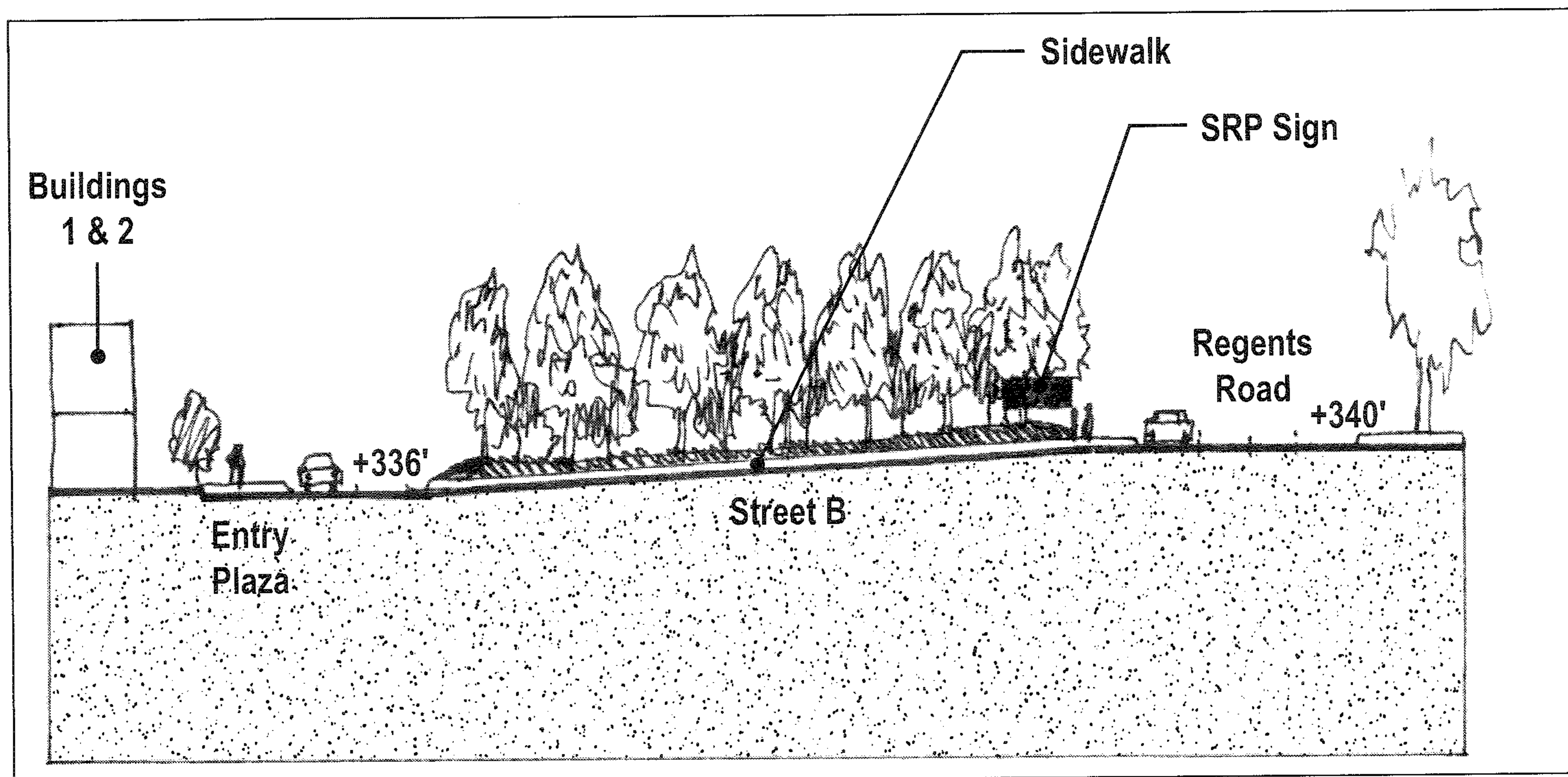


Figure 4.12 Street B section - off campus/community pedestrian connection to SRP

Building lighting design should reinforce the overall form, massing, and spatial characteristics of the building, rather than create a “statement” about a particular feature of the building. Exterior and interior lighting features should be integrated to provide a visual understanding of the building’s composition and function.

The following guidelines support this approach:

- Illuminate space and planar elements, rather than particular features. Avoid the “spotlighting” of major building features.
- Reserve feature lighting fixtures for important building elements such as entries.
- Favor the use of diffuse lighting systems over those generating a strong, point-source of lighting.
- Enhance the visibility of interior building lighting to the exterior, giving a sense of light ‘emanating’ from the building.
- Avoid dramatic changes of illumination levels, which can produce glare and disorientation.
- Enhance the illumination of landscape features. See Section 4.8.11 regarding landscape lighting.

Selection of lighting fixtures located in shared parking areas and in parking areas within building lots should coordinate with and complement that of the building lighting. See Section 4.10 for specific requirements.

