



Report to the Board of Curators
University of Missouri-St. Louis
Master Plan Summary

Prepared for
The University of Missouri-St. Louis

Prepared by
Sasaki Associates, Inc.
Watertown, Massachusetts

March 2002

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE
Master Plan Summary – March 2002

Report to the Board of Curators

TABLE OF CONTENTS

| | |
|-------------------------------------------------|----|
| 1. Introduction | 1 |
| 2. Defining Concepts | 2 |
| 2.1 Central Connecting Open Space | |
| 2.2 Gateways | |
| 2.3 Precincts | |
| 2.4 Campus Connection | |
| 3. Structuring Elements | 4 |
| 3.1 Open Space | |
| 3.2 Districts | |
| 3.3 Vehicular Circulation and Parking | |
| 3.4 Pedestrian Circulation | |
| 4. Program Accommodation and Phasing | 17 |
| 4.1 Academic and Support Facilities | |
| 4.2 Housing | |
| 4.3 Sports and Recreation Facilities and Fields | |
| 5. Space Needs Analysis | 21 |
| 5.1 Methodology | |
| 5.2 Enrollment and Growth | |
| 5.3 Summary | |

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

1. INTRODUCTION

In July of 2002, the University of Missouri-St. Louis (UMSL) retained Sasaki Associates, Inc. (Sasaki) to update the 1993 Master Plan and space needs assessment for the University. The purpose of this plan is to provide direction for short- and long-term decision-making related to the future expansion and enhancement of the university. This Master Plan Summary Report has been prepared to provide an overview of the key concepts and elements of the Master Plan. The comprehensive Master Plan Update Report contains detailed information including, an inventory of existing conditions, space inventory, and space needs analysis.

This summary report is organized in four sections, Defining Concepts, Structuring Elements, Program Accommodation and Phasing, and Space Needs Analysis. The defining concepts establish the character of the university, create a cohesive campus environment, and enhance the overall image of the campus. The structuring elements provide the framework for the unified and consistent development of building areas, open spaces, roadways, parking, and pedestrian circulation. The third section establishes a strategy for program accommodation and phasing that provides flexibility to allow the university to respond to resource allocations, phasing capabilities, and unanticipated needs. The last section of this report summarizes the space needs analysis, including existing space deficits and projected short- and long-term space needs. The master plan also acknowledges that UMSL will continue to cooperate with various community college districts to develop outreach centers. Physical planning for these outreach centers is being done by the University staff.

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

2. DEFINING CONCEPTS

The master plan for the UMSL campus is based on four defining elements that will help to establish the character of the University of Missouri–St. Louis, create a cohesive campus environment, and enhance the overall image of the campus:

2.1 Central Connecting Open Space

The master plan reinforces the valley that runs through the University's land as a central defining element and the connecting fabric that links all areas of the campus (Figure 1: Central Open Space and Valley). All other elements of the campus open space system are structured around the valley. The introduction of a significant new green space within the South Campus will extend the character of the valley south of Natural Bridge Road and connect it with St. Vincent Park to the south. The removal of Garage 'N' will strengthen the connection between the valley, the adjacent bird sanctuary, and the community open space network west of the campus.

2.2 Gateways

The plan establishes new gateways to the North and South Campuses, which will create a strong first impression for visitors to the University, and will anchor a new, integrated campus road network (Figure 2: Gateways). The North Campus Gateway will be defined by a beautifully planted entrance drive extending from the re-aligned Florissant Road, and connecting with the future campus loop road. The entrance drive will be lined on one side by a new sports field and will provide views of the University's new signature Performing Arts Center. The South Campus Gateway will consist of a new entrance drive along a new South Campus Lawn. The Lawn will contain recreation fields and will be framed by new student residences. The drive forms part of a rationalized South Campus road network that connects with East Campus Drive on the North Campus across Natural Bridge Road.

2.3 Precincts

The plan delineates three precinct areas that are defined by the principal existing or future land uses in different areas of the campus (Figure 3: Precincts). Each precinct forms a self-contained area that is connected to the other areas of the campus by strong open space, pedestrian and vehicular links. The three precincts are:

- The *Core Academic Campus* encompasses the entire North Campus area and will continue to serve as the location for the University's principal academic and support functions. The Core Academic Campus contains several districts including the existing Arts and Science District, the Cultural District, the Athletics and Recreation District, and the Beffa property.
- The *South Campus* consists of the South Campus Residential Community, which will be defined by an increasing concentration of student residences, supported by new dining facilities, a 'wellness center,' and outdoor play fields. It also contains the Health Profession School District, which builds on the existing concentration of health profession schools that will relocate over time to the Normandy Hospital building or to new facilities at the edge of the campus next to Natural Bridge Road.



