



LANDSCAPE HERITAGE PLAN
UNIVERSITY OF CALIFORNIA, BERKELEY



The Landscape Heritage Plan is the third in a series of planning documents that will guide campus planning and design for generations to come. Preceded by the New Century Plan and the Landscape Master Plan, which lay out a comprehensive vision for campus buildings and open space, this plan examines the key characteristics of the historic Classical Core and provides guidance for its continued development in a manner that respects and builds upon its unique landscape legacy.

Beginning with the picturesque framework established in the 1870s by Frederick Law Olmsted, overlaid with the dominant classical forms and axes of John Galen Howard's master plan of 1914, and interlaced with the modern interventions of Thomas Church in the mid-20th century; the Berkeley campus embodies the skillful integration of America's most significant landscape design movements. The Landscape Heritage Plan presents the history of this unique collage of styles, and offers future designers a rich palette of choices to build upon this design tradition with respect for the past and creative innovation for the future. In doing so, the plan recognizes the importance of the landscape as the connective fabric of the Classical Core, which transforms the campus into a community across both space and time.

I encourage all who read this plan to consider how you can support its intention, whether through your work, your generosity, or by simply sharing in the delight of a more enlightened appreciation of the campus's distinctive beauty. We look forward to working with all of you, to realize the possibilities revealed in this plan and continue Berkeley's long tradition of distinctive leadership in shaping the campus environment.

The University would particularly like to acknowledge the Getty Grant Program for its generous support of this plan through a Campus Heritage Grant.

Sincerely,

A handwritten signature in cursive script that reads "Robert M. Berdahl".

Robert M. Berdahl
Chancellor

June 2004

"In respect of soil, exposure, natural foliage and water supply, your ground is, to say the least, unsurpassed in the vicinity of San Francisco."

Frederick Law Olmsted, Berkeley 1866

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*Under separate
cover*

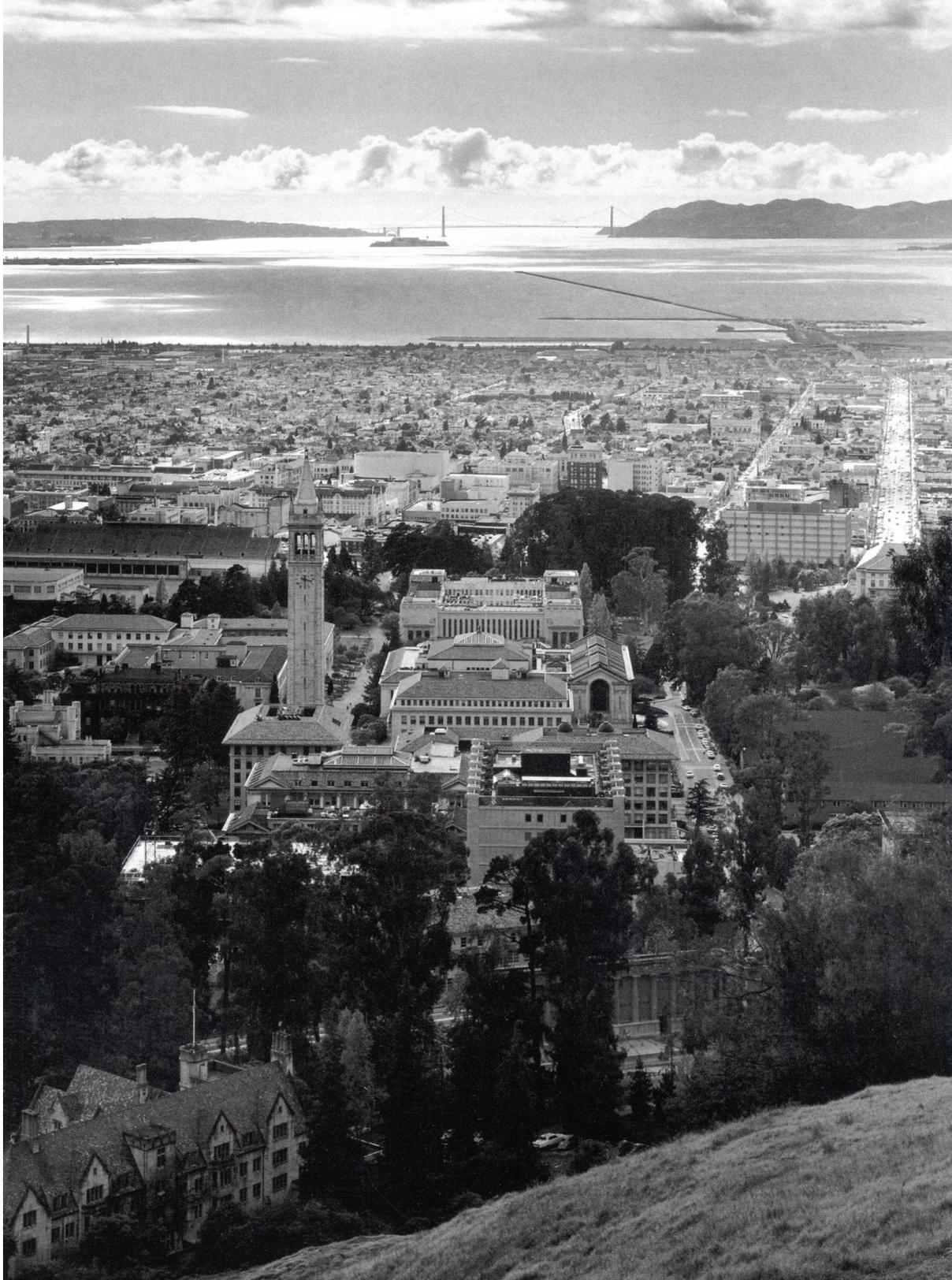
Foreword

It is with great pleasure that the National Park Service Historic Landscape Initiative (HLI) provide this preface to the UC Berkeley Landscape Heritage Plan. The Berkeley campus, which began as a 160-acre campus site in 1858, is one of the jewels in the University of California system. With many of its buildings already listed on the National Register of Historic Places, and nearly 150 years of significant landscape architectural commissions reflected in the campus landscape today, UC Berkeley was an ideal candidate for deeper research, evaluation, planning and design. This process, whose findings are reflected in this Landscape Heritage Plan, is a critical step for UC Berkeley. When this plan is and utilized in concert with the New Century Plan and other planning tools recently developed by the campus, this work will position the University to balance the myriad issues in safeguarding its natural and cultural resource legacies which today span over 1,200 contiguous acres and serve 33,000 students annually.

When considered in this context, the commitment of time and resources provided by the UC Berkeley campus takes on increased import. As identified by the project team of historians, landscape architects, planners and architects, the Berkeley campus today represents three distinct periods of development -- and as illustrated by the Landscape Heritage Plan it is this commitment to a solid research and analysis foundation that may serve as an example for other campuses to follow.

As a result of this planning process, it is now possible to recognize that if an individual designer's contributions are overlooked or not valued (such as the limited historical value that was previously placed on Thomas Church's UC Berkeley contributions), character defining landscape features may be subject to inappropriate alterations or removal. The Berkeley Landscape Heritage Plan is an important step in reversing this trend by making the palimpsest of these landscape designs and their shapers visible -- and in doing so will yield a holistic stewardship ethic for campus planners and managers today. We applaud the efforts of all of those involved in this study and look forward to seeing how future planning, design and management projects are realized at Berkeley and other campuses that may benefit from this work.

Charles A. Birnbaum, FASLA, FAAR
Coordinator, Historic Landscape Initiative
National Park Service, Washington, DC
June 2004



Overview

Purpose of the Plan

Cultural Landscape

Study Process

Scope of the Plan

Related Campus Plans

*"Above and beyond any of the considerations which have been enumerated,
is the principle that it is owed to the people to establish on these grounds a
standard of artistic excellence."*

John Galen Howard

*Preceding page: Ansel Adams, West from the "Big C", 1965
Keystone-Mast Collection, California Museum of Photography, University of California, Riverside*

*Facing page: Ansel Adams, Campanile, Tree, Path, 1966
Fiat Lux Collection, California Museum of Photography, University of California, Riverside*

The University of California, Berkeley's magnificent setting orients the campus to the Golden Gate, forming a symbolic association with America's heritage of westward expansion. With its nearly 150-year history, the campus exhibits a rich layering of natural and designed landscape systems. The natural backdrop of rolling hills, the sinuous character of Strawberry Creek, the broad greens of the Central Glade, and the geometry of the historic core present a remarkable backdrop for an educational institution of higher learning. At the campus's center lies the iconic beaux-arts Classical Core, the focus of the *Landscape Heritage Plan*.

Purpose of the Plan | The *Landscape Heritage Plan* (LHP) embodies the University's effort to preserve the historic legacy of the Classical Core. As the premier public university in the world, our mission is to deliver programs of instruction, research, and public service of exceptional quality to the State of California. A critical aspect of supporting the UC mission is the enhancement of the quality of life on campus. The University is providing for the continued stewardship of its significant cultural landscape resources through research, documentation, and planning based on the standards of the National Park Service Historic Landscape Initiative. The Plan provides a framework and guidance to ensure a successful balance between historic preservation and the need to accommodate improvements of a growing and changing educational institution.

The LHP is distinctive in addressing an entire historic area of a campus, rather than a single site. The Classical Core includes a multitude of landscapes reflecting a century and a half of American landscape design styles and the theo-

ries that informed them. The scale of documentation and analysis involved in this effort provides a significant example in the study of cultural landscapes. Because universities across the country face similar situations of accommodating new improvements within historic settings, the LHP is intended to serve as a model for other campuses with valued cultural landscapes.

Cultural Landscape | A cultural landscape is defined as a "geographic area, including both cultural and natural resources, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values" (*The Secretary of the Interior's Standards for the Treatment of Historic Places, 1996*). Like historic buildings and districts, these special places reveal aspects of our country's origins and development through their forms, features, and use. The Classical Core reflects the values and expressions of three important eras in American architecture and landscape architecture. The overlapping and intertwining of the picturesque, beaux-arts, and modern eras yield a rich and diverse dialogue of formal design languages. The Classical Core's landscape gains its power to the extent that these three layers "meet" each other and coexist.

The fortuitous combination of UC Berkeley's original landscape context, and the efforts of campus planners of three eras who engaged the work of their predecessors, has made the Classical Core an international example of successful "collage" - the work of prior layers deliberately retained and successional layers emerging. As the University's educational needs and campus development evolve, this layering of landscape design and intervention continues.



Illustrative campus landscape plan, including significant open space elements and building placement, from UC Berkeley's *Landscape Master Plan* (2004).



Study Process | The LHP began with extensive **research** of nine study areas within the Classical Core, chosen by the campus as representative landscapes for this plan. The research documented the physical development of the landscape, focusing on human interaction with, and modification to, the natural landscape over time. **Historic assessments** and a chronology developed from the research were analyzed in the context of the extant campus landscape, resulting in suggested treatments for the study areas and an identification of the periods of significance for the Classical Core. The historic assessment evaluation was then applied to two **case studies**. These case studies assessed historic values with current campus needs, yielding conceptual designs for future implementation. Finally, a comprehensive set of **design guidelines** was developed to address the future needs for site planning, design, and maintenance programs on campus. The guidelines address spatial compositions of site elements within the Classical Core, preserving and respecting the historic qualities in this notable area of the campus.

Scope of the Plan | The LHP provides direction to the University administration, planning and design staff, and design consultants for landscape rehabilitation and enhancements within the Classical Core. The Plan is intended to inform the landscape design process in the assessment and application of cultural landscape values for the development of site improvements. It is also valuable as an overview for the philanthropic community who will in large measure enable the initiatives to become a reality.

Due to the Classical Core's significant cultural landscape value, the landscape design process requires an understanding of the particular cul-

tural resource, determined through an assessment process, prior to developing a design concept. Consistent with this approach, the LHP is organized as follows:

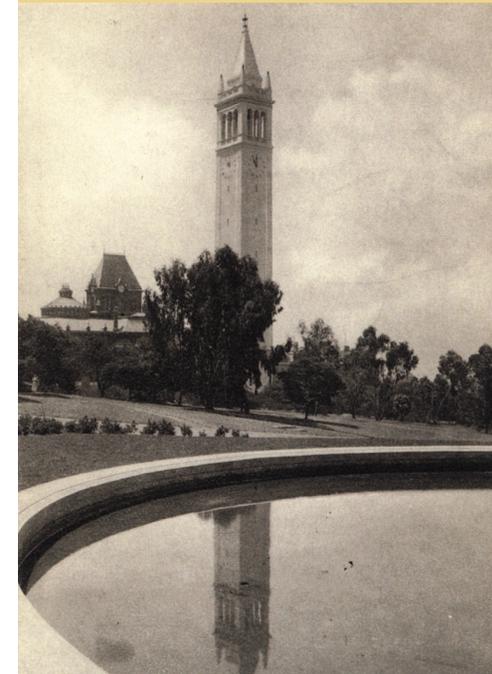
Section 1 | Introduction:
Presents a summary of the Plan and its purpose

Section 2 | Historical Significance:
Illustrates the campus's historical significance in the context of American campus design in addition to the historic chronology

Section 3 | Implementation Concepts:
Describes the cultural landscape assessment process and its application in two model areas of the Classical Core

Section 4 | Landscape Guidelines:
Provides design guidelines for site planning and landscape design in the Classical Core

Related Campus Plans | The LHP is the fourth and final step in a series of strategic planning documents designed to guide University growth and development over the next 50 years. Completed in 2002, the first two documents, the *Strategic Academic Plan* (SAP) and the *New Century Plan* (NCP), direct academic growth and establish a comprehensive strategy for the University's capital investment program, respectively. The *Landscape Master Plan* (LMP), completed in 2003, presents a broad physical framework for the use and treatment of open space within the entire central campus. The LHP focuses on the cultural landscape, and associated landscape improvements, within the Classical Core.



View of the Campanile from the Mining Circle (ca. 1914). Courtesy *Picturing Berkeley - A Postcard History*

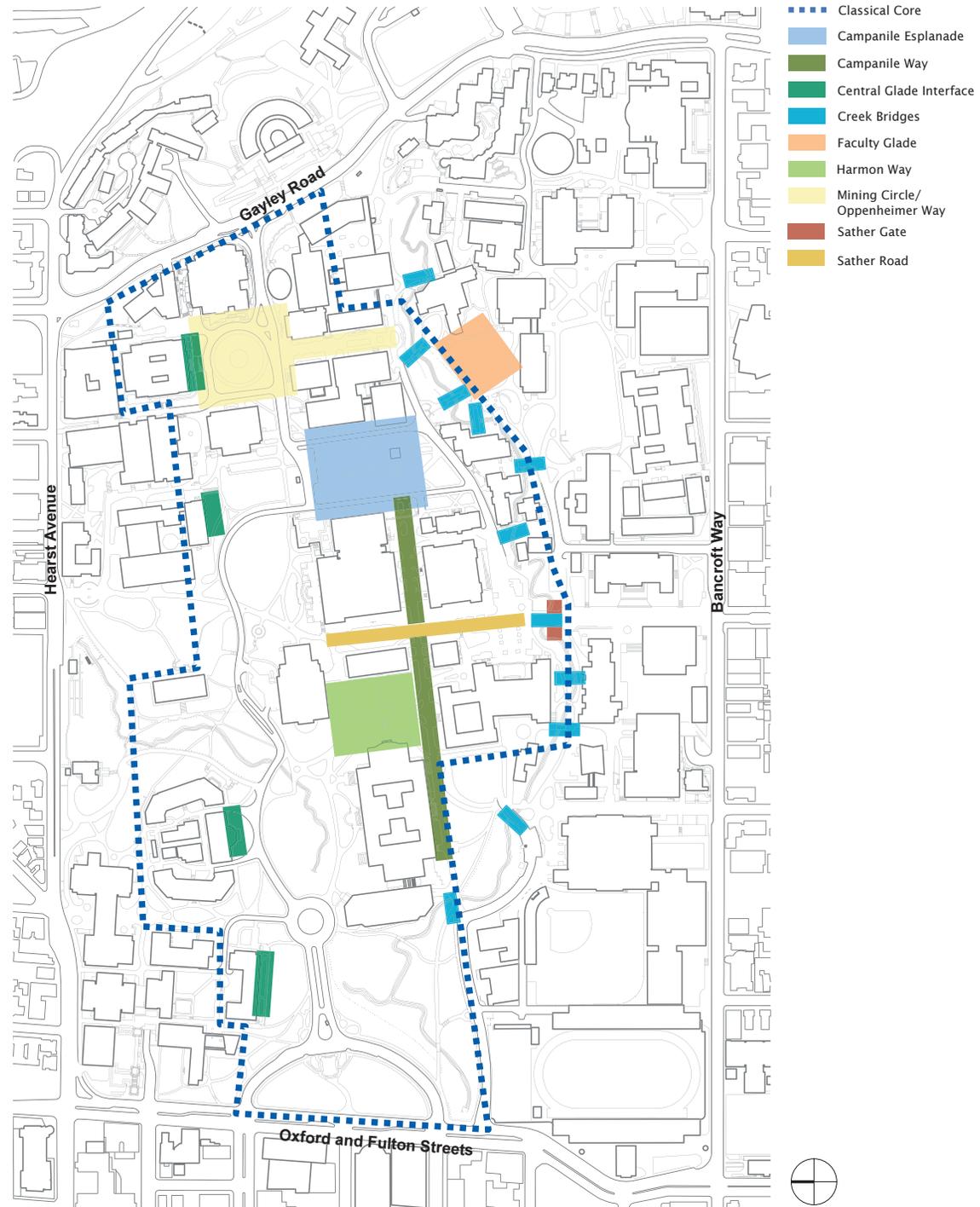
Study Areas Diagram

UC Berkeley staff identified nine study areas in the Classical Core for the cultural landscape assessment process, using the following criteria:

- The study area is an iconic element on campus (Example: Campanile Esplanade).
- The study area represents a typical landscape element within the campus, and knowledge gained from its study provides guidance to similar campus spaces (Example: Campanile Way in its role as a pedestrian spine).
- The study area represents a significant campus resource that has not been previously studied (Example: Strawberry Creek bridges).

Based on the assessments, the cultural landscape consultants recommended the following treatment strategies, as defined in Section 3:

- Campanile Esplanade - Restoration
- Campanile Way - Rehabilitation
- Central Glade Interface - Rehabilitation
- Creek Bridges - Preservation
- Faculty Glade - Rehabilitation
- Harmon Way - Preservation
- Mining Circle/Oppenheimer Way - Restoration and Rehabilitation
- Sather Gate - Preservation
- Sather Road - Rehabilitation





Historical Significance

Cultural Landscape Significance

American Campus Context

Campus History

Implications for the Future

“In the new building scheme of the University of California, it is the intention to restore the artist and the art idea to their old preeminence.”

*Excerpt from the International Competition for the Phoebe Hearst
Architectural Plan of the University of California prospectus*

*Preceding page: Ansel Adams, Plaza North of Student Union, 1966
Keystone-Mast Collection, California Museum of Photography, University of California, Riverside*

*Facing page: Ansel Adams, Sather Tower trees from Plaza, 1964
Fiat Lux Collection, California Museum of Photography, University of California, Riverside*

The history of UC Berkeley's Classical Core conveys an evolution of campus planning and landscape design informed by the prevailing design theories of the last 150-years. This section details the significance of the Classical Core's cultural landscape, its context within the evolution of American campus design, and its historical chronology. This historical information provides a foundation for making decisions regarding the restoration, rehabilitation, and enhancement of the Core's sensitive landscape.

Cultural Landscape Significance | To determine a site's national historical significance, the National Park Service sets standards for the documentation of a site's history and its historical context. These standards are set forth in the *National Register for Historic Places* (NRHP) program. Apart from its architectural and academic legacy, portions of the UC Berkeley campus landscape may be culturally significant, as determined using the NRHP criteria.

Criterion A: Associations with an event, or series of events, that have made a significant contribution to the broad patterns of American history.

UC Berkeley demonstrates national significance as the first federal land grant public university in the state of California; the first Agricultural Experiment Station in the state of California; and for its early collection and study of exotic botanical plant specimens.

Criterion B: Associations with the lives of people significant in our past.

UC Berkeley has a distinguished list of master landscape architects and architects whose collective work has defined the campus: Frederick

Law Olmsted, Sr.; William Hammond Hall; John Galen Howard; John W. Gregg; Lawrence Halprin; Garrett Eckbo; Robert N. Royston, and Thomas D. Church.

Criterion C: Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values.

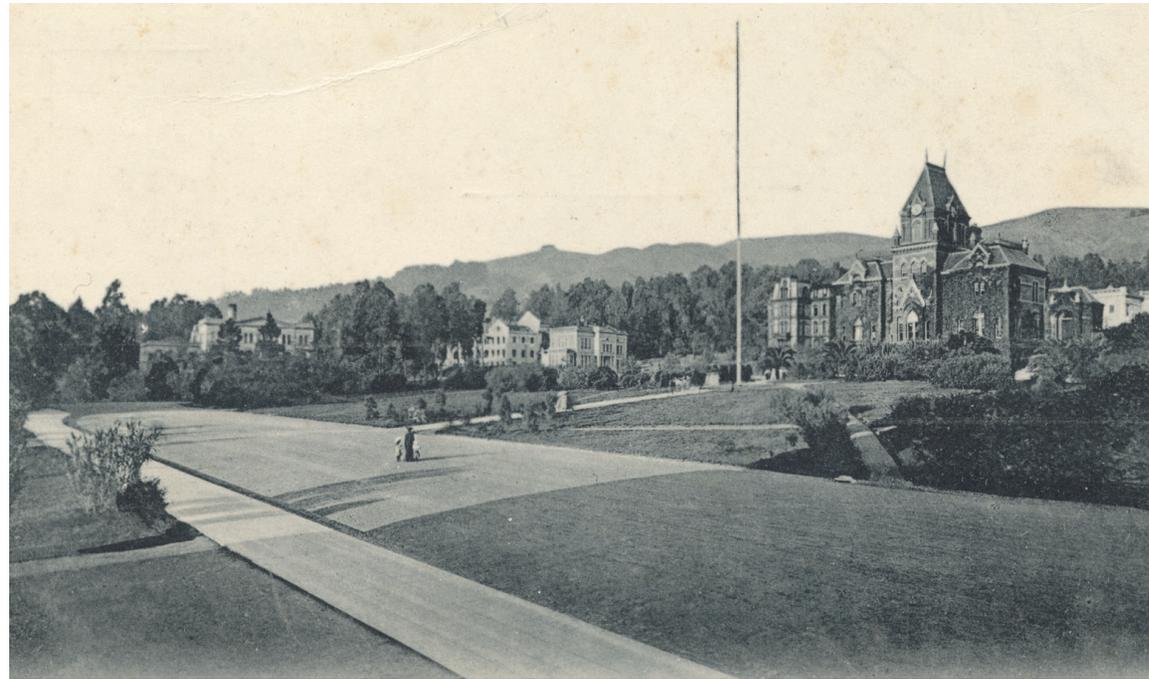
The Classical Core at UC Berkeley retains a layered collage of three significant internationally recognized landscape design movements: the picturesque era; the beaux-arts neoclassical era; and the modern era.

American Campus Context | The UC Berkeley campus is notable as a reflection of the values and expressions of broad national patterns and eras of American landscape architecture. The evolution of American campus design, and UC Berkeley's association with it, provides the context within which to understand the Classical Core's significant cultural landscape.

During the Colonial and early 19th century, campus design in the United States looked to the moral benefits of the landscape and to the nurturing character of Jefferson's "Academical Village", as expressed at the University of Virginia, rather than to European prototypes of universities. Jefferson's ideas were borrowed from European models for hospitals and model industrial villages. Likewise, most campus planning made use of axial organization, straight roads, and buildings aligned within or bordering park-like landscapes reminiscent of village greens.



Bacon Hall and campus flagpole in the picturesque era (ca. 1898).



The Picturesque Era | The picturesque movement, begun in the 1820s, had a great effect on the first campus plan for the College of California, the predecessor to UC Berkeley. The 19th century American picturesque was a natural style, evolving in Europe from the English 18th century preference for "nature" over French Baroque "artifice". The picturesque style originated in England, where the gently rolling agrarian ideals of Lancelot "Capability" Brown evolved with the more dramatic picturesque vision of Uvedale Price and Richard Payne Knight with gnarled trees, chasms, and precipices. Andrew Jackson Downing, who later championed both of these styles as options for appropriate natural rolling topography, popularized the two in a style that has become known solely as the picturesque or the romantic style of landscape design.

Downing's friend, Frederick Law Olmsted, Senior, and his partner Calvert Vaux would carry this approach forward after Downing's death in 1852, in the competition for Central Park in New York. The picturesque became a primary style of the consequential Olmsted/Vaux partnership, in which they firmly established the profession of Landscape Architecture.

The College of California, UC Berkeley's predecessor institution, was the first to employ Frederick Law Olmsted to set the picturesque tone. In 1866, Olmsted developed a picturesque park-like campus plan with the major east-west axis set on a view of the Golden Gate, modeling it after Alexander Davis' and Howard Daniel's Llewellyn Park. His visionary landscape report for the College of California campus is also a significant project within the Olmsted legacy.

