

Campus Development Plan

Western Michigan University
Kalamazoo, Michigan

CAMPUS DEVELOPMENT PLAN
WESTERN MICHIGAN UNIVERSITY

prepared by

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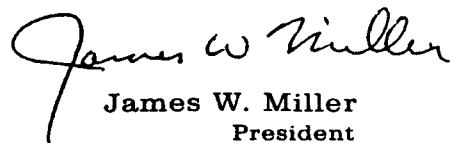
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FOREWORD

The Campus Development Plan for Western Michigan University has been evolved in large measure through the efforts of an advisory committee appointed by the President of the University and its successor, a newly formed Campus Planning Council of the Faculty Senate. To these groups we are heavily indebted, particularly to the latter which set forth the philosophical guidelines for the construction of facilities with emphasis on the academic area. Enthusiastic approval was given the guidelines by the Western Michigan University Board of Trustees, thus giving the architectural firm of O'Dell, Hewlett and Luckenbach the framework to highlight the concept of a pedestrian campus and to designate specific sites for academic and non-academic facilities.

The Development Plan is based on an enrollment of 20,000 full-time equated students, but it has the flexibility to cope with a student population which goes beyond present projections. With this in mind, we feel it is important to emphasize that this is a living Development Plan subject to continuing review by the Campus Planning Council and technical personnel. The rigidity of a master plan has been avoided so that the prescribed guidelines, and any amendments necessitated by changing conditions in enrollment and programs, can be followed.


James W. Miller
President

OBJECTIVES OF THE CAMPUS DEVELOPMENT PLAN

A "campus development plan" is basically a framework within which the University can expand its physical facilities as needed while maintaining an orderly arrangement of both function and aesthetics. It is fundamental that the "plan" be considered a guide by which the inevitable changes can be measured. The "plan" is not inflexible, but rather a springboard.

The Campus Development Plan for Western Michigan University as presented herein was based on criteria with respect to University philosophy, anticipated enrollments, and academic development as determined by the Administration and Faculty. Their recognition of the need for long-range planning and their devoted efforts toward its implementation have provided much impetus to the planning process.

The over-riding control of a campus development plan is the maximum anticipated enrollment. For Western Michigan University, this was established at 20,000 full-time-equated students. A total enrollment of 22,500 full-time and part-time students was projected to equate to this figure. Therefore, academic facilities were based on the projected full-time-equated enrollment, while all supporting facility planning, including provisions for academic needs, campus services, circulation, parking and services were based on the total enrollment of 22,500. It should be cautioned that, should a significant deviation from these figures be considered at any time, an in-depth study of the resulting implications must be made.

Within the limitation of the established maximum enrollment, the direction of the basic planning emanates from decisions and guidelines pertaining to the academic area. The philosophy and goals are well-expressed in the following criteria developed by the Faculty Advisory Committee on Campus Planning and subsequently endorsed by its successor, the Campus

Planning Council:

"Make this a pedestrian campus by eliminating from the academic core all vehicles other than those of a service nature. Maintain a ten-minute walking time between extreme points within the academic core on the campus."

"Locate all main service driveways and parking facilities outside the academic core of the campus."

"Locate all non-academic facilities on the periphery of the campus."

"Designate specific areas that must remain vacant for controlled density purposes."

"Those responsible for the long-range plan must be urged to give at least as much attention to vistas and to the outdoor spaces formed by the location of buildings as to the shape and location of the structures themselves."

These guidelines set a high standard for the campus development plan and a challenging directive to the University as it moves toward fulfillment of its goals.

Planning is a continuing process which may be reduced to a specific plan at any point in time. Each building as it is designed becomes a fixed element in the long range development plan and future planning must be adjusted to accommodate changing needs.

While the Development Plan shows future building outlines, there is no attempt to make a commitment. These outlines are used to illustrate a principle. The design and function of these buildings will be determined by future programs and planned with an understanding of and empathy for the principles and guidelines of the Development Plan.

EXISTING CAMPUS

The present stage of campus development has resulted from an irregular and unpredictable growth of the university in its formative years. Neither the ultimate role nor the complexity of the institution could have been foreseen when the West Campus was begun. The function, form and relationship of existing buildings as well as existing pedestrian and vehicular traffic patterns are directly related to these indeterminate conditions.

Existing buildings must be the starting point for a development plan for tomorrow. Traffic patterns can be changed, most roadways can be economically rerouted if desirable, but structurally sound buildings must be thoroughly considered and, to the degree of reasonableness, they must be integrated into future planning. If abandonment or complete separation is ultimately indicated, direct recognition in planning is mandatory.

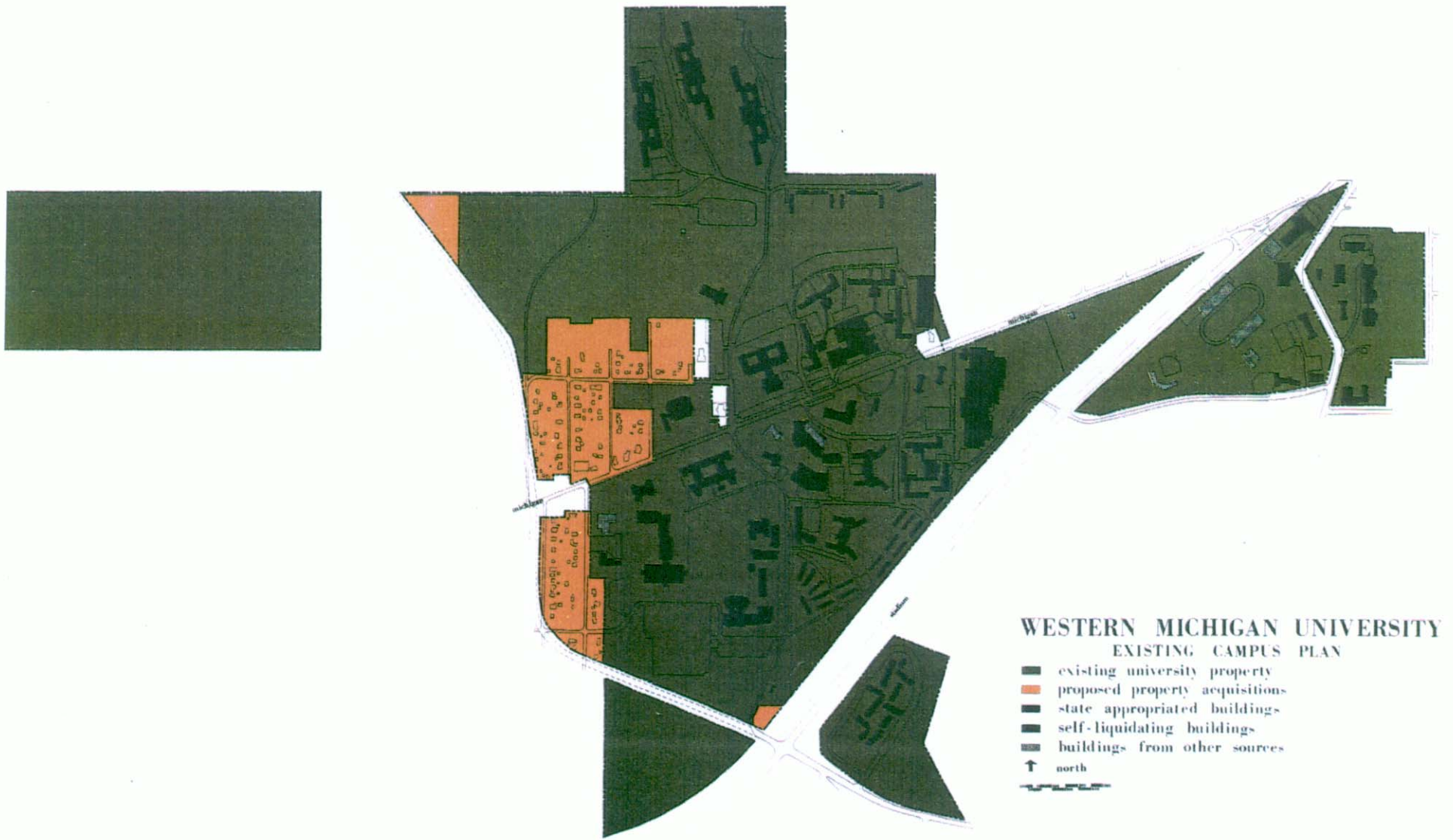
The Western Michigan University campus presently consists of two separate campuses divided by the Penn-Central Railroad, Stadium Drive and athletic fields. The East Campus is the site of the original school which was founded in 1903. The land northwest of Stadium Drive was purchased in 1946 and succeeding years, and it is here that all recent expansion has occurred. The West Campus has become the "Main Campus."