FIGURE 1: CENTRAL OPEN SPACE AND VALLEY

UNIVERSITY OF MISSOURI
 St. Louis Missouri

March 8, 2002



SASAKI

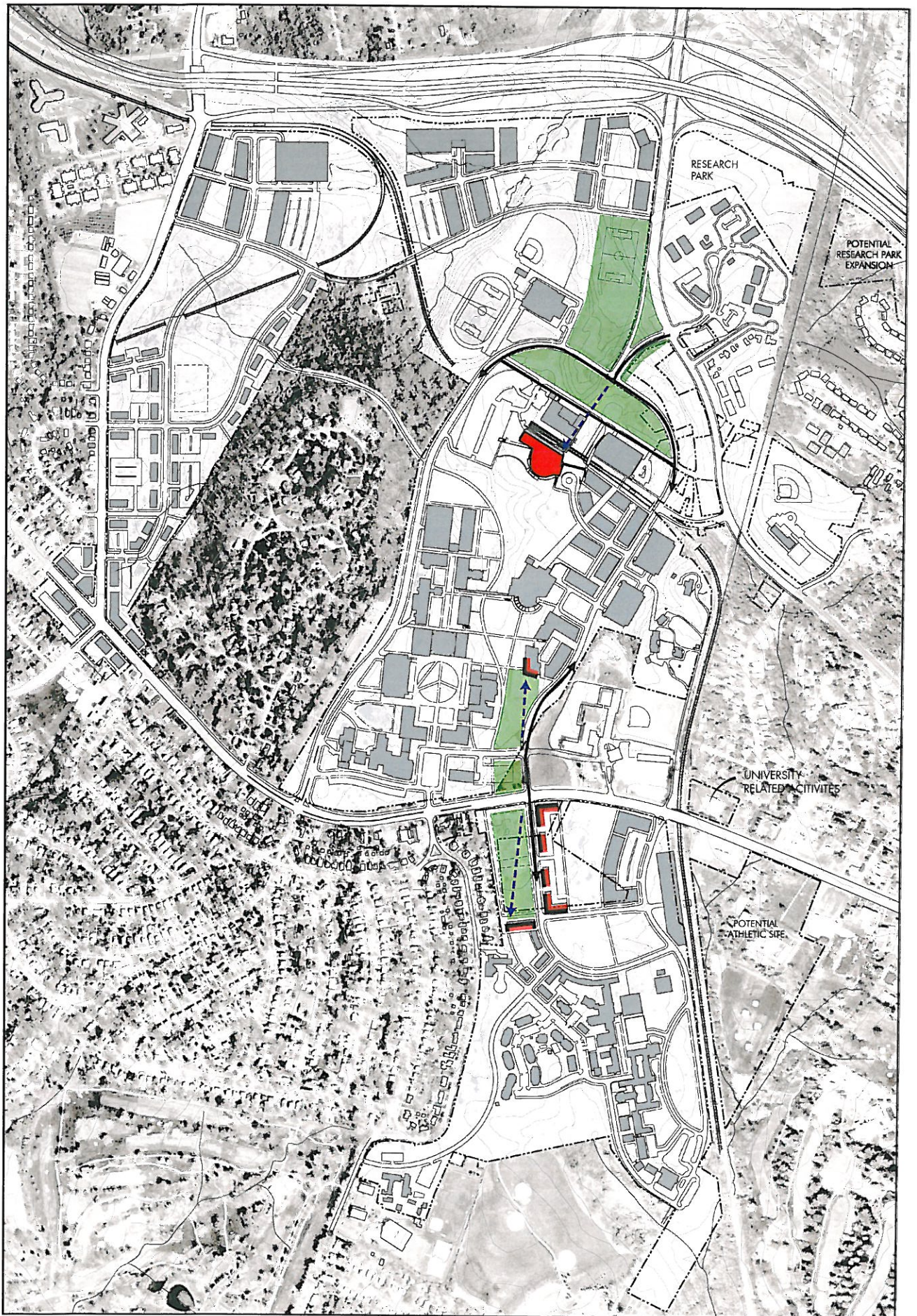


FIGURE 2: GATEWAYS

UNIVERSITY OF MISSOURI
St. Louis Missouri

March 8, 2002



SASAKI



FIGURE 3: PRECINCTS

UNIVERSITY OF MISSOURI
St. Louis Missouri

March 8, 2002



0 500 1000 Feet

SASAKI

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

- The *West University Precinct* is a new area to the west of the Core Academic Campus that will support the University's need for student housing and support amenities. New housing will be developed along the edge of the valley that defines the character of the area and connects it with the campus core. Outdoor play fields will provide recreation amenities for the new community. The West University Precinct also contains a new 'Campus Town' with University-related retail and entertainment uses located at the intersection of Hanley Road and Natural Bridge Drive, and a significant new open space that extends from Hanley Road to connect with the valley through the bird sanctuary.

2.4 Campus Connections

The plan strengthens the connections between all areas of the campus to create a cohesive campus environment. The valley serves as the fabric that links the Core Academic Area with the South Campus and West University Precinct and the surrounding community. The extension of East Campus Drive across Natural Bridge Road through the new South Campus Gateway creates a strong physical and psychological connection between the North and South Campuses. The West University Precinct will be connected to the Core Academic Campus by pedestrian pathways through the surrounding open space system and by Natural Bridge and Geiger Roads.

3. STRUCTURING ELEMENTS

The concepts that define the master plan will be implemented through a framework of structuring elements that will create a consistent and unified context for future campus development. The structuring elements are:

- The Open Space Network
- Districts
- Vehicular Circulation and Parking
- Pedestrian Circulation

3.1 Open Space

The University's open space network is the principal structuring element of the master plan. The open space areas and the connections between them form a system which will have a significant effect on the physical and visual cohesiveness of the campus. The major elements of the open space network consist of the valley, the South Campus Lawn, South Campus Common, Normandy Green and the surrounding community open space network. These elements are supported by the placement of sports and recreation fields in different areas of the campus to enhance the open space network and by structuring new campus development in quadrangles which frame and define a series of more intimate open spaces. The open space network is shown on Figure 4 Open Space Framework.

The Valley

The valley is the principal defining element of the campus and is the backbone of the open space system. It provides a beautiful natural environment that defines the character of the campus. New open spaces will be introduced to reinforce and extend the valley both physically and visually through other areas of the campus so that all other elements of the campus open space network connect to the valley. Ultimately, the valley will extend from St. Vincent Park, through the South and North Campuses to the bird sanctuary, and beyond to Hanley Road.

The valley has been compromised by the development of surface and structured parking facilities and service roads. For the full potential of the valley to be realized, these elements must be removed so the valley system can either be planted with trees or naturalized.

Future development on the campus should be sited to reinforce the valley. Buildings should be sited to frame the valley edge, and oriented to take advantage of views into the valley.

South Campus Open Spaces

The master plan introduces three significant new open spaces in the South Campus which help to connect the overall campus open space network, organize the pattern of land uses within the South Campus, and create a new focus for development. These areas are the South Campus Lawn, the South Campus Common, and the Normandy Green. The implementation of this concept is dependent on the University acquiring the child-care center in the north portion of the South Campus.

The *South Campus Lawn* consists of a four-acre level green space that will be developed as part of a new South Campus Gateway. The Lawn is a significant green connection that links existing elements of the South Campus open space network with the valley to the north. It will be framed by Natural Bridge Road to the north, a new South Campus entrance drive to the east, and existing