Under the tutelage of Olmsted, William Hammond Hall planned the first built incarnation of the University of California, Berkeley campus. Hall's 1875 layout was a product of the picturesque era, with its sloping topography and formidable views. The picturesque style relied heavily on tree canopy for its effects, which includes the filtered light of woodlands to contrast with open meadows and glades. On the UC Berkeley campus, historically important picturesque zones were the Botanical Garden, Strawberry Creek and environs, Founder's Rock, and the Eucalyptus Grove.

The UC Berkeley campus, while a new university in a new state, was well in line with other contemporary campuses in its use of the picturesque style. Vassar College (1861), with a picturesque plan centering on a single main academic building; Kansas State, similarly started with a single College Hall, Michigan Agricultural College (ca. 1860); and Iowa State University were all based on the picturesque landscape.

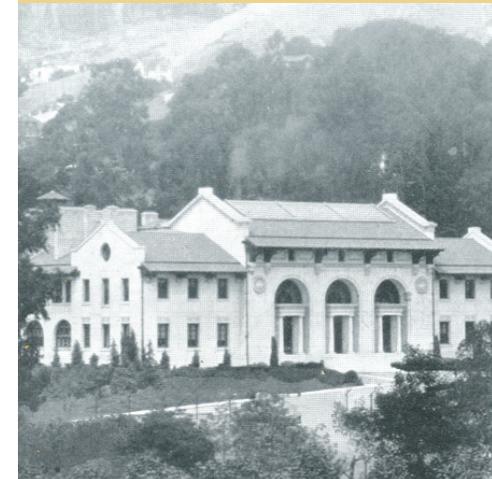
Hall's 1875 layout for UC Berkeley took place at the zenith of the picturesque era. Less than twenty years later, the beaux-arts neoclassical era, with its focus toward Europe, would become the prevailing style of the day.

The Beaux-Arts Era | The University of California, Berkeley is historically and architecturally notable for its "International Competition for the Phoebe Hearst Architectural Plan, 1897-1899", managed by architect Bernard Maybeck. Although John Galen Howard placed fourth in the competition and French architect Emile Benard placed first, Howard ultimately would serve as the UC Berkeley campus architect for over 20 years. The core of the Berkeley campus

by John Galen Howard is considered to be one of the largest, most complete beaux-arts neoclassical ensembles ever executed in permanent materials in the history of American architecture. As of the 1930s, no other campus in the United States appears to have achieved UC Berkeley's combination of beaux-arts neoclassical architecture set primarily within a picturesque landscape.

The beaux-arts neoclassical style ascended in the United States during the last decade of the 19th Century with the work of such architectural firms as McKim, Mead and White. Soon, the beaux-arts neoclassical style eclipsed all others to reach its first apogee as the primary architectural character of Chicago's 1893 World's Columbian Exposition (the "White City"), where Frederick Law Olmsted was the landscape architect. Plans for the Washington Mall followed, and many cities determined the style was an appropriate statement of national - and international - status.

The beaux-arts neoclassical style utilized plans (partis), architectural form, and detail prototypes from eras where great economic and political power was manifested in design. The Caesar's of Rome and the 17th century French monarchs employed classical typologies driven by strong geometry for their public "personas". For American architects and landscape architects in the late 19th and early 20th centuries, the beaux-arts neoclassical style provided a style for both building and site design that expressed America's "coming of age" as a great international power. Grand vistas were often a part of these designs, usually taking the axial form of roads, water features, or "tapis verts" (great expanses of lawn).



John Galen Howard's Hearst Memorial Mining Building (ca. 1922).

Howard's early beaux-arts neoclassical plan for the upper reaches of the Central Glade (ca. 1914).



Within the UC Berkeley Classical Core, a compromise was reached early on between the picturesque landscape and the beaux-arts neoclassical composition. In their original Hearst Competition entries, both the Howard and Bénard plans intended that the creek would be covered for most of its length by new construction. The competition prospectus, however, noted that preservation of the natural landscape and strict limits on grading were to be a priority for the final submissions. By 1900, Bénard's winning plan showed Strawberry Creek weaving in and out of a beaux-arts neoclassical design parti. This was only the first of the retreats of the "artificial" beaux-arts neoclassical style when

faced by the staying power of the "natural" style of the picturesque. In Howard's later beaux-arts neoclassical plan of 1908, buildings and formal landscape terraces still were intended to work together as a single symphonic beaux-arts neoclassical composition. However, much of the portion of Howard's parti that involved terraces and plazas, including his plan for what is now the Central Glade open space, was never built. The result was that the Classical Core of the campus remained a combination of predominantly neoclassical structures within a predominantly picturesque landscape.

Another noted American beaux-arts neoclassical campus is Columbia University in New York City (1894) by Charles F. McKim. This plan also combined a beaux-arts neoclassical ground-plane parti and neoclassical architecture. However, the Columbia campus was deliberately conceived as an urban campus, built to fit within metropolitan confines, and lacked the grand exterior landscape frame of reference - the Berkeley Hills and the Golden Gate - that set the UC Berkeley campus within a regional frame.

Campus plans with strong beaux-arts neoclassical partis that did not employ neoclassical architecture included the Olmsted and Coolidge plan for Stanford University (1888), designed in the Richardsonian-Romanesque, and the Horace Trumbauer plan for the West Campus of Duke University (1925). Trumbauer designed the latter with African-American architect Julian Abele in the collegiate gothic style. Both of these campuses have maintained a strong period plan in their historic cores, without contemporary overlays. The same is true of the plan for Rice University, which has preserved its historic beaux-arts neoclassical parti (ca. 1910) and its eclectic collection of historic core buildings.

The closest parallel to the Berkeley campus may be at the University of Washington in Seattle, another site that benefited from a strong beaux-arts neoclassical parti. Originally a picturesque landscape centering on Denny Hall (1891-1900), the Olmsted Brothers (1904), Gould (1915), and Bebb and Gould (1920) plans for the University of Washington all show strong beaux-arts neoclassical plans. Most important to its beaux-arts neoclassical landscape was its interim use during 1909 as the site of the Alaska-Yukon-Pacific

Exposition, for which UC Berkeley architect John Galen Howard and landscape architects the Olmsted Brothers designed a magnificent beaux-arts neoclassical site plan. In direct contrast to Howard's work at UC Berkeley, the University of Washington's beaux-arts axial landscape has been retained, while most of its neoclassical Exposition buildings were destroyed.

The UC Berkeley campus began as a picturesque landscape and owes its axes to Olmsted and John Galen Howard. While the campus developed a strong beaux-arts neoclassical parti, it lacks an intact beaux-arts neoclassical layer. Finally, the campus has faced the challenges of major post-war design layers while retaining some elements, through contemporary campus plans, of its beaux-arts neoclassical heritage.

The Modern Era | The mission of landscape architecture changed radically from the Great Depression through the 1970s. The profound impact of the automobile, not just on the land but in how people move through the landscape, and the increasing requirement that landscape should be functional caused a re-evaluation of design principles. The intent of the modern era was to acknowledge the industrial era and to pare away the "styles" to gain greater honesty of form.

Three students of the Harvard University Landscape Architecture Department, Garrett Eckbo, James Rose, and Dan Kiley, and one faculty member, Christopher Tunnard, experimented with modern design principles and applied them to landscape architectural design. Their work was characterized by simplicity, strong spatial organization, relaxed and informal "outdoor" livability, and relatively low maintenance costs. In



The north facade of Doe Memorial Library (ca. 1936).



View looking northeast from the West Circle (ca. 1936).

Tunnard's vision, the tenets of this new style would be functionalism, aesthetic beauty, and "empathy" with the site. Some of the finest modern unions of site and landscape architectural design also would appear in the work of UC Berkeley graduate and campus planner Thomas Church.

Church, who produced a Landscape Master Plan for the campus, also helped to frame the 1962 *Long Range Development Plan (LRDP)* that guided campus development for nearly 30 years. In the comprehensive 1962 LRDP, Church sought to prioritize pedestrian movement over vehicular and preserve open space, preserve the rustic essence of the picturesque period, enhance the beaux-arts neoclassical areas, and begin a modern layer of geometric site definition. Church's extensive campus design work, undertaken in collaboration with campus Architect Louis DeMonte, was in keeping with the principles from the LRDP.

Other modern campus plans of this era include Ludwig Mies van der Rohe's work at the Illinois Institute of Technology in Chicago (1938-1940); Dan Kiley and Skidmore Owings and Merrill's plan for the Air Force Academy in Colorado Springs (1954-1962); Foothill Community College by Sasaki Walker Associates with architects Ernest J. Kump and Master & Hurd (1959); and Church's design (with Warnecke and Associates) for the UC campus at Santa Cruz (1963-1965). However, these projects did not have the challenge of integrating the work of previous design eras, as Church did at UC Berkeley.

Campus History | The evolution of the UC Berkeley campus reflects broad national patterns of American landscape design and the legacy of this educational institution. The following chronological history of the Classical Core documents the development of the campus and its related significance. Based on the historic research and assessment, the Classical Core is found to reflect three periods of significance: the picturesque era, the beaux-arts era, and the modern era.

Campus Origin | The College of California, the predecessor institution to University of California, Berkeley, was founded in Oakland in 1855. In 1860, the College procured the 160-acre Berkeley campus site, named for the 18th century educator George Berkeley, Bishop of Cloyne. Located five miles north of Oakland, the site was characterized as "a choice savannah which supported large coastal live oaks scattered on gentle grassy slopes." The location had an adequate water supply, a mild climate without strong winds, sycamore and bay trees, and spectacular views to San Francisco and the Golden Gate.

In 1862, the U. S. Congress passed the Morrill Act, establishing federal land grant universities. The Act was intended to bolster state economies by funding universities to do research and outreach for investment-based interests in agriculture, mining, and military service. The State of California received 150,000 acres of land from the Morrill Act, most of which were sold to fund a College of Agriculture and Mechanic Arts. At the same time, the College of California had experienced growth setbacks from insufficient financial support. The idea of forging a union between the two interests - a small private col-

lege and a State College of Agriculture, Mining and Mechanical Arts - was proposed, and the concept of a "University of California" was born.

The 1868 Organic Act of California, authored by John W. Dwinelle, established the first public University of California, the Berkeley campus. The Act included a program of manual labor in connection with the Agriculture College, "having for its objective practical education in agriculture and landscape gardening." The University of California Board of Regents was established in 1868 and Dr. Henry Durant became the University's first president.

The Picturesque Era: 1866 - 1900 | Prior to the merger, site planning and tree planting was well underway at the College of California campus. In 1866, Frederick Law Olmsted was commissioned to generate a comprehensive study of the campus, which he entitled "*Report Upon a Projected Improvement of the Estate of the College of California, at Berkeley, near Oakland*". Considered a significant piece of the Olmsted legacy, the report provided basic concepts and a land ethic that would prevail throughout the early development of the campus.

The Olmsted plan envisioned a picturesque park-like campus, stemming from Olmsted's belief that the natural order of landscapes serve a moral purpose in society and would be well-regarded by the Trustees. The plan included a major east-west axis aligned with the Golden Gate and campus grounds framed by the north and south forks of Strawberry Creek. Olmsted introduced adaptable tree species to 'forest' the open land. Incorporated as an essential component of the overall plan was the creation of an adjacent upscale neighborhood to support and



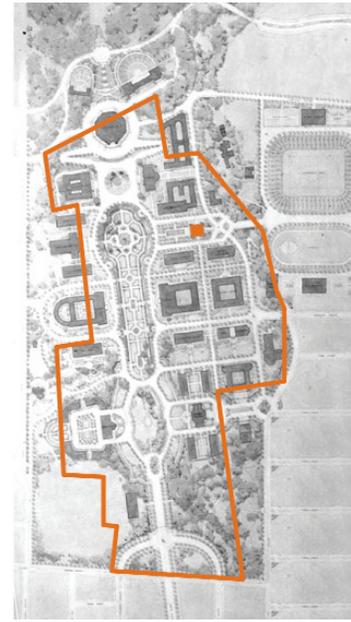
The Olmsted Plan for the College of California (1865) illustrates the origins of the east-west axis of the Central Glade, embraced by the north and south forks of Strawberry Creek. Piedmont Way is the landscape boulevard running north-south at the top right of the image.

Period of Significance

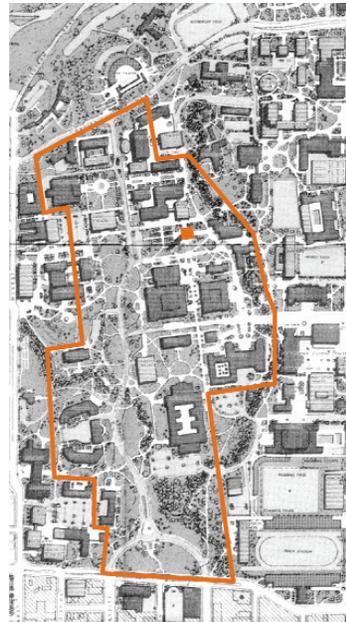
Period of significance is the length of time when a property was associated with important events, activities, or persons, or attained the characteristics which qualify it for National Register listing. Period of significance usually begins with the date when significant activities or events began giving the property its historic significance; this is often a date of construction. (*U.S. Department of Interior's National Register Bulletin: How to Complete the National Register Registration Form, Revised 1997*).



Olmsted's Plan (1865)



Howard's Plan (1914)



Church's Plan (1962)



New Century Plan (2002)

These scaled plans convey the morphological evolution of the campus over time. The Olmsted, Howard, and Church plans represent the campus's three periods of significance, the picturesque, the beaux-arts, and the modern, respectively. The fourth (NCP) plan represents the current condition of the campus with the inclusion of some future buildings and landscape initiatives. The orange square (Campanile) and outline (Classical Core) serve as orientation devices for each plan, conveying the change over the last 150 years of campus development.

uplift the institution of higher learning. Another integral design element was Piedmont Way, Olmsted's first landscaped boulevard that became a model for several of his residential projects around the country.

Shortly after completing the campus plan, Olmsted returned home to support the Olmsted & Vaux Company, his firm that was in its ascendancy. William Hammond Hall, a military surveyor and civil engineer who assisted in the planning of Golden Gate Park and environs, took over campus planning at Berkeley. Olmsted and Hall exchanged correspondence over the next few years, creating a productive working relationship during the implementation of the campus plan. Much later in 1886, Olmsted, commissioned by Leland Stanford to plan his campus, expressed criticism of the Berkeley campus' struggling landscape.

The fledgling University languished in its first years and the Regents grew impatient. Hall, motivated by their concerns, assessed the needs of the campus with the help and mentoring of Olmsted. In 1874, Hall's report to the Regents, entitled "*Development of the Grounds at Berkeley*", began a slow departure from the Olmsted plan. The Hall plan, a synthesis of Olmsted's early vision and Hall's own site knowledge, became the guiding document for campus planning through 1900.

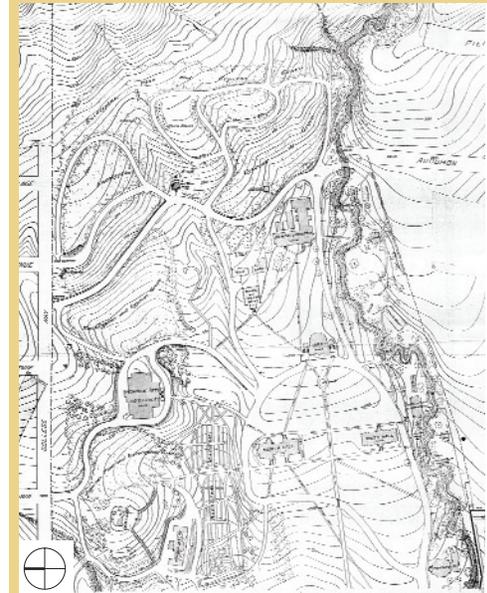
Unlike the Olmsted plan, Hall's plan proposed a larger university campus than Olmsted's vision for a thirty to thirty-five acre site serving college purposes. As Hall states:

"Thus the present plans for improvement are based upon an idea totally different from that upon which Mr. Olmsted formed his scheme; involving the conception of the entire area of one hundred and fifty acres manipulated as one educational institution, the material University."

Hall's plan also introduced a critical central feature, the botanical garden, to the campus setting:

"...but no more distinctive features to be considered than the botanic garden for the scientific arrangement of the plants, the departments for the practice of horticulture and agriculture, or even the recreation grounds, the ramble in the woods, or the mere landscape effects. A Conservatory, wherein much botanical knowledge can best be acquired, and always a pleasing and attractive feature, is located at a protected spot, where the ground about it is adapted to the cultivation of such plants and shrubs as would be appropriate in its neighborhood, and where it will represent a remarkably fine effect in the principal landscapes."

Following the Hall plan, construction of campus buildings began in earnest. Hall's plan incorporated North and South Halls, designed by architect David Farquharson and built in 1873 per the earlier Olmsted plan. The Second Empire victorian style architecture, a "romantic picturesque" style popular in England combined with the emerging picturesque landscape, struck a compatible tableau. Bacon Hall Art and Library Building was later constructed in 1881 in the victorian-gothic style and would remain in place throughout the entire beaux-arts neoclassical era until the 1960s.



This campus map (1897) illustrates some of the objectives of William Hammond Hall's 1870s plan for the campus, including the east-west axis of the Center Street Path, now known as Campanile Way, flanked by North and South Halls with Bacon Hall at its eastern terminus.

The campus flagpole located between North and South Halls (ca. 1898).



At some point in these early years, the axial Center Street path and a campus flagpole were installed, serving as forerunners of Campanile Way and the Campanile itself. Bacon Hall was shown as the eastern terminus of the axis, facing North and South Halls that were sited slightly to the west. Hall also included a small formal area with geometric walks at the east end of the Center Street path. The campus flagpole was the campus "axis mundi" - the vertical center point - in the early triangle and at the heart of the campus. Outside this core, picturesque winding roads carried students to other campus zones. These roads were installed along the north and south forks of Strawberry Creek following Olmsted's original concept and the subsequent Hall plan. The picturesque landscape plan was soon augmented by the development of the

College of Agriculture growing grounds and Botanical Garden.

The Agricultural Experiment Station and the Botanical Garden | From inception, the site chosen for the University held great natural landscape character and integrity with its gentle rolling topography, grasslands, and oak woodland. The forks of Strawberry Creek ensured a predictable water source and contributed to the revered scenery and riparian lushness with "their fine bordering of oaks, sycamores, bay trees, and plentiful growth of evergreen shrubbery." Tree planting began slowly but was generally accomplished in the Olmsted picturesque spirit, with thick plantations along the roads and "...that in front of this, trees should be planted singly and in small detached groups, as they are often seen in pastures in the east."

Early tree introductions on campus consisted of *Cedrus libani*, Cedar of Lebanon; *Pinus pinea*, Italian Stone Pine; *Cupressus macrocarpa*, Monterey Cypress; *Olea europa*, Olive; and other flowering trees. One of the earliest non-native plant introductions (ca. 1870) was *Eucalyptus globulus*, Blue Gum, a grove (plantation) at the western end of campus, planted as a windbreak for a cinder running track. From this time on through 1900, tree planting was extensive and consisted mainly of evergreens such as eucalyptus, pines, cypress, and acacias.

The Regents of the University formally established, by federal and state mandate, an Agricultural Experiment Station of 40 acres in 1872; an Economic Garden of 2 acres in 1878; and a Botanical Garden of 7 acres by 1891. The proponents of the Experimental Station introduced and studied numerous species for agricultural, forest, and ornamental purposes. At the direction of the Regents, the University set aside the Botanical Garden acreage along the swale below Observatory Hill for "a garden distinctively botanical" to create at Berkeley a display similar to "a part of the pride of almost every university in Europe at the present time." As part of this undertaking, the University established the College of Agriculture and Agricultural Engineering, officially launched in 1875 with the appointment of Professor Eugene Hilgard. Hilgard's first objective was to obtain a legislative appropriation to permit the "continuation and expansion of the experimental cultures on the grounds assigned to the department and the establishment of a garden of economically important plants, both for experiment and for the instruction of classes by actual demonstration and exhibition of the growing plants."

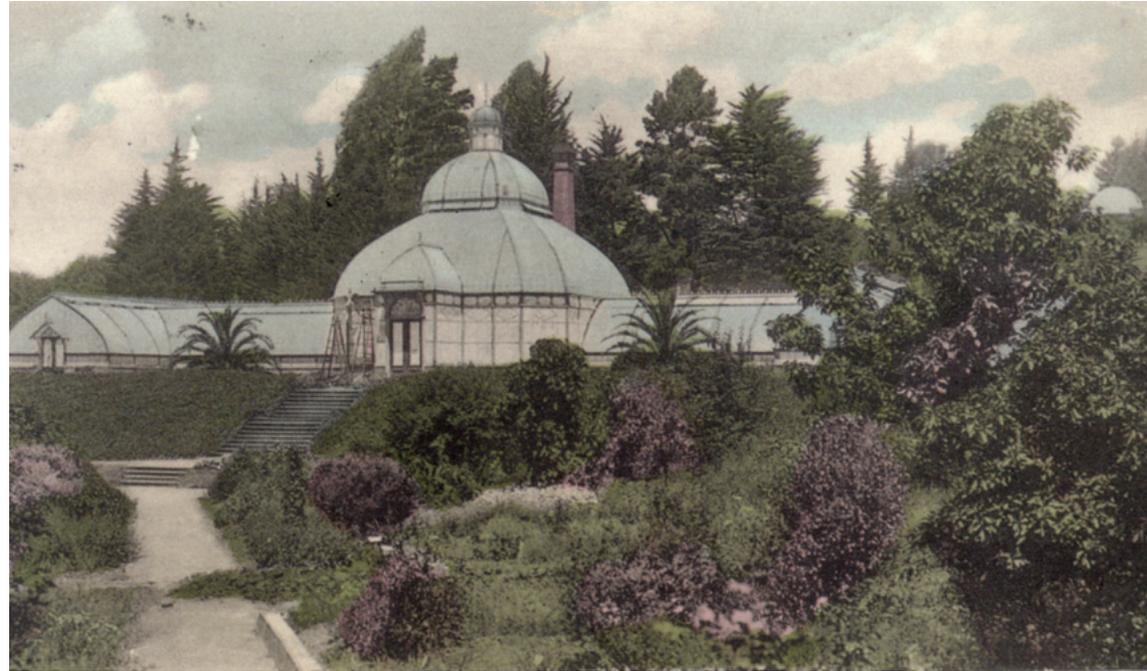
Contemporaneous with the Botanical Garden, the University established a College of Natural Sciences and appointed Professor Edward Greene to one of its founding units, the Department of Botany. Experimental planting accelerated, doubling in two years. Greene wasted no time in planning for the botanical garden, commenting "the Botanical Garden has always and everywhere been recognized as a most important adjunct to a thorough and efficient course of instruction in the knowledge of plant life in general. The Garden of Economic Plants, long ago established at Berkeley by Professor Hilgard, is to be accounted an excellent beginning in this direction, and is doing good service." The University Department of Botany graduated seven doctoral candidates by 1912.

A glass and steel Botanical Conservatory was erected in 1891, in a style analogous to the London Crystal Palace and San Francisco's Conservatory of Flowers. It was situated on a raised pad at the foot of Observatory Hill approximately on axis with present day Sather Gate and adjacent to present day Haviland Hall. Because of the early 20th century growth of the University, the Botanical Conservatory was dismantled in 1924. The Botanical Garden and many specimens were moved from the central campus eastward to the hills above the campus where the UC Berkeley Botanical Garden exists today. Campus landscape architect John W. Gregg (1913-1946) designed the layout for the new site of the Botanical Garden, following the requirements of then director Dr. T. Harper Goodspeed (1926). A major difference in the new design was the departure from a traditional grouping of plants according to taxonomic relationship or economic usage. Gregg arranged plants in demonstration areas, grouping them by



The Eucalyptus Grove was an introduced element on the Berkeley campus (ca. 1870). Courtesy *Picturing Berkeley - A Postcard History*

Botanical Garden and the Glass Conservatory
(ca. 1920). Courtesy *Picturing Berkeley - A Postcard
History*



their geographical origins and recreating, in effect, intact bio-communities. Some horticultural artifacts from the earlier Botanical Garden remain within the Classical Core.

The Beaux-Arts Era: 1900 - WWII | It was clear by the turn of the new century that the grounds of the University had not yet realized their full potential. At the urging of master architect Bernard Maybeck, University donor Phoebe Apperson Hearst sponsored an international competition for a master plan of the campus. This act would usher in a new and pivotal era in campus history. Excerpts from *The International Competition for the Phoebe Hearst Architectural Plan of the University of California* prospectus read:

"It is seldom in any age that an artist has had a chance to express his thought so freely, on so large a scale and with such entire exemption from the influence of discordant surroundings. Here there will be at least twenty-eight buildings, all mutually related and, at the same time, entirely cut off from anything that could mar the effect of the picture. In fact, it is a city that is to be created - a City of Learning - in which there is to be no sordid or inharmonious feature. There are to be no definite limitations of cost, materials, or style. All is to be left to the unfettered discretion of the designer. He is asked to record his conception of an ideal home for a University, assuming time and resources to be unlimited. He is to plan for centuries to come. In the great works of antiquity, the designer came first, and it was the business of

the financier to find the money to carry out his plans. In the new building scheme of the University of California, it is the intention to restore the artist and the art idea to their old preeminence."

