UNIVERSITY OF WISCONSIN-WHITEWATER
CAMPUS EXTERIOR DEVELOPMENT
MASTER PLAN

Project No. 9305-22

July 11, 1994

PREPARED FOR
The University of Wisconsin-Whitewater
Wisconsin Division of Facilities Development
University of Wisconsin System

PREPARED BY
Ken Saiki Design
Bowen, Williamson, Zimmermann
INTRODUCTION

The University of Wisconsin-Whitewater, and the State of Wisconsin, Division of Facilities Development, have identified the need to develop a Campus Landscape Master Plan. The intent of this Master Plan is to establish a framework that unifies the campus both functionally and aesthetically. The importance of a functional framework is clear. The benefit of a unified and attractive campus image may be less obvious, but its importance as a component in the recruitment of potential students, retention of faculty and staff, promotion of an active alumni and effects on the surrounding community cannot be overlooked.

THE MASTER PLAN DESIGN PROCESS

The Master Plan process is briefly described below, and in more detail in the contract scope of work. (Appendix B)

Base Preparation

The process for developing the Master Plan for the University of Wisconsin-Whitewater campus began with a compilation of base materials, in digital form. It is intended that this digital file can be manipulated to add additional base information, explore design options, provide a current base for updating campus maps and signs. The base information for this project was digitized from the current campus map, and adjusted to correspond with dated campus planimetric maps. The base provided by this process is accurate as a Master Planning tool only, and is not intended to be accurate for needs more specific than this project. The user is cautioned to obtain site survey information for any site specific project.

Inventory/Analysis

Field inventories were recorded as part of the base mapping process. This included an inventory of many of the canopy trees on campus, by approximate location, size and genus. (Appendix G)

Other field inventories were used to define existing conditions and character. These inventories were not compiled in a comprehensive manner, but were used to help define existing land use and circulation patterns and the overall image of the campus. Included were general documentation of pedestrian movements, zones of different campus landscape character, photographic inventory of conditions at various locations on campus, existing signs, and existing site furniture.

Workshop

The next step in the Master Plan design process was to begin to build consensus. To encourage this, the process involved a campus-wide spectrum of interest groups and individuals. A two-day, on-campus workshop allowed interested parties to express their opinions of the campus, its image, function and how things might be improved. Following the workshop a memorandum summarizing all of the interview sessions was published and distributed to all who participated. (Appendix D)

The information gathered, the issues further defined by the workshop, coupled with the data gathered in the site inventory and analysis formed the base for concept development.

Concept Plan

A concept plan was developed, which organized the various functional systems, pedestrian circulation, parking, and, landscape character and was presented to all interested workshop participants. These plans were accompanied by preliminary ideas for support elements, such as signage, entry features, pedestrian spaces, and perimeter treatments. The presentation was designed as another opportunity for workshop participants to contribute to the project's design direction.

Preliminary Plan

The preliminary plan incorporated adjustments and additions discovered in the review of the concept plan. This plan was submitted to the campus and University System Administration, and reviewed and discussed at an informal presentation on-campus. This review presentation was again open to interested workshop participants. Review comments were relayed, setting direction for the preparation of the final plan.

Final Plan

Following the preliminary plan review, sub-area plan alternatives were circulated for final review and approval. Final written comments were assembled and either rejected or incorporated in the final plan. This final plan was submitted to UW-Whitewater, UW System Administration, and the State Division of Facilities Development for final review and acceptance.
DESIGN ISSUES

Several design issues were defined from the original request for proposals, observations from field investigations and from the discussions of the workshop. Generally, project objectives addressed issues of function and aesthetics. These related to:

- Theme and Image
- Signage
- Circulation
- Parking
- Landscape Character
- Site Amenities
- Services to the Disabled

Theme and Image

A primary goal is that the campus project a unified identity, creating a unique environment, separate from the surrounding neighborhoods. There is also a need to identify sub-areas within the campus, differentiating land use and activity to give each area of campus a "sense of place" that supports its respective function.

Project site analysis and workshop discussion identified several theme opportunities. The existing campus setting and regional influence are suggestive of a "rural" character. This concept is consistent with the perception of one of the campus' positive recruitment attributes.

Existing geological features, and the more mature plantings on campus further define a desirable and unique landscape character. This character, that of an "open woodland", consisting of canopy tree plantings over areas of turf (shown at right), is prevalent throughout the campus, particularly near the campus academic core. The arboretum at the south end of the campus, the tree covered portions of the main drumlin, the area to the north and west of Carlson Hall, the area to the east of Upham Hall, and the area to the east of Fischer Hall are all examples of this "open woodland" landscape.

The more recent campus buildings, the University Center, and the Auditorium, exhibit a contemporary architectural theme, as well as a definitive color and material palette that identify the Whitewater campus. These buildings and their architectural detailing give form and direction to developing a campus theme and image.
Signage

A major concern identified in the original requested scope of services, observed in the site analysis and emphasized by the workshop was the lack of a useable directional signage system. A goal of the Master Plan is to provide design guidelines for a complete campus signage system. This should include campus identification, building, parking, and general information.

Reaction to current campus signage is generally negative in that it is unattractive, hard to read, inappropriately located, and does not reflect the kind of image that the University should portray.

Signage is particularly important for assisting first time and infrequent visitors to campus. There is a significant lack of appropriate signage within the city boundaries to direct a visitor to the campus, and a lack of signage within campus boundaries to direct the visitor to their various destinations.

Parking is an important destination and part of the visitor’s orientation on campus. Visitors are not directed to any particular lot when they reach campus, nor given indication of where to go to obtain information about the campus. Parking lot signage (shown at top right) is present, but is not user friendly, due to the complexity of the signs.

Existing building identification signs (shown at bottom right) detract from the overall campus image. Design and materials do not convey an institutional message. Generally, signs are inconsistently located and can have visibility limitations, especially from the street.

An aid in providing on-campus directions for visitors was identified in the workshop. Visitor centers, or information centers have been developed at other UW-System campuses, and offer a single destination to assist the campus visitor.

Circulation

Primary circulation issues are concerned with accommodating the various types of vehicular movements: cars, delivery vehicles, including semis, Disabled Student Services vehicles, maintenance vehicles, and bicycles. The other aspect of campus circulation involves pedestrian patterns. Generally, the goal of the Master Plan is to improve circulation by reducing conflicts between pedestrians and various vehicle types, and providing new routes that recognize existing and future desired paths.
There are a number of pedestrian "cattle paths" throughout campus. They are clear indications of pedestrian desired paths that need to be recognized in the planning process.

There are numerous points of conflict throughout campus. These will be detailed individually, along with their proposed remedies later in the report.

With the exception of a bike lane running along each side of Starin Road, there are no clearly marked or designated bike routes on campus. The lack of identifiable bike routes leads to unsafe conflicts between bicycles and pedestrians in pedestrian zones throughout campus.

Parking

A program to accommodate needed additional parking has been provided. This parking study has determined the numbers of stalls required in the various parts of the campus. The goal of the Master Plan is to incorporate parking expansion, both in terms of number and location, according to the parking study.

Landscape Character

An inventory of the campus revealed a distinct difference of landscape character types present on the campus. Two of these landscape types, the formal planting and the "open woodlands" landscape are prevalent throughout the entire campus. These landscape character types are unique to the design of the campus and have the potential to express the desired image for the campus.

Site Amenities

Site amenities are an important component of the overall appearance of the campus. Existing UW-Whitewater campus site amenities, include benches, trash cans, lighting fixtures, kiosks, bike racks and pieces of public art. Many are unrelated to each other, and in many cases are out of date or in a deteriorating state. These elements serve very important functions, but do not portray the type of visual message the campus desires. A primary goal of the Master Plan is to provide recommendations for a more suitable furniture palette that can be phased in over time. This furniture palette should balance the concerns of cost, maintenance, durability and design impact.

Bicycle parking is a particular site amenity that is in limited supply and most of what is in place is out of date. The existing bike storage lockers are serving a purpose, and there is a waiting list for these lockers. There is a concern, however, about the appearance and the maintenance of these bike lockers. The existing bicycle racks are outdated in that they do not accommodate the popular Kryptonite type locks. In addition, the advent of the mountain bike has created a greater base of year-round riders, and although the placement of many of the racks is fine during most of the year, during the winter the racks are moved in order to allow for snow removal, which causes problems for those people who ride in the winter.

Another site amenity issue, which directly affects the appearance of the campus, is the placement of sign boards that various organizations use to announce special events. These boards usually appear at building entrances and are not regulated in any way. Often these boards are not retrieved after an event, this coupled with a lack of maintenance, create potential aesthetic and safety problems.

Lighting fixtures and light levels throughout campus are of concern. Typically the maintenance personnel do a good job of keeping the campus well lit, but there are areas on campus that are less well lit. These include the athletic fields and service drive in the northern portion of the campus west of the playing fields and areas bordered by public areas such as Starin Park or the Cavalry Cemetery.

Trash and recycling containers are other site amenities that impact the campus' appearance. The existing containers do not contribute in a positive manner to the overall campus appearance. The criteria for trash and recycle containers includes a 55 gallon capacity, a swinging door on the top, and color coding for the various uses of the containers. Current color coding is brown for trash, green for recyclables, and blue for office paper.

There are four bus shelters on campus, however, there is no bus service on campus or in the city. The bus shelters should be removed.

The existing kiosks, in their current locations, are not heavily used or adequately maintained. These kiosks are located out of the mainstream of pedestrian traffic and are not accessible to all campus users. The kiosks are of the same style as the campus signage and benches, and are viewed as less than attractive.
Services for the Disabled

The University of Wisconsin-Whitewater is uniquely committed to serving the needs of disabled students. These needs are an important consideration in the development of the Master Plan and its design and policy recommendations. The routes and drop-off locations for the Disabled Student Services vans are important elements of vehicular movement on campus. A minimum goal for the Master Plan is to maintain existing routes and drop-off locations.

MASTER PLAN RECOMMENDATIONS

PRIMARY DESIGN COMPONENTS

The Campus Master Plan recommends that several areas of campus be redeveloped in order to meet the goals set forth in the plan. The following discussion deals with those areas where changes are being suggested, what those changes are and how they work toward achieving the overall goal of the plan.

Theme and Image

Theme and image development, although not a site specific design project, is an important aspect of the overall Campus Master Plan. Identifying positive design elements that already exist on campus and incorporating them into various aspects of the Master Plan recommendations allows for a common theme and image to develop. Through the repetition of a palette of similar design elements, including distinct forms and colors, a design pattern evolves and works to express a unified and consistent appearance for the campus.

The landscape theme for the campus is based on two types of plantings, formal plantings and informal or "open" plantings. The Master Plan suggests the use of formal plantings, in this case formal meaning the alignment of plants in straight rows, in those parts of campus that are heavily used by pedestrians as thoroughfares or gathering places. These plantings act as physical suggestions of the desired use of the space. Formal plantings help to reinforce desired movements and traffic patterns in urban, and high density pedestrian settings, while informal or "open" landscapes cater to more relaxed and less structured uses.

Campus Entrance Experience

The approach to the campus is an important experience, in that it gives the visitor their first impression of the campus. The current condition does not allow for an entrance experience because it is lacking directional signage, as well as a sense of arrival. Both of these aspects are important in creating an entrance experience.

The campus has developed parking primarily on the perimeter of the campus. This allows for the interior of the campus to be oriented toward the pedestrian. This being the case, the parking lot becomes the primary visual element upon arrival to campus, which in terms of image projection, is an undesirable situation.

The concept of parking along the perimeter will not be changed, therefore it is important to create a solution which allows for perimeter parking, yet contributes to the creation of an entrance experience. The Master Plan recommends that a campus perimeter treatment be developed which will signify the campus as a separate and identifiable entity.

The main component of the suggested perimeter treatment is a modular retaining wall system. This wall system is an average of three feet in height, and may vary as to its placement in relation to the sidewalk. In areas where widths are acceptable the setback could be as much as fifteen or twenty feet, while in other areas it may be as little as two or three feet. The wall provides the campus with a well defined edge, giving the visitor an idea of the boundaries of the campus, and a sense of entering the campus. The wall helps to screen the parking areas directly behind it, creating a pleasant and unified visual appearance upon entering campus from any direction.
Another aspect of the perimeter treatment is the entry features. There are two types of entry features incorporated into the perimeter treatment. The first type is a main entry sign. The second type of entry feature is the parking lot entry sign. These features will be discussed later in the report.

An entrance experience, with a grand entryway, is created by designating Starin Road as the main entry drive to the campus. Prince Street and Prairie Street act as the primary approach drives, building a sense of arrival as the visitor nears the intersection with Starin Road, the location of the new entry features. The designation of an entry route provides a sense of approach and arrival. In addition, this entry sequence will guide the visitor to the proposed Information Center, their first destination point.

Information Center

One of the major site design projects recommended by this Master Plan is the development of a new Information Center. This facility will serve to distribute parking information and permits, and will be a location for a campus map and directory to help visitor's orient themselves to the campus. The new facility is located at the head of Wyman Mall to introduce the visitor to the campus core as soon as they reach the campus. This location also places the facility near the campus police and parking offices to more easily facilitate the distribution of parking permits, and provide phasing flexibility. (See subarea plan on page 8).

