

U C BERKELEY PHYSICAL DESIGN FRAMEWORK

NOVEMBER 2009



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PREFACE

In March 2008, The Regents authorized the ‘pilot phase’ of a major reconfiguration of the capital projects approval process. This pilot phase would entail an initial test of the redesign, in order to examine its logistics and impacts prior to full implementation.

In general, the new process would delegate much more authority to the campus for project approval, and would limit project-specific review by The Regents to very large and complex projects. Each campus would prepare a set of ‘framework’ plans that outline its capital investment strategy and physical design approach. Once those plans are approved by The Regents, then as long as a project meets certain thresholds, and conforms to the framework plans, it could be approved by the Chancellor, subject to a 15 day review by OP. One of these thresholds is dollar value: the currently proposed figure is \$60 million or less.

The framework plans for Berkeley include 3 documents:

- The *2020 Long Range Development Plan* provides a land use policy framework, within which projects can be prioritized and planned.
- The *Physical Design Framework* describes the current state of the campus physical environment alongside our design objectives, and prescribes principles and guidelines to ensure projects in the capital plan meet the design objectives.
- The *2009-2019 Capital Plan* outlines both how the capital investment program would meet the campus’ academic and strategic objectives, and how the campus intends to fund the program. The *Plan* describes present conditions, outlines the campus’ objectives and priorities for the capital program, and details the campus’ financial strategy to meet those objectives.

The *2020 LRDP*, adopted by the Regents in 2005, prescribes a design framework and design guidelines for new capital investment at UC Berkeley through 2020. The *2020 LRDP* in turn draws upon several previous documents, including the *Strategic Academic Plan* (2002), the *New Century Plan* (2002), and the *Landscape Master Plan* and *Landscape Heritage Plan* (2004).

In 2007, at the request of The Regents, the Berkeley campus prepared and presented a Campus ‘Palette’. Although the *2020 LRDP* includes the Campus Park Guidelines, with special and more prescriptive guidelines for sensitive areas such as the classical core, The Regents expressed the view more comprehensive design guidance was required to create a coherent architectural image and identity for the Berkeley campus as a whole, particularly with respect to exterior design and materials.

This *Physical Design Framework* augments the design guidance in the *2020 LRDP* with the provisions of the Campus Palette, and also with more complete guidance for new capital investment in the City Environs. As described in the *2009-2019 Capital Plan*, the overwhelming majority of new construction proposed for the next decade would occur in the City Environs, not on the Campus Park. This *Physical Design Framework* recognizes the City Environs present design challenges very different from those on the Campus Park, and require different but complementary principles, and guidelines.



Sather Gate and Sather Tower (Campanile)

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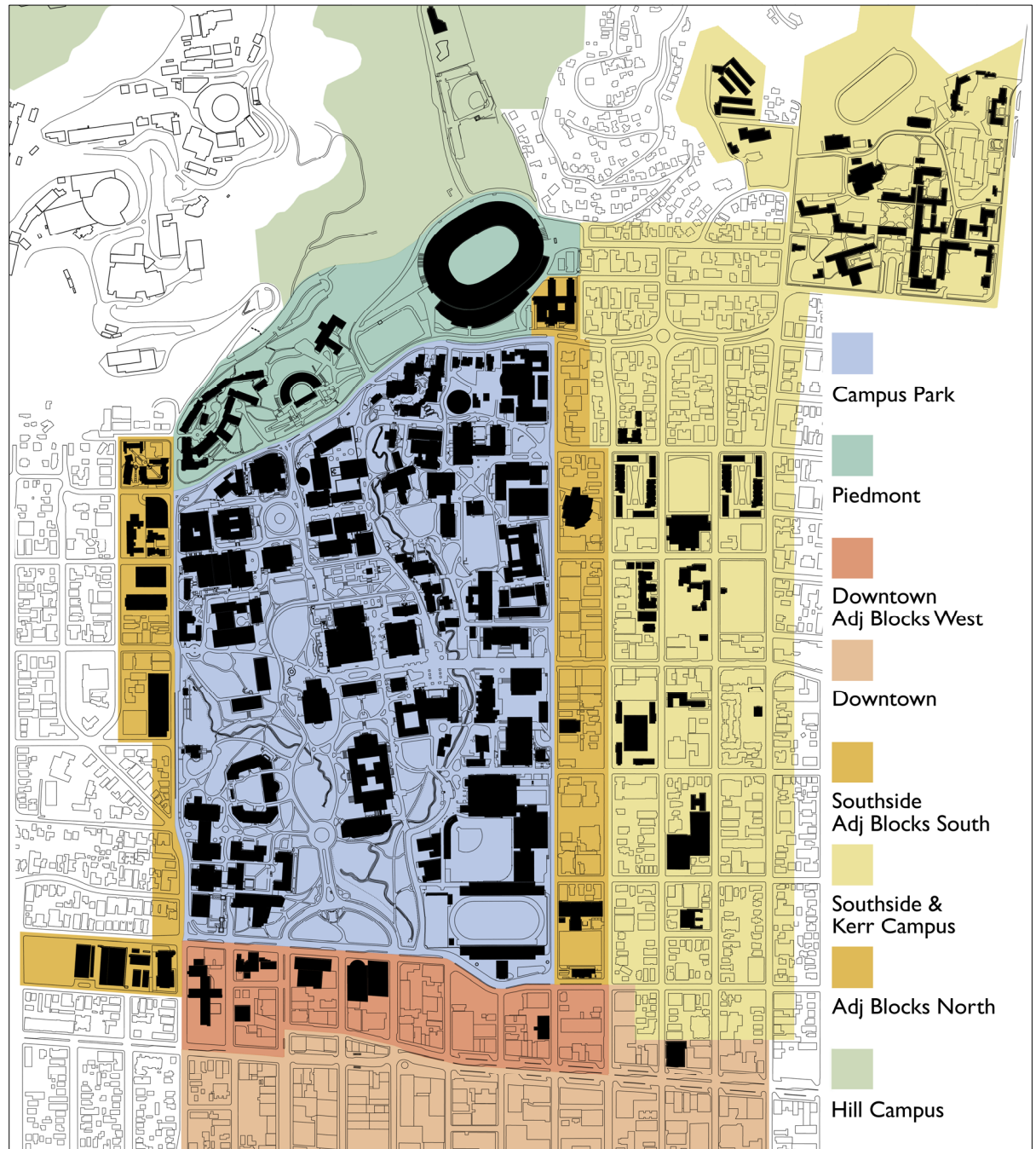


Figure 1. Design Zones

FRAMEWORK SCOPE

While the campus functions as a single academic enterprise, the areas that comprise it vary considerably in terms of physical capacity and environmental sensitivity. This *Physical Design Framework* is organized based on the following ‘Design Zones’, as shown in figure 1.

Like the 2020 LRDP, the *Physical Design Framework* excludes University Village Albany, Richmond Field Station, and other remote field stations and properties lying entirely outside Berkeley. These sites are sufficiently different from the main campus to warrant separate design guidance.

Campus Park

The historic 180 acre Campus Park, defined by Hearst on the north, Oxford/Fulton on the west, Bancroft on the south, and Gayley/Piedmont on the east, contained roughly 48% of the UC Berkeley space inventory in 2009. Although intensively developed, the Campus Park retains a distinctive parklike environment of natural and formal open spaces, as well as an outstanding ensemble of historic architecture. The Campus Park serves both as the center of campus intellectual life and as a scenic and cultural resource for the entire Bay region.

Piedmont

The *Physical Design Framework* also introduces a new zone, the Piedmont, lying between the Campus Park and the Hill Campus. The 2020 LRDP includes this area within the City Environs, but in fact its character is quite different. While the balance of the City Environs are comprised of relatively flat city blocks, the Piedmont lies at the base of the eastbay hills, and features both sloping terrain and a rustic woodland landscape.

Because the design challenges this area presents are also quite different from the City Environs, the *Framework* considers it a separate design zone. The term ‘Piedmont’ refers both to its geographical position - gently sloping land at the base of a range of hills - and the street, Piedmont Avenue, which defines the western edge of the zone. The Piedmont contained roughly 4% of the UC Berkeley space inventory in 2009.

Hill Campus

The Hill Campus consists of roughly 1,000 acres extending east from Stadium Rimway to Grizzly Peak Boulevard. 200 of these acres are managed under the separate jurisdiction of Lawrence Berkeley National Laboratory, and are not within the scope of the 2020 LRDP or this Framework. The Hill Campus contained roughly 2% of the UC Berkeley space inventory in 2009.

City Environs

The City Environs are defined in the 2020 LRDP to include the Adjacent Blocks, the Downtown, the Southside, and the balance of the City of Berkeley: in other words, the entire scope of the 2020 LRDP except for the Campus Park and Hill Campus.

The areas within the City Environs are comprised mostly of city blocks served by city streets, and include university properties interspersed with non-university properties. The City Environs contained roughly 27% of the UC Berkeley space inventory in 2009.

Note: In this Physical Design Framework the term ‘City Environs’ excludes the Piedmont, as explained above.

Since the adoption of the 2020 LRDP in 2005, UC Berkeley has collaborated with the City of Berkeley on city plans for two areas within the City Environs: Downtown and Southside. The areas covered by these plans include most of the Adjacent Blocks West, Adjacent Blocks South, and Southside as defined in the 2020 LRDP, but the boundaries differ in certain respects.

In this *Physical Design Framework* the boundaries of the Design Zones for the Downtown and Southside align with the aforementioned city plans. Figure 1 also delineates the ‘Adjacent Blocks West’ and ‘Adjacent Blocks South’: although these are part of the Downtown and Southside zones and plans, respectively, the section ‘Design Zones: City Environs’ describes how the physical conditions – and university objectives – for these blocks differ in certain respects from the balance of the Downtown and Southside.

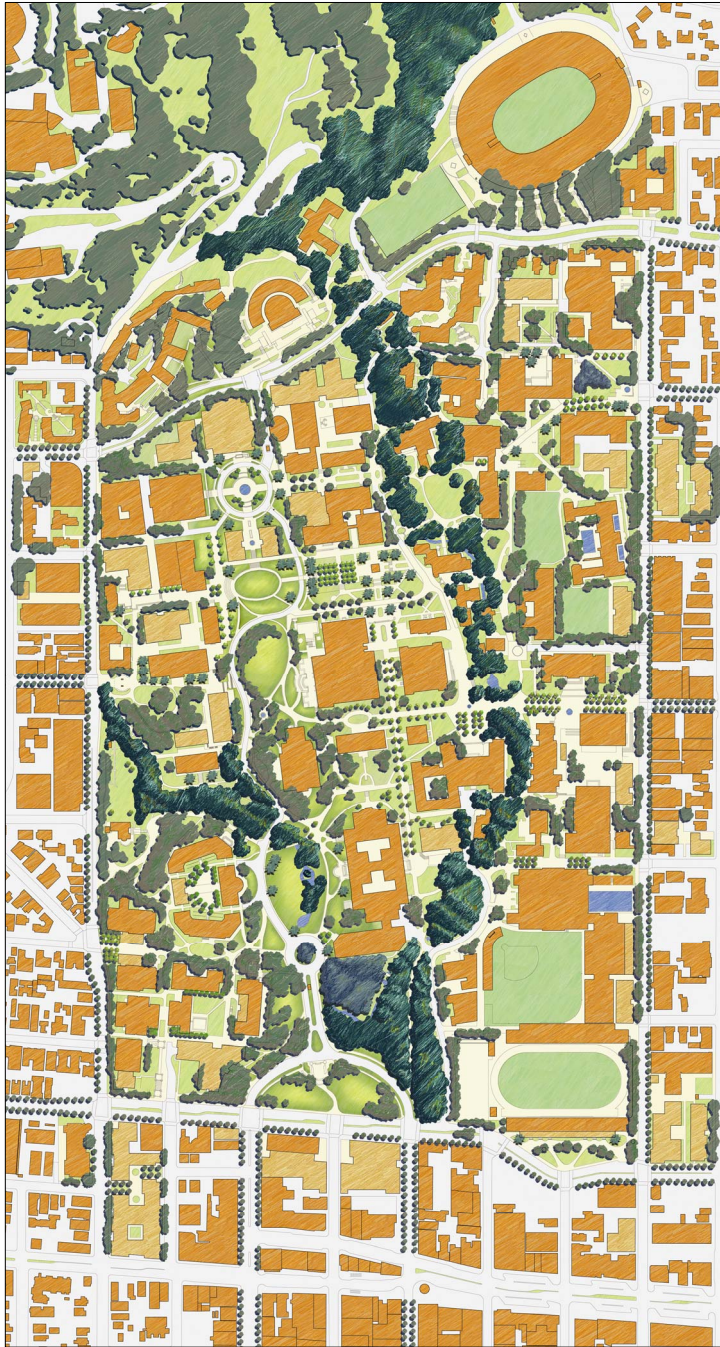


Figure 2. 2020 LRDP Illustrative Concept

RELATIONSHIP TO 2020 LRDP

The UC Berkeley *2020 Long Range Development Plan*, adopted by the Regents in 2005, prescribes a land use framework and design guidance for new capital investment at UC Berkeley through 2020. The *2020 LRDP* in turn draws upon several previous documents, including the *Strategic Academic Plan* (2002), the *New Century Plan* (2002), and the *Landscape Master Plan* and *Landscape Heritage Plan* (2004).

The *2020 LRDP* also prescribes a campus approval process for major capital investments. The *2009-2019 Capital Plan* augments this process with some refinements designed to:

- Maintain the alignment of project scope and budget from concept through delivery, and
- Implement a consistent and transparent process to prioritize and schedule capital investments.

This *Physical Design Framework* does not replace the *2020 LRDP*, but rather augments it to address the specific design challenges posed by the *2009-2019 Capital Plan*. The *Framework* also augments the *2020 LRDP* to incorporate events since 2005, including the adoption by the City of Berkeley of its new Downtown Area Plan, and also augments the provisions of the *2020 LRDP* with more complete guidance for new capital investment in the City Environs.

The design provisions of the *2020 LRDP* primarily focus on the Campus Park, the 180 acre historic core campus. Since the 2005 adoption of the *2020 LRDP*, several major new buildings have been completed or are now underway on the Campus Park, including Stanley Hall (2007), Starr Library (2008), Sutardja Dai Hall (2009), and the Center for Biomedical & Health Sciences, the Law School Expansion, and the Blum Center (all under construction).

However, the *2020 LRDP* includes only very general design guidance for the ‘City Environs’, the urban blocks that surround the Campus Park. As described in the *2009-2019 Capital Plan*, the overwhelming majority of new construction proposed for the next decade would occur in the City Environs, not on the Campus Park.

This *Physical Design Framework* recognizes the City Environs present design challenges very different from those on the Campus Park, and require different but complementary principles and guidelines.