The final judging for the Competition was held in 1899. The winner was Frenchman Emile Bénard, who designed an elaborate plan in the French beaux-arts neoclassical style. He came to California and revised his plan in 1900, preserving Strawberry Creek while imposing formal urban elements upon the land. However, he did not remain in California to see to its implementation. After his departure, dialogue with Bénard would continue through 1901, but his involvement in the design process would be minimal.

In 1901, Ecole des Beaux-Arts trained John Galen Howard, whose New York firm placed fourth in the Competition, was chosen by Mrs. Hearst to design the Hearst Mining Building, in memory of her husband, California Senator George Hearst. Gradually, Howard was brought forward to replace Bénard in the UC Berkeley beaux-arts campus design project. In 1902, Howard became the campus Supervising Architect and began to implement his revision of the Bénard plan. One aspect of Howard's beaux-arts neoclassical design was the "consistent placement of buildings on re-graded, leveled land." Another pivotal aspect was the siting of the Mining Building, his first built project, within the present campus core north of the earlier campus structures. By its placement, Howard secured the east-west Central Glade axis as precedent, affirming Olmsted's original axial vision, with the Mining Circle at its head. This began the implementation of the neoclassical beaux-arts layer of campus design at UC Berkeley.

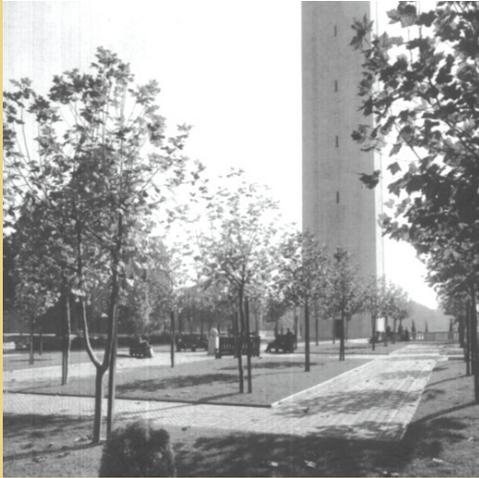
Howard would dominate UC Berkeley campus master planning for the next 20 years. He founded the Architecture Department in 1903, the same year in which Maybeck's Faculty Club and Howard's Greek Theatre were completed. California Hall was completed in 1905, and the Mining Building was completed in 1907. In 1911, the University House and the Bakewell and Brown Class of 1910 bridge in the Faculty Glade were completed. Boalt (now Durant) Hall was completed the following year, with Wellman Hall finished in 1913.

Although Howard's beaux-arts architecture was well received, his neoclassical parti for a Central Glade formal axis was not fully implemented. In the January 1911 campus map, the Central Glade area is denoted as the Botanical Garden. It is possible that the already extant Botanical Garden, and the power of the College of Agriculture, were factors that sealed the fate of Howard's Central Esplanade, followed by the cost of new non-academic construction and a general desire to avoid site grading.

Regents of the UC stated as early as 1912, the founding year of the Agricultural Extension at UC Berkeley, that there was need "for the preparation of a permanent plan for landscape gardening on the University Campus." In 1913, the University hired John W. Gregg, at the request of Dean of Faculty Thomas Forsythe Hunt (also Dean of Agriculture), as founding Professor of the Division of Landscape Gardening and Floriculture within the College of Agriculture. This division later became the Landscape Design and then the Landscape Architecture department. A Memoriam by several of his now notable former students stated:



John Galen Howard's revision of the 'Competition' Plan (1914) with a strong east-west axial configuration to the Central Glade.



The Campanile Esplanade, with its signature London Plane Trees prior to being pollarded (ca. 1920).

"Gregg guided both the planting of the Berkeley campus, and the protection of its native growth, tree by tree and shrub by shrub."

In 1914, Landscape Gardening and Floriculture Division faculty developed planting plans for Hearst Memorial Mining Building, and the Division was asked to prepare planting plans for Doe Memorial Library, California Hall, Boalt Hall, and Agriculture (Wellman) Hall. Gregg was appointed campus Landscape Architect and Engineer in 1915.

As the beaux-arts neoclassical architectural layer of the campus grew, John Galen Howard again revised his campus master plan in 1914. In the revision, entitled the Phoebe Apperson Hearst Architectural Plan, Howard oriented his buildings toward each other within the campus core. Construction of Sather Tower (Campanile) began in 1913 and the Esplanade followed in 1915-16. In 1917, both the completion of Doe Memorial Library and the construction of Wheeler Hall were achieved. In 1923, Howard sited Stephens Hall on different levels in response to the natural topography, deviating for the first time from creating a flat landscape plinth as a building site.

With his influence waning, Howard's career at UC Berkeley drew to a close in 1924 following his dismissal as Supervising Architect, although he remained as head of the School of Architecture until 1930. From 1915 until Howard's departure in 1930, Gregg worked with Howard on campus landscape design issues. Particularly notable was Gregg's combination of picturesque site design surrounding smaller beaux-arts neoclassical building and formal landscape zones. This design approach would be the

ultimate paradigm for UC Berkeley during its beaux-arts neoclassical era. Named the Berkeley campus Consultant Landscape Architect in 1926, Gregg also began to provide designs for other UC campuses.

George Kelham, who had spent a year at the Ecole des Beaux-Arts, was appointed as Supervising Architect in 1927. He respected Howard's adaptation of the Bénard plan and also contributed to UC Berkeley's beaux-arts neoclassical layer. His work included Crocker Radiation Laboratory (razed), old Davis Hall, Harmon Gymnasium (partially demolished and replaced), Bowles Hall, the engineering building (now McLaughlin Hall), Moses Hall, and International House. Kelham's Life Sciences Building (1930) was a large building planned with a faculty committee and located on a site identified in Howard's plan for five smaller buildings. Construction of Giannini Hall (1930) by William C. Hayes finished Howard's 1908 tripartite agriculture group.

In 1931, University President Sproul appointed an Advisory Committee on Campus Development and Building Location, and Kelham would not be given the same power once given to Howard. Warren G. Perry, Chair of Architecture who had also attended the Ecole, headed the committee. Perry would produce a campus study in 1934 and, as in the Howard plan, the study permitted construction on Observatory Hill.

During the early 1930s, the campus landscape character was generally described as one of eucalyptus groves and acacias, and the Faculty Glade was noted for its oaks with a central "worn" open space. Per a request from



President Sproul, Gregg planted eighteen *Quercus agrifolia*, thirty-four *Sequoia sempervirens*, thirty-five *Liquidambar styraciflua*, one *Sequoiadendron giganteum*, some *Betula alba*, two deciduous oaks, four *Pinus pinea*, and various other trees in connection with the landscaping of "our new building." In the early 1930s, Harmon Gym and Edwards Stadium were built southwest and outside the historic campus core, moving the campus boundary one block to Bancroft Way to better accommodate campus growth.

By 1939, Gregg's approach to landscape architectural design appeared to be fully aligned with the pre-modernist eras of the picturesque and the beaux-arts neoclassical formal. These styles were often used together in park design, such as

Olmsted and Vaux's Central Park in New York City.

George Kelham died in 1936, and Arthur Brown, Jr. replaced him as campus Supervising Architect. Due to the Depression economy and impending WWII, his tenure saw little construction. However, he continued to respect Howard's design style in spite of budget issues. Gregg believed that, due to its design maturity, changes to the campus now were occurring "only in the details." Sproul Hall, constructed in 1941, was one of the last buildings on campus to conform to a beaux-arts aesthetic, and it was off axis with the main grouping of buildings. Also in 1941, Stern Hall, a women's dormitory and the first building in the modern style, was built east of the core campus (Corbett and McMurray with

Signature oaks within the Faculty Glade (ca. 1922).



Temporary wooden buildings located west of Mining Circle (ca. 1949).

William Wurster, John W. Gregg, and Isabella Worn).

In 1944, the Brown plan for the campus was adopted with the hope of guiding future campus growth. However, the plan did not address such important elements as anticipated enrollment limits, land acquisition planning, on-campus parking policy, dormitory housing plan, or architectural design guidelines. The Brown plan added roads and building sites within the campus core along the Howard axis, with a road on axis with the southern edge of the Mining Circle and a loop road around the Esplanade. Strawberry Creek would provide occasional open spaces. Brown asked that that new buildings respect a four-story height limit. However, "...as a result of his plan, virtually all the campus open spaces were seen as building sites."

The Brown plan modified the Howard plan. Buildings from 1908 onward would be seen as the campus core, the buildings and landscape would be treated as a comprehensive architectural group, and building heights would be limited to four floors to avoid the need for elevators. This plan, however, was not well implemented and most construction was on the campus perimeter rather than in the campus core. Brown sited academic clusters at the corners of the campus, and William C. Hayes, Chair of Sproul's Development and Building Committee, chided him for not building on the Central Glade. Several buildings were considered for location in the central green space, and, although nothing came to fruition, the idea of building in the glade finally gained a foothold. The final Brown plan called for many low-rise buildings "with limited public open space." When Arthur Brown stepped down as campus Supervising Architect in 1948, he was not replaced.

In 1947, temporary wooden buildings, left over from war use, were moved to the campus by the U.S. Veterans' Educational Facilities Program to supply spaces for a post-war student boom. Located on the Central Glade in the heart of the historic campus core, some remained through the 1970s.

John Gregg retired in 1946, praised by A. D. Taylor as having done "more than anyone else to develop landscape architecture in the Far West as an established program." H.L. Vaughn, a modernist, succeeded him as Chair of Landscape Design, and the beaux-arts neoclassical style landscape design was no longer taught at UC Berkeley. While several additional buildings would be built in the neoclassical style, a transition to modernism was beginning to occur on campus.

The Modern Era: WWII - Mid 1970s | In 1948, an Exhibition of Landscape Architecture at the San Francisco Museum of Art focused on "California School" garden landscapes by Berkeley graduates Thomas Church, Garrett Eckbo, Robert Royston, and Edward Williams. The exhibition's catalog included articles by William Wurster (architect), Claire Falkenstein (sculptor), and Christopher Tunnard (city planner). Also in 1948, the Landscape Design program became the Landscape Architecture Department within the College of Agriculture. A year later, alumnus William Wurster arrived as Dean of the College of Architecture. Morgan Hall would be constructed in the modernist style in 1953, with the Alumni House following in 1955 and Warren Hall (Public Health) in 1956. From 1948 until 1956, campus landscaping remained relatively untouched except for planting around the Administration Building. One exception



included the modern landscape design of Dwinelle Plaza (ca. 1950-51), attributed to Eckbo, Royston & Williams.

In 1948, the University Division of Architects and Engineers was renamed the Office of Architects and Engineers and given the Supervising Architects' duties. At this time, the campus, in essence, had no master plan document in place. The scale and number of buildings in progress led to concerns about the form and function of the campus as a whole. For example, parking was introduced to the Central Glade in 1951. In 1952, an Office of Architects and Engineers campus plan was approved and

revised. It included high-rise dormitory structures off campus. University Architect Robert J. Evans and campus Architect Louis DeMonte had looked at potential land acquisition to accommodate campus growth without destroying open space. DeMonte noted, in particular, concern for the Central Glade, the Eucalyptus Grove, and the Faculty Glade.

In 1952, Chancellor positions were created for two of the UC campuses, UC Berkeley and UCLA. Previously, the UC president had essentially governed all UC campuses directly. Clark Kerr was selected as the first UC Berkeley Chancellor. One of his foci was campus planning,

Sather Gate, Wheeler Hall, and the Campanile beyond (ca. 1945). Note that at this time, the Gate defined the campus entrance, and the adjacent Sproul Plaza was a city block.



South fork of Strawberry Creek with the Class of 1910 Bridge beyond (ca. 1918).

which he approached with his powerful Administrative Committee on Buildings and Campus Development.

Lawrence Halprin, the first consulting Landscape Architect, submitted a preliminary campus master plan report in 1954. His plan, never realized to any degree, emphasized a pedestrian campus with submerged peripheral parking, creek environments as retreats from the urban areas of campus, and ample tree planting for design rather than botanical purposes. His plan sunk Gayley Road near the Greek Theatre in an effort to re-connect all campus land from west to east, and it proposed closing Bancroft Way at Telegraph Avenue, creating a pedestrian node. The plan also recommended returning much of the campus to true native planting, excluding lawns, and planting trees in parking lots. Though officially recorded, Halprin's plan was never adopted.

In 1956, the UC Board of Regents created a Committee on Campus Planning, naming Chancellor Clark Kerr, William Wurster, Regent Donald McLaughlin, and Chief of Staff Louis DeMonte (also head of the Office of Architects and Engineers) as members. This group served in the role of Supervising Architect. The Committee looked at aesthetics, building locations, massing, land use, and open space issues. The Committee also developed design criteria for use by individual architects commissioned to do a project. The Regents made the final selection of architects, and Wurster, Church, and DeMonte managed the architectural effort. Church and DeMonte also recommended sites for expansion to the Building and Campus Development Committee, which ultimately made the final decisions.

In 1956, the Committee on Campus Planning produced UC Berkeley's first *Long Range Development Plan* (LRDP) in response to an anticipated growth to 25,000 students. The plan's intent was specifically to preserve the campus landscape context. It also incorporated many of the recommendations of *The Students at Berkeley Report*, including new residence halls, a new student union complex, and extensive play and recreation facilities. The plan concepts included a 10-minute class change time centered on the library, central campus density of building to land of 25 percent maximum, clustering of academic use groups, and minimizing of vehicular circulation on campus by parking cars in perimeter structures. All of these concepts were implemented. The plan also committed to "the private automobile as the principle means of circulation and access to the campus." While the plan scheduled some buildings for demolition, those actually demolished included the Anthropology Museum, Bacon Hall, Band, Chemistry, Decorative Arts and Annex, Faculty Club Garages, Freshman Chemistry Lab, Handball Courts, some Hothouses and Greenhouses, Mechanics, Music, the Observatory, a Storehouse, and 10 of the 19 temporary buildings. This was the era in which the campus lost the 1880s Observatory and some of its remnant greenhouses. The University and the City also agreed to work together on congestion and design issues.

The 1956 LRDP included a specific goal related to "Landscape, Regional Scenic Assets, and Historical Features." This stated that: "Every measure will be taken to preserve the beauties of the natural setting of the campus. The natural groves and woodlands of Strawberry Creek will set the prevailing feeling for the campus land-

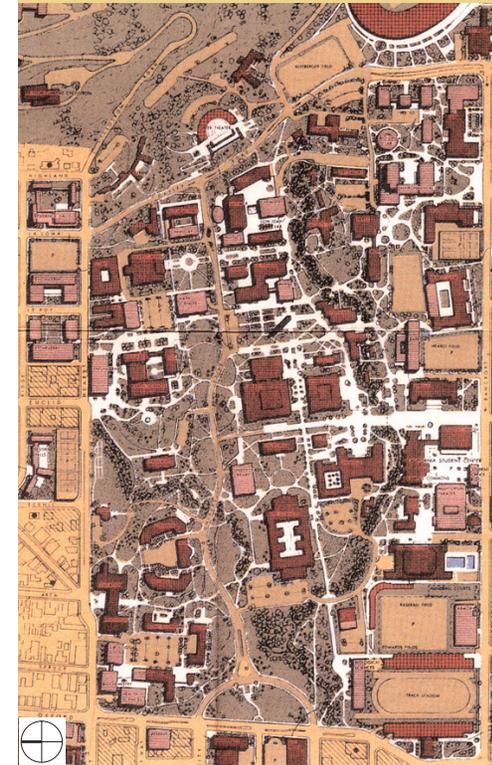
scape, modified by a few areas of formal character..." and preserving (among other sites) "...Mining Circle and Sather Gate..." The Plan proposed "a continuing replanting program to replace over-age trees, especially the oak, bay, and eucalyptus trees that give the campus its distinguished California setting." Specific natural areas noted were "Strawberry Creek, the Central Glade, the Eucalyptus Grove, Observatory Hill, and Faculty Glade. Although a systematic maintenance and replacement program was indicated, it was not implemented." Nonetheless, the 1956 LRDP essentially reflected an urban mentality, Kerr's "multiversity", and a deliberate move away from the village or small town character and towards a vision of the university as a major city.

Thomas Church, friend and supporter of Halprin, was hired between 1957 and 1959 as Consultant Landscape Architect to produce a campus landscape master plan. Church's focus was to plan for growth and for preservation of the campus landscape. According to an oral history, supervising architect DeMonte worked together with Thomas Church and Frederick Warnake to develop much of the Church-era planting design. Some of this work was done in Church's office, and Warnake would have done some on campus with Church's oversight. Church also designed lighting fixtures, benches, and kiosks. DeMonte noted that Church did plans for "every building in the time he was there, Earth Sciences, Engineering, the Math Building, and much of Church's work had to do with realignment of roads." Church's primary contributions campus-wide included the preservation and enhancement of the Strawberry Creek environment, the protection of the Faculty Glade, and the removal of the majority

of vehicular traffic and parking from the core of the campus.

In 1960, the Architecture, Landscape Architecture, and Urban and Regional Planning departments merged as the College of Environmental Design, an event nine years in the formal planning stage. 1960-61 also saw the construction of the Student Center complex south of the Central Core, connected to the Sather Road north-south axis. This would be the site of the Free Speech Movement demonstrations in 1964.

In 1962, a second *Long Range Development Plan* was published, incorporating the work of Thomas Church, who also served on the 1962 Long Range Development Plan committee. The Plan specified the following open space areas for "formal" design treatment: Campanile Esplanade, the Student Center complex and related Dwinelle and Wheeler squares, University House gardens, West Crescent, and Springer Gate. It recommended the relocation of University Drive to the north side of the Central Glade to provide views to Moffitt Library and Valley Life Sciences, which was completed. Campus entrances were to be treated and small landscape elements were to be added within the campus core. The 1962 plan also emphasized the protection and enhancement of open space features, including the branches of Strawberry Creek, the Central Glade, Faculty Glade, Observatory Hill, the Eucalyptus Grove, and the great backdrop of the Berkeley Hills. While providing for on-campus parking, it encouraged public transit, bicycle use, and other alternative modes of transit. Ironically, the 1962 plan inserted Moffitt Library and Evans Hall into the central campus core, a space that had been largely pre-



The 1962 *Long Range Development Plan* developed by Thomas Church.

Memorial Glade following its 1998 renovation and the view west to San Francisco Bay (2003).



served as open space in almost all previous plans. This plan was still the plan of record when the *Campus Historic Resources Survey* was published in 1978. The Survey's author concluded that "failure to implement its mechanisms for continued re-evaluation has drained it of all force."

Several modernist buildings were constructed during this period. Wurster Hall, located outside the Classical Core and designed by DeMars, Esherick and Olsen, was completed in 1965 in the 1960s Brutalist style. It housed the new College of Environmental Design. Barrows Hall by Aleck L. Wilson and Associates was completed in 1964-5, detracting from the visual character of the Classical Core. Church "objected to its impact in blocking views of the bay and cut-

ting off the view of the Campanile from Telegraph Avenue." Zellerbach Hall (1968) by Hardison and DeMars completed a four-building modernist student center complex. In 1971, Evans Hall was completed, blocking the view to west from the Mining Circle, and the neo-brutalist University Art Museum was opened in 1970.

The Contemporary Campus | In 1976, Richard Bender became Dean of the College of Environmental Design. He was the leader of a group preparing urban design studies and historic resource surveys, providing guidance on growth and preservation in a time when the University was without a LRDP. The *Campus Historic Resources Survey*, published in 1978, was compiled by Richard Bender, Jack Sidener,

and Sally Woodbridge. These studies would in turn lead to a National Register of Historic Places nomination and subsequent listing of several beaux-arts neoclassical campus buildings. While concentrating on the campus architecture, the survey also provided a chronology of the evolution of the campus landscape as seen through various campus planning proposals. Current planning concerns, per the survey, were maximum use of existing space, energy conservation, historical continuity, ecology, accessibility, safety, and participatory decision-making. Historic preservation of the campus's Classical Core had renewed support.

The 1990 *Long Range Development Plan*, by the Campus Planning Office in association with ROMA Design Group, once again sought to cluster program, preserve historic and natural resources, and move development and automobiles to the periphery. In 1994, the Gardner Stacks were completed, linking Doe Memorial Library and Moffitt Library below the Central Glade. This project provided for the restoration of Memorial Glade (1998), designed by Richard Haag with Royston, Hanamoto, Alley and Abey.

In 2002, the Campus Planning Office developed the *New Century Plan* (NCP) in association with Sasaki Associates. It provides a comprehensive strategic plan for the University's capital investment program, setting policies for all future University development of campus buildings and landscape through the middle of the century. In addition, the NCP establishes stewardship goals for the campus, including upholding the campus's architectural legacy and identifying landscape preservation zones.

In 2003, the Campus Planning Office developed the *Landscape Master Plan* (LMP) to specifically reference and tie into the overall strategies presented within the NCP, while advancing the role of the campus landscape. The LMP addresses the central campus and its direct context of the surrounding city blocks. The Plan presents a broad physical framework for the use and restoration of open space within the central campus.

Implications for the Future | The UC Berkeley campus, like other great campus landscapes, draws inspiration from the natural features of the landscape and from prevailing design philosophies. Starting with the basic landscape structure envisioned by Frederick Law Olmsted, succeeding generations of designers have continued to adapt UC Berkeley's campus, addressing the University's needs while building upon the principles set forth by past campus planners. The understanding of these historic principles and their incorporation into campus planning and design is both a reflective and forward-looking process, not just one of historic documentation and preservation. The continued success of UC Berkeley's campus landscape will be determined by how effectively the University builds upon these cultural layers of plans and designs. The historic research and assessments completed for this plan are intended to inform and provide guidance to the University's enhancements within the Classical Core, helping to ensure its ongoing success.



The 2002 *New Century Plan* illustrative portrays the prominent existing open space elements such as the tree canopy layer along the forks of Strawberry Creek and the Central Glade axis. The darker colored buildings represent existing structures to remain, while the lighter buildings represent proposed building or replacement locations. The NCP also includes new landscape initiatives.



Implementation Concepts

Methodology

Treatment Strategies and the
Cultural Assessment Process

Mining Circle/Oppenheimer Way

Campanile Way/Sather Road

"It is the University's bounden duty to cultivate artistic ideals just as distinctly and indisputedly (sic) as it is its duty to teach the beauties of literature and the wonders of science."

John Galen Howard

*Preceding page: Ansel Adams, Memorial Stadium from the Southeast, 1966
Keystone-Mast Collection, California Museum of Photography, University of California, Riverside*

Based on knowledge gained through the study, two implementation concepts were developed for selected areas in the Classical Core. These concepts demonstrate the process for landscape improvements and application of guidelines based on sensitivity to a site's historical context and landscape features. They provide examples for designers, the University community, and potential donors when developing enhancement concepts and designs for cultural landscapes. The two implementation concepts, Mining Circle/Oppenheimer Way and the Campanile Way/Sather Road intersection, were chosen based on their importance to the campus and their representative historic and landscape characteristics.

Historic research and assessments were completed for each site, providing important base information to inform the future design. Each site was analyzed through design alternatives, and a preferred alternative was developed in further detail. An important aspect of the process was retaining the key defining features and historic character of these sites while addressing the future needs of a dense urban campus.

Methodology | Responding to the importance of the Classical Core's historic character, the implementation concepts result from a detailed process, incorporating the following steps:

Cultural Landscape Assessment | The cultural landscape assessment analyzes and documents a variety of factors, including period of significance, overall landscape site integrity, incompatible features, and character defining features.

Site Landscape Assessment | The site landscape assessment analyzes and documents the

extant physical site, including current and desired uses and patterns of activities.

Preliminary Strategies of Treatment | Based on the information gained in the cultural landscape and site landscape assessments, landscape treatment strategies define the design approach and long-term management of the cultural landscape. Standard treatments, as defined in the *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (1996), include preservation, rehabilitation, restoration, and reconstruction.

Illustrative Design Concept | Based on the treatment strategies, the design concept illustrates the proposed landscape enhancement in the Classical Core.

Implementation | Subsequent to the overall planning process, the development of implementation funding is an essential consideration for the University. As educational institutions continue to grow, the importance of planning and coordinated implementation cannot be underestimated. Two key aspects of the plan implementation are broad support and funding.

Support and recognition of the plan within the campus and its related community is attained through the engagement of campus committees, departmental partnerships, and University constituencies. The associated web site is an important tool for reaching beyond the campus community and for sharing plan goals, implementation concepts, and guidelines. Its reach and content provide a model for other educational institutions in developing their own preservation plans.