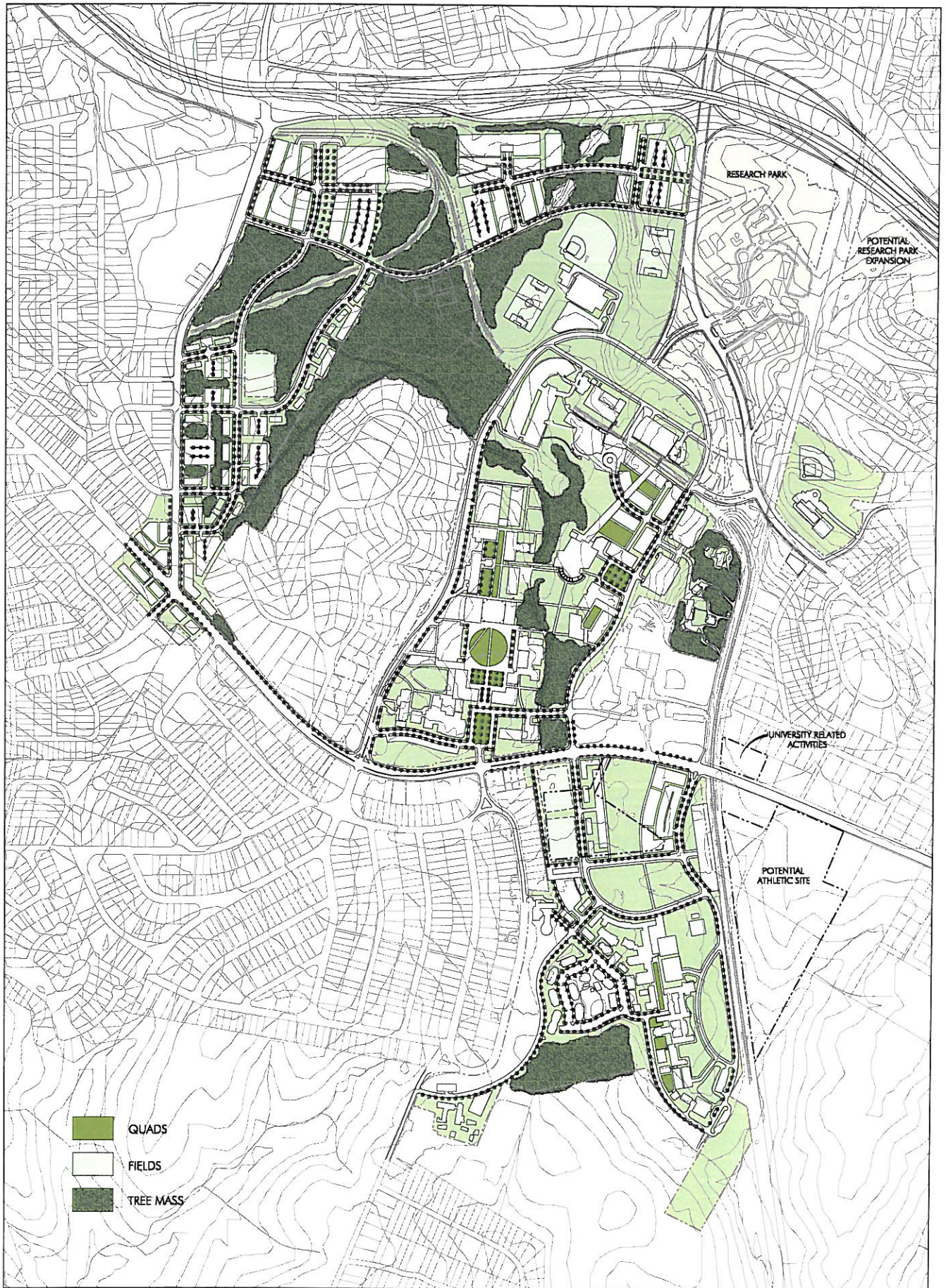


FIGURE 4 : OPEN SPACE FRAMEWORK

UNIVERSITY OF MISSOURI

St. Louis, Missouri

March 8, 2002



SASAKI

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary - March 2002

Report to the Board of Curators

West Entrance Drive to the west, which will be closed to traffic but will continue to serve as a principal pedestrian route to Natural Bridge Road. The south border of the Lawn will be defined by the Marillac Drive, which will also be closed to traffic between the new South Campus entrance drive and existing West Campus Drive.

The South Campus Lawn will be framed by new student housing along its south edge and on the east side of the new entrance drive. A row of trees will create a buffer between the Lawn and the residential properties to the west. The Lawn will contain two athletic fields for informal recreation.

The master plan expands several smaller existing open space elements to create a consolidated five-acre natural green space at the center of the South Campus. The new *South Campus Common* will be framed by Marillac Drive to the north, Marillac Hall to the south, new student residences to the west, and East Entrance Drive to the east. Marillac Drive will be re-aligned to provide a direct pedestrian route along the edge of the Green from the UMSL South Metro Link station to the West Entrance Drive pedestrian pathway. The South Campus Common will need to be implemented in two phases in order to preserve an adequate supply of parking on the South Campus until additional parking facilities can be provided.

The South Campus Common will provide an important link in the overall campus open space network and a transition between the natural character of the valley along the east edge of the South Campus and the more formal South Campus Lawn. It will also separate the student residential community to the south from the professional school district that is planned around the Normandy Hospital along Natural Bridge Road.

Over the long-term, the master plan introduces a new *Normandy Green* within the Health Profession School District, described below. This area will consist of a four-acre green space extending from Natural Bridge Road to Marillac Drive. The Green will provide a focus for future development within this district if the Normandy Hospital is demolished.

Surrounding Open Space Network

The master plan establishes and enhances connections between the on-campus open space system and open space areas that are adjacent to the campus to create an integrated network that extends from St. Vincent Park to the south through to I-70 and Hanley Road. The University's acquisition of an six and a half-acre parcel of land at the north edge of St. Vincent Park next to the University Meadows apartment complex creates the opportunity to extend an open space connection between the new South Campus Common and St. Vincent Park. This connection will be reinforced by the introduction of a driveway and pedestrian pathway connection between Marillac Drive and Bellerive Drive at the Honors College.

North of Natural Bridge Road, the valley system extends around the community of Bellerive Acres to the Natural Bridge and Hanley Road intersection, to the north-west to Hanley Road at Geiger Road, and to the north-east by the University's sports and recreation complex to I-70. The removal of Garage N on the North Campus will eliminate a significant barrier between the campus and the valley system and will help to connect the North Campus with the West University Precinct area.

Athletic and Recreation Fields

The master plan introduces new sports fields in several areas of the campus to reinforce and define the open space network, to animate certain spaces, and to provide a focus for development. A replacement athletic field will be introduced on the west side of the new campus entrance drive as part of the new North Campus Gateway in order to activate this area and extend a green edge at the entrance to the campus. The South Campus Lawn will contain two new fields that will provide

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

3.2 Districts

The master plan organizes the University's three precinct areas into a series of districts that reflect existing and future land uses on the campus (Figure 5 Districts).

Core Academic Campus

Arts and Science District

This area consists of the University's existing academic core. Future buildings for the University's arts and science programs will occur within this area of the campus. Buildings will be sited on infill sites around the Arts and Science Quadrangles.

College of Education District

The College of Education will move from the South Campus to a new site along East Campus Drive south of the Millennium Center. The College will be the focus of a new academic district in this area of the campus.

Cultural District

The plan creates a new Arts and Culture district in the area between the Performing Arts Center (PAC) and the Millennium Center. The district will contain the PAC, the Mercantile Museum, a sculpture park, and other cultural uses. Over the long-term, the University's Fine Arts and Music programs will re-locate from other areas of the campus to this district.

Athletic and Recreation District

The area around the Mark Twain Center will continue to serve as the focus for the University's Intercollegiate Athletics and Physical Education programs. The completion of planned roadway improvements in this area, including the construction of a new entrance drive and the campus loop road and the re-alignment of Geiger Road will establish the boundaries of the Athletic and Recreation District.

Beffa Property Special Use District

The master plan designates the Beffa property as a Special Use District because of its access constraints, topography, dense vegetation, and the life estate that governs University title to the land. Possible future uses for this area include a chancellor's residence, a conference center, and accommodations for visiting faculty and chancellor's guests.

South Campus

The University's acquisition of the Normandy Hospital site creates the opportunity to relocate the health profession schools to either the renovated hospital building or new facilities along Natural Bridge Road, and reclaim the balance of the South Campus for residential use. To achieve connections and efficient land utilization within the South Campus and to implement the master plan concepts for the area, acquisition of the existing childcare center will be necessary.

South Campus Residential Community

The plan for the South Campus Residential Community converts space currently occupied by the College of Education, College of Nursing, and School of Optometry to student residences, and removes the fencing around the University Meadows apartments to integrate this complex into the