4.3.16 Building Signage Design

Building signage design should conform to the UCSD standards developed for exterior signage, while allowing for individual tenant identification. Neighborhood signage is addressed in Section 4.11.

4.4 Vehicular Circulation and Access

4.4.1 Roadway Design

The primary circulation through the SRP neighborhood will occur on Street C. Vehicular access to the neighborhood buildings and service areas will be provided from this street. It is two lanes wide except at the intersection with Medical Center Drive where it widens to 3 lanes to align with that street. The 2-lane road is 40 feet wide to accommodate the two vehicle lanes and two bike lanes. Where the road divides each lane is 20 feet wide to accommodate a single vehicle lane, bike lane, and curbs and gutters. The bike lanes adjacent to the roadways are typically 5 feet wide throughout the campus.

Street B is the primary public vehicular entry into the SRP from Regents Road. It is four lanes wide with a median divide of 10 feet. The roadways are each 32 feet wide to accommodate the two drive lanes, bike lanes, and curbs and gutters.

Secondary roadways within the neighborhood are typically 26 feet wide and do not include a bike lane. These roads include those accessing sites, below building parking areas and service yards.

Special paving will be used selectively on Street C and at the neighborhood entrances to emphasize arrival areas and pedestrian crossings. As previously noted in Section 2, the UCSD Naming Committee will assign names to Streets B and C.

4.4.2 Emergency & Maintenance Access

Emergency and maintenance vehicles will be allowed to enter the interior pedestrian areas at designated points, which will require designing these areas to accommodate heavy vehicle loads and clearances. A north/south route (North Walk) utilizing paved pedestrian paths and possibly grasscrete landscape areas will extend

through the neighborhood (see Figure 4.11). The Terraces or central walkway will allow limited fire access; vehicles will not be able to drive all the way through the space due to changes in elevation.

4.4.3 Shuttle Buses

The SRP neighborhood may be served by the Campus shuttle system. Shuttle service between East and West Campus will be expanded once the new Gilman Bridge across I-5 is constructed. Shuttle stops near the SRP have not yet been determined by UCSD; however two likely shuttle stops include the intersection of Street C and Medical Center Drive and/or within the SRP neighborhood at the Entry Plaza bordering the intersection of Street B and Street C. Due to the uncertainty of shuttle stop locations and expected vehicular volume, pullouts are not recommended.

4.5 Pedestrian and Bicycle Circulation and Access

A network of pathways will provide pedestrian and bicycle circulation within the neighborhood and provide connections to adjacent destinations including the ECHS neighborhood, the potential LRT station and Mesa Housing (Figure 2.2).

4.5.1 Sidewalks and Pathways

As noted in Section 3.3, pedestrian walks consisting of the Terraces, North Walk and West Walk link the SRP research buildings and will be focal points of the neighborhood. The western terminus of the Terraces will lead pedestrians toward the canyon riparian area and to pathways extending to adjacent neighborhoods and destinations north and south. The eastern terminus at the SRP entrance will connect to sidewalks extending to off-campus destinations such as Mandell Weiss Eastgate Park (Figure 4.12).

Sidewalks along Street C are typically set back from the curb edge by 10 feet and are 5-feet wide. The Street C sidewalk is continuous on the building side of the street but interrupted along the south and east curbsides. Major pedestrian crossings on this street will be defined with textured paving or other traffic calming measures to alert motorists of pedestrians travelling between the perimeter parking lots and the research buildings.

The sidewalks along Street B are set back 10 feet at the curb edge and are 5-feet wide. The sidewalks along Health Sciences Drive and along Regents Road are contiguous with the curb edge and are also 5-feet wide.

Sidewalks located within the building lots from roadways and parking remain typically 5-feet wide. This is exclusive of the Terraces, North and West Walks. The Landscape Guidelines (Section 4.8) describe materials and color for sidewalks and hardscape in more detail.

A shared off-street path for pedestrians and bicyclists will extend between Mesa Housing and the intersection of Street C and Medical Center Drive. The minimum width of this paved path is 8 feet with an additional 1 foot of paving or clear open space in curved areas. At the intersection, this path will transition to 5-foot wide striped lanes located on Streets B and C.

4.5.2 Accessibility

All sidewalks, pathways and parking areas are to comply with accessibility regulations, with the exception of the off-street bike path extending from Mesa Housing, which is not intended for use by the disabled.

4.6 Parking Concept

4.6.1 Surface Parking Lots

The standard parking space is 9 x 18 feet with a 24-foot wide drive aisle, all at 90 degrees. The parking lots in the neighborhood are to be set back a minimum of 20 feet from adjacent roads, buildings, or the existing canyon to permit an ample area for landscaping.

Design for Parking Lots 1 and 2 should include parking bays (defined as a drive aisle and two flanking rows of parking) separated from adjacent parking bays by 10-foot wide landscape islands. A minimum of 10-foot wide landscape island is also required at the end of parking rows at the intersection of drive aisles.