Based on the study involved in the preparation of the

Development Plan, it now appears that the enrollment objectives for Western Michigan University can be met within an area generally bounded by (a) Stadium Drive and the Penn-Central Railroad on the south; (b) Howard Street extended as proposed on the west; (c) existing residential areas beyond the residence halls on the north; and (d) Kalamazoo College on the east. Land acquisition is recommended to complete this tract with specific additions including (a) land west to Howard Street from the existing campus limits; (b) a parcel east of the Student Center on Michigan Avenue; and (c) the vacant area on the southeast corner of Howard Street and VandeGeissen.

All major buildings on the West Campus are relatively new and have been given full consideration in the Development Plan. The married-student housing, constructed in the World War II era, has limited expected usefulness due to deterioration. The site of this housing has not been specifically programmed, as it does not fall within the academic circle in the proposed plan. However, due to its location and topography, this site is an interesting one and should be considered for future non-academic use.

The buildings on the East Campus are much older but some are in sound condition. Although in the Development Plan they are not programmed as a part of the ultimate undergraduate academic facilities, they remain as an integral part of the overall University program.



LAND USE MAP

It is the purpose of a Land Use Map to establish in broad terms the land areas that should be designated for various functions so that general relationships can be developed. Based on the Land Use Map, the more detailed planning for individual functions can progress.

Western Michigan University is most fortunate that, due largely to its foresighted program of land acquisition, growth of its campus now lends itself to logical zoning for land usage. During the University's recent growth, most of the "support" facilities on the proposed plan have already been located on the east and northeast edges of the new land use plan. This has permitted designation of the academic area in a well-articulated concentration in the western sector.

In determining the area to be allocated for academic facilities, the ten-minute walking range established by the Faculty Advisory Committee was used. Thus, a circular academic zone of a 2,100 foot diameter will meet the criteria.

Using the existing academic buildings as the easterly edge of a circular academic zone, the land for containment of the academic areas can be broadly defined. Upon detailed study of both site availability and functional relationships, the area does, in fact, lend itself to the completion of the academic area needed.

It is of utmost importance to recognize that Michigan Avenue presents a major violation of the principles of a pedestrian campus. Although at one time Michigan

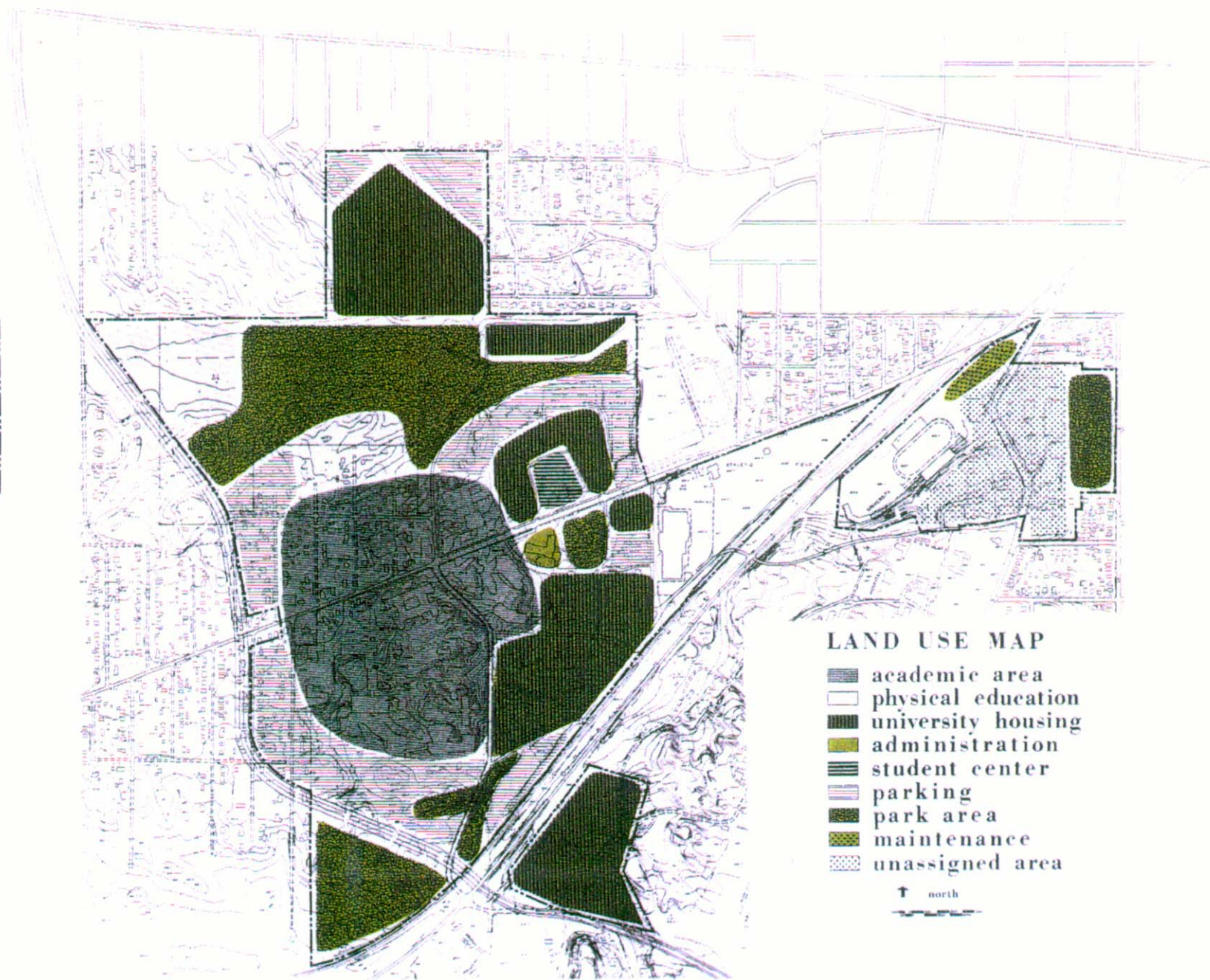
Avenue was a major thoroughfare between Detroit and Chicago and handled considerable traffic, the construction of the freeways and of Howard Street will further decrease Michigan Avenue's importance. Presently, it carries just enough through traffic and University traffic to constitute both a hazard to students and a barrier to campus units.