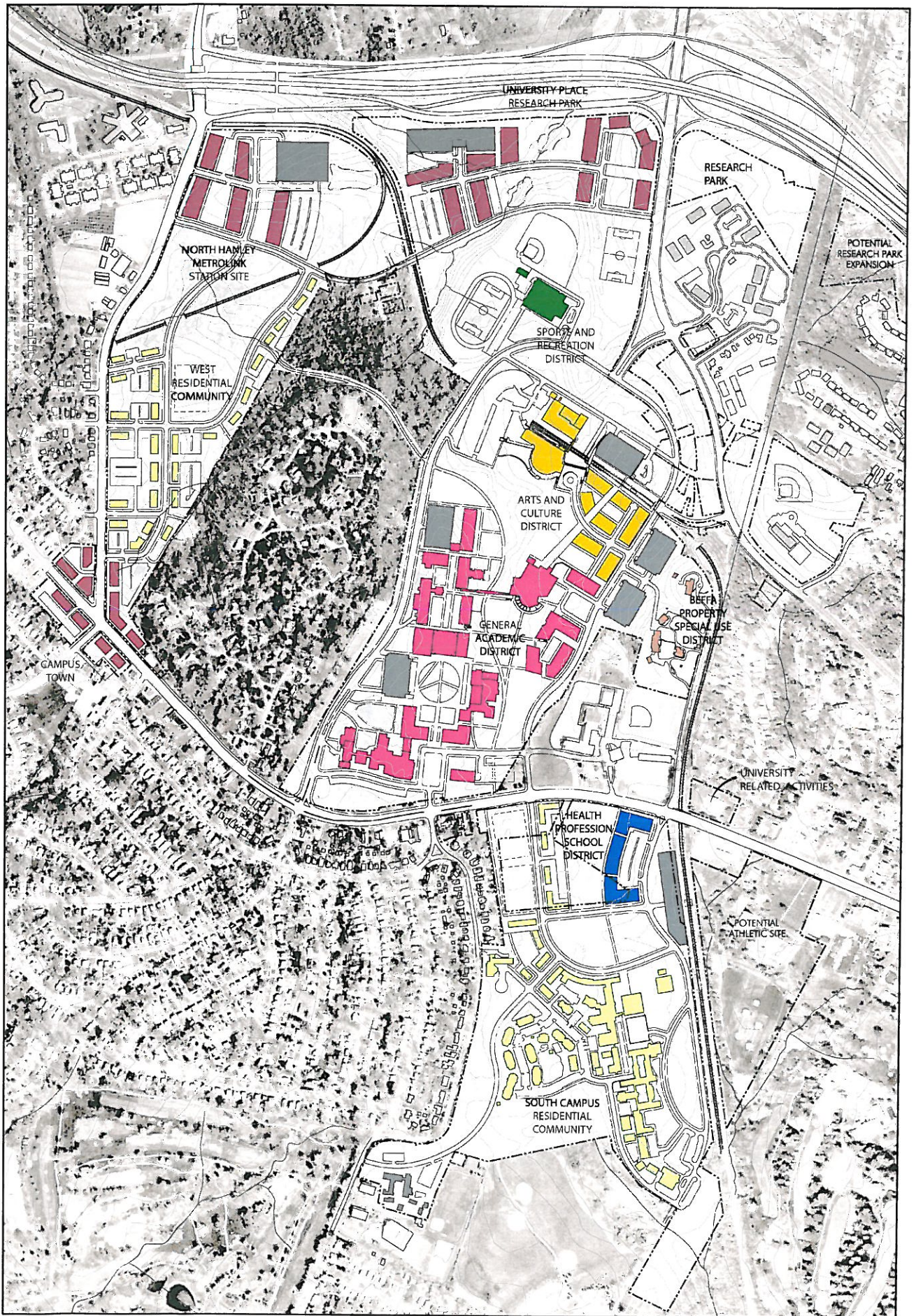


FIGURE 5: DISTRICTS

UNIVERSITY OF MISSOURI
St. Louis Missouri

March 8, 2002



UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

South Campus. It also introduces several new student residences on the south and west edges of the new South Campus Lawn, and on infill sites between the University Meadows area and the Daughters of Charity buildings.

The plan also expands student life amenities in the South Campus Residential Community. The dining hall in the Daughters of Charity building will be reclaimed for food service and the Barnes library will be converted to a 'wellness center' containing fitness facilities.

Health Profession School District

The plan designates the area along Natural Bridge Road centered around the Normandy Hospital as a Health Profession School District. The College of Nursing and the School of Optometry will relocate to either the renovated hospital building or to new facilities along Natural Bridge Road. In the future, a dentistry school may also be established in this area. If the Normandy Hospital is demolished, a new Normandy Green will be introduced, extending from Natural Bridge Road to Marillac Drive. The Green will provide a significant open space within the district and context for future development. To accommodate the parking needs of students, faculty, staff, and visitors to the schools, a new structured parking facility will be developed within Parking Lot B, next to the Metro Link station on the east side of East Entrance Drive.

West University Precinct

The plan establishes two new districts to the west of the existing campus boundaries in order to accommodate the long-term need for housing and recreation and entertainment amenities to serve the entire University community. These areas are the West Residential Community and the Campus Town at Natural Bridge and Hanley Roads. The University will need to acquire land in the West University Precinct in order to control the character and quality of development and to implement the master plan concept for the area.

West Residential Community

The West Residential Community will be located to the west of the North Campus on the west side of the valley and bird sanctuary area. The Community will contain principally student housing developed along the edge of the valley and in 'courts' off Hanley Road, as well as an outdoor recreation field and other open spaces. It could also contain faculty or staff housing. The area will be linked to the North Campus through walking trails in the valley. A new street grid extending from Hanley Road will connect the area with the future Campus Town to the south, and with the North Hanley Metro Link station to the north.

Campus Town

The master plan designates the area at the intersection of Natural Bridge and Hanley Road as a new Campus Town to serve the University Community. Several restaurants catering to University staff and students already exist at this location. The Campus Town will contain a mix of University-related retail, service, and entertainment uses that are currently lacking near the campus. A new street grid will provide direct pedestrian and vehicular connections between the Campus Town and the West Residential Community. Improvements to pedestrian routes along Natural Bridge Road will also help to connect the area with the South Campus Residential Community.

Campus Edge Areas

The master plan identifies three other adjacent districts that are separate from, but connected with the principal University Precincts areas. These are the North Hanley Metro Link Station area development, University Place Research Park, and North Gateway residential area.

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

North Hanley Metro Link Station Site

The North Hanley Metro Link Station site will be developed with a commuter parking garage, a hotel and convention center, and commuter-oriented retail uses. While the new development is not specifically intended for University use, it is anticipated that the garage and hotel/convention center will provide important amenities that will serve the campus. The relationship between the new development and the campus will be supported by the existing Metro Link line that connects the site with the North and South campuses, and by improved vehicular connections from the re-alignment of Geiger Road. The University will also be participating in decisions concerning uses, site design and building architecture.

University Place Research Park

The 30-acre University Place Research Park will be located in the area bounded by I-70 to the north, Geiger Road and the Carsonville Heights and Hollywood Park neighborhoods to the south, the North Hanley Metro Link Station site to the west, and the former railway corridor to the east. The Research Park will contain University-related business and research uses. Access to the area will be from re-aligned Geiger Road, which will extend from Hanley Road to Florissant Road. The area will be connected to the North Campus through the area road network, the Metro Link system, and the open space and valley system.

North Gateway Residential Area

The area near the North Gateway, on the east side of Florissant Road, currently contains several low-rise condominium apartments, the majority of which are owned by the University. This district will be preserved for residential purposes to accommodate the needs of students with families and graduate students. Improvements to adjacent roads and pedestrian pathways will better connect this area with the North Campus.

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

3.3 Vehicular Circulation and Parking

The master plan introduces several significant improvements to the campus road and pedestrian circulation system that are designed to fully integrate all areas of the campus into a unified environment (Figure 6: Vehicular Circulation). It also accommodates new parking to support the growth of academic, support and residential uses.

Entries

North Campus

The master plan establishes a new formal entrance to the campus as part of the North Campus Gateway concept. The entrance will consist of a separate entrance drive off Florissant Road that connects with the campus loop road system. The entrance drive will be treated with special planting and will provide views of the new Performing Arts Center.

