THE UNIVERSITY OF MICHIGAN **CAMPUS PLAN** ANN ARBOR, MICHIGAN

PHASE1

April 22, 1998

Venturi, Scott Brown and Associates, Inc. 4236 Main Street Philadelphia, PA 19127





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<u>KEY</u>

- Ann Arbor Retail
- Ann Arbor Entertainment
- UM Nodes: Michigan Union, Michigan
 - League & Pierpont Commons
- UM Property

KEY PLAN

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design

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I. INTRODUCTION AND SUMMARY

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I. INTRODUCTION AND SUMMARY

University campuses maintain a unique spot in our imagination. Linked to nostalgia for youth, they follow us in memory, and their physical aspects, particularly those that are most imageable, come to stand for the whole. Images of the campus stay with us on our life's journey and are thereby broadcast throughout the world. This is especially true of the University of Michigan, whose context is global and whose graduates are numerous and widespread; they all, like today's University community, nurture an image of the Michigan they love.

In his message to the University community, President Bollinger described a reassessment of the physical campus the University has chosen to undertake as many of its parts continue to grow at unprecedented rates:

"In 1837, when the Ann Arbor Land Company granted the 40-acre tract bounded by State Street, North University, East University, and South University as the site for the University of Michigan, not even the most visionary civic and academic leaders could have imagined the reach of the campus we now occupy. Today, our Ann Arbor Campus comprises five or six discrete campuses, each with its own geographic center and its own master plan. For many years, we have recognized the Central Campus, the Medical Campus, the North Campus, and the South Campus. I returned to Ann Arbor to hear for the first time of the East Campus and the Briarwood facilities.

"The last ten years have witnessed an unprecedented period of construction on each of these campuses. We are, however, at risk of centrifugal sprawl, of diluting our essential coherence and sense of community. Much good work has been done on planning for the University campus, but it no longer suffices to plan campus by campus. We need to conceive of our Campus as a whole and consider its place in the larger Ann Arbor community. We need to take a long view, to consider what our University Campus might be like, what its character should be, one hundred years from now."

VSBA has been invited to be the planners for this conception of the whole. What follows is Phase I of this study. As an overview, a "once-round-lightly," it is intended to sketch out the scope of the study and to lay the groundwork for future stages of the planning process.

A. PURPOSE OF THE PLAN

What physical development will help take Michigan's highest aspirations into the twenty-first century? How should physical plans be related to policy decisions in all areas of the University's growth and to evolving relationships on campus?

In his charge to the Campus Plan Advisory Committee, Robert Beckley sets a mandate for a campus plan that:

• enhances the academic, scholarly and research mission of the University

• creates and sustains the vitality of a place easily identified as a "community" of scholars for faculty, students and supporting staff

- enhances the relationship between town and gown
- celebrates the highest principles of aesthetics and environmental design

• is dynamic and can respond to the changing needs of the academy and its constituency.

The Advisory Committee -- and the plan -- is charged with representing the highest values and aspirations of the University and helping to shape an environment that can best sustain these values into the next century.

B. USES OF THE PLAN

A long-range campus plan for physical development can help the University's overall strategic planning efforts by:

• Describing a variety of ways of thinking about the physical campus -- as a series of systems and subsystems, for example, or as a succession of activities within buildings -- and sharing these perspectives broadly with the greater University community as an aid to coordinating decision-making.

• Setting out principles for the location of buildings and activities and the organization of the landscape within the broad fabric of campuses and properties, to inform and coordinate decisions about structures, systems and subareas of the University.

• Discussing the physical implications of academic, administrative, operational or financial policies under consideration, suggesting which events might trigger physical change.

• Producing information on the character, condition and capacity of the University's physical infrastructure, and suggesting opportunities for activities and uses that this heritage of buildings and landscapes offers.

• Establishing or verifying the role of each campus or property in the whole, outlining the desired relationships between areas, while suggesting programmatic, strategic, or physical linkages to augment these roles and relationships.

and beyond.

campus.



fig. 1. The Diag Looking Southeast

• Assigning priority to existing needs, identifying "brushfires," and formulating long-term strategies for the twenty-first century

• Suggesting policies that might support goals for the physical

C. PLANNING APPROACH AND PROCESS

We have approached the campus planning process as a series of interrelated tasks whose goal is to propose strategies and a vision for the long term future of the campus and to obtain consensus among the Advisory Committee and the University's other constituent groups. We have recommended a process of analysis and design that:

- defines the major objectives of the project
- describes alternative means of achieving them
- advises the client group on the choice between means and, that choice made,
- suggests plans for implementation over time.

We believe this process should be reiterated several times at different scales and degrees of detail, making the overall master planning process a circular one. This, the first iteration, attempts an initial definition of the overall campus, its aspirations, opportunities, problems, issues and options. Following phases will cover much the same territory, but at different scales and degrees of detail.

1. Phase I and Its Reception

In Phase I there has been considerable stress on data gathering. With the help of various University constituencies, we have compiled a broad base of knowledge on which to build future phases of the plan. In parallel, we worked with the University to evolve a system of representation, steering and decision-making for the plan.

• In "Learning from Michigan" (in Section II), we attempt to engage and understand, at an artistic level, the campus' "many landscapes," broadly defined to include all aspects of the physical campus -- buildings, spaces and vegetation -- and all facets of its architectural and landscape character, from urban to natural areas. Land use and other campus patterns and systems have been mapped (Section II.E) in order to better understand the campus and to lay a foundation for future recommendations.

• Our assembled data and analyses are incorporated under the headings "*Mission, Goals, Opportunities, Problems, Issues and Options*" (*MGOPIO*) in Section III. This format can provide a framework for the findings and recommendations of the plan.

• *Brushfires*. Even in the early stages of the plan, issues needing immediate attention arise. By studying these areas in more detail -- "the apple with the tree" -- we apply what we have learned to the matter at hand and in the process learn more about the University as a whole.

The information in this report has been derived from published documents, previous studies, first rounds of discussions with City and County officials and University officers, faculty, students, and administration, and walking and driving around. It has been enriched by comments from the University community, and is presented here for comment and input.

We have made interim presentations to the Advisory Committee, the Deans and a Business Operations staff group. Many of the individuals in these groups have taken an active interest in the process. Some have shared draft information with their constituencies, and many have sent us comments by letter and e-mail. These have been invaluable in sharpening issues, clarifying or correcting facts and unearthing new information. Some comments are reflected in this document; others will be further explored in future phases.

Although an important purpose of Phase I is to bring issues and options -- as we now understand them -- to the fore, it is too early for resolution of issues or recommendations between options. These will require a deeper understanding of particulars and the continuing participation of the University community.

2. Future Phases

The next immediate phase of the plan is likely to focus on particular areas and systems -- on individual Schools and Colleges, individual campuses, aspects of student life or campus transportation, for example. What we learn from these more finely grained analyses can help inform the direction of the overall plan.

We expect to continue to plan in a cyclical manner in subsequent phases, moving, in consultation with the Advisory Committee, from general statements of overall purpose to fairly detailed options related to action and design ("design" defined broadly -- there can be economic as well as physical design in the campus plan), and to widen the circle of participants in the process.



fig. 2. View of Angell Hall along State Street

D. THE CAMPUS

1. Images and Landscapes of the Campus

What is the image of the University of Michigan that graduates hold so dear? From our discussions and observations some buildings and spaces have emerged as special:

• *The Diag* (fig. 1), as the center of the original 40-acre campus and home of some of the most historic campus buildings and artifacts -- not to mention Engineering Arch or the block "M"-holds a special place in the University community's imagination and has been described as the heart of the campus.

• At the *northwest corner of the Diag*, the contrast between the shaded green of the Diag and the bustling, commercial activity and architecture of State and Liberty Streets -- including Nickels Arcade and the State Theater -- sets each in relief and emphasizes the vitality of their connection.

• *Burton Memorial Tower* and its recent North Campus counterpart, Lurie Tower, mark important centers and, as landmarks identifiable from a distance, are symbolic representations of the campus and the University. If the University is a set of precincts seamed into the city, its most imageable landmarks -- like the Towers, or the Rackham Building -- define centers of intensity rather than edges.

• Individual buildings and spaces -- for example, the Law School and its Quadrangle, the Rackham Building, Ingalls Mall (fig.3), West Hall, Hill Auditorium and others -- help give structure and identity to the Central Campus. Michigan Stadium anchors the Athletic Campus and provides a visual gateway to the University.

• Other important places are off the everyday paths of the general population -- for example, the *Music Building* in its forest clearing or Maya Lin's Wavefield. These must be discovered as quiet delights.

• Architecturally distinguished buildings, such as the Art Museum, Angell Hall (fig. 2), Yost Arena, the Kelsey Museum and the LS&A Building, contribute to an interesting, variegated matrix of campus buildings.



fig. 3. Looking North along Ingalls Mall

Garden.

• The Michigan Union and the Michigan League, important landmarks for University communities past and present, provide daily opportunities for lively intermingling of faculty, students and staff from different disciplines.

Clearly, there is no one image of the University, but rather a collage of many. Each of the campuses and areas is different from the others, and each includes within it distinct landscapes and architectural complexes.

Various philosophies have influenced planning and development of the campuses over time so that today the University landscapes include:

• The many-layered Central Campus with the original fortyacre superblock at its core, changed over time through demolition, adaptive reuse and new construction; overlaid with Beaux Arts planning; and expanded through the creation of additional superblocks.

• The fortress-like Medical Campus, whose hard outer "rind" -reinforced by topography, roads and a significant elevation change across it -- encircles the remnants of a more grid-like genesis and a pedestrian network at its core.

• The forest clearings of the North Campus, with some infrastructure and buildings based on Saarinen's plan, but overlaid with more recent complexes that follow other planning principles; adorned with large-scale works of art in the public realm and small, intimate spaces, largely hidden behind buildings -- like the garden behind the Bentley Library.

• The South Campus, with large varsity sports facilities, the annexation of former industrial buildings serving Facilities, Public Safety and other workaday uses, growing to the south as land becomes available.

• The acquired land and buildings east of Highway 23 -- including former agricultural lands, a primary care medical facility and a research-park-in-the-making -- side by side with the legacy of the Matthaei family which includes a botanical garden, important natural areas and a faculty and alumni/ae golf course.

• The facilities at Briarwood Mall and other remote, suburban medical facilities.

• Other acquired properties, such as Wolverine Tower.

• Special, almost sacred landscapes include the extensive Arboretum, Botanical Gardens and wooded areas of North Campus and others that are small and precious, such as the Martha Cook



fig. 4. Aerial View of the Huron River (Dale Fisher Heli-Photo, Grass Lake, Michigan)

2. A Preliminary Interpretation of Campus Development

The University's present campus began within Ann Arbor's grid plan (fig. 5). There is an inherent democracy in the grid; land is subdivided equally, there are no broader avenues with kings' palaces at the ends. Streets give direct access to buildings and connect both longitudinally and laterally. The grid can spread to infinity, but makes interesting patterns to accommodate topography and other natural features. For example, Ann Arbor's grid was distorted to accommodate the Huron River and the hills to the north and west of Washtenaw and Geddes Avenues, including the site of the present Medical Campus.

When the University moved to Ann Arbor in 1837, the campus superblock was established as a forty-acre exception within the grid. Buildings on the block were entered from the surrounding streets; the center of the block was relatively undefined.

As the campus developed, the grid became a plaid, as the Ann Arbor street system was altered to suit the scale and geometry of the automobile. The Central Campus expanded through the formation of precincts and growth of additional superblocks, which largely focussed inward and frequently required the closing of streets (fig. 6). By the 1990s, only remnants of the original grid existed within the Central Campus. Now perimeter roads give access to campus and subareas but also break the connections between campus areas, and between the campus and the town.

Helicopter views of Ann Arbor (fig. 4) show wooded uplands rising from the mist in the Huron River valley. One upland is the Medical Center, separated by sloping topography and roads from the river and neighboring precincts. Earlier views of the Medical Center show a greater connection with its surroundings, including a street leading to the old hospital. Now, the Center seems like a "walled city" with an inner network of buildings and open spaces.

The North Campus, a second upland area, was conceived as a series of clearings in a primeval forest. Later, more intense development was undertaken in an attempt to make the North Campus more like the Central Campus, but North Campus seems perhaps like Central Campus with "glandular problems" -- its spaces seem too big for conviviality. Bonisteel Boulevard was built in anticipation of the interstate highway's being closer to the campus than it was, and was not really designed for easy connections across.

Large sports facilities developed along the street edges of South Campus, with a railroad, former industrial buildings, athletic fields and parking in the interior. How might this area change as pressures for growth near Central Campus increase?

The University properties east of Highway 23 are in early stages of development and retain vestiges of presettlement landscape -- what should their character be? Next steps require more information about present patterns and conditions and future demands to be made on this important land holding.



fig. 5. Map of Ann Arbor, 1911 (Hatcher map Library)

3. Campus Patterns

The University of Michigan campus comprises many layers of complex patterns -- of landscapes, activities and structures. An understanding of these patterns and the relationships they support will be basic to any attempt to add to or change the physical campus.

In Phase I, we have combined maps from different sources to convey information on all campuses and about many urban and campus variables -- land use, transportation, landscape and others. Some patterns – land use, for example -- are illustrated layer by layer. By disaggregating layers of activities and structures in various ways, we hope to perceive new relationships, understand the rules that guide or should guide their growth, and thereby make planning well-based decisions.

On the pages directly following (pp. 6-7), we include land use maps for the campus and surrounding areas, juxtaposing town and gown uses. Shown disaggregated are retail, housing, performing and cultural arts, and medical and other science-related uses in and around the University campus. Other pattern maps are included in Section II.E of this report.

As we learn more about other patterns and relationships in future phases -- archaeological sites or learning channels, for example -- we will map those too.



fig. 7. Illustration from JJR Plan (Reproduced from Central Campus Plan, 1963)

2

3

1

5

С.

Existing

Central Campus

Central Quad.

fig. 6. Illustration from JJR Plan (Reproduced from Central Campus Plan Update, 1987, JJR)

lorth Campus

ann aubor

ver compas

fig. 8. Detail of Land Use Map



LAND USE: CAMPUS & SURROUNDING AREAS

Public Open Space

Multi-Unit Housing

Entertainment Parking Lots

Parking Garages

Cemeteries Housing

Offices Retail

University of Michigan Campus Plan, Phase I

Base Map: UM Facilities Planning & Design Information Source: UM Office of Space Analysis, Hedberg Maps, Inc.











UM HEALTH SYSTEM, UM SCIENCES & ENGINEERING, OTHER HOSPITALS, CORPORATE RESEARCH & DEVELOPMENT





April 22, 1998

UNIVERSITY OF MICHIGAN LAND USES

- Medical Hospitals & Medical Clinics
- College of Pharmacy, Division of Kinesiology, School of Dentistry, School of Nursing, School of Public Health, & the Medical School
- LS&A Sciences, College of Engineering, & the School of Natural Resources & Environment
- UM Institutes
- UM Student Housing
- UM Museums
- UM Performing Arts
- UM Student Services

OTHER LAND USES

- Corporate Research & Development
- Hospital
- Housing
- Multi-Unit Housing
- Retail
- Entertainment

LAND USE: PATTERNS DISAGGREGATED

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Source: UM Office of Space Analysis, Hedberg Maps, Inc.

4. Campus-wide Linkages and Systems

What elements of the physical campus can help provide unity? Here are some first thoughts:

• Systems and connections. University-wide systems include the bus system, bicycle and pedestrian pathways, e-mail, M-Pathways, the Michigan Daily and M-Care -- but how about system-wide activities or combinations of activities? All residential life facilities, for example, including dining? All campus arts and sciences? The collaborative between Engineering, Medicine and the Life Sciences?

• *Imagery and symbolism*. The daily experience and memory of images that are beloved University-wide -- Burton Tower, the Diag, Michigan Union, the Michigan League, Hill Auditorium and Michigan Stadium -- help knit the University together as a community.

• Shared cultural and recreational resources. These include downtown Ann Arbor, the Arboretum, the Musical Society, football Saturdays and other shared amenities perceived as "public goods."

• *Spectrum of landscape*. Although the character of each campus is unique, within their Ann Arbor-Washtenaw County setting they represent a broad spectrum of landscape types, ranging from small, interconnected urban spaces near the city center to large, open, suburban spaces north of the Huron, and to remnant rural and natural areas beyond city limits. The connections and transitions between these places may not be visible enough to make the landscape system perceptible as a whole and a strong unifier. Future phases of the plan should consider ways of raising levels of perceptibility of the broader, river-based landscape.

• *"M-Pride."* The University community is united by a pride in the institution, its values and successes. One obvious galvanizing example is the support for the Athletics program.

E. A SHARED PUBLIC REALM

1. The University in the Region

The University has tremendous educational, cultural and economic significance to Ann Arbor and the region. For example:

• After Detroit's Big Three automobile manufacturers, the University is Michigan's largest employer. According to the University's department of human resources, the Ann Arbor campus employs 22,295 faculty and staff.

• The University's combined student, faculty and staff population in Ann Arbor exceeds 59,000 people. As of the 1990 census, 109,592 people lived in Ann Arbor.

• The University's art museum attracts over 80,000 visitors a year, and the Musical Society -- an independent organization affiliated with the University -- presents over 70 productions a year, most in UM buildings.

• Of the University's almost 400,000 living alumni and alumnae, 23,218 live in Washtenaw County.

• The Office of Business Operations states that the University, its employees, students, and visitors "pumped an estimated \$2.5 billion in [fiscal year] 1994-1995 into the local and Michigan economies."

2. The Meeting of Town and Gown

The relationship between Ann Arbor and the University is a mutually dependent one. Advisory Committee member Colin Day writes, "Just as the University's vitality powers the town so the proximity of that vibrant downtown enlivens and contributes in a major way to the life of the University. I am sure I am only one among many at the University who was attracted to the University at least partly by the townlife and is kept here to a considerable degree by that life and the rarity of it in the USA. ... In brief, we can recruit and hold outstanding people at least in part because of the sense of life in downtown."

The University and Ann Arbor share many areas of concern, including safety, housing and the quality of the environment. The University sits not apart from the City, but as a series of precincts within it. This integration is not only perceptual; about 70% of the University's students live in the surrounding communities. Campus edges are indistinct. At their best, these edges -- like that at the northwest corner of the Diag (fig. 10) -- are exciting and active. At the other end of the spectrum, garages and parking lots separate the campus and the City.

3. The Huron River

The University and the Huron River define a cruciform that divides the city of Ann Arbor into quadrants. Although many in the University community cross the river daily, it barely registers as an important image for the University or the city.

So clear and dramatic a presence on maps, the river is barely visible from the vehicular bridges that cross it, and there are no more than a few glimpses of the valley from Central and North Campuses. It is perceived as separating campus areas rather than connecting them. Yet at almost every meeting we've attended so far, a desire to make better connections to and across the river has been articulated. How can the river become a more tangible part of the experience of the campus?



fig. 9. The Huron River at Gallup Park

4. Creeks and Watersheds

1920s.

There are five tributary creeks that are within or adjacent to University property. The condition of these is varied. Of the five tributaries, two, Fleming and Swift Run creeks, retain their historical channel course and shape. Miller Creek and Malletts Creek have been relocated, channeled, and piped to various extents. Allen Creek has been completely piped since the mid-

F. MGOPIO: MISSIONS, GOALS, OPPORTUNITIES, PROBLEMS. ISSUES AND OPTIONS

As part of this first phase, we have begun formulating a list of the plan's missions, goals, opportunities, problems, issues and options (MGOPIO). The most general and campus-wide are excerpted here, and a detailed list is provided in Section III.

Comments and additions from the University community continue to pour in. We are most grateful for them. Some of these have been incorporated in the present lists: others -- more detailed or requiring more extensive research -- will be investigated in future phases.

1. Key Themes and Goals

At the end of Phase I, the Advisory Committee notes, "We hope to be, or become, a single campus with interlocking parts -- a Uni-versity. This conclusion can be used to frame the next phase(s) of the development of the Campus Plan, which should promote this integration by every possible means, including links, transportation, decisions regarding aesthetics, housing, landscaping and the like."

As we now understand it, the Campus Plan should devise strategies that:

• Define a physical setting for the life of the mind of a great University and for those who use and support it. Allow for the complex and shifting reality of the life of the mind.

- Establish an overall framework and hierarchy for development, relating physical priorities to academic and financial policies.
- Promulgate an understanding of the physical campus, its historical development, aesthetic dimensions, present patterns and conditions, and future options, and its place, historically and today, in the growth of Ann Arbor.
- Encourage a sustainable, liveable, amenable and beautiful environment.

• Provide facilities for education and research that promote the public good, foster areas of creative collaboration, and support individual excellence.

• Encourage an intensity of cultural, recreational and social activities, and define a spectrum of residential opportunities, on and off campus, that will continue to attract and help to hold the highest caliber faculty, students and staff.

• Nourish the arts on campus and in Ann Arbor, including establishment of an Arthur Miller Theater.

• Increase physical opportunities for interdisciplinary collaboration University-wide, perhaps especially in relation to growth in the sciences.

• Define and develop the roles of each of the University campuses. This includes providing a more convivial environment for the North Campus with imageable connections to the rest of the University, and identifying appropriate purposes for UM-owned properties east of Highway 23.

• Balance densification and outward expansion.

• Help define a "home" for each member of the University community -- a physical location identified as the central place of experience for each faculty, student or member of staff.

• Help evolve a planning process that establishes an appropriate balance between centralized and de-centralized decision making, and invites participation of the wider University community, relevant governmental agencies and local citizens.

As planners, we must seek truth but know we will not altogether find it; as artists, we leave room for many truths, seeking beauty, but knowing that, in truth, beauty may at times be agonized.

2. Campus-wide Issues

Here we have over 2,860 acres of UM campus. It is the sum of its warts and beauty spots and the resultant of its history and the myriad decisions made for it over time. Of course it is complex and contradictory; it's a human habitat. What view shall we take now and for the future of its various campuses and properties? Some are almost beyond our peripheral vision, others fill (perhaps overfill) our foreground. How shall we reassess their relationships within themselves and to each other for a new millenium, a changing society, and a burgeoning rate of technological development?

later."

• The University's patterns of activities and systems are a constantly shifting set that move over the less changeable infrastructures and structures of the physical campus. What are the University's overarching disciplinary and interdisciplinary foci today? How might these evolve over the next 25 years? What physical shifts and extensions will this require? What types of reweighting might this involve for the various campuses and landholdings?