RELATED CAMPUS PLANS

New Century Plan

Commissioned in 2000, the *New Century Plan* presents a compelling vision for the future of the Berkeley. The *New Century Plan* states:

The new century finds UC Berkeley at the threshold of major physical change. The substantial capital investments required to improve the seismic safety of our buildings, and accommodate the growing number of college-age Californians, also present us with a unique opportunity to leverage those investments to renew the campus, and provide the space and infrastructure we require to maintain the Berkeley standard of excellence. Because our resources are finite, however, we must strive to ensure each new investment:

- represents the optimal long-term use of land and capital for the campus as a whole,
- preserves and enhances our extraordinary legacy of landscape and architecture,
- provides the capacity and agility to meet future as well as current demands,
- contributes to a stronger and more vital intellectual community,
- improves the synergy of campus and community, and
- enhances the quality of campus life.

The *New Century Plan* is organized around a set of **Strategic Goals**. Each deals with an aspect of the capital investment strategy and is supported by **Policies** and **Initiatives**, which outline the specific actions the university should take to implement the Goals.

Policies are measures that guide and shape – and in some instances limit or prohibit – new capital investment, to ensure resources are used wisely and that the quality and amenity of the campus environment is enhanced by each project.

Initiatives are proposed actions that serve the campus as a community, beyond the project-oriented purpose of the Policies. Initiatives may be undertaken as opportunities are identified, often catalyzed by a specific project or projects.

The **Project Portfolio** section of the *New Century Plan* illustrates how the Policies and Initiatives might be realized. The **Project Guidelines** section augments the Policies with more detailed criteria for project Location, Space Utilization, and Design.

The *New Century Plan* concludes with a proposed new **Project Approval Process**, describing how the strategic elements of the *New Century Plan* would be used to frame and inform capital investment decisions. This process was subsequently formalized in the 2020 LRDP and its EIR.

The 2020 LRDP reflects the Goals, Policies and Initiatives articulated in the *New Century Plan* as well as two subsequent documents focused on the campus landscape and open spaces: the *Landscape Master Plan* and *Landscape Heritage Plan*.

Landscape Master Plan

In respect of the special character of the Campus Park and its environs, and building on the foundation of the *New Century Plan*, the campus conducted a more in-depth study of the history, legacy and potential future of its landscape. The two products of this effort are the *Landscape Master Plan (2004)* and the *Landscape Heritage Plan (2004)*.

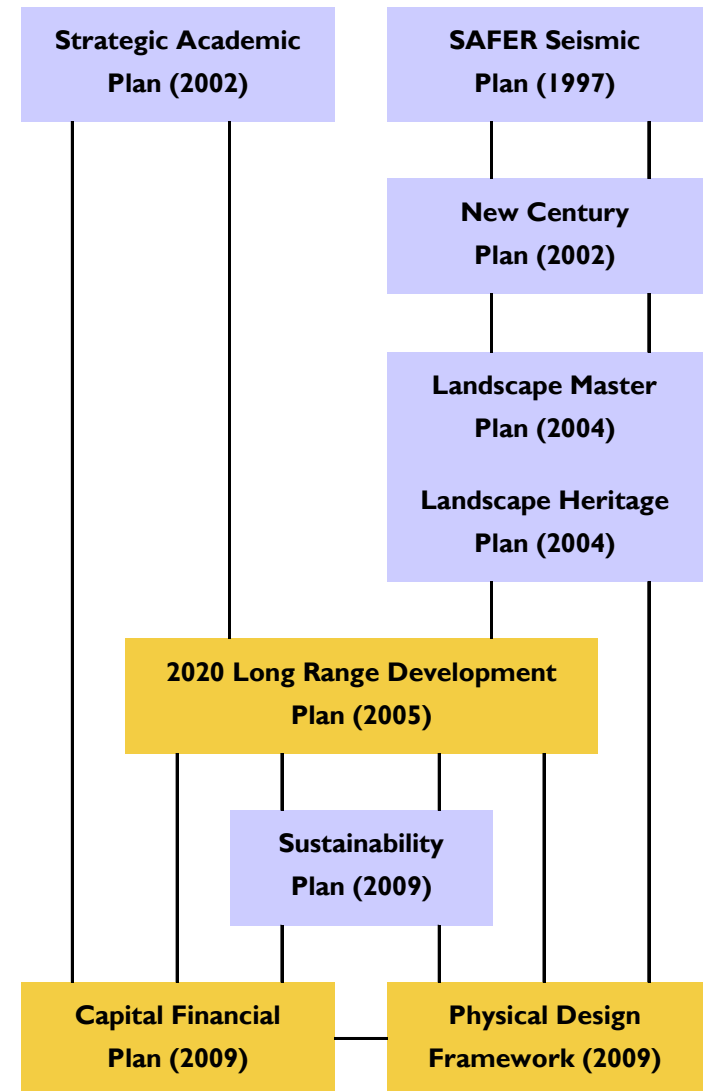
The *Landscape Master Plan* is a comprehensive, long range plan that guides the stewardship and development of the Campus Park landscape. The Plan presents a broad physical framework for the use and treatment of open space.

The *Landscape Master Plan* presents a thorough analysis of the physical setting and places of the Campus Park; articulates goals and defines objectives and policies; and describes a number of site-specific Initiatives. These Initiatives may be implemented as part of larger capital investment projects, or as separate projects financed through the Campus Landscape Fund proposed in the 2009-2019 *Capital Plan*.

Landscape Heritage Plan

The classical core of the Berkeley campus includes a multitude of landscapes reflecting a century and a half of American landscape design and its underlying concepts. The *Landscape Heritage Plan* represents the campus's commitment to preserve the historic legacy of the classical core. The campus provides for the continuing stewardship of its significant cultural landscape resources through research, documentation, planning and renewal based on the standards of the National Park Service Historic Landscape Initiative. The *Landscape Heritage Plan* provides a framework and guidance to ensure a successful balance between historic preservation and the accommodation of improvements to meet the needs of an evolving institution.

The *Landscape Heritage Plan* includes a rigorous historical analysis, placing the development of the Berkeley campus's landscape in the context of American campus design of the 19th and 20th centuries; guidance for undertaking historic landscape assessment and its application, with illustrative models; and design guidelines for site planning and landscape design.



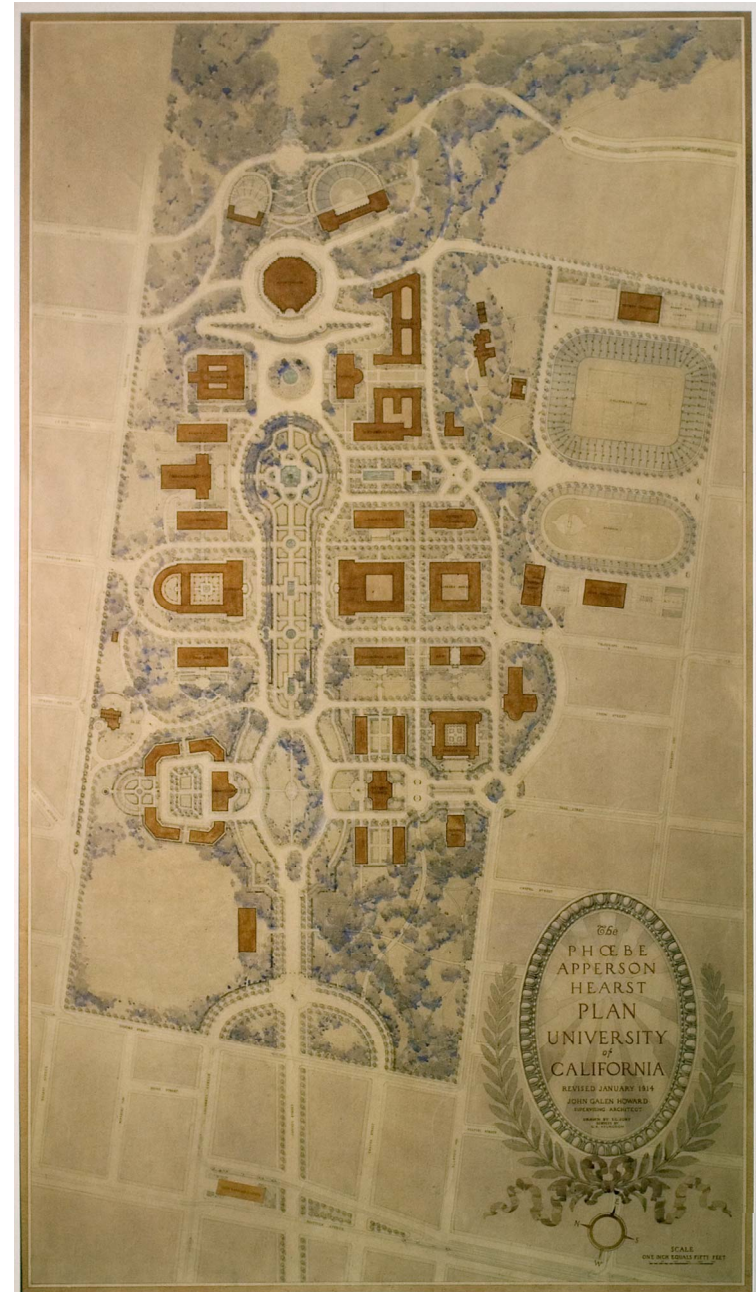


Figure 3. John Galen Howard Plan



Durant and California Halls



Hearst Memorial Mining Building



Stanley Hall

DESIGN ZONES: CAMPUS PARK

The heart of UC Berkeley is often described as a 'university in a park', and it is this parklike character that unifies its disparate buildings and diverse academic functions, and imparts a unique and memorable identity to the campus.

The founders of the University accepted a gift from the private College of California, and located their new institution on a 160 acre site on the east shore of San Francisco Bay. The site was a savanna of rolling hills, framed by the north and south forks of Strawberry Creek, with live oak, sycamore, and bay trees, and views west to the Golden Gate. Frederick Law Olmsted, designer of New York's Central Park, was commissioned to create the initial master plan for the new site.

At the turn of the 20th century, Phoebe Apperson Hearst, widow of mining magnate and U.S. Senator George Hearst, and later the first woman to serve on the Board of Regents, financed an international architectural competition for a master plan for the campus: a "grand vision worthy of the great University". The design contest, for a "city of learning, in which there is to be no sordid or inharmonious feature", brought the new campus at Berkeley not only a master plan but worldwide publicity.

Emile Bénard of Paris won the competition with an elaborate plan in the formal Beaux Arts neoclassical style, but it was fourth place winner John Galen Howard who was appointed to modify and implement the campus plan. Howard introduced a series of subtle but significant changes that made the plan, ultimately, more his than Bénard's.

The Olmsted and Howard Plans established two complementary design themes that have come to define the relationship of buildings and landscape in the Campus Park. The first theme, pursued in the Olmsted plan of 1866, emphasized the complex natural order of the site in its organic landscape forms and informal clusters of buildings. The second theme, pursued in the John Galen Howard Plan of 1914 (figure 3) sought to overlay on this natural landscape a formal composition of classical buildings, oriented along an east-west axis aligned with the Golden Gate. The unique character of the Campus Park results from the synergy of these two themes, the natural and the formal.

The Howard Plan also established an architectural direction for the Berkeley campus. Nearly 20 buildings in the neoclassical style, including some of the Campus Park's most elegant structures, were built under Howard's direction. Among them are the California Hall (1905), Hearst Mining (1909), Boalt (Durant) Hall (1911), Wellman Hall (1912), Doe Library (1911-1917), Wheeler Hall (1917), and Sather Gate (1910) and Tower (1914).



Wellman Hall



Sproul Hall



Dwinelle Hall

New neoclassical structures continued to be built through the first half of the 20th century to accommodate a growing student body and research program. After world war I, the exterior material shifted from granite to concrete, and the style and detail continued to become simpler and less ornamental, from the early ‘stripped classical’ buildings like Sproul Hall (1941) through Mulford and Lewis Halls (1948) and Bancroft Library (1949) to the end of the neoclassical line, the Law School (1951) and Dwinelle Hall (1952).

Simultaneously, a second tradition emerged on the Berkeley campus, one much more local in origin. Starting with Bernard Maybeck’s Faculty Club (1903), a series of smaller, more informally composed buildings were constructed along the forks of Strawberry Creek, most clad partly or entirely in wood shingles in the craftsman style. Others include North Gate Hall (1906), Naval Architecture (1914), Dwinelle Annex (1920), and the former Unitarian Church (1898).

The growth of the campus, due first to the GI Bill veterans and then the postwar boom generation, led to the campus’ first LRDP, which planned for the growth of the campus to 25,000 students, and then ultimately to a series of large and, in retrospect, insensitive and intrusive buildings through the 1960s, including McCone Hall (1961), Tolman Hall (1962), Barrows Hall (1964), Wurster Hall (1964), Moffitt Library (1970) and Evans Hall (1971). A new, four-building student complex was also built at the south gateway to campus: as described in Principles: Land Use, a plan to reconfigure and renovate the complex to meet the needs of 21st century students is now underway, although the investment program is still being defined.

Although intensively developed, the Campus Park today retains a magnificent legacy of natural and formal open spaces, as well as numerous historic buildings and ensembles. Preserving this legacy is a fundamental objective of the 2020 LRDP and the Physical Design Framework: each future project should be scoped and designed to enhance the image and experience of the campus, and the quality of campus life.



Strawberry Creek



Live Oak Glade



Central Glades

Land Use

The Campus Park is also our center of intellectual community, and there is a strong preference among academic programs for Campus Park locations. However, because university land is both scarce and finite, our use of land on and around the Campus Park must be strategic. As described in *Principles: Land Use*, space in the Campus Park is prioritized for programs that directly engage students and promote student-faculty interaction.

New space in the Campus Park would be produced through a combination of renovation and expansion of existing buildings, strategic building replacements, and new buildings on underutilized sites. Many of these renovations, expansions and replacements would be done in conjunction with seismic improvements. To ensure its parklike character is preserved, the Campus Park Guidelines define preservation zones to protect the campus' most significant open spaces: no new buildings may intrude into those areas.

Landscape

The natural landscape of the Campus Park provides a wide variety of experiences, from the shady, peaceful glens and rustic woodlands along Strawberry Creek, to the broad open lawns of the Central Glades. Located within the densely urbanized eastbay, the Campus Park is a precious resource for both the university and the city around it.

However, over the years the integrity of the landscape has been damaged by insensitively sited and designed projects. Sometimes the damage is obvious, such as the location of Evans and Moffitt within the Central Glades, while other times it is more subtle, such as the gradual and cumulative impacts of ongoing construction.