It is critical to the realization of a valid campus plan that the University and the involved public authorities close Michigan Avenue through the campus. No other solution will fully achieve the goals of this plan.


The major athletic fields, located as they are east of that area designated for the functioning campuses are limited by size, physical condition, student accessibility and inadequate parking. The 80 acres west of the Howard Street Extension could well be considered for this future need in addition to other related activities.

Goldsworth Valley suggests a unique land use as a recreational area. It is a barrier between the Residence Halls to the north and the campus but it is a barrier that is an asset and should be maintained and developed for park uses. Some intramural sports fields, an outdoor concert pavilion, a nature preserve and other uses are suggested for this area.

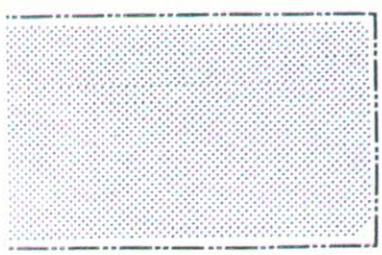
It is very reassuring that, unlike most universities that have reached a major portion of their enrollment growth, Western Michigan has before it the opportunity to develop a highly acceptable land use plan.

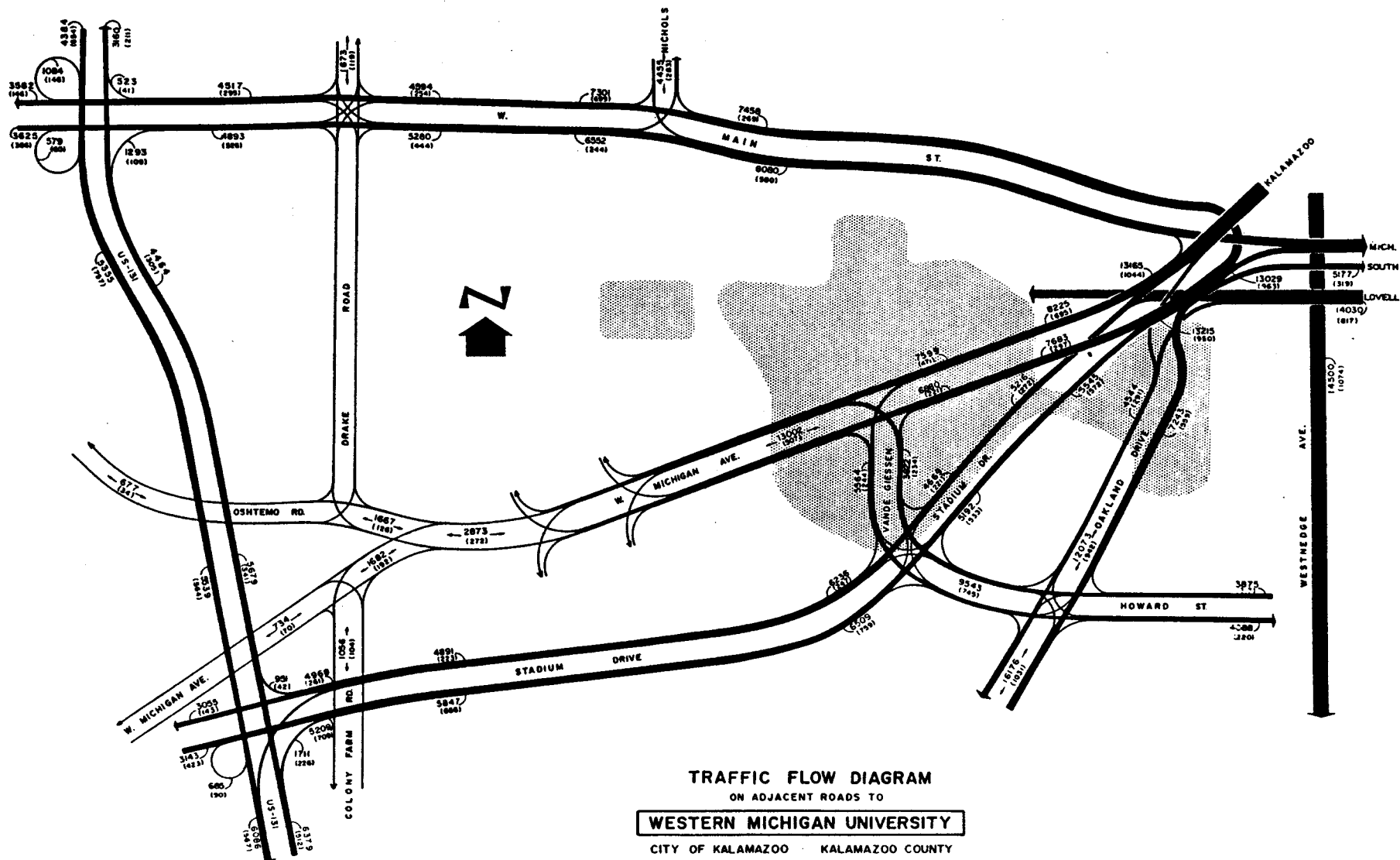


LAND USE MAP

-  academic area
-  physical education
-  university housing
-  administration
-  student center
-  parking
-  park area
-  maintenance
-  unassigned area