By placing the Information Center adjacent to the Starin Road parking lot, and by directing incoming University traffic to this location with directional signage, the motorist will be located in the parking lot in which they will most likely be parking for the remainder of their stay. This limits much of the confusion about where to park when first arriving to the campus.

The design incorporates a circle drive and pedestrian plaza. The circle drive allows the newcomer to drive up to the facility, where they can park for a short time, while they obtain their parking permit. It also provides a safe location for those who may be dropping off or picking up passengers. The circle drive also acts as a welcoming element, providing the visitor with a sense of arrival. There is additional short term parking provided in a small lot immediately to the east of the circle drive. These 20 stalls are adequate to accommodate short term visitor and University Bookstore customer parking.

The pedestrian plaza is an important component in the design for several reasons. The plaza space connects the Information Center with the Wyman Mall, by creating an attractive and spacious extension of the mall. In addition this area of campus, particularly at class break, can get very congested and the plaza offers adequate room for small groups to gather, while allowing pedestrian traffic to efficiently flow through the space.

Another aspect of this site design is the new configuration of the parking lot and walkways. The parking lot has been changed to accommodate a new building site and circle drive, as well as a new walkway. Existing "cattle paths" indicate that this is a desired route, therefore the design provides a more direct north-east/south-west route to the Carlson Hall sector.

This new sidewalk meets Starin Road directly across from the Salisbury Hall courtyard, creating another important pedestrian crossing zone. By creating one larger pedestrian zone which extends from the west side of the Wyman Mall to the east side of the new Salisbury Hall courtyard crossing, a safer situation can replace what exists today. By widening the pedestrian zone and making it physically and visually different from the rest of the road, the motorist will become more aware of the importance of this space.

The ideal treatment for this design would be to pave the entire space with concrete pavers. Using concrete pavers has several positive affects. Pavers offer the pedestrian a "warmer", less harsh environment to traverse, as well as offer a different tactile experience for the motorist. This further strengthens this area as an important pedestrian space while suggesting slower and more attentive driving tactics. Finally pavers will add aesthetic qualities to the space. A small speed bump at either end of the zone, accompanied by a pedestrian right-of-way traffic light, will also help to slow traffic along this portion of Starin Road.

In addition to the pedestrian zone on Starin Road, the street has been narrowed. The on-street parallel parking along Starin Road has been removed to allow for wider parkways and wider bike lanes. The narrowing of the street will also help to slow traffic using Starin Road. A final benefit from narrowing the street and creating the pedestrian crossing zone is that it may discourage non-essential traffic from using the road.
Another issue related to the pedestrian crossings on Starin Road is the driveway to the east of the Bookstore. This driveway is used by the University Police, as well as by delivery vehicles using the loading dock at the Bookstore. There are two distinct problems created by this situation. First, cars tend to stack up at the stop sign on Starin Road, especially at class break when pedestrian traffic is the heaviest. This can cause the driveway to be blocked, limiting access onto Starin Road from the Police parking area, which in an emergency situation is problematic. The other situation limiting access onto Starin Road occurs on occasion when a delivery vehicle is using the loading dock at the Bookstore. In this situation the truck is usually blocking the entire driveway.

To remedy these problems some changes have been recommended for this area. First, it is important to remove the loading dock traffic from the driveway. To do this, the access driveway has been relocated to the east and the existing driveway becomes an access drive exclusively for the loading dock. This allows trucks to drive in without affecting other traffic, and back into the loading dock without blocking the driveway. Pushing the driveway to the east also allows for more stacking on Starin Road without interfering with the driveway entrance.

A strong pedestrian pattern has been noted to the east of the Bookstore, calling for design improvements to the pedestrian walkway along the eastern edge of the driveway and a clearly designated bike lane.

**Wyman Mall**

Wyman Mall (see subarea plan on page 10) is a primary pedestrian space on the campus. It is designed to provide a safe and direct route from the southern edge of the campus through the academic core. The mall is an important link from the academic core to many other parts of campus, particularly the Bookstore and East Residence Halls. It is recommended that a strong visual and physical connection be made by extending Wyman Mall across Starin Road and north toward the East Residence Halls.

Wyman Mall is important to the overall design of the campus, not only because it is the major north-south pedestrian link on campus, but also because it acts as a model for the new malls that are proposed by the Master Plan. The formal plantings, the organization of pedestrian traffic, and the campus character are all elements that have been used in the development of the Carlson-Heide Mall, the Case Street Mall, and the pedestrian link from Carlson Hall to the West Residence Halls.

**Carlson-Heide Mall**

There are two major components to the proposed Carlson-Heide Mall. This new mall (see subarea plan on page 11) connects the Carlson Hall sector with Wyman Mall and on to Heide Hall. The first component is the link being made between the two areas of campus and the second is a plaza space created at Heide Hall.

The pedestrian connection of these spaces traverses the northern end of the drumlin at the location of the two proposed building sites. This is an important east-west connection which the campus is currently lacking. The connection is made from the new Case Street Mall to an existing walkway between Baker Hall and the University Center. The design incorporates a series of stairs and a ramp at the east end of the corridor to accommodate accessible travel across the drumlin, within a limited horizontal distance. This corridor spills into the Wyman Mall crossing the service drive for the University Center loading dock.

A traffic conflict between service vehicles and pedestrians exists in this location and will remain, but these improvements will give higher priority to the pedestrians. This will be accomplished through the development of a designated pedestrian crossing zone across the service drive. The design solution here is to create a pedestrian zone similar to, yet substantially smaller than, the one created on Starin Road.

The pedestrian connection then continues on past Wyman Mall to Heide Hall, which is a heavily used academic building on campus with substantial pedestrian traffic to and from the building. This is the location of a proposed pedestrian plaza space. Presently the paths between Heide Hall and Winther Hall are inadequate to handle the volume of traffic in this zone, creating problems with trampled turf and muddy conditions. This area is a popular gathering spot during class breaks, but does not cater to the needs of its users. This area is, in fact, such an important people place on campus that it warrants substantial attention. The Master Plan recommends that this space become a hard surfaced plaza area, with a design and site amenities appropriate of one of the main gathering centers on campus.

There are a number of major traffic patterns surrounding Heide Hall, most leading to the north entrance of the building. The largest pedestrian circulation pattern is to the north, running between the west side of Winther Hall and the back of Roseman Hall. This route is an important north-south connection to this part of campus. The Master Plan calls for a strengthening of this corridor by widening the pavement along this route and emphasizing the corridor with a planting treatment.
Another substantial pedestrian traffic pattern in this area is to the west, heading toward Wyman Mall and the University Center. This traffic moves across the circular service drive behind the University Center. This creates a traffic conflict, which cannot be eliminated, but can, with a correctly designed pedestrian route, be limited to one specific crossing zone. This crossing zone should be a design similar to the pedestrian crossing zone on Starin Road, although not as substantial in size.

The last major circulation route in this area runs north, to the east side of Winther Hall, heading toward the East Residence Halls and dining hall. This route is intruded upon by parking lot 13, which lies directly north of Heide Hall. This parking lot is small, but is heavily used. The heavy use is in part due to the misuse of the lot as a pick-up and drop-off point for passengers, a function that is not accommodated in the current design. For these reasons the Master Plan recommends that parking lot 13 be redesigned.

The lot has been redesigned to cater to the practice of using this lot as a pick-up / drop-off zone. The design relocates the western edge of the lot so that it is flush with the edge of the building corner where the entrance door is located. This provides a straight walkway to the north, east of Winther Hall. The lot has been widened to allow a second driveway, and to expand the number of stalls. This second entry allows traffic to enter the lot to use a drop lane and then continue on in the same direction. This will eliminate the need for vehicles to use the handicapped stalls to turn around, thereby lessening congestion in the lot.

The number of stalls in the new design exceed the present volume by fourteen. This coupled with the excess parking produced in the reconfiguration of lots 14 and 12 meet the recommendations of the parking study.

Parking lot 14, immediately north of Winther Hall, was recommended for expansion by the parking study. The required number of stalls are provided by creating a new lot on the site directly to the west of the existing parking lot. The existing lot has been resized and reconfigured to more efficiently utilize this space.

**Hamilton Field / University Green**

The University Green is an important space in this portion of the campus. Traditionally this area has been used for various Homecoming events. It is also used heavily on nice weekends, for recreational purposes, by students living in private housing in the area. These functions are important to the University, and this area should be preserved for them. This area can be improved without interrupting the space functionally.

Adding several informal canopy tree plantings to the perimeter of the space helps to frame the space, giving it a stronger identity. These informal tree groupings also provide opportunities to use this space for outdoor study or for informal gatherings, adding to its list of potential uses.

**Case Street Mall**

The creation of Case Street Mall has been mentioned several times in this report. This area (see subarea plan on page 13) includes the space directly surrounding Carlson Hall, the space currently occupied by Case Street, the proposed future building sites located at the north end of the drumlin, and the new parking lot located at the corner of Prince Street and Starin Road.

The closing of Case Street is an invaluable step in the attempt to create a very pedestrian oriented "campus" for this portion of the University grounds. Closing Case Street allows for the development of a pedestrian mall, which helps tie this part of campus to other parts of the campus, particularly Wyman Mall and the West Residence Halls. The development of this mall provides the opportunity to create plantings, similar to those found on Wyman Mall, which further strengthens this connection.

Pedestrian circulation is facilitated by this design, providing a much safer alternative to what currently exists. Pedestrian movement across the drumlin can also be more easily accommodated. Direct routes can begin closer to Carlson Hall, providing a greater distance over which to traverse the slopes of the drumlin. This permits the walkways to take on a less severe grade, making the route a comfortable passage.
Center of The Arts

Another area on campus where design recommendations are being made is around the Center of the Arts (see subarea plan on page 15). With the removal of the parking lots from the drumlin, which will be discussed later in the report, there is a need to replace the stalls that are being lost. For this reason, and from the recommendations of the parking study, all parking lots that serve the Center of the Arts building are being expanded.

Several changes are being made to parking lot 24, the lot north of the building. One change, the removal of Case Street, will not only affect the parking lot but also a large portion of the western campus. The closing of Case Street has a number of benefits. First, it allows parking lot 24 to expand to the east, picking up more usable space for parking stalls, without violating the existing northern edge of the lot. Secondly, this design allows the parking configuration to be changed so that the bays run east to west rather than north to south. This would lessen the visual impact of the lot from both the street and the top of the drumlin.

Parking lot 3, located immediately north of the Center of the Arts building, has also been reconfigured. During the redesign of parking lot 24, it became apparent that in order to produce the most efficient design, lot 3 would have to be slightly altered. The service areas for the Center of the Arts building, which feed off of these lots, have remained unaffected by the changes.

The closing of Case Street affected only one building in terms of service access. McCutchen Hall is currently serviced by a driveway off of Case Street, which leads to the service area and the parking that is located to the south of the building. The redesign provides access for service vehicles via a driveway that is incorporated into parking lot 24. The parking lot behind McCutchen Hall has been removed. These stalls are accommodated in lot 24.

An important aspect of the design of this portion of campus, is the incorporation of a circle drive drop-off at the east entrance of the Center of the Arts building. This drive provides for safe and efficient passenger unloading, while at the same time allowing traffic within the parking lot to circulate, unaffected by stacked cars waiting to unload.

The circular form allows traffic to continually flow in one direction, which eliminates the possibility of congestion at the end of the drive. In addition, the sidewalk placed along the entire length of the drive allows passengers in a number of vehicles to safely unload at the same time, helping to move traffic more efficiently. Placing the drive at the back of the parking lot eliminates drop-off patrons from stacking into the street.

This Master Plan recommends that parking lots 1 and 2, which also serve the Center of the Arts, be changed by expanding their capacities. Lot 1 has been reconfigured and joined with lot 2 in order to more effectively expand the lots and gain more stalls. The expansion occurs to the east, on property the University will be acquiring in the near future. The existing entrance off of Prince Street becomes the only entrance for the lot, thereby eliminating access from Main Street. This eliminates congestion on Main Street from stacking vehicles wishing to turn into the lot.

Two connector routes are incorporated into the design to allow for safe and direct pedestrian circulation. One route is an existing sidewalk which begins at Main Street and leads up to the front door of the Center of the Arts. The second route begins at Main Street and leads north to the Carlson Hall sector and beyond to William's Center. This link becomes a very important North/South connector route, allowing users to travel within the University boundaries instead of along City street corridors.

A parking lot has been developed for the Alumni Center to allow for visitor parking, as well as to provide an adequate number of handicapped parking stalls in this area.

Drumlin Area

Following the Information Center development, the most significant change proposed by this Master Plan occurs in the Drumlin area (see subarea plan on page 15). The major change is to remove the parking lots from the main drumlin and reestablish its natural slope. This recommendation is made in order to reinforce the established campus concept of perimeter parking.

From a circulation standpoint, restoring the original slope affords the opportunity to design accessible pedestrian walkways across the drumlin. A system of walkways has been developed which facilitates efficient pedestrian travel from Carlson Hall to the Center of the Arts, to Hyer Hall, and to the University Center.