The *2020 LRDP* and *Physical Design Framework* take as axiomatic the principle there should be no further degradation of the Campus Park landscape. The first principle of design for the Campus Park, therefore, is to identify those areas of the landscape into which new buildings should not intrude. These 'preservation areas', described in *Principles: Landscape & Open Space*, and in more detail in the Campus Park Guidelines, include the campus' most significant natural areas, open spaces, and scenic vistas.



Starr East Asian Library



Starr East Asian Library and Doe Library



Bancroft Library and Doe Library

Architecture

While the campus does not have a single, coherent architectural vocabulary, it does have many buildings of great distinction, and the best of these comprise the 'classical core': the beaux-arts ensemble designed primarily by John Galen Howard, the first campus architect. The classical symmetry of these buildings, and their common palette of granite facades, tile roofs, and copper trim, impart a sense of unity and dignity to the heart of campus.

The campus identity is also shaped by another, more subtle ensemble: the variety of picturesque buildings, mostly located along the forks of Strawberry Creek, which also include a number of historic structures. In contrast to the formality of the classical core, these picturesque buildings are designed as informal, articulated volumes that respond to the natural contours of the site.

UC Berkeley includes 53 sites, structures, and features on the National Register of Historic Places, of which 28 are located on the Campus Park, Piedmont, and Adjacent Blocks. The majority are neoclassical buildings located primarily within the classical core, while the balance is comprised of picturesque buildings located primarily along the historic route of Strawberry Creek.



Faculty Club



Haas Business School



Naval Architecture (under renovation) and Sutardja Dai Hall

While the design of each campus building should reflect its own time and place, it should also reflect the enduring values of elegance and quality, and contribute to a memorable identity for the campus as a whole. Toward this goal, major capital projects are reviewed at each stage of design by the UC Berkeley Design Review Committee, a majority of who are design professionals of distinction external to the campus.

The Campus Park Guidelines guide these reviews to ensure they both reflect a coherent esthetic vision and support the academic goals of the campus. The Guidelines prescribe general design principles for the Campus Park as a whole, as well as more prescriptive criteria in selected areas where existing natural and historic features must be respected.

Given the importance of the historic context to the Campus Park, the DRC includes at least one architectural historian or other person with equivalent experience and knowledge in historic preservation. As part of project review, the DRC evaluates potential adverse impacts on cultural resources and recommends measures to minimize such impacts.

Circulation

The Campus Park is an intensively developed environment, laced with an intricate web of circulation systems that are complex and often confusing in their purpose, hierarchy, and linkages. There is a lack of signage leading to the campus, and a lack of a legible wayfinding system within it. Moreover, although the campus continues to implement a multiyear program of universal access improvements, some routes of travel on campus include segments that are not yet accessible for those with impaired mobility.

While the Campus Park is often described as a 'pedestrian' environment, in fact a wide variety of vehicles enter the campus on a typical workday: not just campus vehicles, but service and maintenance trucks, package service vans, construction vehicles and private cars. Not only do they pose a hazard to pedestrians, particularly on busy routes such as Sather Road and Campanile Way, they also cause paving and landscape damage which the campus has very limited funds to repair. As the campus becomes more congested due to both growth and construction activity, the unregulated flow of private vehicles through the Campus Park must be managed more assertively.

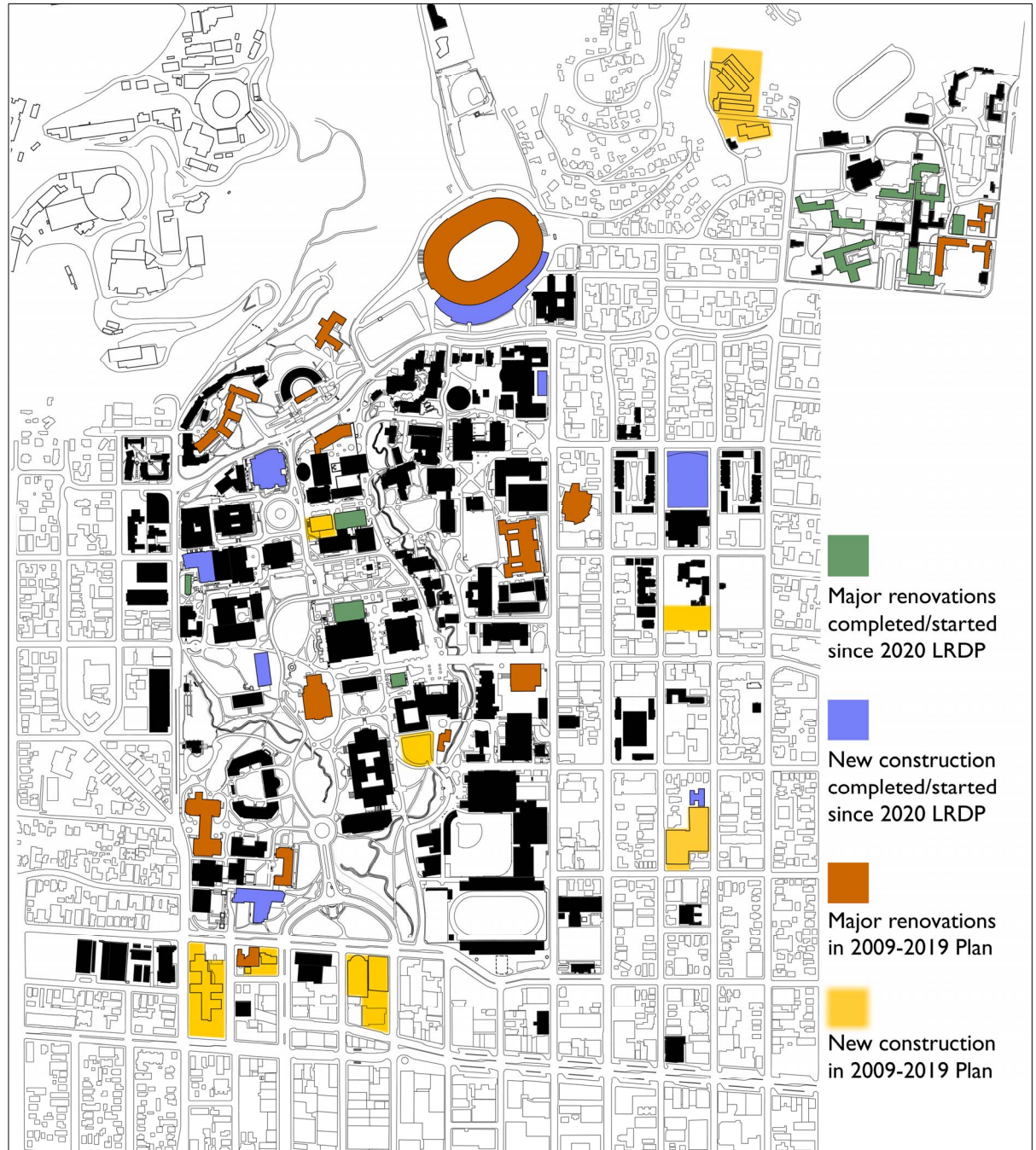


Figure 4. Recent and Proposed New Construction and Major Renovations

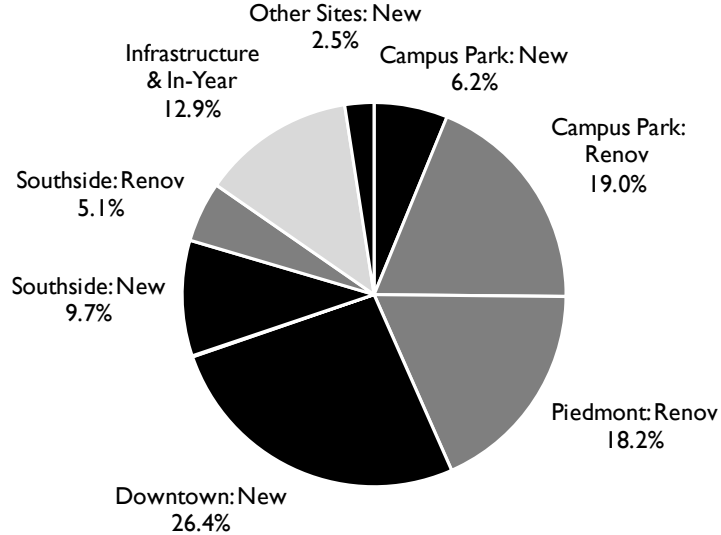


Figure 5. 2009-2019 Capital Plan
Dollar Value of New Construction and Renovation by Design Zone

DESIGN ZONES: CITY ENVIRONS

UC Berkeley is an urban campus, and the City Environs are as much a part of the Berkeley experience as the campus itself. The quality of city life, including its diverse and dynamic mix of students and non-students, is a large part of what makes UC Berkeley a unique and desirable place to learn, work, and live.

The areas within the City Environs consist mostly of city blocks served by city streets, and include university properties interspersed with non-university properties.

The 2020 LRDP recognized it is not possible to accommodate all projected future space demand through 2020 on sites within the Campus Park. The Location Guidelines in the 2020 LRDP prioritized Campus Park space for programs that directly engage students and promote student-faculty interaction: at least some of the growth in other programs must be accommodated elsewhere within the City Environs.

In the initial years following adoption of the 2020 LRDP in 2005, several major new projects have been completed or were under construction in 2009 on the Campus Park, as shown in figure 4. However, as proposed in the 2009-2019 Capital Plan, the overwhelming majority of **new construction** through 2020 would occur in the City Environs – Downtown and Southside – not on the Campus Park, as shown in figure 5.

Since the adoption of the 2020 LRDP the City of Berkeley has adopted a new Downtown Plan, and is finalizing the long delayed Southside Plan. UC Berkeley actively collaborated with the city and community in the formulation of both plans. Although the university is not subject to municipal regulations, UC Berkeley has committed in principle to using these plans as its guide for the location and design of new projects within these areas.

In this *Physical Design Framework* the boundaries of the Design Zones for the Downtown and Southside align with the aforementioned city plans.

DOWNTOWN

Viewed on a map, the juxtaposition of Downtown and the grand west entrance to the Campus Park might suggest an elegant, vibrant interface of town and gown, but this potential is largely unrealized. While the downtown BART station and bus lines from the north and west ensure a steady flow of people through the blocks west of campus, the visible university presence on these blocks in 2009 consisted of a vacant printing plant, a parking structure, a bus garage, and a generic late 1950s office building.

History

A central downtown began to take shape in Berkeley in the 1870s, and reached its peak of development in the 1920s and 1930s. The evolution of Downtown in this period followed the traditional pattern of American cities, with a grid street pattern and most buildings built to the frontage line, with apartments or offices above street-level storefronts. The broad right-of-way of its main street, Shattuck Avenue, held several intercity streetcar tracks, and became a focus of retail activity. The image and experience of Downtown today is largely defined by its historic buildings constructed during this period.

But by the 1970s, the Downtown's role as a regional retail destination was in decline and the pace of investment slowed. Streetcar service ceased in 1958, and by the time BART opened its Downtown Berkeley station in 1973, retail centers with easy auto access were eclipsing traditional downtowns. BART construction itself was also a major disruption to Downtown for several years. However, in response to these economic trends, Berkeley did not embrace the 'urban renewal' schemes of the 1960s and 1970s, in which other cities tore down whole blocks of historic fabric to create sites for large scale redevelopment. Much of Berkeley's historic fabric remains intact and is highly valued by Berkeley residents.

Since the 1960s, the university has played a growing role in the Downtown, as university programs and their need for space continue to grow. Because land on the traditional Campus Park is limited, the university has leased, acquired, and developed space in Downtown and, as noted above, the 2020 LRDP anticipates significantly more over the next decade.

The other major new trends in Downtown over the past 20 years have been the growth in cultural facilities and new housing. While students occupy most of this new housing, nonstudents occupy a significant amount, partly because at least 20% of all units must be affordable to low- and very low-income households: many students are dependents and do not qualify, or have not lived in Berkeley long enough to qualify.



Center Street at Oxford – new Art Museum site on right



Shattuck Hotel



Center Street Storefronts and Streetscape

Downtown's reputation as a center for theatre and the arts was also strengthened in the past 20 years, with development of the 'Arts District' along Addison Street, including a second stage for Berkeley Repertory Theater, the Aurora Theater, the Freight and Salvage folk music club, and other arts venues, along with a cluster of cinemas.

Downtown Plan

The effort to create a new Downtown plan for Berkeley was initiated in 2005 following the adoption of the 2020 LRDP, which envisioned up to 800,000 net new gsf of campus space on the blocks just west of the Campus Park by 2020.

In 2005 the city designated a 21 member Downtown Area Plan Advisory Committee, with 3 additional ex officio members appointed by the university. After nearly 100 meetings over two years, the committee produced its draft Downtown plan in late 2007 and presented it to the city for review and deliberation. After making a few substantive revisions to the draft, most notably with respect to building heights, the city adopted the new Downtown Area Plan in July 2009.

Although the university is not subject to municipal regulations, UC Berkeley has committed to using the Downtown Area Plan as its guide for the location and design of new projects within the downtown. The Adjacent Blocks West are within the scope of the Downtown Area Plan, but these blocks have special importance to the UC Berkeley capital investment program:

Adjacent Blocks West. The Adjacent Blocks West offer enormous potential to enhance the synergy of campus and city. Viewed on a map, the juxtaposition of Downtown and the grand west entrance to the Campus Park might suggest an elegant, vibrant interface of town and gown, but this potential is largely unrealized.

The majority of new UC Berkeley construction from now through 2020 would occur in the Adjacent Blocks West. Although a significant amount of investment is also envisioned for the Campus Park, it is mostly renovation, as shown in figures 4 and 5. As described in Principles: Landscape & Open Space, this program of new investment also creates the potential to transform the public realm of this section of Downtown, through the frontage improvements normally installed as part of any large urban project.

The largest single university development site in the Adjacent Blocks West is the former State Department of Health Services site, acquired by the university in 2006. This site, at the north end of the Downtown, has an estimated development capacity of up to 420,000 gsf under the parameters prescribed in the Downtown Plan.

SOUTHSIDE

The dense and diverse Southside includes only about 2.5% of the land in the City of Berkeley, but accommodates 10% of its residents. Southside, including the Clark Kerr and Smyth Fernwald complexes, is and will continue to be the primary district of residence for UC students, housed in both university owned and privately owned residences.

History

The origins of the district date to the 1850s when the College of California purchased land in then-rural Berkeley. The land located south of Strawberry Creek was parceled by the College and sold for development. During the last quarter of the 19th century, the Southside area became a residential district, with private homes and student living groups, churches, and some commercial buildings along Telegraph Avenue. In the early 20th century, arrival of streetcar lines, the growth in size and prestige of the university, and the post-earthquake exodus from San Francisco contributed to rapid development. However, although the new buildings, including apartments, hotels, clubs, and mixed-use retail and residential structures along Telegraph, were often larger, they maintained the fine-grained pattern of multiple buildings on each block.