↑ north





CODE
0000 - 24 HOUR TRAFFIC COUNT
0000 - 7 AM - 6 AM TRAFFIC COUNT
..... - W.M.U. CAMPUS

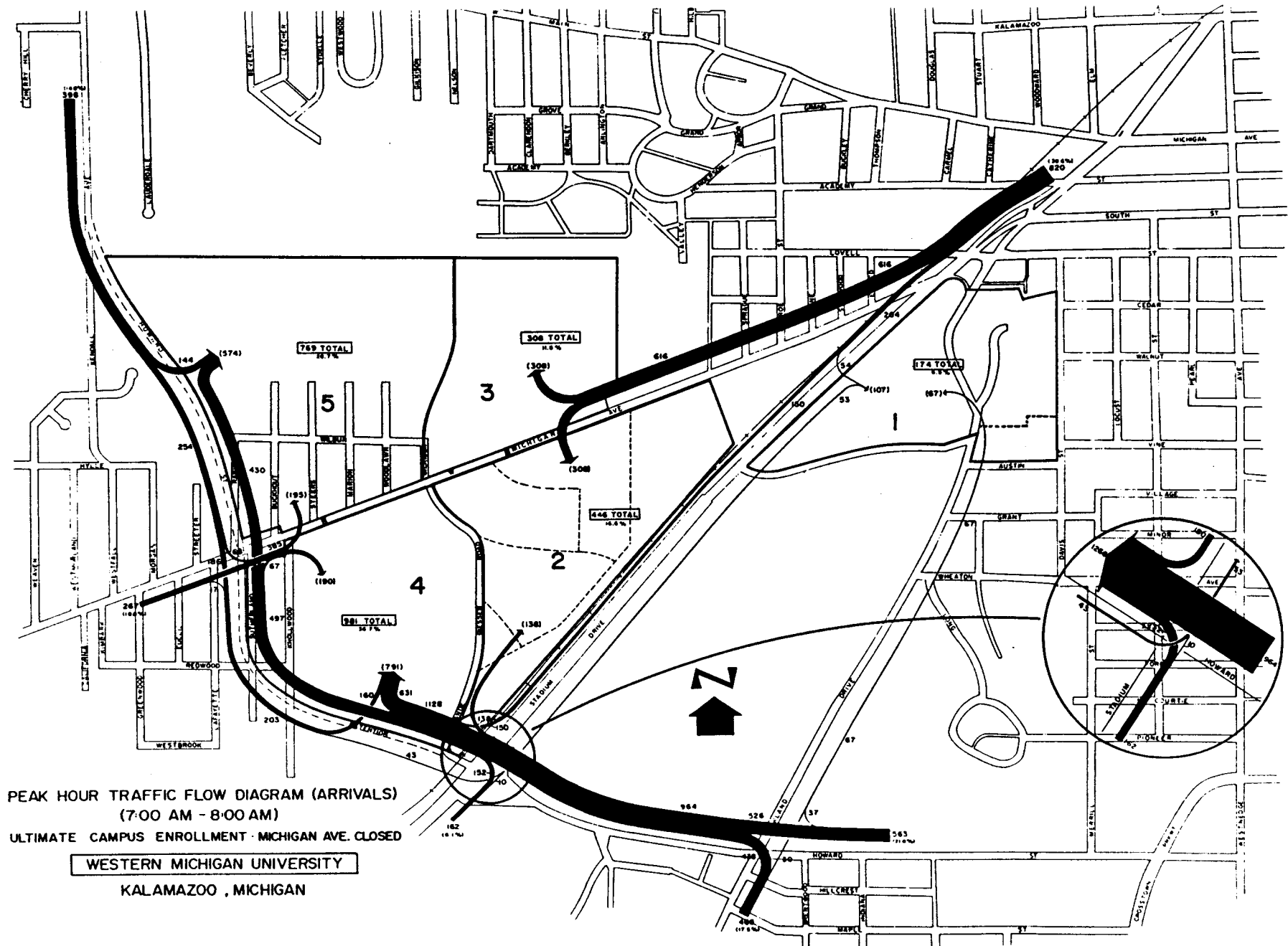
VEHICULAR TRAFFIC STUDY

An increasingly important phase of site planning is the traffic pattern, both on-site and off-site, for existing conditions as well as for those proposed. An equally important phase in planning is that of providing adequate parking facilities to accommodate the traffic bound for the campus. As the volume of traffic in and around the University increases, further planning must be predicated upon well-grounded projections of traffic flow.

Traffic Engineering Consultants conducted a study of traffic and parking conditions at Western Michigan University. Traffic counts, origin and destination surveys and parking statistics were used. From these

studies, projections were made for the expanded enrollment objective. It was assumed for the purposes of projection that (1) the regulation governing the use of cars by students will remain unchanged; (2) the ratio of campus-housed students to commuters will remain at the current level; and (3) that the current ratio of men to women students (and the related ratio of on-campus cars) will remain the same.

The capacities of the principal thoroughfares serving the University, i.e., Stadium Drive, Michigan Avenue, Howard Street (as extended), Oakland Drive and Main Street, can accommodate the increase of traffic that will develop when the maximum enrollment is reached.



The proposed Howard Street extension will provide a new and more convenient approach to the campus and assist through traffic.

As indicated in the Peak Hour Traffic Flow Diagram, the major traffic in the area is University-related. In order that congestion does not become intolerable at the intersection of Howard and Stadium, it will be necessary to encourage traffic approaching from the west to enter the campus on the west and park there and to encourage traffic approaching from the east to enter the campus on the east and park in that area. This action will permit closing Michigan Avenue through the campus.

The traffic survey has indicated a future need for 5228 parking spaces in Zone #1, thru Zone #5. Two thousand four hundred thirty-seven existing surface parking spaces will be retained in the Development Plan and the balance must be made available in surface parking or parking structures distributed as required in each zone.

Students residing in campus residence halls have not been included in peak hour traffic or parking estimates since these cars must be parked in residence hall parking lots only and may not be used in traveling to and from classes.

VEHICULAR CIRCULATION AND PARKING

The proposed vehicular circulation system has been designed to provide access to and from the University for faculty, staff and students living off campus. The majority of these persons will arrive by car and will be provided with convenient parking.