South Campus

A new entrance to the South Campus will be created east of the existing West Entrance Drive as part of the South Campus Gateway. The entrance will consist of a new driveway aligned to intersect with an extension of East Campus Drive at Natural Bridge Road. The driveway will extend along the South Campus Lawn and lead into the main South Campus loop road system. A land swap with the Normandy School District will be required to achieve this entrance and re-align East Campus Drive.

Existing Natural Bridge Road Entrance

The University's original entrance along Natural Bridge Road will be preserved as a secondary entrance to the campus that will function as a right-in, right-out only from Natural Bridge Road. The existing light will be moved east to the new East Drive entrance.

Campus Loop Road

North Campus Loop Road

The master plan accommodates the reconfiguration of East and West Campus Drives north of the Metro Link tracks. The new configuration connects East and West Campus Drives to form a continuous loop around the entire North Campus.

South Campus Loop Road

The plan introduces a similar loop road system within the South Campus. The loop road consists of West Entrance Drive, which is re-aligned to the east, and a new drive in front of Marillac Hall along the south edge of the South Campus Common that connects with existing East Campus Drive.

North-South Campus Connection

The plan establishes a new roadway connection across Natural Bridge Road that links the North and South Campus loop road systems. The connection will be formed by extending East Campus Drive to connect with the new alignment of West Entrance Drive. This connection will significantly improve vehicular and pedestrian circulation between the North and South campuses and will help to create a more unified campus environment. Acquisition of the existing childcare center site is necessary to achieve this connection.

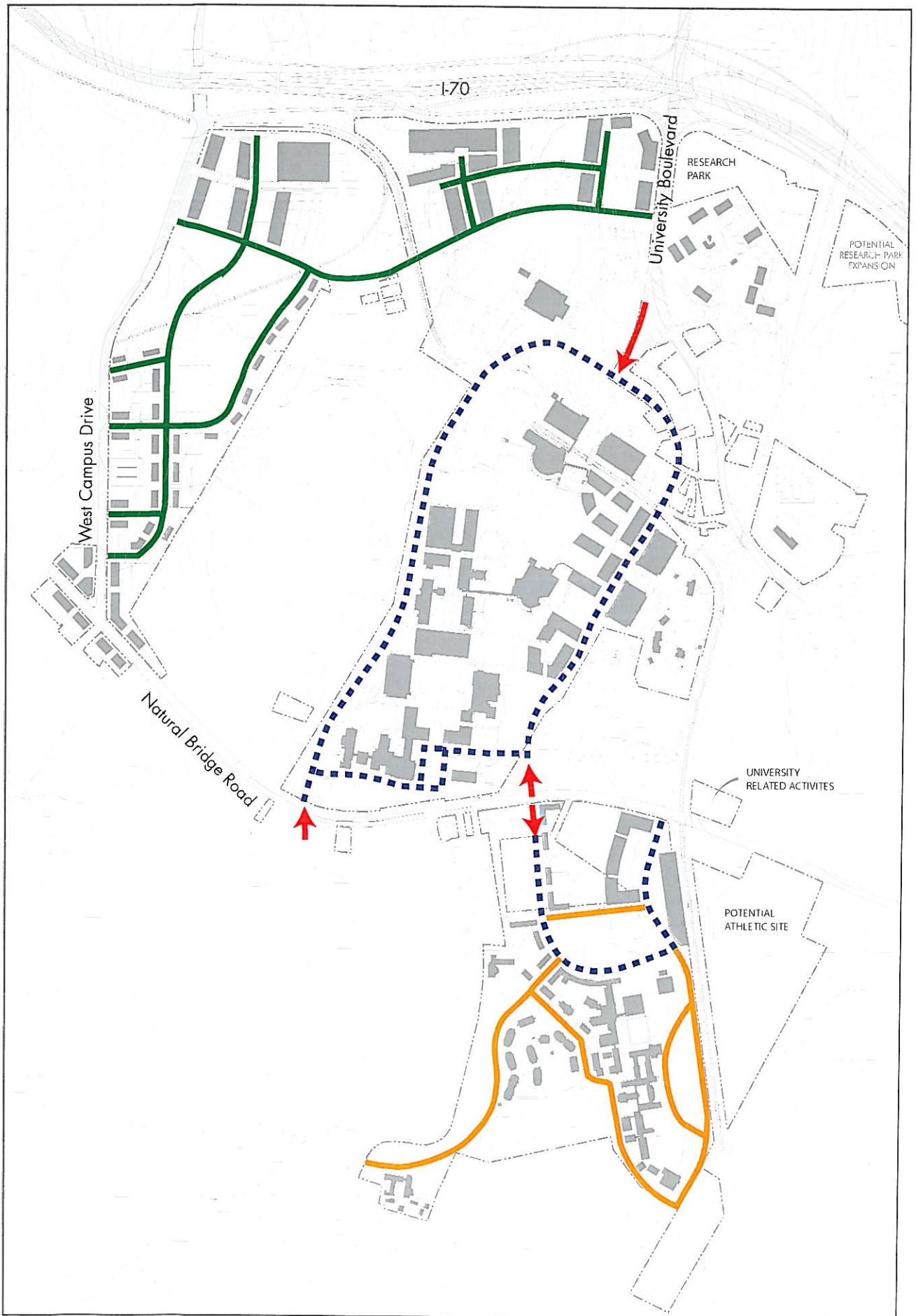






FIGURE 6: VEHICULAR CIRCULATION

UNIVERSITY OF MISSOURI
St. Louis Missouri

March 8, 2002

-  Entries
-  Campus Loop Road
-  South Campus Road Network
-  West Precinct Road Network



SASAKI

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

South Campus Road Network

The master plan outlines several additional improvements to rationalize the overall South Campus road network, as follows:

Re-alignment of Marillac Drive

The plan re-aligns Marillac Drive to create a direct vehicular and pedestrian connection from the Metro Link station to the South Campus Lawn along the north edge of the South Campus Common.

Honors College Driveway Connection

A new driveway is introduced that connects the South Campus loop road with the Honors College and Bellerive Drive. The driveway allows the College to be accessed directly through campus property, rather than Bellerive Drive. It also provides access to the University Meadows apartments.

University Meadows Road Network

The plan removes fencing around the University Meadows apartment complex and introduces two new roadway connections to integrate the complex with the South Campus. The connections link the University Meadows internal driveway system with the new Honors College driveway at the existing entrance to the complex, and with a new road around the west side of the Daughters of Charity buildings at the south-west corner of the complex.

South Drive Extension

South Drive is extended around the west side of the Daughters of Charity buildings to connect with the Honors College drive through the University Meadows road system, described above.

Daughters of Charity Entrance Drive

The existing Daughters of Charity entrance drive is extended to a continuous arc that connects with South Drive south of the Kathy J. Weinman Center.

West University Precinct Road Network

The master plan introduces a new road grid within the West University Precinct to accommodate the development that is planned for that area of the campus. The road grid maintains existing Katherine and Link Roads, extends Jenny Road to connect with Hanley Road, and closes Jane Road. It also introduces two new north-south connector roads through the area. The east connector road extends from Geiger Road to Jenny Road along the east edge of the valley, and the west connector road extends from Geiger Road to the Campus Town, south of Katherine Road, where it bends to connect with Hanley Road.