Reestablishing the natural slope also allows the opportunity to create a unique campus "quad". Unlike the mall, this "quad" provides usable
green space and portrays a more traditional campus setting. Opening this up as green space also makes it possible to plant additional canopy trees in this part of campus, further strengthening the campus landscape theme, by using an "open woodlands" theme and playing up the natural features of the campus.

The concept for an additional, more direct pedestrian route from the Carlson Hall sector to the University Center has also been suggested. It is provided as an option in this plan because of the overwhelming interest to have the most direct route possible crossing the drumlin. This walkway, however, is not strongly recommended for three reasons. One reason is that this particular route would be costly to build. There would be a substantial amount of rock cutting and earth moving involved and it would require a substantial retaining wall. Another reason this route is not strongly recommended is because it would be hard to maintain in the winter. It is bordered on both sides by a retaining wall, which would hinder the snow removal process. Thirdly, curving a swath of earth away from the drumlin, sacrifices a number of mature trees, thereby reducing the number of elements which help to enforce the desired landscape theme for the campus.

At the north end of the drumlin, two future building sites are recommended that could eventually become part of the new drumlin campus quad. Placing buildings in this location helps to strengthen the drumlin as a campus quad, while keeping the buildings close to area parking lots. The design of these buildings at this point is unknown, but it is a recommendation of this plan that their design accommodate split level access. This would help to facilitate accessible travel lengthwise across the drumlin, by allowing access to the drumlin from a second floor entrance.

**New Carlson Parking Lot**

Another important pedestrian connection will be created in the design of the new parking lot just north of Carlson Hall (see subarea on page 13). This linkage has been developed from the current use patterns of pedestrians moving from the West Residence Halls to the Carlson Hall sector and beyond. The design caters to the pedestrian, which allows for safe and efficient pedestrian flow. The lot houses 150 stalls, which exceeds the recommendations of the parking study. The excess stalls in this location help to replace those stalls lost in the removal of the parking lots from the drumlin.

Currently there is a strong diagonal pedestrian movement from the West Residence Halls to the Carlson Hall sector and beyond. The buildings that are currently standing on this property prevent a direct route from developing. Upon the acquisition of these properties by the University, and the removal of the buildings from the site, pedestrians will want to take the shortest and most direct route to the Carlson Hall sector. The design of the parking lot is built around a central pedestrian walkway.

The pedestrian walkway (shown below) is slightly elevated from the parking lot level to provide for greater pedestrian visibility within the parking lot. This increased visibility provides the user with a greater sense of security, it allows police patrol to better survey the area, and it allows drivers within the parking lot to see pedestrians who may be entering a crossing zone.

This design serves these functional purposes, but also provides some aesthetic and visually unifying qualities. The sidewalk is lined on either side with trees, which act as a buffer between the parked vehicles and the pedestrians using the space. This treatment enhances the space visually and its use becomes a more grand experience, making this a special pedestrian space. This design also provides for the continuation of some of the planting patterns set forth in the design of Wyman Mall and the recommended Case Street Mall, further strengthening a sense of uniformity on campus.
This pedestrian connection is very important in terms of pedestrian circulation. It is a key link from the West Residence Halls to the Carlson Hall sector, the Center of the Arts and to Wyman Mall via the proposed Carlson-Heide Mall.

**West Residence Halls and the New Interior Road**

The recommended changes for the West Residence Halls area (see subarea plan on page 18) deal mainly with circulation issues. The most significant recommendation is the closing of Winnebago Street. From a campus image standpoint, closing Winnebago Street is an important step. The recommendation for one of the vehicular entry sequences is a route up Prince Street to Starin Road, creating a grand entryway at this intersection. If Winnebago Street were to remain in place, one of the first images that visitors would have of the campus would be an unattractive, vehicle-cluttered driveway and a loading dock. By eliminating vehicular circulation from the area, safer pedestrian circulation can be accommodated and a greater amount of open green space can be created immediately adjacent to the residence halls.

Access to the Drumlin Dining Hall loading dock and to one of the new recycling stations is affected by these changes. A new access drive has been designed which feeds off of a new interior campus road. This new road runs from Starin Road to Stadium Drive, and is created by placing planting islands in the parking lot to separate through traffic from parking vehicles. The service access provides adequate space for maneuvering back into the loading dock. The recycling center is accessed through the Starin Road parking lot.

To facilitate the development of the new campus road to Williams Center, the tennis courts to the east of the West Residence Halls need to be moved. The courts have been relocated to the south of a proposed addition to Williams Center. This allows Stadium Drive to continue straight past Williams Center creating a T-intersection, a much safer situation than the sharp curve which currently exists in the road. Creating a T-intersection at this location provides the opportunity to reestablish Stadium Drive as a two-way road, if the University desires to do so in the future.

This road is not intended to be a thoroughfare for through traffic. It is to provide University service vehicles an interior route to the Athletic Complex without having to use off-campus, city streets. This route also allows students living in the West Residence Halls to easily get to parking lot 9 without having to leave campus. If it is found in the future that through traffic has become a problem on this road the University may wish to install a gate system to prohibit such use.

Another minor change to this part of campus is to relocate the existing volleyball courts to the interior green space west of the new road. Placing the courts on the west side of the road provides safer access for the residents, and gives them a greater sense of ownership of the courts.

Further changes to the Starin Road parking lot include installing planting islands throughout the lot and adding another bay of stalls to the north end of the lot. These changes accommodate the numbers recommended by the parking study, plus provide for stalls which will be lost with the closing of Winnebago Street and the narrowing of Starin Road. Other design changes have also been made in this lot in order to accommodate the Information Center and its entry circle drive.

**East Residence Halls**

Only one significant recommendation has been made for the East Residence Halls (see subarea plan on page 19). The change is recommended in order to better facilitate safe and efficient pedestrian circulation to and from the East Residence Halls. The parkway between the roadway and the tennis courts, directly south of Esker Dining Hall is badly trampled and eroded. These conditions are unacceptable and a permanent solution needs to be developed for this site. The Master Plan recommends that the terrace area on both sides of the street be changed to a hard surface. It is also recommended that this treatment be carried across the intersection to portray this space as a distinct pedestrian crossing zone similar to the Starin Road crossing.

A concrete paver treatment would be the ideal construction material for this development. Pavers would add a certain richness to the design and an added tactile experience. This tactile experience will help to reinforce to motorists that this area is an important pedestrian crossing space.

It is recommended that trees be planted within this space, in a manner similar to those planted along the sidewalks in parking lots 1 and 2, and the new Carlson parking lot. Although the design of the space is slightly different, by planting the same types of trees and in the same general pattern, some of the planting themes recommended for the campus can be reinforced. This theme connection also helps to strengthen the visual connection of this area with other parts of campus.
Another important change that is recommended for this area is the strengthening of the pedestrian link between the East Residence Halls and the northern portion of Wyman Mall. By widening the sidewalk along this route and reinforcing this movement with formal tree plantings a strong suggestion can be made that will direct pedestrian traffic to Wyman Mall.

**LAWCON Site**

The LAWCON site (see subarea plan on page 21), which includes the area directly north of the East Residence Halls, has been redesigned in order to accommodate a parking lot large enough to meet the recommendations set by the parking study. Some of the existing LAWCON land has been redesignated and recreation facilities relocated to the athletic fields in the northwest portion of the campus.

The design for the site includes an expanded parking lot, with 468 parking stalls with planting islands, a softball diamond, and a basketball court. The parking lot is designed on a north-south configuration to cater to the pedestrian movements that will be occurring there. The existing LAWCON picnic shelters will remain and the softball diamond has been moved to be more closely associated with the shelters. Due to the topography in this area a certain amount of earth-work may be required in the redesigning of the site.

**Secondary Design Components**

**Signage System**

A comprehensive campus signage system is a key aspect to the success of the overall development of the campus. Both functional and aesthetic goals can be met by developing and implementing a new signage system. The proposed signage system includes off-campus directional signage, on-campus directional signage, campus identity signage, parking lot identity signage, and building identity signage.

**Off-Campus Directional Signs**

Signage to the campus needs to begin at the Interstate and continue to the campus destination. Particular routes include State Highway 59, Rock County Highway "N", State Highway 12 (Main Street), and Tratt Street. Generally speaking, directional signs are adequate up to the City limits.

Within the City of Whitewater directional information is not easily identified. Signs should follow a standard City direction sign format. The City has suggested that signs could be designed to combine City and University functions in a new format. The design could play off of the forms and colors used for the University signage, which would further strengthen the overall signage system.

**On-Campus Directional Signs**

Directional signage is signage placed on the campus perimeter to direct the visitor to specific destination points. Two specific destination points warrant directional signage, Warhawk Stadium and Williams Center, collectively called the Athletic Complex, and the proposed Information Center. Providing directional signage to these two destinations only, will simplify the way-finding system and create a predictable entrance sequence.

The design of the directional signs (shown below) recall the form of the University Center arches. This form is used in place of the seamed roof motif used in the design of other signs in the system. This is because the directional signs are two-dimensional and lack the physical character necessary to support the seamed roof motif effectively. The color of the directional signage repeats the theme color.
Campus Identity Signs

Campus identity signs, of which there are two types (both shown below), announce the visitor's arrival and welcome the visitor to the campus. These signs act as entry features to the campus, as well as anchors for the perimeter treatment developed around the campus. The signs, set into a masonry wall, use materials common to many of the buildings on campus and recall the distinctive architectural form of a steamed roof. The message on the main entry sign will read, "The University of Wisconsin-Whitewater, Excellence in the 21st Century", which is the motto that the school has adopted for its academic image. The main signs will be placed at either end of Stairin Road, one at the top of Prince Street, and one at the top of Prairie Street. Other intermediate entry signs may be located at parking lot entryways or other entries to campus.

The wall is similar in color to the masonry of many of the buildings on campus. The sign plate utilizes the blue color found in the Center of the Arts building and the University Center. The blue color is repeated in a wall cap which recalls the standing seam roof of significant buildings. This cap emphasizes the importance of the entry feature, while acting as a unifying feature in the landscape.

Parking Lot Identification Signs

The proposed parking lot signage reinforces the form, materials and colors of the sign system. The message is simple and concise to quickly communicate the identification of the lot and where visitors are allowed to park. The signs should be placed at the entry drive of each parking lot. Where there are multiple entries there should be multiple signs.

The design of these signs (shown below) is three dimensional, allowing the signs to take on greater importance in the landscape. They help to reinforce the "edge" of the campus, serving as anchors for the perimeter treatment.
There are three options for mounting these signs (shown below). In areas where the parking lot is bordered by the perimeter treatment, the sign could be set into the wall. The wall would have the same cap treatment as the entry sign. Other options for mounting these signs include a solid masonry base the same thickness as the sign box, or mounting on metal posts. Each parking lot entry is different, so it is conceivable that all of these options will be implemented.

Street Signage

Building Identity Signs

The Master Plan recommends using a building mounted sign for building identification. This option, rather than a free-standing post mounted sign has several advantages. The building mounted sign poses fewer maintenance problems, while a post mounted system complicates mowing and other maintenance practices. The post mounted system is more prone to vandalism, while the building mounted system is well out of reach.

The design (shown at right) incorporates simple wording to quickly and easily communicate with the visitor. The signs contain the name of the building and a tag line for the departments housed in the building or the functions that it serves. Some buildings have multiple functions to be reflected in the tag line. The signs provide two lines of larger text for the building name, and two lines of smaller text for the tag line.

The signs are modelled after a corner stone, which reinforces an institutional character to the campus. These signs will be a stone or stone-like material set into, or applied to the building facade. The text will be raised, contrasting colored letters.

In each case the sign will be placed in the same location on every building, just above the first floor level and in the right one-third of the facade. This placement method establishes a viewer pattern for building sign locations throughout campus. The signs should be placed on the fronts of all buildings, as well as on any side which has significant viewing potential. For example, if a large pedestrian path is headed toward the side of a building, then that side should also be signed. The placement of the signs may need to vary slightly due to building design or existing vegetation.

Building signs will be lighted with low voltage, wall mounted florescent lighting units. This lighting fixture allows for direct lighting of the signs while minimizing the flow of light into nearby windows. This fixture also eliminates the possibility of vandalism or maintenance problems that could be posed by a ground mounted unit.

Some miscellaneous signage issues include the need to manage the temporary sign boards and the need to provide, in a more attractive manner, the basic functions currently served by the two existing wooden kiosks on the mall. These issues will be discussed in the section dealing with site amenities.

All sign designs are to comply with the City of Whitewater Municipal Codes. (Appendix E)
Bicycle Circulation

A great number of campus users prefer the bicycle as their mode of transportation to and around campus. For this reason, and to reduce the potential for pedestrian / bicycle conflict a campus bicycle route has been incorporated into the Master Plan. (The route is delineated on the plan with a dashed line). The development of a separate bicycle route through campus relieves heavily used pedestrian corridors of hazardous bicycle traffic. Bicyclists want, as do pedestrians, the quickest and most direct route to their destination. The Master Plan designates bicycle routes that afford the cyclist very direct routes to and from most areas of campus with very few pedestrian and vehicular conflicts.

The Master Plan recommends using asphalt for the development of any new bike paths, because it is the most affordable option. Another, more expensive alternative, would be to use a colored concrete, particularly a color such as red or blue, which would stand out and identify the bike path as a distinctly different use space.