Parking Lot 3 should be constructed in a manner that is sensitive to its environment due to its location along the canyon edge. Cars should not be parked along the canyon edge where a pedestrian

and bicycle path is located. A suggested lot design approach would be to create a lot with irregular edges and randomly placed and shaped interior landscape islands to evoke organic forms of the natural landscape.

4.6.2 Underbuilding Parking

To ensure adequate parking supply, a minimum of one level of structured subgrade parking is likely to be needed under three of the research buildings; however, structured parking is encouraged under each building. The site topography on Building Lots 3, 4, and 5 are most conducive for development of below-grade parking, and may permit the parking level to “daylight” to allow visual orientation to the site and natural ventilation.

4.6.3 Structured Parking Access

Primary access to the parking structure located on Parking Lot 2 will be provided from Street C. Entry to the garage will occur at the lowest level. An egress ramp from the garage to Regents Road (right turn only) may be possible, subject to coordination with the City of San Diego. The parking structure will be approximately 4-5 levels in height. Although depressed one level below surrounding site elevations, the grading of the site assumes daylighting of all elevations to permit natural ventilation of the parking structure. Refer to Figure 4.13 for conceptual east-west section through the parking structure.

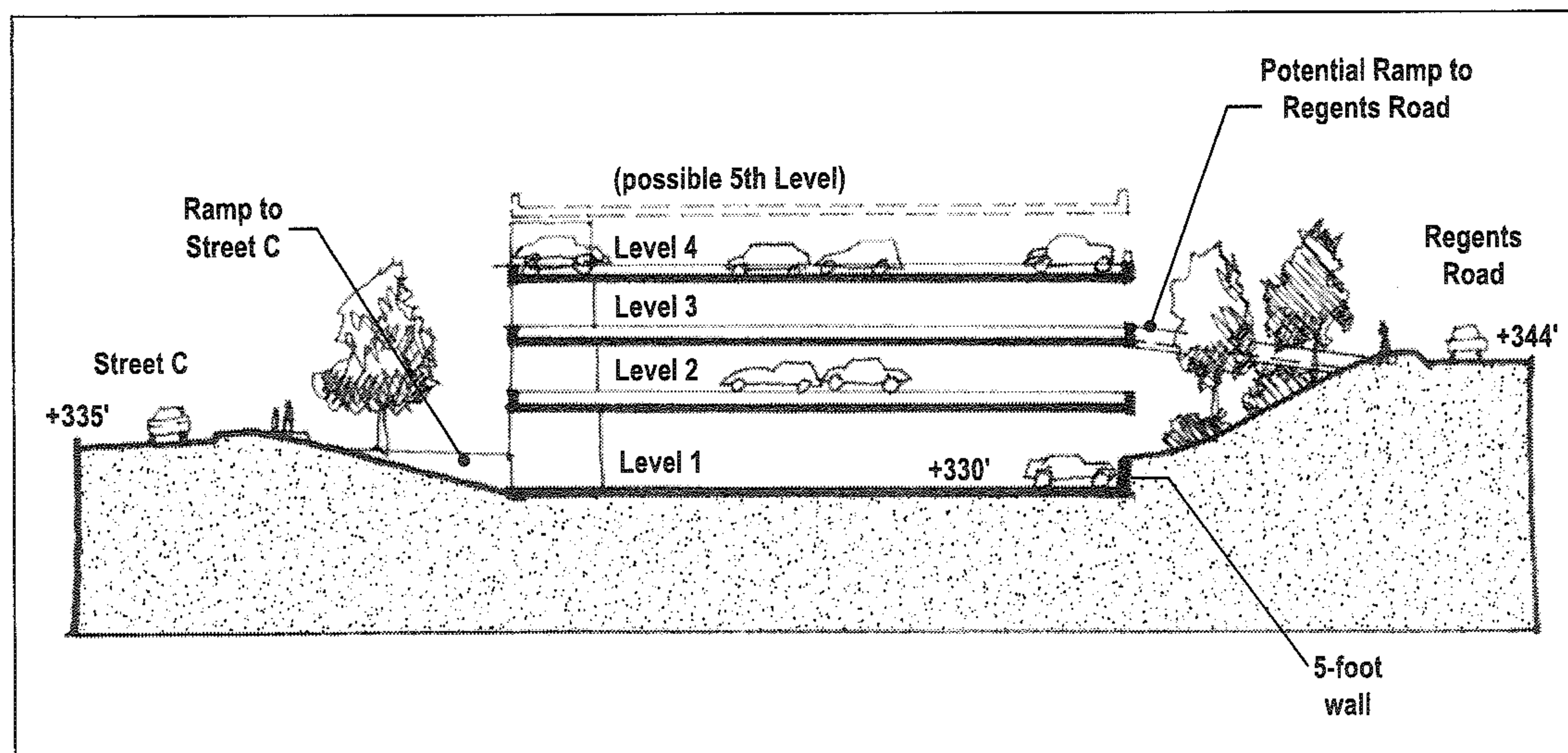


Figure 4.13 Parking Lot 1 Parking Structure section (east-west)

4.7 The Metropolitan Transit Development Board (MTDB) Light Rail Transit (LRT)

A potential alignment of the LRT would be elevated as it passes along the southwest and west edge of the Science Research Park. This elevated structure would cross Parking Lot 3 diagonally. The support columns of this structure would need to coincide with landscape islands within the parking.