• How can we respond to changing patterns of activities, collaborations and associations now, yet leave flexibility for future rounds of change in educational and administrative policy? With generic, loft-like buildings that fit like mittens not gloves, allowing a succession of uses and relationships over time? Within a flexible grid, like the original plan of Ann Arbor? Within and across distinct precincts? Which elements should be fixed and which changeable?



fig. 10. Northwest Corner of Diag at Intersection of Town and Gown

The Overview phase has raised many issues (and some hackles); these cannot be settled without digging deeper. Some of the broadest issues are presented here to help frame the discussion of future phases. Although the issues are posed as questions, we

suspect the resolutions will not be "either-or." They are more likely to be "both-and" -- "this here and that there," or "this now and that

• To what extent should town and gown be physically integrated? Should the University continue the practice of closing streets to create pedestrian precincts? The University's Office of Business Operations comments that traffic and commerce as part of the fabric of the University are "clearly contrary to our effort -- and that of most universities -- to provide as much safety as possible for pedestrians on campus...and encouraging a physical environment suitable for contemplation, study, and research. This is a university, not an entertainment district. While some of the universities in the world's crowded cities cannot avoid mixing academic buildings with the city environment...we can and should." On the other hand, Advisory Committee member Colin Day notes that "in the humanities and social sciences (at least) nurturing is less done by the construction of buildings than by the creation of opportunities for serendipitous encounters, informal meetings and the like. ... The great strength of Ann Arbor as a university town is the proximity and inter-weaving of downtown activities with the University: the downtown is where many of those serendipitous meetings can and do occur. The need to nurture and inter-weave with downtown is part of the program of sustaining the creative academic environment." Where in the spectrum of possible relationships with the city should the campus lie?

• As in the 1960s, Michigan still faces the issue of extended or compact growth. The decision then seemed to be between a growing center or a limited center with satellites. The pattern today resembles less and less that "garden city" ideal. Four areas demonstrate some aspects of a center: Central Campus, downtown Ann Arbor, Medical Center and North Campus; and there are several outlying areas, South Campus, properties east of Highway 23, Briarwood, etc. How shall we define them, together and apart, and in relation to the City and County?

• Where does the new administration see the place of decisionmaking about the physical campus, in whole and in part, in the polity of the University and of the City? What are the issues of democratic participation and of centralized and decentralized decision-making?

• How can we (all), as artists, draw from the fabric, history and iconography of the University its profoundest meanings and help these emerge in its physical development? What kind of beauty can this drawing engender?

• What are the "many landscapes" of the University? Where is that "special landscape" that sears the memory and is associated forever with our college days?

• To what degree should the various campuses have a commonality? Should they be as unified as possible or should each campus have its own distinct character? Within each campus, should unity or diversity be emphasized? Should that vary by campus?

• What responsibilities does the University have in environmental matters? Should it take a leadership position? What kind of neighbor should it be? What programs already underway could provide the necessary foundation for leadership?

• How should environmental concerns -- including the preservation of significant natural areas and the desire to limit impervious surfaces -- be balanced with the demand for new buildings, recreational facilities, and parking?

• To what extent should environmental considerations govern campus planning and the design of individual facilities? How will environmentally responsible positions and actions be defined?

• How can the physical campus and the patterns it suggests help to increase the frequency and fertility of interdisciplinary interactions and improve the quality of academic and student life?

• How should student life and student residential life facilities evolve to meet changing life patterns of students? How should they relate to academic cores?

• What kinds of connections and linkages between campuses are desirable?

• What role should cars play on the campus? Can landuse patterns emerge which would reduce dependency on the automobile? How can using transit be made more attractive than bringing vehicles to campus?

• What should be the nature of the University's cooperation and coordination with City and County governments? How should town and gown collaborate over areas of interface?



fig. 11. Historical View of "The Diagonal Walk" (Bentley Historical Library)

3. Some Preliminary Options

The "options" sketched out during this early phase of the plan are not yet recommendations; they are means of analysis rather than designs. They are broadly based, considered for heuristic purposes; their aim is to set out the scope of the problem and the range of possible solutions. It is too soon to make decisions on these options, as more information is needed to make good choices. Indeed, the information and response elicited by the options presented here may lead to different, more realistic options.

The options are limned out here and are further detailed in Section III. They are what we have heard at meetings or what have occurred to us — "wouldn't-it-be-nice-if" — during fact gathering and analysis. These are first, exaggerated notions of the University's grand options. Feasibility lies somewhere between. They are also unrelated to each other. What should grow from them is a larger sense of where the real options lie. Later phases will combine sets of realistic, internally consistent alternatives that represent valid choices to be made about campus development.

a. Options for University-wide Development

The major options will concern alternative assignments and reassignments of activities and systems and consequent shifts of emphasis among and within the University's campuses. If the alternatives between densification and suburban nucleation posed in ideograms in 1963 no longer hold, what are the new ideograms? Here are five further alternatives (p. 11):

• *Central Campus is "downtown.*" South Campus is "the urban fringe." North Campus is suburbia. East Property is exurbia.

• An extended Central Campus. Central Campus, downtown, Medical Campus, plus the built-up portion of North Campus are linked by transit. Residential North Campus and East Properties are the University Residential Life's suburban component; academic uses there relate to the Botanical Gardens or to suburban research parks. South Campus is attached to Central Campus ceremonially, processionally and iconographically.

• *Two centers*. Somewhat like "extended Central," but centraltype activities extend in North Campus and Medical Campus decentralizes.

• North Campus the new center. It has considerable room for expansion and parking -- if we accept its already ongoing densification and some loss of landscape. There are prospects for enlivening its atmosphere if we accept some loss of design purity and control. Is Central Campus then Old City? East Campus the "new" North Campus?

• *Each campus a tub on its own bottom*. Each has a different identity and enough self-sufficiency (and computer connections) to reduce the requirements for movement between them. Global ties vie with local loyalties.



OPTIONS: CAMPUS DEVELOPMENT

University of Michigan Campus Plan, Phase 1



Other options, still at a general level, involve relations between Central, Medical and North Campuses and downtown Ann Arbor:

• *The Arts.* Patterns of use suggest an option for developing a performing arts locus east-west on campus (fig. 13) from performing spaces in the Music School, Media Center, and Medical Center, via Power, Mendelssohn, Hill and Frieze, on to the Michigan Theater, shops, restaurants and other amenities of Liberty Street.

• The interdisciplinary collaboration of Medicine, the Life Sciences and Engineering traces an arc across the academic and institutional universe, within the University and beyond. Where in a spectrum from the Internet to bricks and mortar will most of that collaboration take place? Sites where major collaborative facilities could be considered (fig. 14) include the old hospital site, the "cathole" site off Washington Avenue at Palmer, sites off Glen Avenue around E. Ann Street, several near Wall Street, and perhaps even on a North Campus site related to Engineering and the VA Hospital. Transit could connect all these sites with perhaps only four stops, not stretching the patience of busy medics and engineers. • Reweighting the Central Campus force diagram. "City physics" (fig. 12) portrays the campus infrastructure as a diagram of forces, loaded in different ways at different times, in response to changing pressures. This interpretation suggests that the pull of the Medical Center and North Campus may shift the center of gravity within Central Campus north toward Rackham and Power, over time. The ideas for the arts, sciences, medicine and engineering discussed above should accentuate that trend, if their development takes place on the sites discussed. The east-west axis suggested by the locations of performing arts facilities on campus and in Ann Arbor could be seen as a new campus alignment (p. 13) involving developments in the arts and sciences, supported by outriggers south (Hill Auditorium) and north in the Medical Center and North Campus (Music School, Engineering, Architecture).







fig. 13. Option: The Arts





Venturi, Scott Brown & Associates, Inc.

CENTRAL CAMPUS FORCE DIAGRAM

Base Map Source: UM Facilities Planning & Design Information Source: Office of Space Analysis Discover the Ann Arbor and Ypsilanti Area Magazine

April 22, 1998

b. Open Space Systems and Landscape

Options for open space systems and landscape treatment are presented at three gradations of scale: regional, city and campus. Although what the University elects to do on its campuses can to some extent influence regional and city patterns, choosing or accomplishing any of these wider options will require a great deal of participation and cooperation among the University, the City and the broader community.

Regional Scale

• Polka Dot Model (fig. 15). Open space parcels, ranging from public parks to sports fields to natural areas, are dispersed throughout the University and the City of Ann Arbor. Open space links between these parcels are generally linear connections along stream corridors or bicycle lanes.

• A Net of Pearls (fig. 16). In this model, too, open space parcels are dispersed throughout the University and the City. Additionally, a web of open space connections, ranging from narrow recreational trails to wider greenway corridors, provides linkages between the larger open space 'anchors'. The Huron River becomes one of the threads among a larger network.

• *Roots and Shoots* (fig. 17). This hierarchical system is organized around a central corridor -- the Huron River valley -- emphasized as the principal natural resource. The many secondary branches provide access between open space parcels and the main stem of the system. This branched open space system fosters larger, multi-functional corridors providing a wide range of opportunities for recreation, habitat conservation, and water resources management.





fig. 16. A Net of Pearls

fig. 15. Polka Dot Model



City Scale

• *River as Invisible Thread* (fig. 18). In the absence of coordinated planning efforts to make the Huron River a centerpiece, development patterns will continue as they are. The presence of the river will not be a major element in the experience of the city and will not be visible from a distance. Development of parking lots, buildings, storage facilities, sports fields, and roadways will continue, with some restrictions mandated by local and federal regulations. Access to the river edge may be limited to specific sites linked by roads but could also be developed into a more connected riverwalk. This scenario does not take full advantage of opportunities to improve recreational and environmental conditions.

• *River as an Embroidered Ribbon* (fig. 19). The river and the adjacent floodplain are largely restored to a ribbon of continuous natural vegetation, making it a visible element in the landscape. Existing roadways in the valley are tied together as a coherent, scenic parkway. Adjacent recreational trails link limited amenities such as sport fields, boathouses, and picnic areas. This model seeks to establish a balance between the recreational use and restoration of the most sensitive areas to a natural condition. For this approach to be effective, development of the slopes adjacent to the valley bottom should include a robust open space network connecting the river to upland development.

• *River as a Wild Ribbon between Urban Centers* (fig. 20). This model envisions a continuous natural river valley between Barton Pond and Gallup Park, excluding built elements except for bike and pedestrian paths. Parking and other facilities are provided at the perimeter of the ribbon.

Campus Scale

Choices are likely not to be "either-or" but "both-and" or "this here and that there"; each model implies a particular planting vocabulary and organization.

- Central Campus Model. The traditional collegiate landscape of greens, courtyards and malls structure the landscape organization.
- Music School Model. Woodlands and natural landscape are the matrix in which individual buildings are dispersed; grass is limited to small sunny glades and high use areas near the buildings.
- Suburban Model. Lawns form a wide apron around individual free-standing buildings, and space flows freely around the buildings.
- Village Clusters in a Natural or Rural Landscape. Clusters of buildings -- including teaching, research, housing, recreation -- around a central garden core are set in a more rural or natural setting which reflects and preserves the surrounding landscape.











fig. 20. River as a Wild Ribbon

fig. 17. Roots and Shoots

c. <u>Transportation</u>

What options might encourage the use of transit and improve the intercampus connections? The University already has many programs in place to reduce dependence on personal automobiles in congested areas, including commuter parking lots, areas of cooperation with the Ann Arbor Transit Authority (AATA) and a bus system that serves over 3.8 million passengers a year.

A transit system to improve intercampus connection and communications (fig. 21) could involve a combination of means:

• a transit route (possibly high-tech, more probably rubbertired) with about 10 stops, linking activities and parking on four campuses

• a more "seamless" (to quote Parking Services Manager Susan Kirkpatrick) UM-AATA bus transit system

• a "flyer" express system linking outlying commuter parking lots directly to campuses without intermediate steps

A relatively short, highly imageable transit route -- a "zigzag?" -- with few, strategically located stops could help make connections between North Campus, the Veterans Administration Hospital, Medical Campus, Central Campus, and the South Campus. Like London's Oxford Street underground line, the system could develop its own identity through its simplicity, through the facilities at each stop, and through the conveniences there --Intense retail in some areas and just a pushcart vendor in others. These would help users visualize sequences, relationships and distances. Vehicles would be more intimate, less "bus-like" than UM buses -- perhaps powered by an alternative fuel? This system -- with structured parking eventually along its route -- could help encourage people to leave their cars outside congested central areas.

How can transit become rapid transit? Through dedicated bus lanes? By adopting emerging technologies? In the long term, high-speed people movers may be feasible. In the nearer term, we must find the most recent information on high-technology means of transportation and their options and look for convenient, imageable routes and investigate possible rights-of-way.

A parking system described by Susan Kirkpatrick could tie in to the transit system outlined above. It would involve:

- visible parking for visitors, as now, around most public areas of Central and North Campuses
- parking structures organized by pay and allocation systems as now, but with structured parking added near the route of the proposed "zigzag" system
- on lot parking as demolition and construction permit
- on street, metered parking
- frequent monitoring of the system by computer to fit parking supply to customer demand.



fig. 21. Diagrammatic Illustration of Transit Option Combining the "Zigzag," "UM Flyer," and the AATA and UM Transit Systems

G. CONCLUSIONS AND NEXT STEPS

In this Overview report we have tried to assess key themes and issues of campus planning for the University, in terms of its history and future but also in terms of its intangibles -- in its academic mission, its aspirations for quality, its artistry and its iconography.

Perhaps we have worked hard and long yet have managed to set down only the obvious -- what "everybody knows." If so, we hope the act of putting it in one place and sharing it across the community can give rise to new understandings, perhaps to realizations not previously reached, and provide a basis for future discussions.

In future phases we will begin to canvass in greater detail the aspirations, plans and programs of Schools, Colleges and other entities of academic life, as well as of Student Life, Student Residential Life, Recreational Sports and the Administration. These will help us develop a next round of options for the physical campus, based on a deeper understanding of aspirations and realities.

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II. THE MICHIGAN CAMPUS

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II. THE MICHIGAN CAMPUS

A. CAMPUS DEVELOPMENT

1. A Brief History

Historical documents, including planning reports, maps and photographs, have been made available to the planning team by Plant Extension, the University Planner, the Bentley Library, the Hatcher Library and others at the University and in Ann Arbor.

In addition, the University Planner, Frederick Mayer, shared a written narrative of the history of campus planning at Michigan. He gave a summary of this narrative in an early meeting with the planning team:

A building in Detroit was the University's first home, but there is no evidence classes were ever taught there. In 1837, the Ann Arbor

Land Company offered the University 40 acres of land. At the time, land in the immediate area was not selling well, as most development was in the lower town near a mill; the University has from its first days in Ann Arbor been viewed as a spur to development.

The Regents hired A.J. Davis to make a plan for the new campus. They rejected his initial Gothic Revival drawings and asked for a Classical plan instead. A copy of Davis' Classical plan has not been found, but it might have been an adaptation of Yale Row. An 1850s painting shows a row of smallish white buildings; of these, only the building that is now the President's House remains.

The campus developed in the 1860s to include University Hall along the western edge of the forty acres and science and medical buildings along the east side.

Two of the University's 19th century presidents, Henry Philip Tappan and James Angell, moved the institution away from the

English model and toward the Prussian model of higher education. Tappan, for example, eliminated dormitories on campus, and required students to find housing in the town.

Buildings traditionally faced the perimeter streets, and the central yard was used for grazing, then became "leftover" space. The library built in the 1880s (since demolished) was the first campus building that did not face outward. In 1890, Henry Ives Cobb, planner of the University of Chicago, made a plan for Michigan that focussed attention on the central open space. Dean Lorch's plan of 1906 (fig. 22) also focussed on the central space and presented an axis for growth to the north. In 1908, the old Chemistry building was built with the first door onto this new axis.

With the advent of the Ford Motor Company in the early 20th century, the State of Michigan prospered and demand for higher education grew. The original forty acres could no longer meet all the University's needs, and the Regents began moving student activities, athletics and large-scale clinical facilities off the central forty acres.



fig. 22. Dean Lorch Plan, 1906 (University Planner's Office)

fig. 23. Pitkin and Mott Plan, 1923 (University Planner's Office)



fig. 24. Aerial View of the University, circa 1947 (University of Michigan Office of the President)

For a while, the University operated two medical schools. A school of homeopathic medicine was housed in North Hall. The school of allopathic medicine moved to Catherine Street, the general location of the current Medical Center.

In the early years of the century, the University began acquiring land in all directions for expansion and also initiated a comprehensive rebuilding of the original forty acres.

In the 1920s President Burton, charged with meeting growing demands for higher education in the state, expressed his belief that quality and size could co-exist. He set out on a major building program and commissioned a master plan from Pitkin and Mott (fig. 23). The master plan included a north-south axis, and showed the University growing across North University, East University and State Street, and expanding toward the Medical Center. This plan guided growth until World War II.

In the late 1940s, to fulfill the post-WWII demand for higher education, the University built new buildings on Central Campus (including LS&A and Mason and Haven Halls) and also began buying land north of the Huron River. In 1952, the Regents commissioned Eero Saarinen to provide a master plan for development of this new campus (fig. 25). Saarinen's guidelines included working with the natural topography, except in the case of the academic core, which was flattened; retaining major stands of trees, especially along Plymouth Road and the Huron Parkway; placing buildings on a north-south-east-west-grid; and unifying the campus through the use of a particular kind of brick. North Campus has now grown to approximately 850 acres.

In 1963, the University began re-examining its planning. The Johnson, Johnson and Roy (JJR) plan (figs. 26 and 27) identified buildable sites and investigated the structure of the campus, including circulation patterns, pedestrian movement, the town-university relationship, and the growth of various sectors. This and other JJR plans for individual campuses have guided growth to the present.

The maps on pages 20 to 21 illustrate the growth of Ann Arbor, from 1836 to the present. Those on pages 22 to 23 show the development and succession of uses on Central Campus and are based on "Mort's Labor of Love," a campus chronology compiled by the University of Michigan Plant Department.



fig. 25. Eero Saarinen's Plan for North Campus, 1953-55 (University Planner's Office; Original is in the Bentley Historical Library.)



fig. 26. Illustration from JJR Plan (Reproduced from Central Campus Planning Study, 1963, JJR)



fig. 27. Illustration from JJR Plan (Reproduced from Central Campus Planning Study, 1963, JJR)

Expansion Tendencies of a Physical Environment



EARLY

Smalluus Singulasity Simplicity Clasity



GROWING

humbers distance complexity Anonimity intality









2:5

NARBOR





























1870

1885

1900











1975

1990



1915

- <u>KEY</u>
- UM Health System
- Academics: Medical & Health Sciences
- Academics: Other Sciences & Engineering
- Academics: Arts, Humanities, Business, & Law
- UM Libraries
- UM Athletics
- Cemeteries
- UM Student Housing
- UM Faculty Housing
- UM Alumni
- UM Administration
- UM Museums
- UM Student Services
- UM Facilities
- UM Performing Arts
- UM Parking Lots
- UM Parking Garages

Present

BUILDING DEVELOPMENT & CHANGE OF USE OVER TIME University of Michigan Campus Plan, Phase 1



Base Map Source: UM Facilities Planning & Design Information Source: Hatcher Graduate Library



fig. 28. View of University Hall (demolished), early 20th century (Bentley Historical Library)


2. The Natural Landscape Past and Present

The landscape system is shared by the entire University community and is the fabric of every University holding. At its best, it is an important generator of the image of University and a setting for communal academic life. It includes the layout and character of all the "spaces between" the buildings, and includes the greens, squares, courtyards, plazas, streets and pathways. In order to understand the "built" landscape, it is important first to understand the "given" landscape, the pre-existing, natural foundation on which the cultural, and social landscape was established. Discussion of the "built" landscapes of the University are included within the exploration of individual campuses.

a. Terrain

Washtenaw County is a subtle landscape. To the casual observer, the land may appear flat, but a finer-grained analysis reveals an expansive landscape of undulating uplands and broad shallow river valleys. Glaciation created this landscape and its features are influenced, not by bedrock, but by patterns of deposition which are the result of the movement of glacial ice and its meltwaters. Glaciers softened the pre-existing topography and buried the land under a thick layer of sand, gravel, and silt. The uplands were shaped into flat till plains and steeper, more rolling end moraines. The Huron River follows a former meltwater channel that cut through linear moraines. The river today is a narrow channel meandering in a broad valley.

The properties of the University of Michigan are located on different sites within this characteristic topography. The first forty acres of the campus were built on the flattest part of the low upland plateau above the river valley. The Medical Campus is sited on the edge of steep slopes directly above the broad, shallow floodplain of the river. North Campus and University facilities east of Highway 23 are built on rolling end moraines. The Huron River meanders through a broad floodplain which divides the South, Central, and Medical Campuses from the North Campus and properties to the east.

b. <u>Water</u>

When European settlers first arrived in the Ann Arbor region they discovered a very poorly drained landscape with isolated lakes and wetlands characteristic of "recently glaciated" areas where extensive drainage networks have not yet developed. To establish farms and towns, settlers constructed extensive tile fields in order to lower the water table to make the land usable. Drainage of the land has been an issue of continuing importance for development ever since, highlighting a number of environmental concerns. Over fifty percent of pre-settlement wetlands in the Ann Arbor region have been filled since the 1800s. Loss of wetlands reduces the ability of the land to clean the water naturally and to absorb floodwaters. Plant and wildlife habitats are also destroyed.



fig. 29. Surficial Geology

KEY

Laci	
Glad	
Ice-	
Fine	
Med	
Coa	
End	
End	
Fnd	

SURFICIAL GEOLOGY

Lacustrian clay and Silt Lacustrian Sand and Gravel cial Outwash sand and Gravel and postglacial alluvium Contact outwash sand and gravel **Textured Glacial Till** dium-textured Glacial Till arse-textured Glacial Till Moraine of fine Textured Till morianes of Medium Textured Till I moraines of Coarse Textured Till

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities, Planning and Design Information Source: School of Natural Resources & Environment Geographic Information Systems Facility, University of Michigan



power.

Portions of four main tributary creeks flow into the Huron River across some areas of University property. Fleming Creek retains its historical channel, course and shape. Millers Creek (North Campus Drain) and Malletts Creek have been partially relocated, channeled, and piped. Allen Creek has been completely piped since the mid-1920s.

c. Vegetation

Washtenaw County is located on the boundary between the great eastern forests and the tall grass prairies. Before European settlers cleared the land, the upland areas supported a mix of hardwood forests and oak savanna (fig. 30). Oak savanna is a transitional woodland that occurs primarily along the margins of forest and prairie. The majority of University holdings were originally oak and hickory forests, although a small area of oak savanna grew at the northern end of the Matthaei Botanical Gardens near the eastern edge of the campus. The Huron River floodplain and some creek valleys supported lowland hardwoods of elm, ash, and silver maple. Areas of shrub thickets and wet prairie marshes occurred along Malletts Creek and Fleming Creek, in the North Campus and East Properties.

