



THE VISION
FOR
UC MERCED

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A Campus for the New Millennium

The new UC campus at Merced will be the first entirely new, major research university campus in the United States, as well as within the University of California, to open its doors in the 21st Century. Like UC Berkeley, which was conceived in the mid 19th Century but came to full form in the early 20th Century, UC Merced has the opportunity to further define the role and form of the University in a time of accelerated change in information access and technology.

John Galen Howard was the first Dean of Architecture and Campus Planner at UC Berkeley from 1902 to 1927. Writing about planning a campus at the beginning of the last century he noted:

Future generations will consider themselves bound by our preparations to the extent, and only to the extent, that we have foreseen their needs and have planned wisely for them. We cannot force them to follow out our schemes if these run contrary to their own inclinations; but we may fairly expect that if we plan wisely and in accordance with the really right and natural thing, our successors will follow out what we arrange, if only because it will accord with reason. Outside

of what we actually execute, the most we of today can do is merely to prepare the channels for those who come after us; but if we prepare the channels well and in accordance with irrefutable laws, the flood of future development will find the beds we trench as inevitably as rivers seek the sea by the broadest and most direct channels open to them.

In the same way, the planners of UC Merced, at the beginning of another new century, have identified concepts that will positively shape the character and quality of the campus physical setting. These concepts have been inspired by the special qualities of this site and the needs and requirements of academic life in this new century. There is an enormous opportunity to create a truly beautiful and functional 10th campus in Merced; these guiding concepts will set this University off on a successful path. Changes are inevitable and future planners and designers will find ways to enhance and strengthen these concepts that seem so promising as we begin the 21st Century. The LRDP provides a framework that is flexible and adaptable, yet clearly sets a vision for the campus for the new millennium.

PLANNING CONSIDERATIONS

Flexibility and Integration

As the history of many of our finest institutions shows, we cannot adequately predict future needs with any specificity.

As a consequence, ensuring flexibility for the campus is a critical concern. Flexibility in this regard concerns several components of the campus:

- The pattern of campus development
- Interdisciplinary flexibility in the Academic Core
- Technology and learning

The Pattern of Campus Development

Over time the UC Merced campus will grow in response to factors that can only be dimly if at all perceived today. Instruction and research will be conducted in areas not yet contemplated, and land and space will be used in ways that cannot be predicted. In the same ways that institutional buildings, which are very long lived, undergo periodic renovation to refit them for contemporary users and uses, the campus will also undergo periodic redevelopment and growth at various times in the future.

As a consequence, the campus plan must be flexible and able to accommodate a wide range of uses and activities. This extends to all elements of the campus and its infrastructure; roads, utilities, building sites, and the buildings themselves will need to be designed with flexibility and future change in mind.

One of the most relevant models for development for UC Merced lies in its host town itself. The urban town grid, such as characterizes the City of Merced and other Valley towns (Figures 4.1, 4.2), provides an appropriate pattern with several benefits:

- Easy integration of campus and adjacent town
- Flexible and efficient movement of pedestrians, bicycles and vehicles
- Easy subdivision into building blocks of varying sizes
- Locates utility corridors in easily accessible and predictable locations
- Legibility and ease of wayfinding
- Facilitates mixing or segregating uses as needed
- Ability to close or restrict access to create auto-free zones
- Facilitates creation of transit corridors for public transportation

Interdisciplinary Flexibility in the Academic Core

One need only look at any University of California campus today to see the extraordinary degree of change in teaching and research since the earliest years of these institutions. Campuses need to expand to accommodate previously unforeseen uses and users, and to welcome and integrate new modes of learning and instruction.

Fig. 4.1
City of Merced Grid,
Circa 1917

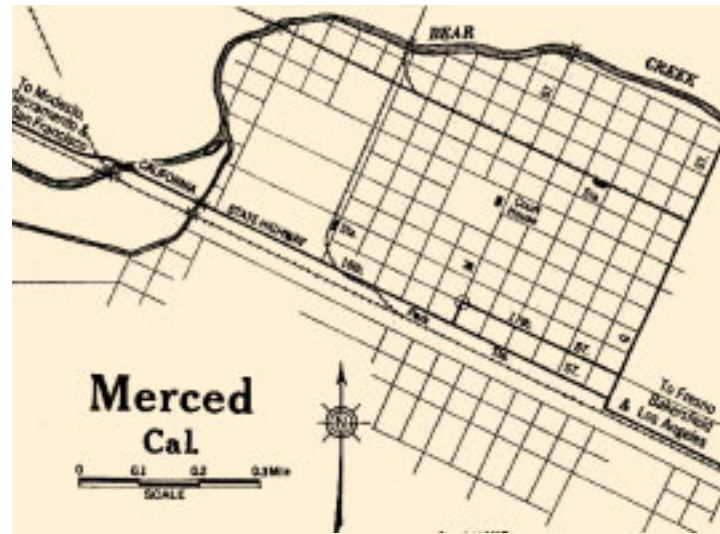


Fig. 4.2
Thermalito, 1912,
California State Library



The teaching and research of the modern campus is increasingly interdisciplinary and commonly may involve multiple topics, departments and faculty. Institutes, such as the Sierra Nevada Research Institute at UC Merced, are organizing to address a range of diverse but related topics: in this case population growth and development, water and watersheds, air quality, fire ecology, biodiversity, climate change, transportation, resource management and policy, and public recreation.