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

Other Road Improvements

I-70 and Florissant Road Re-alignment

I-70 is currently being re-aligned to the south of the existing highway. The re-alignment addresses a safety problem near the Florissant Road interchange. A new interchange with Florissant Road is being developed as part of this project. Florissant Road is also being re-aligned to the east as a result of the I-70 project. The new road will connect with the existing Florissant Road at Normandy Terrace.

The re-aligned portion of Florissant Road has been designed as a boulevard that will serve as a new gateway to the campus and will be renamed University Boulevard.

Geiger Road

Geiger Road will be re-aligned from Hanley Road to the new Florissant Road/University Boulevard. The new road creates improved frontage for the future University Place Business Park. This project is being funded and implemented by St. Louis County.

North Hanley Metro Link Station

While the layout of the internal driveways within the North Hanley Metro Link Station site has not been established, it is recommended that these be coordinated to intersect with the two north-south connector roads through the West University Precinct.

University Place Research Park

The master plan shows a concept for the University Place Research Park, which includes an internal road layout. The actual road layout for this area may change as plans for the Research Park are further developed.

Parking

The master plan strategy for parking addresses both the University's quantitative need for parking and the accommodation of parking within the context of the master plan vision for the campus. The strategy identifies the number of parking spaces that are needed to support the current and projected campus population and outlines an approach for accommodating parking that rationalizes parking facilities across the campus, helps to maintain a pedestrian-oriented campus environment, and eliminates parking from critical areas in order to further other campus-building objectives. The master plan parking strategy is described below. Table 1 outlines the existing supply of parking and the phasing of parking improvements on the campus. Existing parking facility locations are shown on Figure 7: Existing Parking, and the locations of proposed future lots and garages are shown on Figure 8A: Parking Phase I and Figure 8B: Future Parking Phase II.

Parking Supply

Currently, the University has a supply of 6,000 parking spaces of which 4,700 are located on the North Campus and 1,300 are located on the South Campus, including 200 spaces at the South UMSL Metro Link Station. Given the University's existing population of faculty, staff, and commuter students, it is estimated that the parking ratio for this group is .43 spaces per person. While this ratio is relatively high compared to other institutions with a large proportion of commuter student, and the aggregate supply of parking appears to be adequate for the University's current enrollment, parking is un-evenly distributed across the campus with several lots located in inconvenient areas away from the center of campus activity.

UNIVERSITY OF MISSOURI - ST. LOUIS MASTER PLAN UPDATE
 Table 1: Parking Analysis - March 2002

North Campus

| Lot Designation | Location | Existing Spaces | Spaces Added | Phase 1 | | Spaces Added | Phase 2 | |
|-----------------|-------------------------------------|-----------------|--------------|-------------------|-------------|--------------|-------------------|-------------|
| | | | | Spaces Eliminated | Net Spaces | | Spaces Eliminated | Net Spaces |
| A | Woods Hall/Admissions | 111 | | -11 | 100 | | | 100 |
| B | Woods Hall/Admissions | 54 | | -54 | 0 | | | 0 |
| C | Garage C site | 186 | | -186 | 0 | | | 0 |
| GARAGE D | East Campus Dr. | 684 | | -684 | 0 | | | 0 |
| E | East Campus Dr. | 519 | | | 519 | | -440 | 79 |
| F | TCC LOT | 77 | | | 77 | | -77 | 0 |
| I | Adjacent to Garage N | 95 | | | 95 | | -95 | 0 |
| K | Adjacent to Garage N | 302 | | | 302 | | | 302 |
| L | Adjacent to GSB | 24 | | | 24 | | | 24 |
| M | Mark Twain Center | 76 | 61 | | 137 | | | 137 |
| GARAGE N | West Campus Dr. | 515 | | -515 | 0 | | | 0 |
| N&P | West Campus Dr. on-street | 263 | | -263 | 0 | | | 0 |
| Q | Benton Dr. | 85 | | | 85 | | | 85 |
| R | Benton Dr. | 10 | | -10 | 0 | | | 0 |
| EDGI | East Campus Dr. | 664 | | | 664 | | | 664 |
| WDG | West Campus Dr. | 664 | | | 664 | | | 664 |
| NC1 | East of Stadler Hall | 16 | | -16 | 0 | | | 0 |
| NC2 | North of CCB | 14 | | -14 | 0 | | | 0 |
| NC3 (J) | Mark Twain Dr. | 79 | | -79 | 0 | | | 0 |
| NC4 | Hollywood Park | 47 | | -47 | 0 | | | 0 |
| NC5 | Bellerive Dr. | 23 | | -23 | 0 | | | 0 |
| NC6 | Mid-Americ Orthopedic | 31 | | -31 | 0 | | | 0 |
| NC7 | Florisant Rd. at Fine Arts Building | 29 | | | 29 | | | 29 |
| AA | Fine Arts Building | 119 | | | 119 | | | 119 |
| NG | North Garage | | 664 | | 664 | | | 664 |
| NP | Adjacent to North Garage | | 54 | | 54 | | | 54 |
| EDGII | East Campus Dr. Phase II | | 664 | | 664 | | | 664 |
| WDGII | West Campus Dr. | | 664 | | 664 | | | 664 |
| Total | | 4687 | 2107 | -1933 | 4861 | 0 | -612 | 4249 |

South Campus


| Lot Designation | Location | Existing Spaces | Spaces Added | Phase 1 | | Spaces Added | Phase 2 | |
|-----------------|-----------------------------------|-----------------|--------------|-------------------|-------------|--------------|-------------------|-------------|
| | | | | Spaces Eliminated | Net Spaces | | Spaces Eliminated | Net Spaces |
| S | Music Building | 74 | | -74 | 0 | | | 0 |
| T | East Entrance Dr. | 62 | | | 62 | | -62 | 0 |
| U | Observatory | 135 | | -135 | 0 | | | 0 |
| V | Marillac Hall/Optomety Clinic | 189 | | -189 | 0 | | | 0 |
| W | East Entrance Dr. | 52 | | | 52 | | -52 | 0 |
| X | Barnes Education Library | 95 | | -95 | 0 | | | 0 |
| Y | East Entrance Dr. | 56 | | | 56 | | -56 | 0 |
| Z | East of Seton Hall | 23 | | -23 | 0 | | | 0 |
| JJ | East of Villa Building | 55 | | | 55 | | -55 | 0 |
| KK | North of Nursing Administration | 27 | | | 27 | 5 | | 32 |
| LL | East of Nursing Administration | 33 | | | 33 | | | 33 |
| MM | South of Seton Hall | 30 | | -30 | 0 | | | 0 |
| NN | South Campus Residence Hall | 40 | | -40 | 0 | | | 0 |
| PP | South of Honors College | 41 | | | 41 | | | 41 |
| RR | North of Honors College | 22 | | | 22 | | | 22 |
| XX | Surplus Property Center | 20 | | -20 | 0 | | | 0 |
| ZZ | South of Seton Hall | 24 | | -24 | 0 | | | 0 |
| SC1 | East Entrance Dr. | 2 | | | 2 | | | 2 |
| SC2 | Kathy J. Weinman Center | 68 | | | 68 | | -68 | 0 |
| SC3 | West of Provincial House | 8 | | -8 | 0 | | | 0 |
| SC4 | South Drive | 38 | | | 38 | | | 38 |
| SC5 | East of Nursing Administration | 2 | | | 2 | | | 2 |
| SC6 | East of Villa Building | 8 | | -8 | 0 | | | 0 |
| SC7 | South of Barnes Education Library | 13 | | | 13 | | -13 | 0 |
| Metro Link Lot | Metro Link Station | 214 | | | 214 | 900 | -214 | 900 |
| SS | Normandy Hospital | | 336 | | 336 | | -136 | 200 |
| SCP1 | East of South Campus Lawn | | 108 | | 108 | | | 108 |
| SCP2 | North of Bellerive Hall | | 63 | | 63 | | | 63 |
| SCP3 | South of Seton Hall | | 60 | | 60 | | | 60 |
| SCP4 | South of Wellness Center | | 60 | | 60 | | | 60 |
| SCP5 | North of University Meadows | | 31 | | 31 | | | 31 |
| Total | | 1331 | 658 | -646 | 1343 | 905 | -656 | 1561 |