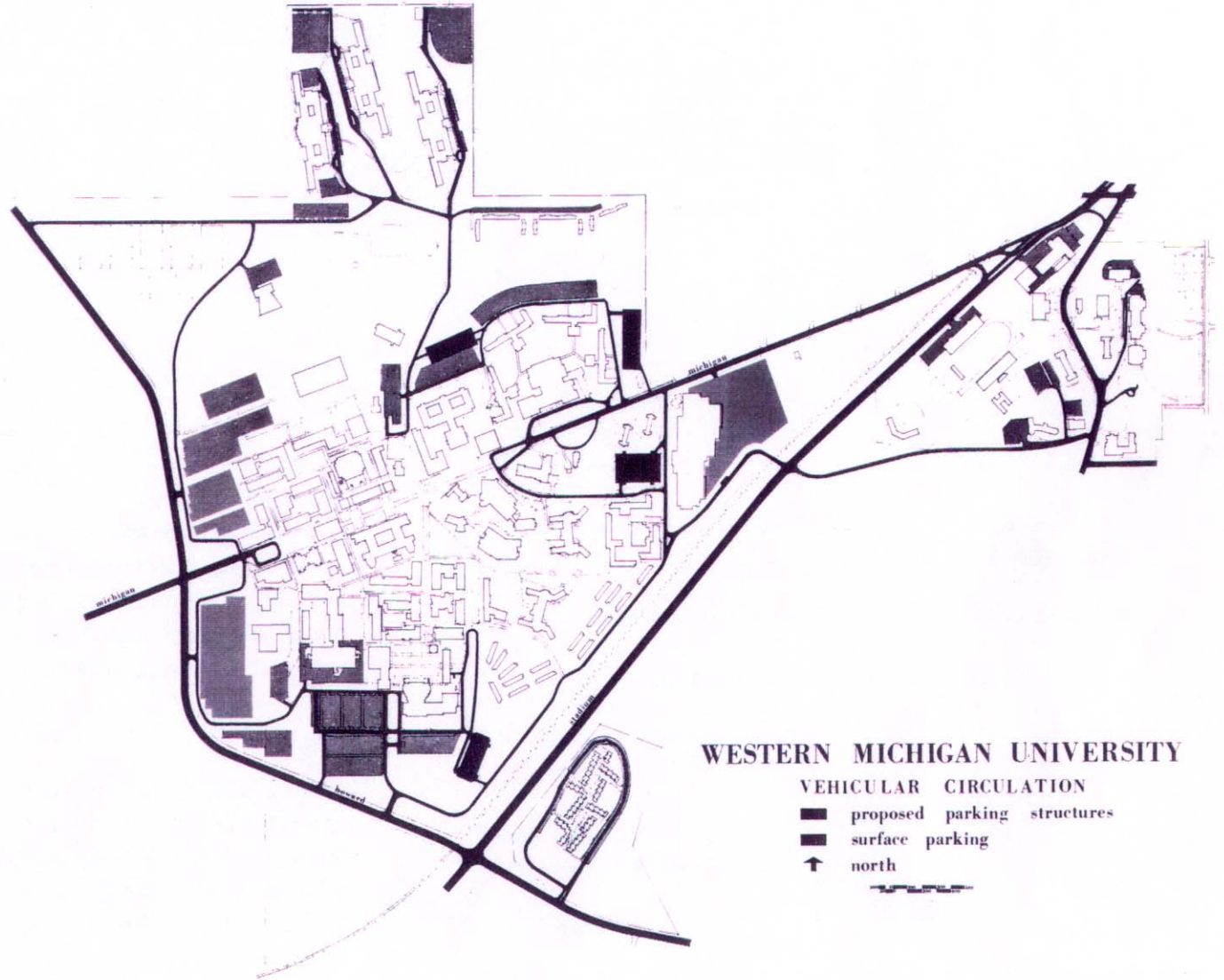
Ease of arrival, departure and parking for public events at the Auditorium, Shaw Theatre, Student Center, Read Field House, and other similar facilities has also been considered.

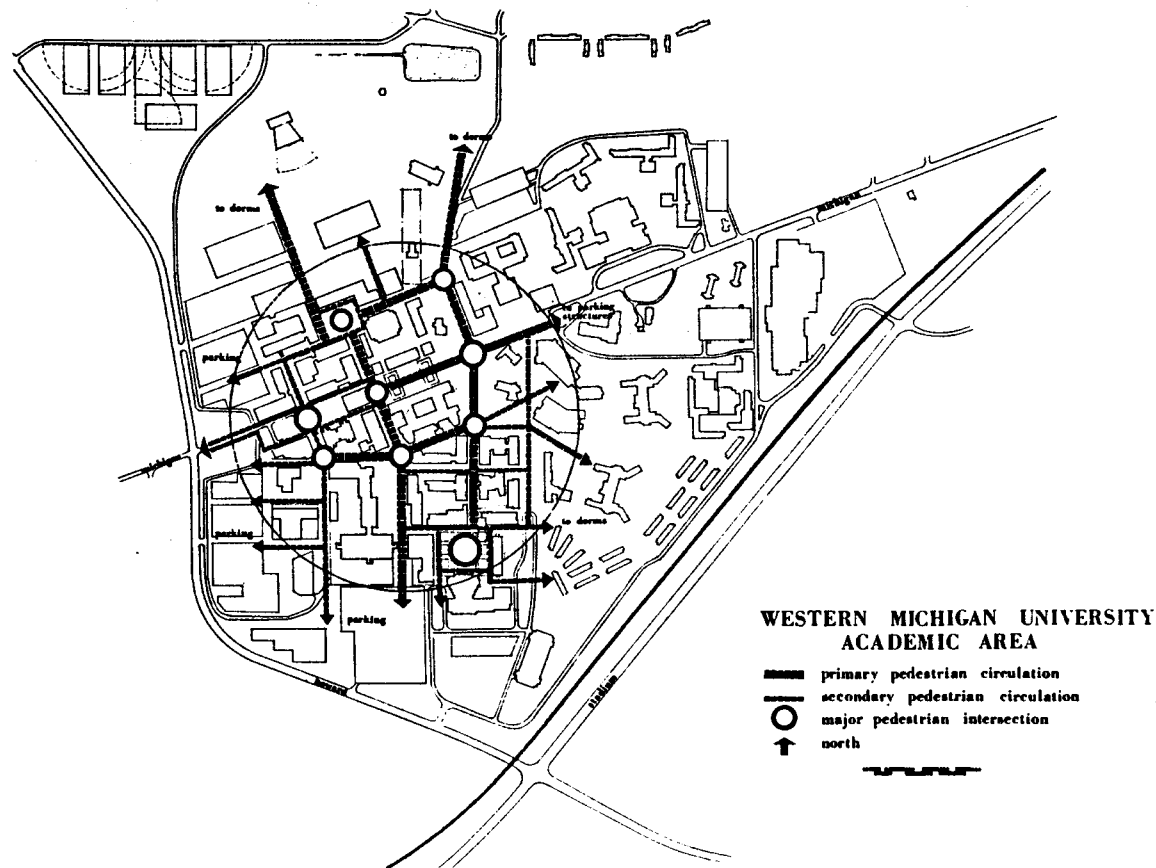
Within the boundary of the campus, certain streets would be closed and Western Avenue realigned at its west end. The remaining streets will form a network around the campus and provide access to parking and buildings requiring such availability. Service and emergency vehicles will use widened pedestrian pavements which will preclude the need for constructing service drives.

A vehicular circulation pattern requires the addition of a fully developed parking system. Four parking structures are located and sized as was found necessary by the traffic and parking survey.

Parking structures are shown on the vehicular circulation plan in black. These structures are located in areas where the amount of land needed for surface parking is not available. One 608-car structure has been completed to serve the University Student Center area. The locations of three additional structures are indicated, one to replace the lot west of the Field House, one in the area of the Auditorium complex, and one north of Sangren Hall. Surface parking west of the academic core is adequate both north and south of Michigan Avenue provided the property to the Howard Street extension can be acquired. If any sizeable parcels cannot be purchased, additional parking structures may be indicated, particularly as the northern half of the academic core is developed.

Residence hall parking is adequate and suggests no problem now or in the foreseeable future except for reassigning spaces.





ACADEMIC CORE

Planning of the academic core is the pivotal point of the Campus Development Plan. The relationship of the academic buildings to each other and to the campus as a whole will determine much of the efficiency and effectiveness of the various academic programs. At this point in the University's growth, the need for academic facilities is pressing and that need in itself dictates a thoughtful analysis of the plan for implementation.