These vegetation patterns have been altered profoundly by development (fig. 31). Agriculture and the steady expansion of Ann Arbor reduced the extent of the original forest to small, isolated patches. Fires, which occurred naturally in the presettlement landscape, had helped to sustain the pattern of prairie, savanna, and forest. In the settled landscape, suppression of natural fires, extensive drainage of wetlands, logging of timber, climatic change, and atmospheric impacts altered native biological systems, natural processes, and the pattern of vegetation in forests and savannas. Only tiny remnants of the original savannas, wet prairies, maple/ beech forests, and lowland hardwood forests exist today.

Stands of second-growth upland hardwood are preserved at the edges of North Campus and as part of the Nichols Arboretum. Remnants of lowland forest are found in the floodplain of the Huron River beyond University boundaries. The Matthaei Botanical Gardens has two areas of significant natural vegetation, an old-growth upland oak forest, and the fen. What should University policy be toward these significant ecological plant communities and habitats? Once lost, they will be irretrievable.

KEY

Tree Savanna - Oak Barrens Mixed Upland Hardwoods - Beech/S. Maple Mixed Upland Hardwoods - White Oak/Hickory Mixed Upland Hardwoods - Black Oak/W. Oak Lowland Hardwood - Broadleaf Shrub Dominated Wetland-Buttonbush/Dogwood Emergent Marsh - Inland Wet Prairie University Boundary ∧ Rivers/Streams Highways **County Roads** Lakes/Rivers

PRESETTLEMENT VEGETATION

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities, Planning and Design Information Source: School of Natural Resources & Environment. Geographic Information Systems Facility, University of Michigan

fig. 30. Presettlement Vegetation

There is one large river, the Huron, which separates the University of Michigan properties into a northeastern and southwestern section. Between Barton Pond and Ford Lake, the river is ponded behind dams, and only a few sections of freeflowing river remain. The dams were constructed originally for water power for mills, and later for the generation of electrical

d. Prominent Natural Features

While the overall character of the terrain is fairly flat with undulating uplands, the bluffs and slopes adjacent to the flat meandering floodplain of the Huron River punctuate the landscape. The Medical Campus is prominently located within Ann Arbor, on a high bluff above the Huron River Valley, at a significant point of river crossing.

Ravines too are important landscape features; these thread up into campus areas along Fuller Road, in School Girls' Glen, and in the Nichols Arboretum, creating distinct contrasts with the surrounding landscape. The ravine along Parker Brook, south of the East Medical facility, and the rolling terrain of the Radrick Farms Golf Course are other dramatic places in the landscape of the University.

The University of Michigan also encompasses a rich variety of man-made landscapes such as the courtyards and greens of Central Campus, the Nichols Arboretum, the Wave Field, to name only a few. These, together with the natural landscapes, define the varied spatial fabric of the University.







B. THE "LEARNING FROM" PROCESS

Although in this first phase of the plan we have been collecting data and working toward a factual understanding of the Michigan campus, here we attempt to engage the campus' "many landscapes" at an artistic level. We have defined landscape broadly to include all aspects of the physical campus -- buildings, spaces and vegetation -- and all facets of its character, from urban to natural areas.

In this first phase, analysis has dominated, but a kind of intuitive awareness should accompany and parallel our more formal analyses, and from this "learning from" the place (as we put it) hypothetical jumps can evolve. These early thoughts on design, which may suggest or anticipate ultimate solutions or options, can be tested during the analysis.

The analytical process will evolve in response to dominant problems within the campus and its setting. These pertain largely to the need for connection -- physical and perceptual, pedestrian and vehicular -- between campuses. Lack of connection creates disunity within the University community. The resultant problems or challenges range from particular inconveniences to broad symbolic dissatisfactions. Dealing with them involves the study of activity patterns, physical arrangements, transportation modes and systems, and symbolic identifications -- fine-grained research where ultimately the detail can wag the dog and where hypothetical jumps may be inappropriate.

The intuitive process may both parallel and deviate from the analysis. It can be less problem-oriented, more joyous. From it, significant modification, not drastic imposition, should evolve -- if the campus is worth learning from, it's implicitly worth maintaining and making the best of what it can be.

"Learning from" can later be melded with the broader planning process, to help in the formulation of principles and guidelines for design.

C. LEARNING FROM THE MANY LANDSCAPES OF THE "UNI-VERSITY"

The breadth and variety of Michigan's campuses and properties present both opportunities and problems for a complex *uni-versity* that revels in both its unity and its diversity.

The introduction to this report described a wealth of diversity between and within campuses and essayed an interpretation of the University's development given its landscape, topography and history. This forms the basis for our consideration of individual campuses below.

These descriptions see the campus and its components from the viewpoint of the overall; views of each School, College or Program from the inside out will be equally important to the study and must be considered in the next phases of the plan.

1. Central Campus

Central Campus is the most urban of the campuses, with strong physical connections to Ann Arbor, especially to the State Street-Liberty Street retail area. The center of town and its edges are a varied and vital context to the Central Campus. The density of the campus, its comparatively historic architecture, and the presence of many University-wide functions and images make it "central" symbolically even as the University's eastward expansion moves it off-center geographically.

University-wide symbols. Many of Michigan's most loved buildings, landscapes and landmarks -- including the Diag. Ingalls Mall. Michigan Union, the Michigan League, the Rackham Building, Hill Auditorium, Burton Tower, Angell Hall, and Engineering Arch -are on Central Campus. These are emblems of the University as a whole.

Density. Of the University's 36,450 students, about 23,000 are enrolled in schools and colleges on Central Campus. The adjacent commercial neighborhoods draw on this density and contribute to it by attracting many non-University users as well as North, Medical and South Campus students, faculty and staff.

Central functions and activities. Most University-wide administrative, cultural and performing arts activities and the offices of the President, Provost and Executive Vice Presidents are on Central Campus, which is important symbolically as well as functionally.

Historic buildings. Although only the President's House and the Detroit Observatory remain of the pre-1870 campus, there is a wealth of historic building on Central Campus in a variety of styles and materials. Some -- Rackham, Hill Auditorium and Burton Tower -- were built for particular uses and have become University-wide landmarks. Many others -- like Lorch Hall, the Dana Building, West Hall and North Hall -- are generic, loft-like, masonry structures that have served a succession of uses, as teaching philosophies and technologies have changed.

fronts to the street.

Orientation toward streets. Early buildings on the original fortyacre superblock were constructed facing its perimeter streets; the central yard was a pasture and, as the campus developed, this "residual" space was treated less formally than was the perimeter frontage. Most outward facing buildings of the earliest campus have been demolished and, since 1890, campus plans have focussed attention on the central space with its famous Diag; yet many of the most symbolic buildings on Central Campus face public streets or pedestrian ways that were once streets. Street facades are generally more formal, classical and imageable than facades on the Diag. Angell Hall, Alumni Memorial Hall and the Clements Library, for example, offer symmetrically composed, columnar

The Diag, originally a pedestrian shortcut across the superblock, is now the main crossing point and image of the Central Campus. It is the most important symbolic space on Central Campus and possibly within the whole University. Its design and materials serve the continuous ballet of campus movement between the most heavily used teaching spaces on campus. Particularly in fine weather, it is much used for recreation and "just sitting." To quote Professor Grandison (SNRE):

"Michigan handles an unusually large volume of pedestrian traffic on a relatively small site in an urban context. In contrast, most large public universities are situated on large tracts of land. In this sense, Michigan is more similar to private urban universities. However, most private urban campuses with limited space ... have much smaller university populations and much less openness to the public The fact that the number of people per unit of area on our campus is unusually high means that this campus cannot easily accommodate the softer, greener ambiance of the stereotypical campus--that is, not without a very high degree of maintenance ... how effective the functional, open design of our campus has been. The design accommodates a steady pedestrian flow, which occurs rather freely in this limited space. Other designs could have resulted in chaos. This freedom of movement is true even at the height of use between classes, when the space accommodates mobs of pedestrians. Moreover, the design has provided remarkable opportunities for adaptive use by students and passers-through. On an average Fall day, walk along the East University, the Ingalls Mall, or even the less successfully redesigned Diag, and you will see what I mean. Students sunbathe on the raised lawns to see and be seen. Bicyclists zip through cramped spaces with minimal harm to others and park their vehicles conveniently. Classes meet under the shade of trees on sunny days, as people stream this way and that. Even the corners of the seatwalls provide for a surprising variety of interaction and uses. The campus stays clean and in relatively good shape, despite the heavy traffic and limited grounds personnel."

Ingalls Mall extends from the Hatcher Library north to the Rackham Building to form a visual connection across the superblock. With its aligned buildings and formal landscape, it overlays Beaux Arts planning principles on this section of the campus and is a primary component of the image of the University. The asymmetrically placed Burton Tower, west of this axis, provides a counterpoint and, with Rackham, helps shift the centerof-gravity of Central Campus northward from the original forty acres. Landscape organization and character. The courtyards, greens and malls of the Central Campus seem modeled somewhat distantly on English Medieval and more closely on American eastern collegiate exemplars. The landscape character of the greens and courtyards is simple and large-scale with few fussy elements -- informal groups of trees in lawn. Central Campus is generally a successful collection of spaces of varying scales that are linked together by "green corridors." On a broader scale, there is little perceptual connection between the Central Campus and the Huron River flood plain, except at Nichols Arboretum or as you circulate en route to the North Campus.

A variety of scales. The scale of buildings on Central Campus varies, from residential-scale of houses converted to academic use, to the modest yet institutional-scaled Alumni Memorial Hall, and to the imposing Rackham terminating the Mall. In some cases, for example the juxtaposition of the President's House across from the Law Quadrangle, the mix of scales is serendipitously charming.

Central Campus outside the Classroom Walls. The Advisory Committee writes, "... Central Campus has both shortcomings and positive attributes...places such as the Michigan Union and the Michigan League are quite unique to the campus and its secular life. Besides Rackham, however, there are few venues for creating a sense of identity with one's peers, no faculty club, no undergraduate center that is the equivalent of Rackham, few identifying outdoor spaces besides the Diag and the Law Quad which create a vibrant sense of 'home' for the various constituents of the University community. Student circulation and movement patterns and places of intense student use should be given attention which is equal to buildings and spaces. The Campus needs learning centers, vibrant spaces where people will want to gather, taking learning beyond the classroom walls and making it part of the campus milieu." Committee member Sherman James adds, "...the beautiful, arresting space directly in front of the graduate library and off to the left toward State Street is ... inviting for unhurried conversation, and I do invite colleagues to join me for conversation over lunch in this space whenever the weather permits. The problem, at least in my view, is that there are not enough such inviting outdoor spaces on the U of M campus."

Ann Arbor's classic downtown commercial district edges and weaves into the Central Campus. A few mini-centers make for picturesque and vital contrasts with the Central Campus and link it to residential areas they border or sit within. Churches of varying historical periods enrich the urban and campus context. The interweaving is perhaps best where the town-gown boundary is at midblock and streets have been enabled to retain their symmetry of activity on either side, as on parts of State Street and South University Avenue. Parking at the perimeter. In some instances, a collision of scales and a sea of parking create a distinction and a barrier between town and gown. An example is the Thompson Street parking structure: to its west is a neighborhood of modest houses and small apartment buildings; to its east are University dormitories and administrative buildings. They are separated rather than linked by the parking structure and adjacent parking lots. Is the scale contrast urban, poignant, and in some way the sign of a living city, or is it merely disruptive?

Residential neighborhoods. At their best, the residential neighborhoods surrounding Central Campus have an American small town character that adds to the sense of a traditional campus. Some in the immediate vicinity, where University expansion has left little "critical mass," are in apparent decline with poorly kept houses and yards.

Learning from Central Campus Robert Venturi

The Central Campus as a kind of superblock whose rich variety and hierarchies of elements include:

• Pedestrian Circulation: A gridiron system of paths reflecting that of the streets of the town beyond; upon which is juxtaposed a system of diagonal paths through spatially ambiguous-piazzas; upon which is juxtaposed a central axial "boulevard" connecting Hatcher Library and the Rackham Building.

• Architecture: Brick structures of generous scale, varying rhythms, and consistent heights that constitute a group of the most distinguished generic loft buildings to be found anywhere; that are, via their classic forms and varied ornament, anti-stylistic; that work, via their particular shape on the outside, to direct or border exterior space; and whose particular configurations of inside space can variously accommodate classrooms, libraries, laboratories and other uses over time.

• Symbols and Signs: Very little of, except for the Burton Memorial Tower which effectively symbolizes the center of the campus as a whole and constitutes an emblem of the University as a whole -- and in these ways enhances unity. And then there is the sculpture -- the Carl Milles we particularly love -- that enriches spaces, and signs that direct circulation, and poster boxes that announce events. Such kinds of iconographic elements can be developed to further enrich the environment and its symbolic content and identify place and direction within a complex configuration.

• The Elements of Connection and Proximities and the Configuration of Precincts: All of these elements work together to promote community, identity, and convenience within the central campus and have been analyzed via various maps that are part of this study.

• The Landscape of the Central Campus.

• The Boundaries of the Central Campus or the Physical Relation between Town and Central Campus: The edge of the campus can be explicitly delineated by a street as divider as along South State Street, North University Avenue, and Maynard Street where these commercial streets sit across from a comparatively guasi-rural campus and create vivid contrast and thereby whamo vitality. On the edge of the campus can be explicitly delineated by a sudden change along a street from quasi-rural campus on both sides to (student-oriented) commercial-retail on both sides as on South University Avenue where it is crossed by East University. These examples of vivid edging involve contrast. Other edges of the Central Campus are less explicit and represent interweaving more than edging. And from their ambiguity can also derive positive tensions -- spatial and architectural -- between campus and town. And from these juxtapositions involving diversities of parts and of relationships derives a configuration of center of town and Central Campus ambiguous and explicit that makes for a whole that is rich and vital.

University of Michigan: General Ideas Derived from Different Sources in No Particular Order Robert Venturi

COMMUNITY	•	Pa
COMMUNICATION	•	Ma
CONNECTION	Nc	orth I

- Dangers of landscape/prettification as substitution for urban/campus planning.
- Community input

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Interdisciplinary issues

 Exciting juxtapositions -- urban-commercial and American "rural" campus; vivid juxtapositions and, at the same time, ambiguities concerning the borderlines between campus and town.

• Identification of campus: the gateway identifying the edge vs. the sign diminishing the sense of edge and identifying place in general.

• Washington vs. Philadelphia city plans and the acknowledgement of diagonal circulation.

- Continuity vs. juxtaposition.
- Wayfinding via signage/iconography.
- Not expressive architectural grandeur

'Main Street is almost all right' has become 'Main Street is almost flourishing.'

- Proximity and infill
- Acknowledgement of "bad weather"
- Frederick W. Mayer has a wonderful amount of history in his head.
- Challenging vs. overwhelming •
- Technology: computer, web, LED
- Signs more than space and form
- The desanctification of the North Campus
- Hard edge vs. soft edge

• Kerrytown: a great high school and therefore families are coming back.

arking issues

lagnificent coming together of institution and commercial at n University and South State Streets!

Picturesque river area vs. the grid plan above

Very beautiful houses of all periods in the town

Evolution vs. revolution

Academic planning

Housing

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Eventual emphasis on sciences

Beauty and relevance of older loft buildings.

Desanctify the North Campus with its commercial facing inside like a commercial mall -- how about some commercial iconography?

• More on appropriate desanctification of the North Campus: to enhance continuity and connection, and complexity and contradiction -- via pedestrian amenity deriving from increases in architectural proximities, architectural infill, and architectural openness (i.e., you can look inside and see activity), and programmatic diversity including commercial uses, and iconographic dimensions including commercial signs and aesthetic/historical signage involving varying media; decrease the aesthetic of harmony via analogy and increase that of harmony via contrast: diminish architectural, stylistic, motival consistency and accommodate valid juxtapositions for today for a multi-cultural institution in a multicultural time.

• Commercial areas: 1) Kerrytown, 2) South University, 3) State and Liberty. 4) Main Street.

 Realistic planning involves not solely revolution or solely evolution but rational and aesthetic combinations of both.

2. The Medical Campus

Seen from across the Huron, the Medical Campus is an impressive sight, high atop a steep wooded bluff near a major river crossing. From various points of view, the Campus can also be seen as:

A dense configuration of large buildings. An oxymoron, • "autocratic pragmatism," seems to apply to its evolution over time.

• A hard rind with a swiss cheese center (p.36): Its exterior ring of buildings projects little spatial coherence or identity except seen from across the river and flood plain. An inner epithelium of older buildings and courts is pleasantly scaled to the campus and city, but is considered in need of renewal or demolition. The inner campus forms a pleasant and well-used network of open spaces but these are disconnected from their surroundings. The space at the center (site of the Old Main Hospital building) may offer opportunities to connect with Central Campus. Wall Street could be seen as an extension of the Medical Campus, taking it across the river and toward interdisciplinary connections with the North Campus.

• An automobile-centered landscape. Because most patients -- and many faculty, staff and visitors --- arrive by vehicle, large spaces are auto-dominated and public pedestrian spaces are tucked into smaller, more intimate areas between buildings. At the perimeter, vehicles move quickly along roads which are uninviting to pedestrians. Parking lots, building drop-offs, and the continuous facades of parking garages that edge the ring road project the image of the landscape.

A series of open spaces contributes to the character of the Medical Campus:

• The Old Main Hospital Site. The steps off Couzens and Observatory Roads, which once led to the entrance of the old hospital, now give on to an open parking lot below, edged with buildings that turn their backs to the space. This vantage point and its position in the topography and urban grid imply a significant formal spatial connection between Ann Arbor and the Medical Campus. A reformulated and re-landscaped parking lot at the old hospital site is planned for the near term; in the long term, the site could provide a location for an important University building linking Medical and Central Campus uses.

• *Pedestrian Passages and Courtyards*. At the northern perimeter of the parking lot a public open space runs eastwest between the Medical Center and the Taubman Center Hospital. Building entrances open onto this space, providing good connections, but some are poorly marked, and some doorways are invisible. The character of the space is intimate, well-defined and detailed. The courtyard at the Mott Hospital is a pleasant surprise, with seating areas for people, trees, turf, and a wellplaced entrance. Other people-oriented spaces are included in a few small interior courtyards, many of which use a special palette of plantings and materials.

We have received extensive e-mail from the University medical community. From these and other comments and our own observation, it is apparent that many factors affect perceptions of the Medical Campus:



fig. 32. View of the Medical Center from across Fuller Road

• Complex circulation routes between buildings block direct access from Central Campus and from the inner courts of the Medical Center to the exterior perimeter.

• Uses of buildings and spaces. The Medical Campus is a complex mixture of academic, clinical, research and administrative uses. Within and around the Campus, retail, dining and recreational amenities for its users, including students, faculty, staff, and patients and their families are insufficient. Connections to the city from either the perimeter or the inner campus are difficult.

• *Topography*. The Medical Center buildings form a strong, bastion-like edge along the bluffs above the Huron River Valley and adjacent to the ravine of School Girls' Glen. The northeast edge of the site is one of the most dramatic topographies of the campus, with views north to the river and east to the Arboretum. Changes in grade around almost all edges define the Medical Center plateau and separate Medical Campus from Central Campus and other adjacent areas, isolating activities more than is desirable. For example, the Medical School and hospitals are isolated from the School of Nursing and other related medical activities west of Glen Avenue.

• Views. Assistant University Architect Paul Couture notes, "Though it is true that the perimeter of the Medical Center is bordered by a ring road, parking lots and parking structures, much of the perimeter of the new Hospital facilities (and the newest Medical School research buildings) take advantage of the magnificent views of the river valley and nature. Some 300 patient rooms in the University Hospital have spectacular views of the river valley, each room with low, broad windows specifically placed to maximize the sight lines from a patient bed. ... The value of this view of nature was also extended to numerous public and staff spaces..."

• *Pedestrian access.* Although almost all patients arrive by vehicle, many students, staff and faculty walk to Medical Campus destinations daily. Access from Central Campus is problematic owing in part to difficult pedestrian crossings, particularly at the intersections of Huron and Zina Pitcher and Zina Pitcher and East Ann, and across the Medical Center Drives.

• Special buildings and spaces. A few architectural gems -- the Simpson Memorial Institute, for example, or the Detroit Observatory across East Ann -- and spaces are memorable and loved by those who use them. The courtyard at the Mott Hospital, for example, is a well-made surprise at the heart of the Medical Center.

Strengths. The medical campus has been virtually rebuilt during the past decade; only the satellite activities, by design, are outside the central perimeter. This internal design is characterized by its connectedness -- the broad corridors and high ceilings, the glass covered bridges, the circular walk linking many of the clinical

• *Connections*. This section is by Macdonald Dick II, M.D.:

buildings and encompassing the treed central courtyard are all well designed, executed and people friendly. These features are invigorated by the people who gather for the myriad of activities that take place there: concerts, picnics, ice cream socials, jazz bands, magic shows, basking in the warm (out of the sun) weather, lunching, conversation, grieving, counseling, meeting, contemplating.

Weaknesses. This connectedness in the hospitals and clinics is not fully linked to the medical school and basic research enterprise. Further, the medical campus is isolated from the other campuses; only the Big Blue Bus Service and the computer network provide some ties (albeit good ones).

Adjacent to the Medical Campus are areas that do not clearly belong to one campus or another:

• School of Nursing. Located across Glen and "behind" the highrise North Ingalls hospital administration building, the School of Nursing is at the periphery of the Medical Campus, isolated geographically from the Medical Center and Central Campus. Owing in part to its isolation, some in the community perceive that the area is not as safe as many others on campus.

• School of Public Health. At the southern edge of the Medical Campus (or is it the eastern edge of the Central Campus?), the School of Public Health -- although more visible from busy streets and more directly related to the Medical Center than Nursing -- is separated by dormitories, Palmer Field and other uses from Central Campus academic buildings.

• The Arboretum. Nichols Arboretum -- part of which is on City land -- is directly across East Medical Campus Drive from the hospital. Established in 1906, the Arboretum's dramatic landform slopes 180 feet from Geddes Drive to the Huron River; it is dissected by School Girls' Glen and the Main Valley. O.C. Simonds, founder of the University's Department of Landscape design, was largely responsible for the overall character established in the original design and layout, incorporating a "long view" and a sense of mystery that still pervades the site. Several early directors added plants and design elements of both ornamental and teaching value -- Tealdi's Peony Garden, for example -- that continue to delight.