The routes have been designed to provide primary north/south, and east/west circulation. There are two primary north/south interior bicycle routes and three primary east/west routes. Each route begins with access to a city street, providing opportunities to link the campus bicycle route with a potential city bicycle system.

The primary north/south routes are important for linking the residential hall complexes with the academic core, while the primary east/west routes are important for linking different parts of the academic core to one another. All paths provide adequate space for two bikes to pass each other while in motion. Conflict zones will exist where bicycle paths cross pedestrian paths, but with proper signage, these intersection can be controlled. It is a suggestion of this Master Plan that bicycle sized traffic signs, including yield and stop signs, be placed in appropriate locations along the bicycle route, and that caution or warning signs also be placed along the pedestrian routes where a bicycle path crosses.

Main pedestrian malls are envisioned as "no ride" zones, with bicycle storage and parking located strategically on the perimeter of the main pedestrian core.

Site Amenity System

Site Furniture

Site furniture includes a wide range of site amenities. These include benches, trash containers, lighting fixtures, and bicycle parking facilities. It is the recommendation of this Master Plan that the campus begin a program of replacing the existing site furniture throughout campus. The choice of a particular product brand or style will not be recommended in this plan, but some general guidelines should be considered during the decision process. One guideline is that the Campus chose a line of site furniture that is designed in the same style. This will provide a uniform appearance and insures that the various elements will be easy to coordinate. Another recommendation of this plan is that the Campus chose a site amenities series that is a metal based construction. Choosing a metal based series gives a greater flexibility in color choice, and is more durable and more vandal resistant than wood products.

In terms of lighting fixtures, the Master Plan recommends that the campus engage in a process of unifying the lighting fixtures on campus. Rather than removing all existing light fixtures and beginning the process from scratch, the plan recommends that the campus continue to install the brown box light fixtures that already exist on campus. The style of this fixture is very appropriate to the campus complementing the style of the theme buildings. The process of replacing the other light fixtures on campus should be done as funds become available. The highest priority for replacing existing light fixtures should be in the heaviest pedestrian trafficked areas.

Information Kiosks

A new system of kiosks is proposed by the Master Plan. This system incorporates many of the same design themes, colors and materials, as the proposed signage system. There are three different components to the kiosk system. The first is a main kiosk that is to be placed in each of the four main pedestrian malls. The locations of the four main kiosks include the space in front of the steps to the University Center, in front of Carlson Hall, on the proposed Case Street Mall, in the proposed Heide Hall plaza space, and the fourth at the Information Center. A kiosk at the Information Center location could serve as the Phase One Information Center, and as other phases of the Information Center develop the kiosk can remain, or be relocated to another appropriate location.
The kiosks (shown below) are designed to serve pedestrian traffic from two directions, allowing an announcement to be seen by all persons using the mall, if posted on both sides of the kiosk. The kiosk consists of a blue metal framework, housing an enclosed posting surface. For safety purposes, the structural frame is open and allows for clear viewing of pedestrian traffic coming from other directions. The posting area on the main kiosks is large enough to accommodate six announcements each sized at 11" x 17".

The second component of this kiosk system is a sign board framework to be used by organizations wishing to advertise an event in a larger format. These frameworks (shown at right) provide an aesthetic and safe solution to the problem of sign boards which are randomly placed around campus, and are not maintained or retrieved after they have served their purpose. It is the suggestion of this plan that the random placement of sign board be prohibited, and instead organizations can use the frameworks if they design their signs appropriately. In order for this stipulation of the plan to work it will be necessary that all illegally placed sign boards be promptly removed by University personnel.

The placement of these sign board frameworks is important in order to encourage compliance. There are several places on campus where these frameworks would be appropriate, but limiting their use to a few areas is advisable. The frameworks should be placed in the main pedestrian mall areas, and placed in conjunction with the main kiosks. The frameworks can be extended to any number of sign board areas, but a maximum of five per each side of the kiosk is advisable. The area around the kiosk and sign board frameworks should be designed to a pedestrian scale, as shown in the plan below.
The third component of the kiosk system is an auxiliary kiosk. This kiosk design is to be used throughout campus wherever there is a need for such a facility. The auxiliary kiosk is a smaller structure, standing one and one half feet shorter than the main kiosk and two and one half feet narrower. The sign posting area on the auxiliary kiosk is also smaller.

**Bicycle Racks**

The existing bicycle racks on campus are extremely out of date in terms of the function they perform. It is the suggestion of this Master Plan that the campus engage in a process of replacing the existing bicycle racks. The replacement racks, regardless of the brand name chosen, should be of the design that accommodates the use of the kryptonite locks, which are the most popular type of lock being used today.

**Planting Issues**

Planting recommendations fall into two main categories. The plan has included a discussion of landscape theme, which, in broad terms, consists of an informal, open woodland character similar to the wooded areas of the main drumlin and a formal tree planting in the pedestrian mall areas.

The other category deals with turf grass species selection and management. As with many large area institutional facilities, a large percentage of maintenance time and dollars are expended on mowing and maintaining turf. There are some more recently available turf grass mixes that can minimize maintenance requirements.

Fescue mixes require no fertilizing, and can dramatically reduce mowing time. During the hot summer months, mowing may only be needed every six weeks. Some fescue mixes have a maximum growing height of 10" - 15", and could be used on steep slopes in the open woodland areas to eliminate mowing entirely. This would also provide an opportunity to intersperse bulbs and perennials within the naturalized areas because mowing would be eliminated. Because fescues are sod forming, weed control requirements will be similar to bluegrass installations after establishment.

Specifications for both fescue mix seed and sod are included in Appendix I. Implementation of a new turf mix system can be phased in over several years. Newly installed turf should utilize the fescue mixes. Phased implementation may want to begin with the steeply sloping areas on the drumlin, to eliminate mowing requirements there first.

**Construction and Materials Guidelines**

In addition to design recommendations it is important that this plan also provide general guidelines for construction. Construction methods and materials should be made standard so that new projects are developed in keeping with the design themes for the campus. Without standard materials and construction methods, the campus will become a piecemeal mixture of different colors and textures. Specific design issues include sidewalk widening, new sidewalk construction and the construction of campus support structures.

Widening walks (as shown on page 27) can address worn turf, eroding ground and tire tracks created by excess pedestrian traffic and service and maintenance vehicles. In most cases, increasing the walk width by two to four feet will be sufficient to address most situations. The plan recommends that this width increase be installed on both sides of the walk in a material that will contrast visually and texturally with the main walk. This material could be concrete with a detailed scoring pattern, or dry set, pre-cast concrete pavers. This will add color and texture to the pedestrian corridor, enhancing the aesthetic value of the sidewalks. Brick pavers add a unique tactile experience that can be beneficial to maintenance vehicles, as well as visually impaired users, by helping to guide them along the route. This brick paver space can also act as a zone for the placement of functional and site amenities such as drainage structures, site furniture, lighting elements, or trash receptacles.

In some situations it might be advisable to install a curbed edge to the sidewalk. The curb further helps to minimize damage to lawns and plantings by creating a barrier between the sidewalk and the plantings. A curb also increases the tactile experience and guiding qualities by adding a definite edge to the pavement.

In cases where the corner of a sidewalk intersection is being cut and trampled, a corner fill should be added. The current practice for treating these situations seems to be to fill the corner with a small triangular section of concrete. This tends to be a temporary solution, because eventually there will be another rut created along the side of the infill. This is because a triangular infill piece does not provide for the desired circulation motion. A more permanent solution recommended by the Master Plan for filling corners is to install an infill created with a radius. A 15 foot radius would allow plenty of space for pedestrian movements and to provide for unencumbered vehicle turning motion. Again to further enforce the edge, a curb may be installed.
In cases of new sidewalk construction, the same design procedures should be followed. A standard concrete sidewalk should be built, accented with an edge.

Conclusion
This Master Plan has been developed as a tool to help guide the campus in future planning and development, to provide a common theme, to establish a distinct campus identity, and to provide for the safe and efficient movement of campus users. The recommendations in this plan should be viewed as guidelines that may change or evolve as site-specific designs are developed.

The campus has a number of positive attributes that can be used in coordination with the ideas set forth in this plan to create for the campus an image that is desirable to portray to the public.

Another situation where standards should be made is in the construction of any new support structures on campus. This includes structures such as trash enclosures, recycling container enclosures, and bicycle shelters. Many new trash and recycling enclosures have been recently constructed. To maintain some uniformity it is recommended that the styles and materials that have been used on these structures be used for future support structure building projects.
APPENDIX A

REQUEST FOR PROPOSALS
If you have any questions regarding the request plan, please contact me.

If you are interested I would need your proposal no later than February 1, 1993. Consequently it material and submit a proposal. We would like to initiate the project in early spring. Consequently if your firm would be interested in participating in such an effort; I would request that you study the

- Master Plan Fee Estimate Sheet Format
- Statement of Client Responsibilities
- Scope of Service for Campus Master Planning
- Campus Six Year Physical Development
- Needs Study. A copy of the proposal is enclosed along with the following material.

However, we must evaluate the cost/benefit of these services. We are also proceeding with a separate planning process for the needs of the campus exterior environment. It is believed that a comprehensive study and plan will

be ready by the middle of the spring semester. The planning process will also take into account the

development of a campus master plan for developing a comprehensive plan for the campus exterior. The planning process and the budget requirements will be discussed later.

To Whom it May Concern:

Madison, WI 53706
4610 University Avenue, #840
Ken Sick Design

January 4, 1993
2. Pedestrian circulation patterns

2a. Hamilton Field Area

2b. Pedestrian malls:

2c. Pedestrian traffic control (crosswalks, traffic signals, grade

west cross clearing and North and South movement

2d. Areas used for pedestrian traffic transition from east to

configuration (configuration)

waterways (with), pavement patterns

5. Storage areas, benches, etc. including integration of bike stands, trash/recycling

concept, special sites, plantings, and landscape development

1. "outdoor "use areas (configuration, construction

change for integrated areas with include:

A. Evaluation of existing campus facilities and recommended

following major components:

The campus master plan objectives listed above are included in the

- The campus

- Develop site design standards and criteria which will enhance

- Add/extend or renovate amenities

- Assess current site amenities and make recommendations for

- Make current recommendations for new or renovated landscape

- Assess existing permanent and seasonal campus plantings and

- Assess campus stage

- Identify vehicular and pedestrian circulation needs, conflicts

plan will:

- Physical improvement plans when appropriate, the campus master

for ease of discussion and for further development of detailed

area, the campus will be broken down into seven areas (A-G)

overall framework that functionally and aesthetically utilizes the

The purpose of developing a campus master plan is to establish an

UNIVERSITY OF WISCONSIN

CAMPUSS MASTER PLANNING

SCOPE OF SERVICES
Ten copies of the final report will be provided to the ten selected groups. The summary report will detail recommendations made throughout the course of the study. A report summaries the findings and recommendations will be presented at the completion of the study.

Meetings

Designated campus group meeting frequencies and attendance record of the group members will be presented. It is anticipated that more than six meetings will be held for each group, and in terms of the group's ability to meet their goals, it is anticipated that the individual members will gain a better understanding from the meeting content and the proposed project goals. To keep members of the operational and among planning project to keep meetings will be held on a regular basis throughout the project.

Six months to complete

It is anticipated that the duration of the project will take six months to complete.

Schedule

The text used to detail the recommendations set forth in the summary report will also include reduced copies of all graphs used to develop the final plan. Recommendations and criteria for the stage style and material standards

5. Stage style (location, size, shape, color, specialty, graphics, etc.)

6. Summary report detailing all assumptions and criteria (statement)

d. Informational maps
c. Directional (pedestrian and vehicular)
b. Pedestrian

The proposed plan for maintenance, type of ground cover, general plan for annual planting programs, general plan for perennial plantings, general location and array of trees and shrubs, on low cost maintenance alternatives.

3. Integrative landscape plan with parking study project.
Client Responsibilities

1. The Client would take responsibility for assembling a Campus Master Plan

2. The Client would provide consultant with current reproducible base maps of
   existing conditions, site location, location of buildings and two foot contour intervals,
   existing conditions indicating building location, site location, walkway

3. The Campus Master Plan Committee would respond to master plan concepts in
   a timely manner.

4. A campus project representative would be established having the responsibility
   of ongoing communications between the consultant and the Campus Master
   Plan Advisory Committee.

5. The State of Wisconsin would review of the Draft Report by the Campus Master
   Plan Advisory Committee.

6. Receipt of comments to the printing of the final report shall take no longer than two weeks, allowing consultant two weeks from the

The Optional Scope of Services and corresponding Fee Estimate are to be based on

Master Plan

University of Wisconsin - Whitewater Campus
UNIVERSITY OF WISCONSIN-WHITEWATER
COPY OF PROPOSAL

CAMPUS EXTERIOR SPACE MASTER PLAN
UNIVERSITY OF WISCONSIN-WHITEWATER

SCOPE OF SERVICES

Task 1 - Base Map Preparation

1.1 Digitize Campus Plan Update
The consultant will establish the existing map of the Campus Development Plan in digital format. This will be developed in layers to maximize flexibility in data retrieval, and will include all information present in the existing document. This documentation will serve as part of the working base information for the Campus Exterior Space Master Plan process, and final report.