An early example of this pattern is the Anna Head School complex, now owned by the university. The complex of brownshingle buildings is on the National Register of Historic Places, and may be the first examples of the brownshingle style in Berkeley.

During the 1940s through the 1960s, the character of the Southside was transformed by a second wave of growth, first with immigrating war workers, then with the expansion of the university due first to returning veterans and then to the postwar generation of students. In response, in the 1950s the University began a program to acquire land south of Bancroft. On most of these blocks, existing buildings were demolished and, in the ensuing decades, new facilities built, including three dormitory complexes with four towers each, the Underhill parking/playfield structure, the Berkeley Art Museum and, as the unplanned outcome of another planned student housing complex, People's Park.

These university projects, in which a single building or complex of new buildings would cover much of a single block, had a significant impact on the fine-grained urban fabric of the Southside. The buildings often turned their back to the street to create internal amenities for the complex, leaving blank walls and loading docks to face the street.



Telegraph Avenue at Bancroft Way



Anna Head Complex



Typical Southside Apartments

During this same period, from the late 1940s through the 1960s, many family and older residents moved from the Southside to the Berkeley hills or more distant suburbs. They were replaced by a younger and more transient student population. This led to a considerable transformation in the character of the older single family parts of the Southside.

Some single family homes were converted into multiple rental units, while others were demolished to make way for larger apartment buildings for the student market. These buildings were characteristically of modern design, with simple plaster exteriors, flat roofs, metal window frames, and blank parking garages on the ground floor. Often, they were built very close to lot lines and the sidewalk.

By the 1970s the pace of physical change slowed, in part due to community activism around development issues. Over the past two decades, non-university development has been limited to relatively small infill projects. In the last decade, however, the university has made significant new investments in student housing, recreation, and parking in implementing the 1999 *Underhill Master Plan*.

UC Berkeley has constructed over 1200 new bed spaces in the Southside during the last decade, and another 890 are proposed by 2020. UC Berkeley also replaced the Underhill parking/playfield structure, which had been razed in the late 1990s due to seismic hazard, and constructed Crossroads, a new dining commons with a plaza open to the street, to replace the old cafeterias internalized within the midcentury dorm complexes.

Southside Plan

In 1997, the City of Berkeley and UC Berkeley signed a Memorandum of Understanding, which states ‘the city and the university will jointly participate in the preparation of a Southside plan ... the campus will acknowledge the plan as the guide for campus developments in the Southside area.’ City and university staff prepared a first draft plan in January 2000. The city established working groups on transportation and land use and housing to review the plan and recommend changes. The city then produced a new draft plan in July 2003 and, a year later, initiated preparation of an EIR. Due primarily to transportation issues, the draft EIR was not released for public review until April 2008. Following public review, the city began a process to update the Plan itself, since many of its provisions had become outdated. The City issued a new draft in 2009, has initiated a new round of reviews by the planning commission, and now hopes to adopt the Southside Plan in the near future.

Despite the delays, however, most of the substance of the 2003 draft remains largely intact in the 2009 draft. Although UC Berkeley can not commit formally to using the document as its guide for the location and design of new projects in the Southside until the current review and update is complete, and the changes to the 2003 draft have been reviewed, the Southside Plan in its present form serves as an important reference for the campus, and many of the principles for the Southside in this *Framework* are drawn directly from the Southside Plan.

The Southside as described in this *Physical Design Framework* includes the area covered by the Southside Plan plus the Clark Kerr and Smyth Fernwald sites, as shown in figure 1 and described below. The Adjacent Blocks South, although part of the Southside and the Southside Plan, are given special consideration in this *Framework* because of their distinct character and their relationship to the Campus Park.

Adjacent Blocks South. The Southside Plan recognizes the unique role of the Adjacent Blocks South in the context of the Southside. While the balance of the Southside is first and foremost a residential district, a condition the Southside Plan aims to preserve and reinforce, the blocks along Bancroft Way facing the Campus Park are mostly nonresidential. Those blocks include the Berkeley Art Museum, the Tang Health Center, two university-acquired office buildings, and two university parking lots, as well as commercial buildings on the blocks east and west of Telegraph.

The Southside Plan recognizes this distinction with land use and design criteria which encourage a mixed-use character and more intensive site utilization than in the balance of the Southside. Although the renovation of the Old Art Museum is currently the only defined project in the Adjacent Blocks South through 2020, as funding permits the two parking lots are envisioned to be redeveloped with new university buildings.

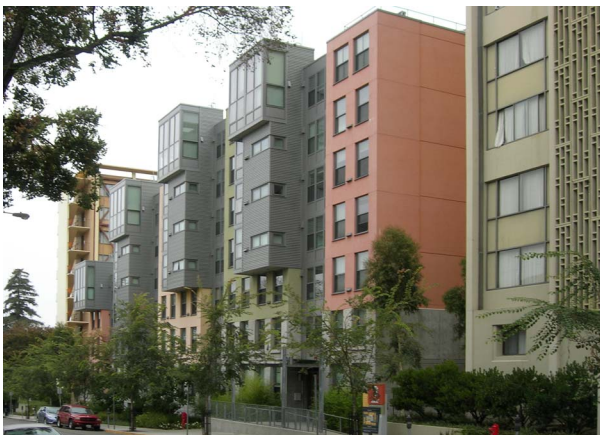
Balance of Southside Plan. A stated goal of the Southside Plan is to ‘... Encourage a land use pattern which provides for a high density mixed-use edge to the UC campus and spine along Telegraph Avenue ... the high density edge and spine [frame] less dense areas, which progressively become less dense and more residential in use [as they] transition to the lower density residential areas to the east and south ...’ The two student housing projects envisioned by 2020 are within the high density residential zone of the Southside Plan, and are consistent with the intent of this zone designation.



Crossroads Dining Commons



Southside UC Student Apartments



Southside UC Residence Halls

Clark Kerr Campus. The Clark Kerr Campus, acquired from the State in 1982, contains 25 buildings with 839 student beds, a dining commons, auditorium, and conference center. The entire complex is on the National Register of Historic Places.

In 1982 the university executed a Declaration of Covenants and Restrictions with neighboring property owners and a Memorandum of Understanding with the City of Berkeley, both of which commit the university to a site plan and land use program on the Clark Kerr Campus for a period of 50 years. No significant change in either use or physical character is anticipated within the timeframe of the 2020 LRDP or the *Physical Design Framework*.

A 3-phase renewal of the historic **Clark Kerr Campus** was initiated in 2007. The phase 1 renovation of 3 buildings with 330 student beds was completed in summer 2009. The phase 2 renovation of 4 buildings with another 313 beds is now underway, to be completed in summer 2010. The third and final phase, comprised of 3 buildings with 196 beds, is proposed to begin in 2015-2016.

However, the renovation does not include any significant changes to site or design: the design concerns primarily involve historic integrity, and the campus will continue to address these concerns in the project-specific historic evaluations, guidelines, and design reviews required by the 2020 LRDP.

Smyth Fernwald. The 74 1940s vintage, student family units at Smyth Fernwald are planned to be vacated. All student family housing in the future is planned to be accommodated in the 974 units at University Village in Albany. Once the old housing is vacated and razed, the site is planned to be redeveloped with up to 154 new apartment units prioritized for new untenured ladder faculty, to meet the faculty housing objective set by the 2020 LRDP.



Bowles Residence Hall



International House



California Memorial Stadium

PIEDMONT

The *Physical Design Framework* includes a new land use zone, the Piedmont, lying between the Campus Park and the Hill Campus, as shown in figure 1. The 2020 LRDP included this area within the Adjacent Blocks, but in fact its character is quite different. While the balance of the Adjacent Blocks zone is comprised of relatively flat city blocks, the Piedmont lies at the base of the eastbay hills, and features both sloping terrain and a rustic woodland landscape. Because the design challenges this area presents are also quite different from the Adjacent Blocks, the *Framework* considers it a separate land use zone. The term ‘Piedmont’ refers both to its geographical position and the street, Piedmont Avenue, that defines the western edge of the zone.

A master plan for development of the southern portion of the Piedmont was outlined in the 2006 *Southeast Campus Improvement Plan EIR*, which also incorporated a portion of the Campus Park. The SCIP includes the construction of the new Student Athlete High Performance Center adjacent to the historic Memorial Stadium, as well as the seismic remediation and renovation of the Stadium itself, plus several other future projects. While the timing of those other projects is not yet determined, the Student Athlete Center is under construction and the renovation of Memorial Stadium is in design.

Although four projects within the Piedmont are planned to occur by 2020, all are renovations. The seismic renovation of Memorial Stadium is proposed for Regental design consideration in January 2010. The future renovations of Bowles and Stern residence halls, and the seismic retrofit of the Greek Theater, do not anticipate any significant changes to site or design: the design concerns primarily involve historic integrity, and the campus will address these concerns in the project-specific historic evaluations, guidelines, and design reviews required by the 2020 LRDP. Memorial Stadium, Bowles Hall and the Greek Theater are on the National Register of Historic Places.

PRINCIPLES: INTRODUCTION

The Principles in this *Physical Design Framework* cover three aspects of campus design:

- **Land Use**
- **Landscape and Open Space**
- **Architecture**

The Principles incorporate the Berkeley Campus Palette and are followed by the Campus Park Guidelines. The Palette provides guidance on architectural form, design, and materials for projects both within the Campus Park and in the City Environs. The Campus Park Guidelines, excerpted from the 2020 LRDP, provides more comprehensive guidance for projects within the Campus Park, including special criteria for those areas with unique environmental or historical features.

Although the 2020 LRDP includes some general principles relevant to the City Environs, they have been updated and augmented in this *Framework* to reflect not only the Southside and Downtown Plans, but also the shift in new capital investment from the Campus Park to the City Environs envisioned in the 2009-2019 *Capital Plan*, including several new projects which had not yet been defined at the time of the 2020 LRDP.

PRINCIPLES: LAND USE

The breadth and quality of our academic programs is the equal of any university in the world, but UC Berkeley is more than the sum of its parts. A great research university also requires a vital and dynamic intellectual community, one that provides exposure to a wide range of cultures and perspectives, and generates the encounters and interactions that lead to new insight and discovery. For such a community to thrive requires a campus organized and designed to foster those interactions.

Although the academic structure of the campus reflects the traditional disciplines defined over a century ago, those disciplines are no longer insular and self-contained. For example, the health sciences initiative brings researchers from physics, biology and chemistry together to study phenomena at the molecular level, while our programs focused on culture, gender, and ethnicity integrate the humanities and social sciences.

Because the potential for synergy is everywhere at UC Berkeley, our first principle of land use should be to retain and reinforce the contiguity of the academic enterprise, in order to encourage interaction and exchange both within and across disciplines.

The need for growth, combined with the principle of contiguity, requires an increase in density on and around campus. As shown in figure 4, the campus and its environs include a number of sites suitable for more intensive development, including surface parking lots and older academic buildings with both seismic and functional deficiencies. However, because UC Berkeley is an urban campus, each of these sites exists within an established physical context that includes many significant natural and cultural resources.



Figure 6. 2020 LRDP Landscape Preservation Zones

Principles: Land Use

- **Accommodate new and growing education and research programs primarily through more intensive use of university owned land on and adjacent to the Campus Park.**
- **Prioritize Campus Park space for programs that directly engage students in education and research.**
- **Prioritize sites on Adjacent Blocks for other research, cultural and service programs that require Campus Park proximity.**
- **Prioritize the Downtown for university functions that serve or engage visitors and the public.**
- **Maintain and enhance the residential scale and character of the Southside beyond the Adjacent Blocks.**

Campus Park

Land at UC Berkeley is a scarce and finite resource, and it is neither feasible nor desirable to house every campus function on or adjacent to the Campus Park. In order to optimize the use of campus resources, and ensure space on or adjacent to the Campus Park is reserved for programs that require it, future capital investment at UC Berkeley should be informed by the Location Guidelines prescribed in the *2020 LRDP*.

City Environs

Because of its excellent transit service and suitability for more intensive land use, the Downtown should be prioritized for university facilities that serve or engage the public. The *2009-2019 Capital Plan* includes several such facilities on Downtown sites: the new Berkeley Art Museum; the Community Health Campus, which collocates the School of Public Health and other health science programs with a clinical, community based focus; and a new Conference Hotel and Executive Education Center.

In the Southside, the blocks adjacent to campus should be prioritized for programs that need to be proximate to the Campus Park, particularly student services and organizations, given the concentration of student residents in the Southside. Investment in the balance of the Southside should respect and enhance the residential character of the district.

PRINCIPLES: LANDSCAPE & OPEN SPACE

The UC Berkeley campus is a unique synergy of natural and formal elements. The organic forms of the creek and the sloping terrain contrast with the axial geometry of historic places such as Campanile Way and Esplanade. Together, these elements provide the campus with a rich variety of open spaces, and a peaceful counterpoint to our urbanized environs.

Open spaces for both quiet contemplation and active recreation have always been an integral part of the campus. The removal of the wartime-vintage 'T buildings' and the construction of Memorial Glade restored John Galen Howard's original vision of a grand central open space at the heart of campus. Yet, notwithstanding this one outstanding example, capital investment at UC Berkeley in recent years has focused almost entirely on our aging buildings and infrastructure, rather than the landscape.

LANDSCAPE

Principles: Landscape

- **Preserve significant views, natural areas, and open spaces within the Campus Park.**
- **Implement an ongoing program of investment to restore and renew the Campus Park landscape.**
- **Collaborate with the City on a master plan and guidelines for public realm improvements in the Downtown.**
- **Include street frontage improvements to implement the master plan in each new Downtown project.**

Campus Park

The *2020 LRDP* takes as axiomatic the principle there should be no further degradation of the Campus Park landscape. The first principle of design for the Campus Park, therefore, is to identify those areas of the landscape into which new buildings should not intrude. These 'preservation areas', shown in figure 6 and described in detail in the Campus Park Guidelines, include the campus' most significant natural areas, open spaces, and scenic vistas.