The Arboretum, which offers a direct connection to the Huron River, is a short walk from Central Campus; from its entrance along Geddes Avenue, it offers a spectacular view of North Campus. The Arboretum's beauty and its physical and visual linkages to the River, and North, Central, and Medical Campuses make it an important central landscape, and its educational and research mission make it a valuable resource for the entire community.



fig. 33. Yost Arena

3. South Campus

The largest, most memorable buildings on South or Athletic Campus were built for particular purposes, which are reflected in their form. The purposes of Michigan Stadium and Crisler Arena are instantly recognizable. These buildings are emblems of their sport and symbols of Michigan athletics. The stadium is probably the building on campus most widely known by the outside world, given its frequent appearance on television. It is the terminal of a crowded but informal processional of visitors who wend their way to the football game from parking places between Central and South Campus.

These special events buildings must accommodate by far the largest crowds on campus. They generate intense parking needs. In tandem with the Campus' outdoor athletic fields, their requirement for ample surrounding space has given the South Campus a coarse-grained fabric of buildings and spaces. This coarse grain contrasts with the residential scale of the neighborhoods to the east, west and northwest (p. 36).

Cutting a diagonal swath through South Campus is a railroad track. The industrial sheds along its west side and the large parking lots to their west form the vast interior of this Campus (fig. 34). The workaday buildings here serve primarily Facilities and related functions, but also Public Safety, the University of Michigan Press and other administrative functions. Staff in these locations are distant -- geographically and perhaps even more so perceptually -- from their colleagues on Central Campus and in Wolverine Tower and from "even a bad cup of coffee," to quote one South Campus resident.

East of the railroad tracks are athletic buildings and fields. In this area, buildings along streets form a distinct campus edge following the urban grid; Yost Arena is particularly beautiful and loved by many in the University community (fig. 33). The Intramural Sports Building, which -- with Canham Natatorium and Keen Arena defines the Hoover Street edge of the Campus and one side of the Ferry field track -- is also a handsome structure. The large scale of its central arch is analogous to the scale of the Field to the south and stands in lovely and poignant contrast to the houses along Mary Street to the north. The metal shed Track and Tennis building along the railroad has more in common stylistically with the industrial buildings across the tracks than with its more distinguished neighbors. Some street trees and a few ornamental plantings comprise the plant vocabulary.

The University Golf Course is located south of Stadium Boulevard, and includes frontage on Stadium, State and Main; the Varsity Tennis Pavilion is south of the course.



fig. 34. View of the "Interior" of South Campus

4. North Campus

North Campus landscapes range from the School of Music's clearing in a metaphoric wilderness to the centrally organized Engineering precinct. Some infrastructure and building siting has been based on Saarinen's plan, but the campus has expanded beyond the limits of the plan and deviated from it in many ways:

• Instead of a series of interconnected courtyards and pedestrian spaces at the heart of the academic core as planned, there is a large centrally organized space -- the North Campus Diag -- with a bell tower.

• The scale and footprint of academic buildings and the central space is larger and the scale of the family housing units much smaller than assumed in Saarinen's plan.

• Some roadways and buildings -- for example, Bursley Hall and the Baits houses and the curvilinear realignment of Beal Avenue to accommodate a large parking lot at the "front door" of the Lurie Building -- are more romantically, less orthogonally organized.

• Bonisteel Boulevard was planned to connect with an interstate highway, but the highway was located farther east and Bonisteel was not a connector. Should Bonisteel's width and configuration be reconsidered to accommodate changed circumstances?

The fact that the plan has been abrogated does not imply criticism of the plan or of subsequent development, the character of which undoubtedly arose from circumstances and programmatic concerns that could not be anticipated in 1955. An understanding of the place as it is today can help us formulate strategies for the future.

Scale. On this campus, the vastness of nature vies with an overscaled built environment -- "Central Campus with glandular problems," (DVSB) "utilitarian blandness ... aggravated by size" (Joe Vining). Big roads and vast spaces co-exist with bulky, largely unrelated buildings.

Character. North Campus major streetscapes feel like areas of access ramps to an expressway. The Campus's main open space is not yet complete, but -- although roughly the same size -- seems much vaster than its forefather on Central Campus; crossing its Diag feels more like a long trudge than a campus ballet. Small spaces behind various buildings, including the famous Wave Field, are a private relief to public vastness, as are the romantic landscaping of the School of Music and some remaining forest tracts. The character of North Campus buildings varies with their organization and placement in the landscape, but they are mostly large with unbroken masonry surfaces and their materials are mostly similar. Saarinen suggested the campus be united by using a single brick color. That's not necessarily bad, but the (honorable) bulkiness of the buildings and their uniformity calls for some variety in their open spaces and their landscaping.



fig. 35. North Campus Diag

Symbolism. A mythic landscape that never really was? Originally forested with oak and other upland hardwoods, North Campus' remnant hardwood stands have been supplemented with massive implantations of evergreens. But conifer forests have never been typical of Ann Arbor.

The North Campus as Utopian Exurbia. The mid 20th-century Modernist planning ideal combined the Romantic English garden -without picturesque ruins -- and Ville Radieuse -- without rational slabs -- with a dash of exurban exotica. This gave the aura of the post-war research park.

Perceived problems involve many C-words:

• *Connections*. Lack of proximity and ambiguity concerning distances can encourage isolation among the parts and make for weak connections among departments and buildings. Is this a pedestrian or a vehicular place?

get in a car.

• Communication and Community. Proximity would permit informal communication and communication would stimulate community -- lack of incidental opportunities for intermingling is a problem.

• *Crowds and Critical Mass.* Are there too few people on the North Campus to engender a market for convenience retail or allow a perception of safety?

• *Coherence*. Is there too much of it? Have the planning ideals been too much respected? Can planning that seeks a picturesque relation to an imagined natural landscape, produce solutions to the North Campus need for building density and problems of connection?

• *Controversy.* Connecting to the aesthetic and planning needs of our time may require a less evolutionary and more revolutionary stance here, to make the North Campus a place that acknowledges both its natural setting and the complex and contradictory diversity of our time. As it stands now, it only incidentally exemplifies the historically evolved Central Campus, yet it has gone too far in its development to return to the forest clearing. But an act of desanctification of this sacred place will risk controversy.

• North Campus Residential. Housing on North Campus is fuori le mura -- "outside the walls" of the academic core. With the exception of Bursley Hall and Baits Houses, most of the North Campus residential is family housing. Should it be seen as part of the residential matrix developing north and east of it that includes land within the University's properties east of Highway 23, or as a University enclave seeking better connection to North Campus life? Or as both?

• *Convenience and Commercial.* "There's no place to buy a Sudafed," students say, and dining options are limited unless you

5. East Properties

University property east of Highway 23 -- which comprises almost half the Ann Arbor campus -- includes several distinct areas, ranging from suburban corporate parks to natural areas. The Matthaei gifts represent about half of the University's land in this area:

• *The Matthaei Botanical Gardens*, at its main location on Dixboro Road is a 350 acre preserve that includes display gardens, a visitor center and a public conservatory. The Gardens were given to the University by Frederick C. Matthaei, Sr. and his wife Mildred Hague Matthaei, and are dedicated to research, education and public outreach.

• *Radrick Farms*, another Matthaei gift to the University, includes former agricultural lands, a fen, and an old-growth upland forest. According to the minutes of Regents meeting in which the gift was accepted (November 1961), it was given to be used "for the establishment and use of faculty residences, classrooms, a golf course, any desired extension of the Botanical Gardens and for other scholastic and recreational uses." Current recreational uses include a faculty and alumni/ae eighteen-hole golf course and a challenge rope course. Cross-country ski trails traverse the forest and south agricultural fields. The fen and the south agricultural fields are managed by the Botanical Gardens and are used for teaching and research purposes. The Radrick Forest has been used for Botanical Gardens research and teaching and Recreational Sports cross-country skiing since 1987.

Other University properties east of Highway 23 include:

- *Horner-McLaughlin Woods*, 95 acres just south of M-14, which is part of the Botanical Gardens and is used for research and adult education.
- *A Michigan Health Care* primary care medical facility and associated surface parking, built in 1996 south of Plymouth Road, convenient to the US-23 interchange.

• *Arbor Lakes*, a former corporate facility north of Plymouth Road, purchased in 1997 and currently occupied by several University departments, including some offices of the Information Technologies Division.

• *Parcels in the Ann Arbor Technology Park* owned by the University are near facilities owned by Toyota, Mazda, and other corporations, and are subject to the easements and restrictive covenants described in the ownership documents, including restrictions on use.

Much of East Campus is undeveloped, and within its undulating topography there are several distinctive landscapes, including remnant rural and natural areas. Fleming Creek, a tributary of the Huron flows through these properties. At present, it is in relatively healthy condition from its headwaters to its mouth. Fleming Creek watershed has a large drainage area extending well into Wayne and Oakland Counties. Both within and beyond University property the watershed is largely undeveloped. Although the percentage of the creek within University boundaries is small, University land planning and development choices will have an influence on its future.

On a site visit, Dr. David Michener and Dr. Brian Klatt of the Botanical Gardens described to several members of the project team the value of the natural areas adjacent to the Botanical Gardens. Andropogon summarizes:

"The Radrick Fen and Forest are important representatives of calcareous fen and old-growth oak forest in southeastern Michigan. Calcareous fens are some of the rarest wetland communities in North America. The Radrick Forest is believed to be one of the few examples of pre-settlement vegetation in all of Southeastern Michigan. At present, these natural areas are remarkably undisturbed and contain a high diversity of roughly 300 native species. Many of these native species are regionally rare or endangered, including several orchids, lilies, and northern species that are at the extreme southern end of their range.



fig. 36. Radrick Forest

"The hydrology of the fen is intimately interlinked with the adjacent upland forest as is much of the wildlife which moves between upland and lowland habitats for food and shelter. The existence of the fen is supported by the unusual alkaline groundwater that seeps to the surface in the uplands and flows down into the fen. Such a wetland is sensitive to alterations in groundwater and surface quantity and quality."

Andropogon adds that the forest and fen, in addition to their environmental and educational importance, also have symbolic significance:

"On a cultural level, the Radrick Forest and Fen are a remnant of the ancient wilderness which once spread across the entire continent. ... The wilderness was a major factor which drew European settlers to the New World to carve a civilization out of the chaos of what was for them an unsettled land. The wilderness provided the raw materials with which they forged the American civilization we now know. The wilderness is also a concept, one rooted in deep, ancient corners of our collective consciousness. For the American nation, the concept and the physical reality of wilderness have been driving forces in the meaning of our lives and identities, and the Radrick Forest and Fen are tangible remnants embodying this aspect of cultural history."

6. Briarwood and Nearby Facilities

The medical facilities in Briarwood Mall represent the changing face of health care and the growth of the Michigan Health System. Like other satellite care facilities, many much further away, these represent the University of Michigan to those who use them. Medical care regional dispersion, *quo vadis?*

Wolverine Tower, a high-rise office building in an automobileoriented environment is closer to the Briarwood medical facilities than to South Campus, but its activities are more closely related to administrative functions on Central Campus. There is little physical or symbolic relationship with other parts of the University. University employees here are distant from their colleagues and students; some would like to have the sense of belonging to an academic community.

South of I-94 near the airport the University owns several storage facilities on Varsity Drive.

	Hard Rind'
	Ring Road
	Downward Slope
	Major Pedestrian Circulation & Connection
	Existing Linkage
BD	Desired Linkage
	Original 40 Acres
	Symbolic Building Fronts
	Mall (Symbolic Space)
	Potential Building Site
	UM Administration
	UM Arts, Humanities, Business, & Law
	UM Athletics
	UM Facilities
	Courtyards & Greens
	Ann Arbor Retail
	Ann Arbor Entertainment
	UM Nodes: Michigan Union, Michigan
	League, & Pierpont Commons
	UM Property

THE MANY LANDSCAPES OF MICHIGAN: MEDICAL, CENTRAL & SOUTH CAMPUSES

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Source: Hatcher Graduate Library Map Room, UM Office of Space Analysis, Universal Map





Symbol-laden Tree Clusters

Forest Clearings

- Courtyards & Greens
- Ann Arbor Retail
- Ann Arbor Entertainment
- UM Nodes: Michigan Union, Michigan
- League, & Pierpont Commons
- UM Property

THE MANY LANDSCAPES OF MICHIGAN: NORTH CAMPUS

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Source: Hatcher Graduate Library Map Room, UM Office of Space Analysis, Universal Map



- University of Michigan Property Other Institutions Housing Commercial Industrial
- Park, Recreational space, or Cem (Non-University)
 Corporate Research or Offices

ANN ARBOR: LAND USE

University of Michigan Master Plan, Phase 1 Draft

Base Map Source: City of Ann Arbor Information Services Division

Information Source: Discover the Ann Arbor & Ypsilanti Area Magazine



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D. CAMPUS PATTERNS

The University of Michigan campus is made up of layer upon layer of complex patterns -- of landscapes, activities and structures of varying ages, qualities and materials; of systems and infrastructures; and of relationships. An understanding of these patterns will be basic to any attempt to add to or change the physical campus.

In Phase I we have combined maps from different sources to convey information on all campuses and about a range of urban and campus variables -- land use, transportation, landscape and open space, natural systems and others. By illustrating some patterns -- land use and campus activities, for example -- layer by layer we hope to perceive new relationships, understand the rules that guide or should guide their growth, and thereby make wellbased recommendations.

On the following pages are maps illustrating patterns of:

1. Land Use

• Land Use: Ann Arbor (p. 38), shows the University in the larger context of the city and adjacent areas. Together, the campus and Huron River form a cruciform dividing the City into quadrants.

- Land Use: Campus and Surrounding Areas (p. 40), illustrates on one map University and off-campus activities.
- Land uses are shown disaggregated on pages 41 to 48:
- Land Use: Sciences (p. 41)
- Land Use: Housing (p. 42)
- Land Use: Religious Institutions (p. 43)
- Land Use: UM Administration (p. 44)

• University Buildings: Classrooms and Laboratory Space (p. 45) illustrates the density of classrooms and classroom and research laboratories. By this measure, parts of North Campus appear as dense as Central Campus.

- Land Use: Arts (p. 46)
- Land Use: Recreation (p. 47)

• Land Use Patterns Disagreggated (p. 48) includes individual diagrams for Open Space, Libraries, Parking and Industry.

- 2. Open Space
- Components of Open Space (p. 49)
- Open Space System: Activities and Access (p. 50)
- Landscape Types: Aesthetic and Spatial Quality (p. 51) categorizes the type and character of campus open space.

• Open Space Quality diagrams (pp. 52-53) characterize campus open space.

3. Transportation

- Transportation: Campus and Surrounding Areas (p. 55) overlays on one map major roads, parking lots and transit hubs.
- University and Ann Arbor Transit Routes (p. 56)
- Bicycle Routes (p. 57) shows Ann Arbor Bicycle routes overlaid on City and University recreational uses.
- Freshmen Path Diagram: Residence to First Class (p. 58).

- 4. Interdisciplinary Linkages
- President for Research.

We have been working on other maps -- learning channels, public safety, regional land uses, and other campus scale comparisons, for example. These are in draft form for discussion with the Advisory Committee, and will be included in future reports. As we learn more about other patterns, systems and relationships -- archaeological sites, for example -- we will map those too.

• Transportation: Ann Arbor (p. 54) shows the University within the context of regional transportation systems.

- Senior Path Diagram: Residence to First Class (p. 59).
- Scale Comparisons: Walking Distances (pp. 60-61) illustrates walks between UM campuses and equivalent distances in wellknown cities. What makes some walks more imageable and manageable than others? Walking from landmark to landmark? Along a line or easily defined path? Activities along the way?

• Interdisciplinary Linkages as Reported by the Deans (p. 63) was prepared in 1994 by Patricia S. Whitesell, Office of the Vice

UNIVERSITY OF MICHIGAN

UM Health System

College of Pharmacy, Division of Kinesiology, School of Dentistry, School of Nursing, School of Public Health, & the Medical School UM Libraries

College of Architecture & Urban Planning, Law School, College of Literature, Science & the Arts, Officer Education Program, Rackham Graduate School, School of Art & Design, School of Business Administration, School of Education, School of Information & Library Studies, School of Music, School of Public Policy Studies, & the School of Social Work LS&A Sciences, College of Engineering, & the School of Natural Resources & Environment UM Institutes

UM Athletics UM Recreation UM Student Housing UM Student Services UM Museums UM Administration UM Performing Arts UM Facilities

OTHER LAND USES

Medical Hospitals & Clinics Industrial Corporate Complexes, Research & Development Offices Corporate Properties Institutional Other Colleges and Universities Public Open Space Housing Multi-Unit Housing Offices Retail Entertainment Parking Lots Parking Garages

LAND USE: CAMPUS & SURROUNDING AREAS

University of Michigan Campus Plan, Phase I

Base Map: UM Facilities Planning & Design Information Source: UM Office of Space Analysis, Hedberg Maps, Inc.





- UM Health System
- Other Hospitals
- UM School of Public Health
- UM Medical School
- UM School of Dentistry
- UM School of Nursing
- UM Division of Kinesiolgy
- UM College of Pharmacy
- UM Institutes
- UM LS&A Sciences & SNRE
- Taubman Medical Library
- UM College of Engineering
- Corporate Research and Development
- Ann Arbor Retail
- Ann Arbor Entertainment
- UM Nodes: Michigan Union, Michigan League,
- & Pierpont Commons
- UM Property Limit

LAND USE: SCIENCES

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Source: UM Office of Space Anaylsis



- UM Dining in Residential Halls
 UM Student Housing
 UM Fraternities, Sororities, & Co-ops
 Single Family Housing
 Multi Family Housing
 Ann Arbor Parks & Golf Courses
 Ann Arbor Retail
 Ann Arbor Entertainment
- UM Nodes: Michigan Union, Michigan League, & Pierpont Commons
 UM Property

LAND USE: HOUSING

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Source: Discover the Ann Arbor & Ypsilanti Area Magazine, UM Office of Space Analysis, Hedberg Maps, Inc.





- Ann Arbor Religious Institutions
- University Affiliated Institutions
- UM Spaces Also Used by Religious Groups
- Tuniversity Liaison for Ethics & Religion Ann Arbor Retail
- Ann Arbor Entertainment
- UM Nodes: Michigan Union, Michigan
- League & Pierpont Commons
- UM Property Limit

LAND USE: **RELIGIOUS INSTITUTIONS**

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Sources: Ann Arbor Observer City Guide http://www.umich.edu/UM-Clubs.html

SQUARE FOOTAGE OF OFFICE SPACE

- Over 50,000 sq. ft.
- 40,000 49,999 sq. ft.
- 30,000 39,999 sq. ft.
- 20,000 29,999 sq. ft.
- 10,000 19,999 sq. ft.
- 1,000 9,999 sq. ft.
- Under 1,000 sq. ft.

KEY

 President's Offices
 University Relations Offices
 Academic Affairs Offices
 Research Offices
 Student Affairs Offices
 Medical Affairs Offices
 Development Offices
 Development Offices
 UM Facilities
 Ann Arbor Retail
 Ann Arbor Entertainment
 UM Nodes: Michigan Union, Michigan League & Pierpont Commons
 UM Property Limit

LAND USE: UM ADMINISTRATION

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Source: UM Office of Space Anaylsis





Base Map Source: UM Facilities Planning & Design Information Source: UM Office of Space Analysis



University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning and Design Information Source: UM Office of Space Analysis, Discover the Ann Arbor and Ypsilanti Area Magazine, Ann Arbor Observer City Guide 1997-1998, American Association of Museums





- Ann Arbor Recreational Buildings
- UM Varsity Sports Buildings
- UM Intramural Sports Buildings
- UM Varsity Sports Fields
- UM Intramural Sports Fields
- UM Golf Courses
- UM Land
- UM Parks & Preserves
- Ann Arbor Parks
- Ann Arbor Golf Courses
- Ann Arbor Retail
- Ann Arbor Entertainment
- UM Nodes: Michigan Union, Michigan League,
 - & Pierpont Commons
- UM Property

LAND USE: RECREATION

University of Michigan Campus Plan, Phase I

Base Map Source: Facilities Planning & Design Information Source: Ann Arbor Department of Parks & Recreation, Ann Arbor Discover City Guide 1997-1998, Matthaei Botanical Gardens Draft Planning Map 1997







UNIVERSITY OF MICHIGAN LAND USES

- UM Libraries
- Parking Lots

Parking Garages

OTHER LAND USES

- Industry
- Public Open Space
- Cemeteries
- Parking Lots
- Parking Garages

LAND USE: PATTERNS DISAGGREGATED

University of Michigan Campus Plan, Phase I

Base Map Source: Facilities Planning & Design Information Source: UM Office of Space Analysis, Hedberg Maps, Inc.

"Open space provides resources supporting the quality of life, human health, psychological, water quality, air quality, soil erosion, aesthetic/scenic quality, and wildlife impacts" . (Washtenaw County Metropolitan Planning Commission, 1997)

"In the natural world, everything is interdependent. As the landscape is crissed-crossed with a network of roads, storm sewers, and drainage ditches...(n)ature's important, cost-free controls have been by-passed...By maintaining landscape patterns of large woodlands and wetlands (nodes) and wooded stream valley and drainage-ways, significant natural functions are protected." (Robert Coughlin, et al. 1993)

What opportunities exist for the University to tie into regional landscape patterns? How does University open space fit into the larger picture. By planning cooperatively with municipal and regulatory agencies, the University build an open space system that links to a regional network, provides a wider range of recreational opportunities and is ecologically more resilent. The following landscape types represent possible candidates for part of a future open space system:

1. Agricultural Lands (top right): These should be preserved both as a future agricultural resource and for their scenic and cultural values.

2. Fragile Lands (bottom left): Fragile lands are environmentally sensitive areas that are ecologically significant. They should be preserved to provide a representation of regional ecosystems, for educational purposes and for their scenic and cultural values.

3. Traditional Recreational Space (bottom right): These areas are an important component of any open space system and should be included to provide a variety of active recreational opportunities.

4. Cultural Sites (not mapped): These sites are an important part of a cultural heritage and are often important for their educational and scenic value.

5. Brownfields (not mapped): Old industrial sites, abandonned railway right-of-ways, former landfills and other wastelands present a major opprtunity for new open space in dense urban areas.