To determine the space needs for the University maximum of 20,000 full-time-equated students, Western's Office of Institutional Research made estimates of area needs for each department. The space needs were predicted on a "space-per-student" allowance of 146 square feet per student, which unit was taken from the budget report of 1966-67 as a "reasonable minimum".

The estimates of ultimate space needs are as follows:

The College of Applied Sciences	463,041 sq. ft.
The Graduate College (Librarianship)	21,955 sq. ft.
The College of Business	270,025 sq. ft.
The College of Education	774,355 sq. ft.
The College of General Studies	433,875 sq. ft.
The College of Arts and Sciences	
Humanities	478,442 sq. ft.
Science	388,652 sq. ft.
Social Science	446,655 sq. ft.
TOTAL	3,277,000 sq. ft.



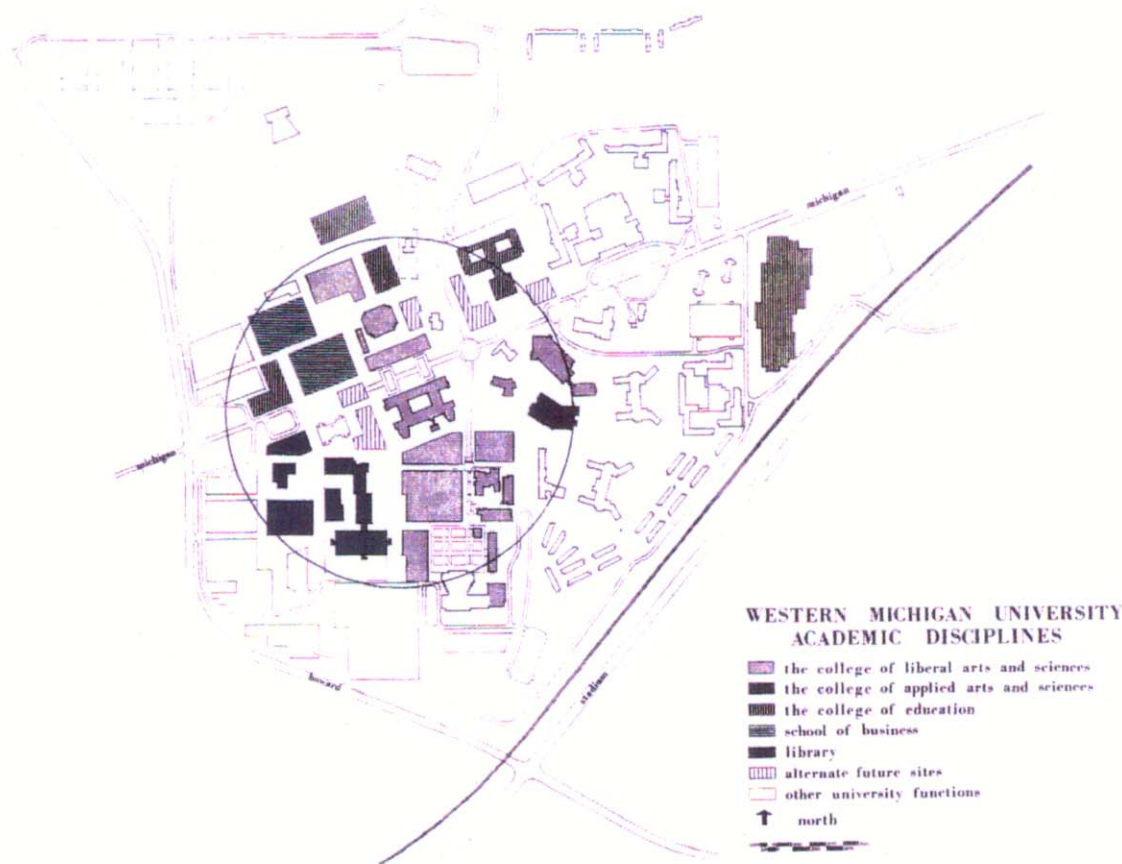
All buildings present and future are within the circle representing the ten-minute walking distance. The plan shows graphically how the relatively narrow walkways connecting the major open spaces create a feeling of openness belying the high land coverage. The green representing the open areas dominates the plan. The grey areas to the south, west and north are parking lots and should be treated as open space of a different kind.

The desired ten-minute walking diameter has an area of about 80 acres. With a total of 3,277,000 sq. ft. of academic space and considering an average building height of three and a half stories, the land coverage or density will be approximately 35%. This density precludes the placing of each building on its own plot with generous land around it. Existing buildings with spacious grounds must necessarily yield to more proximate neighbors. A walking campus in the academic area leads to the creation of an urban environment for a university of this size.

The organizational principle of an urban campus

should be a system of pathways interconnecting a series of open spaces. For the spaces to have identity and meaning, they must be substantially larger than the paths leading into them, and they must have a strong architectural definition so they are perceived as giant outdoor rooms. In fact, the system of paths and spaces is not very different from a system of corridors connecting rooms of a building. The visual experience of moving through a sequence of pedestrian paths and open spaces is highly satisfying.

Within a campus as large and as concentrated as this, the walkways must have a simple system. One needs to be able to identify his location at all times and to relate quickly to his destination. The primary and secondary pedestrian circulation has been kept as direct as possible. The areas designated by circles are major pedestrian intersections which are natural meeting places. These should be planned and landscaped to encourage casual encounters. The continually changing views, vistas, textures and spatial quality are vast improvements over the monotony of uniform street widths and building spacings of the more conventional campuses.



ACADEMIC DISCIPLINES

On a campus where land area and building density permit, it is common for the various disciplines to be physically grouped into major academic divisions such as schools or colleges. Conversely, limited space and high building density often preclude this logical grouping of disciplines, and make necessary the intermingling of the facilities of some academic disciplines. This latter condition exists at Western Michigan University. In the Campus Plan the academic function of existing buildings has been maintained and, where possible, forms the nucleus of that particular discipline. Some buildings, both extant and planned, fall within dissimilar groups, but as projected not more than a ten-minute walk separates any buildings within the planned academic core. Buildable areas have been assigned to accommodate the square foot area per department as determined by the University's Office of Institutional Research space estimates.



FUTURE BUILDING AREAS

It would be presumptuous to propose the distinctive shape, area or function of future buildings. Sites have been shown on which future buildings may be placed with allowance for considerable freedom of design. It is desirable to build up to the allocated lot lines thus continuing the basic principle of relatively narrow walkways connecting major open spaces. Care must be exercised to assure that the pedestrian ways are well defined and direct. The sites should be built up to but not exceed, the total square foot area scheduled in order to maintain the required density for the academic core. Reducing the ground floor area in any building would necessitate compensating for this shortage on other building sites and thereby create an imbalance in building density. This condition would ultimately require the placement of buildings beyond the ten-minute walking distance.

Certain building sites shown in grey are unassigned to allow for future program growth.