Funding Strategy

The strategy for funding the LHP implementation concepts employs a broad spectrum of sources. Standard funding for landscape enhancements is limited as public and private funding is focused on development of campus programs and buildings. The challenge is to make use of a broad spectrum of funding sources in a coordinated manner, leveraging all possible opportunities for investment in the campus's physical environment. While the sources listed below support the development of implementation concepts, it should be noted that additional planning, analysis, and design is required for each site in advance of the development phase. Potential sources of funding are:

Capital Campaigns: Broad UC Berkeley campaigns to raise funds for specific initiatives

Class Campaigns: Focused UC Berkeley class gift campaigns

Public Funding: Application of state or federal project funds for campus projects

Campus Discretionary Funds: Funding for safety or cost sharing projects

Memorial Gifts/Endowments: Gift projects for specific campus projects

Grants: Support from organizations and foundations for planning and/or development funds

City-Campus Partnerships: Cost share projects that benefit the campus and the city

Deferred Maintenance: Landscape renewal opportunities in conjunction with safety or other deferred maintenance projects

Treatment Strategies

The definitions for the standard treatment strategies follow:

Preservation

Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

Rehabilitation

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Restoration

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Reconstruction

Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

Cultural Landscape Assessment Process

The assessment process, the initial step in preparing a landscape design concept, characterizes a site in terms of cultural landscape values.

Period of Significance and Site Continuum/National Register Status

Apply National Register criteria to determine potential significance and to identify the period(s) of significance. Assess adjacent sites and/or buildings in the UC Berkeley National Registrar listing for historic and spatial context. Discuss the historic period layering of the landscape.

Campus Context

Review for historic and the physical contexts. Determine significance in the landscape by understanding the associations with significant persons, construction dates, spatial relationships, and campus uses, both historic and present day.

Educational Significance

Identify the landscape features that have the potential to interpret or 'tell the story' of the school's educational programs' essence and origins.

Cultural Significance

Identify the landscape features that have the potential to interpret or 'tell the story' of the campus's essence and origins.

Overall Landscape Site Integrity

Determine if the overall site integrity is reflected in the site's ability to convey its significance. As part of the analysis, apply the National Register criteria to location, setting, feeling, association, design, materials, and workmanship.

Significant Architects, Landscape Architects, and Other Professionals

Determine the participation of significant design professionals and their specific contributions toward the determination of significance. Identify certain master designers, patrons, and University related persons to help establish a period(s) of significance.

Historical Plans and Drawings

Identify historic illustratives, plans, drawings, and construction documents, and when they were introduced and by whom, to help determine significance of extant features.

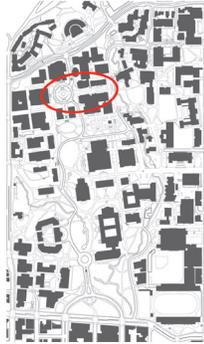
Incompatible Features

Identify incompatible features and non-historic introductions to help generate recommendations for removal of non-contributing features, thereby enhancing historical integrity.

Character Defining Features (CDF)

Identify extant features of the cultural landscape through the analysis of spatial organization and land patterns, topography, view and vistas, vegetation, circulation, water features, structures, furnishings and objects, and environmental considerations. Identify the extant material known from a particular period of significance to support a finding of a CDF.

Mining Circle/Oppenheimer Way |



The Mining Circle (1914) was named in conjunction with the Hearst Memorial Mining Building (1902-07) and built seven years later. The Circle is the eastern terminus of the Central Glade, the campus's primary open space and visual axis toward the Golden Gate. Connecting to the Mining Circle on a north-south axis, Oppenheimer Way is associated with Gilman Hall (1917) and LeConte Hall (1923). This north-south axis plays an important role as it connects the formal Central Glade axis to the sinuous character of Strawberry Creek.

Cultural Landscape Assessment | Summarized in a table on pages 42 and 43, the cultural landscape assessment describes the significant cultural landscape features of Mining Circle/Oppenheimer Way.

Site Landscape Assessment | The site landscape assessment below provides a site description and identifies the current and future use of Mining Circle/Oppenheimer Way. (*Note: limited information was available for Oppenheimer Way*).

Site Description

The Mining Circle area is comprised of a sloping plaza framed on the north by the Hearst Memorial Mining Building, on the east by the planned Stanley Hall Replacement Building, on the west by Evans Hall, and on the south by the north facades of Pimentel Hall, Tan Hall, and Campbell Hall. The Mining Circle proper is limited to the circular pool, lawn area, and the encir-

cling roadway of the original design. Oppenheimer Way currently connects the Mining Circle to the south, between Tan Hall and Campbell Hall, with a sloping corridor that intersects with South Road on the north bank of Strawberry Creek.

Current Uses and Patterns of Activities

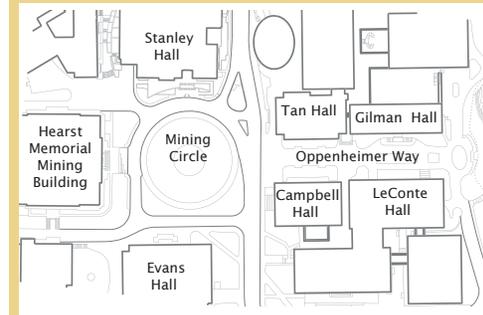
The current use of the Mining Circle is construction staging for the new Stanley Hall replacement project. The character of the space is still intact with the outer form of the Circle and the circular pool protected under the construction trailers.

The current use of Oppenheimer Way is pedestrian circulation space and construction staging. The way provides an important physical and visual link between the Mining Circle and Strawberry Creek.

Desired (Future) Uses and Patterns of Activities

The *New Century Plan* calls for the restoration of the Mining Circle and replacement of Evans and Campbell Halls. Two small pavilion buildings, replacing Evans Hall, are planned to open the view corridor overlooking the Central Glade and to the Golden Gate beyond. A new building will replace Campbell Hall in its existing location.

The *New Century Plan* calls for the restoration of the Oppenheimer axis to a pedestrian corridor, creating an attractive landscape framing views and serving as an appropriate forecourt to the adjacent buildings.



Context map for Mining Circle/Oppenheimer Way.

Cultural Landscape Assessment:
Landscape Integrity of Mining Circle
(See pages 42-43 for detailed assessment)

Location: In situ, but the pool is compromised.
Setting: Seriously compromised.
Feeling: Seriously compromised and out of context.
Association: Compromised.
Design: Seriously compromised. Additional historic plans and/or photos are needed to complete evaluation.
Materials: Some extant materials within Mining Circle, generally compromised.
Workmanship: Compromised.

The Mining Circle and Hearst Memorial Mining Building (ca 1914).



Preliminary Strategies of Treatment | Based on the cultural and site landscape assessments, the overall treatment strategies recommended for Mining Circle/Oppenheimer Way are **restoration and rehabilitation**, respectively (refer to treatment definitions on page 36).

The treatment strategy for the Mining Circle includes the following steps:

- Restore the extant historical fabric. John Galen Howard's drawings, along with historical photographs, provide guidance for the restoration.
- Reconstruct the key missing elements of the original design, in particular the reflecting

pool from the beaux-arts period of significance that remained intact through the 1990s.

- Incorporate Howard's beaux-arts design elements, including the diameter of the Circle, topographic design implications, the framed viewshed to the Golden Gate, and a crescent shaped planter bed on the upper end framing the large round lawn panel.

The treatment strategy for Oppenheimer Way is a comprehensively planned landscape design for the entire corridor, prioritizing the space for pedestrian use. The Thomas Church construction documents (ca. 1964) provide guidance for



the overall design. The treatment strategy for rehabilitation includes the following steps:

- Replace the two Church planted *Pittosporum* (Mock oranges) in front of LeConte Hall with trees of appropriate scale for the building and related space. From Church's drawings, it appears they were intended to be contained vertical accent entry statements instead of large canopies.
- Replace the *Syzygium* (Eugenias), considered poor specimens, in front of Gilman Hall.
- Planter beds per the Church era will be retained, between Gilman and LeConte Halls, and affirm predominant pedestrian access.

- Incorporate the rustic wall interface at Strawberry Creek into the overall design.
- Establish a generous oval planter to prevent through vehicular traffic.

Illustrative Design Concept | The following pages illustrate a possible design concept for the Mining Circle/Oppenheimer Way based on the cultural and site landscape assessments and preliminary strategies of treatment.

**Cultural Landscape Assessment:
Landscape Integrity of Oppenheimer Way**
(See pages 42-43 for detailed assessment)

Location: In situ, some loss of integrity but generally good.

Setting: Southern sections retain very good settings. Northern section is not significant.

Feeling: Southern sections retain very good feeling. Northern section is not significant.

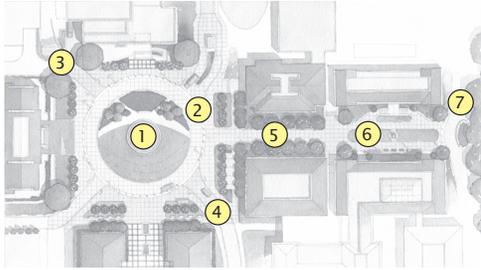
Association: Strong associations with the halls and Strawberry Creek in southern sections. Northern section is undefined.

Design: Strong beaux-arts design integrity between the halls. Creek interface retains strong design elements from the modern era.

Materials: Southern sections retain very good materials, especially the modern era creek interface wall. Northern has nothing of significance.

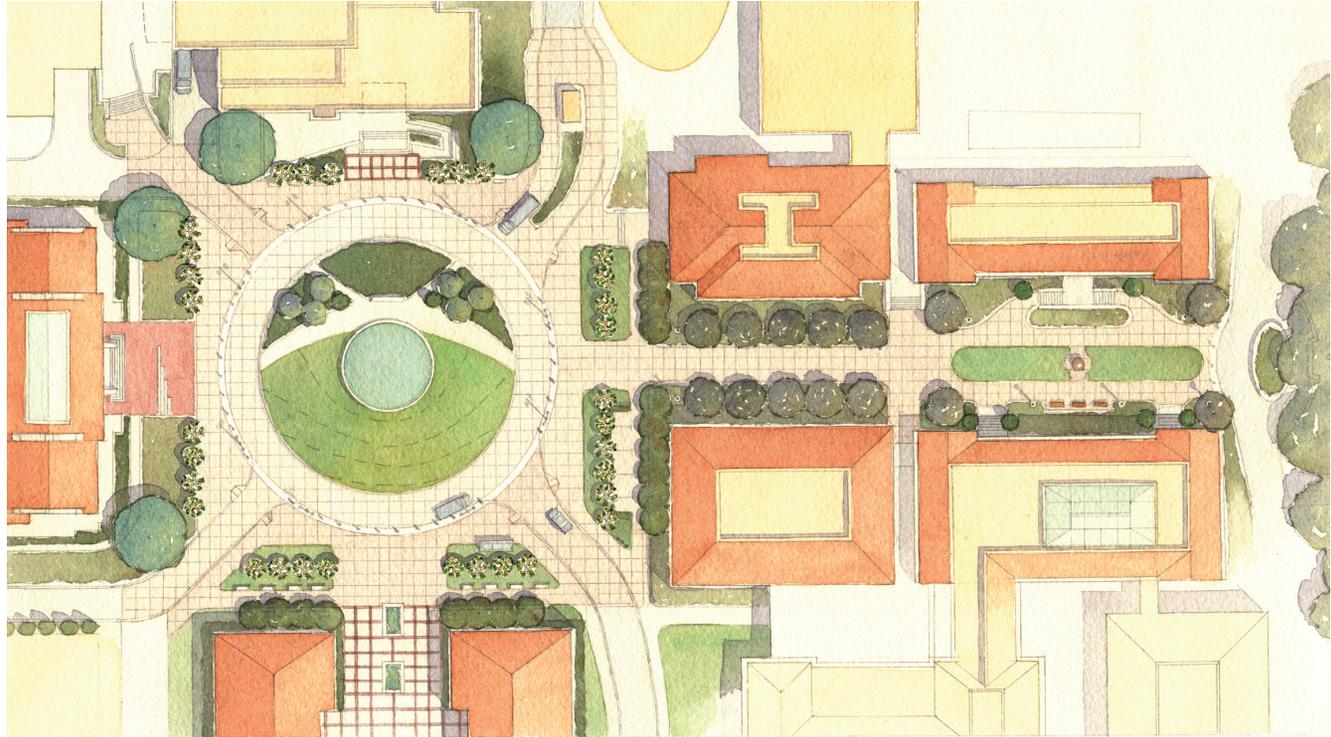
Workmanship: Stone wall from modern era has excellent workmanship.

John Galen Howard's illustrative of the Mining Circle (ca. 1914).



Mining Circle/Oppenheimer Way Concept

1. Restore the pool and incorporate crescent-shaped path, low ground cover, and lawn on western slope.
2. Unify the entire space with consistent paving material and flush condition between vehicular and pedestrian areas. Incorporate low bollards to delineate travel way.
3. On north and northeast sides, plant pollarded London Plane Trees to reinforce the square form of the plaza and use large coniferous, evergreen trees at corners of buildings.
4. On south and southwest sides, plant pollarded London Plane Trees to reinforce plaza form, and create an allée with broadleaf evergreen trees adjacent to buildings.
5. Plant broadleaf evergreen trees in single rows to strengthen view corridor to the creek along Oppenheimer Way.
6. Rehabilitate the Church design using landscape forms suitable for the site context. Incorporate low bollards at intersection of South Road to restrict vehicular access.
7. Restore the Church sitting area with low ground cover in an oval planter and open views to 1910 bridge and Faculty Glade.





The design concept retains the historic form of the Mining Circle and center pool, and unifies the public space with a consistent paving treatment, creating a pedestrian plaza throughout.

Cultural Landscape Assessment

The Mining Circle/Oppenheimer Way resides within the campus's neoclassical landscape type. The neoclassical style derives its forms, materials, and character from 19th century European precedents and, in particular, the teachings of the Ecole des Beaux-Arts in Paris, France. This site expresses an architectonic formalism represented in the bi-lateral symmetry related to the architecture, with evergreen monochromatic plantings and expansive framed vistas. (See Section 4, page 68, for description of landscape types).

Period of Significance and Site Continuum / National Register Status

The period of significance for the Mining Circle is beaux-arts, associated with the Howard/Gregg era. The Mining Circle is a significant companion landscape component to the National Register Hearst Memorial Mining Building, but was not included in the 1982 National Register listing.

The period of significance for Oppenheimer Way is beaux-arts, associated with the Gregg era, with a modern Church layer from the early 1960s.

Campus Context

The Mining Circle is the embodiment of the first Central Glade element envisioned by Frederick Law Olmsted in 1866. Olmsted conceived the east-west Central Glade, with a linked Golden Gate view, as the primary design alignment from which all subsequent development of the campus would occur. While the Emile Bénéard Plan of 1900 shifted the axis developed by Olmsted to align with Berkeley's city grid, Howard "corrected" Bénéard's work and gave deference to Olmsted's original concept. The Circle forms the eastern anchor of the Central Glade axis.

Oppenheimer Way, once referred to as "Gilman Way", was historically separated from the Mining Circle. In the early 1960s, Thomas Church, anticipating the removal of the first Mining and Mechanic Arts Building, expanded the

space as a north-south access, and reinforced its relationship to Strawberry Creek. The south end of Oppenheimer Way has been a pedestrian corridor between Gilman and LeConte Halls since the completion of LeConte in 1923.

Educational Significance

The Mining Circle has the potential to 'tell the story' of John Galen Howard's mastery of beaux-arts architecture and its extension in the landscape. It exhibits Howard's command of architecture, landscape architecture, and site planning. The Mining Circle was a contemplative space meant to inspire scholarly reflection.

Oppenheimer Way is a continuum of the Thomas D. Church era when, for the first time, he connected the Mining Circle to the corridor between Gilman and LeConte Halls. This established a perpendicular axis to the Central Glade, linking the creek to this historic space.

Cultural Significance

The Mining Circle was designed as a companion piece to the Hearst Memorial Mining Building, originally commissioned by Phoebe Hearst in honor of her late husband, Senator George Hearst. The ensemble of building and landscape stands as a benchmark to the most character-defining period of UC Berkeley, the beaux-arts neoclassical, and reconfirms the center point from which the built environment of the Classical Core began.

Overall Landscape Integrity

The Mining Circle site is currently inaccessible to physical analysis and appears to be seriously compromised. Overall integrity of the Mining Circle is poor. The reconfiguration of streets in later periods negated the Circle element.

The upper section of Oppenheimer Way retains no significance, mostly due to the picturesque era building that occupied the space through the 1960s. The southern section holds a moderate level of integrity from the Gregg

era oak plantings and later Church horticultural additions. Further south the Church interface with Strawberry Creek retains a good deal of integrity in the wall and oval planter bed (see complete evaluations in the sidebar of pages 38 and 39).

Significant Architects, Landscape Architects, and Other Professionals

John Galen Howard, Architect
John W. Gregg, Landscape Architect
Thomas D. Church, Landscape Architect

Historical Plans and Drawings

Howard illustrative of the Mining Circle.
Construction documents of Thomas Church's Oppenheimer Way landscape improvements (south section only) and terminus.

Incompatible Features

Some extant planting at both Mining Circle and Oppenheimer Way may be later additions and non-contributing. Realignment of the west side of the Mining Circle was partially implemented from the 1962 LRDP. Evans Hall to the west has completely negated the primary viewshed from the Mining Circle and has severed its relationship with the Central Glade.

Oppenheimer Way has recently undergone infrastructure improvements that have affected its central mall planters, although this may have occurred earlier.

Character Defining Features

Spatial Organization and Land Use Patterns, Views and Vistas

John Galen Howard sited the Hearst Memorial Mining Building to frame the open space and the dramatic viewshed to the Golden Gate.

Oppenheimer Way was an open space corridor between Gilman and LeConte Halls but was not physically or visually connected to the Mining Circle. The 1879 Mining and Mechanics Building sat just to the south of the Howard Mining Circle until 1964, negating that connection. However, within the 1962 *Long Range Development Plan* (LRDP), Thomas Church proposed the connection of the two areas based on the removal of the Victorian era building.

Topography

The Mining Circle has a slight rise from west to east. John Galen Howard expressed his sensitivity to the topography in his design by taking advantage of the rise in elevation. Adding emphasis, the tree placement is on the upper portion with the planting arranged in a crescent facing the view to the Golden Gate. A circular pool and concentric walkway were the central features.

Oppenheimer Way is on ground sloping somewhat to the southern end as it approaches the Strawberry Creek bank.

Vegetation

In Howard's Mining Circle illustrative, accent trees were shown as evergreen and columnar, a typical beaux-arts planting effect. The crescent shaped planter bed hosted low shrub cover; with the remainder as predominantly lawn. However, in photo aerials from 1930 on, the trees have obvious canopies. Extant are mature *Quercus agrifolia* (Coast Live Oak) and *Pittosporum undulatum* (Victorian Box).

Oppenheimer Way has the remnants of the John Gregg era: four *Quercus agrifolia* placed symmetrically on each far corner framing both Halls (noted as 'existing' in Church's LRDP plan). Two compromised *Syzygium* (Eugenia) flank the entry to Gilman Hall. In the mid section between the Mining Circle and Oppenheimer Way, there was no landscape present prior to Church's plan due to the presence of the original Mining and Mechanic Arts Building. Church redesigned the planter beds and placed two *Pittosporum undulatum* flanking the entry to LeConte Hall.

Circulation Systems

The Mining Circle historically provided a round-about function for vehicles. Oppenheimer Way is a strong north-south pedestrian circulation element that connects the upper central campus across the Strawberry Creek to all points south.

Water Features

The Mining Circle ground plane circular reflecting pool was the focus of the space. It is presently intact but seriously compromised. The south fork of Strawberry Creek traverses along the southern end of Oppenheimer Way in a woodland riparian environment.

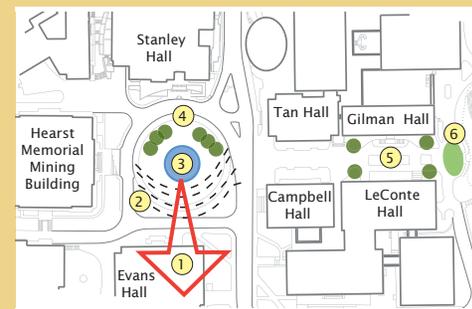
Structures, Furnishings, Objects

The Mining Circle lacks any extant features of significance. The low rustic stone-faced wall south of Oppenheimer Way is part of a rustic opus within the Classical Core designed by Thomas Church.

Environmental Considerations: Macro and Microclimates

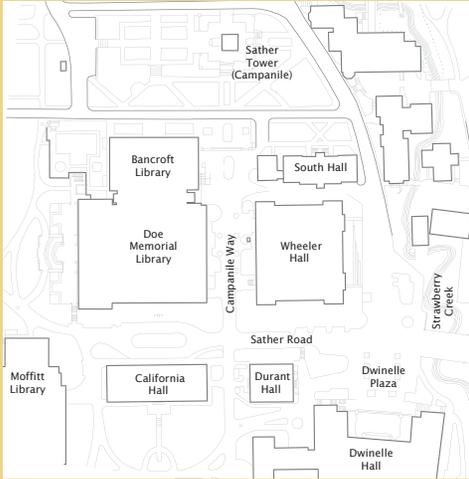
The Mining Circle was once in complete all day sun, and had northwest prevailing breezes coming up through the Central Glade. Today, the presence of the non-historic Evans Hall changes that environmental dynamic.

LeConte Hall shades Oppenheimer Way in the late afternoon and protects the area from wind.



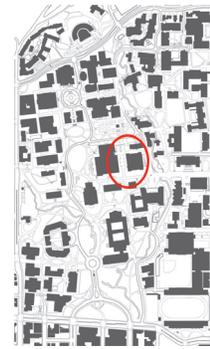
The cultural landscape assessment yielded six primary **character defining features** for the Mining Circle environs:

1. Views to the west
2. Topography of the circle
3. Reflecting pool
4. Crescent shape to the center circle planting
5. Beaux-arts landscape along Oppenheimer Way
6. Thomas Church stone wall and oval planter



Context map for Campanile Way/Sather Road.

Campanile Way/Sather Road | Campanile Way



is named for its axial association with the iconic UC Berkeley Campanile (Sather Tower). Developed during the picturesque period, it was the first centrally-located, campus street (from Sather Road eastward). Campanile Way's strength is its important role as a major pedestrian access in the heart of the Classical Core and its strong visual axis and view, connecting the tower with the Golden Gate. A remnant of an earlier functional era, Campanile Way was re-confirmed by Howard as a design element of the Classical Core. Sather Gate, Sather Bridge, and Sather Tower are named for UC Berkeley donor Jane Sather in honor of her husband, Peder Sather. The road is a major north-south mid-campus pedestrian access from the south entry at Bancroft and Telegraph Avenues to the Central Glade.

Cultural Landscape Assessment | Summarized in a table on pages 50 - 53, the cultural landscape assessment describes the significant cultural landscape features of Campanile Way/Sather Road.

Site Landscape Assessment | The site landscape assessment below provides a site description and identifies the current and future use of the Campanile Way/Sather Road intersection.

Site Description
Campanile Way extends from South Hall Road on the east to the 1908 Bridge on the west and includes the landscaped areas along the road, up

to the facades of the adjacent buildings. Although it is intended as a pedestrian corridor, the historical character of Campanile Way has been compromised with vehicular use and wide expanses of pavement.

Sather Road begins on its southern end at Sather Gate and runs north, concluding at Moffitt Library. It is defined on the east and west by four buildings designed by John Galen Howard - the paired groupings of California Hall and Durant Hall on the west and Doe Memorial Library and Wheeler Hall on the east. Sophomore Lawn, located between Doe Memorial Library and California Hall, expresses the elevation change between these buildings.

Current Uses and Patterns of Activities
Pedestrians and delivery/service vehicles are the primary users of Campanile Way. Conflicts occur between the high volume of vehicles using the corridor and the heavy pedestrian use during peak daytime hours. Campanile Way also provides a strong view corridor to the east, with views of the Campanile, and to the west, with views to the Golden Gate. Underlying this corridor is a complex network of underground campus utilities.

Sather Road is the primary north-south pedestrian corridor connecting the center of the campus with the busy Sproul Plaza area and the southern egress into the city of Berkeley environment. The road also serves as a emergency vehicle route into the central campus and is an integral part of the night safety route for students.



An aerial view of Campanile Way looking northeast (ca. 1948).

Desired (Future) Uses and Patterns of Activities

The *New Century Plan* calls for enhancing Campanile Way and orienting it for primarily pedestrian use, while retaining the size and proportion of the corridor. The proposed plan for the area would restrict service parking and potentially consolidate it into a designated parking area on the current site of South Hall Annex. The underground utilities are retained.

The *New Century Plan* retains Sather Road as a busy crossroads of pedestrian traffic and an emergency vehicle access point to and through the campus. The proposed recommendations in the *New Century Plan* and *Landscape Master Plan* call for physical improvements to the road, addressing hardscape and planting issues only.