| | | | | | | | |
|-----------------------------------------------|-------------|-------------|--------------|-------------|------------|--------------|-------------|
| Total Parking North and South Campuses | 6018 | 2765 | -2579 | 6204 | 905 | -1268 | 5810 |
|-----------------------------------------------|-------------|-------------|--------------|-------------|------------|--------------|-------------|



FIGURE 7 : EXISTING PARKING

UNIVERSITY OF MISSOURI
 St. Louis, Missouri
 March 8, 2002


SASAKI

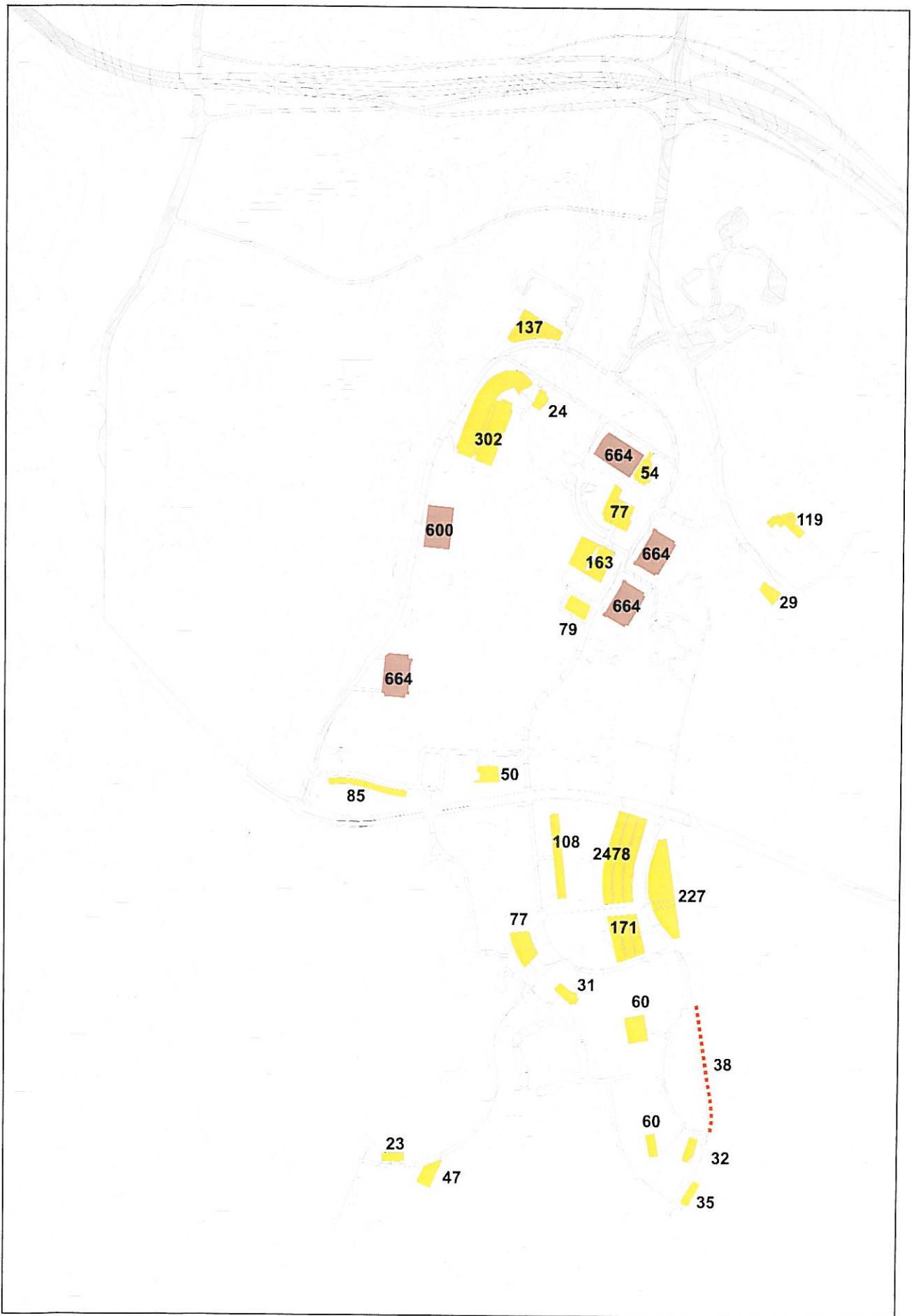


FIGURE 8a: PARKING PHASE I

UNIVERSITY OF MISSOURI
St. Louis Missouri

March 8, 2002

- Surface Parking
- On Street Parking
- Parking Structure



S A S A K I

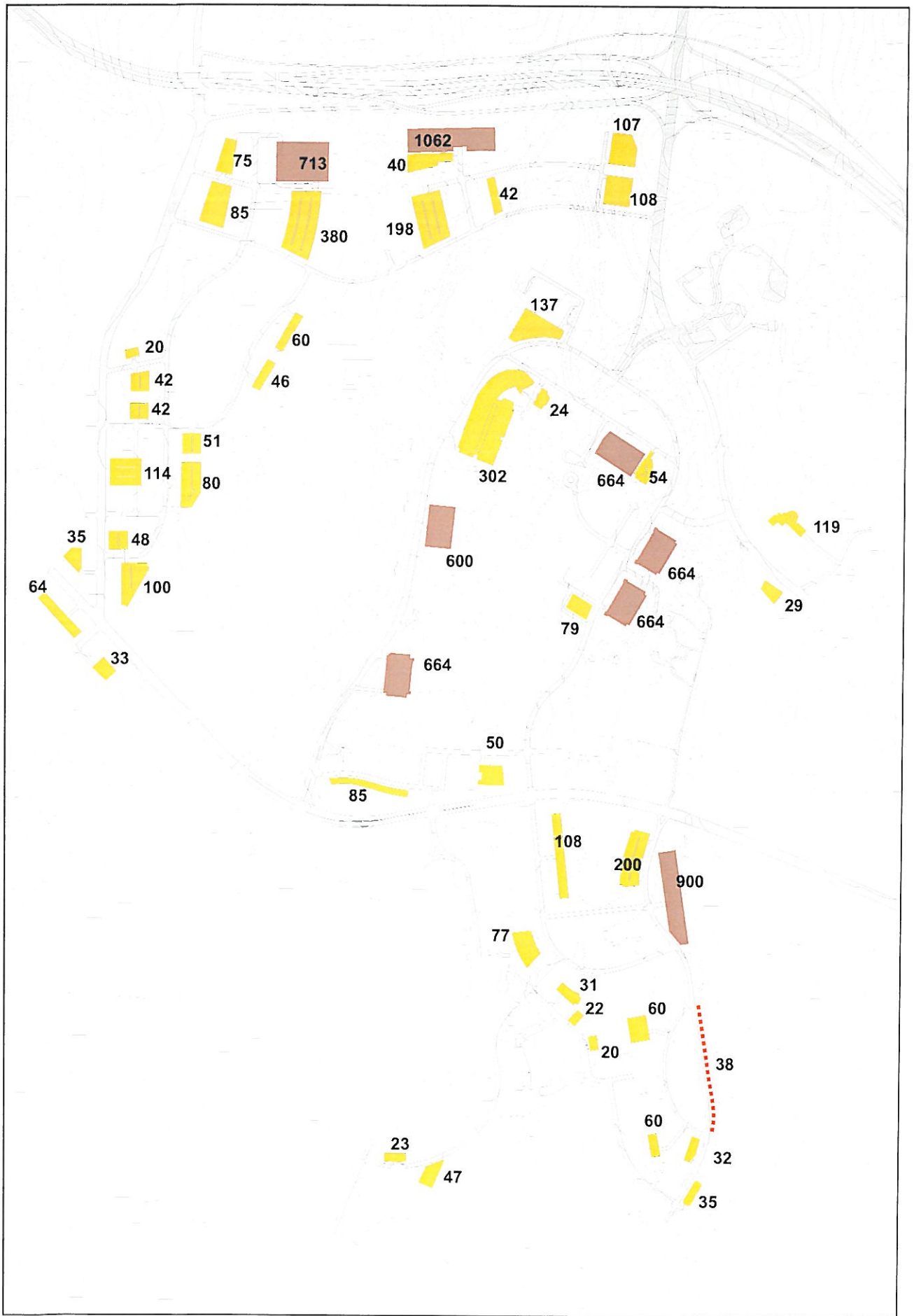
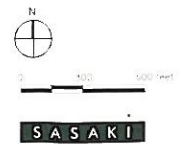


FIGURE 8b: FUTURE PARKING PHASE II

UNIVERSITY OF MISSOURI
St. Louis Missouri

March 8, 2002

- Surface Parking
- On Street Parking
- Parking Structure



UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

The master plan improves the efficiency of parking on the campus to ensure an adequate supply of parking exists to support enrollment growth for at least the next five years. The plan eliminates many small, inconvenient lots and replaces parking in larger, strategically located lots or garages next to concentrations of activity on the campus. In the next five years, the plan projects a net increase of approximately 170 spaces on the North Campus and no net change on the South Campus. With anticipated efficiency improvements, the increased supply of parking should be adequate to meet the University's needs for the next five years.

In the future, the master plan projects a net increase of another 200 spaces on the South Campus, which should be adequate to satisfy the demand for parking in this area. Within the North Campus, the plan projects a net *decrease* of 600 spaces resulting from the accommodation of new facilities on existing surface parking within the Cultural District. As there are no other locations on the North Campus to accommodate new structured parking facilities if the spatial and aesthetic qualities of the campus are to be preserved, these spaces will need to be replaced through alternative parking solutions, such as remote parking at the North Hanley Metro Link station or increased use of transit.

North Campus Parking Strategy

Nearly one third of the North Campus's 4,700 parking spaces are located within the valley. Several temporary lots have also been introduced in the areas between the Millennium Center and the University Center. The presence of these facilities has a significant visual impact on the North Campus and precludes the vision for the valley from being realized. In addition, the penetration of a large number of cars into the campus core seriously compromises the pedestrian environment in the core academic area.

The parking strategy for the North Campus represents a critical step in the implementation of the vision for the valley, significantly enhances the pedestrian environment within the campus core, and improves the overall efficiency of the campus by locating parking near the areas it serves. The strategy removes all parking lots and garages from the valley and replaces them with new parking structures at strategic locations along the campus loop road next to existing or future concentrations of academic functions including east of the Cultural District (East Drive Garage Phase II), north of the PAC (North Garage) and north of the Computer Center Building (Garage N replacement).

South Campus Parking Strategy

The South Campus currently contains many small- to medium-size parking lots that are disconnected and awkwardly interspersed among buildings. This situation is confusing to visitors, inefficient, and has a negative visual impact on the South Campus.