1.2 Additional Base Information - (Optional)
The consultant will, upon written request, add other information to the Campus Development Plan database. This could include utility lines, lighting locations, and other information requested by the Client. Cost for these services will be negotiated upon determination of scope.

Task 2 - Coordination with Parking Study

2.1 Attendance at Planning Meetings
The consultant will attend up to four appropriate planning sessions dealing with the development of the Campus Parking Study.

2.2 Information Exchange
Upon request, the consultant will provide copies of all in-progress or completed Exterior Space Master Plan base and inventory documents to assist in the Parking Study process.

2.3 Review of Documents
The consultant requests that the client provide access to copies of developing Parking Study documents. In a timely manner, in order to remain informed as to the direction and findings of that study.

Task 3 - Preliminary Site Inventory and Analysis

The consultant will conduct a comprehensive site inventory to become familiar with the campus setting and the components of the physical environment. Documentation of this task will take the form of plan drawings, diagrams, photographs, sketches and text. Plan drawings and diagrams will be prepared as part of the overall digital information package, and photograph locations will be indicated on the plan diagrams. Elements that will be included, and method of data gathering are listed as sub-tasks, below.
3.1 Pedestrian Circulation
The consultant will conduct general observations of pedestrian movements on-site. Site work will be scheduled to allow observations during various times of the school day. The inventory will record other indications, such as worn turf areas and existing pavement widths to establish a general understanding of overall circulation.

Bicycle routes and parking areas will be documented. Additional information will be sought as part of the first workshop.

Part of the circulation inventory will include a general, ADA pedestrian accessibility audit consisting of a cataloguing of building entrances, barrier free walkways, and inaccessible slopes as indicated by the Americans with Disabilities Act. A diagram locating the findings of this audit will be prepared as an overlay to the overall plan package.

The findings of the circulation inventory will be confirmed and expanded as one aspect of the first workshop. Staff input will be used to expand on circulation issues as related to delivery, operations and maintenance circulation.

Existing vehicular circulation patterns will be inventoried through collection of existing data such as traffic counts, and data generated by the Parking Study. On-site observations will also be used to identify pedestrian/vehicle conflicts.

3.2 Signage
The consultant will conduct a general inventory of existing signage. This will consist of a photographic record of various sign types, and sketch documentation of size, mounting detail, and other general characteristics. This will not be a comprehensive listing of individual signs and locations, but will serve as a general record of the state of the sign system, and a beginning for the development of comprehensive sign guidelines for the campus.

Particular attention will be given to directional signage locations. All observable directional signs will be inventoried for message and location. Additional inventory and analysis of the existing directional system will be solicited from staff as part of the first workshop.

3.3 Existing Vegetation
The consultant will conduct a campus-wide assessment of existing vegetation. This will be limited to major plantings within areas associated with primary buildings; generally, the area contained by Main St., Prairie St., Prince St. and Starrin Road, the two residence life areas, and the Williams Center and Phy Ed. areas of the campus. This assessment will evaluate plantings by application, (e.g. ground cover, foundation, canopy structure, parking areas, detail or display and turf), condition, life expectancy, landscape theme, maintenance requirements, and subjective valuation.

Canopy tree and evergreen tree plantings, within the main vegetation study area described above, will be catalogued and located by individual tree. This data will be collected from existing documents and from a comprehensive field survey. The consultant will provide a plan overlay showing the existing campus forestry by species, size and approximate location. This will provide critical base information for new and renovated landscape recommendations.
Areas in more naturalized and less developed sections of campus will be inventoried in a more general manner. This will consist of general observations taken within accessible sections of these areas. Information gathered will be description of plant community association, indicator species, general health, and general subjective valuation of areas of vegetation.

Areas of significant annual and perennial plantings will be identified in the field, and from interviews with campus staff. Evaluation of perennial plant conditions will be conducted in the field if the schedule is conducive to growing season observations. Staff evaluation will reinforce or replace on-site observations.

3.4 Site Amenities
The consultant will conduct a general inventory of existing site amenities. This will consist of a photographic record of various site furniture types, materials and general characteristics. This will not be a comprehensive listing of individual amenities and locations.

3.5 Architectural
The consultant will conduct an on-site visual inventory of existing building stock. This will include architectural style and materials, and will assist in the evaluation of overall campus visual character. Overall architectural inventory will consist of photographic montages of significant building elevations and their relationship to the exterior spaces. Photographic inventory will be keyed to a location plan for reference.

Particular attention will be given to buildings that will be considered for expansion within the next 10 year period. Schematics of existing floor plans for these buildings will be collected or developed as part of the inventory process. Adjacent site areas available for expansion will be identified. Complete elevational photographic montages will be provided for buildings under consideration for expansion.

3.6 Views
The consultant will document existing view conditions throughout the project site. This will include views into the campus from adjoining properties and roadways, and views out of and between campus areas. The inventory will document significant views through photographs keyed to a location plan.

3.7 Land Use
The consultant will document existing land uses within the campus boundaries, immediately adjacent to campus properties, and significant uses near to campus if appropriate. Campus and adjacent land uses will be documented as an overlay on the CADD plan package. If required, outlying significant land use patterns will be documented as part of another mapping system such as air photography, or other appropriately scaled system.

3.8 Visual Character/Quality
The consultant will conduct an on-site inventory of existing visual characteristics. This will be a subjective assessment of the visual and spatial qualities of the campus environment. Quality will be measured through a combination of multiple criteria, including many of the characteristics listed above.
The findings of this assessment will be documented in a diagrammatic form in plan, and with photography and accompanying text.

**Task 4 - Workshop Preparation**

4.1 **Workshop Schedule and List of Participants**
The consultant will work with the Client representative to confirm a list of workshop participants and to schedule a series of on-site interviews to explore the issues to be addressed in the Master Plan. The consultant will provide copies of questions for distribution to workshop participants prior to interviews in order to facilitate discussion. Draft copies of some inventory/analysis plans will be provided for review and feedback.

4.2 **Preparation of Base Documents**
The consultant will provide draft copies of inventory drawings and organize photographic record to serve as reference during the workshop sessions.

**Task 5 - On-site Workshop**

The consultant will facilitate a two day, on-site workshop, that will focus on expanding and confirming the site inventory, identifying areas of common need and areas of conflicting need, exploring the physical requirements of the various campus operations, and developing a direction for campus aesthetic theme and visual character. Information will be assembled through a series of interviews. Interviews will be planned to involve representatives from discreet campus planning interests in order to explore individual issues in depth.

5.1 **Interviews**
The consultant will facilitate a series of interviews with members of the Campus Master Plan Advisory Committee, Campus Planning staff, and other designated individuals or groups. These interviews will be scheduled within a two day period, at a common location on-site.

5.2 **Memorandum of Understanding**
The consultant will publish a summary memorandum, outlining the findings of the interview process, by issue or topic. This memorandum will be delivered to the Client for circulation to workshop participants.

5.3 **Refined Final Inventory and Analysis**
The consultant will revise and refine the inventory and analysis documents to reflect input from the workshop session. Questions raised by the workshop may require that additional information be assembled. This information will be added to the inventory/analysis database.

**Task 6 - Concept**

Based on the findings of the project inventory and analysis, and the information from the initial workshop, the consultant will develop a series of concept recommendations for the many issues of the master planning process. Where appropriate, alternative concepts may be developed. Concept recommendations will consist of plan diagrams, sketches and cutline text.
6.1 **Circulation**
Concept design will explore overall pedestrian and bicycle circulation issues in diagrammatic form. A hierarchy of main, secondary and tertiary routes will be identified. Areas of pedestrian/vehicular conflict will be identified, and solutions explored. Areas of significance will be identified for possible increased amenity integration and landscape development.

Findings of the Parking Study are expected to be an integral part of the circulation concept.

6.2 **Signage System Concept**
Signage concept development will focus on the directional system, exploring the entrance sequences, again in diagrammatic form. Sign system development will begin with identity and theme creation, and move through the main directional elements, building identification, regulatory, informational and other desired signage elements. Options for phased implementation will be explored, along with options for graphic design and materials.

6.3 **Plantings**
Concept direction for campus plantings will focus on development of treatment zones. Zones will be differentiated by land use, potential for theme creation or reinforcement, response to existing vegetation, maintenance requirement and expectation. Planting recommendations will also explore treatment and design direction according to plant type, i.e. canopy tree, evergreen tree, ornamental tree, shrubs, perennials, and annuals.

Concept development will be illustrated in plan diagram form, and with supporting sketches and text.

6.4 **Site Amenity System Concept**
Consideration of site amenity system development will begin with prioritization of development areas. High priority areas may include main pedestrian circulation intersections, entry feature areas, main outdoor use areas, etc.

6.5 **Architectural**
Based on information from the planning workshop, and the Physical Development Plan, the consultant will develop architectural massing scheme alternatives for scheduled building expansions. This information will set some parameters for exterior space development near buildings to be expanded.

6.6 **Design Theme**
Concept design will begin to assemble the various components of the concept design to create an overall aesthetic design theme for the campus. Design theme development will suggest visual unification of campus components where possible, and suggest visual transition for divergent areas. Theme development will address formal/informal issues.
Task 7 - Preview Work Session

The consultant will provide an informal review of developing concepts with Client representative. This is intended to provide an opportunity to fine tune the initial concept direction, prior to the second workshop session.

Task 8 - Concept Review Workshop

The consultant will facilitate a concept review workshop that will focus on an in-depth review of concept directions. The workshop will begin with an overall presentation of project findings and concept development. Additional input will be solicited from workshop participants in regards to more detailed development of the concept direction. If necessary, the workshop will continue by breaking out focus groups to address particularly complex issues.

Task 9 - Preliminary Master Plan

The consultant will develop the concept plan into a preliminary master plan. The plan will illustrate actual improvements in plan and sketch form with supporting text. Plans will differentiate dimensional differences, materials, and order of magnitude cost alternatives.

9.1 Circulation
Circulation improvements will be identified. Pavement widths will be identified, as well as pavement details to deal with issues of maintenance, accessibility, and cost.

9.2 Signage System
Sign design proposals will be developed for all sign types, i.e., identity, informational, directional, regulatory, etc. Sign system implementation recommendations will be proposed, including prioritization of system elements.

9.3 Plantings
Planting redevelopment will be identified for main infrastructural plantings, i.e., canopy and evergreen trees, by species. Specialty detail plantings, such as entrance feature areas will also be identified by species. General planting guidelines will be developed for building foundation, perennial, annual and other herbaceous plantings.

General maintenance procedure guidelines will be developed, with a focus on decreasing the extent of overall maintenance operations, while improving overall image and appearance.

9.4 Site Amenity System Concept
Site amenities will be presented in terms of style and material, and if necessary, manufacturer. Redevelopment of site amenity system will be prioritized for phased implementation.

9.5 Architectural
Building expansion areas will be identified. Where necessary, multiple expansion zones will be delineated on plan drawings.
9.6 Design Theme
Design theme will be the culmination of the various elements of the master plan development. Design theme will be communicated through a series of elevational sketches, sections and perspective renderings, suitable for use in promotional publications. Renderings will be provided as full color illustrations.

Task 10 - Review Work Session
The consultant will present preliminary master plan documents to Client representatives, and solicit comments and revisions.

Task 11 - Draft Master Plan Report
The consultant will prepare text discussion of the master planning process, and the findings of the master plan. Draft master plan report will not include reduced drawings at this time, but will refer to full size drawings for reference. Location of graphics in the final report will be noted. 10 copies of the draft report will be delivered to the Client for review and revision.

Task 12 - Final Master Plan and Report
The consultant will incorporate final comments and revisions into final master plan documents. Final graphics will be produced in color versions, as well as reduced black and white. Final plan drawings will also be provided on computer disk, in Dxf format.

Task 13 - Final Presentation
The consultant will provide a final presentation of master plan documents to Client representative, and deliver 10 copies of the Final Master Plan and Report.
SCHEDULE

The consultant will provide a schedule, outlining target dates upon authorization to proceed. The proposed scope of services contains significant field investigations as part of initial inventory and analysis processes which should be scheduled during the academic year, and preferably during reasonable weather. Based on the ability to begin the project either in April or August of 1993, the project schedule is diagrammed below.

<table>
<thead>
<tr>
<th>TASK</th>
<th>MONTH1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MEETINGS

Meetings are diagrammed in the project schedule above. Meetings indicated by * are review and presentation meetings for the Master Plan. Meetings indicated by o are associated with the Parking Study, and are for purposes of coordination. All meetings indicated in the scope of services, and indicated in the schedule are included in the base fee proposal.

DELIVERABLES

Conceptual plans will be presented at an appropriate scale. All plans, including base drawings, inventory/analysis plans and diagrams, and final master plan will be provided as reproducible full size drawings, reduced size drawings, and on computer disk, in Dxf format.

The consultant will provide a report summarizing the process and findings of the Master Plan. Final plans, supporting graphics and significant photographic record will be included in the summary report. Graphics and photographs will be reproduced through color photocopying processes. Ten copies of the final report will be provided as part of the base service and expense proposal.
APPENDIX C

LIST OF WORKSHOP QUESTIONS
Introduction
Thank you for agreeing to participate in our planning workshop for the UW Whitewater Campus Landscape Master Plan. Your input will help to insure that we address the issues most important to the success of the campus. Please review these questions prior to our workshop. Note that not all questions will apply equally to everyone.