In response to these evolving needs, the campus has been planned to foster interaction to encourage these initiatives and to be flexible in the distribution and organization of academic uses. Hard boundaries denoting specific colleges or disciplines are less and less appropriate. A more fully integrated community of professional school education, graduate arts and sciences, undergraduate education, research, and teaching is a preferred model.

Technology and Learning

University functions are being radically transformed by information technologies, allowing much wider, even global, retrieval and storing of information.

The transmission of knowledge and culture is one of the other key roles of the university. Despite the growing revolution in digital access to information and predictions of the virtual university and global libraries replacing the traditional campus, the university campus is still the place for face-to-face interaction, for socialization and social integration, and for the making of lifelong connections.

We all need to learn things we didn't set out to learn. "Distribution requirements" are the formal way that conventional education provides this for students and for society. But the collective experience of college and what the German sociologist Karl Jaspers described as the "creative tension" generated by the mingling of people from different fields, different backgrounds, and different expectations makes a critical contribution. Among other things, such experience helps provide not only knowledge and information that people don't know they need, but also the skill to judge the worthwhile from the worthless—an increasingly important skill in an age of ubiquitous and often unreliable information.

—Brown and Duguid, *The Social Life of Information*, Harvard Business School Press, 2000

The form and organization of all elements of the campus must foster opportunities for this interaction.

In addition the campus, like other living and working environments, is increasingly a 24-hour-a-day environment—students and faculty demand access to information, conversation and food, at all times. The campus, like cities, can respond by providing places for interaction and by ensuring a safe and active community life.

Sustainable Planning and Design

As the first UC Campus of the 21st Century, UC Merced has a unique opportunity and obligation to grow as a model of environmental stewardship for both the UC system and the Central Valley.

Sustainability is broadly defined as providing for the needs of the present generation without reducing the ability of future generations to meet their own needs.

In August 2000 Governor Gray Davis issued an executive order requiring incorporation of sustainable building practices into the planning, operations, policymaking and regulatory functions of state entities, with a similar strong request to the University of California. In this order he said “. . . California is committed to providing leadership on energy, environmental, and public health issues by implementing innovative and resource-efficient public building design practices . . .” and “. . . opportunity exists for the State of California to foster continued economic growth and provide environmental leadership by incorporating sustainable building practices . . .” In consultation with the individual campuses, the University is in the process of formulating systemwide policies on sustainability.

This LRDP indicates the comprehensive manner in which the University of California will approach sustainable planning and design of this first campus of the 21st Century.

Fig. 4.3
St. John's College, Oxford:
The Cloistered Canterbury
Quad



Fig. 4.4
Emanuel College, Cambridge
University, Circa 1688



Campus and Community

Historically, considerable thought has been given to the importance of creating a campus that functions well as a community, with the interactions, diversity and sense of place that distinguish our best towns and cities.

At the same time, the successful campus, serving a diverse student body with connections around the world, has a mandate to be well integrated into and closely allied with its adjacent community. The core mission of the university—to accomplish research, teaching and service—all benefit from the co-location of campus and community. The history of campus planning has numerous examples of campuses planned as and in communities.

Although John Keats stated: “This Oxford, I have no doubt, is the finest city in the world,” the colleges and community suffered from an uneasy relationship until relatively modern times. The Oxford colleges are located in the center of this medieval town, and are generally arranged in a cloistered format, with central enclosed quadrangles of green, quiet space. In many ways indistinguishable from the town, the colleges front on High Street, the main shopping street of town, as well as on other streets throughout.

While the American colleges founded in colonial times took many of their cues from their European, especially English, counterparts, they brought a unique approach to space, land and building.

As Paul Turner notes:

[A] trait that typifies American college planning is its spaciousness and openness to the world. From its very beginning, at Harvard in the seventeenth century, the American college has largely rejected the European tradition of cloistering-like structures in favor of separate buildings set in open green space. This ideal is so strong in America that even those schools located in cities, where land is scarce, have often gone to considerable expense or inconvenience to simulate a rural spaciousness.

—Turner, *Campus: An American Planning Tradition*, MIT Press, 1984

Built outside Boston in the small community of Cambridge, Harvard at first consisted of a few buildings on a street at the edge of town; it grew organically by adding more buildings and in so doing, framing green open spaces or yards. Eventually the campus and community grew together, merging in places, separate in places.

Today, the boundaries of the university in the city of Cambridge are hard to discern. Massachusetts Avenue, the main thoroughfare, is the location for many student and community activities and businesses. Harvard facilities are found on either side of Massachusetts Avenue, and despite its high volumes of traffic it is not seen as a real barrier. Harvard Square, this area immediately adjacent to town and campus, is an extraordinarily vital and active center.