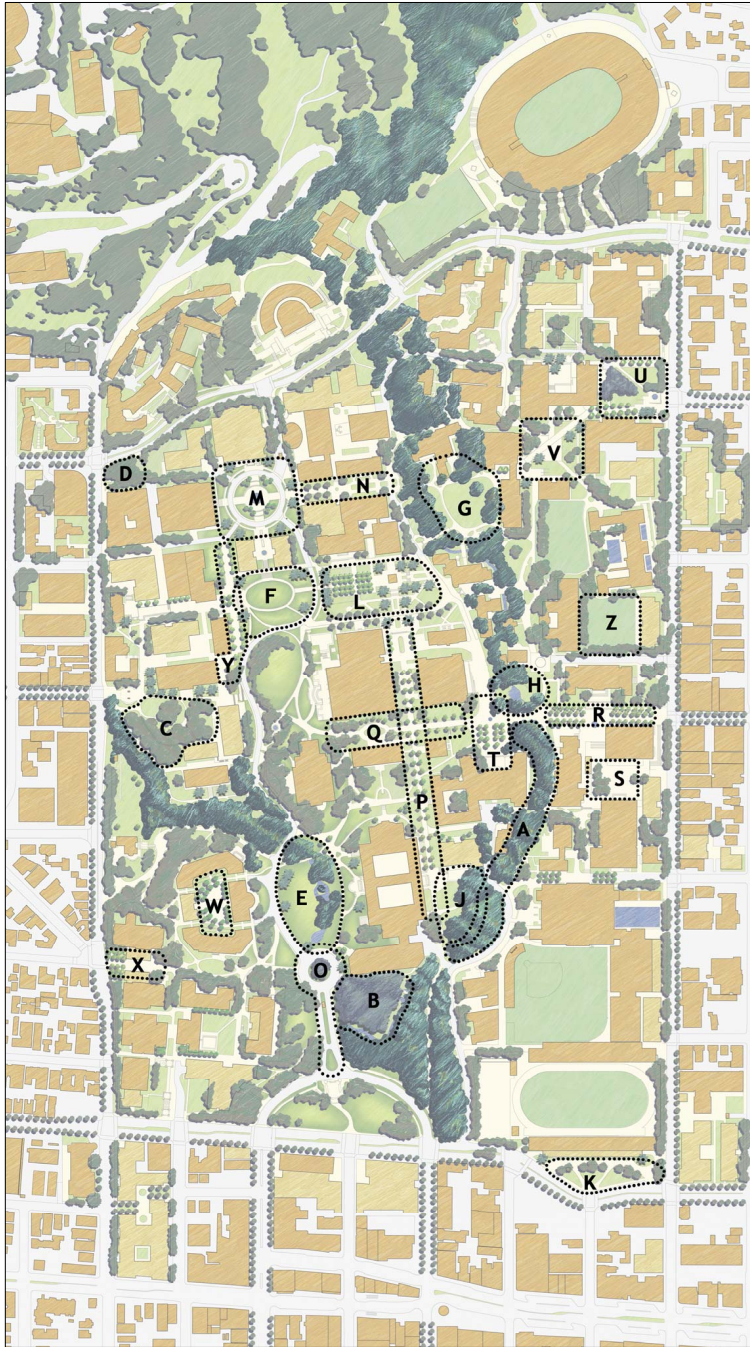


Figure 7. 2020 LRDP Landscape Initiatives

The experience of the Campus Park is created by the synergy of buildings and landscape, and the character of many of our open spaces depends to a great extent on how they are framed and defined by the buildings around them. For this reason, some of the preservation areas described in the Campus Park Guidelines include setback and build-to lines, to ensure their character is maintained and reinforced by new buildings.

Many areas of the campus landscape are dominated by plants nearing the end of their natural life cycles: this problem is particularly acute for the many specimen trees and groves that serve as campus landmarks and frame key vistas. The natural riparian areas along the creek forks reveal the cumulative impacts of erosion, unstable banks, and the displacement of native plants by invasive exotics.

The 2009-2019 *Capital Plan* recommends a new Campus Landscape Fund, to solicit gift funds for both restoration of the existing landscape and for selective landscape and open space improvements.

City Environs

Our objective to respect and enhance the City Environs requires more than just sensitive building design: it also requires that each university project in the City Environs contribute its fair share of improvements to the adjacent public realm, including undergrounding surface utilities and improving paving, planting, and lighting within the project frontages.

The city's new Downtown Plan recommends a master plan and guidelines for street improvements in the public realm. Within the Adjacent Blocks West, university owned sites occupy a substantial amount of the street frontages, and the incorporation of public realm improvements into each new university project would have a transformative impact, benefiting not only the community but also the image and identity of the university. The campus should collaborate with the city in formulating this master plan, and then implement it project by project.

OPEN SPACE

The campus landscape is not only an extraordinary natural and visual resource, it also serves as an important complement to spaces within buildings, as a venue for relaxation, recreation, and interaction.

Principles: Open Space

- **Implement a program of strategic investment in new and enhanced open spaces within the Campus Park and City Environs.**
- **Utilize landscape and open spaces to help create a distinct university image and identity for projects in the City Environs, but**
- **Design those landscape and open spaces as urban places that respect and enhance the urban fabric.**
- **Design future projects in the City Environs to frame, observe, and activate the public realm and internal open spaces.**

Campus Park

To the casual observer, the mature campus landscape seems deceptively stable, but a closer look reveals the impacts of age, intensive use and misuse, and lack of investment. The great beauty of the campus, often taken for granted, is in fact increasingly fragile, particularly as campus land use becomes more intensive.

The lack of past investment is also evident in the campus' formal open spaces. While few would dispute the value of places such as Sproul Plaza or Campanile Way, due to the lack of funds for renewal many campus open spaces have fallen into severe disrepair. Our capital investment program should acknowledge the critical role of our landscape and open spaces in the image and experience of the campus, and include proactive measures to reverse their decline.

In order to guide and prioritize future investment in campus open spaces, the UC Berkeley *Landscape Master Plan* has identified 29 initiatives, as shown in figure 7: 25 place-specific initiatives plus the four urban edges of the Campus Park. The *2009-2019 Capital Plan* recommends a special Campus Landscape Fund, to solicit gift funds for landscape improvements on the Campus Park. The program of improvements would be based on the landscape initiatives presented in the *Landscape Master Plan*.

City Environs

The valued role of open space in fostering intellectual community is not limited to the Campus Park. As described further in Principles: Architecture, below, new university projects in the City Environs should also incorporate the landscape as an integral part of the design, but the Campus Park pattern of buildings set within an organic landscape should be reversed.

In the City Environs, **building forms should frame and define streets and open spaces**, and in general the open spaces should be scaled and designed to serve building users and visitors rather than the campus community as a whole. In facilities oriented primarily to visitors, such as the new Art Museum or the campus visitor center, the open space can and should have a vibrant public character, whereas a primarily academic facility like the Community Health Campus may have a quieter, more internal space, designed for the students, faculty, and researchers who work in the complex or visit it often.



Class in the Glades



Sproul Plaza



Free Speech Cafe



Campanile Esplanade

PLACES OF INTERACTION

Of particular importance to the goal of a vital intellectual community are spaces designed to encourage informal interactions both within and among disciplines.

Principles: Places of Interaction

- **Create places of interaction at key nodes of activity in the Campus Park and the City Environs.**
- **Program and design new buildings to promote activity in, and ensure the safety of, places of interaction and the public realm.**

Campus Park

As described in the 2020 LRDP, several Campus Park open spaces have the potential to become true 'places of interaction', because they are located on major pedestrian routes and/or because they are framed by multiple buildings housing a variety of academic programs.

For such places, moreover, the program and design of adjacent buildings is as important as the design of the places themselves. Buildings should be programmed and designed so active interior spaces face and observe major pedestrian routes and places of interaction, and help ensure the campus is a safe place to work and study at any hour, as prescribed in the Campus Park Guidelines.

City Environs

The above principle is just as true for places of interaction in the City Environs. While the Downtown offers a wide range of cafes and restaurants, these are often not suited to longer and more in-depth conversations, particularly when those conversations involve the very differences in perspective and opinion that challenge existing conventions and open new paths of inquiry. Not only should new projects in the City Environs incorporate on-site open spaces, as noted above, but they should be scaled and designed to foster the kinds of interaction essential to academic life.



Figure 8. Downtown: Adjacent Blocks West Public Realm

This diagram shows how new projects on university owned sites (yellow) in the downtown blocks adjacent to the Campus Park (blue) could, in combination with public realm improvements, have a cumulative transformative impact on the environmental quality of the downtown. Oxford Street (#1) can be transformed from a boundary into a green 'seam' that extends the campus landscape and connects rather than divides campus and city. Center Street (#2), the main pedestrian route from the BART station (red) to campus, can be transformed into a primarily pedestrian street activated by the new museum (#3) and conference hotel (#4). Helios West (#5) and the Community Health Campus (#6) include a new open space scaled to the urban fabric and framed and defined by the buildings. University Avenue (#7), the main vehicular route to campus, can become a landscaped green boulevard at its terminus to signal arrival at the campus.

PRINCIPLES: ARCHITECTURE

The 2020 LRDP prescribes comprehensive design guidance for new construction on the Campus Park. However, most of the new capital investment envisioned in the 2009-2019 Capital Plan would occur in the City Environs, for which the 2020 LRDP provides relatively little guidance.

Moreover, even within the Campus Park, the 2020 LRDP focused primarily on the classical core and other areas with a strong historic context. Such referential guidelines were not as helpful in areas toward the periphery, with a mix of buildings of various periods, scales, and styles.

At the request of the Regents, the Berkeley campus prepared and presented a Berkeley Campus Palette in 2007. Although the 2020 LRDP includes the Campus Park Guidelines, the Regents expressed the view those guidelines were not comprehensive enough to create a coherent architectural image and identity for the Berkeley campus as a whole, particularly with respect to exterior design and materials.

This Framework includes both the Berkeley Campus Palette and the Campus Park Guidelines: projects located on the Campus Park should conform to both sets of guidelines. The Campus Palette also informs projects outside the Campus Park in the City Environs.

Principles: Architecture

- Ensure each project on the Campus Park or in the City Environs conveys an image of substance, elegance, and permanence.
- Ensure each project on the Campus Park or in the City Environs is shaped by enduring values rather than ephemeral trends.
- Ensure future projects on the Campus Park and in the City Environs are informed by the Berkeley Campus Palette.
- Design projects on the Campus Park projects to conform to the Campus Park Guidelines.
- Design projects in the City Environs to respect the form and scale of the urban fabric, and frame and activate the public realm.
- Prepare project specific guidelines for each major new project.



Figure 9. 2020 LRDP Architectural Legacy

Campus Park

The UC Berkeley campus today does not have a single, coherent architectural vocabulary. Although such a vocabulary was envisioned in the beaux-arts Howard Plan, and a number of early campus buildings were constructed in the neoclassical style, over time the architecture of the campus has become more diverse: in the first half of the 20th century, the buildings retained at least the basic elements of neoclassical form and composition, although over time they became much simpler in both details and materials.

In the years of rapid growth following World War 2, enrollment and budget pressure led the campus to largely abandon any pretext of uniformity, beyond a few mission tile ‘hats’ affixed to buildings like Campbell (1959), Birge (1964), and Barker (1964). More typical of this period are the very large and economical modern buildings like McCone (1961), Barrows (1964), and Evans (1971).

But in spite of decades of often insensitive and intrusive new construction, the historic buildings and landscape of the Campus Park remain its most memorable image. The 2020 LRDP prescribes program and design guidelines for the Campus Park as a whole, as well as more prescriptive criteria for sensitive areas.

The most important such area on the Campus Park is the classical core, which contains the ensemble of neoclassical buildings designed primarily by John Galen Howard. The classical core represents a unique cultural resource, in terms of both its architectural merit and the open spaces its buildings frame and design. For this reason, new projects within the classical core, as shown in figure 9, should be sited and designed to reinforce and enhance this ensemble, as prescribed in the Campus Park Guidelines.

Figure 9 also shows the locations of the picturesque ensemble, which like the classical core includes several structures on the National Register of Historic Places. New projects within the areas of picturesque influence should respect and continue these traditions.

For projects on the Campus Park, the Campus Park Guidelines should guide the reviews by the Campus Architect and the Design Review Committee to ensure they reflect a coherent esthetic vision, and respect and enhance the historic fabric of the campus. Moreover, given the variety of site conditions on the Campus Park, project specific guidelines should be prepared for each major project.

City Environs

As envisioned in the 2009-2019 *Capital Plan*, most of the investment in the next decade would occur in the City Environs, mostly on the blocks adjacent to the Campus Park. Arguably, this is a more challenging design problem than building on the Campus Park because, although the City Environs contain many distinguished individual buildings, they do not form as strong and coherent a context as the architecture and landscape of the Campus Park.

In fact, highly prescriptive design guidelines that encourage a uniformity of style would be at odds with the very nature of a vital urban community, which draws much of its vitality from its diversity of age, scale, and style.

The more diverse architectural context in the City Environs is more resilient and receptive to new design goals and directions, and foremost among those goals is the architectural expression of sustainable design. Although every new campus project must achieve high standards of performance, the architectural expression of those standards on the Campus Park must be balanced with the need to respect and enhance its historic architectural traditions.

While the provisions of the Berkeley Campus Palette should inform the design of each new project in the City Environs, just as they should on the Campus Park, the campus should also be receptive to new interpretations of those provisions in the City Environs, if they serve to demonstrate how high standards of sustainable performance can inspire rather than constrain excellence in design.



Durant & California Halls



Hearst Memorial Mining Building



Doe Library



Hearst Gymnasium



Wheeler Hall



Wellman Hall



Hilgard Hall



Old LeConte Hall

BERKELEY CAMPUS PALETTE

At the request of the Regents, the Berkeley campus prepared and presented a Campus Palette in 2007. Although the 2020 LRDP includes the Campus Park Guidelines, with special and more prescriptive guidelines for sensitive areas such as the classical core, the Regents expressed the view more comprehensive design guidance was required to create a coherent architectural image and identity for the Berkeley campus as a whole, particularly with respect to exterior design and materials.

The Palette described on the next few pages provides guidance on exterior design and materials for all new UC Berkeley projects, both on and off the campus. The Campus Park Guidelines, prescribed in the 2020 LRDP and presented later in this Framework, remain in force: projects on the Campus Park should conform to **both** the Campus Palette **and** the Campus Park Guidelines. The Campus Palette should also inform university projects beyond the Campus Park.

ARCHITECTURAL TRADITIONS

The 2020 LRDP designates two areas of the Campus Park where an historic architectural tradition must be respected:

- The **picturesque zones** contain clusters of buildings along the creeks designed in the arts and crafts tradition.
- The **classical core** contains most of our historic neoclassical buildings, organized around the central glades.

Neoclassical

To the extent the Berkeley campus has a distinct architectural identity, it derives from the neoclassical tradition. This tradition begins with the first set of buildings designed by John Galen Howard, the first campus architect: they employed a neoclassical vocabulary of symmetry, tripart composition, ashlar granite walls, and hip or gable roofs clad in mission tile, which influenced campus architecture for the next 50 years.