	Ground Floor Area	Total Building Area
a.	28,600 sq. ft.	75,000 sq. ft.
b.	48,000 sq. ft.	148,000 sq. ft.
c.	16,950 sq. ft.	61,200 sq. ft.
d.	65,400 sq. ft.	262,000 sq. ft.
e.	22,000 sq. ft.	73,500 sq. ft.
f.	33,950 sq. ft.	100,600 sq. ft.
g.	32,550 sq. ft.	118,500 sq. ft.
h.	28,950 sq. ft.	113,500 sq. ft.
i.	51,200 sq. ft.	206,300 sq. ft.
j.	22,600 sq. ft.	91,600 sq. ft.
k.	60,800 sq. ft.	168,200 sq. ft.
l.	25,400 sq. ft.	100,550 sq. ft.
m.	19,050 sq. ft.	76,000 sq. ft.
n.	59,500 sq. ft.	233,650 sq. ft.
TOTAL	514,950 sq. ft.	1,828,600 sq. ft.

CAMPUS DEVELOPMENT PLAN

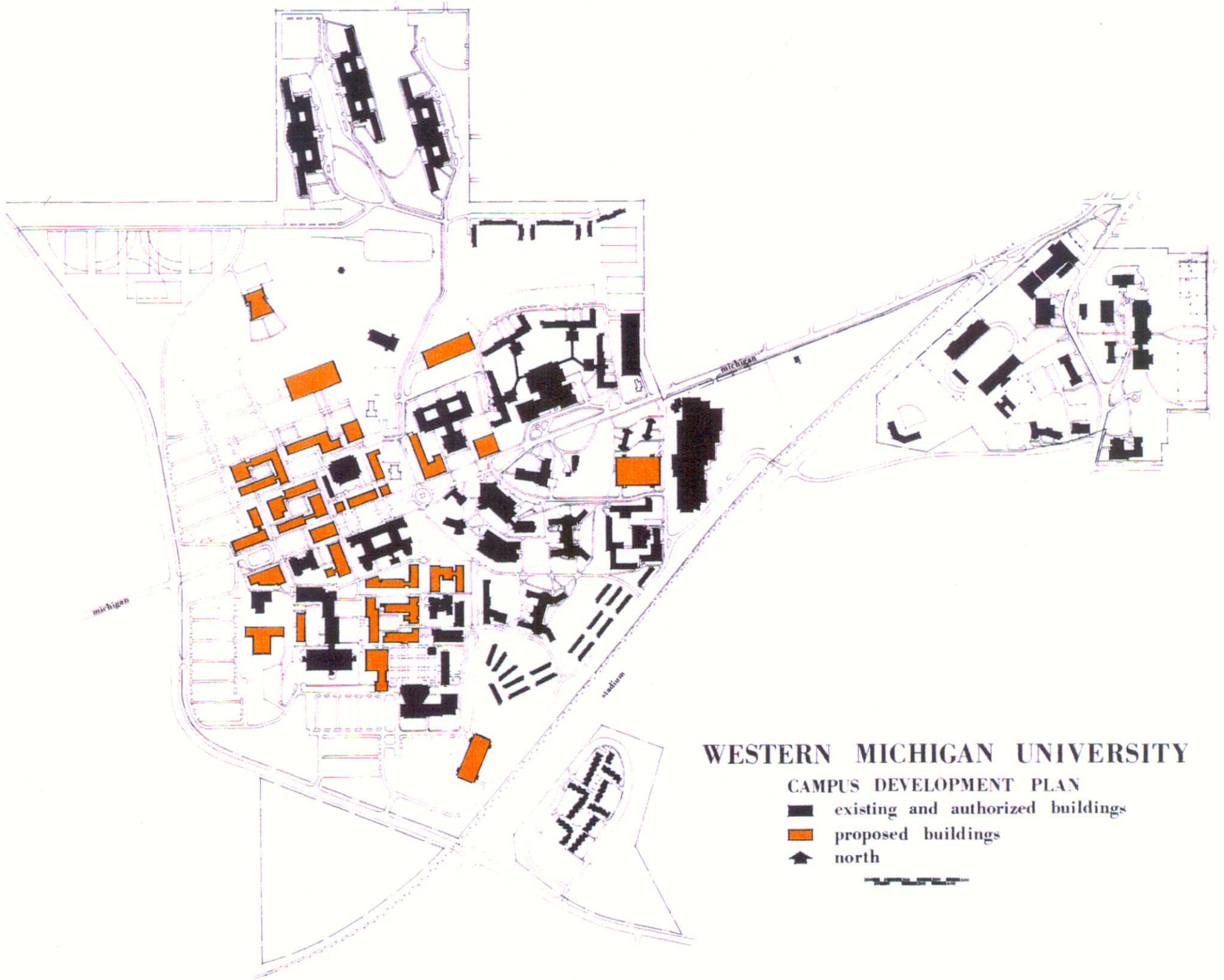
The acceptance of the Campus Development Plan is only the first phase of the campus planning process. It is a two-dimensional plan that organizes and designates land and location for the various required uses in the proper places and in the appropriate relationships. The uses and the relationships were determined by the guidelines and requirements of the University, then imposed on an existing campus with its existing buildings and fixed topography, and complemented by a proper circulation and parking system.

Only when buildings, walkways, roads and landscaping are built with a sympathetic understanding of the principles set forth herein, will the plan begin to be realized. The buildings will vary in shape, size and texture but the relations with existing buildings and future buildings must be conceived and studied building by building, fully utilizing the techniques of urban design. The relationships among buildings and the space between them are as important as the structures themselves.

The campus at Western Michigan University has an interesting and hilly site, and future buildings and landscaping should exploit this to the utmost to create interest and enhance the environment. A good environment must be carefully conceived and implemented with each building, parking lot, road, walkway and landscape project. In this way the plan will be based upon the totality of the campus rather than each individual part.

The following detached parcels of land are used by Western Michigan University but are not shown on the Campus Development Plan.

1. The 80 acres west of Kendall Avenue.
2. The 48.5 acres in the Kleinstuck Preserve.
3. The 17 acres on Milham Road.
4. The Seven acres at the Kalamazoo Municipal Airport.
5. The 280 acres in the University's farm on Parkview Road.



LANDSCAPE PLAN

The staff, students, and visitors view Western Michigan University as a collection of spaces in which they involve themselves in one form or another. Within this framework they experience changing relationships of time, scale, visual and emotional perception. This environment as interpreted by its participants' involvement typifies the term "campus".

The Landscape Plan is a general graphic concept of spatial development. This plan takes into consideration the relationships of buildings and spaces. The details of open space become increasingly important tools to unite visually the individual expression each new building should have under the influence of the Development Plan.