COMPONENTS OF OPEN SPACE

University of Michigan Campus Plan, Phase I

Sources: Facilities Planning & Design Ann Arbor Department of Parks & Recreation, Ann Arbor Discover City Guide 1997-1998 Robert Coughlin et al. Guiding Growth. 3rd Ed. Pennsylvania Environmental Council, Inc. 1993. Washtenaw County Metropolitan Planning Commission Wastenaw County Agricultural Lands and Open Space Preservation Plan Final Report December 1977 Geographical Information Systems maps for Regional Open Space, Agricultural Lands and Fragile Lands





REGIONAL OPEN SPACE

Source: Weehtenew County Metropoliten Plenning Commission 1977

KEY Essential Agriculture



Source: Washtenaw County Metropolitan Planning Commission 1977



Active Recreation

TRADITIONAL RECREATIONAL SPACE

Source: Ann Arbor Department of Parka & Recreation, 1997-1998

DEDICATED 'PUBLIC' OPEN SPACE (unrestricted access and activities)

- Natural Areas areas with native vegetation communities, supporting primarily passive, low intensity use
- Parks/Arboretum areas where native vegetation is interspersed with turf, supporting both active and passive uses.
- Campus Open Space areas with extensive turf and pathways. May include canopy trees. Supports a wide range of active and passive uses
- Sports fields Primarily active uses

DEDICATED ('SEMI-PUBLIC') OPEN SPACE (restricted access and activities)

UM Gardens and Reserves

School Playgrounds

Golf Courses and UM Sports Facilities

Cemeteries

- Valuable Natural Areas
- Undeveloped Open Land with Native Vegetation
- Bike Routes
- UM Property

OPEN SPACE SYSTEM Activities and Access

University of Michigan Campus Plan, Phase I

Base Map Source: Facilities Planning & Design Information Source: Ann Arbor Department of Parks & Recreation, Ann Arbor Discover City Guide 1997-1998

School of Natural Resources & Environment, Geographic Information Systems Facility, Unversity of Michigan Matthaei Botanical Gardens draft planning map, 1997, topo and golf course limits based on JJR base plan





Natural Areas

KEY

Native vegetation which retains its original structure and species composition.

Parkland

Wooded areas with lawn below mature canopy trees, both coniferous and deciduous.

Traditional Collegiate Campus

Spaces, largely enclosed by buildings, form a unified landscape. Plantings are mostly mature deciduous canopy trees, grouped informally in lawns.

Suburban Campus

Individual modern buildings are surrounded by large lawns with scattered specimen trees. Remnant stands of hardwood forest and conifer plantations accentuate outer edges. In the core, large scale buildings enclose wide, central greens and subsidiary spaces.

Modern Urban Campus

Large scale buildings surround interior courtyards with scattered trees and minimal plantings. Vehicular spaces and paved plazas predominate.

Residential: Suburban Apartments Low residential buildings are placed between parking lots and wide lawns. Plantings include scattered canopy trees and foundation plantings.

Athletic Fields and Recreational Turf Very large, flat, open areas of closely mown grass, punctuated by athletic equipment, utilitarian fencing and hedge-like plantings. Some spaces are defined by large buildings, mostly athletic facilities.

Services and Parking Campus areas largely paved, mostly devoid of planting and dominated by vehicular use.

UM Property

LANDSCAPE TYPES: Aesthetic and Spatial Quality

University of Michigan Campus Plan, Phase I

Base Map Source: Facilities Planning & Design Information Source: Hedburg Maps, Inc.: Professor Pathfinder's University of Michigan and Central Ann Arbor Map

Looking at the "voids" in the landscape which are used by people, these maps show the quality and pattern of those spaces. Like outdoor rooms, the shaped, contained sequence of spaces offer a vivid contrast to the free-flowing spaces of North and South Campuses. Note the prevalence of auto-dominated spaces at the periphery and on North and South Campuses.

KEY

- Campus Green Type Spaces: shaped, contained spaces which are primarily planted
- Plaza or Mall Type Spaces: shaped, contained spaces which are primarily hard surfaced
- Open lawns, lawn extensions, soft planted surfaces, playing fields
- Parking and auto-associated spaces

Connector spaces

* Special outdoor places

Alumni Center Space towards Mich. League Assembly Hall (Business School Oak) The Diag East Quadrangle Courtyard East University Walkway Ferry Field Track Ingalls Mall Law Quad Rackham Graduate School Gardens School of Education Courtyard University Hospital Center Gardens West Quadrangle Courtyard

OPEN SPACE QUALITY: CENTRAL, MEDICAL & ATHLETIC CAMPUS

University of Michigan Campus Plan, Phase I Draft

Base Map Source: Facilities Planning & Design Information Source: Ann Arbor Department of Parks & Recreation, Ann Arbor Discover City Guide 1997-1998

Sources of special places: Frederick Mayer letter February 27, 1998; Donna Erickson email March 5, 1998; Ann Knott email March 5, 1998





- Campus Green Type Spaces: shaped, contained spaces which are primarily planted
- Plaza or Mall Type Spaces: shaped, contained spaces which are primarily hard surfaced
 - Open lawns, lawn extensions, soft planted surfaces, playing fields
 - Parking and auto-associated spaces
- Connector spaces
- * Special outdoor places

Bentley Historical Library Courtyard Gerald Ford Library Courtyard Moore School of Music Building Pond '47E Reflecting Pool Courtyard Wave Field



022712022

Contraction

Canadian

OPEN SPACE QUALITY NORTH CAMPUS

University of Michigan Campus Plan, Phase I Draft





Base Map Source: Facilities Planning & Design Information Source: Ann Arbor Department of Parks & Recreation, Ann Arbor Discover City Guide 1997-1998 Sources of special places: Frederick Mayer letter February 27, 1998; Donna Erickson email March 5, 1998; Ann Knott email March 5, 1998



Base Map Source: City of Ann Arbor Information Source: Hatcher Graduate Library Map Room 54

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- CITY PARKING LOT
- P CITY PARKING GARAGE
- UNIVERSITY PARKING GARAGE
- **P** UNIVERSITY PARKING LOT
- AATA BUS STOP
- * BLAKE TRANSIT CENTER
- LIMITED ACCESS HIGHWAY
- STATE ROADS
- ---- MAJOR THROUGH STREETS
- UNIVERSITY BUS SYSTEM
- ---- RAILROAD

TRANSPORTATION: CAMPUS & SURROUNDING AREAS

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Sources: Ann Arbor Transportation Authority, UM Bus Schedule Map, & Universal Map 55

April 22, 1998

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KEY UM Northwood Route

- UM Commuter Route
- UM Bursley-Baits Route
- UM Night Owl North Route
- UM Night Owl South Route
- AA Single Bus Route
- AA Multiple Bus Route
- Blake Transfer Center
 Terminus for all AA routes except:
 1U, 12U-Liberty, 12U-Miller, 22, 38
- * Greyhound Bus Station
- AATA Primary Stops
- Amtrak Station
- P AATA Commuter Parking Lot
- UM Property Limit

UNIVERSITY AND ANN ARBOR TRANSIT ROUTES

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Sources: Ann Arbor Transportation Authority, UM Bus Schedule Map



- Ann Arbor Bicycle Routes
- Ann Arbor Recreational Buildings
- UM Varsity Sports Buildings
- UM Intramural Sports Buildings
- UM Varsity Sports Fields
- UM Intramural Sports Fields
- UM Land
- UM Parks & Preserves
- Ann Arbor Parks
- Golf Courses
- Ann Arbor Retail
- Ann Arbor Entertainment
- UM Nodes: Michigan Union, Michigan League,
- & Pierpont Commons
- UM Property

BICYCLE ROUTES

University of Michigan Campus Plan, Phase I

Base Map Source: Facilities Planning & Design Information Source: Ann Arbor Department of Parks & Recreation, Ann Arbor Discover City Guide 1997-1998, Matthaei Botanical Gardens Draft Planning Map 1997 From a Sample of 1000 Freshmen Residence to Wednesday First Class

- 1 9 Students
- 10 29 Students
- = 60 99 Students
- 100 + Students

KEY

- Routes to Class (Includes Pedestrian & Vehicular Routes)
 UM Student Housing with Freshmen
 Academic Building with Freshmen's First Class
 Ann Arbor Retail
 Ann Arbor Entertainment
 UM Nodes: Michigan Union, Michigan
- League & Pierpont Commons

FRESHMEN PATH DIAGRAM: RESIDENCE TO FIRST CLASS

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Source: Office of the Registrar







- 1 9 Students
- 10 29 Students
- = 60 99 Students
- 📁 100 499 Students
- 500 + Students

- Routes to Class (Includes Pedestrian & Vehicular Routes)
- UM Student Housing with Seniors
- Academic Building with Seniors' First Class
- 🔲 Ann Arbor Retail
- Ann Arbor Entertainment
- UM Nodes: Michigan Union, Michigan League & Pierpont Commons
- UM Property

SENIOR PATH DIAGRAM: RESIDENCE TO FIRST CLASS

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Source: Office of the Registrar



Ann Arbor: from Central Campus to Michigan Stadium (approx. 1 mi.); Burton Bell Tower to Lurie Bell Tower (approx. 1 ½ mi.); From Medical Campus to Lurie Bell Tower (approx. 1 mi. illegally crossing railroad tracks)



Washington, DC: from Union Station to National Air and Space Museum (approx. 1 mi.); White House to Capitol (approx. 1 ½ mi.) ^b



London: from Regent's Park to Picadilly Circus (approx. 1 mi.); Marble Arch to Holborn (approx. 1 ½ mi.).



Paris: from Luxembourg Palace to the Louvre (approx. 1 mi.); L Árc de Triomphe to the Obelisk (approx. 1 ½ mi.) °
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Manhattan: from Columbus Circle to Public Library (approx. 1 mi.); Public Library to the Whitney (Approx. 1 ½ mi.); from Columbus Circle to Cooper-Hewitt (approx. 1 ½ mi.)



i S.S. Philadelphia: from Rittenhouse Square to Washington Square (approx. 1 mi.); City Hall to Penn s Landing (approx. 1 ½ mi.)



Detroit: from Renaissance Center to Grand Circus Park (approx. 1 mi.); Tiger Stadium to the Music Hall (approx. 1 ½ mi.)

Venice: from Accademia Bridge to Campo dei S.S. Giovanni e Paolo (approx. 1 mi.)

2

PATC

Lini 10,11



Rome: from Piazza S. Pietro to Piazza Navona (approx. 1 mi.), 1 1/2 mi. walk from Piazza del Popolo to Roman



KEY APPROX. 1 MI. APPROX. 1 ½ MI.





University of Michigan Campus Plan, Phase I

Map Source: *Rand McNally; [□]Hallwag; [►]ADC; •Gabelli; •Septa

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Interdisciplinary Linkages

As Reported by the Deans



Diagram: Patricia S. Whitesell, UM Office of the Vice President for Research 1994

5/94 pswhitesell version 4.landscape

Washtenaw County Impervious Surfaces



This classification scheme, provided by SEMCOG, for urban stream water quality potential is based on imperviousness (Schueler 1994). Impervious surfaces include roads, parking lots, rooftops, and other impermeable surfaces usually associated with urban landscapes.

Increases in impervious surfaces have negative effects on the hydrologic cycle. The impacts that may ensue include: increased flooding and stream bank erosion, greatly diminished water quality, degraded habitat, reduced groundwater recharge and reduced baseflow, and the addition of pollutant loads from stormwater runoff.

(Tom Schueler, The Importance of Imperviousness, Watershed Protection Techniques, Vol.1, No.3, Fall 1994.)



Potentially sensitive streams

Moderate Impervious Area (11%-25%) Potentially impacted streams

High Impervious Area (26% or greater) Potentially severely impacted streams

DRAINAGE AND IMPERVIOUS SURFACES

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities, Planning and Design Information Source: Southeastern Michigan Council of Governments



Venturi, Scott Brown & Associates

E. SOIL AND DRAINAGE PATTERNS Andropogon Associates, Ltd.

The University of Michigan lies within the middle Huron River watershed. The following maps, pictures and diagrams explore this watershed at two scales: first, the larger scale of the midportion of the Huron River Watershed and second, the smaller scale of the sub-watersheds of the main tributary creeks flowing into the Huron River through University property. The name of each of these sub-watersheds is derived from the primary creek that flows through them. There are four main subwatersheds within University property-Allen Creek, Malletts Creek, Millers Creek (North Campus Drain) and Fleming Creek. A large portion of Central Campus drains directly into the middle Huron River. North Campus includes a very small portion of the Travers Creek drainage area.

In general, pollutants from stormwater, scoured from paved surfaces, enter the stormwater conveyance system and are carried into streams. These non-point source pollutants represent the single greatest water quality problem nationwide. Most of this pollution occurs during periods of heavy runoff. The impact of non-point source pollutants varies in the five tributary watersheds and in the Huron River itself. Regional water quality goals include the reduction of phosphorous (The Middle Huron Initiative: Phosphorus Reduction Strategy for the Middle Huron River Watershed, Brenner and Rentschler, 1996; Physical and Biological Description of the Huron River, Its Watershed and Tributaries in the Ann Arbor-Ypsilanti Area, Davis, 1994).

At present stormwater and wastewater systems are collected and conveyed separately at the University. Many of the University's existing stormwater management strategies consider how to modify the stormwater system to provide pollutant reduction measures. Other steps, such as control of erosion and sedimentation during construction, are required by regulation.

The Department of Occupational Safety and Environmental Health of the University of Michigan (OSEH) has applied for a permit under the National Pollution Discharge Elimination System (NPDES), still pending approval by the state. This permit would allow the University to discharge stormwater into the Huron River, its tributaries, highway storm drains and city storm drains. For the permit application, OSEH prepared a Stormwater Management Program for the University detailing specific guidelines for mitigating pollution impacts. Also, Plant Extension has developed and implemented a rigorous set of guidelines for all land disturbance at the University. Different offices of the University have made significant corrections to campus infrastructure to eliminate discharge of wastewater from buildings to the stormwater system.

The University also has a number of programs to reduce surface pollutants. These programs include: Grounds and OSEH working together to eliminate illegal dump sites and clean debris from wetland areas at North Campus; Grounds aggressively pursuing snow and ice control methods that minimize dependence on chlorides; carefully monitoring spraying activities; and putting in place an Integrated Pest Management program to reduce the use of fertilizers and herbicides, etc. Future growth will be served by this system and discharge of wastewater presents little constraint to University development.

Impervious surfaces -- roads, parking lots and building roofs -have both a qualitative and quantitative impact on stream health. The OSEH Stormwater Management Plan is concerned primarily with qualitative effects of stormwater on stream condition, and with quantitative effects only as required by regulation.

One of the common impacts of traditional stormwater management systems is the loss of infiltration. In general, when rainfall is transformed into runoff, less water percolates into the ground water, which replenishes baseflow in the streams. During times of drought, when water has been conveyed away from the land

in pipes, there is little reservoir of ground water to replenish area streams. Stream flow is reduced and may even run dry. Streams are biological systems and these systems are damaged when perennial streams become intermittent ones. While the present University stormwater conveyance system serves to efficiently prevent flooding, there is potential impact on local streams from lack of recharge of water in the uplands.

A second issue raised by traditional stormwater management methods is the increase in water quantity in the streams at times of peak flow.

The older University campus areas fall largely into the sub-watersheds of Allen and Malletts Creek. Recently, Paul Rentschler, Executive Director of the Huron Valley Watershed Council, characterized these creeks as "severely degraded," and added, "As far as we can identify the source of these problems, degradation in Malletts Creek stems from heavy stormwater inputs and the resulting extremes in flow causing further erosion."

With recent developments, the University has constructed surface detention basins which hold increased runoff during and just after a storm. This method reduces the immediate impact of increased quantities and velocities of stormwater but does not address the issues of infiltration and groundwater recharge.

The campus has the opportunity to become a greater part of the solution in the future. Fleming Creek and its tributaries, which is of relatively high quality (Davis 1994) can be either sustained or degraded by future development. Such development has the opportunity to incorporate infiltration strategies within the network of paved surfaces, to preserve the integrity of the stream

channel and to provide a minimum 100 foot riparian buffer on either side of the channel

stormwater.

Existing paved surfaces in South and Central Campus can be retrofitted to provide infiltration basins underneath the paving. These innovative methods and others could allow the University to have paved surfaces that are permeable and help infiltrate

Huron River Watershed



Huron River Valle

Summary Opportunities

Several opportunities are presented to preserve the Huron River. Floodplain preservation and protection will provide a large scale example of an indigenous plant community. A buffer of lowland forest along the floodplain will filter stormwater runoff, improve water quality. The porous nature of soils under forests will encourage infiltration, helping to reduce downstream flooding. Preservation of the Huron River



The Huron River at Riverside Park



Huron River Watershed Length: 136 miles Total Drainage Area: 900 square miles

provides an aesthetic and recreational resource for the city. Finally, the Huron River can become important biological corridor, encouraging a diversity of plant and animal life.

Physical Assessment

Below Barton Pond, few remnants of the original Huron River channel exist as it flows through Ann Arbor and Ypsilanti. This section contains the largest portion of steep gradient on the entire river. The channel is currently almost entirely impounded with only a few fragments of free flowing reaches interspersed between dams. Only three of the dams (Barton, Superior, and Ford) that were constructed to produce hydroelectric power are currently in operation.

Areas of the Huron River watershed within University boundaries are the middle Huron River watershed, and five sub-watersheds within it: Allen Creek, Fleming Creek, Mallets Creek, and Miller's Creek.

Biological Assessment

The Huron River is a high quality river for one so urbanized, and supports a wide diversity of biological life. Excess phosphorus and bacteria levels from nonpoint sources are a concern and limit recreational use of the Huron River during summer months. Projected population increases in southeast Michigan and the loss of agricultural lands, wooded areas, and open spaces from urbanization will impact the Huron River watershed.

Political Jurisdiction

Originating in Big Lake and the Huron Swamp in Central Oakland County, The Huron River drains 900 square miles before flowing into the Northwest corner of Lake Erie south of Detroit and Lake St. Clair. The Huron River is subject to policies of Ingham, Jackson, Livingston, Monroe, Oakland, Washtenaw, and Wayne Counties, as well as the cities of Ann Arbor and Ypsilanti.

Middle Huron River Sub-Watershed



Summary Opportunities

Opportunities are present to encourage a holistic approach to water resources management that integrates governmental, non-profit, and university stakeholders in the policy making process. This could result in improvements in this stretch of the Huron River, despite the projected increased development in this region.

Biological Assessment

Stream assessment studies indicate that patterns found in the middle Huron River Watershed are typical of moderately urbanized watersheds in the United States. Tributary creeks in less developed watersheds for the most part exhibit an overall higher quality, as indicated by cooler and more stable flows, rich diversity of benthic macroinvertabrates and fish populations, and stream channels generally show less erosion on the banks than those that have been straightened, channelized, or partially piped. In areas of more intense development, watersheds with a greater proportion of development are characterized by more degraded streams and stream corridors.

Political Jurisdiction

The Middle Huron River sub-watershed is located downstream of Barton Pond. It is subject to the policies of Washtenaw County, Ann Arbor, Pittsfield, Scio, Superior, and Ypsilanti Townships, and the Cities of Ann Arbor, and Ypsilanti. The Huron River divides the University of Michigan campus.

Allen Creek Sub-Watershed



topography of Ann Arbor

Summary Opportunities

Opportunities are present to daylight the Allen Creek channel. The creek can then serve as a biological corridor, greenway, and pedestrian pathway which will enhance water quality and reduce volumes of stormwater discharge into the Huron River.

Physical Assessment

Allen Creek is the most developed of the Universities four sub-watersheds. Although the entire length of Allen Creek was buried in 1920 to prevent flooding, remnants of the previous drainage patterns in this area is visible in the topography. Allen Creek drains through South and Central Campus. Runoff from both South and Central Campuses contributes to the Allen Sub-Watershed.

Biological Assessment

Piping Allen Creek removes air and sunlight from the water which is vital for most aquatic life. This factor in combination with polluted water has reduced aquatic habitat for benthic organisms.

Political Jurisdiction

Allen Creek flows through the University of Michigan's Athletic Campus and the City of Ann Arbor.

Traces of Allen Creek valley can be seen in the



Allen Sub-Watershed



Fleming Creek Sub-Watershed



Fleming Creek at Paper Mill

Fleming Creek at Radrick Fen



Fleming Sub-Watershed

Length of main stem: 12.6 miles Total Drainage Area: 30.8 square miles, extending out to Wayne and Oakland counties



Surface Coverages

Summary Opportunities

Fleming Creek is currently in a relatively healthy state with natural conditions along most of its length. Sensitive development will create opportunities to preserve the stream corridor through the East Territories of the University with a riparian buffer and infiltrate stormwater in the uplands. Such a development might provide a model for the larger watershed outside of university properties.

Physical Assessment

Land-use is predominantly rural/agricultural in the upper portions of the Fleming Creek watershed. Fleming Creek is in good condition with most of the creek's length in a natural state. Ground water from springs and seeps are located along the creek. Water temperatures in the creek are moderate while dams across its channel affect flow function. Fleming Creek is the least developed of the four sub-watersheds in the study area.

Biological Assessment

Except in areas downstream of Geddes Road, a good diversity of biota is found along the course of Fleming Creek. Overall, stream habitat quality is good with limited sedimentation and bank erosion. Wetlands adjacent to Fleming Creek include a rare calcareous fen.

Political Jurisdiction

The Fleming Creek watershed is located in Superior, Salem, Northfield and Ann Arbor Townships. The bottom portion of the Fleming Creek Watershed (15-20%) flows through the University in the East Territory.

Mallets Creek Sub-Watershed



Mallets Creek







□ Impervious Surfaces Surface Coverages



Summary Opportunities

Opportunities are present to reduce flash flooding and perhaps increase biological diversity in the creek by reducing velocities and quantities of stormwater runoff from South Campus.

Physical Assessment

Mallets Creek receives some drainage from Briarwood Medical Facility and Wolverine Towers. The creek can be described as a narrow corridor of shrubs and trees with some portions of it piped while others sections are open but seriously eroded. Water temperatures are higher than Fleming Creek. Before entering south (Signor) Pond the final section of Mallets Creek is almost completely silted.

Biological Assessment

The physical characteristics of Mallets Creek appear to be capable of supporting a wide diversity of macroinvertabrae. The creek is presently in poor condition and has a lower variety of benthic macroinvertabrae than most of the other creeks. Flash floods may be the cause of low macroinvertabrae diversity.

Political Jurisdiction

The entire length of Mallets Creek falls within the jurisdiction of the Township of Ann Arbor. Mallets Creek is a designated county drain.