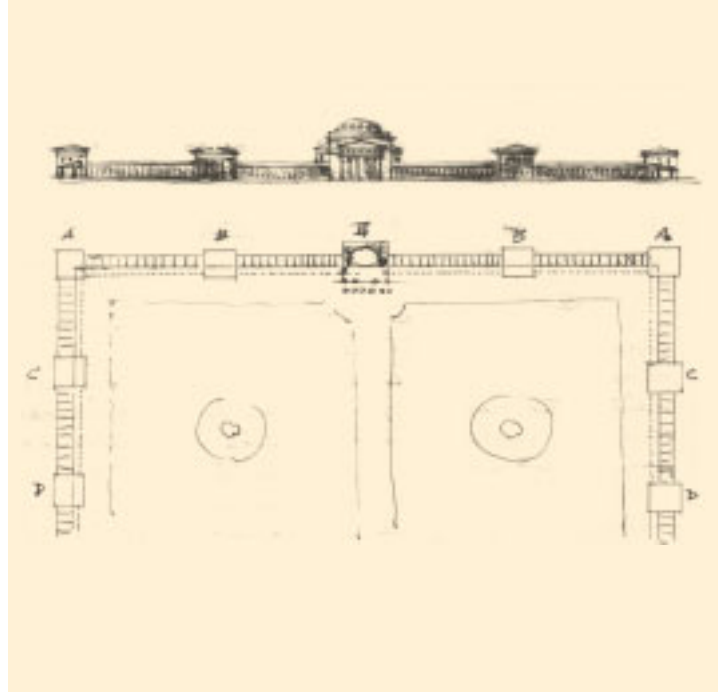


Fig. 4.5
Harvard University,
Circa 1668

Fig. 4.6
University of Virginia,
Charlottesville Designed by
Thomas Jefferson, 1817



Fig. 4.7
Portion of a Letter From
Benjamin Henry Latrobe to
Thomas Jefferson, July 1817
With proposals for Design of
the University of Virginia



Thomas Jefferson, in his design of the University of Virginia, took the university precedents of Europe, especially of Oxford and Cambridge, and made them uniquely American. Paul Turner notes that Jefferson's plans to encourage variety in the design of the pavilions lining the central green, ". . . underscores the nature of Jefferson's design as literally an academic 'village'—an informal group of buildings, each having its own independence and individual character, as in any American town." As Jefferson himself noted, the original plan for the university ". . . forms in fact a regular town, capable of being enlarged to any extent which future circumstances may call for." Jefferson's University of Virginia plan bore many similarities to American villages, with a large village green, surrounded by homes and institutions.

The College of California, which was to become the University of California in 1868, was sited at Frederick Law Olmstead's direction in a farming community north of the city of Oakland. Olmstead's plan conceived of the college as an integral part of a larger community. He argued that colleges should be located neither in the country nor in the midst of the city, rather in a planned community, close to other urban areas (in this case Oakland and San Francisco). This juxtaposition would facilitate the integration of domestic life and nature.

Today one sees the effect of considerable and unanticipated growth of both the University and city. Several city streets, notably Bancroft Avenue and Telegraph Avenue, host student-serving businesses and are typically active throughout the day and evening. University uses are found throughout the area immediately surrounding the formal campus boundary, but the campus is also welcoming to the community at large. Many facilities, especially the museums, performance halls, and sports venues, most of which are located on the campus periphery, are heavily used by the city and regional population.

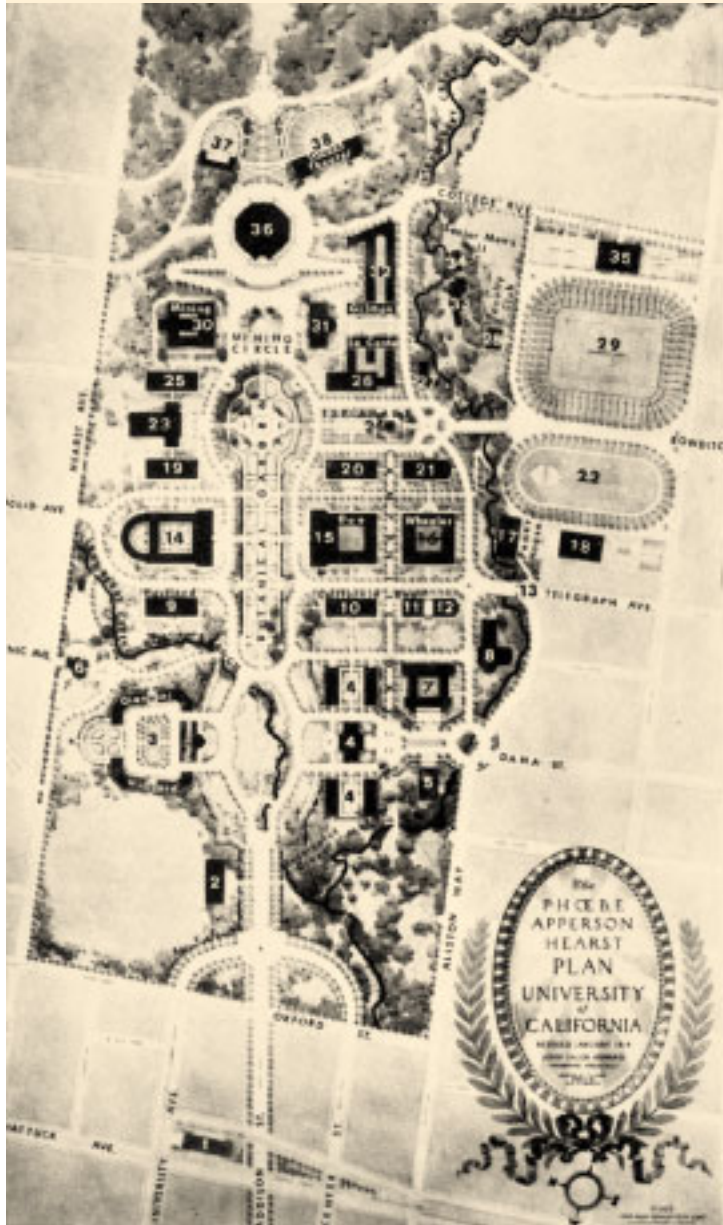


Fig. 4.8 (far left)
University of California,
Berkeley Plan Circa 1914, by
J.G. Howard