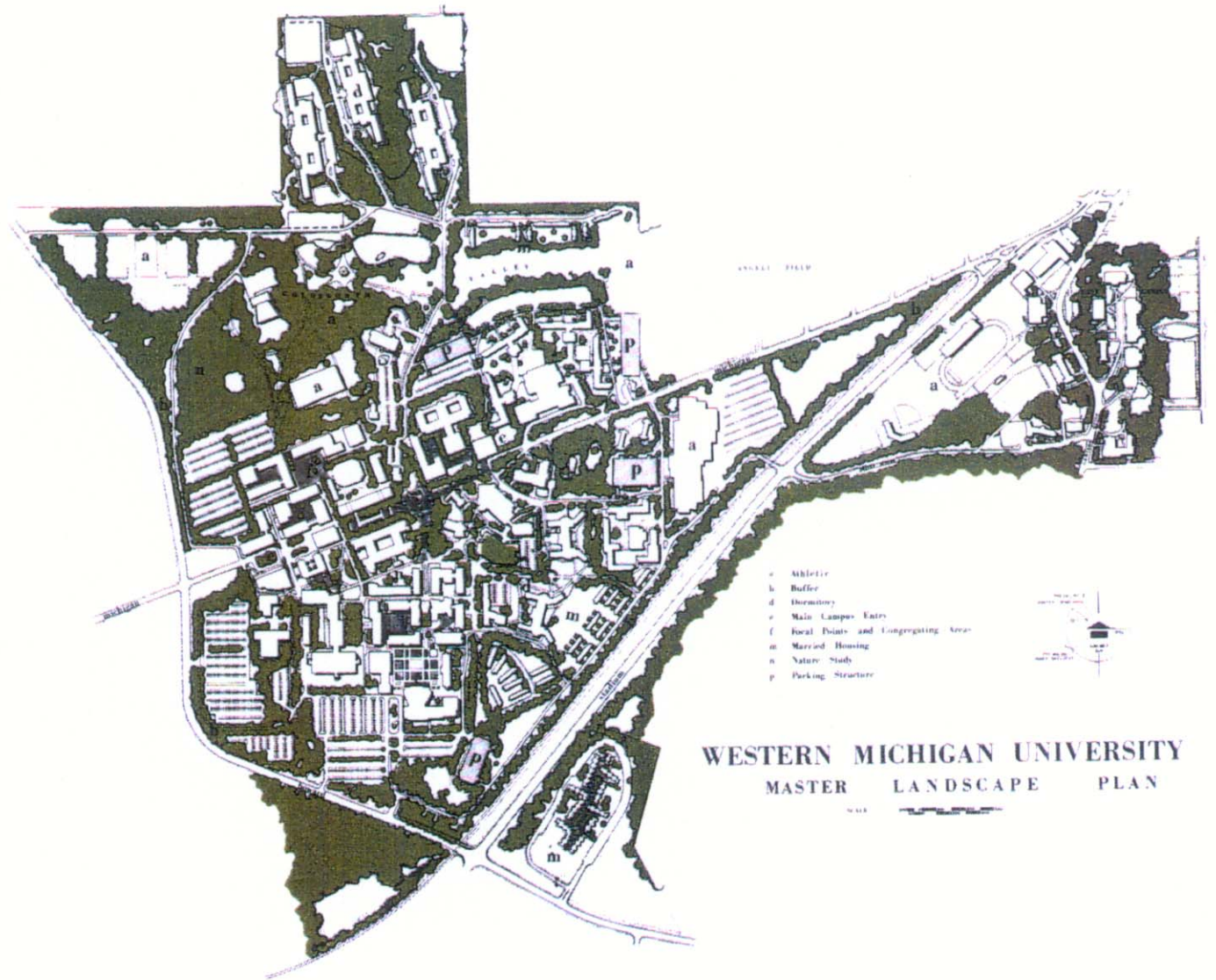
In order to establish strong guidelines for development of these details of open space, the following considerations should be made:

1. Enforcement of spatial relationships on a human scale with paving, street furniture, trees and low level landscape features.
2. Preservation and conservation of important natural and architectural features. The plant growth and topography should be given special consideration.
3. Recognition of pedestrian and service circulation should be functional and have a pleasing sense of order, which is reinforced by changing experience of space, color, texture, and scale. Multi-use paving should have careful consideration to assure compatibility of uses.
4. Development of spaces for social and aesthetic

amenities, such as those proposed at the intersection of Michigan Avenue and VandeGeissen Drive or the sitting areas in the walk from Wood Hall to the Auditorium.

5. Development of focal points and vistas as strong elements giving a sense of space and place to the individual as he moves about the campus.
6. Provision for large recreation and green spaces outside the academic area. These spaces could serve the leisure time activities of the students and faculty.
7. Plantings should have special consideration in the following ways:
 - A. Major trees should be encouraged as the primary landscape planting. These trees will make the most significant contribution to the campus of *all natural materials*. *Massing of one variety* should be used in areas requiring bold harmony.
 - B. Buffer plantings between the campus and adjoining roads and properties should be established as early as possible.
 - C. Low level planting should be in scale with the buildings and spaces and should not take the role of "Lettuce Landscaping". Simplicity should be the key word in most areas.

The establishment of character in the campus landscape can only be successful if the details of the outdoor spaces reinforce the concept of the Development Plan.



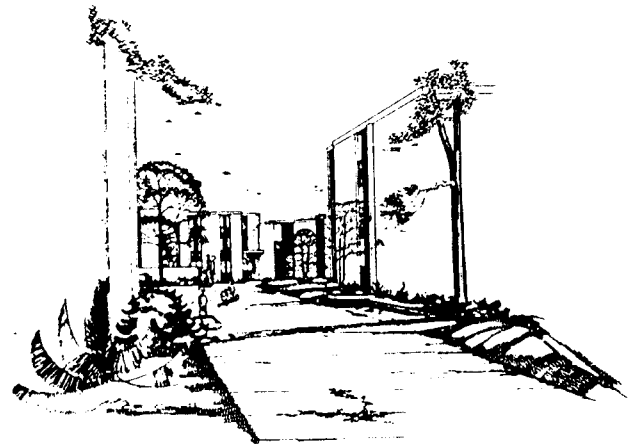
WESTERN MICHIGAN UNIVERSITY
MASTER LANDSCAPE PLAN

WESTERN MICHIGAN UNIVERSITY
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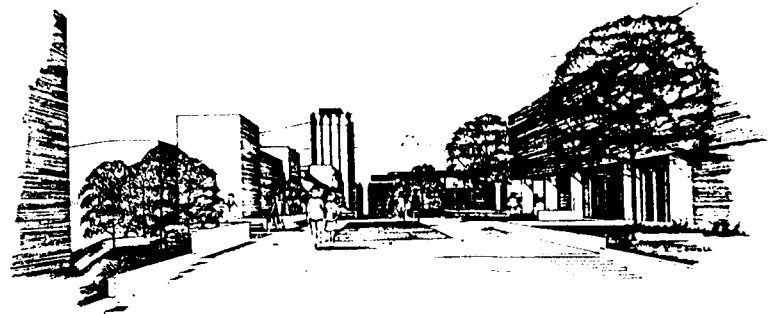
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VIEW NORTH FROM BROWN HALL OF VANDE GEISSEN DRIVE



VIEW OF COURTYARDS AT STADIUM DRIVE, MARRIED STUDENT HOUSING



VIEW SOUTH FROM DALTON PROMENADE TOWARD AUDITORIUM COMPLEX