General Questions
What is your interpretation of the strategic priorities, and the campus goals and objectives for the next five to ten years? What is your overall vision for the campus? What things should the campus do now, or in the near future to achieve this vision?

From your own experience, on-campus, how would you change or improve the environment? How well does it function? How does the setting influence your activities?

From your knowledge of the history of the campus, are there consistent ideas that should be respected and continued? Are there problem areas that should be corrected?

How does the campus interact with the University System or the community at large? What is the nature of this relationship? How can it be improved?

How would you characterize the visual appearance of the campus? How does it relate to the overall mission of the campus? What message does it send? How can this be improved?

Specific Questions
Are the present site facilities adequate for your operations or activities? How can they be improved?

We have been specifically asked to investigate the following issues. What concerns or problems do you see relating to these particular areas?

Vehicular and pedestrian circulation- conflicts and opportunities for improvements. Of particular concern is east/west pedestrian movements across the drumlin.

Campus signage

Plantings

Site amenities such as benches, trash containers, bike racks, etc.

Unification of the visual appearance of the campus
University of Wisconsin-Whitewater
Workshop Memorandum

INTRODUCTION

We would like to thank all of those individuals who participated in the Campus Master Landscape Planning Workshop. We held eleven interview sessions, which were attended by more than 50 people, representing a number of various campus and community interest groups. Sign in sheets, circulated at the beginning of each interview session are attached. Participants were asked to give their impressions of the campus' overall appearance, identify a visual theme, and identify specific problems or concerns. Through these discussions, we were able to identify what appear to be the major design issues for the campus. Among those are signage, pedestrian circulation particularly over the "drumlin", conflicts between pedestrian and vehicular traffic especially on Starin Rd., and the development of a visitor/information center.

What follows is a summary of the discussions of the various interview sessions. We encourage you to read through this material to gain a greater perspective of the two day workshop event and the views others have of the problems and opportunities the campus offers. Many topics overlap, and may be mentioned more than once, or may be discussed in another topic area.

SIGNAGE

Signage was mentioned by every group in the workshop as a major problem for the University of Wisconsin - Whitewater. Directional signage, to the campus from outlying areas and within the campus was perhaps the biggest concern of workshop participants.

Signage to the campus needs to begin at the interstate and continue to the campus destination. Particular routes mentioned in the workshop were State Highway 59, County Highway N, State Highway 12 (Main Street), and Tratt Street. Needs mentioned include clear directional signage to the Warhawks Stadium, the Residence Halls, the LAWCON site, Baker Hall, the Police and Parking Offices, and a potential Visitor's Center or Information Booth.

Several comments were made regarding an entry or gateway feature as part of the signage system. This feature would act as an identifying element, announcing the visitor's arrival to the campus, as well as distinguishing the campus as an entity separate from the surrounding neighborhoods and community. This may be a single feature or a series of features, but regardless would act as an identifiable entry and landmark for the University.

Another signage issue is the "locator map" or University directory map which tells you, "you are here", and identifies destinations and parking. This was mentioned several times during the interview sessions, with particular emphasis being given to the fact that it should be accessible both for pedestrian and automobile traffic. This feature could be incorporated into a Visitor's Center or could be a stand alone feature, perhaps with multiple locations.

Other needs include, directional, parking, and building signage. Comments regarding the current campus signage were generally negative. The great majority of workshop participants feel that the current signage is unattractive, hard to read, placed inappropriately, and does not reflect the kind of image that the University wants to portray.
A number of suggestions were made regarding building signage including placing signs directly on the buildings rather than on sign posts in front of the building, placing building signs not only in the front of the building but on all sides of the building (or at least those side of the building that face the direction of significant traffic patterns), lighting signs so that they are readable at night, provide a function title on the building sign as well as the name of the building, and that the signs be designed so as to be seen from a distance.

Comments were also made regarding parking signage. The current parking signs are full of information and not easily digested in a short amount of time. Suggestions were made that these signs be much simpler, making them easier to read and understand, perhaps by using a coding system or icons to communicate intended purposes for the different lots. Handicapped stalls must be clearly marked.

Miscellaneous signage issues include the need to manage the temporary sign boards and the need to provide the basic function served by the two wooden "kiosk" signs.

Some general comments on a signage system is that it be uniform throughout the campus, both in its design and placement. That signs be readable from a number of directions and distances and be relatively maintenance free and vandal resistant, and most of all be "user friendly".

CIRCULATION

Another issue discussed in detail in most of the interview sessions was circulation. Issues identified included both general and specific conflict areas.

One particular area that was discussed in detail and recognized as a problem for pedestrians is the drumlin area. The drumlin creates a physical barrier between two sections of the campus, and is generally viewed as inaccessible and hard to cross. Crossing becomes particularly difficult and uncomfortable in the winter with ice and snow accumulation, and cold winds.

On-campus, particularly off-roadway, vehicular circulation was discussed. Elements include Disabled Student Services vehicles, maintenance vehicles, delivery vehicles, both internal and non-University, visitors, Police and other emergency vehicles, Parking regulation vehicles, commuter student vehicles, University faculty and staff vehicles, special event participant vehicles, and external service vehicles such as trash or recycling removal vehicles.

Another very important issue raised by many workshop participants relating to circulation is the conflict between pedestrian and vehicular traffic. There are areas where conflict has been identified as a priority area for concern.

A major conflict exists along Starin Road. Information provided from workshop participants indicates that between 80-90% of the traffic volume on Starin Road is University related. Pedestrian crossing causes traffic backups on Starin Road particularly at times when classes break. This causes lengthy delays for waiting vehicles and creates problems for police vehicles entering Starin Road from the driveway east of the Bookstore. Another crossing conflict on Starin Road is at the corner of Starin and Prairie, near the Health Center Building. The parking area just to the East of the Bookstore, Goodhue Hall and Fischer Hall carries heavy pedestrian traffic, which conflicts with delivery vehicles and the University Police.
Another traffic conflict area noted by workshop participants is on Main Street, particularly near the Library. Main Street carries significant vehicular traffic and is difficult to cross. Some workshop participants feel that Main Street is poorly lit. Also, there should be consideration of the street widening project which is slated for construction in 1995.

Other areas of campus cited for circulation problems include the circular drive behind the University Center because of the large volume of semis and other delivery vehicles, loading dock areas for Upham Hall, the University Center and the Bookstore, a drop-off for the Young Auditorium, and parking lot 13 being used as a drop-off for Heide Hall.

Bicycle circulation was mentioned by workshop participants. Currently the campus does not cater to the needs of bicyclists, whether commuters or just on-campus riders. Some workshop participants believe that the integration of a bicycle route through campus should be a major consideration in the master plan. The City Planning Commission has expressed some interest in the possibility of linking a University Bicycle Route with a future City of Whitewater Bicycle Route. This could also connect to the Ice Age Trail.

The on-campus bike system needs additional bike storage support. Participants recognized the need for more and improved bicycle storage, including, substitution for existing bike lockers, properly located and detailed bike racks.

**PARKING**

Parking issues are primarily being dealt with in the Campus Parking study, which will be giving recommendations for numbers of stalls needed and locations for those additional stalls. However, parking issue are a concern of the master plan where they related to the functions and efficiency of the campus as a whole. Specific examples of problem areas were noted by a number of workshop participants, and they have been noted.

These specific examples include the parking for the University Police, this specific example is sited due to the importance, in some cases, that they have quick and easy access to their squad cars for emergencies or when dangerous situations that might arise.

Another parking issue, which will not be covered in the Parking Study, is parking for a potential Visitor’s Center. The need to bring people to a specific location for acquiring parking permits and information was a highly regarded issue by many workshop participants, and the need to provide parking at this site was considered to be very important. In the event that the University Center were to become the official “Visitor’s Center” (that is not to say they are not currently the campus’ primary information center), this facility would need additional parking, an issue most likely not dealt with in the Parking Study.

Additional parking for the Alumni Center might be a valid consideration of the master plan. This may be a consideration in that there is a safety issue involved with the arrival of elderly alumni at the Alumni Center and the need for convenient and safe short term parking.

**THEME / IMAGE**

Discussions about the image of the University and a Theme for the campus, prompted by the workshop questionnaire, varied from session to session, but a number of general comments on the subject came out. One of the most commonly mentioned problems with the image of the campus is the absence of a theme and visual unity. (A side note to the problem of lack of image and continuity to the campus is the current
logo design. Discussions about the University logo were brought up during some of the sessions and it was suggested that the logo be redesigned to coordinate with the image or theme that will be created for the University and the campus by the master plan.)

Another general observation made by workshop participants is that the University is a "rural" school. The region and surrounding community were the most prominent reasons for these observations, but a few comments on the rural nature of the campus also related back to the style of the existing signage. The concept of utilizing plant materials native to Southeastern Wisconsin, using a native landscape as a unifying element was mentioned. This concept could also relate to a "rural" aspect to the campus. Many participants feel that the campus landscape should not be a highly formalized design, but rather should be more park-like in its appearance.

A landscape design theme that was mentioned by several participants was a glacial theme, using the glacial features present on and unique to the campus as the basis. Suggestions as to how to portray this image were not offered, but it was stated that some of the art work in the University Center, including the neon light work in the entryways were designed with this theme. Many of the buildings on campus are named after glacial features.

Another suggestion for theme was to work with the architectural elements already present on campus. The blue arches of the University Center was one suggestion, as well as the pitched roofs of some of the newer buildings. The comments related to this suggestion were that these architectural elements are much more recognizable to the students of today, and for the past twenty years, because the Tower burned down in the 1970's. These suggestions were also based on the idea of viewing the University as a progressive, forward thinking and acting school. A place where young people can envision themselves living and learning.

On the other hand, however, it was suggested that the University incorporate the history of the school into the theme of the campus. The Old Main Tower, which currently appears on the University logo, was one suggestion for reflecting the history of the school. It was suggested that a replica of the tower could be built, and/or an historical plaque could be placed near Hyer Hall explaining some of the history of the campus. Another comment was to incorporate the past, present and future into the theme (and logo) for the University. An educational theme was another suggestion for the theme of the campus, focusing on the expression that has become the verbal theme for the University, which is "Excellence for the 21st Century".

Students would like a more "Ivy League" type feel to the campus, with more main quad spaces, and more relaxed, tree covered, study spaces.

**VEGETATION**

The comments about campus vegetation varied from group to group. One comment was that this campus isn't as beautiful as others, in part due to the lack of trees throughout the campus. Some specific areas were cited for needing additional plant material; the walkway behind parking lot 7 to the William's Center, the north side of parking lot 7, and the University Green. There were also comments on the overabundance of mowed lawn areas.

Comments were also made that the present plantings are out of control, causing safety and maintenance problems. With the separation of maintenance tasks between the general grounds crew and the Residence Life grounds crew, plant material is being maintained in different ways, creating an inconsistent appearance of the overall campus plantings.
A need exists for standard maintenance and development practices for planting, and it was suggested that the master plan include recommendations for guidelines for planting techniques, plant material selection, plant maintenance, and placement of plantings, particularly for donated specimen trees.

All-season interest was another concern. The incorporation of more evergreen plant material, and plant material with other winter interest was suggested as an improvement to the overall appearance.

Safety issues relative to plantings should be an important consideration of the Landscape Master Plan.

Several functional applications were mentioned for campus plantings, including, trees to provide shade on the Children's Center playground, wind screening plantings along the mall and the walkway leading to William's Center, plantings to screen a number of different parking lots, and planting along the perimeter of the campus for aesthetic purposes.

The planting of annuals vs. perennials was another issue mentioned by a number of different groups. While most participants agreed that the annual plantings done every year around the campus are attractive, many question the cost effectiveness of those plantings, due to their labor intensive nature. The fact is that these plantings do not go into the ground until late May, when the student labor force is available. This gives the University a time period of about four months when these plantings are effective. This is appropriate timing for many of the preview and recruiting sessions that occur during the summer, but there are several on campus days during the year, which could also benefit from an attractive planting display.

SITE AMENITIES

Site amenities are an important component of the overall appearance of the campus and was a topic of many of the workshop sessions. A general comment made by a number of participants was that the existing site amenities, benches, trash cans, lighting fixtures, kiosks, bicycle racks, lighting fixtures, and pieces of public art, are unrelated to each other and out of date. These elements serve very important functions on campus, but do not portray the type of visual message the campus desires. Particular site amenities mentioned as inappropriate or unattractive include the fountain on the north end of the mall, the mismatched lighting fixtures throughout campus, the building signage, and the color of the benches on campus (which match the brown of the campus building signs).

One particular site amenity that was discussed by several different groups was the boardwalk on the top of the drumlin. It was stated that this boardwalk is highly used during the nice weather, but poses not only maintenance problems, but safety problems as well. It is the type of amenity that students seem to want more of and many participants feel it should remain, but renovation should occur for safety concerns.