Fig. 4.9 (near left)
Proposed Perspective of
University of California,
Berkeley Circa 1917, by
Emile Bernard



Fig. 4.10
University Community
Town Center

Planning for UC Merced has, from its earliest stages, included the consideration of a campus and a community that are immediately adjacent to one another. The University Community Concept Report (1999) notes:

An integrated campus and community environment will be created as a new model of development. It will feature a permeable boundary between the campus and community, while maintaining a symbolic identity for the campus. This will advance the idea that the “town is invited into the campus and the campus is invited into the town.”

The plan also describes the character of the future Town Center of the University Community:

The Town Center will be the focal point of the University Community’s activity and identity. It will be located immediately adjacent to the core of the campus, providing a place where University students, faculty, and staff can come together with local residents for shopping, dining, entertainment, cultural activity, recreation, civic functions, and socialization. A variety of uses will be accommodated including retail, offices, services, restaurants, entertainment, overnight lodging, and cultural facilities. Housing will be integrated with the commercial and cultural uses to establish a 24-hour, mixed use environment. It will complement those amenities located in downtown Merced and other commercial centers.

PLANNING PRINCIPLES

The Land

The UC Merced campus has been located within environmentally sensitive lands and it begins in a time of increasing environmental awareness. The campus will be a laboratory for learning about the preservation of the natural habitat that borders the site to the north and east and the conservation and efficient use of energy and water within the site. It will be a living laboratory that will inform and innovate on environmental matters.

As substantial population growth is anticipated for the Central Valley in the coming years, increased environmental problems are expected to face the region. The UC Merced campus, by its planning, architecture, and landscape, will be a model for compact, environmentally responsible development in the Central Valley that permits preservation of agricultural and environmentally sensitive lands.

The location of the campus at the edge of Lake Yosemite and the regional park has influenced the form and character of the campus in a number of ways. In early years, when the campus will lack mature landscaping, will have only limited recreational facilities, and will be somewhat isolated from the Merced community, Lake Yosemite Regional Park will provide a visual and physical amenity for the campus. It will also serve as a meaningful bridge between the campus and town communities, until planned growth of the city nears the campus and the University Community grows nearby.

The campus has been oriented to capture cooling breezes off the lake to help mitigate the occasionally extreme summer heat of the valley. This orientation of the campus also allows spectacular views from many places on campus to the park and lake. Natural contours of the site, in particular the drainage swales that create a gentle, elongated bowl in the middle of the site, have affected the arrangement of campus uses, with many athletics and recreation uses focused in this location.

Fig. 4.11 (left)
The Land: Site Features

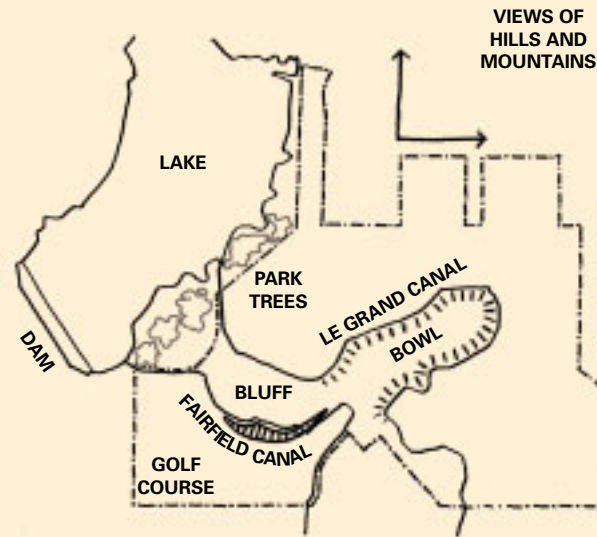


Fig. 4.12 (right)
The Land: Breezes

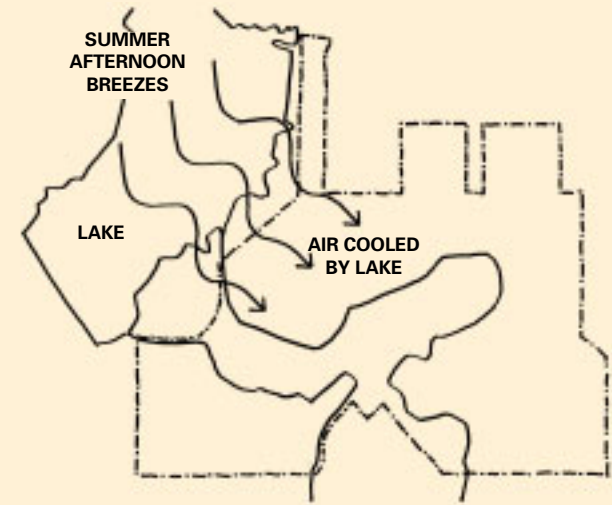
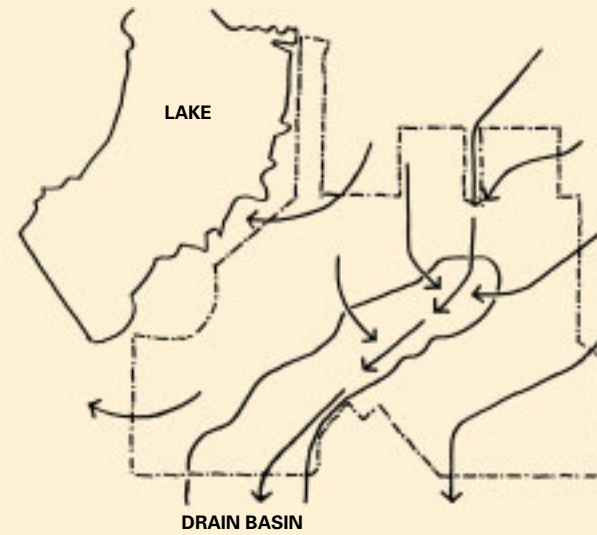