Cultural Landscape Assessment:
Landscape Integrity of Campanile Way
(See pages 50-53 for detailed assessment)

Location: Remains in its historic location.

Setting: Campanile Way is the first historic “flagpole” axis, affirmed by John Galen Howard.

Feeling: Campanile Way's axial power and historic views to the Campanile and the Golden Gate retain a high level of integrity.

Association: The Campanile, the buildings and open spaces remain as a testament to the work of John Galen Howard and those who followed.

Design: Campanile Way's axial design role remains in place. Work by John Gregg and Thomas Church, et al., remain largely in place, including a formal balustrade platform at the top of the Way (Church), and an integral Church seating node outside Wheeler Hall. The Way also continues to reflect its heritage as a service/utility corridor.

Materials: Plantings and paving vary in integrity, but problems appear to be reversible. The historic brick gutters, low curbs, and pollarded Plane trees remain. Church plans reveal the modern layer and should be considered for all future work. Small scale elements have retained their own integrity: the statue of "The Football Players," the Class of 1905 Bench; the flagstone walkway southwest of Valley Life Sciences and the Class of 1940 Fountain near Wheeler Hall.

Workmanship: Loss of integrity. Asphalt has proliferated to handle increased pedestrian traffic, service use and parking.



Preliminary Strategies of Treatment | Based on the cultural and site landscape assessments, the overall treatment strategy recommended for Campanile Way/Sather Road is **rehabilitation** (refer to treatment definitions on page 36).

The treatment strategy for Campanile Way includes the following steps:

- Retain, protect, and enhance views to the Campanile and the Golden Gate, and maintain existing building heights along the Way.
- Take cues from the Thomas Church era construction documents for the eastern end, executing in ways that retain historic vistas.

- Enhance and frame the Church balustrade landing detail at the top of Campanile Way as a significant design element.
- Retain and/or rehabilitate all historically relevant vegetation, and the historic semi-formal foundation plantings, to the original design intent.
- Address the partial deterioration of the ground plane caused by vehicular service access and parking,
- Protect, repair, and/or replace surviving brick gutters, as function permits; replace in-kind deteriorated elements; and repair the Class of 1940 water fountain.

A view looking east along Campanile Way at California Hall (ca. 1912).



The treatment strategy for Sather Road includes the following steps:

- Rehabilitate the road from the north end of California Hall and Doe Memorial Library to the south of Durant and Wheeler Halls.
- Rehabilitate the remainder of Sather Road south to Sather Gate, with the exception of the modern addition of concrete retaining walls and seating at South Road.
- Recognizing that the north end of Sather Road is truncated at Moffitt Library, rehabilitate this area, making the space visually and physically functional for today's needs.
- Retain and/or rehabilitate all historically relevant vegetation, and the historic semi-formal foundation plantings, to the original design intent.

Illustrative Design Concept | The following pages illustrate a possible design concept for the Campanile Way/Sather Road intersection based on the cultural and site landscape assessments and preliminary strategies of treatment.

**Cultural Landscape Assessment:
Landscape Integrity of Sather Road**
(See pages 50-53 for detailed assessment)

Location: Sather Road, while modified at its northern and southern ends, remains in its original location.

Setting: Sather Road's setting remains strongest in its central beaux-arts neoclassical area, although some of the plantings along the western side are quite mature. Dwinelle Plaza seating area also retains integrity.

Feeling: Very strong in the central beaux-arts area, weak at the ends.

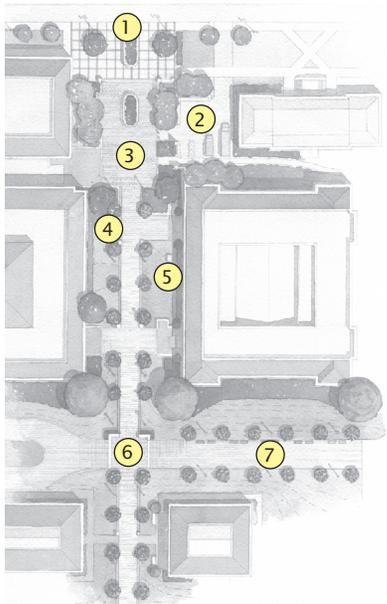
Association: Strong in the central area, weak at the north end.

Design: Strongest within the beaux-arts core, weak at both the north and south ends.

Materials: Strong in the beaux-arts core, where the mature plantings appear to be contemporaneous with the buildings. Materials near Moffitt Library are a mixture of modern and relic, and the overall integrity appears low. Further research is needed to determine historic materials in the Dwinelle Plaza/Sather Road/South Drive intersection. This area appears to lack integrity of materials except in the vegetation west of Wheeler Hall, and in the fountain and the concrete retaining wall/seating area southwest of Wheeler Hall, remnant from the 1950s. The brick paving east of California Hall is historic to the Howard era. Much of the asphalt itself is marred by cracking and old repair work. The Miller Clock appears to be intact.

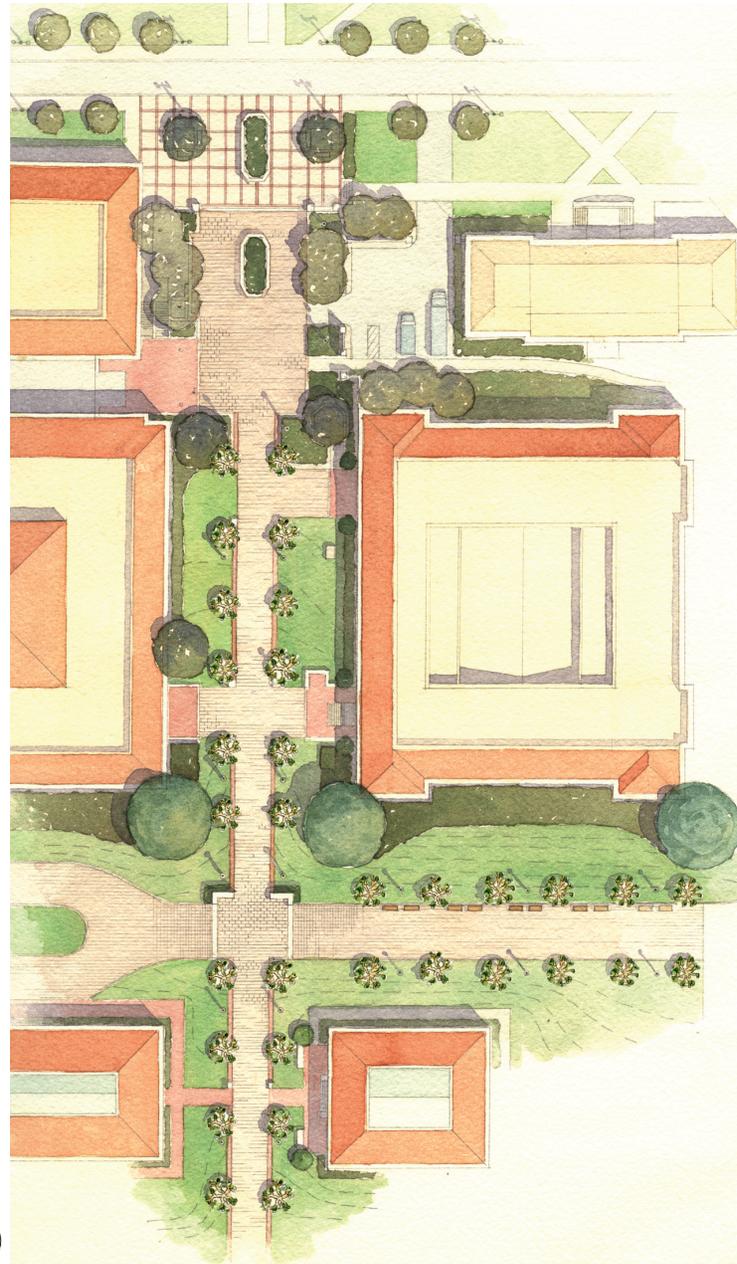
Workmanship: Strong in the beaux-arts core, weak at both ends.

Sather Road, with a view towards Sophomore Lawn and the previous Botanical Garden/Glass Conservatory (ca. 1912).



Campanile Way/Sather Road Concept

1. Enhance the Church plaza with a raised planter, benches, and restore the existing paving.
2. Create a service court with accessible parking stalls for Bancroft Library. Screen with a wall that reflects the adjacent architecture.
3. Restore Campanile Way to a pedestrian walk; narrow to 20 feet wide, restore brick gutters, pave with large concrete pavers, and frame with lawn panels.
4. Infill pollarded London Plane Trees along Campanile Way.
5. Use underground grass stabilizers around utilities for service vehicle parking.
6. Incorporate precast concrete seat walls, on both sides of Campanile Way, east of the intersection.
7. Use concrete pavers along Sather Road, compatible but smaller in scale, to Campanile Way pavers, and restore pollarded London Plane Trees along both sides.





The design concept returns Campanile Way to a pedestrian environment consisting of modular paving, brick gutters, and enhanced views to the Golden Gate.

Cultural Landscape Assessment



An aerial view of Campanile Way looking west from Sather Tower (ca. 1949).

Campanile Way resides within the campus's neoclassical and natural landscape types. Campanile Way provides pedestrian and service access to a host of beaux-arts neoclassical era buildings. The northern end of Sather Road, from Campanile Way to the Central Glade, reflects the neoclassical type. The southern half, from Campanile Way to Sather Gate and Bridge, reflects a mixture of neoclassical, urban, and natural landscape types. Sather Road provides pedestrian and emergency access to the Classical Core from the south. (See Section 4, page 68, for description of landscape types).

Period of Significance and Site Continuum /National Register Status

Campanile Way's period of significance is a continuum of the picturesque, beaux-arts, and modern periods. It serves as a functional access from the west entrance to the upper campus. A flagpole centered on North, South, and Bacon Halls once marked the eastern end of Campanile Way from the 1890s until the construction of the Campanile itself in 1914. The flagpole was a central point for the campus at that time, as the Campanile is today. The early placement of North and South Halls, which had inspired Bacon Hall and the flagpole, provided the impetus for Howard's use of the Center Street path as a beaux-arts visual axis to his Campanile (not until 1942 was the Center Street path referred to on a campus map as Campanile Way).

Modifications were made in the 1960s by Thomas Church along the eastern half of Campanile Way. Church paid homage to Howard with the creation of a small plaza and a matched set of beaux-arts balustrades at the top of Campanile Way, in a gesture to expand the Esplanade further out into the landscape. This work included new seating spaces and the preservation of the plane trees, but it also increased vehicular use with increased pavement.

Sather Road's period of significance also spans the picturesque, beaux-arts, and modern eras. The

picturesque era is seen within its contextual interface with Strawberry Creek. There are four beaux-arts Howard era buildings on the National Register clustered near the intersection of Campanile Way: Doe Memorial Library, Wheeler Hall, California Hall, and Durant Hall. The modern era is represented by Dwinelle Hall and its forecourt plaza. Sather Road came into existence on campus as a north-south cross-axis in John Galen Howard's beaux-arts neoclassical plan. The 1908 gift of Sather Gate may have finalized Howard's decision to emphasize this corridor in his site planning.

Campus Context

Campanile Way historically functioned as the secondary neoclassical design axis and as a service drive and pedestrian access route. Beginning at the Campanile Esplanade, it stretches westward through the campus to its terminus. This landscape context includes the historic "The Football Players" statue, the Class of 1905 Bench, the flagstone walk, and other individual landscape elements.

Sather Road continues to play its historic role as the north-south access, beginning at Sather Gate and flanked by an ensemble of beaux-arts period buildings. The Road's terminus at University Drive, however, was rerouted prior to the construction of Moffitt Library (1968). From this point there is a pedestrian path access north across the Central Glade, leading to the campus's North Gate.

Educational Significance

Campanile Way is an example of the blending of high-style design and the most pedestrian of functions. The small Thomas Church seating area at Wheeler Hall illustrates the compatibility of a sensitive modern addition with a dominant design style. Future interpretation should emphasize notable individual elements at the western end of the Way as well as the historic view east to the Campanile.

Sather Road's educational significance relates to its original role as the early southern campus entrance, while today it introduces students to the academic center of the campus. It also provides, at the Campanile Way intersection and in views north and south, an understanding of John Galen Howard's beaux-arts neoclassical design vision.

Cultural Significance

As with the Sather Gate entry to the campus, Campanile Way provides an important pedestrian spine within the campus' Classical Core. As the pedestrian crosses north over Strawberry Creek via John Galen Howard's 1908 bridge, the tree canopy narrows and then opens, continually framing the symbolic vista to the Campanile. From the east, pedestrians look west along the Way toward the Golden Gate, which is still a commanding view.

The primary cultural significance of Sather Road is its expression of John Galen Howard's beaux-arts neoclassical design intention, seen in the confluence of the four buildings framing the intersection of Sather Road and Campanile Way. Historic text notes that: "the exteriors, heights, setbacks and character of the four buildings were carefully planned . . .". Sophomore Lawn, the historic evergreens, and foundation plantings along the west sides of Wheeler Hall and Doe Memorial Library, are all features lending strength to Howard's concept. The protective wall of Strawberry Creek vegetation and Sather Gate at Sather Road's southern end serve to shield the character and provide transition into the "inner sanctum" of the Classical Core.

Overall Landscape Site Integrity

Campanile Way still retains its overall integrity. The site integrity of Sather Road is strongest between Doe Memorial Library and California Hall, and between Wheeler and Durant Halls. The integrity diminishes at the two ends of Sather Road at Dwinelle Plaza and near Moffitt Library. Plans from Eckbo, Royston and Williams (ca.1950) may show a greater scope and integration than

is apparent today, but their landscape "vignettes" fail to do more than augment the incoherence of this very important arrival space. The significance of these isolated elements is questionable (see complete evaluation in sidebar on pages 46 and 47).

Significant Architects, Landscape Architects, and Other Professionals

John Galen Howard, Architect
John W. Gregg, Landscape Architect
George Kelham, Architect (after John Galen Howard)
Thomas D. Church, Landscape Architect (participation of Louis DeMonte, Campus Architect)
Eckbo, Royston, Williams, Landscape Architects

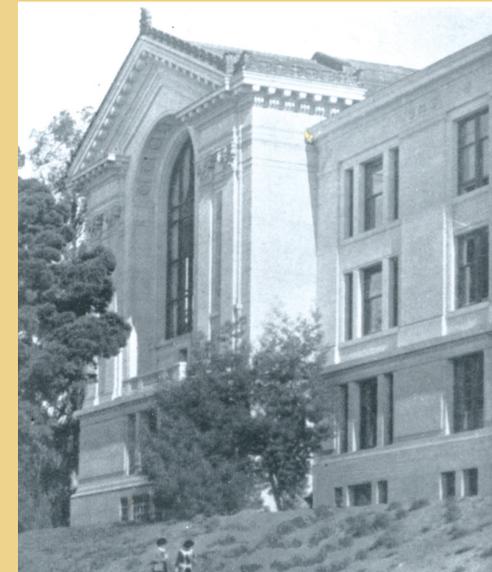
Historical Plans and Drawings

Aerial photographs and campus maps.
General Plan from the Thomas Church office dated 1960 for the area adjacent to Wheeler Hall and Doe Hall and Annex.
Numerous photographs from the 19th century.
Construction documents from office of Thomas Church for eastern half of Campanile Way, 1964.
Large scale maps were only available for Sather Road.

Incompatible Features

Campanile Way's over-abundance of service access and parking areas are all non-contributing.

The asphalt at the intersection of Dwinelle Plaza, Sather Road, and South Drive lacks design integrity. Although asphalt was a practical means of adding to the pedestrian walkway area, it has no other historic significance. Concrete planter boxes and wooden benches have no known historical significance. The Eckbo, Royston and Williams 1950s retaining walls at Wheeler Hall appear incongruous within a neoclassical setting. Although the association with significant designers is known, the vignette itself, considered within their body of work, is considered non-contributing.



Doe Memorial Library from Sophomore Lawn (ca. 1922).



The western end of Campanile Way, planted with native oaks (ca. 1935).

Character Defining Features

Spatial Organization and Land Use Patterns, Views and Vistas

As an access for the rear or side entrances of primarily neoclassical buildings, Campanile Way continues to provide a powerful axis from west of the Valley Life Sciences Building to the Campanile itself. Its visual containment is generally strong. Views and vistas include both the Campanile at the eastern end of the Way (visible along its entire length) and the Golden Gate (visible from the east at Dwinelle Hall) at the western end.

Strawberry Creek vegetation encloses the Sather Road views and space, with a narrow opening of Sather Gate providing an axial southerly release. After a strong entrance into the Classical Core through Sather Gate, the space opens to an unorganized composition of plaza and pavement. The spatial clarity improves toward the intersection with Campanile Way and continues quite strongly between Doe Memorial Library and California Hall.

Topography

Campanile Way rises at a moderate continuous slope from its inception west of Valley Life Sciences Building to its terminus at the Campanile and Esplanade.

Built on westward sloping land, Sather Road forms a plateau between Wheeler Hall on the east and Durant Hall on the west. The northern half of Sather Road is bi-level, enclosing the oval Sophomore Lawn that takes up part of the grade between Wheeler Hall and Doe Memorial Library.

Vegetation

The major vegetation element of Campanile Way is its allee of pollarded London Plane Trees (*Platanus acerifolia*), shown in aerial photos up until 1959 when the road was widened and its regularity lost. Many remaining Plane trees along the eastern half of the Way are in small circular, or square, planters. In addition, the Way is

functionally and decoratively planted with foundation plantings and framed with lawn panels. However, Campanile Way's vegetation presently is subservient to the use of asphalt. Part of the role of Church's work on Campanile Way was removing the tree canopy blocking the view to the Campanile and enlarging pedestrian space. The vegetation along the eastward reach of Campanile Way is generally formal plantings that reflect a more refined urban character than the native Live Oaks (*Quercus agrifolia*) at the park-like western end of the Way.

Sophomore Lawn, original and intact, is the most culturally significant lawn panel in the Sather Road corridor. Foundation and large coniferous tree plantings for Wheeler Hall and Doe Memorial Library are extensive and quite mature, many may survive from the historic Howard/Gregg era. Pollarded London Plane Trees (*Platanus acerifolia*), somewhat inconsistent in form, formally line the road between Durant and Wheeler Halls. Vegetation from Strawberry Creek forms a picturesque wall to the south, enhancing the Classical Core.

Circulation Systems

Campanile Way, as the earlier Center Street path, was a maintained dirt path that was later paved with a macadam surface until it met South Drive. During the Howard era, the Way was paved and brick gutters were installed that remain partly intact today in the western half. Plans through 1959 show Campanile Way as a straight road of uniform width, lined with pollarded London Plane Trees (*Platanus acerifolia*), and foundation plantings, a product of the Howard and Gregg's era. The most recent design modifications to Campanile Way's circulation appear to be from the Thomas Church era (ca. 1960), when the road was irregularly widened and more asphalt installed to provide for additional pedestrian circulation and parking. Campanile Way's asphalt paving may also be dictated by the presence of underground utility lines. Curbing, where present, also appears to be modern.

Sather Road is a north-south pedestrian corridor. Built on westward sloping land, the northern half of Sather Road is bi-level and separated at the oval Sophomore Lawn, which takes up part of the grade between Doe Memorial Library and California Hall. At the intersection of Sather Road, South Drive, and Dwinelle Plaza, pedestrian circulation has been accommodated via a large expanse of asphalt of undetermined age or design intent. The northern end of Sather Road is truncated at Moffitt Library. Sather Road historically provided access into the Classical Core from Sather Gate and Bridge, the Student Union, Telegraph Avenue, and points south. Currently, it provides access into the Classical Core from Sproul Plaza and the Central Glade.

Water Features

The small Class of 1940 water fountain at the northeast corner of Wheeler Hall is the sole water feature within Campanile Way. The western terminus of Campanile Way, however, is a road bridging Strawberry Creek.

Strawberry Creek flows under Sather Road adjacent to Sather Gate, and provides views into the natural character of the original campus landscape.

Structures, Furnishings, Objects

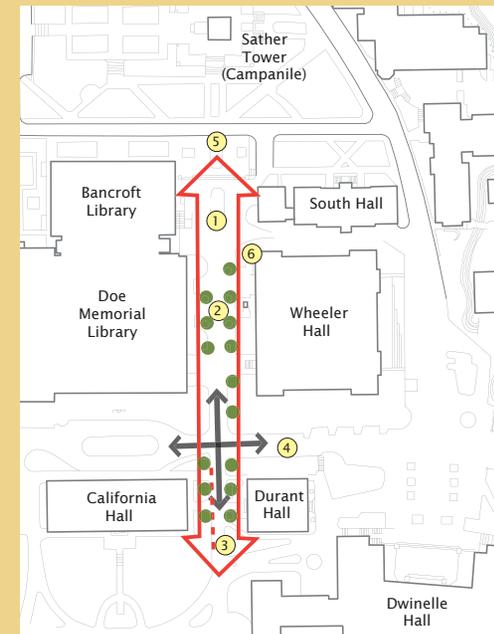
The southeastern end of Campanile Way, near the corner of Wheeler Hall, includes a Thomas Church designed seating node. The nearby Class of 1940 water fountain is in good condition. Additional significant landscape elements, all located west of the Dwinelle Hall parking lot, include the Class of 1905 bench, some Gregg era flagstone paving, the Tilden statue of "The Football Players", and the 1908 John Galen Howard bridge, which effectively provides the western terminus of the Way.

Sather Road is paved primarily in asphalt with concrete curbing. Sather Bridge, part of the Sather Gate ensemble and southern terminus to the road, is a concrete structure ornamented with neoclassical balustrades traversing Strawberry Creek. Original decorative brick

walks consist of herringbone patterns and granite headers. The roadbed brick paving, a later addition, is large concrete aggregate with brick headers. A brick sidewalk with Howard era concrete detailing runs east of California Hall. The concrete and wood seating wall west and south of Wheeler Hall dates from the 1950s and are attributed to Eckbo, Royston and Williams. Neither of these two small landscape "vignettes" are well used today. West of Doe Memorial Library, nestled in mature vegetation, is the historic stone Miller Clock.

Environmental Considerations: Macro and Microclimates
Campanile Way is essentially an open and sunny east-west avenue, except for its western end where it has natural and rustic character and concomitant shade provided by a planted oak woodland adjacent to the Strawberry Creek environment.

Sather Road is generally an open and sunny area, shaded in parts by mature vegetation.



The cultural landscape assessment yielded six primary **character defining features** for the Campanile Way and Sather Road environs:

1. East-west views along Campanile Way
2. Pollarded London Plane Trees along Campanile Way
3. Brick gutter along Campanile Way
4. Major cross-axis of the central campus
5. Thomas Church plaza
6. Thomas Church sitting area



Landscape Guidelines

Landscape Goals

Landscape Design Process

Site Planning

- Formal and Dynamic Views
- Circulation Systems
- Grading and Drainage
- Service Areas
- Utilities

Landscape Components

- Planting
- Paving Materials
- Lighting
- Pedestrian Barriers and Traffic Controls
- Furnishings
- Signage

"Men and women come here at the most impressionable period of their lives, and lost is the most important of opportunities for raising the standard of their taste and cultivating higher instincts, if they do not find themselves at once in an atmosphere of fine artistic surroundings."

John Galen Howard

*Preceding page: Ansel Adams, View from the "Big C" Hill, Eucalyptus Grove, 1966
Keystone-Mast Collection, California Museum of Photography, University of California, Riverside*

The Classical Core of UC Berkeley is the heart of the campus community and the center of campus life. It is rich in architectural resources and landscape expression, having developed and evolved over a 150-year period. Responding to this valued historical and environmental context, the landscape guidelines address site planning and landscape components for the Classical Core.

The Landscape Guidelines section includes:

- Landscape Goals
- Landscape Design Process
- Site Planning: which defines the contextual relationship of landscape components with buildings and campus-wide systems.
- Landscape Components: which describes the materials and furnishings palette appropriate for the Classical Core.

The landscape guidelines are derived from the values and characteristics of the Classical Core as discerned from the historical assessment and the implementation concepts. They provide direction for the overall composition of elements within a particular landscape setting.

Landscape Goals | The following goals and objectives form the foundation of the Classical Core's landscape guidelines. They supplement and further the goals and objectives of the University's *Landscape Master Plan*.