Miller's Creek (North Campus) Sub-Watershed



Miller's Creek at Huron Parkway



Mouth of Miller's Creek

Physical Assessment replacement.

Biological Assessment Benthic community populations are of an average diversity for a small tributary such as Miller Creek.

Political Jurisdiction Miller's Creek is entirely in the City of Ann Arbor. No portion of Miller's Creek is designated a county drain.

Sources:

MALLETT

Miller's Creek Sub-Watershed Length of main stem: 3 miles Total Drainage Area: 3 square miles



Summary Opportunities

The small scale of the Miller's Creek Sub-Watershed presents opportunities for a basin wide comprehensive watershed management program. Specific changes to the present treatment of the creek might include the replacement of structural features (concrete sidewalls) with natural systems such as vegetated banks and natural stream meanders.

Located on steep topography, Miller's Creek is the smallest named tributary to the Huron River within University properties. During construction of the Huron River Parkway Miller's Creek was relocated. Today, Miller's Creek is subject to flash flooding from runoff from impervious surfaces (parking lots, roofs, and streets) on North Campus. The Creek's channel is subject to scouring and erosion while several structural features along the creek's channel are in need of either repair or

- Andrew Brenner, Paul Rentschler, September 1996. The Middle Huron Initiative: Phosphorus Reduction Strategy for the Middle Huron River Watershed
- Florence Davis. September 1994. Physical and Biological Description of the Huron River, its Watershed and Tributaries in the Ann Arbor-Ypsilanti Area.
- Joan Martin, Adopt a Stream Program Director of The Huron River Watershed Council, 1998. Deterioration of a Regional Treasure: Fleming Creek (Draft).
- Paul Rentschler, Executive Director of the Huron River Watershed Council March 27, 1998. Letter to Andropogon Associates.

The drainage characteristics of soil directly effect infiltration rates. Soils which are well drained present opportunities for infiltration beds and groundwater recharge in stormwater management plans. However, Paul Spradlin points out, that actual conditions may vary. Many disturbed areas are covered with 1-3 feet of mixed clay fill. Areas of the campus, therfore, may drain slower than expected.

Floodplains and existing groundwater recharge areas fulfill an important role in flood control and water quality improvement in the natural landscape. These areas, therefore, present important opportunities for open space dedication.

KEY

Well Drained Well-moderately Well Drained Moderately Well Drained Somewhat Poorly Drained Poorly Drained Poor-VeryPoorly Drained Very Poorly Drained University Boundary Rivers/Streams // Highways County Roads N Drainage Basins Lakes/Rivers Groundwater Recharge Areas Wetlands Floodplains

SOIL DRAINAGE CHARACTERISTICS

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities, Planning and Design

Information Source: School of Natural Resources & Environment, Geographic Information Systems Facility, University of Michigan. Groundwater Recharge and Wetland Areas developed by Washtenaw County Metropolitan Planning Commission, 1992.



Cahill Associates

April 22, 1998

Andropogon Associates

Venturi, Scott Brown & Associates

III. MGOPIO I

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III. MGOPIO I

Here follows our collection of Phase I data into a statement of Mission, Goals, Opportunities, Problems, Issues and Options -categories that can lead from analysis to synthesis and eventually to a plan. Although many of the issues are posed as questions, we suspect that resolutions will not be "either-or." They are more likely to be "both-and" -- "this here and that there" or "this now and that later."

At this point, options are set out to determine the scope of the problem and the range of possible solutions and to uncover further sources of information. It is too soon to make decisions, as more information is needed to make good choices. In all likelihood, the response to this first report will lead to other, perhaps more realistic, options.

A. MISSION OF THE UNIVERSITY

Here, as a preamble to the MGOPIO of the plan, we reproduce -- for discussion, comment, and elaboration -- the University's published mission and vision statements.

The mission of the University of Michigan is to serve the people of Michigan and the world through preeminence in creating, communicating, preserving and applying knowledge, art, and academic values, and in developing leaders and citizens who will challenge the present and enrich the future.

As we enter the twenty-first century, the University of Michigan intends

• To be a source of pride for all the people of Michigan and have a place in the heart of every member of the University community.

- To have a place in the dreams of every potential member of the community of students, staff, and faculty.
- To be recognized as a university that honors human diversity.
- To be a scholarly community in which ideas are challenged, while people are welcomed, respected, and nurtured.
- To be an institution whose environment fosters creativity and productivity among all faculty, staff, and students.
- To occupy a position of unique leadership among the nation's universities in research and scholarly achievement.

• To be a community whose members all share responsibility for supporting its mission and receive recognition for their contributions.

[The Regents of the University of Michigan, http:// www.umich.edu/UM-Mission.html]

How should this tie in to the University's mission statements for its campus and the planning of its campus?

The Advisory Committee suggests an addendum to the mission statement defining the value the institution places on creating and maintaining a physical environment that enhances the University and the City as places to live and work.

B. PLAN OVERVIEW

1. Mission and Goals of the Plan

At the end of Phase I, the Advisory Committee notes, "We hope to be, or become, a single campus with interlocking parts -- a Uni-versity. This conclusion can be used to frame the next phase(s) of the development of the Campus Plan, which should promote this integration by every possible means, including links, transportation, decisions regarding aesthetics, housing, landscaping and the like."

As we now understand it, the Campus Plan should devise strategies that:

• Define a physical setting for the life of the mind of a great University and for those who use and support it. Allow for the complex and shifting reality of the life of the mind.

- Establish an overall framework and hierarchy for development, relating physical priorities to academic and financial policies.
- Promulgate an understanding of the physical campus, its historical development, aesthetic dimensions, present patterns and conditions, and future options, and its place, historically and today, in the growth of Ann Arbor.

• Encourage a sustainable, liveable, amenable and beautiful environment.

- Provide facilities for education and research that promote the public good, foster areas of creative collaboration, and support individual excellence.
- Encourage an intensity of cultural, recreational and social activities, and define a spectrum of residential opportunities, on and off campus, that will continue to attract and help to hold the highest caliber faculty, students and staff.

• Nourish the arts on campus and in Ann Arbor, including establishment of an Arthur Miller Theater.

• Increase physical opportunities for interdisciplinary collaboration University-wide, perhaps especially in relation to growth in the sciences.

• Define and develop the roles of each of the University campuses. This includes providing a more convivial environment for the North Campus with imageable connections to the rest of the University, and identifying appropriate purposes for UM-owned properties east of Highway 23.

• Help define a "home" for each member of the University community -- a physical location identified as the central place of experience for each faculty, student or member of staff.

• Help evolve a planning process that establishes an appropriate balance between centralized and de-centralized decision making, and invites participation of the wider University community, relevant governmental agencies and local citizens.

As planners, we must seek truth but know we will not altogether find it. As artists, we leave room for many truths; seeking beauty, but knowing that, in truth, beauty may at times be agonized.

them?

2. Opportunities

• The advent of a new University administration opens the way to a reassessment of policies for the campus as an integrated whole. Broad strategies can be set and implemented for its development in line with changing academic, financial and administrative policies.

• The University's tradition of interdisciplinary study and the trend toward increased collaboration could help forge new programmatic and physical links across campuses.

facilities.

• Given the large geographic area and population of the campus, the University's decisions regarding land use, physical character, and environmental stewardship could have far-reaching benefits for the community.

• The size and extent of the campus allows room for University expansion into the unforeseeable future and probably buys time too. There is the opportunity to densify with discrimination, not overcrowd the Central Campus, not underserve the North Campus, and to keep the sunlight on courts and buildings during the winter.

Balance densification and outward expansion.

If these are key themes and most general goals of the study, what major concerns emerge from them? What principles should direct our approach to them? What policies can be derived from

• The University-wide love for the campus in its Ann Arbor setting and the realization that extensive growth could obliterate this traditional image will lend support to this project, as it attempts to redefine the broader campus to meet future needs without sacrificing its loved identity.

• New technologies, new teaching methods, new techniques in research or management, in use or under consideration, could help create new linkages between activities, and alter requirements for

3. Problems

• The campuses are far from each other, geographically and perceptually.

• Connections between some campuses are difficult to visualize. What ideogram could clarify the Central-North campus connection?

Decentralized decision-making has contributed to the excellence of many different spheres of the University, but has also made coordination of facilities planning difficult, and made "public goods" such as Hill Auditorium hard to support.

• The remoteness of housing and many campus activities from the core increases the dependency of the campus on automobiles and buses.

• The reduction of open space and increased vehicular traffic associated with rapid growth and expansion of the University in the last few decades have mirrored those of the state and the region. A 1997 article in the Ann Arbor News (January 19, 1997) noted that the amount of urbanized land in Michigan grew by 76 per cent between 1960 and 1990 -- six times the rate of population growth. According to the same article, between 1980 and 1990, Washtenaw County roadways became 37.9% busier (2 million more miles driven daily) and County farmland decreased by 27.4% (55,000 fewer acres in farms).

4. Issues

• The University's patterns of activities and systems are a constantly shifting set that move over the less changeable infrastructures and structures of the physical campus. What are the University's overarching disciplinary and interdisciplinary foci today? How might this situation evolve over the next 25 years? What physical shifts and extensions will this require? What types of reweighting might this involve for the various campuses and landholdings?

• How can we respond to changing patterns of activities, collaborations and associations now, yet leave flexibility for future rounds of change in educational and administrative policy? With generic, loft-like buildings that fit like mittens not gloves, allowing a succession of uses and relationships over time? Within a flexible grid, like the original plan of Ann Arbor? Within and across distinct precincts? Which elements should be fixed and which changeable?

• To what extent should town and gown be physically integrated? Should the University continue the practice of closing streets to create pedestrian precincts? The University's Office of Business Operations comments that including traffic and commerce as part of the fabric of the University would be "clearly contrary to our effort -- and that of most universities -- to provide as much safety as possible for pedestrians on campus...and encouraging a physical environment suitable for contemplation, study, and research. This is a university, not an entertainment district. While some of the

universities in the world's crowded cities cannot avoid mixing academic buildings with the city environment...we can and should." On the other hand, Advisory Committee member Colin Day notes that "in the humanities and social sciences (at least) nurturing is less done by the construction of buildings than by the creation of opportunities for serendipitous encounters, informal meetings and the like. ... The great strength of Ann Arbor as a university town is the proximity and inter-weaving of downtown activities with the University: the downtown is where many of those serendipitous meetings can and do occur. The need to nurture and inter-weave with downtown is part of the program of sustaining the creative academic environment." Where should the University place itself within this spectrum? Could the answer be different for different areas of campus?

• As in the 1960s, Michigan still faces the issue of extended or compact growth. The decision then seemed to be between a growing center or a limited center with satellites. The pattern today resembles less and less that "garden city" ideal. Four areas demonstrate some aspects of a center: Central Campus, downtown Ann Arbor, Medical Center and North Campus; and there are several outlying areas, South Campus, the properties east of Highway 23, Briarwood, etc. How shall we define them, together and apart, and in relation to the City and County?

• Where does the new administration see the place of decisionmaking about the physical campus, in whole and in part, in the polity of the University and of the City? What are the issues of democratic participation and of centralized and decentralized decision-making?

• What should the roles of strategic planning and opportunism be in the future development of the campus? The University's Business Operations Office notes. "Units have always been encouraged to take advantage of sudden opportunities along their road to excellence. ... A plan needs to recognize this and to provide a way to deal with random uncertainties."

• How can we (all), as artists, draw profound meanings from the fabric, history and iconography of the University and help these emerge in its physical development? What kind of beauty can this drawing engender?

5. Options

In the maps that follow are some first notions of the University's overall options. They are what we have heard at meetings or what have occurred to us during fact gathering and analysis. They are exaggerated and feasibility probably lies somewhere between them. They are also unrelated to each other. What should grow from them, and from the response to this Overview, is a larger sense of where the real options lie. Then, these can be combined into sets of realistic, internally consistent alternatives that represent valid choices to be made about campus development.

The major options will derive from alternative assignments and reassignments of activities and systems within the University and consequent shifts of emphasis within its campuses and landholdings.

a. New Ideograms: Reweighting the Campuses

centralizes.

"new" North Campus?

vie with local loyalties.



- If the alternatives between densification and suburban nucleation posed in ideograms in 1963 no longer hold, what are the new ideograms? Here are five further alternatives (p. 71):
- Central Campus is "downtown." South Campus is "the urban fringe." North Campus is suburbia. East Property is exurbia.
- An extended Central Campus. Central Campus, downtown, Medical Campus, plus the built-up portion of North Campus are linked by transit. Residential North Campus and East Properties are the University Residential Life's suburban component; academic uses there relate to the Botanical Gardens or to suburban research parks. South Campus is attached to Central Campus ceremonially, processionally and iconographically.
- *Two centers*. Somewhat like "extended Central," but centraltype activities extend in North Campus and Medical Campus de-
- North Campus the new center. It has considerable room for expansion and parking -- if we accept its already ongoing densification and some loss of landscape. There are prospects for enlivening its atmosphere if we accept some loss of design purity and control. Is Central Campus then Old City? East Campus the
- *Each campus a tub on its own bottom*. Each has a different identity and enough self-sufficiency (and computer connections) to reduce the requirements for movement between them. Global ties



OPTIONS: CAMPUS DEVELOPMENT

University of Michigan Campus Plan, Phase 1

N April 22, 1998

b. Other General Options: Campus Relationships

Other options, still at a general level, involve relations between Central, Medical and North Campuses and downtown Ann Arbor:

• *The Arts.* Present activity patterns suggest an option for developing a performing arts locus east-west on campus from performing spaces in the Music School, Media Center, and Medical Center, via Power, Mendelssohn, Hill and Frieze, on to the shops ands restaurants of Liberty Street.

• The interdisciplinary collaboration of Medicine, the Life Sciences and Engineering traces an arc across the academic and institutional universe, within the University and beyond. Where, in a spectrum from the Internet to bricks and mortar, will most of that collaboration take place? Sites where major collaborative facilities could be considered (fig. 38) include the old hospital site, the "cathole" site off Washington Avenue at Palmer, sites off Glen Avenue around E. Ann Street, several near Wall Street, and perhaps even a North Campus site related to Engineering and the VA Hospital. A transit-like connection could pick up all these sites with perhaps only four stops between engineering and medicine, in order not to stress the schedules of busy medics and engineers.

• Reweighting the Central Campus force diagram (p. 73). "City physics" sees the campus infrastructure as a diagram of forces, loaded in different ways at different times in response to changing pressures. Such an interpretation suggests that the pull of the Medical Center and North Campus may, over time, shift the center of gravity within Central Campus northward across North University Avenue, to Rackham and Power. Developments for the arts, sciences, medicine and engineering discussed above should accentuate that trend, if they take place on the sites discussed. The east-west alignment of performing arts facilities on campus and in Ann Arbor roughly along Washington Street could be seen as a campus axis involving the newest developments in the arts and sciences, supported by outriggers south (Hill Auditorium) and north in the Medical Center and North Campus (Music School, Engineering, Architecture).



fig. 38. Opportunities: Medical Campus Desired Linkages



CENTRAL CAMPUS FORCE DIAGRAM

Base Map Source: UM Facilities Planning & Design Information Source: Office of Space Analysis Discover the Ann Arbor and Ypsilanti Area Magazine

April 22, 1998

C. AESTHETICS, DESIGN AND PRESERVATION

1. Mission and Goals

• Maintain and augment the campus's beauty for the enjoyment of the University community, alumni, alumnae, and visitors. Understand its many landscapes and the opportunities each presents.

• Preserve precincts, complexes, buildings and open spaces and design new facilities and spaces that underpin the history and beauty of the University and Ann Arbor. Describe their historic importance and present relevance, define their character and, where necessary, recommend reuses that are appropriate to campus needs today. Mediate between the need to add new facilities and the need to support and maintain those the University already has.

• In the design of major campus open spaces, build on the "givens" of topography, native plant communities, the surrounding context of built forms, and the best elements of the historical landscape.

• In the design of campus landscape spaces (both hard and soft) encourage communal academic life and create lively, liveable places for people to live, work, play, and learn.

• As new buildings are added, preserve and integrate existing campus landscapes, including gardens, courtyards and greens.

• Create multi-scaled open space networks that connect the University to the town, the campuses to each other, and the river to the campus.

2. Opportunities

• The many landscapes of the University's campuses and properties, each with its own characteristic forms, symbols, and contexts, provide strong points of departure, good models and abundant opportunity for diverse forms of development in the future.

• Preserving historical buildings and spaces of the Central Campus and pointing up their areas of vital interface with the city could contribute to the University community's sense of its own history.

• Existing open spaces could provide the foundation for a University-wide open space network. New buildings can provide opportunities for new, related outdoor spaces linked to a wider network.

• The planned renovation and selective restoration of Perry and Frieze could help set standards for dealing with historic buildings on campus. The planned renovation of the LS&A building, if sensitively accomplished, could help foster renewed appreciation for the University's post-WWII modern buildings.

• The three large sites in and near the Medical Campus and the plans for the Arthur Miller Theater could help to infuse the area north of the Diag with lively, interconnected amenities and produce an exciting, new element of campus and urban design.

• Regional changes in medical care provision and consequent redeployment of medical activities could provide the opportunity to reduce densities and increase amenities on the Medical Campus.

• The intimate relationship of the land at the base of the Medical Center to the Huron River Valley could help establish better links between the campus and the river. To the extent it became more perceptible from campus, the river flood plain could provide opportunities for knitting the campuses together, and add to the treasury of Michigan's loved and remembered landscapes

• Changes in the North Campus -- the heightening of retail and amenity services in and around Pierpont Commons and Bonisteel Boulevard, and the juxtaposition of the Media Union and the Lurie Building with "forest clearing" buildings such as the Music School -- could produce a new, vital identity for this Campus.

3. Problems

• The overlap of 20th century transportation systems and planning philosophies upon the swiftly growing campus have resulted in many landscapes, admirable diversity, and also jarring mismatches and discontinuities where systems or philosophies have not meshed with what lay under them. These tend to occur in the in-between areas -- at breaks and fissures in the topography, at the edges of precincts and campuses -- leaving an impression of the campus as a series of preferred views surrounded by places not intended to be seen.

• The Huron River, historically part of several important vistas from both North Campus and Central Campus, has not been fully integrated as a landscape or an amenity, and has been cut off from the University by the development of roads and buildings.

• A number of roads and vistas in central areas end in blank walls, service yards or parking structures (fig. 39).

renovation.

• The *Town/Gown Study* completed by the College of Architecture and Urban Planning in 1993 noted that "the edge of campus is left to storage facilities, parking garages, parking lots, and gigantic athletic facilities surrounded by even more parking lots."





fig. 40. Hill Auditorium

• Some important landmarks, such as Hill Auditorium (fig. 40) and the Rackham Building, remain underused and/or in need of

fig. 39. View North Along Maynard Street

• The scale of development of the Medical Center and the North Campus has been vast, without sufficient mediation by the smaller scale that has historically brought grace to the monumentality of institutional buildings. The Diag of the North Campus is wide and windswept and without clutter, and the scale of the Medical Center perimeter buildings is formidable.

• Winters in Ann Arbor can be dreary, and in many cases the south sides of courtyards have been infilled with tall buildings, casting the exterior spaces in shadow.

4. Issues

• What are the "many landscapes" of the University? What are their positive and negative characteristics?

• What campus buildings, landscapes, and landmarks should be considered "sacred?"

• To what degree should the various campuses and holdings have an aesthetic commonality? Should they be as unified as possible or should each have its own distinct character? Within each, should unity or diversity be emphasized? Should that vary by campus?

• What is the architectural and landscape character (or characters) of each campus? Should a different landscape be fostered on each campus or should the University-wide landscape be similar in organizing principles, types of spaces and plantings?

• The Advisory Committee asks. "Shouldn't we risk rethinking the character of the entire University physical presence rather than assume we should build upon six very different existing tendencies?"

• What policies and processes could help preserve the positive aesthetic qualities and characters of the campus? What processes could help preserve its historical and emblematic elements? What processes could help preserve landscape character and still accommodate new facilities? How can these serve as points of departure for growth and change?

• Where is that "special landscape" that sears the memory and is associated forever with our college days?

• In addition to their scientific and educational value, what is the cultural and symbolic value of rare original landscapes. for example, Radrick Forest and Fen? How can this value be communicated to the University community?

• Can the Huron be our Seine? Are there other potential grand landscapes to be discovered and developed on North Campus or the properties east of Highway 23?

5. Options

Options for aesthetics, design and preservation will grow out of the "Learning From" studies described in Section II B and C and from choices made between the options suggested in other sections of this MGOPIO. These choices will themselves be determined, in part, by their likely aesthetic impact on the physical campus.

Design options can be described through actual designs and also through guidelines that would accompany the plan documents. Here we present some preliminary considerations regarding how design might relate to pragmatic decisions facing the University; these might lead to but are not yet options.

a. Aesthetic Dimensions of University-wide Systems

• The Larger Landscape. If every academic landscape worth remembering has at its base some component of natural landscape -- a Cam, a Charles -- and if, through its topography, the Huron cannot guite be this to Michigan, we submit, as a joint candidate, a combination that includes the Huron, the arboreta, the Radrick natural areas, two Diags, the Music School and, for not altogether describable reasons, the Stadium.

• Areas of Academic Intensity. The map showing distributions of labs and classrooms (p. 45) depicts graphically the emerging, campus-wide pattern of intensities and suggests how far we already are toward the four-center general option described in Section III.B5. Design guidelines for these areas will be those for urban complexes where architecture defines the shape of exterior spaces -- they will cover scale, bulk, height, window-openings, cornices, roofs, materials, views and vistas, the unique and the generic, and the relation between campus and city, private and public, unique and generic, old and new, large and small, and high and low.

• Imageable Transportation Routes. The transportation options under discussion (Section III.D.5) give rise to the possibility of several "bright light" routes through the campuses that could become M-Emblems: the Stadium Processional, the Town and Gown Avenue of the Performing Arts and the Bonisteel Transit Trip. What should be the character of each?

• *Housing*. Another larger system is the matrix of housing within which Ann Arbor and the campuses sit. The aesthetic component of a University-wide and regional housing policy would contain both an urban and a suburban dimension. North Campus housing could be to the North Campus Center what "beyond the walls" (fuori le mura) was to the medieval town. This and aesthetic options for inner city housing should be explored in future planning phases.

b. Urban and Campus Landscapes and Spaces

As choices are made regarding the kinds of campus development necessary and desirable, the following might be considered:

• Understanding and loving the Ann Arbor grid plan, the richness of its retail, house and church architecture and the nature of the soft and hard edges it forms with the University, could help to define the future coexistence of town and gown.