This potential alignment continues along the southern edge of the SRP adjacent to Street C. A landscape zone that is as deep as possible should be provided between the Street C curb and the LRT alignment.

4.8 Open Space, Landscape, and Hardscape Guidelines

4.8.1 The Rustic Canyon Landscape

The character of the UCSD Campus emphasizes the sharing of a built environment within the context of open space and surrounding native vegetation. Eucalyptus groves, originally planted for agricultural purposes, set the main stage for this interface. Other surrounding plant communities consist of native and indigenous species, which have established “natural edges” around the campus.

The site for the SRP is an extension of the East Campus mesa where the interface of natural open space is still very evident. The west perimeter of the site incorporates native and indigenous species, which visually link the natural landscape to the site. The goal of the landscape design guidelines is to transition the landscape character of the open space into the SRP neighborhood development.

Views and visual connections to surrounding open space are the basis for the proposed landscape design of the SRP. The landscape of the neighborhood should both complement and be compatible with the surrounding canyons and avoid impacts to the sensitive

natural environment. The planted areas within the building lots and along Terraces and Walks should be considered as “discrete” in character and offer greater design selections of both ornamental and indigenous species. The outlying areas are considered as “rustic” in character and will focus on more natural compositions and use of both indigenous and native plant selections.

The design for the landscape character of the SRP is based upon connections to the natural environment. Through the landscape design, the important views and the interpretative value of the unique environment that surrounds the SRP are drawn into it.

The interior core of the SRP will include spaces where the landscape supports the atmosphere of contemplation of new ideas. The landscape will provide venues for gathering, retreat areas for quiet observation and clear visual connections from various areas.

The landscape design focuses on several distinct areas discussed in more detail in the following sections and illustrated in Figure 4.14.

4.8.2 Terraces

The Terraces represent the central axis of the SRP. The name represents the three levels of grade change that begin at the neighborhood entry off Regents Road and proceed west to the canyon rim. One of the unique features of this area is the geology of the coastal region and the inherent “layering” of various soil types. As each of these terraces steps down to the canyon the character of each terrace is to be based on a typical soil layer. For instance, the Upper Terrace represents the thin layer of topsoil rich in organic matter, which supports a majority of plant life in this area. Ornamental and indigenous plant palettes will be used to represent this relationship in the Upper Terrace. The Middle Terrace represents clay, which has less organic value but provides more contrast in color and pattern. Plant palettes in this area will transition to the