Bicycle parking is another issue that generated a great deal of discussion. The current bike storage lockers are serving a purpose, and there is a waiting list for these lockers. There is a concern about the appearance and maintenance of the bike lockers. Many of the bike racks on campus are outdated in that they do not accommodate the new, popular, kryptonite locks. The placement of many of many of the racks is fine during most of the year, but during winter the racks are moved in order to allow for easier snow plowing, causing problems for those who ride in the winter. The advent of the mountain bike has created a greater base of year round riders. Another issue related to year round bike riders is the storage of bicycles, particularly for commuter bicyclists. A couple of comments were made related to the need for appropriately designed, roofed storage areas to keep the ice and snow from accumulating on the bike and adversely affecting the gears and other components.
Other site amenity issues, which directly affect the appearance of the campus as a whole, include newspaper vending machines near the Bookstore, and the sign boards that various organizations use to announce special events. These boards usually appear at building entrances and are not regulated in any way. Often times these boards are not retrieved after the event or maintained, and in some cases can pose safety issues if left unattended.

The historic buildings located at the top of the drumlin were also discussed. The function of these buildings was discussed, as was the appropriateness of their location. These buildings are closed, with no physical or visual access to the inside, except for a Junior High School annual event. Removing the structures or donating them to another community or organization was discussed.

Lighting was commonly mentioned in the sessions. There is a lack of a unified lighting fixture or system of fixtures. There is also an apparent lack of appropriate lighting level in certain areas of the campus. Areas needing additional lighting include the athletic fields and service drive in the northern portion of the campus, parking lot 9 west of the playing fields, and areas bordered by private property such as near Starin Park or the Calvary Cemetery.

Trash and recycling containers are other site amenities discussed in several of the workshop sessions. A number of participants mentioned the need for trash containers in the parking lots. On the other hand, it appears that most of the trash generated in the parking lots comes from cases of beer, smuggled into the dorms, and is not likely to be deposited in trash containers. Criteria for trash containers includes a 55 gallon capacity, a swinging doors on the top, and color coding for the various uses of the containers. Color coding is brown for trash, green for recyclables, blue for office paper.

The appropriateness of the four bus shelters occurred in a couple of the workshop sessions. The participants said that the shelter on Main Street in front of the library is regularly used as a waiting place for people being picked up by car. The other shelters are not used. It was also suggested that the bus shelters might be used as sign shelters or as kiosks.

The existing kiosks in their current locations, are not heavily used or maintained. They are off the beaten path and not accessible to all campus users. The kiosks are of the same style as the campus signage and benches, and are viewed as less than attractive.

MAINTENANCE

Maintenance is an important issue, both its function and its aesthetic impact. There were several issues related to the topic of maintenance, including plant material maintenance, snow plowing, sidewalk conditions, and vandalism.

An important issue is the lack of coordination between the different agencies performing maintenance tasks.

Another major issue is mowing. The campus has a great number of lawn areas which, constantly need to be mowed. A couple of these areas, including the glacial drumlin and some of the tree planted berms on the mall, pose problems for the mowers, and must be mowed by hand.

Snow removal is a big part of the duties performed by the campus maintenance department. Most snow removal is done with plows, and in some cases brushes. Some hand shoveling must also be performed, such as on the boardwalk on top of the drumlin and on all exterior stairs.
and ramps. The snow is deposited on site, rather than being removed and hauled to a disposal site. (There was some mention of a snow removal plan in the maintenance discussion... if there is a formal document the consultants would request a copy of the plan.)

Snow removal on this campus is not only a reality, but is an important safety issue as far as maintenance practices are concerned. Safety issues are particularly applicable to the use of sidewalks by the more than 50 disabled students on campus. Snow and ice removal practices were discussed which would be most effective and at the same time least harmful to students' wheelchairs. The Drumlin seemed to pose the most difficult winter maintenance problems as far as making all sidewalks accessible.

Sidewalks were another topic of discussion in several of the workshop session. In general the comments related to two main issues, the lack of sidewalks in appropriate places and the development of "cattle paths" throughout campus, and the rutting of the edges along the sidewalks during the winter, leaving muddy "gutters" along most of the sidewalks. Construction guidelines for sidewalks should be part of the Master Plan recommendations. Other maintenance issues include plant selection for low maintenance in terms of cutting and pruning, and litter removal, drainage problems on various sidewalks, ash urns and the litter problems associated with smokers at the entrances of buildings, and the problem with sign maintenance. Many of the signs and fences on campus are continually vandalized and must be repaired on a routine basis.

SAFETY

Safety is a main concern for the campus master plan. Issues of safety dealing with lighting levels were mentioned repeatedly by workshop participants. Specific areas were mentioned and the topic will be further explored on the 16th of November when campus police will be conducting a lighting walk around campus to identify those areas that may be lacking the appropriate amount of light for pedestrian safety. This consultant will attend the lighting walk.

Another safety issue for pedestrian safety is the overplanting. At this point no specific areas were discussed, but one of the Campus Police Officers mentioned a seminar held by the National Crime Prevention Organization on Crime Prevention through Environmental Design. The consultant is obtaining information on and will be trying to arrange attendance at one of the seminars.

Another safety issue are conflicts that exist between pedestrian, bicycle and rollerblade, and vehicular traffic throughout campus, particularly at the intersection of the mall and Starin Road, crossing Main Street near the Library, and internal areas of the campus where delivery and University services vehicle traffic is high. Also noted by some of the participants was the speed of some of University related vehicles.

Plantings were another issue brought up during the discussion of safety for pedestrians on campus, in particular for those students with physical and visual impairments. Limbs hanging over sidewalks can be dangerous for anyone, but in particular for students with visual impairments. Excessive natural litter (i.e. wet leaves, fruits etc.) on the sidewalk can present problems to those with mobility problems.

SUMMARY

These are the general issues raised in the two day Landscape Master Plan Workshop, many smaller issues or issues which relate specifically to a particular area or building may not be included in this memorandum, but are in our meeting notes and will be considered in the master
planning process. If there are any misinterpretations present in these notes, or significant omissions, please inform us at your earliest convenience.

We appreciate all those who took time out of their busy schedules to join us in the workshop interviews and invite you all to attend the preliminary conceptual presentations that will be held on December 14, location to be announced. There will be two sessions on that day, one from 10:00 a.m. - Noon, and the second from 1:00 - 3:00 p.m., and you are invited to attend whichever of these sessions best fits into your schedule.
APPENDIX E

CITY OF WHITWATER
SIGNAGE ORDINANCE DRAFT
enacted to read as follows:

SECTION 1: Section 19.54 is hereby repealed and re-

CHAPIER 19.54 ENLARGED SIGNS
AN ORDINANCE REPEALING AND RE-ENACTING

Section 15.45.020 Definitions and Regulations Specific to Certain Signs

The following permits shall be granted by the chapter to assist in the establishment or cleanup of clear cut

Section 15.44.010 Sign Permits

CHAPTER 19.54 - SIGNAGE REGULATIONS

The Common Council of the City of Whittierwater, Waterworth

defined a sign petental, except for the exceptions in (1) and (2) above:

No person shall erect, alter or relocate within the City of Whittierwater any sign without first

obtaining a sign permit, except for the exceptions in (1) and (2) above:

(1) Commonly used and familiar signs and symbols included in this section.

(2) Street names and street addresses displayed in accordance with the requirements of Section 19.54.020(a).

(3) Signs established by or order of any governmental agency.

(4) Signs erected by the State of New Mexico for a period of time not in excess of the maximum permitted sign area for a period of time.

Signs erected by the State of New Mexico for a period of time not in excess of the maximum permitted sign area for a period of time.

Signs erected by the State of New Mexico for a period of time not in excess of the maximum permitted sign area for a period of time.

Signs erected by the State of New Mexico for a period of time not in excess of the maximum permitted sign area for a period of time.
Monument Type Signs:

- **The Oaks Condominiums**
  - Sign face maximum height: 32 square feet
  - 8 max.

- **42 Main Street Bank**
  - Sign face maximum height: 32 square feet
  - 5"

- **Citizens Bank**
  - Sign face maximum height: 32 square feet
  - 5" setback from any street.

- **Arm/Post Type Signage**

**Residential/Business Signage Area**

Properties:

- West Main Street from Prevent Street to Tran Street, fronting on Main Street, and all other residential and commercial properties.

Map showing the area.
or more of the loss in the subduction zone.

Section 19.5.4.9.61  Temporary Signs

Any lot or block served by this code.

In the chart for sign board sizes, these signs shall be counted as to the total

Businesses. These signs shall be located within the total window area for the

two equal to 1/3 of the floor area of the window.

19.5.4.034
ADOPTED: September 7, 1993

ABSENT: Hayes, Nosek

NOTES: None

AYES: Pumitas, Pischel, Shrocke, Tries, Conklin

Second by Commissioner Pumitas

Section 1. This ordinance shall take effect upon passage and publication as provided by law.

It is possible to read the rest of the document, but the text is not clear due to the quality of the image.
APPENDIX F

CITY OF WHITEWATER
PARKING LOT ORDINANCE
space shall be increased to forty feet.

The point of intersection, (refer to diagram below),

the area bounded by the right-of-way fifteen feet from

line joining points along the right-of-way fifteen feet from a

alley in the area bounded by the right-of-way lines, and a

area established by the intersection of streets 1/3

area depicted or allowed to grow in such a manner as to collect-

wall, sign or other structure shall be erected, placed,

Traffic, Parking and Access

Chapter 19.51

on a lot (see Section 19.60.150). (Ord. 94.4.53.17(G), 1982).

I district, more than one principal structure may be located

19.48.080 Number of structures on one lot, within the
19.31.100 Surfacing of parking areas. All off-street parking areas, landscaped islanded for parking uses, are required to have concrete, asphalt or gravel paving. Any other surfacing material shall be determined by the building official. All off-street parking areas shall be drained and surfaced so as to be dust-free and property drained. Sand or gravel surfacing is not allowed in the vicinity of the building. In addition, any storage area or parking area that is a public right-of-way shall be surfaced with concrete, asphalt or gravel surfacing.

19.31.090 Designed parking areas. Vehicle parking areas to be located in accordance with Section 19.31.77.4.100. The area shall be designed in accordance with Section 19.31.090. Buffer striping shall be provided to separate the parking area from the rest of the property. The buffer striping shall be a minimum of four feet wide and shall be extended to the property line. When a located off-street parking area is located on a grade, the pavement shall be designed to grade.

19.31.080 Front and side yard parking. No parking area shall be located closer than five feet from any property line. The parking area shall be designed and landscaped to be consistent with the overall landscaping of the property. The parking area shall be designed to accommodate a variety of vehicles, including large trucks and buses.

19.31.070 Lighting of parking areas. Lighting shall be provided in any parking area to ensure the safety and security of the area. Lighting shall be provided in accordance with the local building codes.

19.31.060 Size and location of parking spaces. A. The size of each parking space shall not be less than one hundred eighty square feet except for the principal use. The size of each parking space shall be not less than one hundred twenty square feet except four the principal use. The size of each parking space shall be not less than one hundred eighty square feet except for the principal use. The size of each parking space shall be not less than one hundred eighty square feet except for the principal use.

19.31.050 Size and location of parking spaces. A. The size of each parking space shall be not less than one hundred twenty square feet except for the principal use. The size of each parking space shall be not less than one hundred eighty square feet except for the principal use. The size of each parking space shall be not less than one hundred eighty square feet except for the principal use.
Based on the requirements for each type of stall, the minimum number of parking stalls required is as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Minimum Stalls Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business, government</td>
<td>1 stall per employee</td>
</tr>
<tr>
<td>Educational institutions</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Warehouses, plants</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Commercial</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Retail and service</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Religious venues, churches, theaters</td>
<td>1 stall per 500 square feet of primary floor area</td>
</tr>
<tr>
<td>Elementary and secondary schools</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Public assembly centers</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Healthcare, medical and dental clinics</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Nursing homes</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Group quarters, boardinghouses, dormitories, sororities, fraternities</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Hotels, motels</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
<tr>
<td>Mobile homes</td>
<td>1 stall per 200 square feet of primary floor area</td>
</tr>
</tbody>
</table>

The maximum number of parking stalls required is 1,300 stalls.
following:

19.31.190 Highway-access limitations. A. No direct public or private access shall be permitted to the existing or proposed managed全天or the right-of-way of the freeways, except as provided in Section 19.31.195. B. No direct public or private access shall be permitted to the existing or proposed right-of-way of the freeway agency.

19.31.195 Access to existing or proposed freeway areas. A. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as provided in this section.

19.31.195 Access to existing or proposed freeway areas. A. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as provided in this section.

of three days. (Ord. 694 $4.3(N), 1982.)

C. Camper trailers shall be permitted to park for a period not exceeding twenty-four hours, except as otherwise provided for in this section.

A. One panel or pickup truck, exceeding the length of the bedroom, shall be permitted to park for a period not exceeding twenty-four hours.

B. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as provided in this section.

19.31.190 Truck, trailer, mobilehome and equipment.

19.31.195 Access to existing or proposed freeway areas. A. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as otherwise provided for in this section.

19.31.195 Access to existing or proposed freeway areas. A. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as otherwise provided for in this section.

19.31.190 Truck, trailer, mobilehome and equipment.

19.31.195 Access to existing or proposed freeway areas. A. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as otherwise provided for in this section.