• Providing intimate, detail-rich transitions between large open spaces could help reinforce a hierarchy and system of open space including all scales from small, intimate courtyards to large open greens, from the maze to the Mall.

• Infilling specific underused areas to contain sprawl, if completed in a manner which reinforced a logical network of open spaces, could help preserve a strong sense of "campus."

• Preserving and integrating natural features and sensitive areas (woodlands, stream valleys, and wetlands) into recreational and habitat corridors could preserve and enhance the sense of place and the viability of regional park systems, and support local biodiversity.

• Completing restoration and renovation of important campus buildings, for example, Hill Auditorium, could reinforce to the University community the value placed on these important historical assets.

and fall seasons.

• Re-establishing lawn extensions at the residential edges of Central Campus could help make a transition from the University landscape to the landscape fabric of Ann Arbor.

each place.



fig. 41. Historical View of Campus Paths in Winter (Photograph: The Bentley Historical Library)

• Developing sunny, south facing courts and spaces protected from winds could extend the periods of outdoor activities in spring

• David Michener, Assistant Curator at the Matthaei Botanical Gardens, suggests that the entire campus might be considered an arboretum, with curated plants enhancing the unique identity of



fig. 42. View South from Thompson Street Parking Structure

c. Individual Campuses and Properties

• *Central Campus and Downtown Ann Arbor.* Whatever their political and functional separations, aesthetically these are point and counterpoint. The Central Campus plan must make the rules for the interweaving of town and gown at the point of meeting, suggesting means for mending ruptures that occur at points of violent juxtaposition -- for example, at the Thompson Street garage (fig. 42) -- and ways of protecting combinations that delight.

• *Medical Campus.* Could recent and ongoing shifts in health care provision allow some de-densification of the walled fortress? Changing to uses that let the public in has been suggested for some spaces and floors. Could there be some concomitant opening of access from the perimeter to the interior? Could such changes decrease traffic volume on the ring road? How much demolition would be required in the Medical Campus interior if additional sites are available between Central Campus and the Medical School?

• *North Campus.* The mythic Northern Landscape has come under a campus building onslaught and is now besieged around the edges. It is in its glory only at the Music School. We wouldn't harm a hair on its head. But what is the new landscape we now have?

• Indications are that large-scale building is still in store for the North Campus; this may give it the urban density required to support the lives of those there now and allow consideration of a transit system that will facilitate communication with colleagues to the south. This densification, if designed well, could end the inbetween aesthetic state the North Campus center is in now. North Campus needs to define its own Diag. Could the North Campus be reforested in select locations?

• *East Properties.* Between a rural landscape, exurbia and suburbia, its form is impossible to predict without an understanding of the ecological and regional economic forces of its field and an analysis of the Medical System's plans for its "East Medical Campus." It is, *inter alia*, a land bank, a time machine, a lung. It should not become a dump.

• *South Campus.* A playground of the gods, the terminal of a processional, but no longer the terminal of the campus, an industrial zone, an intrusion on a neighborhood, the locus of the University's prime emblem?

• *Wolverine Towers*. The new campus outpost? A way station to Ann Arbor airport? Temporary accommodations?

• *Briarwood Facilities*. The southern tip of the Ann Arbor campus? Or no less central than the Health System facilities in other parts of the region?

D. THE ENVIRONMENT AND NATURAL SYSTEMS

1. Mission and Goals

President Bollinger's charge to the Campus Plan Advisory Committee describes a campus plan which "celebrates the highest principles of aesthetic and environmental design" and "creates and sustains the vitality of a place easily identified as a 'community.' " The Advisory Committee has asked that the plan consider issues of sustainability. To achieve these aims, development and management of University of Michigan properties should support the ongoing processes that sustain life and should promote their continuing function.

• Consider the effect of every intervention on the larger community, how the microcosm of each building, space, street, and parking lot is integral to the macrocosm of the University and the region.

• Design new site development to preserve natural hydrologic patterns, existing terrain, and native plant communities to the greatest extent possible, and promote the recovery of damaged sites and sustain the health of undisturbed ones, whether infill on existing urbanized land or new buildings in rural areas.

• Enhance programs already implemented by the University to promote landscape management practices that restore, preserve and sustain the larger landscape context.

• Foster local biodiversity by preserving significant natural landscapes, restoring degraded landscapes and creating new indigenous landscapes where appropriate.

• Develop campus spaces to provide a linked system of lively, humane, community places. These should build on the broad range of landscapes offered at the University, from intimate alcoves and courtyards to large communal gathering places.

2. Opportunities

• The University is at present engaged in a number of important collaborative environmental initiatives. Campus-wide policies on environmental planning, design and management could reinforce these efforts.

• The University is a leader in research and teaching about the landscape. Drawing on the expertise within the institution could help Michigan become a model of environmental responsibility. The University's extensive campus, currently undeveloped in some areas, could be a laboratory for solutions to larger environmental problems and a model for site sensitive development.

• Much of Fleming Creek falls under the control of the University's policies. This watershed is comparatively undeveloped and the creek is in a relatively undisturbed condition. Sensitive, development of East Properties -- preserving the stream corridor and its riparian buffer, minimizing impervious surfaces, and using innovative recharge methods in the uplands, can add value to development.

• On the North Campus and East Properties there is still the opportunity for development to respect the natural topography and vegetation.

• The Radrick Fen and Forest present an opportunity to preserve a significant indigenous ecosystem and provide a valuable teaching tool, in combination with resources at the Arboretum and the Botanical Gardens.

• Present stormwater management plans for the University could explore minimizing impervious surfaces and dual use of paved surfaces for, for example, both parking and recharge.

3. Problems

• The older campus areas fall largely within Allen Creek and Malletts Creek Watersheds, both of which have been described as "severely degraded" by Paul Rentschler, Executive Director of the Huron River Watershed Council, who states that "as far as we can identify the source of these problems, the degradation of Malletts Creek stems from heavy stormwater inputs and the resulting extremes in flow, which cause further erosion." As part of the watershed, the campus may be contributing to this problem; it could also be a part of the solution.

• The University controls only a bottom portion of the Fleming Creek watershed, which is of relatively high quality. Current development pressures, both beyond and within University holdings, threaten to degrade present conditions.

• The construction of new buildings, parking and other facilities has increased the amount of impervious surfaces on the campus, and this process will continue.

 According to Henry Baier and Terrance Alexander of UM Occupational Safety and Environmental Health (OSEH), the University's decentralized decision process "makes coordination with environmental health and safety activities across the diverse groups difficult."

• Owing to decentralization, not all University-related projects follow the environmental guidelines established by OSEH.

4. Issues

• The University has already assumed considerable responsibility in environmental matters. What further responsibilities should it take? Should it take a leadership position? What kind of neighbor should it be? What programs already underway could provide the necessary foundation for leadership? Should the University adopt environmental policies at all scales, including the design of individual facilities?

• How will environmentally responsible positions and actions be defined? What policies and mechanisms would be needed to establish University-wide standards and ensure follow through?

• What should University policy be towards significant ecological plant communities and habitats -- for example Radrick Forest and Fen and tributaries of the Huron River that run through University property? Can the preservation of significant natural areas be balanced with the demand for new buildings, recreational facilities, and parking?

• To quote Radrick Farms Manager Tracey Jones, "Is demand for expanded recreational facilities...more important to the overall University community than preservation of Radrick Forest as it stands today?"

• What constitutes a liveable campus? The ability to walk to a variety of facilities and activities? Indoor and outdoor spaces that encourage communal academic life? Integration of buildings. terrain and vegetation?

efforts should be taken?

• How should the University address the environmental impacts of housing, transportation, parking, and development? Many in the University population of 59,000 commute from distant offcampus housing, placing a demand on roadways, infrastructure, and the land that affects pollution and stream quality, contributes to the loss of open space and upsets the delicate balances of plant and animal life. How can the University work with regional jurisdictions to deal with these related issues, shared by all?

• During the Phase I process, two alternate philosophies of environmental stewardship have been expressed in the dialogue with the University. The first is an inward-looking approach, stating that the University should concentrate on its own property holdings, basing priorities for future criteria primarily on internal needs and objectives. The second view holds that the University of Michigan is part of a larger whole; for developing internal strategies, this view looks outward to the surrounding region in setting priorities, in tandem with addressing its own needs. How should these conflicting value systems be resolved?

• According to Joan Martin of the Huron Valley Watershed Council, portions of the northern and western Huron River watershed are still rural, in open space or preserved as natural areas. Planning initiatives undertaken by the City, County, and University will be critical to the future of this area. While some collaborative initiatives are in place, what further joint planning



fig. 43. Open Space: Polka Dot Model



fig. 44. Open Space: A Net of Pearls



fig. 45. Open Space: Roots and Shoots

5. Options

a. Open Space and Landscape

Options for open space systems and landscape treatment are presented at regional, city and campus scales. Although what the University elects to do on its campuses can to some extent influence regional and city patterns, choosing or accomplishing any of these wider options will require a great deal of participation and cooperation among the University, the City and the broader community.

Regional Scale

• *Polka Dot Model* (fig. 43). Open space parcels, ranging from public parks to sports fields to natural areas, are dispersed throughout the University and the City of Ann Arbor. Open space links between these parcels are generally linear connections along stream corridors or bicycle lanes. These connections, because they are incidental to this system, tend to be fragmented and to support more limited recreational and conservation opportunities. The dispersed model has the potential to serve community needs quite well but is less effective in the stewardship of natural resources.

• A Net of Pearls (fig. 44). In this model, too, open space parcels are dispersed throughout the University and the City. Additionally, a web of open space connections, ranging from narrow recreational trails to wider greenway corridors, provides linkages between the larger open space "anchors." The establishment of connections is prioritized between the largest landholdings. Upland connections and lowland connections are given equal priority. The Huron River becomes one thread within a larger network.

• Roots and Shoots (fig. 45). This hierarchical system is organized around a central corridor -- the Huron River valley -which is emphasized as the principal natural resource. The many secondary branches provide access between open space parcels and the main stem of the system. This branched open space system fosters larger, multi-functional corridors providing a wide range of opportunities for recreation, habitat conservation, and water resources management.

City Scale

The restoration and recreational development of river fronts is a major civic and environmental emphasis in our cities today. The range of opportunities for the University of Michigan ranges from preserving the status quo to substantial restoration efforts.

• *River as Invisible Thread* (fig. 46). In the absence of coordinated planning efforts to make the Huron River a centerpiece, development patterns will continue as they are. The presence of the river will not be a major element in the experience of the city and will not be visible from a distance. The construction of parking lots, sports fields, and roadways would continue, with some restrictions mandated by



fig. 46. River as an Invisible Thread



fig. 47. River as an Embroidered Ribbon



fig. 48. River as a Wild Ribbon

Federal and local regulations. Access to the river edge may be limited to specific sites which are linked by roads, but could also be developed as a connected riverwalk. This scenario does not take full advantage of opportunities to improve recreational and environmental conditions.

• *River as an Embroidered Ribbon* (fig. 47). The river and the adjacent floodplain are largely restored to a ribbon of continuous natural vegetation, making it a visible element in the landscape. Existing roadways in the valley are tied together as a coherent, scenic parkway. Adjacent recreational trails link limited amenities such as sport fields, boathouses, and picnic areas. This model seeks to establish a balance between recreational use and restoration of the most sensitive areas to a natural condition. For this approach to be effective, development of the slopes adjacent to the valley bottom should be carefully interwoven with a robust open space network connecting the river to upland development.

• River as a Wild Ribbon between Urban Centers (fig. 48). This model envisions a continuous natural river valley between Barton Pond and Gallup Park, and excludes built elements except bike and pedestrian paths. Parking and other facilities are provided at the perimeter of the ribbon.

Campus Scale

Each option implies a particular planting vocabulary and organization, and the existing landscape may suggest an appropriate range of options for a particular place. As at other scales, choices at the campus scale are likely not to be "either-or" but "both-and" or "this here and that there."

• Central Campus Model (fig. 49). In this model the traditional collegiate campus elements of greens, courtyards and malls, structure the landscape. Like a green rug, the lawn unifies campus spaces. Large canopy trees in informal groups provide scale and shade. The model is the English park, the New England Green and the Victorian "shadow" lawn. This is not a landscape of small fussy elements. Low hedges and open fences define the front lawns of buildings where the campus meets public streets, primarily at the perimeter. Massed shrubs accent transition points such as building entrances.

• *Music School Model* (fig. 50). Woodlands and natural landscape are the matrix in which individual buildings are dispersed; grass is limited to small sunny glades and high use areas near the buildings. The deciduous woodland and its flowering understory provide a bold landscape framework where flowers and color appear as broad, sweeping effects. The landscape infrastructure -- parking, paths and roads -- should not fragment the woodlands nor separate them from the buildings.

• Suburban Model (fig. 51). Space flows freely and lawns form a wide apron around individual free-standing buildings. Ideally, large canopy trees provide a transition between these buildings

and the big lawns. Alternatively, the plantings may appear as isolated, scattered elements. At a larger scale, this model does not encourage pedestrian activity but promotes vehicular use.

 Academic Village Clusters in a Natural or Rural Landscape (fig. 52). Clusters of buildings -- including teaching, research, housing, and recreation -- around a central garden core, are set in a more rural or natural setting which reflects and preserves the surrounding landscape.



fig. 49. Central Campus Model (Photograph: The Bentley Historical Library)



fig. 51. Suburban Model (Photograph: Andropogon Associates, Ltd.)

b. General

Further options for consideration in the planning of environment and natural systems include:

creek.

• Minimizing unnecessary grading, preserving natural stream channel configurations, and preventing the removal of native vegetation to help preserve and maintain natural systems.



Ltd.)



fig. 52. Academic Village Cluster Model (Photograph: Andropogon Associates. Ltd.)

• Limiting building of active recreational areas and parking lots in the upper floodplain terraces to allow a riparian buffer along the

fig. 50. Music School Model (Photograph: Andropogon Associates,

Determining areas appropriate to indigenous plant communities and those appropriate to a more traditional collegiate landscape of lawn, specimen trees and planting beds. The range of potential landscape expressions and potential plant communities and habitats for the Washtenaw County region could be identified and used as parts of the University landscape vocabulary.

• Implementing new techniques for water resource management, "best management practices," which call for infiltration rather than conveyance of stormwater, to reduce run-off quantity and velocity and hence pollutants. These approaches would build on existing University efforts to reduce water pollution impact.

Correspondence and conversations with Henry Baier, Terry Alexander and others in Business Operations describe these existing initiatives, including:

-- erosion and sediment control guidelines (on construction projects and on maintenance activities that disturb the soil)

-- elimination of illegal dump sites

-- cleanup of wetland areas

-- reducing de-icing salts

-- integrating pest management programs to reduce use of herbicides and fertilizers

-- identifying the discharge points from facilities into either the sanitary sewer or the storm water management system.

Because greater than 10-15% of impervious areas within a watershed can lead to degradation of water quality, consider: -- Limiting impervious surface to roads, building roofs and parking lots and limiting turf to peopled campus areas, wherever possible. -- Maintaining as many permeable surfaces -- woodlands, planted areas, and porous paving -- as possible to increase stormwater infiltration and recharge groundwater.

-- Using porous pavement with an infiltration basin beneath or traditional pavements piped to underground infiltration basins, to help balance demands for parking with the need for greater areas of infiltration by solving both requirements in a single area. Active recreational areas throughout the University, such as ball fields, can also serve as infiltration basins.

• Furthering a holistic view of water resource management considering the entire "water balance" of the University properties (both quantity and quality). Studies could be initiated of each sub-watershed within the University properties to record the predevelopment drainage system, the present campus infrastructure, and to measure the percentages and patterns of pervious, semipervious and impervious surfaces in each of these sub-basins.

E. ACTIVITIES, FUNCTIONAL RELATIONSHIPS AND SPACE USE

1. Mission and Goals

• Understand the patterns of activities on campus, their internal dynamics, relations to each other, and trends in the future.

• Establish activity relationships that will help to improve the atmosphere and quality of life for students, faculty, and staff campus-wide, and for patients and their families in the Medical Center. For example, provide or support a wider and better selection of retail and restaurant uses in the North Campus.

• Create spaces campus-wide that reinforce a sense of community and encourage interaction between disciplines and between faculty and students.

• Improve linkages between uses on different campuses. For example, help connect Medical Center faculty, staff, students, patients and their families to Central and North Campuses and downtown Ann Arbor.

2. Opportunities

• The broad spectrum of available types of land on campus -- infill parcels on Central, large sites on North Campus and open landscapes on East Campus -- could support a variety of uses and relationships.

• On Central Campus, opportunities have to do with changes within the heritage of existing buildings, as policies and patterns change. Using an existing building more intensively may obviate the need to build a new building and save the lifetime costs of maintaining and operating two buildings. Many campus buildings have changed their uses over and again, their simple, generic loftlike plans and structures allowing them to do so.



fig. 53. Engineering Arch (Photograph: Andropogon Associates)

• In the area between North University Building and the Central Power Plant are sites that could provide a location for facilities that help foster collaboration between the Sciences on Central Campus and the Medical School. This should be achieved without disturbing the functions and service linkages around the power plant, though it may require the relocation of other facilities planned for the site.

• The students and others on North Campus now could probably support a larger volume and greater variety of retail activity than exists on or near that campus; this should be verified in future phases of the plan. The popularity of the Media Center could be a catalyst for convenience and 24-hour retail uses -- late-night food outlets, for example -- and also for cultural activities that could join musicians, engineers, and architects. A jazz bar? A cybercafe? Dartmouth Library will have one; Harvard's Loker Commons is home to student study groups with their laptops. Several sites on North Campus, including on the Diag, could be developed for activities and populations that augment the conviviality of the central portion of this campus.

• The large open area at the center of the Medical Campus could house important future uses that help link the Medical Center to Central Campus. A building here could help, as well, to enhance the amenity of the Medical Campus core and to re-establish its relationship to local city streets. In the near term, a reconfigured and re-landscaped parking lot is planned for the site.

• "An excellent exception within the medical campus to the absence of connectedness to non-clinical centers can be found in the Cancer Center where patient care and research are geographically bound together, inviting stronger and more productive activity from each. This center underscores the concept of programs wherein individuals, who, by the nature of their work, have strong, similar interests and goals, can come together, stepping beyond (but not out of) the more traditional boundaries of academic departments, disciplines, reporting lines and budgets." (From MacDonald Dick II, M.D.)

• The "soft," changeable nature of the Wall Street area, and the vacancy of the former Kroger supermarket, could help forge a supportive mix of uses there with good linkages to the Medical Center and Central Campus. This is true as well of the area west of Glen Avenue and north of East Huron Street, where affordable housing and retail uses could be a much-needed convenience to the Medical Center. These amenities need not be University-owned.

• The relocation of the Burnham House, now underway, and its reuse as the Arboretum's visitor center, could help establish better links between the Medical Center, the Arboretum, and Central Campus, especially as the main floors of medical buildings in this south-east quadrant of the Medical Campus coincide with the exterior ground level. • Changes within medical care provision may give opportunities for changing activities within the University hospital complex: "Opening up public offices, waiting rooms, family rooms, eating areas would extend the principle of enhancing the human habitat. Adding business enterprises for people who move through the facility would extend the concept of medical-community integration. As the in-patient service downsizes, the top floors of the hospital can be reconfigured into apartments, preferably for retirees." (Macdonald Dick II, M.D.)

• The University's holdings east of Highway 23 are more opportunity than actuality for the University now, and mostly in relation to their size and ecological importance. What activities might this area support? How does the "East Medical Campus" figure in the Health System's plans?

• What opportunities does South Campus offer? Should it contain academic facilities?

3. Problems

• Campus uses are widely dispersed over a large geographic area.

• Patterns of campus activities may not reflect present-day relationships; for example, the departments involved in biological, psychological, biomedical and bioengineering research are geographically distant from one another, spread over the Medical Campus, North Campus and Central Campus.

• "Squatting rights" have perhaps played too large a role historically in assigning space uses.

• Most students live far from academic areas. There is more demand for on-campus housing than can be met.

• There are few campus spaces that encourage interaction. According to James Christenson, Director of Plant Operations, "The one feature this campus has too little of is 'people pockets' -- places where people can naturally gather to study, observe and discuss the day's events. We have some benches here and there, but few configured to encourage dialog."

• There are few restaurants close to the Medical Center.

• In a recent survey, a number of respondents expressed dissatisfaction with the number and quality of available restaurants and convenience retail on North Campus.

4. Issues

• What relationships between housing, academic, social and recreational areas would contribute to academic and student life?

• How should schools, departments, programs, services and administrative functions be allocated among campuses?

• How can the campus and the patterns it supports help to increase the frequency and fertility of interdisciplinary

interactions? How can the physical environment be planned to satisfy the unknowable relationships of tomorrow?

• What kinds of spaces and proximities are needed to facilitate collaborations? For example, how should the Sciences grow together?

• Which facilities should be mixed use and which single use -- at the scale of a particular space, building, precinct or campus?

• How will shifts in teaching method affect classroom demand by type, size and location? Should classrooms continue to be scheduled by individual schools or should some be centrally scheduled by the Registrar?

• How should student life and student residential life facilities evolve to meet changing life patterns of students? How should they relate to academic cores?

• How should changing dining habits in the University community be reflected in University food service facilities? Should traditional residence halls with dining facilities be maintained?

• Central Campus seems the most unchanging to us; nevertheless, because it is central, the great academic growths and shifts will, in the first instance, play over it. How will the Life Sciences and Medicine collaborate in space? What may be the succession in uses of the traditional science buildings as this shift occurs? What is the shifting pattern in the arts? How should the Museum, the Arthur Miller Theater, Architecture and Music relate to this pattern? How should Liberty Street fit with it? What does this imply for the overall pattern of LSA? How will Administration reassess its campus-wide distribution? Will this involve an increased density of administrative functions on or near Central Campus? What new role does Central Campus foresee for itself? A partner with downtown? A first among equals with the other campuses? A quadrant in a four-campus center? "Old town" to some other growing campus?

• How should the North Campus develop? As a forest clearing for mystical communication with a northern pine succession? Like Central Campus but for engineers? Its own built up campus with exurban outriggers? Site of a new relationship to be forged between Medicine and Engineering? How should the plan respond to the perceived need of students for augmented convenience goods, food services and transportation shelters?

• If the North Campus nucleus were to grow, what should it include? What mix of uses would make North Campus more convivial? Retail? Other academic uses? Administration? Satellites of Central Campus student services, such as the Bursar, Counseling or Health Clinic? How could the Bentley Library add depth to the North Campus nucleus?