Fig. 4.13
The Land:
Site Drainage Patterns



The Social Heart

A high degree of collegiality among students, faculty and staff from the earliest years of UC Merced is vitally important to the success of the campus. As a large university with commuting as well as resident students, creating a "heart" of the campus where the campus population can mingle and where special events can occur will be needed. This social heart will be recognized as the center of campus, will be convenient to on campus residents, commuters, and students from the UC Merced Centers throughout the valley, and will be active twenty-four hours a day, seven days a week.

The social heart of UC Merced will be achieved through the arrangement of uses on campus as well as through the programming of individual buildings. Main Street, a wide pedestrian "street" extending through the entire academic core zone, will be the focus of campus activity and the social heart. Buildings lining Main Street will have active ground level uses such as cafes and dining, student services, and large classrooms and lecture facilities. In early years, the social heart will focus on Main Street between the Library and Library Grove and will extend to the northeast as the campus grows.

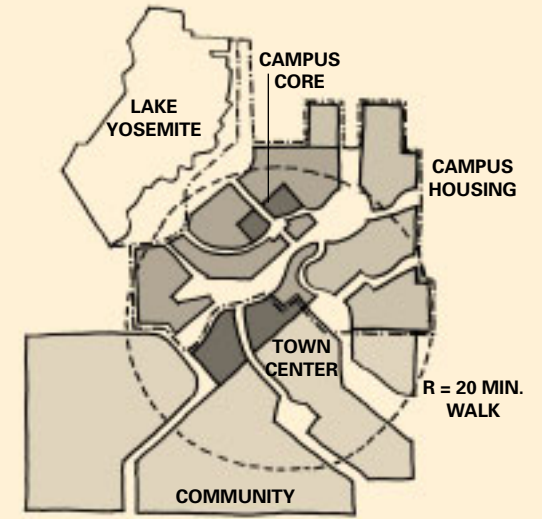
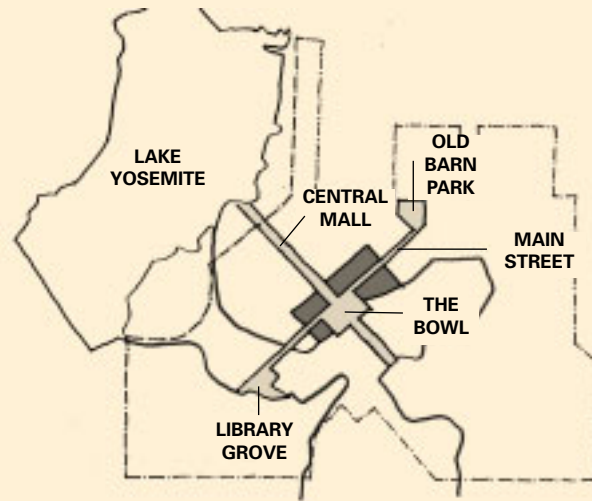
At the geographic heart of the campus, the Bowl park or quadrangle will provide the central open space in the social heart of the campus. It will also be the terminus of the Central Mall, connecting to Lake Yosemite and the regional park, the visual terminus of the formal entry to the campus, and will be the centerpiece of Main Street, with links to the Old Barn Park and Library Grove.



Fig. 4.14
Main Street with
a Mixture of Uses in the
Campus Social Heart

Fig. 4.15 (left)
The Social Heart

Fig. 4.16 (right)
Town Center Adjacency
to Main Campus



Neighborhoods

The campus is composed of identifiable neighborhoods that will promote a sense of community and collegiality within the larger university environment.

Most important, the housing areas of campus – undergraduate as well as graduate, faculty and affiliate – will locate in distinct neighborhoods surrounding the academic center. The residential neighborhoods may each have a special architectural or landscape identity, and will have informal recreation and open space at their centers. Each neighborhood will, however, be closely linked by pedestrian and bicycle pathways with the academic heart of the campus.

Academic disciplines at UC Merced will fall within three divisions: social sciences, humanities and arts; engineering; and natural sciences. In addition, there will be a strong emphasis on graduate education, professional schools, and research institutes. Similarities within these categories regarding types of building space needed, relative intensity of service requirements, and level of desired accessibility to the public, suggest that three academic zones or neighborhoods be established: one for the social sciences, humanities and arts; another for engineering and natural sciences; and the third for the professional schools and institutes. However, these academic neighborhoods will not be as clearly defined as those for housing, and opportunities for interdisciplinary interaction will be promoted through the placement of key facilities. The social sciences, humanities and arts, with their high levels of student activity, will be focused in the most central locations on campus near the library. Professional schools will be located most peripheral to the campus academic core.