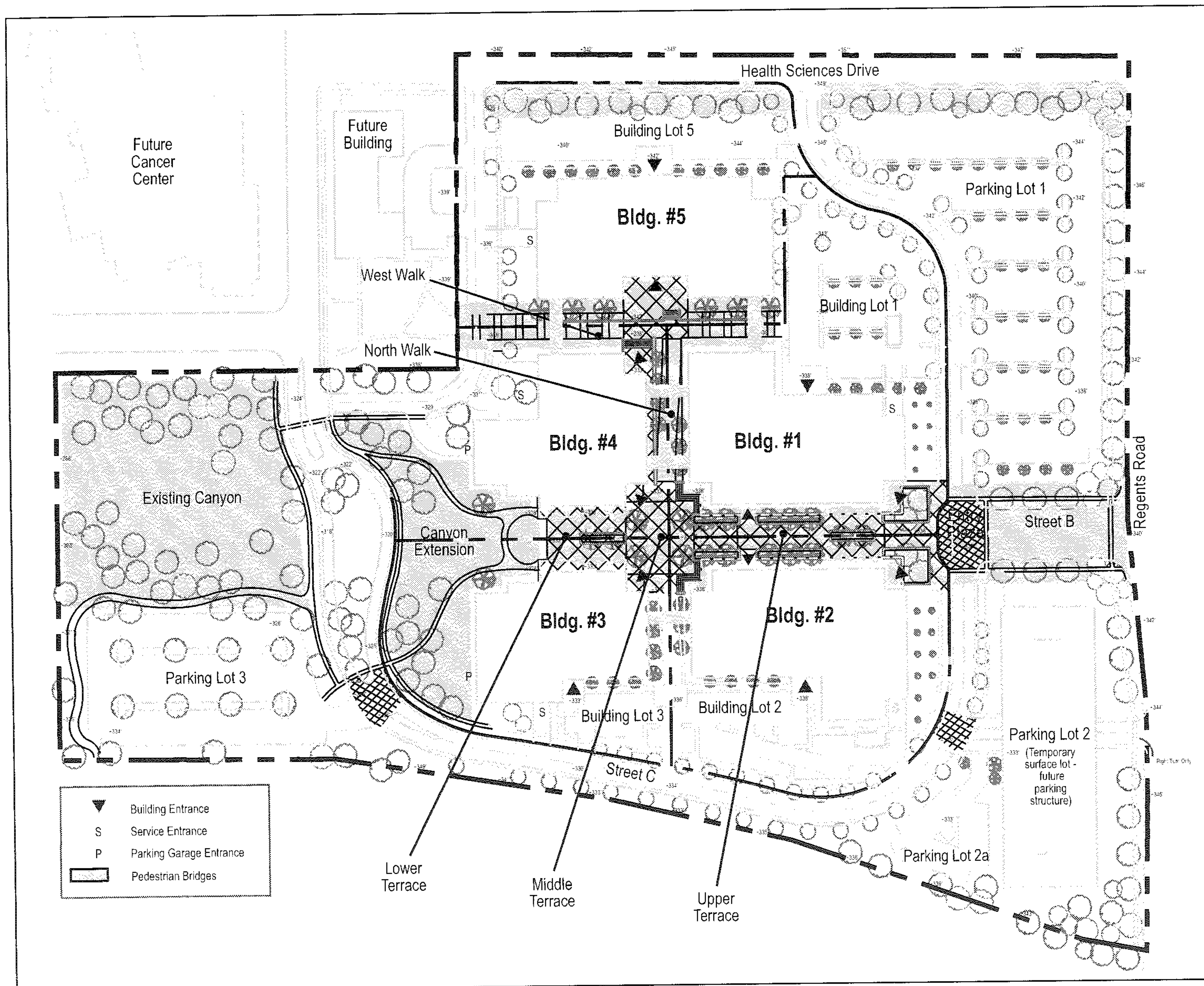


Figure 4.14 Landscape areas

use of both indigenous and native species, which naturally occur in many of the upper canyon zones.

The Lower Terrace represents the sandstone layer where stability is apparent through hardened compaction and marbled stone-like appearance. Here the plant palette is composed of native species, which can exist with minimal organic and water requirements.

Through colors and textures of paving materials the characteristics of the three zones can be interpreted. As an example, the Middle Terrace representing the clay layer will be depicted by terracotta colored paving materials with theme walls using colored layers of block or stone. The Lower Terrace depicting sandstone will utilize light colored paving materials including sandstone or limestone pavers.

At the western edge of each terrace there is an overlook composed of a balcony or mezzanine, which looks to the next lower level. The lowest terrace overlook will comprise the largest space. The view from this area will take in the greatest impact of the adjacent canyon open space and transition into the natural environment. The landscape character along the three terraces will consist of three distinct tree types and ground cover plantings, which depict each terrace origin. Ground cover species vary from terrace to terrace. See Plant Matrix in Appendix 5.1. The proposed trees for each terrace are as follows:

Upper Terrace: Chinese Evergreen Elm – *Ulmus parvifolia*

Selected for its broad canopy and medium size adjacent or central to the proposed building and arcades.

Middle Terrace: Torrey Pine – *Pinus torreyana*

Selected for its visual quality and signature appearance in the central terrace intersection. The trees should be limited to 3-4 in

quantity set within the plaza limits as to allow sufficient room for normal height and width.

Lower Terrace: Strawberry Tree – *Arbutus unedo*

Selected for similar species' native California origin and adaptability to poor soil conditions, this tree represents a typical small-scale tree that adapts naturally to the lower canyon areas. The trees should be used in informal groupings on either side of the terrace to allow maximum views to canyon.

4.8.3 North Walk

The North Walk landscape will serve as a connector from Building 5 to the Terraces. This area will have additional shade in the morning and afternoon hours. Selected landscape materials must be tolerant of the lower light conditions and limited direct solar axis. The character of the landscape should be light and airy so as not to create a tunnel effect. The opportunity for additional seating and retreat areas along this corridor is encouraged as well as patios or plazas at secondary building entries.

The landscape character along the North Walk will consist of two distinct tree types and ground cover plantings which are tolerant of the lower light conditions. The proposed trees are as follows:

Vertical Accent Tree: Bottle Tree – *Brachychiton populneus*

Selected for its vertical open character and light colored foliage, the trees should be used in linear and random placement along the corridor.

Medium Canopy Flowering Tree: Flowering Pear- *Pyrus kawakamii*

Selected for its flowering white blooms and semi deciduous character, which will allow more light in the Walk during the winter months. The trees should be used in informal groupings.

4.8.4 West Walk

The West Walk is the east- west corridor between Buildings 1, 4 and 5. This walk will connect to the North Walk, which leads to the Terraces. The west end of the West Walk connects to the Southeast Plaza in the adjacent ECHS neighborhood.

The theme of the landscape along the West Walk is based upon the idea of an ornamental garden as an entry to the urban design of the adjacent Southeast Plaza. The garden is designed to frame images of the adjacent buildings with plants providing accents of color, texture, and form. The planting should step in height with higher species used against the building base and lower plants used along the Walk.