Haviland Hall



California Memorial Stadium



Lewis Hall



Mulford Hall



Sproul Hall



Bancroft Library



Law School



Dwinelle Hall

But although they share a common palette, each of these buildings is individual and distinctive in its own right. Examples include:

- California Hall (1905)
- Durant Hall (1911)
- Wellman Hall (1912)
- Sather Gate (1910)
- Hearst Mining Bldg (1907)
- Doe Library (1911/1917)
- Wheeler Hall (1917)
- Sather Tower (1914)

These buildings remain the campus' most enduring landmarks, but World War I marked the end of the 'granite period' at Berkeley. The next generation of neoclassical buildings were surfaced in concrete. Examples include:

- Gilman Hall (1917)
- Old LeConte Hall (1924)
- Hilgard Hall (1917)
- Hearst Gymnasium (1927)

Stripped Classical

Over time, the neoclassical vocabulary was 'stripped' of its more ornamental features, but retained the basic form and composition of its precedents. Examples of the stripped classical style include:

- Memorial Stadium (1923)
- Donner Lab (1941)
- Sproul Hall (1941)
- Mulford Hall (1948)
- Haviland Hall (1924)
- Minor Hall (1941)
- Lewis Hall (1948)
- Bancroft Library (1949)

For the most part, the stripped classical buildings are clad in concrete, but for two very prominent buildings, Sproul Hall and the Bancroft Library, the campus used a terra cotta material with a faux-granite coating.

The Law School (1951) and Dwinelle Hall (1952) marked the end of the neoclassical line. Transition is evident in these two buildings: they combine neoclassical forms and materials with a very modernist lack of ornament. A few buildings with decorative mission tile 'hats' followed them, but by the mid-1950s a coherent 'UC Berkeley style' was no longer a driver of campus architectural design, for several reasons:

- Modernism became the prevalent trend in design,
- A campus committee replaced the supervising architect, and
- Growing enrollment and limited land led to taller buildings less suited to neoclassical form and composition.



Faculty Club



North Gate Hall



Haas Business School



Sutardja Dai Hall



Blum Center and Naval Architecture Renovation

Picturesque

Simultaneously, a second tradition emerged on the Berkeley campus, one much more local in origin. Starting with Bernard Maybeck's Faculty Club (1903), a series of smaller, more informally composed buildings were constructed along the forks of Strawberry Creek, most clad partly or entirely in wood shingles in the craftsman style. Others include North Gate Hall (1906), Naval Architecture (1914), Dwinelle Annex (1920), and the former Unitarian Church (1898).

Recently, this tradition has been reinterpreted in much larger buildings within the zones of picturesque influence: the Haas Business School (1995) and Sutardja Dai Hall (2009) both employ forms and materials consistent with this tradition. The Blum Center, now under construction, combines a new building with the renovation of Naval Architecture.

THE FUTURE

The Picturesque Zones present a unique set of environmental conditions and architectural concepts which, arguably, are more 'native' to California and Berkeley than the neoclassical ensemble. However, the image and identity of the Berkeley campus is more firmly based in the neoclassical tradition: the neoclassical buildings occupy the centre of campus and most of its most visible and intensively used sites, and Sather Gate and Sather Tower are the symbols of the Berkeley campus to the world. In formulating a *Palette* for the Berkeley campus, the neoclassical legacy is the right place to begin.



California Hall and the Central Glades: the formal, axial order of the neoclassical buildings contrasts with the organic forms of the landscape.

SITE & FORM

- **Compose new buildings primarily of orthogonal forms with orthogonal relationships to neighboring buildings.**
- **Design buildings over 3 stories to include an articulated base, middle, and top.**

The first half of the 20th century gave the Berkeley campus a great legacy of architecture which, unfortunately, was then greatly disrespected in the second half. Campus architecture arguably reached its nadir in the 1960s, with the construction of McCone Hall (1961), Barrows Hall (1964), Moffitt Library (1970) and Evans Hall (1971). These buildings rejected the neoclassical tradition, but contributed nothing toward a new campus identity.

On the contrary, they combined generic architecture with insensitive siting. Barrows partly obstructs the iconic view of Sather Tower, the symbol of UC Berkeley, from Telegraph Avenue. Evans and Moffitt not only violate the Central Glades, but Evans also blocks the axial view of the Golden Gate, the central organizing feature of the Howard Plan, from the Mining Circle.

The most inspired architectural treatment can not save a building constructed on the wrong site with the wrong form and scale. Although this *Palette* provides guidance on architectural treatment, the provisions of the 2020 LRDP and the *Campus Park Guidelines* must first inform these more fundamental decisions.

Campus Park. One of the most memorable features of the Berkeley campus is the way the organic, picturesque landscape contrasts with the formal, axial order of the neoclassical ensemble. New buildings on the Campus Park should respect and continue this tradition by using primarily orthogonal forms.

The traditional tripart composition of the neoclassical buildings, with a clearly articulated base, middle, and top, both reinforces this formality and, at the same time, imparts a human scale even to very large structures like Doe Library, and should be respected in the design of new projects.



Starr East Asian Library



Stanley Hall



City Environs. The same principles of orthogonal form and tripart composition apply to new projects in the City Environs, for different but equally compelling reasons. While the purpose of orthogonal form on the Campus Park is to respect and reinforce the formal, axial pattern of the historic buildings and their relationship to the landscape, in the City Environs its purpose is to respect and reinforce the urban fabric of orthogonal blocks, and to shape new buildings to frame, define and animate the public realm.

The principle of tripart composition in the City Environs serves a twofold purpose. An articulated base creates visual interest and human scale at street level, while an articulated top contributes to an elegant skyline. This latter point is particularly relevant to downtown sites: the city's new Downtown Plan anticipates only a few tall new buildings in what is mainly a low-to-midrise downtown, but at least 3 of the sites designated as suitable for tall buildings are university owned and proposed to be developed within the next decade.

ROOFS

- **Use hip or gable roofs on buildings within the classical core.**
 - **Clad pitched roofs in unglazed mission tile.**
 - **Match roof pitch and tile color of historic buildings.**
- **Buildings outside the classical core may have flat roofs.**
 - **Finish parapets with articulated cornices.**
 - **Consider special treatment of top floors to enhance building composition.**
- **Conceal roof equipment with enclosures integral to the building architecture.**

Classical Core. The hip and gable roof forms of the neoclassical buildings, clad in mission tile, are a defining feature of the campus. New buildings within the classical core, as defined in the 2020 LRDP, should continue this tradition. The new Starr East Asian Library (2008) is an example of modern versions of traditional principles and elements, integrated into a coherent whole.



California Hall



Stanley Hall

Campus Park & City Environs. In the balance of the Campus Park and in the City Environs, flat roofs may be used, but each roof should provide a graceful terminus to the building, and form a clearly articulated 'top' element of the tripart composition.

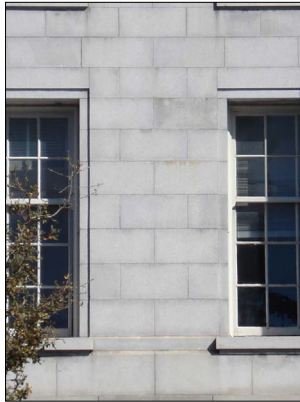
All roof equipment should be concealed in enclosures integral to the architecture. The new Stanley Hall (2007) shows how a well-designed enclosure can provide an elegant 'top' even without a pitched roof. The cornice detail, while unmistakably modern, respects its historic precedents.

WALLS & WINDOWS

- **Compose facades primarily of solid walls and punched windows that respect the structural grid.**
- **Use glass walls primarily for special features or spaces, or where program needs dictate greater transparency.**
- **Clad solid walls primarily in stone or cast materials with sand texture and integral color.**
 - **Suitable materials include granite and precast concrete.**
 - **Other materials like terra cotta or sitecast concrete may be used if color and texture are similar.**
- **Variations in color, texture, or wall/window ratio may be used to articulate base and top.**

Campus Park. The facades of the neoclassical buildings are fenestrated with punched, operable windows: a solution perfectly adaptable to modern green buildings. While glass curtain walls have their place, for special architectural features or spaces, new buildings on the Campus Park should be composed primarily of solid walls with punched windows.

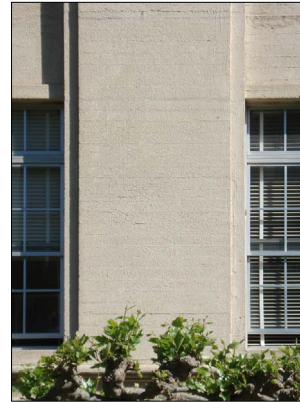
Those solid walls should be clad in materials with a color and texture in the same range as the legacy neoclassical buildings. The new Stanley Hall (2007) employs the traditional Sierra granite, but new materials can be just as suitable: for example, the terra cotta material being used on the Center for Biomedical & Health Sciences (underway) utilizes modular units with proportions similar to the ashlar granite blocks of the legacy buildings.



Wheeler Hall



California Hall



Mulford Hall



Valley Life Sciences Building



Starr East Asian Library

City Environs. The same general principles apply to new campus buildings outside the Campus Park, except they may be more flexibly interpreted where site or program require a unique architectural solution. The proposed new Berkeley Art Museum is one such case: the site demands a building of landmark quality, while the museum program requires a very different pattern of fenestration than a typical academic building.

As noted in Principles: Architecture, more innovative approaches to façade composition may also merit consideration in the City Environs if they serve to demonstrate how high standards of performance can inspire rather than constrain excellence in design.

The traditional composition of solid walls and punched, inset windows not only conveys an image of substance and permanence, but also creates visual interest through the play of light and shadow across the 3-dimensional surface of the façade. But modern technology offers many other ways to achieve this 3-dimensional quality, including a variety of sun control solutions, and these should be encouraged as long as the quality and integrity of design is at least equal to more traditional treatments.

COLOR

- On large buildings, select primary skin materials within a color spectrum of light gray to light ecru.
- Smaller buildings may draw from a broader spectrum of compatible colors.

Campus Park. The neoclassical buildings and their descendants range in color from a cool light gray like Wheeler Hall (1917) to a warm light ecru like Mulford Hall (1948). Large new buildings should have primary skin materials within this same range, but smaller buildings like Alumni House (1954) or Hargrove Library (2004) can provide a visual counterpoint and variety with more intense colors.

City Environs. The same general principles apply to new campus buildings outside the Campus Park. Materials and colors can provide a way to establish a coherent visual identity on and off the Campus Park without prescribing architectural style.

However, in certain instances, colors within the City Environs may display greater variations in hue and intensity greater than those contemplated for the Campus Park, but only when the context and/or the building architecture make this a superior option, and the treatment is consistent with the principle of enduring rather than ephemeral design.

One potential example is the proposed Helios West project, which anticipates the use of precast concrete or terra cotta materials in deeper and more variegated tones than contemplated for the Campus Park. Another example is the proposed Anna Head West housing project which, in sympathy with the adjacent, historic Anna Head school complex anticipates the use of wood as a key element of its exterior palette (see also Picturesque Zones, below)

ACCENTS

- **Select matte or satin metals as trim and accent materials.**
- **Suitable materials include copper, bronze, zinc, and stainless steel.**

There is a long tradition of metals used as trim and accent materials, dating back to the ornate copper skylights of early neoclassical buildings like California Hall (1905) and Wellman Hall (1912). For example, the bronze grilles on the Starr Library (2008) recall those on Valley Life Sciences Building (1930). A variety of metals may be used as accents, as long as they are nonreflective.

PICTURESQUE ZONES

The picturesque zones, defined in the 2020 LRDP, are exceptions to the *Palette*. New buildings within these zones should be designed to respect and complement the neighboring historic buildings designed in the arts and crafts tradition, as do the Haas Business School (1995) and Sutardja Dai Hall (2009).

DOWNTOWN CONCEPTS

The concepts illustrated on the next several pages depict proposed UC Berkeley projects on downtown sites which, at the time this *Framework* was composed, were in early stages of design. They show how the Principles and the Palette described above might be interpreted in the City Environs.



Proposed Berkeley Art Museum

DOWNTOWN PUBLIC REALM

As shown in figures 8 and 10, the public realm in the Downtown blocks adjacent to campus has the potential for transformative change in the near future. University owned sites occupy a substantial amount of the street frontage, and most of these sites are proposed to be redeveloped within the timeframe of the 2009-2019 Capital Plan.



Figure 10. Aerial view of the west end of the Campus Park at its interface with Downtown Berkeley.

DOWNTOWN PROJECTS: ART MUSEUM AND CENTER STREET

The sketch shows how the new Art Museum would relate to Center Street. The main entrance, the museum store, and the café face and activate the street, while street level windows provide a glimpse of the public galleries. The new conference hotel project, planned as a partnership with a private developer-operator, is shown in the foreground. The scope includes a hotel, a conference center, and a new executive education center operated by the Haas School of Business.



Figure 11. Center Street transformed by new Hotel & Executive Education Center (left) and new Art Museum (right).

DOWNTOWN PROJECTS: GATEWAY BUILDING & UC GARAGE

This project would also be a third party partnership. Gateway is planned as a flexible office building, used primarily as relocation space for campus units displaced from buildings undergoing seismic renovation. However, despite this prosaic use, Gateway occupies a prime corner at the west entrance to campus, and high quality design is imperative. The adjacent historic UC Garage, now used for bus storage, would be renovated for a public-oriented use, such as the campus visitor center now housed in the drab lobby of University Hall.