Respect the character of the historic landscapes in the Classical Core

- Evaluate extant features within historical landscapes and determine the strategy(s) for recommended treatments
- Integrate appropriate materials, textures, and patterns to complement historic landscapes

- Create compositions that respect the historic landscape character

Integrate functional, aesthetic, and sustainable considerations

- Promote principles of sustainability, accessibility, and ecological management
- Advocate for the use of sustainable materials with all landscape design
- Integrate and promote elements that are established and successfully used on campus

Provide a safe, accessible campus environment

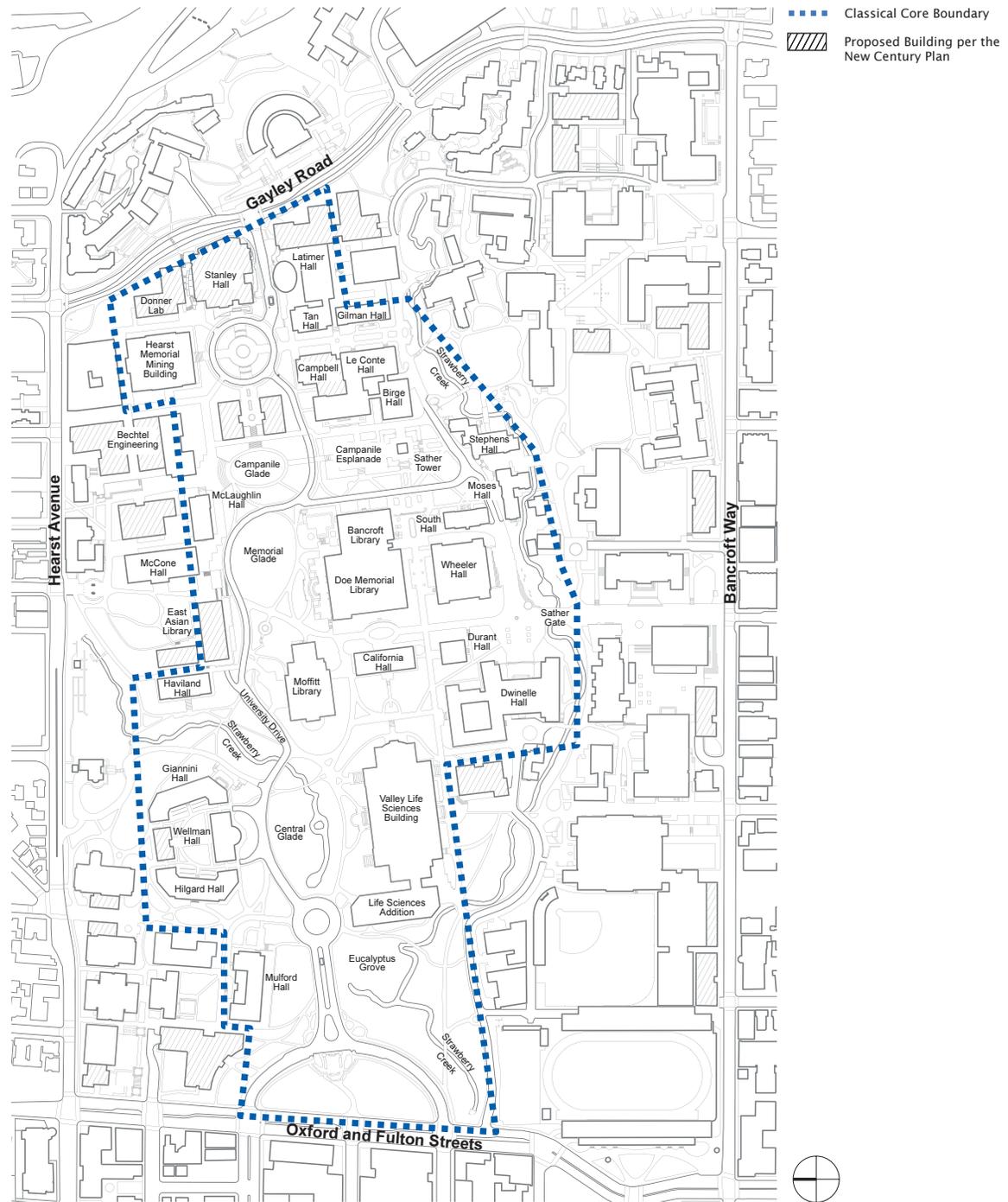
- Integrate universal access standards in design
- Define and designate separate circulation routes for vehicles and pedestrians
- Provide adequate lighting, furnishings, and signage to accommodate day and night pedestrian use

Landscape Design Process | The landscape guidelines provide direction to designers, maintenance personnel, and University staff in all stages of a project. When undertaking landscape improvements in the Classical Core, project participants should undertake the following steps:

- Review UC Berkeley (campus-wide) site improvement requirements and codes
- Review detailed project-specific guidelines as prepared by the University
- Consult with the Campus Landscape Architect on location, color, size, and configuration of all landscape elements
- Submit landscape plans and details to the Campus Landscape Architect and the Design Review Committee for review and approval



The Campanile Esplanade (2003).



Campus map highlighting buildings and prominent landscape spaces in the Classical Core.

Site Planning | Site planning addresses the relationship of site-specific improvements to important contextual elements of the landscape, such as views or circulation. In some cases, this includes establishing and defining contextual elements. Guidelines relating to site planning, used in conjunction with guidelines for planting, paving, lighting, and other landscape components, provide the overall direction and approach for site-specific landscape enhancements in the Classical Core.

- Formal and Dynamic Views
- Circulation Systems
- Grading and Drainage
- Service Areas
- Utilities

The Site Planning section provides descriptions and guidelines for the elements listed below, which are described in further detail on the following pages. When a design is being prepared for a campus open space, all of these contextual elements should be considered.



The **West Entrance** of campus emphasizes the east-west axis along the Central Glade, established by Olmsted and reinforced by Howard.

The vignette illustrates:

- Restoring historical views along the Central Glade axis.
- Creating a pedestrian plaza within the West Circle.
- Using the Campus Standard light fixtures in symmetrical configurations along University Drive.
- Locating low bollards around the West Circle to control vehicular circulation.

Formal and Dynamic Views | Views are an important element of the landscape, orienting pedestrians and enriching their experience as they move through the campus.

Illustrated in the accompanying diagram, the campus includes both formal and dynamic views. Through careful placement of buildings and landscape, formal views orient the viewer from a specific vantage point to discreet objects in the landscape. Within the Classical Core, the composition of neoclassical buildings and landscape frame distant views to the Golden Gate and internal views to landmark buildings on campus, such as Sather Tower (the Campanile).

Dynamic views are experienced as one moves through the landscape. Continuously changing, dynamic views in the Classical Core focus on historic beaux-arts buildings and the movement

through the outdoor rooms, such as Campanile Esplanade and Harmon Way. Dynamic views of the landmark Sather Tower (the Campanile) - the visible icon rising above trees, buildings, and city blocks - orient visitors to the campus from near and far.

Design Intent:

- Organize and integrate design components to respect the formal and dynamic views of the Classical Core.
- Conduct a site-specific spatial analysis to determine sensitive formal and dynamic views around buildings or within landscapes.



The view of the Central Glade with signature red tile roofs of campus buildings, and the San Francisco Bay beyond (2003).

- ■ ■ ■ Classical Core Boundary
- ▨ Proposed Building per the New Century Plan
- Formal Distant Views
- Formal Internal Views
- ▲ Dynamic Internal Views



Formal and Dynamic Views Diagram

Circulation Systems | The Classical Core is pedestrian oriented with restricted vehicular use. Its historic network of vehicular and pedestrian routes affords access to campus buildings and amenities, provides places for social interaction, connects visitors to the campus's past, and serves as character-defining features in the landscape. The guidelines build upon and enhance the existing circulation system, establishing a clear hierarchy and maintaining the integrity and symbolic values of the Classical Core.

Illustrated in the accompanying diagram and discussed below, the circulation system in the Classical Core consists of:

- Vehicular Roads
- Walks
- Paths
- Trails
- Plazas
- Building Entrances
- Bridges

The Landscape Components section provides discussion and guidelines for the treatment of circulation materials and finishes in the Classical Core.

Design Intent:

- Apply the Campus Accessibility Master Plan program for improving and correcting deficiencies.
- Conduct site-specific analysis and programming to determine circulation systems, and material selection, within and around a project site.

Improvements along **South Hall Drive** create a harmonious setting in the heart of the Classical Core.

The vignette illustrates:

- Creating an allee of trees along the Drive, held back from the curb to manage street use.
- Defining road, walks, and plazas with distinct paving materials.
- Using the Campus Standard light fixtures in symmetrical configurations, held back from the curb edge, without obstructing prominent views of neoclassical buildings.



- ■ ■ ■ Classical Core Boundary
- ▨ Proposed Building per the New Century Plan
- Vehicular Roads
- Walks
- Paths
- Plazas
- Building Entrances



Circulation Diagram



Sather Road is categorized as a campus walk with its linear character (2003).



The distinct design of the Campanile Esplanade is an exemplary plaza on campus (1996).
Courtesy Charles Benton

Vehicular Roads

Vehicular roads are routes designated primarily for vehicular and bicycle traffic. Examples of roads on campus include University Drive and South Hall Drive.

Walks

Pedestrian walks are formal pedestrian ways that respond to the building geometries of the Classical Core. They are geometric in character, reflecting the beaux-arts influence, or curvilinear reflecting the picturesque or modern influence. Pedestrian walks include paved areas defined by buildings and paved areas adjacent to buildings in architectonic configurations. Though designated for pedestrian use, major walkways may also provide emergency vehicle access. Examples of typical pedestrian walks include Sather Road, Campanile Way, Oppenheimer Way, and the proposed University Walk.

Paths

Pedestrian paths are sinuous circulation elements reflecting the picturesque influence. They provide linkages between exterior spaces and buildings. Integrated with the topography of the Berkeley campus, this network of paths results in flowing routes for pedestrians navigating the grounds. Pedestrian paths include those in and around Memorial Glade and Central Glade.

Trails

While not a primary means of circulation, pedestrian trails serve the natural areas of the Classical Core and other areas of campus. They weave through the heavily wooded sections of Strawberry Creek, providing access to quiet, intimate spaces. Pedestrian trails are not identified on the *Circulation Diagram*.

Plazas

Plazas are large, social gathering areas on campus, generally located adjacent to major pedestrian routes. They serve as outdoor rooms for studying, places of interaction, contemplation, and eating. Plazas may be active or passive in character. Plazas are often affiliated with building entries and are typically defined by the surrounding architecture. Examples of existing plazas include Dwinelle Plaza and the plaza between Stephens and Moses Halls.

Building Entrances

Primary building entrances are important historical features, serving as the forecourt and providing the transition from exterior to interior space. They contain the richest use of paving materials in intricate patterns. Exemplary building entrances include those at Wheeler Hall, Doe Library, and Giannini Hall.

Bridges

Due to their unique character and setting, bridges are an independent category of the circulation system. Bridges play an important historic role representing different architectural periods and styles, and a functional role of crossing the forks of Strawberry Creek. Although primarily for pedestrian use, some bridges provide vehicular access. The bridges are not identified on the *Circulation Diagram* due to the scale and quantity of data found on the plan.

Grading and Drainage | The campus's natural landform is characterized by the gentle sloping plane toward San Francisco Bay bisected by the drainage patterns of Strawberry Creek. The pattern of stair-stepped building terraces express the campus's formal topography. The constant change in grade from the east to the west on campus affords distant views to the west.

Design Intent:

- Use grading techniques that complement the campus's remaining natural landforms.
- Minimize the use of ramps and stairs for building connections to adjacent walks, paths, and plazas.
- Design surface drainage systems to minimize concentration of surface runoff and avoid soil erosion.
- Promote natural infiltration, such as grass-lined swales, to restrain surface flows, filter water, and reduce stormwater drainage into Strawberry Creek.

Service Areas | Buildings within the Classical Core typically have four main facades and lack any "back of building" for service uses. However, service areas are needed for loading docks and large building utilities as a functional requirement of building programs. They may also include trash containers, which should be relocated or screened to improve building appearance or consolidate service uses.

Design Intent:

- Integrate enclosures for service areas with adjacent buildings, and use finishes similar to the construction materials of the buildings.
- Accommodate large utilities or trash containers within the building. If not possible, cluster components and screen from entries and primary pedestrian paths.
- Integrate external enclosures into the surrounding environment with appropriate lighting, materials, and finishes. Conceal enclosures by using trees, shrubs, and vines.



Opening views along **Strawberry Creek** reveals Howard's neoclassical bridge set within the natural landscape type.

The vignette illustrates:

- Restoring views of the 1910 bridge and views across Strawberry Creek through the management of the tree canopy within the creek woodland.
- Revegetating creek banks with low native plantings suitable for the riparian woodland environment.
- Locating site amenities at pedestrian gathering areas.



Example of typical landform creating a building terrace (2003).

Utilities | Due to the topography and the landscape context of the Classical Core, each site on campus is unique and requires significant coordination of building and site utilities.

Design Intent:

- Design and coordinate the location of new surface utilities to accommodate long-term maintenance requirements and minimize conflicts with the campus’s mature landscape.

Below Grade Elements

The relationship of underground elements and the landscape is highly important in this dense, urban campus. Examples of underground utilities include electrical substations, manholes, controlled environment vaults, and steam service.

Design Intent:

- Consolidate new underground utilities into “tunnels”, in multiple, parallel installations, under roads, walks, and plazas to minimize impacts on the landscape.
- Locate surface hatches, utility covers, and ventilation and access elements within paved areas. If planted areas are the only option, coordinate with existing tree locations and integrate into shrub and ground cover plantings to conceal their appearance.
- Conceal vault covers in modular paving areas, utilizing a pan-like cover to accept the finish paving material.

Above Grade Elements

Above grade utilities include backflow preventors, fire standpipes, gas docks, emergency generators, and other large elements. They typically require maintenance access and clearances.

Design Intent:

- Integrate above grade elements into the site or building design to minimize their impact on the landscape.
- With new building construction, consolidate utilities with adjacent facilities where possible.
- Locate air intake units for buildings away from outdoor sitting areas and service areas to minimize the intake of smoke and exhaust fumes.
- If utilities occur in the landscape, locate away from primary entries and walks and screen with an enclosure and/or plant material.
- Integrate external enclosures into the surrounding environment by using appropriate scale, materials, and finishes.
- For enclosure materials, use concrete, wood, or metal, depending on the landscape context.
- Paint above grade utilities with the campus standard color (Elephant’s Breath) unless specific color is required by code or the location makes it more desirable to blend with an adjacent structure color.
- Coordinate landscape and engineering disciplines to prevent visible utilities in historic view corridors and other undesirable locations.

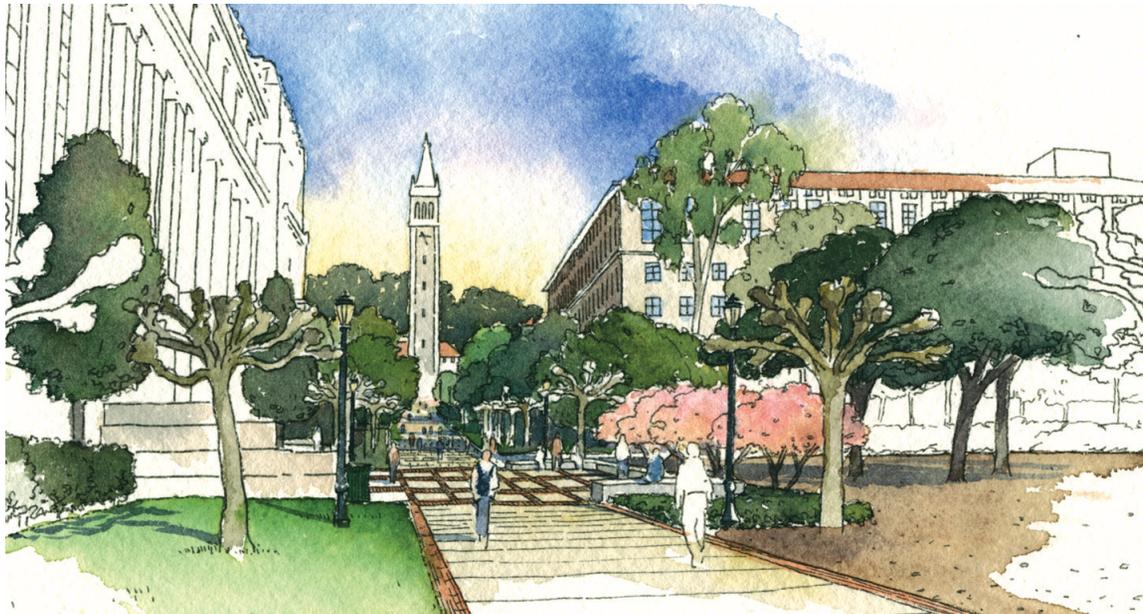
Landscape Components | Landscape Components refer to discrete elements in the designed landscape, such as planting, paving, light fixtures, and benches. To enhance a landscape, careful consideration must be given to site planning (discussed in the previous section), style of landscape components appropriate for the historic setting, and the overall arrangement of the components in the landscape setting.

The Landscape Components section provides descriptions and guidelines for the elements listed below, which are described in further detail on the following pages.

- Planting
- Paving Materials
- Lighting
- Pedestrian Barriers and Traffic Controls
- Furnishings
- Signage

For each element, the guidelines address the location, use, overall composition, materials, colors, and finishes. When a design is being prepared for a campus open space, all of these compositional elements should be considered.

This section begins with a diagram and description of landscape types for the central campus and a narrative of the evolution of campus planting.



The future rehabilitation of **Campanile Way** restores this major east-west circulation corridor to its primary use as a pedestrian walk.

The vignette illustrates:

- Restoring views to the Campanile with selective pruning of large canopy trees.
- Planting pollarded London Plane Trees to infill locations along the alley.
- Using consistent modular pavers along the length of the walk and restoring the historic brick gutters.
- Locating Campus Standard light fixtures in a symmetrical configuration along the walk.

Landscape Types

As documented in the *Landscape Master Plan*, the campus landscape is comprised of a typology consisting of five types, used to describe and organize the physical attributes and historic context of the campus open space system. The order of the types below reflect the chronology of their development.

Rustic type - The original landscape character featuring native plant dominance, rustic character, low maintenance requirements, and relating to neoclassical or rustic architecture. Example: Founder's Rock

Natural type - A landscape that appears natural in the campus, but has been altered. Native or indigenous plant dominance, low maintenance requirements; may support neoclassical or rustic architecture. Example: Grinnell Natural Area

Picturesque type - The picturesque Olmsted-style landscape of rolling pastoral lawns, informal mixed tree borders, mixed exotic and native plants, high maintenance requirements, and not directly related to particular architectural styles. Example: Central Glade

Neoclassical type - Rigid architectural landscape framing neoclassical and Beaux-Arts campus buildings, with typically exotic plants selected to enforce the architectural styling and moderate to high maintenance requirements. Example: Campanile Esplanade

Urban type - Typically exotic landscape plantings in contemporary, geometric urban plazas, popular as places of interaction, with building forms dominant and moderate maintenance requirements. Example: Dwinelle Plaza

Landscape Types Diagram



The Evolution of Campus Planting

In a span of nearly 150 years, the Berkeley campus has evolved from a natural landscape of grassy fields created by riparian woodlands to a complex composite of planted spaces varying from naturalistic compositions of mature trees to geometric patterns in the urban and neoclassical settings. This evolution results from a complex layering of plantings based on functional needs, support of research and academic requirements, and designs by planners, horticulturists, and landscape architects.

Ecological History

The site chosen for the new College of California was that of a classic California landscape - barren, grassy slopes, dormant in summer, dotted with dark broadleaf trees along the streams and on cooler north-facing slopes. Though the landscape imagery has changed, many trees and understory shrubs still exist. Live Oaks (*Quercus agrifolia*) follow the forks of the creek and still dot Faculty Glade and Observatory Hill. California Bay (*Umbellularia californica*) line the creeks, their fragrance filling the air during rain or when crushed under foot. Several gnarled, old California Buckeyes (*Aesculus californica*) serve as landmark sculptures in Faculty Glade and at North Gate. Toyon (*Heteromeles arbutifolia*) emerges in winter with its bright red "Christmas berries".

Academic and Research History

The campus has served as both an arboretum and outdoor laboratory planted for research and classroom needs of the faculty for over 100 years. The early plantings of the Agricultural Experiment Station supported the research and academic needs of the faculty. Oats and wheat were grown in the vale north of North Hall to feed the University's work animals. An orchard of over 200 varieties of fruit trees was planted on the knoll where Wellman, Giannini and Hilgard Halls now stand. The Experiment Station also planted various conifers and hardwood timber trees (English Oaks, Tulip Trees, elms and hickories) and many Australian species that still remain both on the Central Campus and in Strawberry Canyon.

An Economic Garden was once established near the Center Street entrance. It contained grasses, forage plants, cereals, medicinal and textile plants, vegetables and a variety of trees and shrubs studied by students in botany, pharmacy, and other disciplines.

Design Ideals

The planting of the campus reflects layers of concepts and ideals about the design of the landscape. Some are bold and clear, such as the Campanile Esplanade beaux-arts classicism, while other periods are more subtle, with only a few relic trees remaining.

Agricultural Crops

Planting orchards and other crops served the needs of the University to experiment with various crop plants and techniques for the state's developing agricultural economy. With a climate so different from the rest of the country, faculty and researchers in the Agricultural Experiment Station needed to test different varieties of fruit trees and explore farming techniques suitable for California.

Ornamental Plants

The second influence was the importation of and experimentation with the unique array of ornamental plants from around the world. New plants were being brought to California from South America, Australia, New Zealand, and Asia to satisfy the curiosity of horticulturists, nurserymen, and the University faculty.

These exotic plants were in fashion to decorate gardens and parks in California. Palms, conifers, acacias, eucalyptus, and many tropical and subtropical plants were planted on campus. A few such plants, such as a Camphor Tree (*Cinnamomum camphora*), the Titoki (*Alectryon excelsum*), and Chilean Soapbark (*Quillaja saponaria*), remain today where the Botanical Garden once existed.

Picturesque Landscape

Frederick Law Olmsted's early design for the College of California campus was laid out following the romantic ideal of the picturesque landscape. Remnants of this setting are visible in the Central Glade, Faculty Glade, and the West Entrance.

Beaux-Arts Landscape

The classical ideals expressed in design fostered by Ecole des Beaux-Arts began to appear on campus with John Galen Howard's Plan of 1914, which created a landscape married with neoclassical architecture. Plantings followed architectural patterns in allees, bosques, hedges, and in pollarded canopies of plane trees. A rhythm of planting large conifers at the corners of these monumental buildings, linked by hedges or low shrubby ground cover, created a softer counterpoint to the symmetry and geometry of both architecture and the plane trees.

Modern Landscape

During the late 1900s, landscapes for individual buildings followed no discernible pattern or style. Plant composition relates primarily to the building and less often to the context of the surrounding campus landscape. Popular plants used during this period were star jasmine, Canary Island Ivy, Indian Hawthorn, Coast Redwood, Xylosma, and Pittosporum. After the drought years following 1977, more attention was paid to water conservation in plant selection. More California native plants and Mediterranean climate plants were used on projects.



Topographic - Turf used on the gentle slope of Faculty Glade (2003).



Linear - Allee of pollarded London Plane Trees along Campanile Way (2003).

Planting | The planting patterns within the Classical Core were carefully studied in the development of this plan. The planting guidelines document the Classical Core’s history and extant conditions as an invaluable guide for future improvements. The guidelines take into consideration the dynamic quality of plant materials and the related need for maintenance to ensure the proper design intent. In some cases within the Classical Core, the extant plant materials have outgrown their intended expression and are in need of refinement.

The guidelines also respond to the decline in diversity of campus plantings caused by the loss of aging specimen trees to age or disease, the construction of new facilities and buildings, a simplification of the plant palette partly driven by the need to simplify maintenance, and past trends in landscape design.

The guidelines for planting are organized as follows:

- Planting Compositions
- Plant Categories
- Plant Materials

Planting Compositions

The arrangement of planting materials on campus is categorized as topographic, linear, spatial, and architectural. These interrelated categories address the development of forming landscapes around buildings and the definition of outdoor space.

Topographic

The natural topography of the campus is a gentle sloping plane descending towards the Bay, with landforms defining the drainage patterns of Strawberry Creek. Memorial Glade, Faculty

Glade, and West Oval all express this relationship to the original campus landform. A series of manipulated slopes and building terraces express the landscape’s more formal topography. This strong expression of the terraces allows buildings to sit prominently on a level terrain, creating an intertwining rhythm with the character of the landscape. Retaining walls also express the campus’s topography. They serve as grade separation devices as well as seating opportunities and provide a variety of planting alternatives.

Design Intent:

- Respect and reinforce natural and designed slopes and their functions.

Linear

Linear plantings, either straight or curvilinear in nature, serve as significant landscape expressions on campus. The dominant corridor of Strawberry Creek vegetation, the allee of pollarded trees along Campanile Way, and the hedges around the Campanile Esplanade are examples of linear compositions.

Design Intent:

- Reinforce the linear compositions found in the landscape.

Spatial

Formal, architectonic arrangements and informal, natural planting configurations spatially define the campus’s outdoor rooms, glades, and quadrangles. The formal bosque at the Campanile Esplanade, the informal clustering of groves, and the understory plantings around glades contribute to defining these spaces. Specimen and large canopy trees also create landscape spaces by their location, canopy structure, and form. Many specimen trees, scattered

around the Classical Core, are remnants of the Agricultural Experiment Station and the Botanical Garden of an earlier period.

Design Intent:

- Reinforce the expression of outdoor spaces through formal and informal plantings.