The landscape character along the West Walk will consist of three distinct tree types and a variety of shrubs and ground cover. The proposed trees are as follows:

Medium Canopy Flowering Tree: Golden Trumpet Tree - *Tabebuia chrysotricha*

Selected for its flowering yellow blooms in April and brief deciduous character during the blooming period, this tree should be used in informal groupings with the other specified trees set behind to accent the form and flower.

Large Canopy Flowering Tree: Purple Crown Robinia *pseudoacacia*

Selected for the tree's uniform oval shape and shade canopy, the tree flowers in late Spring with brilliant purple grape-like clusters of flowers with lacy light green foliage. This tree should be used in groupings set as accents against building entries or along the east-west corridor.

Background Tree: Brisbane Box - *Tristania conferta*

Selected as a vertical oval shaped tree, which has dark and dense

foliage. The tree should be used as a backdrop for the other flowering trees and placed in random clusters.

4.8.5 Neighborhood Edges

North Neighborhood Edge

Health Sciences Drive, an entrance road into the ECHS neighborhood, adjoins the north edge of the SRP neighborhood and the south edge of a large Campus parking area. Use of similar paving materials, site furnishings, and plant palettes should be used along the full extent of this street to reinforce the unity of design character. The east half of Health Science Drive has been constructed and the landscape and hardscape have been implemented along the north side of the street adjacent to the parking area. This existing segment establishes the streetscape design elements to be implemented on the south side of Health Sciences Drive adjacent to the SRP neighborhood.

The ground plane should be planted with a variety of drought tolerant plant species with a low profile (heights up to 3-feet tall) to allow views into the SRP neighborhood. Trees at the entrance (Health Science Drive and Regents Road intersection) and along this street should include:

Entry Theme Tree: Torrey Pine - *Pinus torreyana*

Selected for its grand form and large framing canopy, this tree should be used at a maximum setback from the street and curb for allowance of growth. The trees should be located a minimum of 30 feet apart in an informal pattern at the corner of Health Sciences Drive and Regents Road.

Street Trees: Flowering Eucalyptus Trees

A mixture of three flowering eucalyptus trees should be planted in an informal pattern along this street.

East Neighborhood Edge - Regents Road

The streetscape of Regents Road will provide the first view of the SRP from the adjoining Golden Triangle business district. The landscape of this street should present a strong organized layout with clear sight lines and setback of planted areas to allow for clear orientation. The ground plan should be low profile shrubs and groundcovers. Planting masses along Regents Road should be low profile along the street edge and step up to taller plants adjacent to the edge of the SRP parking lots. The landscape theme along Regents Road will consist of a mixture of pine trees as follows:

Streetscape Tree: *Pinus canariensis* – Canary Island Pine

Selected as the continuation of the theme planting established on this street, this tree is a tall vertical accent that should be planted in an informal pattern and intermixed with Torrey pines.

Streetscape Tree: *Pinus torreyana* - Torrey Pine

Selected for its grand form and large framing canopy, this tree should be used at a maximum setback from the street and curb for allowance of growth. The trees should be located a minimum of 30 feet apart in a linear pattern on either side of the street.

South Neighborhood Edge

The south edge of the neighborhood is planted as part of Street C; refer to Section 4.8.6 below for landscape guidelines.

West Neighborhood Edge

The Southeast Plaza developed as part of the ECHS neighborhood will adjoin the northwest edge of the SRP neighborhood. This plaza will consist of a combination of landscaping and hardscaping with a tree-lined walk connecting the two neighborhoods. The theme of the plant palette will focus on species that

create an urban edge in contrast to the rustic landscape of the adjacent canyon and SRP canyon extension.

The canyon extension, open space located between Street C and Building Lots 3 and 4, will provide a transition from the landscape of the preserved canyon situated west of Street C to the more urban character of the research buildings and Terraces. Understory plantings are identified in the Plant Matrix, and the proposed tree is identified below.

Canyon extension theme tree: *Quercus agrifolia*-Coast Live Oak

Selected for its grand form and large canopy, the Coast Live Oak should be used at a maximum setback from the pavement to allow for growth. They should be located in informal plant groupings and planted with additional tree species from the adjacent landscape areas to the east and west, including *Arbutus unedo* (theme tree for Lower Terrace) and eucalyptus species (streetscape tree along west segment of Street C).

4.8.6 Streetscape- Street B

Street B will be planted with understory species noted in the Plant Matrix and the Campus entry tree:

Entry Theme Tree: Torrey Pine - *Pinus Torreyana*

The Torrey Pine is selected for its form and large framing canopy. The tree should be planted at a maximum setback from the street and curb for growth allowance, and at a minimum of 30 feet apart, in informal groupings.

4.8.7 Streetscape -Street C

The streetscape of Street C will include two distinctly different themes. The landscape theme is based on the transition of a formal streetscape pattern to the deconstruction of the streetscape

into a pathway through the canyon. The east and south segment of this street will be planted with a formal, linear row of trees. The groundplane planting will consist of ornamental shrubs and ground covers that blend with the proposed palettes for the adjacent parking. Turfgrass should be avoided and walks should be contiguous to the street edge. The west segment of this street is split into two one way roads that allow the canyon edge to pass over the road alignment and integrate with the western edge of the SRP. The landscape will have an informal, rustic character to blend with the adjacent canyon landscaping.