• Should North Campus housing look north toward its shopping center and residential neighbors? To what extent does it share facilities with its academic co-tenants on this Campus? Should it rather be considered a part of the suburban pattern developing around it and around the University properties to the east? • The School of Music Building is in a clearing in the forest; what other kinds of community do they need? What if they say "none"?

• Should there be other small groups metaphorically in forest clearings in the campus landscape? What kinds of communities and relationships does the University want to reinforce?

• What uses could -- now or in the future -- be envisioned for the University's properties east of Highway 23? What uses are part of the University's mission but do not require close physical proximity to academic cores?

• What kinds of linkages and connections are desirable between Nichols Arboretum and Matthaei Botanical Gardens? What kinds of links should these have to the School of Natural Resources and Environment, Architecture and Urban Planning and other University schools and colleges?

• Should the East Properties be developed in clearly defined precincts -- health center, athletics and research park, for example -- or should more integrated land uses be considered?

• Should the University continue the pattern of suburban development at the properties east of Highway 23, densify and urbanize the pattern of development, or create new patterns based on other models?

• What kinds of connections should exist between the East Properties and North Campus? And between them and the region?

5. Options

The following ideas for different activities, relationships and spaces are initially unconnected to the general options above, but could be clustered, as appropriate, within one or several of them.

• A wider selection of restaurants near the Medical Campus could help promote collegiality by increasing opportunities for interaction of faculty and students from within the Medical School and between colleges and departments.

• Locating administrative units on North Campus could promote activity on North Campus by increasing the population and promoting a mix of students, faculty and staff.

• A wider selection of restaurants and retail shops and increased opportunities for entertainment on North Campus could help promote conviviality there. Adding food and convenience outlets to the Media Union could increase North Campus food options and support the Union's 24-hour activity

• Adding activities in residence halls without duplication could encourage students to travel between dorms.

• By locating similar uses on both sides of roadways, streets could be connectors rather than dividers.

• More casual outdoor spaces, perhaps including computer outlets, could help encourage informal interaction.

F. CIRCULATION, TRANSIT AND PARKING

1. Mission and Goals

• Consider all forms of transportation, by mode, responsible agency, and ridership, within an overall concept for circulation in Ann Arbor and on campus.

• Provide better, more easily visualized transportation connections between campuses and between the University and Ann Arbor.

• Create or enhance pedestrian-friendly, weather-appropriate access between Central, Medical, Athletic and North Campuses and between the campuses and downtown.

• Provide a multi-target, client-oriented parking plan, within the bounds of responsible stewardship of the environment, consideration of campus edges and avoidance of overtaxing the Ann Arbor street system.

• Continue to promote alternatives to car travel to reduce pressure on existing and future parking facilities.

• Reduce traffic congestion in and around Central Campus.

Plan for and leave open opportunities for future transportation technologies.

2. Opportunities

• The popularity of the University's commuter parking system, which currently transports over 500,000 passengers a year on its buses, could indicate one direction for further reducing the number of cars downtown and on campus.

• The extended, unevenly distributed population of parkers across the campus suggests the opportunity for a complex, multitiered parking strategy targeted to its many diverse user groups and tied to transit vehicles at its destination points.

• According to the Office of Business Operations, there are "approximately 400 UM sedans leased to departments. These either circulate during the day or are storage parked in prime locations. If we could augment the transit systems and/or provide stronger incentives to use personal vehicles, this number could be reduced by 250 to 300, we would reduce the number of illegal parkers and, perhaps, reduce the congestion in Church and Hill structures..."

• Population increase on the North Campus, brought about by development there of the Engineering School, that School's connections to the Medical Center and the existence of large parking areas near Bonisteel Boulevard, suggests the possibility there exists a critical mass of riders who would use a more visible, visibly amenable, and quick (though probably still rubber-tired) transit system, to and from the North Campus.

• Areas where pedestrians and cyclists illegally cross the railroad tracks may be areas where safer crossings and more direct routes between campuses could be developed.

• The proposed highway interchange from M-14 on Dixboro road could, in the long term (20+ years) change access patterns east of Highway 23.

• The University's research on transportation issues might help point the way to new solutions and possible sources of funds.

• The mass processional of pedestrians southward for athletic events could be an opportunity to make their route a memorable and festive element in the University circulation system.

• The Broadway Bridges project now underway could help provide better, more imageable connections across the Huron, and could, if successful, provide a model for other crossings.

• University Planner Frederick Mayer notes that the existing need to extend telecommunications and electrical lines between South and Central Campuses could provide an opportunity for upgrading pedestrian walkways along State Street from Hill to Hoover.

3. Problems

• Connections between the University's dispersed campuses and properties are difficult and must be made constantly by fleets of University vehicles and private cars.

• It is not possible to move as the crow flies from Central Campus, through the Medical Center and across the flood plain to the North Campus.

• Access into and across the Huron River Valley, except for vehicles, is poorly accommodated. Access is especially lacking from the Central and Medical to the North Campus.

• The north (Glazier Way) commuter lot is often filled to capacity; additional cars park along the residential streets in the vicinity. The South (Crisler) commuter parking lot bus is considered by users to be overcrowded. The nature of the problems points to the success of the program.

• Some streets, especially Washtenaw and Huron, have become barriers between precincts owing to road width and traffic speed.

• Pedestrian crossings described as particularly problematic include Catherine Street near the Taubman Library, the intersection of Huron and Zina Pitcher, Zina Pitcher and East Ann, and across the Medical Center Drives.

• The railroad, roughly parallel to the river, is an impediment to pedestrian and bicycle access from campus to and across the river.

• Pedestrians going from Central or Medical Campus to the athletic fields or parking lots on the north side of the river cross the railroad bridge illegally.

• According to its planners (JJR), the Medical Center loop road is at capacity, and further clinical facilities cannot be added without reevaluating the road system.

• As Ann Arbor's 1992 Central Area Plan notes, competition for limited on-street parking detracts from the residential character of the neighborhoods surrounding the University.

six times per vear.

• University service vehicles, contractors, vendors and delivery trucks park on campus sidewalks and open spaces, creating areas of conflict between service vehicles and pedestrians.

4. Issues

• What new transportation systems should evolve to meet the developing, University-wide pattern of activities? How should these relate to existing transportation systems, which includes large and small buses, lift-equipped buses, passenger vans and cabs?

• Should a plan emphasize providing better transportation connections between distant points, or locating and densifying uses so that less transportation is necessary? Or a combination?

• What new land use patterns can emerge which would reduce dependency on the automobile?

campus?"

• To quote Jim Christenson, Director of Plant Operations, "Whether it is deliveries of goods or movement of people to work, the movements need to be examined. Should we dump goods and people at remote sites, sort them, and then move them in groups to their specific destination? Or, in the case of people, should we move them in larger groups to a few transportation nodes where circulating buses can get them closer to their destination? How can we entice people to do that instead of competing for a parking space two minutes from the office or laboratory? How can we meet our goal of a pedestrian-oriented campus, if members of the University community don't want to be pedestrians?"

• Should a people-mover -- or perhaps some other 21st-century transportation technology -- be considered to make faster, easier connections? Could a rubber tired system simulate some of the advantages of high-tech transit? What is feasible in the near and long terms? Could the schools and programs that most use this "public good" contribute proportionally to its funding? What can be done now to keep future options open?

• The University and AATA have cooperative programs, for example, the Bus Pass Program and the Park and Ride system; bus routes are coordinated with common transfer points. What additional areas of collaboration and coordination between the University and the AATA would be most beneficial?

• Parking on football Saturdays is problematic, albeit only about

• As posed by the Office of Business Operations, "How can transit be more appealing and efficient than bringing a vehicle to





OPTIONS: BONISTEEL TRANSIT TRIP

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University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities, Planning & Design Information Source: Hatcher Graduate Library Map Room

• UM Parking Services Manager Susan Kirkpatrick asks, "How can technology unite University and community parking and transportation as one system for the customer? What will our future system look like? Will we ultimately have one card for access to University, DDA and City parking areas? Will that same card be used for access to AATA buses, University Transportation, and the Parking Express Shuttle system?"

• How can arterial roads bounding present superblocks be made pedestrian-friendly?

• Should the University continue the practice of closing streets to create pedestrian precincts? (This is discussed in relationship to integration of city and University in Section III.A.)

• What parking policy would suit the evolving patterns of campus activity and future changes in the transit systems?

• According to the State Department of Transportation, an expressway interchange at M-14 and Dixboro Road is a future (20 years+) possibility; how would this affect the development of University properties east of Highway 23?

• To what extent should the University become engaged in addressing regional transportation problems?

5. Options

What options might encourage the use of transit and improve intercampus connections? The University already has many programs in place to reduce dependence on personal automobiles in congested areas, including commuter parking lots, areas of cooperation with the Ann Arbor Transit Authority (AATA) and a bus system that serves over 3.8 million passengers a year.

A transit system (p. 85) to improve intercampus connection and communications would need to be a multi-layered augmentation of an already multi-layered system. It could involve combining:

• an imageable transit route (possibly high-tech, more probably rubber-tired) with about 10 stops, linking activities and parking on four campuses

• a "more seamless" UM-AATA bus transit system, to quote Parking Services Manager, Susan Kirkpatrick

• a "UM flyer" express system linking outlying commuter parking lots directly to campuses.

A relatively short, highly imageable transit route -- a "zigzag?" -- with relatively few stops could help make connections between North Campus, the Veterans Administration Hospital, Medical Campus, Central Campus, and the Stadium. Like London's Oxford Street underground line, the system could develop its own identity through its simplicity, through the facilities at each stop, and through the conveniences there -- intense retail in some areas and just a pushcart vendor in others. These would help users visualize

sequences, relationships and distances. Vehicles would be and look distinctly different from the present buses -- more intimate and friendly, perhaps using alternative sources of fuel. If demand is high -- and the route short -- using such a system could be more convenient than driving, even for gold parking pass holders. This system -- in tandem with parking along its route -- could help encourage people to leave their cars outside congested central areas.

How short and direct must such a route be? To connect the entire campus, from Briarwood to the properties east of Highway 23, in this way would not, we imagine, be feasible. Along a route from the Engineering School to the South Campus there could be, we believe, 10 stops, but the aim should be that most needed connections be accomplished with four or fewer stops and that headways be no more than five or six minutes. Would designated transit lanes -- for AATA and UM vehicles and possibly others -- be feasible along parts of the route?

How can *transit* become *rapid transit*? In the long term, highspeed people movers may be feasible. In the nearer term, we must investigate the most recent information on high-technology transportation to see if options for the near future have increased, and to search for convenient, imageable routes and rights-of-way.

The parking system described by Susan Kirkpatrick could be tied to the transit system outlined above, to provide:

• visible parking for visitors, as now, around most public areas of Central and North Campuses

• parking structures organized by pay and allocation systems as now, but with structured parking (plus convenience retail) added near the route of the proposed "zigzag" transit system

- on lot parking as demolition and construction permit
- on street, metered parking

• frequent monitoring of the system, by computer, to fit parking supply to customer demand.

The commuter parking lot system could be expanded. Express shuttle buses, "UM flyers," could transport people from outlying parking directly to their workplaces without intermediate stops.

Other options could complement the transit system:

• Making bus interiors more pleasant and increasing, enlarging and heating bus shelters could help make riding more amenable.

 Placing real-time locations of late night buses on the Internet might help night-owls in the Medical Center and elsewhere.

• Further increasing coordination between AATA and the University bus system could help make transitions between systems more seamless.

• Placing convenience stores in tandem with city parking structures and remote lots could help reduce traffic congestion and increase use of outlying facilities by making them more convenient.

• Promoting bicycle use, especially during warmer months, could help reduce pressures on Central Campus parking lots. The Ann Arbor Bicycle Master Plan suggests that use of bicycles could be promoted by establishing bike lanes and other bicycle-related amenities; rehabilitating existing travel surfaces; providing a range of parking facilities for bicycles; and providing bicycle storage at perimeter commuter lots.

• A more developed pedestrian and bicycle path between the North, Medical and Central campuses could become part of a continuous pathway along the Huron River valley.

• A designated crossing over the railroad tracks could become an important linkage for University pedestrian and bicycle commuters and reduce conflicts with the railroad. An above-grade crossing at the base of the Medical Center could make a popular walking path safer and provide part of a more direct path to North Campus. A safe crossing could also form part of bicycle and walking paths linking the Arboretum and Gallup Park.

• Narrowing Bonisteel Boulevard, perhaps through the introduction of the Bonisteel Transit Trip (p. 83), could help connect uses and activities across the road.

• A processional corridor along the major pedestrian route to the stadium, paralleling the "zigzag" could add safety, convenience, imageability and a new icon to the University.

• Service vehicle and delivery organizations might require traffic management and small-scale, curb and bollard physical interventions more than planning. Susan Kirkpatrick suggests, to relieve congestion and conflicts with pedestrians at loading docks, "we could identify what items and areas should best be handled through central receiving and what dock areas should be off-limits to semis because of safety reasons and dock capacity."

• Increasing the integration of residential and social spaces on campus could increase safety and reduce the demand for parking.





'ZIG ZAG' TRANSIT ROUTE

NOT TO SCALE

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KEY	
	UM Northwood Route
	UM Commuter Route
	UM Bursley-Baits Route
	UM Night Owl North Route
	UM Night Owl South Route
	AA Single Bus Route
	AA Multiple Bus Route
	Blake Transfer Center
	Terminus for all AA routes except:
	1U, 12U-Liberty, 12U-Miller, 22, 38
*	Greyhound Bus Station
\times	Amtrak Station
•	AATA Primary Stops
0	Transit Stop
	Transit Stop with intensified use
P	Parking
\mathbf{P}	Satellite Parking
	UM Property Limit

OPTIONS: TRANSPORTATION

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities Planning & Design Information Sources: Ann Arbor Transportation Authority, UM Bus Schedule Map

April 22, 1998

G. TOWN-GOWN RELATIONSHIPS AND THE COMMUNITY

1. Mission and Goals

• Support a strong, lively and safe downtown for Ann Arbor with close ties to the University.

• Initiate and maintain outreach to Ann Arbor and other communities.

• Coordinate planning efforts among County, Township, City, and University governments and their agencies. Increase coordination at all levels with the Ann Arbor and Washtenaw County governments.

• Help maintain economic and social stability, by supporting improvements to off-campus commercial and residential areas, particularly along major arrival routes such as Packard Street and South State Street.

• Support stable, attractive and safe residential neighborhoods around the University campuses.

2. Opportunities

• Liberty Street could become a stronger connection between Central Campus and downtown Ann Arbor and, with the extension eastward on campus of an axis of related activities, could be the locus of town and campus performance facilities (p. 73).

• Deteriorating neighborhoods at campus edges suggest the University could take the opportunity to support constructive change, possibly in relation to University residential and administrative location policies.



fig. 54. Residential Neighborhood in Ann Arbor (Photo: Andropogon Associates)

• The reduction of on-campus crime in the last several years, and the coordinated efforts of various University departments to help achieve this, could indicate means of achieving the goal of the 1990 Task Force on Safety and Security to provide "an environment that is physically safe."

• Ongoing town-gown cooperation at the staff level exists in many areas -- including snow removal, the logistics of major events such as the Art Fair, and public safety initiatives such as joint bicycle patrols and a combined Public Safety-Ann Arbor Police Department office in Mason Hall. Ad hoc groups such as the Joint City-University Planning Committee, the Joint City-University Transportation and Parking Committee meet regularly, and the Department of Public Safety has weekly meetings with the Ann Arbor Police Department. Could this type of cooperation lead the way to increased cooperation at the highest levels of administration?

• Opportunities for University properties east of Highway 23 need to be examined in relation to growth and development in the regions west and east of it. What would these suggest?

3. Problems

The Town/Gown Study completed by the College of Architecture and Urban Planning in 1993 noted several categories of town-gown problems:

• *Land acquisition* by the University, resulting in dissimilar program and scale relationships, displacement of strong ethnic neighborhoods, "institutional creep," and land removed from tax rolls.

• *Traffic and parking problems*, including parking availability, cost of expanding roads to meet volume strains, and costs of road maintenance.

• *Housing problems*, including dilapidated student neighborhoods and high housing costs and, as a corollary, reduced opportunity for ethnic and class diversity within the community.

The high cost of living in university towns.

• Police problems, including increased risks owing to roundthe-clock use of campus facilities and gathering of homeless and panhandlers.

Other published reports address issues of mutual concern:

• The Report of the 1997 Task Force on Safety and Security noted that -- despite "considerable improvements...to the physical environment vielding solid progress in the quest for a safe environment" -- by comparison with five Midwestern universities the Michigan "appears to have a higher number of robbery (armed and unarmed), burglary, theft, and arson incidents than other universities. In terms of reported offenses per 100 students, UM is highest for robbery theft and arson...[and] third on instances of sex offenses."

• The 1992 Ann Arbor Central Area Plan noted that conversion of single-family homes to multi-family dwellings has contributed to increases in density in Central Area neighborhoods. These neighborhoods typically lack adequate parking, recreational facilities, grocery stores, and other services.

• The Central Area Plan also suggests that *"the transitory nature"* of the student neighborhoods may contribute to conflict relating to lifestyle differences between students and other residents. ... The lack of a clear identity can cause disinterest and apathy in the neighborhood, resulting in less neighborhood cohesion. When this happens, safety, property maintenance and sense of place may be sacrificed."

Beyond these lists, we have noted that:

• Although there are many informal, staff-level channels of communication, there are few formal mechanisms for regular reviews and exchange of information between University and local County and Township governments.

• In a meeting with City and County officials at the beginning of Phase I, several expressed the opinion that the University administration makes decisions based on the needs of the University without giving sufficient consideration to their impact on Ann Arbor and Washtenaw County, and noted that it is not clear to them who represents the University in these activities.

Ann Arbor.

4. Issues

• What should be the nature of the University's cooperation and coordination with City and County governments?

• Should the University consider a larger rental component to its land acquisition and use policy, in the interest of helping to maintain its own flexibility and Ann Arbor's tax base?

• What should be the nature of the University's cooperation (if any) with private sector entities in the City or County? Are there areas in which the University should consider public-private partnerships? Do these have physical corollaries?

• What role should the University assume in Ann Arbor planning and development issues?

• Should the physical campus be further integrated with Ann Arbor? Previous sections have considered some opinions of those within the University regarding a greater integration of town and gown. How would the *City* view the University's expanding its uses further into the community?

• How should town and gown collaborate over areas of interface?

• What does this mean on the Central Campus, in view of plans such as those for the Arthur Miller Theater?

• At the same meeting, some City officials expressed the opinion that the University does not provide adequate financial support to

• What does this mean in the suburban context of North Campus or the rural context of the properties east of Highway 23?

• What responsibility does the University have for student housing off-campus? Has that responsibility changed as the student population has grown? What responsibility does it have for the social and aesthetic qualities of the surrounding student neighborhoods?

5. Options

• Re-evaluate philosophies regarding University property ownership and rental.

• Enhance the character and porosity of campus edges, perhaps by integrating campus uses with off-campus residential and commercial uses in shared public spatial systems.

• Inclusion of City and County officials and staff, merchants' groups, neighborhood groups and other civic organizations in the master planning process could help improve town-gown relations and open up new avenues of communication.

• The *Town/Gown Study* completed by the College of Architecture and Urban Planning in 1993 suggested that the universities and colleges with the most progressive town-gown relationships are those that have a task force of six to eight people representing the institution and the city. Could this work in Ann Arbor?

H. THE PLANNING PROCESS

1. Mission and Goals of the Plan

• Promote participation by all levels of the University community, including students, faculty and staff, and by Ann Arbor citizens and city, county and state agencies in the present planning processes.

• Help to evolve the structure of an ongoing planning process in line with the evolving University polity, its approach to governance and its methods of making decisions.

• Evolve a plan-for-continuing-to-plan that can be administered after we consultant planners have left the campus.

2. Opportunities

• The availability of e-mail could provide a tool for developing a consensus for the master plan.

• The new administration can devise a planning and decisionmaking process that suits its own mandates and proclivities.



fig. 55. Liberty Street Looking East to Burton Bell Tower

3. Problems

• A highly decentralized system of facilities planning has enabled vast growth to take place on campus, expedited by one of the most expert academic facilities planning and operating offices in the United States. A perceived problem with the process now is that physical planning has not been sufficiently integrated with academic, financial and administrative planning at the highest levels.

• A number of individuals and groups within the University and Ann Arbor community feel they should play a greater role in the process than they have done in the past. In particular, notes the University's Office of Business Operations, "students and faculty sometimes feel left out of planning processes."

4. Issues

• How does the University want to define the place of direct democracy, representational democracy, advising, guiding and steering in the project planning and decision-making processes?

stakeholders?

campus development?

• What processes can be devised that help the plan benefit from both the insider's knowledge and the outsider's point of view?

• How can the University most productively use the expertise of those who comprise it, in the plan and in exploration of possible solutions to larger problems? To what extent can the physical campus be a laboratory for that exploration?

5. Options

be evolved.

• How will these roles be undertaken by various project

• How should the present and ongoing planning and decision processes respond to the suggestions of the plan? To the processes of the plan? To what extent and when should executive-level academic and financial planning be involved in decisions on

• As a result of the interactions during Phase I of the project, it is hoped that a structure of governance for subsequent phases can

• This in turn should give rise to ideas on the location and guidance of physical planning and facilities design within the decision-structure of the new administration.

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IV. CONCLUSIONS AND NEXT STEPS

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IV. CONCLUSIONS AND NEXT STEPS

In this Overview report we have tried to outline the key themes and issues of planning for the campus, seeing them in terms of the history and future of the University, but also in terms of its intangibles -- its academic mission, its aspirations for quality, artistry and iconography.

Where artistry lies may not be easy to discern at the overview macro scale -- aesthetic and design issues may seem clearer at the level of individual campuses and subareas. However, relationships established within the overall will have implications for artistry at other scales, which calls for consideration of several scales in parallel during the overview phase.

In the next phase the relationships depicted in the campus pattern maps above must be discussed in greater detail and in the light of future trends and needs. We will begin to canvass in greater detail the aspirations, plans and programs of the schools and other entities of academic life, as well as of Student Life, Student Residential Life and the Administration. These will help us develop a next round of options for the physical campus, based on a deeper understanding of aspirations and realities.

Perhaps we have, so far, managed to set down only the obvious -- what "everybody knows." If so, we hope the act of putting it in one place and sharing it across the community can give rise to new understandings, perhaps to realizations not previously reached, and provide a basis for future discussions.

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