Fig. 4.17
Student Housing
Neighborhood

Fig. 4.18 (left)
Academic Neighborhoods:
Social Sciences, Humanities
and Arts

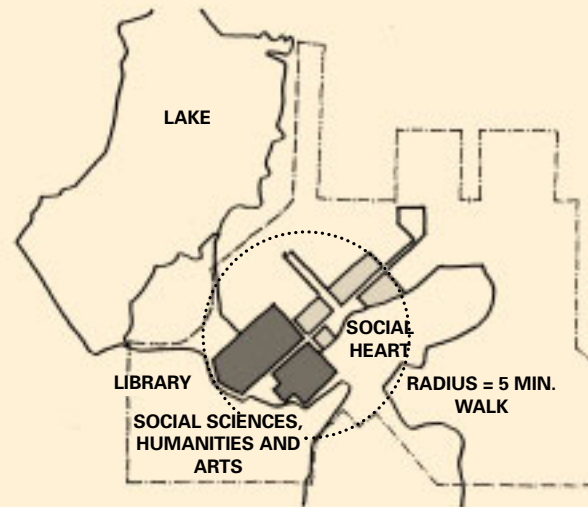


Fig. 4.19 (right)
Academic Neighborhoods:
Engineering and Natural
Sciences

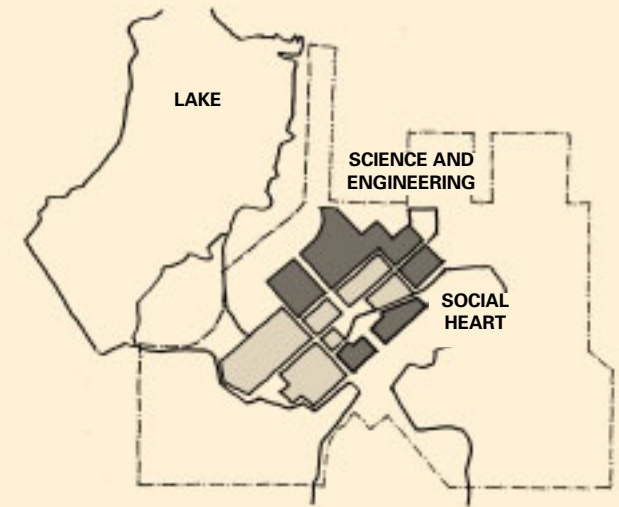


Fig. 4.20 (left)
Academic Neighborhoods:
Professional Schools and
Institutes

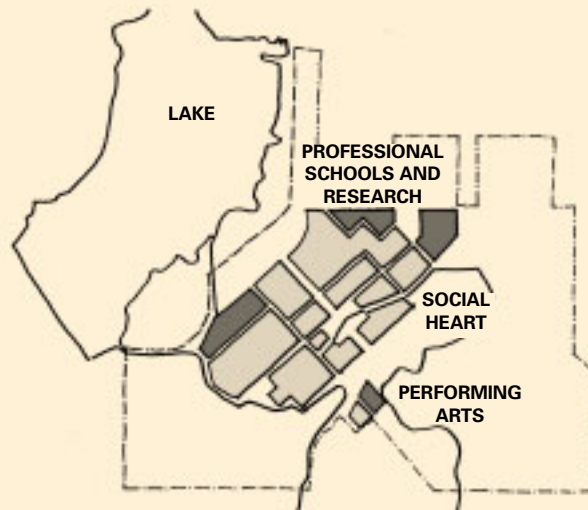
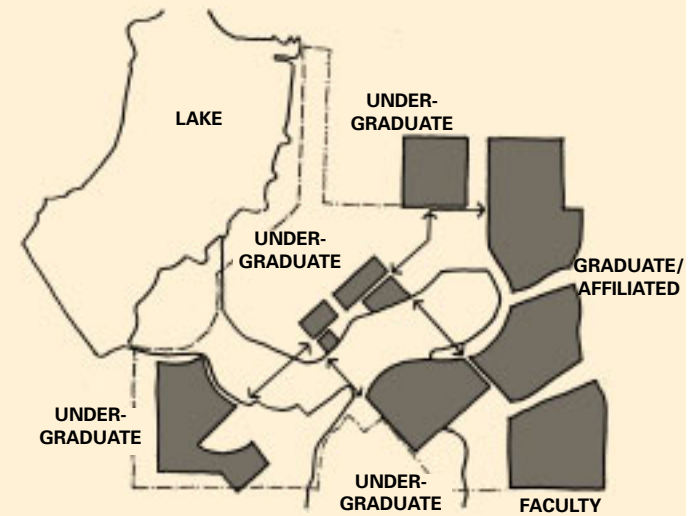


Fig. 4.21 (right)
Residential Neighborhoods



The Meadow and Lake Parks

An important consideration in establishing UC Merced's unique sense of place is its location between Lake Yosemite Regional Park and the Meadow Park, a large green open park located in the drainage swale adjacent to the Fairfield and LeGrand Canals. The meadow is a major feature of the plan. Located in the center of the campus, it provides a corridor for site drainage, temporary storage for flood control, recycled water storage for site irrigation and most importantly, sports and recreation play fields.