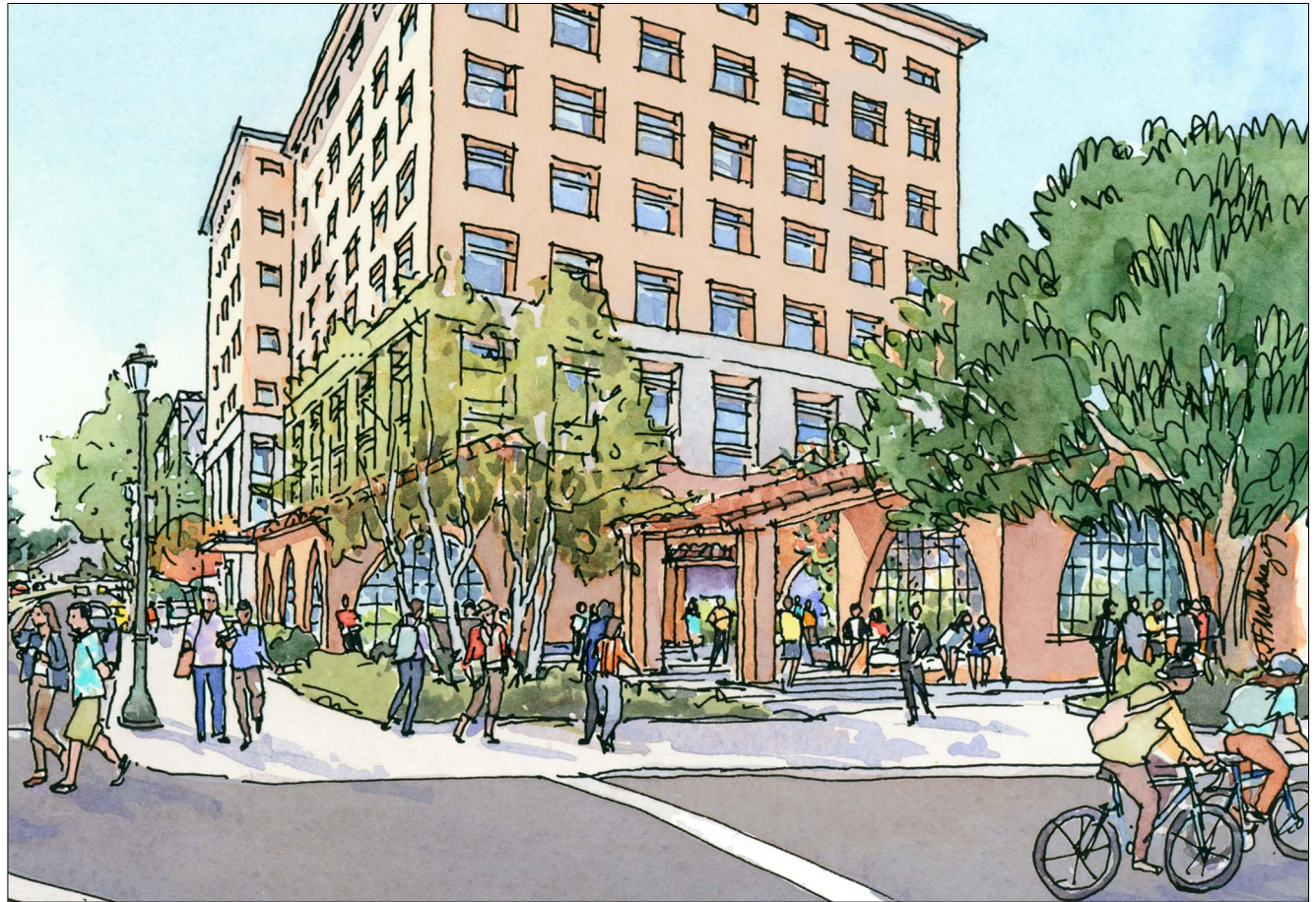


Figure 12. View from north of Gateway Building with renovated UC Garage in foreground.

DOWNTOWN PROJECTS: COMMUNITY HEALTH CAMPUS

This view north into the Community Health Campus from Walnut Street shows a green commons framed by buildings, but accommodating pedestrian access through the block. The commons provides a place of gathering and interaction for the students, researchers, and faculty working in the various programs housed in the complex. The buildings respect the height and density provisions of the Downtown Plan.

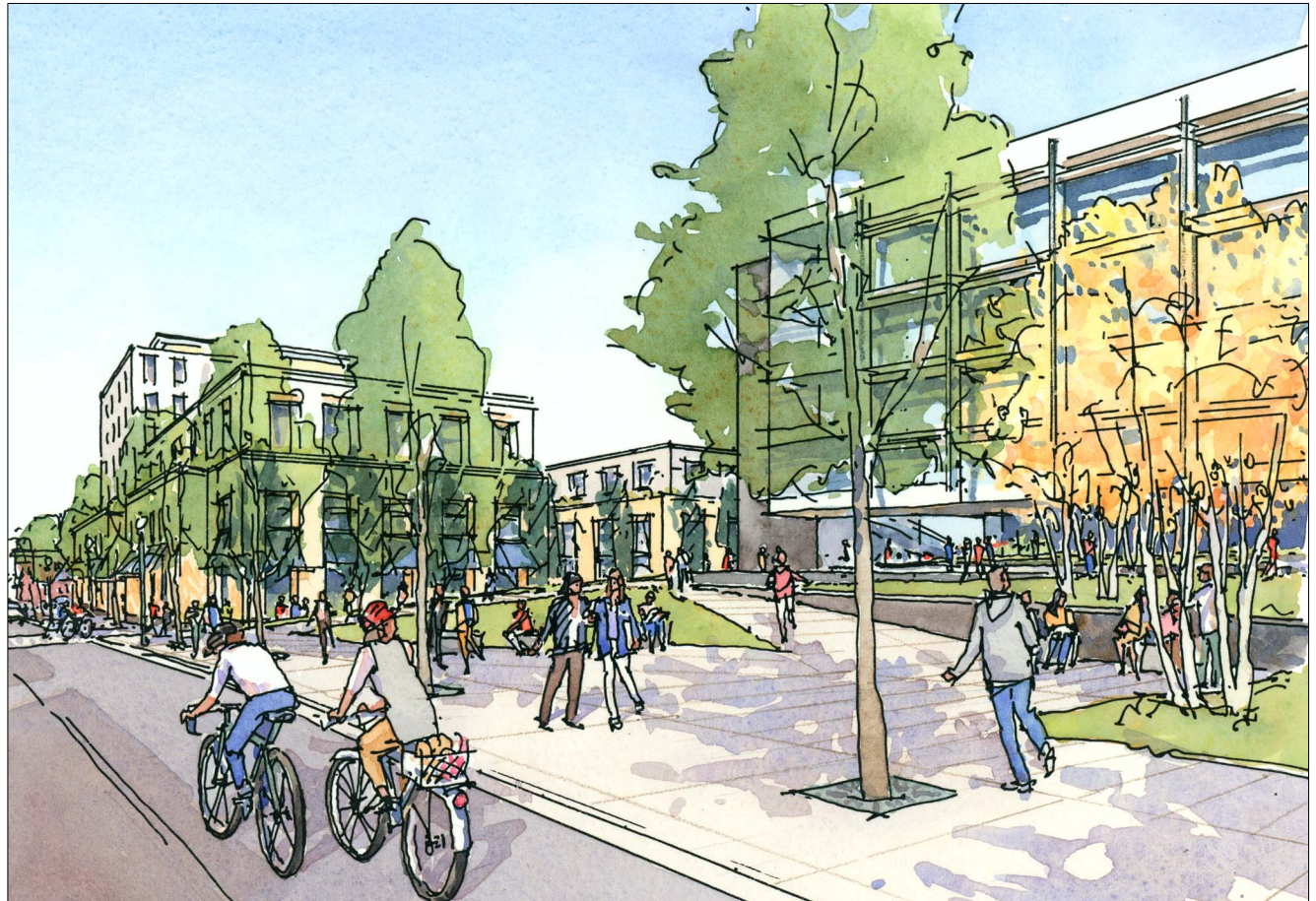


Figure 13. View from south of open space framed by Helios West and Community Health Campus.

DOWNTOWN PROJECTS: COMMUNITY HEALTH CAMPUS

This view of Community Health Campus from the southwest shows its relationship to Shattuck, the main street of Downtown. The Downtown Plan urges retail use for the ground floor along the Shattuck frontage, but this is not a prime retail site, being at the far north end of Downtown. However, public oriented university functions, such as the Optometry Clinic, could play the same urban design role of observing and activating the public realm.

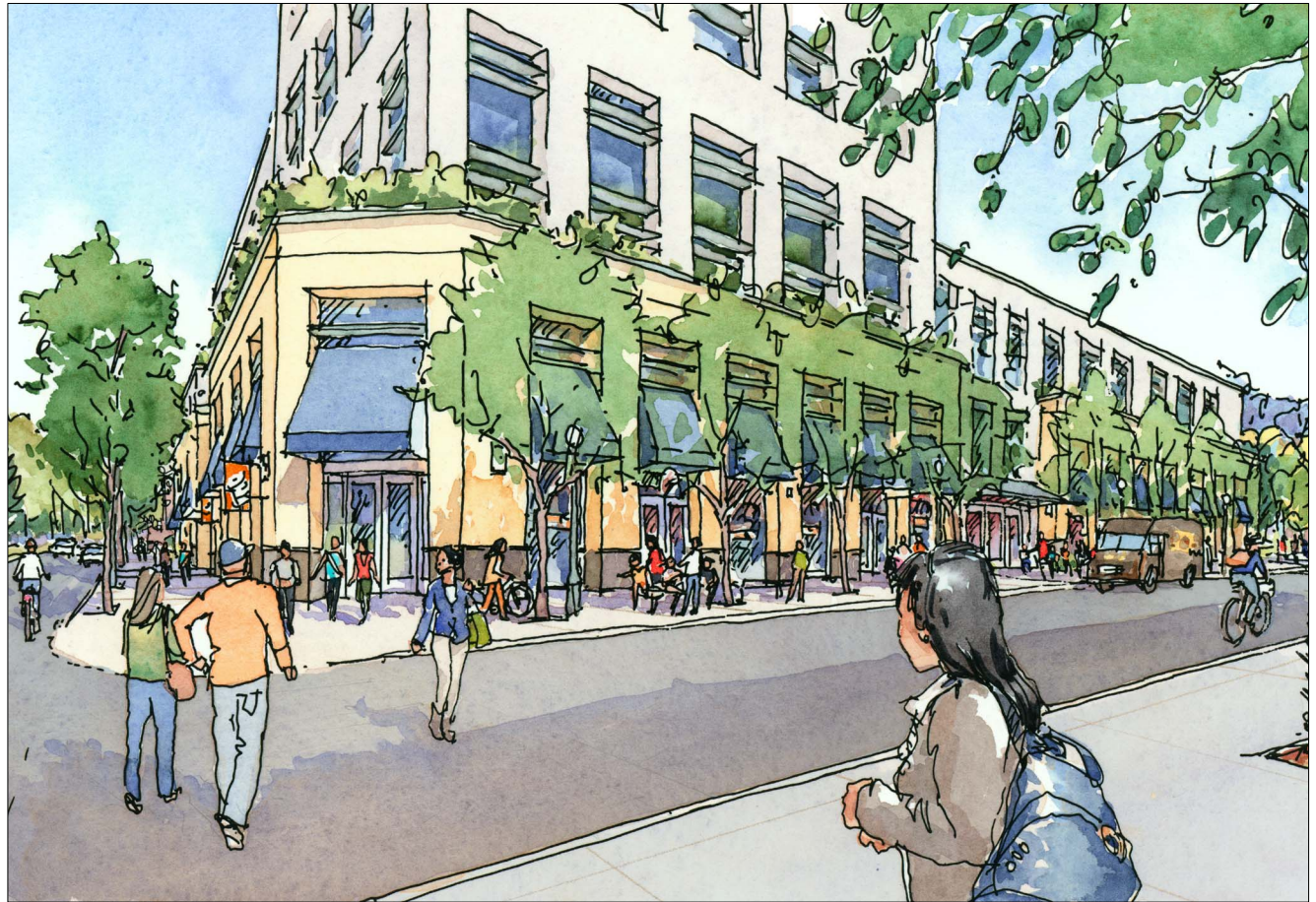


Figure 14. View of Community Health Campus from the west with retail-public frontage on Shattuck Avenue.

CAMPUS PARK GUIDELINES

This section, excerpted from the 2020 LRDP, includes general design and program guidelines for the Campus Park, as well as more prescriptive guidelines for certain place types in the Campus Park with sensitive design conditions. However, each major project also requires project-specific guidelines, to ensure the unique features of the site and environs are respected.

The provisions of the Guidelines are not meant to entirely preclude alternate design solutions. The best solution for a site should not be rejected just because we could not imagine it in advance. In practice, however, while the project designers may present a concept which departs from the Guidelines, they must also present a concept which conforms entirely to the Guidelines. As a rule, the campus should not depart from the Guidelines except for solutions of extraordinary quality.

DESIGN GUIDELINES

Campus design has always been diverse. John Galen Howard himself broke with the classical vocabulary of his first several campus buildings to design the gothic-inspired Stephens Union; and the classical buildings themselves were departures from the earlier Victorian styles of North and South Halls. However, while the design of each building should reflect its own time and place, it should also reflect the enduring values of elegance, quality and durability, and form a coherent and memorable identity for the campus as a whole. Moreover, there are several specific locations on campus where more prescriptive guidelines are required:

- New construction and renovation within the Classical Core should enhance the integrity of this ensemble, and complement rather than compete with existing historic buildings.
- New buildings facing Places of Interaction should be designed to shape these places, provide enclosure and security, and admit sunlight. Ground level spaces within these buildings should house uses that observe and activate the place.
- Buildings at the City Interface should be designed to create a graceful transition from campus to city, and to enhance the visual and experiential quality of the street.

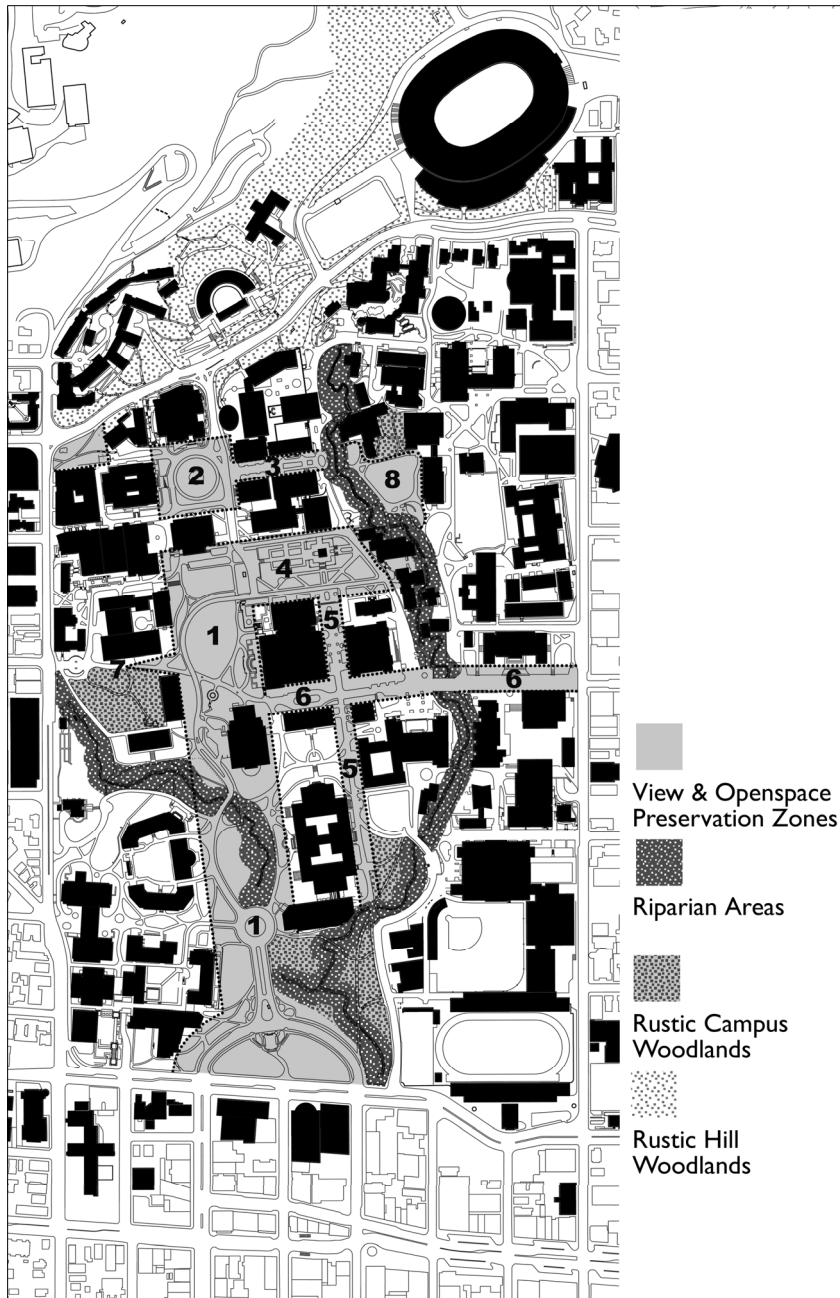


Figure 15. 2020 LRDP Preservation Areas (numbers correspond to Guidelines)

Guideline G.1 Preservation Areas

The preservation areas described below and protect the major elements of the campus landscape armature, as well as its most significant historic exterior spaces. No new buildings should intrude into the preservation areas. *(The numbers below correspond to those in figure 15)*

Natural Preserves. The natural landscape along the two forks of the creek requires careful ecological management, as well as protection from development and the impacts of adjacent development. The natural preserves are comprised of two subzones: the riparian areas along the streamcourse, and other rustic woodlands adjacent to these riparian areas.