Architectural

As architectural elements, plant materials accentuate building facades and pedestrian entries. Large, coniferous evergreen trees are often located at elevated corners to enhance the facade, while smaller human-scale trees accentuate the building entries. Uniform, low-growing shrub or ground cover provides a visual contrast to the light-toned buildings. Where rooftop terraces occur, plants soften the effects of paved surfaces, provide shade, and define spaces in these open areas.

Design Intent:

- Enhance and accentuate the architectural style of campus buildings.

Plant Categories

Various types of plants articulate and define the landscapes of the Classical Core. Primarily, specific plants are used to create compositions based on the plants form, height, texture, or color. The *Plant Categories for Landscape Compositions* Table identifies the dominant plant categories appropriate for individual landscape compositions. The *Plant Categories Summary Table* describes the plant categories based on primary characteristics.

Design Intent:

- Preserve or reinforce plant compositions in the Classical Core with appropriate plant materials.

Plant Materials

The character of the landscape remains strong in many areas where past periods of historic plantings remain dominant. The Classical Core includes areas that serve as teaching laboratories for plant identification and other classes. This can require a diversity of plants.

Design Intent:

- Identify areas with extensive historic plantings and plantings that define the area's character.
- If possible, retain the plantings that define the area's character. Replant as plants age and decline.
- Introduce new plantings as needed to reinforce the existing character or to impose a desired character that strengthens the dominant period type.
- Increase plant diversity to satisfy educational needs while retaining and reinforcing the harmony of areas with a highly identifiable character.
- In areas with a neoclassical landscape, retain existing specimen plants for their diversity as a supplement to the dominant landscape pattern.



Spatial - Bosque of pollarded London Plane Trees at Campanile Esplanade (1995). *Courtesy Charles Benton*



Architectural - Evergreen trees accentuate the building entry of California Hall (2003).



The view looking northeast over the Agricultural Complex and the wooded fork of Strawberry Creek (1999). *Courtesy Charles Benton*

Plant Categories for Landscape Compositions

Landscape Compositions	Plant Categories				
	Canopy Trees	Accent Trees	Conifer Trees	Shrubs	Ground Covers
Topographic				•	•
Linear	•	•	•	•	
Spatial	•	•	•	•	•
Architectural		•	•	•	•

Plant Categories Summary

Plant Categories	Plant Descriptions			
	Height	Spread	Growth Habit	Characteristics
Canopy Trees	30' +	30' +	Single trunk, upright, broad spreading or picturesque form	Deciduous or Evergreen; provides shade, scale in large open spaces, or interesting branching habits for specimens
Accent Trees	15' - 30'	15' - 30'	Single or multi-trunk, columnar, upright, or narrow form	Deciduous or Evergreen; provides interesting flowers, texture, or leaf color suited for pedestrian scale
Conifer Trees	30' +	10' +	Single trunk, pyramidal to picturesque form	Evergreen (needle or scale-type); provides scale, screens, or frames views to buildings
Tall Shrubs	6' +	4' +	Clumping or spreading, regular or irregular form	Deciduous or evergreen; provides interesting flowers, texture, or leaf color
Low Shrubs	2' - 6'	2' - 6'	Clumping or spreading, regular or irregular form	Deciduous, evergreen or perennial; provides interesting flowers, texture, or leaf color
Ground Covers	Up to 2'	2' - 10'	Clumping or spreading forms	Evergreen; provides interesting flowers, texture or leaf color

Plant Selection

The information on the following pages summarizes the characteristics and names of commonly used plant materials appropriate for the Classical Core based on the plant categories discussed earlier in this section. Although the 1976 UC Berkeley publication *Trees of the Berkeley Campus* provides a comprehensive reference of trees once used throughout the campus, the

abbreviated lists to follow represent selections specific to the Classical Core based on historic significance, compatibility with existing materials, availability, and successful plantings on campus. The listings should not be construed as complete inventories, as the University will consider additional plants that meet the description of the categories.



The picturesque landscape of **Harmon Way** is framed by neoclassical buildings and expressed through the use of landforms and plantings.

The vignette illustrates:

- Retaining the picturesque setting with views of California Hall on the upper terrace.
- Emphasizing the slope with low shrubs in a formal configuration surrounding the stairs.
- Creating a hierarchy of circulation through materials and path widths.
- Incorporating wood benches into this picturesque landscape type.



The Eucalyptus Grove west of Valley Life Sciences Building (2003).

Canopy Trees

Mature Size	30'+ height / spread	
Growth Habit	Single-trunk, upright, broad spreading, or picturesque form	
Characteristics	Deciduous or evergreen; provides shade, scale, or interesting branching habits as specimens	
Abbreviated List	Acer macrophyllum	Bigleaf Maple
	Aesculus californica	California Buckeye
	Aesculus x carnea	Red Horsechestnut
	Cinnamomum camphora	Camphor Tree
	Eucalyptus species	Eucalyptus
	Liriodendron tulipifera	Tulip Tree
	Magnolia grandiflora	Southern Magnolia
	Pittosporum undulatum	Victorian Box
	Platanus x acerifolia	London Plane Tree
	Quercus agrifolia	Coast Live Oak
	Umbellularia californica	California Bay

Accent Trees

Mature Size	15' to 30' height / spread	
Growth Habit	Single or multi-trunk, columnar, upright, or picturesque form	
Characteristics	Deciduous or evergreen; provides interesting flowers, texture, or leaf color suited for pedestrian scale	
Abbreviated List	Acer palmatum	Japanese Maple
	Ginkgo biloba	Maidenhair Tree
	Liquidambar styraciflua	American Sweet Gum
	Magnolia soulangeana	Saucer Magnolia
	Malus species	Flowering Crabapple
	Melaleuca ericifolia	Heath Melaleuca
	Olea europaea	Olive
	Platanus x acerifolia	London Plane Tree (pollarded)
	Populus nigra `Italica`	Lombardy Poplar
	Prunus species	Flowering Cherry

Conifer Trees

Mature Size	30'+ height / 10'+ spread	
Growth Habit	Single-trunk, pyramidal to picturesque form	
Characteristics	Evergreen (needle or scale-type); provides scale, screen effects, or frame views to buildings	
Abbreviated List	<i>Cedrus atlantica</i> <i>Cedrus deodara</i> <i>Cupressus macrocarpa</i> <i>Metasequoia glyptostroboides</i> <i>Pinus canariensis</i> <i>Pinus radiata</i> <i>Sequoia sempervirens</i> <i>Sequoiadendron giganteum</i> <i>Taxus baccata</i> 'Stricta' <i>Thuja occidentalis</i> <i>Thuja plicata</i>	Atlas Cedar Deodar Cedar Monterey Cypress Dawn Redwood (deciduous) Canary Island Pine Monterey Pine Coast Redwood Giant Sequoia Irish Yew American Arborvitae Western Red Cedar

Tall Shrubs

Mature Size	6' + height / 4'+ spread	
Growth Habit	Clumping or spreading, regular or irregular form	
Characteristics	Deciduous or evergreen; provides interesting flowers, texture, or leaf color	
Abbreviated List	<i>Abelia x grandiflora</i> <i>Arbutus</i> 'Marina' <i>Camellia</i> species <i>Cotoneaster lacteus</i> <i>Heteromeles arbutifolia</i> <i>Leptospermum</i> species <i>Ligustrum</i> jap. 'Texanum' <i>Photinia</i> species <i>Pittosporum</i> species <i>Prunus laurocerasus</i> <i>Xylosma congestum</i>	Glossy Abelia Strawberry Tree Camellia Cotoneaster Toyon Tea Tree Privet Photinia Pittosporum English Laurel Xylosma



A Ginkgo specimen tree is a landmark from the campus's early years (2003).



Star jasmine in the Campanile environs (2003).

Low Shrubs

Mature Size	2' to 6' height / spread	
Growth Habit	Clumping or spreading, regular or irregular form	
Characteristics	Deciduous, evergreen or perennial; provides interesting flowers, texture, or leaf color	
Abbreviated List	Arctostaphylos species	Manzanita
	Agapanthus species	Lily-of-the-Nile
	Azalea hybrids	Azaleas
	Buxus species	Boxwood
	Ceanothus species	Wild Lilac
	Hemerocallis hybrids	Daylilies
	Juniperus chin. 'Pfitzeriana'	Pfitzer Juniper
	Pittosporum tobira	Tobira
	Prunus laur. 'Zabeliana'	Zabel Laurel
	Taxus baccata 'Repandens'	Spreading English Yew

Groundcovers

Mature Size	up to 2' height / 2' to 10' spread	
Growth Habit	Clumping or spreading forms	
Characteristics	Evergreen; provides interesting flowers, texture, or leaf color	
Abbreviated List	Arctostaphylos species	Manzanita
	Dwarf Tall Fescue	Turf
	Fragaria chiloensis	Ornamental Strawberry
	Hedera canariensis	Algerian Ivy
	Hedera helix	English Ivy
	Hedera helix 'Needlepoint'	Needlepoint Ivy
	Juniperus s. 'Tamariscifolia'	Tam Juniper
	Trachelospermum jasminoides	Star Jasmine
	Vinca minor	Dwarf Periwinkle
	Vinca major	Periwinkle

Paving Materials | Consistent use of selected paving materials enrich the campus environment, improve its functional and aesthetic qualities, and further the campus's sustainability goals. The *Paving Applications Table* identifies appropriate paving materials for the Classical Core and their application for the campus's circulation system (as illustrated in the *Circulation Diagram* in the Site Planning Section). The *Paving Materials Table*

summarizes key characteristics of the paving materials allowed in the Classical Core. The rest of this section discusses the paving materials, categorized as modular pavements, poured-in-place pavements, or boardwalks.



The modular paving materials recommended for **Campanile Way** and **Sather Road** enhance the pedestrian environment at this major cross-axes of the campus.

The vignette illustrates:

- Maintaining the views of neoclassical buildings along these prominent corridors.
- Planting pollarded London Plane Trees to create design symmetry along both walks and restoring foundation planting around neoclassical buildings.
- Enhancing these pedestrian walks with modular paving materials - Campanile Way pavers to be larger in scale than Sather Road pavers.
- Locating Campus Standard light fixtures in symmetrical configurations without obstructing prominent views.
- Incorporating low seat walls at the intersection, framing views to the west.



The Campanile Esplanade, as viewed from above, with its historic use of brick pavers (1998).
Courtesy Charles Benton

Paving Applications

Circulation Categories	Paving Materials					
	Concrete or Stone Pavers	Brick Pavers with Granite Insets	Concrete	Asphaltic Concrete	Decomposed Granite	Boardwalks
Vehicular Roads/Bridges				•		
Walks	•		•			
Paths			•	•		
Trails					•	•
Plazas	○	•	•			
Building Entrances		•				
Pedestrian Bridges		○	•			•

- Typical
- Exception Allowed

Paving Materials

Materials	Size	Color *	Finish	Manufacturers
Concrete Pavers	Varies	Varies	Ground	Hanover, Basalite, or McNear Brick
Stone Pavers	Varies	Sierra White or Iridian	Thermal	Cold Spring Granite
Brick Pavers	Varies	Red tones	Meet Applicable Codes	McNear Brick or HL Muddox
Granite Insets	8x8	Sierra White	Thermal	Cold Spring Granite
Concrete **	N/A	Neutral tones	Broom, Sandblast, or Exp. Aggregate	N/A
Asphaltic Concrete	N/A	Natural black	Rolled	N/A
Decomposed Granite	Per CDS***	Tan/Gold	Stabilized Fines	N/A
Boardwalks	2x6 decking	Tan/Brown	Meet Applicable Codes	Trex or Equal

* Color to be reviewed by Campus Landscape Architect

** Aggregates commonly used within the Classical Core for exposed aggregate paving include Red River, Terry Beach, Lodi, and Yuba and are typically 3/8"- 5/8" stones

*** CDS - UC Berkeley Construction Design Standards

**** Permeable pavements may be considered within this system

Modular Pavements

The use of modular pavers on walks and plazas is consistent with the historical character of the Classical Core. They permit water percolation and are reusable after trenching or repairs if constructed with un-mortared joints. Modular pavers set over a pervious material improves stormwater management, reduces long-term maintenance costs and repair time, and supports the sustainability goals of the campus.

Design Intent:

- Select a method of installation based on site-specific conditions, anticipated uses, and the demands of vehicle weight loads.
- Install modular pavers over a pervious material where possible.
- Use simple edge restraints where modular paving meets adjacent soil.

Concrete or Stone Pavers

Concrete or stone pavers are the appropriate materials for pedestrian walks on campus.

Design Intent:

- Incorporate concrete interlocking pavers or stone pavers in monochromatic colors, rectangular forms, and with slip-resistant surfaces.
- Incorporate pavers with sizes appropriate in scale based on landscape context and project goals.
- Determine thickness of pavers based on functional requirements and material strength.
- In general, configure pavers in pattern perpendicular to the direction of travel.

Brick Pavers

The historic use of brick pavers is evident throughout the Classical Core, exhibiting a variety of paver sizes, colors, patterns, and configurations. Based on observation of historical applications, the herringbone pattern, used on walkways, typically represents movement. The basket-weave pattern characterizes a stationary space, such as a building entrance.

Design Intent:

- In all cases, incorporate brick pavers in red clay tones, with a slip-resistant surface, and size to accommodate specific functional requirements.
- In general, use red brick pavers for paving fields and borders at building entrances.
- In general, use brick pavers as accents in pedestrian plazas.
- For Campanile Way, reconstruct the gutter with red brick pavers that match the module size and color of Campanile Esplanade. Configure pavers in a stacked-bond pattern with aligned joints.
- For Sather Bridge and Campanile Esplanade, retain the historical application of red brick pavers and granite insets.



Example of a herringbone pattern on a walkway (2003).



Example of a basket-weave pattern at a building entrance (2003).



Example of granite insets in brick paving at Campanile Esplanade (2003).



Example of plaza paving consisting of exposed aggregate concrete with brick bands (2003).

Granite Insets

Historically, square granite insets, in conjunction with brick paving, serve as decorative accents denoting corners in the edge bands. They serve as anchoring elements, with the benefit of minimizing the cutting of brick pavers to finish out corners.

Design Intent:

- Where appropriate, use granite insets in conjunction with brick paving fields at building entrances to transition between the brick bands meeting at opposing angles.

Poured-in-Place Pavements

The campus uses poured-in-place paving materials as a functional, durable, and long-lasting solution for vehicular and pedestrian surfaces. Historically, the University has used poured-in-place pavements throughout the Classical Core, providing surfaces that do not compete with the richness of the neoclassical buildings and historical landscapes.

Concrete

Concrete paving material is often used for pedestrian walks and pedestrian plazas due to the resulting formal geometries and architectural forms.

Design Intent:

- At pedestrian plazas, incorporate brick paver accent bands with concrete paving in patterns that complement the historical configurations found within the Classical Core.
- Use concrete in lieu of asphaltic concrete, as appropriate, for service areas that need to withstand heavy vehicle loads.

- Always use neutral tones for concrete paving, either by adding industrial by-product material (carbon) or an integral pigment color.
- At a minimum, include carbon-black additives in natural gray concrete paving to reduce glare and reflection.
- Base the thickness of the concrete slab on a soils report and functional requirements.
- For walks, use a heavy broom finish on steeper slopes, and medium or light broom finish on flatter slopes.
- For plazas, use a sandblasted or exposed aggregate finish (see *Paving Materials Table* for specific aggregate materials).
- For the Mining Circle, which functions as a vehicular roadway, pedestrian walk, and plaza area, consider using concrete paving to distinguish the area as a unified public space. Provide flexibility and safety for pedestrians, while reducing the visual dominance of vehicular circulation.

Asphaltic Concrete

The use of asphaltic concrete for pedestrian paths and vehicular roads accommodates the pathways' fluid lines and diminishes their visual impact on the landscape.

Design Intent:

- Use CalTrans Standard Specifications for Type A or B asphaltic concrete with extra fines.
- Use concrete, or granite, curbs and gutters along vehicular roads where a vertical separation from pedestrian areas is needed. (extruded asphalt curbs shall not be used).
- Base the thickness of the asphalt concrete on a soils report and functional requirements.

Decomposed Granite

The use of decomposed granite paving for pedestrian trails in natural areas complements the character of their setting.

Design Intent:

- Use tan-gold quarry materials that meet sieve sizes specified in the UC Berkeley Construction Design Standards (CDS).
- Ensure paving is polymer stabilized with a finished thickness of 2-inches minimum.
- Edge trails with a wood header.
- Use decomposed granite on trails with slopes not exceeding 4% and with light expected use.

Boardwalks

The use of boardwalks for selected trail segments along Strawberry Creek can minimize the impact to root zones of sensitive tree species and improve disabled access in a cross-sloped environment.

Design Intent:

- Construct of recycled materials, consisting of post-consumer plastic and wood waste.
- Construct on pier footings to minimize the impact on existing grades and tree roots.
- Ensure that planks are slip-resistant.
- Use planks with a natural wood grain, texture, and color.
- Where appropriate, use planks as replacement bridge decking.



Example of a decomposed granite trail leading to a wooden bridge in the natural area along Strawberry Creek (2003).

Lighting | Three types of lighting occur within the Classical Core: the Campus Standard, Architectural, and Accent. The lighting concept for the Core provides safe levels of light on major circulation routes and plazas while preserving views of the neoclassical buildings and landscapes.

Design Intent:

- Consider the locations and intensity of light fixtures in context with trees and other site elements to help diminish their appearance in the open landscape.

- Incorporate lighting techniques to manage light pollution.
- Carefully integrate special use lights, such as the Architectural or Accent fixtures, into the landscape so as not to distract or diminish the historic value of the cultural landscape.

The **Haviland Hall** environs represent the merging of the Neoclassical and Natural landscape types.

The vignette illustrates:

- Restoring views into woodlands along Strawberry Creek.
- Incorporating woodland plantings along creek and emphasize slope with formal arrangement of low shrubs and accent trees around stairs.
- Using Campus Standard light fixtures along path at base of slope and incorporating accent lights at creek crossings.
- Locating wood benches along path and sawn logs along woodland edge.



Campus Standard

The Campus Standard is a single- or double-mounted tulip-shaped luminaire on a fluted pole with a decorative base cover. Most of those on campus are single headed fixtures. The *Double-Headed Light Fixture Primary Zone Diagram* illustrates the principle areas where the double-headed light standards are permitted.

Design Intent:

- Use Campus Standard fixtures along roads, walks, paths, in parking areas, and in pedestrian plazas.
- Meet the following foot-candle illumination level objectives: 1.0 ft/c in parking lots, near night entries to buildings, bus stops, and campus entries, and 0.5 ft/c on walks and paths.
- Use standard campus paint color (Elephant's Breath).
- Recommended Spacing:
50 feet on center near entries and parking
70 feet on center along walks and paths
70-100 feet on center for double-headed fixtures.

Manufacturer:

Sentry Electric, Freeport, NY

Model:

Pole: SCI-NY20, cast iron, 13-foot length,
Luminaries: SBP - Battery Park, 175-watt metal halide, type 3 or 5 distribution, photocell control
Crossarm for double-headed fixtures:
SAL-WB-T

Webpage:

www.sentrylighting.com

Architectural

The use of site-specific architectural fixtures acknowledges that light standards may need to vary from the Campus Standard and relate to the associated architecture. Area lighting associated with the Faculty Club is an example of an existing architectural fixture appropriately set within the context of building and landscape.

Design Intent:

- Consider the architectural and landscape context when selecting a fixture.
- Consider the University's ease of maintenance and availability of replacement parts and lamps when selecting a fixture.
- Incorporate industry-standard components that provide long lamp life and full spectrum color rendition.

Accent

Accent fixtures can add charm and scale to a campus landscape. Examples of existing accent fixtures appropriately set in the landscape occur over several of the bridges crossing the south fork of Strawberry Creek. The University permits the use of accent lights on a site-specific basis.

Design Intent:

- Consider landscape character and scale appropriate for pedestrians when selecting a fixture.
- Consider the University's ease of maintenance and availability of replacement parts and lamps when selecting a fixture.
- Incorporate industry-standard components that provide long lamp life and full spectrum color rendition.



Architectural fixture at Faculty Club (2003).

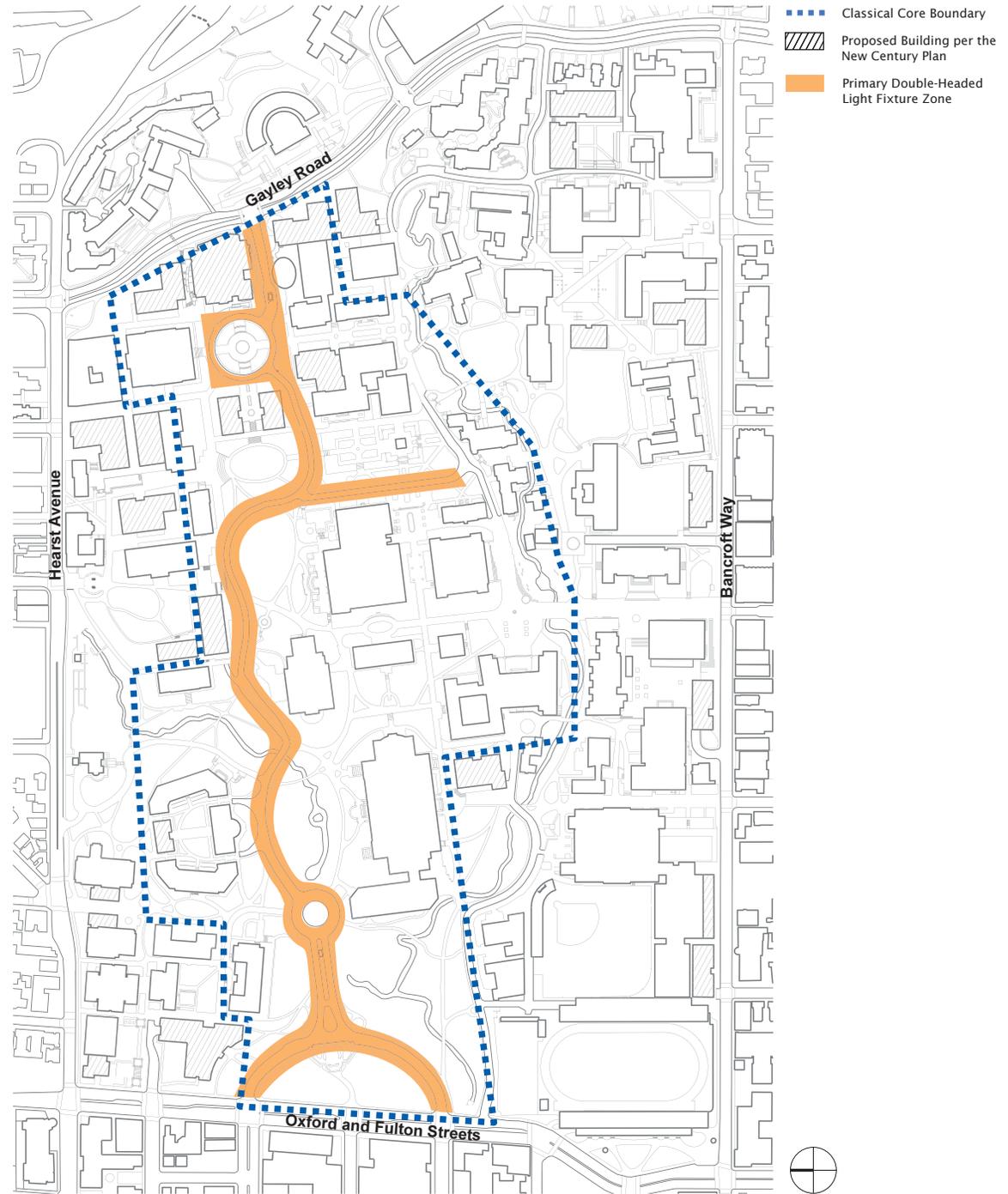


Accent fixture over Strawberry Creek bridge (2003).



Single and double-headed Campus Standard light fixtures.

Double-Headed Light Fixture Primary Zone Diagram



Pedestrian Barriers and Traffic Controls |

Pedestrian barriers direct pedestrians to preferred circulation routes and define landscape spaces. Pedestrian barriers do not address hazardous conditions and associated code requirements. Traffic controls typically restrict vehicular circulation to roads, walks, and service areas. The family of barrier and control elements includes fences, walls, and bollard systems.

Design Intent:

- Use materials that are compatible with the landscape type, other site furnishings, and the architecture in the area.
- Construct at a height and scale appropriate for context and function.

The Pedestrian Barriers and Traffic Control Table summarizes the appropriate location, material, color, and finish of each control item. The text following describes the control item's role and associated guidelines and standards.



Oppenheimer Way will be returned to a pedestrian environment in the future.

The vignette illustrates:

- Maintaining prominent north-south views between the Mining Circle and Strawberry Creek.
- Rehabilitating the beaux-arts formality with appropriate plant material.
- Restoring the corridor to a pedestrian environment and using paving materials similar to Mining Circle environs.
- Incorporating wood benches in this neoclassical landscape and using low bollards to restrict vehicular access.