The width of the street right-of-way where planting occurs will vary and the transition of the landscape into the adjoining areas should be seamless and not divided. The trees proposed for this street are as follows:

East Segment Street Tree: *Tristania Conferta*- Brisbane Box

Selected for large oval shape and dark foliage color, this tree should be used in an equal spacing and set back from the curb a minimum of 12 feet.

West Segment Street Tree: *Eucalyptus* species- See Plant Matrix

The *Eucalyptus* is selected for its rough texture and natural form, and should be used to transition from the preserved canyon to the canyon extension landscape. The trees should be planted in large clusters with a random mix of *eucalyptus* and *quercus* species along the canyon edge.

4.8.8 Building Lot Landscape

The perimeter landscapes of the buildings of the SRP which do not face onto previously described areas are to be natural and blend with the adjacent open space. The theme of the landscape in these areas is more rustic with greater use of indigenous materi-

als and less reliance on ornamental species. The plantings should be large scale with easy access for ongoing maintenance and upkeep. The trees should be located so as to assume the placement of the buildings was determined by the locations of “existing” tree groups. In this manner the perimeter landscape should appear to flow around and into the SRP and not appear as though the SRP started as a flat graded pad. The transition of the landscape into the adjacent streets or parking should also be designed as to provide a seamless and borderless edge.

Representative trees located at the building perimeter include the following:

Vertical Accent Tree: *Pinus Halpensis*-Aleppo Pine

Selected for its natural tree-like form and large canopy, this tree should be used at key areas where the placement will assist in blending the buildings into the surrounding landscape.

Vertical accent Tree: Bottle Tree - *Brachychiton Populneus*

Selected for its vertical open character and light colored foliage, the trees should be used in random placement around the buildings in groupings to accent the adjacent pines.

Background Tree: *Tristania Conferta*- Brisbane Box

Selected as a vertical oval shaped tree with dark green and dense foliage, the tree should be used as a backdrop and contrast to the bottle trees and placed at the transition into the adjacent parking areas.

4.8.9 Parking Lot Landscaping

The parking areas adjacent to the SRP buildings are proposed to be transitional from the perimeter rustic landscape theme of the buildings to the native open space and canyon areas. Planter is-

lands within the parking areas should be planted with indigenous low profile shrub masses with opportunities given for irregular island shapes and non-standard sizes. The location of trees within the parking areas should be consistent with campus parking standards. In accomplishing these standards the final design should attempt to incorporate the opportunity to lay out parking and planter islands in an informal pattern. Wherever possible the random placement of planters and adjacent landscape edges will reinforce the natural transition of the landscape into the surrounding open space.

Selected trees to be located in the parking areas (with the exception of Parking Lot 3) will consist of the following:

Vertical Accent Tree: Pinus Halpensis-Aleppo Pine

Selected for its natural tree like form and large canopy, this tree should be used at key areas where the placement will assist in blending the parking areas to the building perimeter and adjacent open space.

Broad canopy Shade Tree: Tipuana Tipu-Tipu Tree

Selected for its broad canopy and shade quality, these trees should be used adjacent to more discrete landscape areas and away from the canyon areas.

The surface treatment for Parking Lot 3 could be decomposed granite, instead of standard asphalt. River cobblestones could be used in place of curbs. The landscape palette for this lot should respond to the adjoining natural canyon and include low-profile indigenous shrub masses and a mix of eucalyptus varieties with *Quercus agrifolia* along the canyon edge.

4.8.10 Site Furnishings and Lighting

Site furnishings are a design element which caters to the user's needs in and around the campus setting. The use of lighting, trash containers and seating is an excellent way to provide a continuity of design materials through the use of color and material types. The use of site furnishings selected from a family of similar materials will reinforce the character and design of the landscape and hardscape theme for the SRP. The following describes the intent and materials from which site furnishings should be selected.

- **Seating and benches**

Seating and benches are to be a combination of constructed in-place and fixed manufactured styles. The use of user-friendly materials such as wood and metal is encouraged. Concrete or block constructed seating should incorporate "fit-in" type seating which provides greater comfort. Freestanding benches should be located on hard surface areas with pads provided in landscape areas. Trash containers should be grouped near seating whenever possible.

- **Bicycle Parking**

Bike racks that comply with Campus requirements should be located convenient to building entries.

- **Trash and Ash Urn Containers**

Trash containers should be selected to match seating materials. Access to trash container inserts should be taken into consideration for ease of trash access and bag exchange. Recycled material modular containers should be considered for use in high use areas where large groups are likely to gather.