19.31.195 Access to existing or proposed freeway areas. A. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as otherwise provided for in this section.

19.31.190 Truck, trailer, mobilehome and equipment.

19.31.195 Access to existing or proposed freeway areas. A. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as otherwise provided for in this section.

19.31.195 Access to existing or proposed freeway areas. A. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as otherwise provided for in this section.

19.31.190 Truck, trailer, mobilehome and equipment.

19.31.195 Access to existing or proposed freeway areas. A. No direct public or private access, on or to any controlled-access freeway, shall be permitted to the existing or proposed right-of-way of expressways, nor to any controlled-access freeway, except as otherwise provided for in this section.
APPENDIX G

CAMPUS CANOPY TREE INVENTORY
The campus canopy tree inventory on the following pages shows all existing canopy and ornamental trees currently existing on campus. Each tree is labeled by species type and approximate size. The locations of each plant are approximate and cannot be used for exact locations in terms of site specific design. If site specific design is to occur in an area, a detailed survey should be completed before further design begins.

The plant species are labeled with a letter symbol designating each tree type. A list of the species symbols are provided on the following page.

Plants located within a large group of trees have been labeled with a general description of the type of plant community and representative species. Trees located within the arboretum have not been labeled individually because most of these plants are already labeled in the field.

The maps are drawn at a scale of 1" = 100'. The maps follow a zig zag progression around the campus. The progression of drawings begins in the south-west corner of the campus near the Center of the Arts.
<table>
<thead>
<tr>
<th>SPECIES</th>
<th>SYMBOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alder</td>
<td>AL</td>
</tr>
<tr>
<td>Ash</td>
<td>A</td>
</tr>
<tr>
<td>Arborvitea</td>
<td>AR</td>
</tr>
<tr>
<td>Apple</td>
<td>AP</td>
</tr>
<tr>
<td>Beach</td>
<td>B</td>
</tr>
<tr>
<td>Birch</td>
<td>BR</td>
</tr>
<tr>
<td>Black Locust</td>
<td>BL</td>
</tr>
<tr>
<td>Boxelder</td>
<td>BO</td>
</tr>
<tr>
<td>Catalpa</td>
<td>CA</td>
</tr>
<tr>
<td>Cedar</td>
<td>CE</td>
</tr>
<tr>
<td>Cherry</td>
<td>CH</td>
</tr>
<tr>
<td>Crabapple</td>
<td>C</td>
</tr>
<tr>
<td>Dogwood</td>
<td>D</td>
</tr>
<tr>
<td>Elm</td>
<td>E</td>
</tr>
<tr>
<td>Fir</td>
<td>F</td>
</tr>
<tr>
<td>Ginko</td>
<td>G</td>
</tr>
<tr>
<td>Hackberry</td>
<td>H</td>
</tr>
<tr>
<td>Hawthorn</td>
<td>HT</td>
</tr>
<tr>
<td>Hickory</td>
<td>HI</td>
</tr>
<tr>
<td>Honey Locust</td>
<td>HL</td>
</tr>
<tr>
<td>Hophornbeam</td>
<td>HH</td>
</tr>
<tr>
<td>Horse Chestnut</td>
<td>HC</td>
</tr>
<tr>
<td>Ironwood</td>
<td>I</td>
</tr>
<tr>
<td>Juniper</td>
<td>J</td>
</tr>
<tr>
<td>Lilac</td>
<td>LL</td>
</tr>
<tr>
<td>Linden</td>
<td>L</td>
</tr>
<tr>
<td>Maple</td>
<td>M</td>
</tr>
<tr>
<td>Magnolia</td>
<td>MG</td>
</tr>
<tr>
<td>Mulberry</td>
<td>MB</td>
</tr>
<tr>
<td>Oak</td>
<td>O</td>
</tr>
<tr>
<td>Ohio Buckeye</td>
<td>OB</td>
</tr>
<tr>
<td>Pine</td>
<td>P</td>
</tr>
<tr>
<td>Pear</td>
<td>PE</td>
</tr>
<tr>
<td>Poplar</td>
<td>PO</td>
</tr>
<tr>
<td>Redbud</td>
<td>R</td>
</tr>
<tr>
<td>Russian Olive</td>
<td>RO</td>
</tr>
<tr>
<td>Serviceberry</td>
<td>SR</td>
</tr>
<tr>
<td>Spruce</td>
<td>S</td>
</tr>
<tr>
<td>Sumac</td>
<td>SU</td>
</tr>
<tr>
<td>Sycamore</td>
<td>SY</td>
</tr>
<tr>
<td>Tulip Tree</td>
<td>T</td>
</tr>
<tr>
<td>Walnut</td>
<td>W</td>
</tr>
<tr>
<td>Willow</td>
<td>WL</td>
</tr>
<tr>
<td>Yew</td>
<td>Y</td>
</tr>
<tr>
<td>LEVEL</td>
<td>ON/OFF</td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>1</td>
<td>On</td>
</tr>
<tr>
<td>2</td>
<td>On</td>
</tr>
<tr>
<td>3</td>
<td>On</td>
</tr>
<tr>
<td>4</td>
<td>Off</td>
</tr>
<tr>
<td>5</td>
<td>On</td>
</tr>
<tr>
<td>6</td>
<td>On</td>
</tr>
<tr>
<td>7</td>
<td>Off</td>
</tr>
<tr>
<td>8-40</td>
<td>Off</td>
</tr>
<tr>
<td>41</td>
<td>Off</td>
</tr>
<tr>
<td>42</td>
<td>On</td>
</tr>
<tr>
<td>43-51</td>
<td>Off</td>
</tr>
<tr>
<td>52</td>
<td>On</td>
</tr>
<tr>
<td>53</td>
<td>On</td>
</tr>
<tr>
<td>54-56</td>
<td>Off</td>
</tr>
<tr>
<td>57</td>
<td>Off</td>
</tr>
<tr>
<td>58</td>
<td>Off</td>
</tr>
<tr>
<td>59</td>
<td>On</td>
</tr>
<tr>
<td>60</td>
<td>Off</td>
</tr>
<tr>
<td>61</td>
<td>On</td>
</tr>
<tr>
<td>62</td>
<td>Off</td>
</tr>
<tr>
<td>63</td>
<td>Off</td>
</tr>
</tbody>
</table>
APPENDIX I

SEEDING AND SODDING SPECIFICATIONS
The seeding and sodding specification that follows is a general specification that can act as a guideline for projects involving seeding and sodding. The seed and sod mixes listed in these sample specifications are appropriate for the campus and are the recommended mixes for the campus. However, exact project specifications would need to be developed if a site specific design were being developed and implemented.
SEEDING AND SODDING - OUTLINE SPECIFICATIONS

PART 1 GENERAL

1.01 DELIVERY, STORAGE AND HANDLING - (Subject to the specific project parameters and time of planting, but may read something like the following.)

   A. Cut, deliver, and install sod within a 24-hour period. Protect sod from sun, wind, and dehydration prior to installation.

   B. All seeds shall be packed and covered in such a manner as to ensure adequate protection against damage and maintain dormancy while in transit, storage, or during planting operations.

   C. Provide hose and lawn watering equipment as required. Water shall be supplied by the Contractor.

PART 2 PRODUCTS

2.01 MATERIALS

   A. Seed for General Seeding Areas: Fresh clean, 90% pure, and new crop seed mixture.

      Composed of the following varieties, mixed to the specified proportions by weight and tested to minimum percentages of purity and germination.

      | Seed Mix                  | Proportion by Weight | Min. % Germination | Seeding Rate |
      |---------------------------|----------------------|--------------------|--------------|
      | Loft's Ecology Mix:       |                      |                    |              |
      | Reliant Hard Fescue       | 80%                  | 85%                | 4#/1,000 s.f.|
      | Jamestown Chewing Fescue  | 20%                  | 85%                |              |

   B. Seed for Seeding In and Around Parking Lot Areas (and other locations requiring salt tolerant plant material): Fresh clean, 90% pure, and new crop seed mixture.

      Composed of the following varieties, mixed to the specified proportions by weight and tested to minimum percentages of purity and germination.
<table>
<thead>
<tr>
<th>Seed Mix</th>
<th>Proportion by Weight</th>
<th>Min. % Germination</th>
<th>Seeding Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Dawson' Creeping Red Fescue</td>
<td>50%</td>
<td>85%</td>
<td>150#/acre</td>
</tr>
<tr>
<td>Hard Fescue</td>
<td>10%</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>Sheep Fescue</td>
<td>15%</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>'Fults' Puccinellia distans</td>
<td>25%</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>Nurse Crop: annual rye</td>
<td></td>
<td></td>
<td>5#/acre</td>
</tr>
</tbody>
</table>

C. Straw mulch: Clean, weed free much of sedge marsh hay.

D. Tackifier: Dry powder concentrate; Terra Tack AR or equal.

E. Sod: An approved nursery grown salt tolerant sod, as grown by H&E Sod, Havard, Illinois, 708-596-7200, composed of 15% 'Fults' Puccinellia distans, 30% Buffalo Grass, 20% 'Gallway' Tall Fescue, 15% 'Dawson' Creeping Red Fescue, 5% 'Rugby' Bluegrass, 15% Hard Fescue.

F. Fertilizer for Seed Mix A: Granular, non-burning product composed of not less than 50% organic slow acting, guaranteed analysis fertilizer.
   1. Type A: Starter fertilizer containing 20% nitrogen, 26% phosphoric acid, and 6% potash by weight or similar approved composition.
   2. Type B: Top dressing fertilizer containing 31% nitrogen, 3% phosphoric acid, and 10% potash by weight or similar approved composition.

G. Herbicide: Non-selective, broad spectrum, low toxicity, non-persistent, equal to Round-Up, Ranger or Kleenup. Follow all manufacturer's instructions.

PART 3 EXECUTION

3.02. PREPARATION - (Subject to the specific project parameters, but may read something like the following.)
   A. Limit preparation to areas which will be immediately seeded or sodded.
   B. Treat with herbicide to eliminate all existing vegetation/weeds, time application prior to seeding according to manufacturer's specifications.
C. Loosen topsoil of lawn areas to minimum depth of 4". Remove stones over 1" in any dimension and sticks, roots, rubbish, and extraneous matter.

D. Dampen dry soil prior to sodding.

3.03 INSTALLATION - (Subject to the specific project parameters, but may read something like the following.)

A. Seeding:
   1. Seed immediately after preparation of bed.
   2. Seed indicated areas within contract limits and areas adjoining contract limits disturbed as a result of construction operations.
   3. Apply seed at rates indicated, with a rotary or drop type distributor. Install seed evenly by sowing equal quantities in two directions, at right angles to each other.
   4. After seeding, rake or drag surface of soil lightly to incorporate seed into top 1/8" of soil. Roll with light lawn roller.

B. Mulching:
   1. Place straw mulch on seeded areas within 24 hours after seeding.
   2. Place straw mulch uniformly in a continuous blanket at the rate of 2-1/2 tons per acre, or two 50 lb. bales per 1,000 sq. ft. of area.
   3. Contractor may crimp straw into soil by mechanical means or anchor straw mulch with tackifier applied according to manufacturer’s directions.

C. Sodding:
   1. Lay sod to form a solid mass with tightly-fitted joints. Do not overlay edges. Stagger strips to offset joints in adjacent courses. Install sod top flush with adjacent curbs, sidewalks, drains, and seeded areas.
   2. Do not lay dormant sod. Do not install sod on saturated or frozen soil.
   3. Peg sod on slopes greater than 3 to 1 and in drainage swales to prevent slippage at a rate of 2 stakes per yd. of sod.
   4. Water sod thoroughly with a fine spray immediately after laying.
5. Roll with light lawn roller to ensure contact with sub-grade.

3.04 MAINTENANCE - (Subject to the specific project parameters, but may read something like the following.)

A. Maintain lawns until completion and acceptance of seeding and sodding operations. Maintenance shall include watering, spot weeding, mowing, and re-seeding.

1. Water to maintain adequate surface soil moisture for proper seed germination. In the absence of rain, watering shall be provided every third day for all seeded areas. Continue watering until seed has germinated. Water sod thoroughly every 2 to 3 days, as required to establish proper rooting.

2. Repair, re-work, and re-seed all areas that have washed out, are eroded, or do not germinate.

3. Mow lawn areas as soon as lawn top growth exceeds a 6" height. Cut back to 3" in height. Repeat mowing as required to maintain specified height.

4. Remove sod pegs.

3.05 ACCEPTANCE - (Subject to the specific project parameters, but may read something like the following.)

A. Inspection to determine acceptance of lawns will be made by the Architect, upon Contractor's request. Provide notification at least 5 working days before requesting inspection date.

1. Lawn areas will be acceptable provided all requirements, including maintenance, have been met, and a healthy, uniform, close stand of the specified grass is established.

2. No individual areas shall have bare spots or unacceptable cover totaling more than 2% of the individual areas, in areas requested to be inspected.

B. Upon acceptance, maintenance will be performed by Contractor according to maintenance specifications and maintenance Schedule.

3.06 CLEANING - (Subject to the specific project parameters, but may read something like the following.)

A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris and equipment. Repair damage resulting from seeding and sodding operations.