The West Circle represents an area for the potential use of traffic controls (1999). *Courtesy Charles Benton*

Pedestrian Barriers / Traffic Controls Summary					
Item	Location: Landscape Type	Material	Color	Finish	
Fences					
Two-rail	Natural	Posts: 6x6 Rails: 4x6 Rough sawn redwood or PTDF*	Campus Standard (Brown)	Stained	
Cable-rail	Natural and Picturesque	Posts: 6x6 Rails: (4) 1/8" SS, 7- strand aircraft cable**	Campus Standard (Brown)	Stained	
Landscape Walls					
Stonewall / Stone Veneer	Natural	Field Volcanic Stone	Brown/Gray/Tan	Rough, Mortared Stone	
Balustrade	Neoclassical and Urban	Concrete or Granite	Per Project	Per Project	
Formed Concrete	Picturesque, Neoclassical, and Urban	Concrete	Natural Gray	Sandblast	
Bollards					
Stone	Neoclassical	Granite	Per Project	Per Project	
Concrete	Neoclassical and Urban	Concrete	Per Project	Per Project	
Ornate Metal	Neoclassical	Cast Aluminum	Per Project	Painted	
Retractable Metal	All	Steel	N/A	Painted	
Pipe	All	Aluminum or Steel	Natural	Brushed	
Wood	Natural	6x6 Rough sawn redwood or PTDF*	Campus Standard (Brown)	Stained	

* PTDF - pressure treated Douglas fir

** SS - stainless steel

Fences

Fences serve as barriers for pedestrians where hedges would be ineffective or out of character. Their use is seen as a necessary intervention. The family of low fences appropriate for use in the Classical Core consists of a two-rail fence and a cable-rail fence.

Two-rail

The low, two-rail wood fence, for use along walks and paths, is a permanent structure that prohibits pedestrian traffic on steep slopes and banks and directs pedestrians away from intersections at vehicular crossings. This fence style is appropriate for use in the natural landscape type only. An example of a two-rail fence exists along Frank Schlessinger Way.

Design Intent:

- Construct only of rough sawn redwood or pressure treated Douglas fir, stained campus standard color (brown).

Cable-rail

The mid-level, cable-rail fence with wood posts, for use along walks and paths, is a permanent or temporary structure that directs pedestrians onto core walking surfaces and minimizes undesirable foot traffic off of established walks and paths. This fence style is appropriate for use in the natural and picturesque landscape types. An example of a cable-rail fence exists at the east end of West Oval.

Design Intent:

- For posts, construct only of rough sawn redwood or pressure treated Douglas fir, stained campus standard color (brown).
- For rails, construct of four strands of aircraft cables, equally spaced in proportion to the overall fence height.

Landscape Walls

Landscape walls are used to retain slopes, create raised planters, or separate outdoor spaces. They can also be used to integrate seating into the landscape. A well designed landscape wall discourages skateboard use along wall edges and surfaces. The family of walls appropriate for the Classical Core consists of stonewalls, stone veneer, balustrades, or formed concrete with an appropriate finish.

Design Intent:

- Consider opportunities for seating when possible.

Stonewall/Stone Veneer

The stonewall, or stone veneer wall, is appropriate as a retaining structure in the natural landscape type only. An example of a stonewall exists along Strawberry Creek next to the Alumni House.

Design Intent:

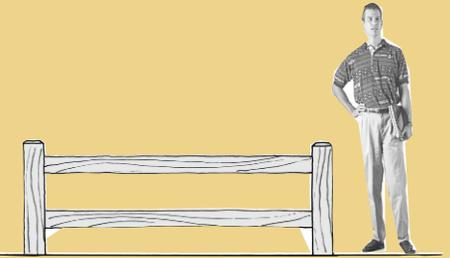
- Construct only of volcanic Napa-Sonoma fieldstone, brown-black in color, with recessed mortar joints.

Balustrades

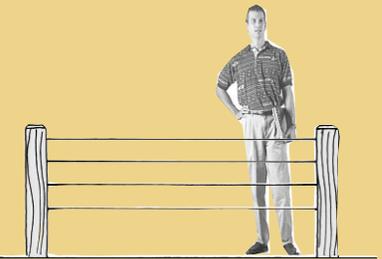
A custom designed element, the balustrade is appropriate as a specialty element in the neo-classical and urban landscape types. An example of a neoclassical balustrade exists around the Campanile Esplanade.

Design Intent:

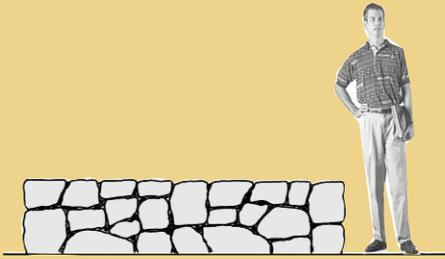
- Construct only of granite or precast concrete.
- Relate style, color, and finish to adjacent architecture or major site amenities.



Two-rail fence concept



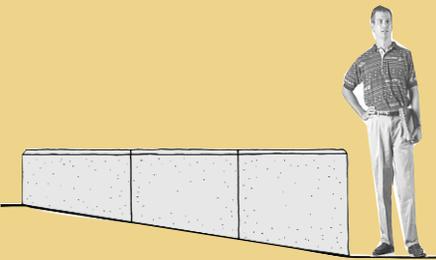
Cable-rail fence concept



Stonewall / stone veneer wall concept



Neoclassical balustrade concept



Formed concrete wall concept

Formed Concrete

A formed, or poured-in-place, concrete wall can be used for retaining slopes, raised planters, as freestanding elements to define a space, or as optional seating elements. These walls are appropriate for use in the picturesque, neoclassical, and urban landscape types. An example of a formed concrete wall exists on the north side of Valley Life Sciences Building.

Design Intent:

- Construct only of natural gray concrete, with a sandblast finish.

Bollards

Bollards are used to limit vehicular access to selected roads, walks, and service areas. The family of bollard materials appropriate in the Classical Core consists of stone, precast concrete, and metal (ornate, retractable, or pipe styles).

Stone

Stone bollards are appropriate for use in the neoclassical landscape type. An example of stone bollards exists at the northwest corner of Evans Hall.

Design Intent:

- Complement neoclassical building materials in color, texture, and finish, and appropriately scale for pedestrian applications.
- Construct only from a cored, round, single-piece of granite.

Manufacturer:

Cold Spring Granite

Model:

Round, cored single-piece

Webpage:

www.coldspringgranite.com

Precast Concrete

Resembling a stone bollard in general appearance, a precast concrete may be used adjacent to neoclassical buildings or in plazas. Precast concrete bollards are appropriate for use in the neoclassical and urban landscape types. An example of precast concrete bollards exists at Tolman Hall breezeway.

Design Intent:

- Complement adjacent buildings in style, color, and finish.

Manufacturers:

Quick Crete, Dura Art Stone, or Napa Valley Cast Stone

Model:

Varies by architecture

Webpage:

www.quickcrete.com

www.duraartstone.com

www.napavalleycaststone.com

Metal Ornate Bollard

An example of an ornate metal bollard exists outside of Stephens Hall, where an ornate design is used in conjunction with victorian and neo-classical architecture. Metal ornate bollards are appropriate for use in all landscape types.

Design Intent:

- Install as a single-piece, fluted cast aluminum post, permanently mounted on a concrete footing.
- Use color that relates to adjacent architecture or, as a default, use campus standard paint color (Elephant's Breath) to diminish the bollard's appearance.

Manufacturer:

Canterbury International

Model:

1890 Bollard

Webpage:

www.canterburyintl.com

Metal Retractable Bollard

The University is installing retractable bollards in response to a heightened interest in vehicle controls and security. The bollards may be either hydraulic or pneumatic. Metal retractable bollards are appropriate for use in all landscape types.

Design Intent:

- Locate at emergency or special vehicular service entries.
- Construct of stainless steel with a painted finish.
- Determine operation of the control unit on a project-by-project basis with direction from the Campus Landscape Architect.

- Match fixed bollards to retractable units when placed in the same location.

Manufacturer:

Delta Scientific Corp.

Model:

TT203, stainless steel

Webpage:

www.deltascientific.com

Metal Pipe Bollard

The pipe bollard may be a removable or fixed element. Metal pipe bollards are appropriate for use in all landscape types.

Design Intent:

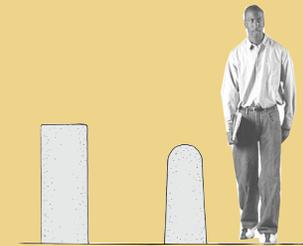
- Construct only of aluminum or steel, not to exceed 3-inches in diameter.
- If a removable bollard, set sleeves in the paving and secure with padlocks.
- If a removable bollard, treat remaining hole and lock depression with safety cover, complying with accessibility code.
- Leave unpainted with a brushed finish.

Wood

Wood bollards are permanent elements appropriate for use in the natural landscape type.

Design Intent:

- Construct only of rough sawn redwood or pressure treated Douglas fir, stained campus standard color (brown).
- Chamfer the top of the bollard to remove rough edges and to relate to the post construction for fences.



Stone and precast concrete bollards concept



Metal ornate, retractable, and pipe bollards concept



Wood bollard concept

Furnishings | The relationship of landscape furnishings to buildings, walks, paths, and plaza areas is important to the character of the Classical Core and to the views of the historic landscapes and neoclassical buildings in the area. The family of furnishings for the Classical Core consists of benches, waste and recycling containers, bike racks, drinking fountains, picnic tables, and news racks. Wayfinding systems in the Classical Core are discussed separately in the Signage section.

The *Furnishings Summary Table* summarizes the appropriate location, material, color, and finish for the various site furnishing elements. The furnishings' locations, as shown on the table, refer

to the landscape types in the Classical Core. The text following the table describes the furnishings' roles and associated guidelines and standards.

The renovations of the corridor east of **Campanile Esplanade** will create a vibrant pedestrian space.

The vignette illustrates:

- Maintaining views of Campanile Esplanade and to the future Campanile Glade beyond.
- Incorporating appropriate paving materials in this pedestrian environment.
- Locating Campus Standard light fixtures in symmetrical configurations without obstructing prominent views.
- Incorporating benches, waste and recycling containers, and bike racks suitable for this neoclassical landscape.

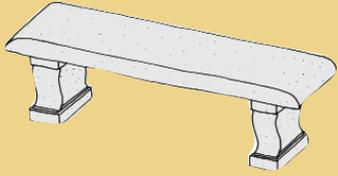


Furnishings Summary					
Item	Location: Landscape Type	Material	Color	Finish	
Benches					
Precast Concrete	Neoclassical	Precast Concrete	Natural	Acid-etched or Sandblasted	
Wood (backless)	Picturesque, Neoclassical, and Urban	Teak	Natural	Unfinished	
Wood	All	Teak	Natural	Unfinished	
Sawn Log	Natural	Redwood or Cedar	Natural	Natural	
Custom	All	Stone, Precast Concrete or Wood	Per project	Per project	
Containers					
Standard Waste Container	All	Precast Concrete	Gray	Exposed Aggregate	
Standard Recycling Container	All	Precast Concrete	Tan	Sandblast	
Alternative Waste & Recycling Containers	All	Metal	Campus Standard or Per Project	Painted	
Bike Racks					
Standard Racks	All	Metal	Natural	Galvanized	
Secure Racks	Per University	Stainless Steel	Natural	Stainless Steel	
Miscellaneous					
Drinking Fountains	All	Varies	Varies	Varies	
Picnic Tables	Natural	PTDF*	Natural	Natural	
Modular News Racks	Urban	Metal	Campus Standard	Painted	

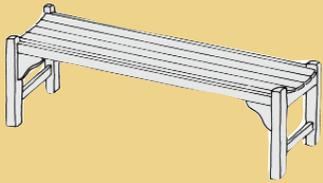
* PTDF - pressure treated Douglas fir



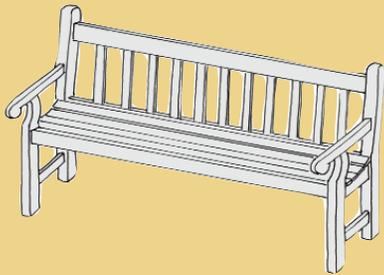
Custom wood benches and historic fountain in the Campanile Esplanade (2003).



Precast concrete bench concept



Wood backless bench



Wood bench with back

Benches

Benches are an integral part of the pedestrian circulation system, providing seating opportunities along walks and paths and at pedestrian plazas. The family of benches for the Classical Core consists of precast concrete, teak wood with and without backs, a sawn log, and the option of a custom element.

Design Intent:

- Integrate seating opportunities with the pedestrian circulation system and plazas.
- Incorporate adequate space for companion wheelchair parking as an integral component in bench layouts and configurations.
- Anchor benches to concrete footings with hidden dowels.

Precast Concrete

Benches constructed of precast concrete are specialized elements suited for entries and plazas around neoclassical buildings. Several varieties of precast concrete benches now exist in the Classical Core. The precast concrete bench is appropriate as the standard bench in hardscape areas throughout the neoclassical landscape type. An example of a precast concrete bench exists Doe Memorial Library terrace.

Design Intent:

- As replicas of historical, backless stone benches, design and manufacture with two ornate pedestal supports and a rounded edge to the bench top, and finish to resemble stone.

Wood (backless)

The backless wood bench complements the standard wood bench (with back) in form and style, and it is useful in omni-directional land-

scape settings where a low, horizontal element is desirable. The backless version is appropriate for use in the picturesque, neoclassical, and urban landscape types.

Design Intent:

- Construct in unfinished teak with slats and mortise and tenon joinery.

Manufacturer:

Smith & Hawken

Model:

Belvedere #274928, 5-foot length

Webpage:

www.smithandhawken.com

Wood (with back)

The campus standard wood bench provides seating opportunities along walks, paths, and in plaza areas where historic views will not be impacted. The wood bench, with high back and armrests, is appropriate for use in all of the landscape types.

Design Intent:

- Construct in unfinished teak with slats and mortise and tenon joinery.

Manufacturers:

Smith & Hawken (standard)

Gardenside Limited (alternative)

Model:

Gloucester #722132, 6-foot length (standard)
Parkside Bench #2608, 8-foot length
(alternative)

Webpage:

www.smithandhawkentrade.com
www.gardenside.com

Sawn Log

Sawn logs used for seating have been a traditional element on the Berkeley campus for decades. The log benches serve as auxiliary seating in the woodland areas, along the banks of Strawberry Creek, and in Faculty Glade. Although they exist elsewhere in the Classical Core, log benches are appropriate for use only in the natural landscape type.

Design Intent:

- Remove, and do not replace, sawn log benches that are at the end of their life span in all areas other than the Natural landscape type.
- Construct of redwood or cedar logs, at least 30-inches in diameter, 6 to 8 feet in length, and quarter-sawn and sanded to create a comfortable bench.

Custom

Custom benches are allowed in the Classical Core, primarily for plaza, building entrances, and memorial situations. Custom benches are appropriate for use in all of the landscape types.

Design Intent:

- Integrate into the context of the designed space or building vernacular.
- Review the design and use of these benches on a project-by-project basis with the University.

Waste and Recycling Containers

Waste and recycling containers are a necessity on campus. The primary family of containers appropriate for the Classical Core consists of a concrete waste receptacle and multi-use recycling component. The Campus Landscape Architect may modify the design of these elements in the near future. Containers made of metal slats may be used as an alternative to the standard in the Classical Core.

Design Intent:

- Limit the visual clutter of containers in the views of historical buildings and landscapes.
- Integrate containers into the landscape of gathering areas, major pedestrian walks, and building entrances without dominating the view.
- Locate containers with careful attention to their servicing needs and aesthetic orientation, and redesign as needed to meet these and ergonomic needs of campus users.
- Provide recycling opportunities across the campus.

Campus Standard Waste Container

The square, precast concrete container with exposed aggregate finish and black metal top is the campus standard outside of plazas and building entries, meeting the need for durability and volume. The waste container is appropriate for use in all landscape types.

Manufacturer:

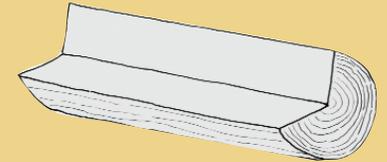
Best Litter

Model:

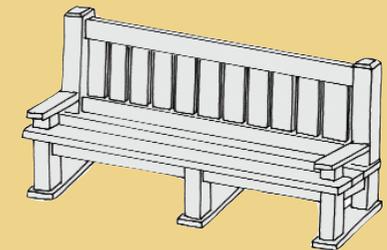
Sentry Collection, Model S-001

Webpage:

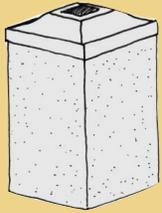
www.bestlitter.com



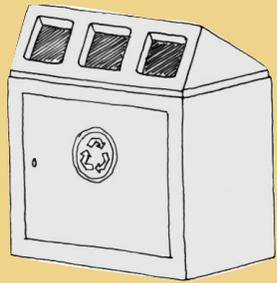
Sawn log concept



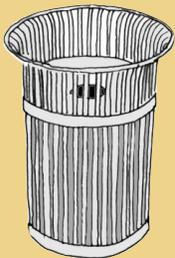
Custom bench concept (used in Campanile Esplanade)



Campus Standard waste container



Campus Standard recycling container



Alternative waste and recycling container

Campus Standard Recycling Container

The rectangular, precast concrete container with multiple access holes is the campus recycling element for glass, aluminum cans, and paper. The recycling container is appropriate for use in all landscape types.

Design Intent:

- Customize the manufacturer's container design to include a front door access and a pitched top to shed water.

Manufacturer:

Doty and Sons

Model:

Custom design

Webpage:

www.dotyconcrete.com

Alternative Waste and Recycling Containers

As alternatives to the standard waste and recycling containers, round, metal slat containers are appropriate for use throughout the Classical Core.

Design Intent:

- Incorporate an opening side door for easy access.
- For recycling, provide two separate containers: one for glass/aluminum combination and one for paper and identify the contents within on the lid.
- For containers away from buildings, use campus standard paint color (Elephants Breath). For containers near buildings, consider colors that relate to the building.

Manufacturer:

Victor Stanley or comparable

Model:

SD-42 and SD-35, Ironsites™ series (separate lids for glass/aluminum and paper receptacles)

Webpage:

www.victorstanley.com

Bike Racks

Bicycle racks are an important component supplementing the campus circulation system.

Design Intent:

- Locate to minimize visual clutter and circulation conflicts.
- Integrate the layout and configuration of bike racks with the pedestrian circulation system, plaza designs, and building entries, and incorporate adequate lighting.
- Provide consolidated bike parking areas where possible.
- Consult with the Campus Bicycle Subcommittee to determine the capacity and location of bike racks for a project.

Standard Bike Rack

The standard bike rack has a continuous ribbon-style configuration. Standard bike racks are appropriate for use in all landscape types.

Design Intent:

- Construct of 2-3/8 inch, Schedule 40 pipe, with a galvanized finish.
- Install with flanged or embedded mounting.
- Construct pervious bike parking surfaces where feasible, using materials like bark mulch (example: Sather Gate) or decomposed granite (example: McCone Hall).

- Screen bike parking areas with hedges or walls where feasible.

Manufacturer:
The Palmer Group – Bikeparking.com

Model:
Welle Multiple

Webpage:
www.bikeparking.com

Secure Bike Rack

The secure bike rack has a built-in heavy duty chain and hitching post to secure the frame and tire of a bike. The racks are typically found at the edge of campus.

Design Intent:

- Locate secure bike racks as directed by the Campus Bicycle Sub-Committee.
- Construct of 1 1/2-gauge stainless steel with a 3/8-inch thick security chain with black cordura sleeve cover.
- Anchor bike rack to the finished paving surface.

Manufacturer:
The Palmer Group – Bikeparking.com

Model:
Crankcase Security Rack

Webpage:
www.bikeparking.com

Miscellaneous

An assortment of miscellaneous furnishings is used in the Classical Core. Typical items include drinking fountains, picnic tables, and modular news racks.

Drinking Fountains

Drinking fountains are traditionally custom design elements on campus, donated as class gifts. Drinking fountains, often unique, highly detailed features, are appropriate for use in all landscape types.

Design Intent:

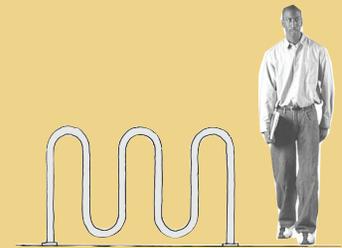
- Integrate into the landscape fabric around gathering areas or adjacent to walks.
- Design to meet current accessibility requirements.
- Construct from high quality, durable materials with weather-resistant fountain components.

Picnic Tables

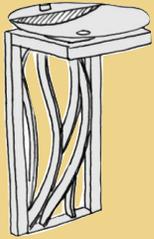
Picnic tables serve as additional opportunities for seating and studying in quiet landscape settings. Picnic tables are appropriate for use in the natural landscape type.

Design Intent:

- Construct of heavy duty, large-member, durable wood with attached benches.
- Anchor mount with embedded concrete to finish paving surface.
- Design for wheelchair accessibility. Incorporate an accessible hardened surface, at a minimum, under the area used for wheelchair parking.



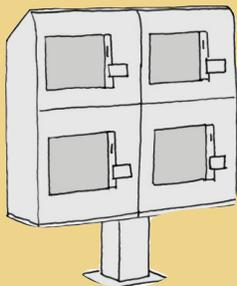
Standard bike rack



Drinking fountain concept



Picnic table concept



Modular news rack concept

Manufacturer:
Columbia Cascade or comparable

Model:
TimberForm Arbor #2243-8-P

Webpage:
www.timberform.com

Modular News Racks

The news rack is a consolidated, modular metal container consisting of four units maximum, set on a single pedestal mount. Modular news racks are appropriate for the urban landscape type only.

Design Intent:

- Locate at campus perimeters in coordination with the City of Berkeley and news vendors.
- Integrate at edge of walks.
- Locate out of major view corridors.
- Use campus standard paint color (Elephants Breath).
- Consult with the Campus Landscape Architect for the use and design of optional campus logos, seals, or other impressions on the modular units.

Manufacturer:
Kaspar Sho-Rack

Model:
Concourse

Webpage:
www.shorack.com

Signage | The University's Campus Sign Program (*Signage Guidelines, January 1995*) organizes the multitude of exterior informational, directional, and regulatory signs on campus. The system is made up of diverse elements, allowing variation of expression, and it is hierarchical to provide clarity within the campus environment. The wayfinding system was designed to be universally understandable for first-time visitors, students, faculty, and alumni.

The Campus Sign Program identifies three primary signage types for the campus wayfinding system:

- **Informational Signage:** This type of signage is the first major introduction to the campus. It includes identification information such as street and path names, building identification, and campus maps. This category can also include helpful information such as safety/protection tips, listing of facility hours, phone numbers, and current events.
- **Directional Signage:** This type of signage directs visitors from surrounding areas to the campus, parking, and campus shuttle bus locations. It includes directional signage within the campus environment.
- **Regulatory Signage:** This category of signage includes public and permit parking information, accessibility signage, and all standard campus regulatory signs.

The guidelines below further define the locations and contextual relationships of sign types appropriate for the Classical Core.

Wayfinding Signage

According to general descriptions, sketches, and diagrams in the *Signage Guidelines*, some informational, directional, and regulatory signage is integrated into building walls or light poles, while others are freestanding elements in the landscape.

Design Intent:

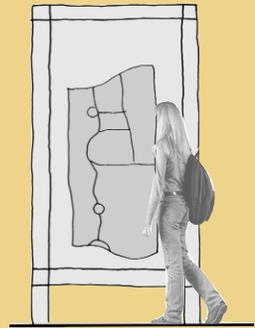
- Locate signs to minimize the visual impact of the historic view sheds of neoclassical buildings and landscapes.
- Locate freestanding signs off of walk edges and outside of pedestrian plazas, preferably in landscape areas.
- Use directional signs to guide visitors to public venues. Do not use directional signs to guide visitors to individual buildings.

Plaques and Commemorative Markers

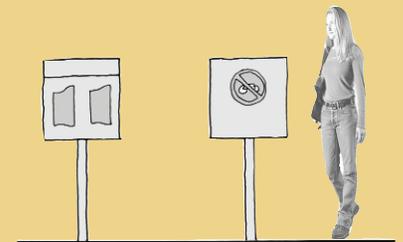
Plaques and commemorative markers are not included in the *Signage Guidelines*. Traditionally, these elements are cast in bronze with slightly raised letters and are attached to rocks, benches, or walls. They can also be incorporated into the paving surface, such as the Memorial Glade markers. Plaques and markers are appropriate for all landscape types.

Design Intent:

- Consult with the Campus Landscape Architect and the Committee on Naming for the design of plaques and commemorative markers.



Informational signage concept



Directional and regulatory signage concept

End Notes

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Acknowledgements

End Notes

The end notes listed here document sources for direct quotations in the text of the Landscape Heritage Plan. The page reference included in each end note refers to the page of the LHP on which the cited quotation can be found.

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**Note: References commonly used when undertaking a cultural landscape evaluation.*

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