- **Planters**

Container plantings should be limited to pedestrian use areas and building entries. The use of seasonal color and accent foliage in containers is preferred to random plantings within the landscape areas. The maintenance of container plants is easier to manage and care for, including periodic replacement for maximum quality. The style and selection of containers should be in concert with the previously discussed seating and trash containers. There are many current manufacturers who offer complete “sets” of similar color or finish materials for these items.

- **Landscape Lighting**

Lighting for landscape and hardscape must conform to criteria established in Section 4.3.15. Lighting should be designed to first address the minimum safety requirements and then to provide for accent and enhancement of the landscape and building areas. Landscape lighting should be designed to provide at least the minimum illumination levels required for pedestrian safety and access. The use of low voltage landscape lighting is encouraged around the pedestrian areas which focus and highlight the surrounding landscape area. Strategic and limited placement of landscape lights is encouraged to achieve the greatest results.

Standard light fixtures should be selected for all Terraces and Walks to enhance design continuity.

- **Signage Placement**

Signage placement and manner of scale is critical to the success of the landscape design. The proposed locations and content of signage must be integrated with the surrounding landscape character. The viewable area and required way-finding

abilities can easily be hidden by improperly placed signage. Landscape plantings in and around signage and monuments must be scaled and placed appropriately to enhance rather than obscure signage.

4.9 Utilities Infrastructure

Above-grade infrastructure service components are to be integrated into the building or building system enclosures to as great a degree as possible. If any equipment such as, electrical vaults, telephone boxes, back flow preventers, fire panels, etc., are located outside these structures in highly visible areas, landscape screening consistent with the overall planting palette is required.

4.10 Neighborhood Lighting Guidelines

Light fixtures along the neighborhood roads and within surface parking lots should match the Campus standard and utilize LPS lighting in compliance with the UCSD Outdoor Lighting Policy and the Outdoor Lighting Guidelines.

4.11 Neighborhood Signage Program

The UCSD Signage Program will serve as the foundation for major neighborhood signage to promote a unified image that relates to the overall campus. Major neighborhood signage will consist of three types: an entry identification monument, neighborhood markers and vehicular directional signs.

- An entry identification sign will be located at the primary entrance to the SRP neighborhood at the intersection of Regents Road and Street B.
- Neighborhood markers will be placed at the secondary entrances to the SRP. These occur on the north at the intersection of Health Sciences Drive and Street C, and on the west at the intersection of Street C and Medical Center Drive.

- A directional sign listing each of the buildings will be located at the intersection of Streets B and C and possibly near the intersection of Street C and Medical Center Drive.

4.12 Public Art

UCSD has a strong commitment to public art on Campus as demonstrated by the Stuart Collection. This unique collection of outdoor, site specific works by leading contemporary artists seeks to enrich the cultural, intellectual and scholarly life of the Campus and community. The entire Campus may be considered for commissioned outdoor sculpture, either as a part of the Stuart Collection or independent of it.

The University solicits the advice of the Stuart Foundation regarding the quality and siting of all outdoor art proposed for installation on the UCSD campus, which is not associated with the Stuart Collection. The proposed art must be of comparable artistic merit and compatible with the Stuart Collection, as well as sustain the reputation of the Collection.

Tree Listing

[illegible]

5.2 Proposed Landscape Plant Palette

Shrubs & Ground Cover Listing

	Upper Terrace	Middle Terrace	Lower Terrace	North Walk	West Walk	North Neighborhood Edge	Regents Road Edge	Interface of South Edge	Interface of SRP & ECHS	Streetscape Streets C & B	Building Lot Landscape	Parking Landscape Area	Canyon Extension
Acacia redolens, Redlands Acacia			X									X	X
Aloe marlothii			X										X
Arbutus unedo, Strawberry Tree			X										
Arctostaphylos edmundsii "Carmel Sur"			X										X
Artemisia californica "Canyon Grey"													X
Baccharis pilularis 'Centennial', Prostrate Coyote Bush			X			X							X
Bougainvillea 'La Jolla'	X						X	X			X		
Ceanothus 'Concha', California Lilac		X							X		X		X
Cistus salviifolius, Sageleaf Rockrose			X	X			X					X	
Coprosma kirkii, Creeping Coprosma	X	X									X	X	
Dicksonia Antarctica, New Zealand Tree Fern	X				X	X							
Echium fastuosum, Pride of Madeira		X	X									X	X
Encelia californica, California Encelia			X						X	X			
Eucalyptus forrestiana			X										
Heteromeles arbutifolia, Toyon			X						X	X			X
Lantana montevidensis, Trailing Lantana		X			X	X	X				X	X	
Leptospermum scoparium, New Zealand Tea Tree		X	X						X	X			
Melaluca nesophila			X			X		X	X	X	X		
Nandina domestica 'Gulf Stream', Heavenly Bamboo	X	X									X		X
Pittosporum 'Wheeleri'	X			X							X		X
Pittosporum tobira 'Variegata'		X				X					X		X
Raphiolepis indica, 'Clara', India Hawthorn	X	X	X		X		X	X	X	X	X	X	X

Shrubs & Ground Cover Listing

[illegible]