The meadow open space also provides a green foreground for viewing campus buildings from the University's main entrance road. On the lake side, a lakeshore road offers a variety of views to the campus, the park and the lake.

These two parks will be connected by the canals that wind through the campus with pedestrian walks and bicycle trails. The lake park, meadow, and canals together establish a powerful and beautiful informal landscape that will give the Merced campus its unique identity and special sense of place.



Fig. 4.22 (above)
View of Campus from
University Drive across
Meadow Park

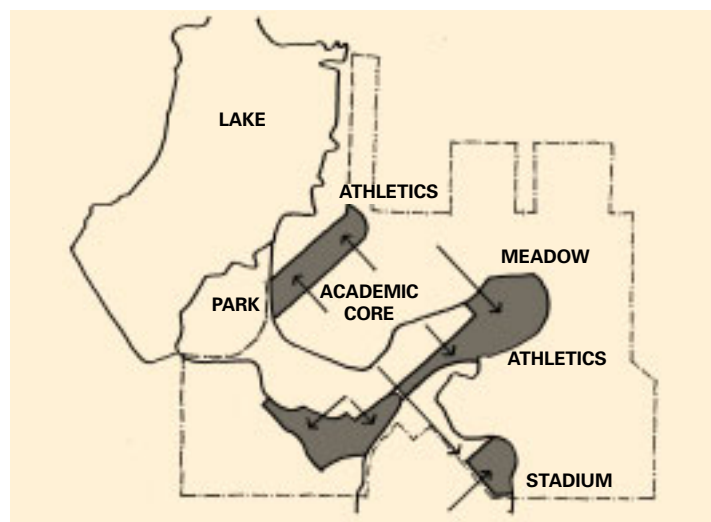
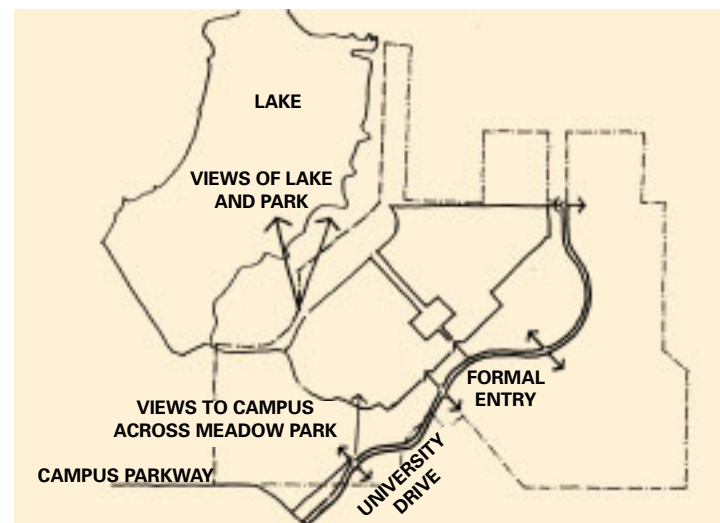


Fig. 4.23 (left)
Athletics and Recreation
Area Adjacencies



Fig. 4.24 (above)
View of Future Campus
at Formal Entry

Fig. 4.25 (right)
Views From University
Drive



Sense of Place

As the newest campus of the University of California, UC Merced inherits a distinguished reputation as part of the world's most prestigious university system. The campus must capture the greatness of the University of California in its physical plan by creating a sense of place from the beginning, and by assuring a sense of beauty which contributes to attracting faculty and students.

The plan will incorporate these qualities by making the approach to the campus and destinations within it into a sequence of memorable views and spaces. The decision to locate the campus at the edge of the existing park and lakeshore has established an immediate sense of place by "anchoring" the campus in the landscape and providing views of trees and water. Within the campus there will be comfortable and memorable gathering places and opportunities for sculpture, water features and other landmarks as the campus grows.

Connections

Clarity of campus layout and the resulting ease of wayfinding is an important consideration. Connections within the academic core are to be made by a continuous grid of movement corridors that are predictable and extendable as the campus grows over time. The grid defines developable sites of 320 by 400 feet, which will accommodate the largest buildings built within the University system today. The grid size also ensures a comfortable framework for walking and bicycling. Within the grid there will be a hierarchy of access: major roads, publicly accessible roads serving housing areas, and restricted access roads within the academic core (Figures 4.27, 4.28, 4.29).

The layout of the campus will also take advantage of the scenic qualities of the site. Curving parkways, in dramatic contrast to the grid, weave along the edge of the meadow providing interesting views across the play fields and along the edge of Lake Yosemite offering views to the lake and marking the edge between University and Park. Pathways also follow the curvilinear forms of the two canals, which frame the meadow. The canal walks connect the lake to the campus, the academic areas to the residential and to the larger planned community to the south.

The grid and the curving pathways will provide a functional, highly memorable way to move around the campus and also contribute to the campus's special sense of place.