- The riparian areas are dominated by native and naturalized plants forming dense woodlands along the streamcourse. Their width may vary in response to local conditions, but in general should be at least 100', centered on the streamcourse.
- The rustic campus woodlands have a strong complementary relationship to the creek, and may also have a strong visual identity in their own right, such as Eucalyptus Grove or Observatory Hill.

Management of the natural preserves should be based on ecological principles, including replacing invasive exotic plants with native plants suited to this biotic zone, replacing unhealthy plants and plants at the ends of their natural lives, and preserving and enhancing the habitat value of the zone.

Hill Woodlands. While the woodlands east of Gayley Road are comprised primarily of introduced species, they provide a forested backdrop to the campus, and a graceful transition to the hills. Those woodlands that remain west of LBNL should be maintained as a preservation zone, to retain the unique rustic character they impart to the student residences, the Greek Theatre, and Gayley Road.

Central Glades (1) The preservation zone for the Central Glades reflects the axial geometry of the classical ensemble of buildings that frame and define them. No building to the north or south should intrude within 180' of the east-west axis of the Glades: these setbacks coincide with the facades of Doe Library and McLaughlin Hall. The east edge of the preservation zone coincides with the east edge of Campanile Esplanade, below. At the west end of campus, the preservation zone widens to an arc 100' from the curbline of the West Crescent.

Mining Circle (2) The preservation zone is defined as a square 360' by 360' centered on the Circle. In order to reinforce the formal character of the Mining Circle as an outdoor room framed and defined by buildings, at least 75% of any new building facade should lie on the setback line.

Gilman-LeConte Way (3) The preservation zone is defined as 50' on either side of the north-south axis centered on the Mining Circle and extending to the creek zone. To reinforce the continuity of spatial enclosure, at least 75% of any new building facade should lie on the setback line.

Campanile Esplanade (4) The preservation zone for Campanile Esplanade reflects the formal geometry defined by the north-south axis of Sather Tower, and is defined as 100' east and 200' west of this axis: these setbacks coincide with the facades of Birge Hall and Bancroft Library. To reinforce the continuity of spatial enclosure, at least 75% of any new building facade should lie on the setback line.

Campanile Way (5) The preservation setback is defined as 50' on either side of the east-west axis centered on Sather Tower and extending to the creek zone. To reinforce the continuity of spatial enclosure, at least 75% of any new building facade should lie on the setback line.

Sproul Plaza & Sather Road (6) This 120' wide zone preserves the primary north-south route through campus as a gracious, generous space with unobstructed views of Sather Gate. The zone is defined by the facades of Doe Library, Wheeler and Sproul Halls on the east and King Union, Durant and California Halls on the west.

North Gate (7) This zone is defined as a view cone originating at the entry plaza to McCone Hall, with the east and west sides aligned with the corners of the north facade of Doe Library.

Faculty Glade (8) The preservation zone for Faculty Glade is defined by the Strawberry Creek natural preserve to the north and west, Morrison Hall to the south, and Hertz Hall and Faculty Club to the east.

Setbacks prescribed in guidelines G.1 and G.2 apply to all above-grade structures. Below-grade structures may extend into the setbacks, but only if they are invisible at the surface; provide soil depth adequate to support landscaping at grade; and do not compromise the integrity of sensitive landscapes. Any elements that project above grade, such as vents, entry pavilions, or skylights, should be sited outside the setback.

Guideline G.2 City Interface

Campus edges and entrances should create a positive first image of both the campus itself and its synergy with the city around it. New buildings at the city interface should be sited and designed to accommodate a more coherent and unifying landscape treatment.

Hearst & Bancroft Frontages. Buildings should be set back at least 20' from the curblineline to accommodate a formal, urban, but generous landscape treatment along both frontages. The Landscape Master Plan should define a palette of planting and paving materials and typical details for these setbacks.

Oxford Frontage. The majority of the Oxford frontage is comprised of green open space: the Crescent, the Creek, and the proposed Edwards Green. In order to create a more coherent landscape treatment in the picturesque style along this frontage, new buildings along Oxford should be set back a minimum of 60' from the curblineline.

Gayley & Piedmont Frontages. One of the most memorable aspects of the campus is its setting at the base of the East Bay hills, and Gayley Road should be reinforced as the 'seam' linking the campus with the hill landscape. Each building should be set back an average of 40' from the curblineline to accommodate an informal landscape treatment along both sides of the roadway. While building edges should be articulated to vary the setback depth, no portion of a building should be closer than 20' to the curblineline.

Individual sites at the city interface may have spatial relationships that require wider setbacks: for example, to align facades with neighboring buildings. These should be prescribed in the project-specific guidelines.

Guideline G.3 Build-To Lines

Guideline G.1 prescribes build-to lines for certain historic campus open spaces. While some variation is desirable to allow for entrances and facade articulation, at least 75% of the facade should lie on the build-to line.

Guideline G.4 Orientation & Exposure

Each new building should be oriented and designed to take advantage of solar angles and wind direction to reduce energy consumption. The design should include consideration of shading options on south and west exposures to reduce heat gain in summer but admit natural light in winter. Shading options include landscape elements, such as deciduous trees, as well as architectural elements.

The design should also include consideration of facade treatments that respond to the characteristics of each exposure with respect to heat, light and ventilation. For example: more glass on the north and east exposures, less glass and greater thermal mass on the south and west, and vents and operable windows located and designed to optimize natural airflow.

Classical Core. Within the classical core the axial, orthogonal relationships of the historic ensemble should take precedence in determining building orientation.

Guideline G.5 Active Frontages

Places of Interaction Ground level spaces in each building facing a place of interaction should house functions with a high frequency of human presence and public activity, such as lounges, libraries, cafes, display spaces, and walk-up services. The main building entrance should be located in the facade facing the place of interaction.

City Interface. In the city General Plan, several sections of blocks adjacent to campus are designated 'commercial': ground level spaces in university buildings within those areas should include retail and/or storefront services at ground level. Other university buildings at the campus perimeter or on adjacent blocks should house functions with a high frequency of human presence and activity at ground level.

Guideline G.6 Entrances

Each new building should be sited and designed to create a plaza or terrace at the main entrance, to serve as a casual gathering place for its users. The plaza or terrace should be distinguished as a place by design treatment - paving, lighting, furnishings - and must provide direct access for persons with special mobility needs.

Guideline G.7 Services

All bulk trash containers and building equipment should be concealed within enclosures designed as integral elements of the architecture. Loading docks should be concealed and secured when not in use.

Guideline G.8 Height

Places of Interaction. Buildings facing places of interaction should be scaled to admit sunlight to the place and impart a comfortable human scale. Buildings to the south and west of the place should be no greater than 65' in height within 75' of the build-to line. Beyond this distance, height may increase 1' for every 1.5' of distance from the build-to line.

Individual sites may present spatial relationships that require lower heights along the build-to line: for example, to align cornice lines in order to create a more formal sense of enclosure. These should be specified in the project-specific guidelines.

City Interface. Buildings at the campus edge should be designed to create a graceful transition in scale from campus to city. Along the Hearst and Bancroft frontages of the Campus Park, buildings should be no greater than 65' in height within 100' of the curblin. On sloping sites, parts of the building may be greater than 65' but not over 80' in height, but the average height within the 100' wide zone should be no greater than 65'.

Along the Oxford frontage, buildings should be no greater than 95' in height within 200' of the curblin. On sloping sites, parts of the building may be greater than 95' but not over 110' in height, but the average height within the 200' wide zone should be no greater than 95'.

Under guideline G.8, the height of buildings with flat roofs is defined as the vertical distance from grade to the top of the exterior wall plane, including parapet. For buildings with sloped, hip, or gable roofs, height is defined as the vertical distance from grade to the average of the height at the ridge and the height at the exterior wall. Nonhabitable elements of the building such as equipment, vents, and other similar elements may extend above these height limits, but should conform to the enclosure provisions of guideline G.10.

Guideline G.9 Composition

Large buildings should be designed to reduce their perceived mass and impart a human scale to the campus. Each building with a horizontal dimension greater than 200' should incorporate changes in both facade plane and vertical height to reduce its perceived scale and bulk.

Each building over 3 stories should have both an articulated base and an articulated top. Flamboyant architectural gestures are discouraged: rather, the top should create a simple and graceful terminus for the building.

Classical Core. Each new building within the classical core should be composed of elements orthogonal in plan and composition, and sited to reinforce the axial relationships of the historic core buildings and the Central Glades.

Guideline G.10 Roof Forms

Roof top equipment should be enclosed so the equipment itself is not visible, and the enclosure should be designed as an integral element of the building architecture. In new buildings, the design should include consideration of roof forms that accommodate passive and active solar energy devices and/or green roof structures as elements integral to the building architecture.

Classical Core. Each new building within the classical core should have a hip or gable roof, with a pitch similar to existing historic core buildings.

Guideline G.11 Facades

Each building should be a coherent architectural composition, and should employ a single, unifying vocabulary of forms, details and materials on all building facades. Facades should be composed primarily of solid planes with punched windows. While metal and glass wall systems may be employed as special architectural features, in general the pattern of solid and transparent elements should respect the structural grid.

Classical Core. Each new building within the classical core should be fenestrated exclusively with individual punched windows, having a greater vertical than horizontal dimension. Windows and doors should be inset at least 6" from the exterior wall surface. Windows may be large and paned, but should not span structural elements.

Guideline G.12 Architectural Materials

Exterior materials should be selected to convey an image of quality and durability. Suitable primary exterior materials include granite, concrete and true plaster. Metal and glass wall systems may be used sparingly as special architectural features; however, dark, opaque or reflective glass is prohibited.

Visual interest should be created by the articulation of planes and volumes, not by arbitrary changes in materials. Changes in materials should occur only at the inside corners of changes in surface plane.

Classical Core. Each new building within the classical core should utilize the following materials palette:

- Roofs: unglazed red clay mission tile.
- Walls: light grey granite or architectural concrete, sand finish.
- Windows: clear or lightly tinted glass, copper or bronze frames.
- Skylights: copper or bronze frames.

Guideline G.13 Site & Landscape Materials

The UC Berkeley Landscape Master Plan prescribes more detailed palettes of site and landscape materials for the campus.

Plant Materials. Landscapes within the Natural Preserves should follow the provisions of guideline G.I for plant selection. Elsewhere, plant materials should be selected to fit the desired structural form and function, while also contributing to a campuswide landscape which is both diverse and well suited to its site, climate, and intensive use.

In general, plants with similar water and maintenance needs should be grouped into zones to optimize both water use and maintenance. High maintenance zones should be limited to building entrances and other heavily used places.

Site Materials. Presently most routes on the central campus are surfaced with asphalt. While this material is suitable for vehicular roads and narrow, secondary pathways, major plazas and pedestrian routes deserve better: not only to improve their visual quality, but also to clarify the hierarchy of routes and the primacy of the pedestrian.

Suitable paving materials for major plazas and primary pedestrian routes include brick, cast and natural stone, and concrete. Paving materials, lighting and furnishings should be selected with care to ensure the identity and continuity of pedestrian routes are clearly discernable.

Paving materials should be selected for durability and safety, and should not pose slip or trip hazards. Paving should also be selected to maximize the amount of pervious surface: materials that allow water infiltration are encouraged, particularly for secondary paths and roads.

PROGRAM GUIDELINES

Campus buildings endure far longer than their initial contents, and should be designed to maximize their flexibility and adaptability. Although the future is unpredictable, a few basic conventions should be followed in the design of all new buildings to ensure these major investments have a long and productive life.

Guideline G.14 Ground Floor Spaces

Guideline G.5 prescribes specific programming for buildings facing Places of Interaction and at the City Interface. However, the program of every new building on campus should seek to optimize its contribution to the quality of campus life. The ground level spaces of each building should be reserved for its most public functions, and those spaces facing public areas should be as transparent as the program allows. Main entry lobbies should be designed as inviting places for waiting and engagement, with features commensurate with the scale and functions of the building.

Guideline G.15 Floor Heights

Each new building in the Campus Park should have a floor-to-floor height of at least 15', in order to accommodate a wide range of instruction and research functions and the infrastructure they require. A greater height on the ground floor may be desirable to accommodate larger public and assembly spaces, such as libraries or lecture halls.

Guideline G.16 Floor Configuration

Each new building should be configured to accommodate a broad range of functions. The need to provide for a specific program in the near term must be balanced against the rapid pace of cultural and technological change, and the long lives of campus buildings. In general, a building width of 75-80' can accommodate a variety of office, lab and classroom layouts.

Guideline G.17 Internal Partitions

Each new building should be designed to consolidate fixed, immovable elements at the core and perimeter, and minimize or eliminate such elements elsewhere. Spaces should be demised with easily reconfigurable partitions.

Guideline G.18 Top Floor Spaces

In tall buildings, particularly those with a view to the west, at least some top floor space with views should be reserved for conference/event rooms available for use by the entire campus. This is an emerging campus tradition, begun in Barrows and continuing through Wurster, Tan and Haas, and should be encouraged as a way to foster intellectual collaboration.