Fig. 4.26
Lakeshore Drive Between
Academic Core and
Adjoining Lake Yosemite
Regional Park

Fig. 4.27 (left)
Major Campus
Access Roads

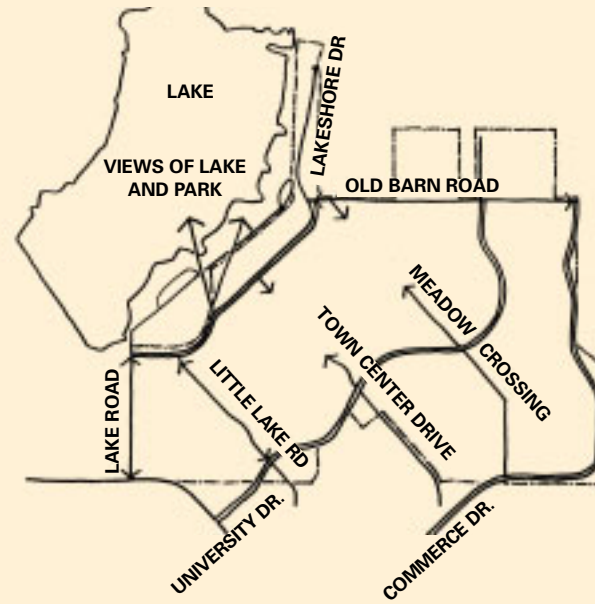


Fig. 4.28 (right)
Restricted Vehicular
Access Zones

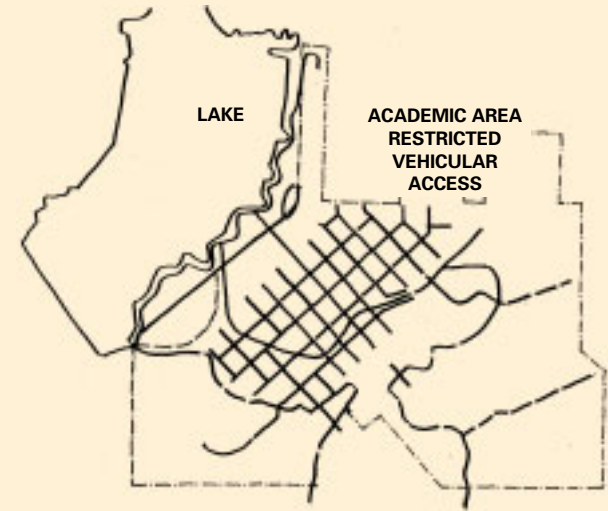
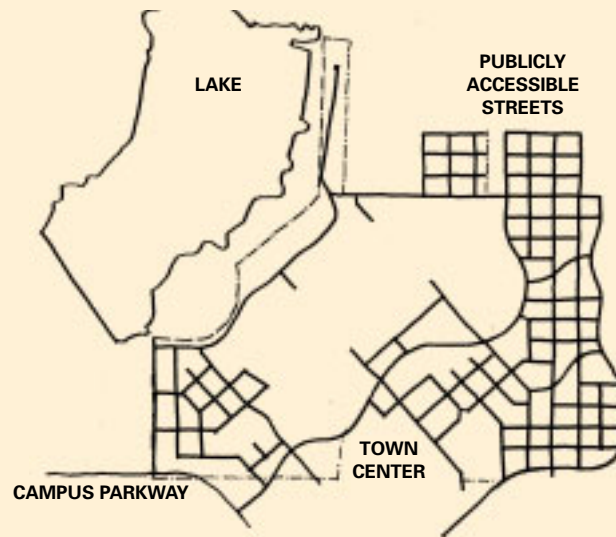


Fig. 4.29
Vehicular Access Zones



Shadow, Water and Breeze

Summer weather in California's Central Valley is hot and dry. A major effort must be undertaken to make campus outdoor life comfortable in these climate extremes.

In the tradition of Central Valley towns, the plan proposes large shade trees along the grid of streets that create the framework of the academic core.

The formal grid creates corridors that channel the afternoon breeze, cooled by passing over the lake water. The breeze lowers the air temperature as it passes through the campus. There can be many like opportunities for cooling through water because of the low humidity and breeze; UC Merced could become memorable as a place of beautiful fountains. This also could be the focus of a public art program.

Trees are typical along the Central Valley's waterways and could also border the canals that weave through the site. This more informal landscape provides a contrast to the grid of streets.

Shadow, water and the afternoon breeze are the best means to create daytime summer outdoor climate comfort. The plan must also provide outdoor lighting adequate for recreation and walking during the summer evenings, but be designed to preserve the dark night sky for stargazing.



Fig. 4.30
Informal Landscape Along
Canal Open Space

Fig. 4.31 (left)
Shade Tree Plantings

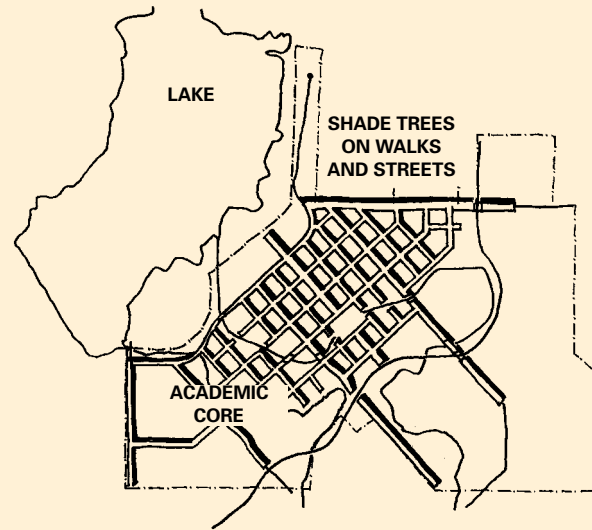


Fig. 4.32 (right)
Corridors Capture Breezes
Off Lake