The master plan strategy for the South Campus involves several actions to address these issues, as follows:

- Relocation of parking from the South Campus Common area to the Normandy Hospital to facilitate the creation of the South Campus Common and to consolidate parking where it is needed next to the professional schools. This action will need to occur in two phases in order to preserve an adequate supply of parking on the South Campus until additional parking facilities are provided.
- Consolidation of small surface lots into larger, more efficient parking 'courts' that are screened to create a more orderly appearance.
- Development of a new 100-space surface parking lot on the west side of the Normandy Hospital to serve new student residences.

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

- Development of a 900-space parking garage at the UMSL-South Metro Link Station to serve the long-term parking needs of the South Campus.

West University Precinct Parking Strategy

As the West University Precinct is a new area of the campus, parking can be provided as it is needed to support new development. The master plan strategy for this area is to accommodate parking at ratios that are appropriate for the planned development, either in surface lots behind buildings or one level below-grade.

Long-Term Parking Needs

In the long-term, the growth in enrollment coupled with the elimination of surface parking to accommodate new academic facilities will create the need for additional parking that cannot be accommodated on the campus. As a result, the University will need to investigate alternative parking solutions, such as parking at remote lots or greater transit use. The development of a commuter parking garage at the North Hanley Metro Link station creates the opportunity for convenient remote parking near the campus. The master plan incorporates strong pedestrian connections from the Metro Link stations to encourage the use of transit.

3.4 Pedestrian Circulation

The master plan establishes a hierarchy of pedestrian circulation corridors that clearly define pedestrian routes between different areas of the campus (Figure 9: Pedestrian Corridors). The pedestrian network is intended to facilitate pedestrian circulation through the campus by maintaining a maximum ten-minute walk from the center of the South Campus and West University Precinct to the center of the North Campus.

Primary Pedestrian Corridors

Valley and Open Space Corridor

The campus valley and open space network contains the principal pedestrian corridor that links all areas of the campus. In the South Campus, the corridor extends from the center of the campus along the edge of the South Campus Common to connect with Natural Bridge Road on the east side of South Campus Lawn. In the North Campus, the corridor extends from Natural Bridge Road directly into the valley system all the way north to West Campus Drive through the current location of Garage N. From there it leads north to connect with the east north-south connector road and south to the Campus Town.

Primary Pedestrian Corridors along Roads

The valley and open space pedestrian corridor is supported by primary pedestrian routes along campus roads. Within the South Campus, primary pedestrian routes will connect with the valley and open space pedestrian corridor along the Honors College drive, the new west segment of South Drive, Marillac Drive, the West Entrance Drive along the south edge of the South Campus Common, and East Entrance Drive from West Entrance Drive to Natural Bridge Road. These routes will facilitate pedestrian circulation between the South Campus Residential Community and the Metro Link station and other areas of the campus.

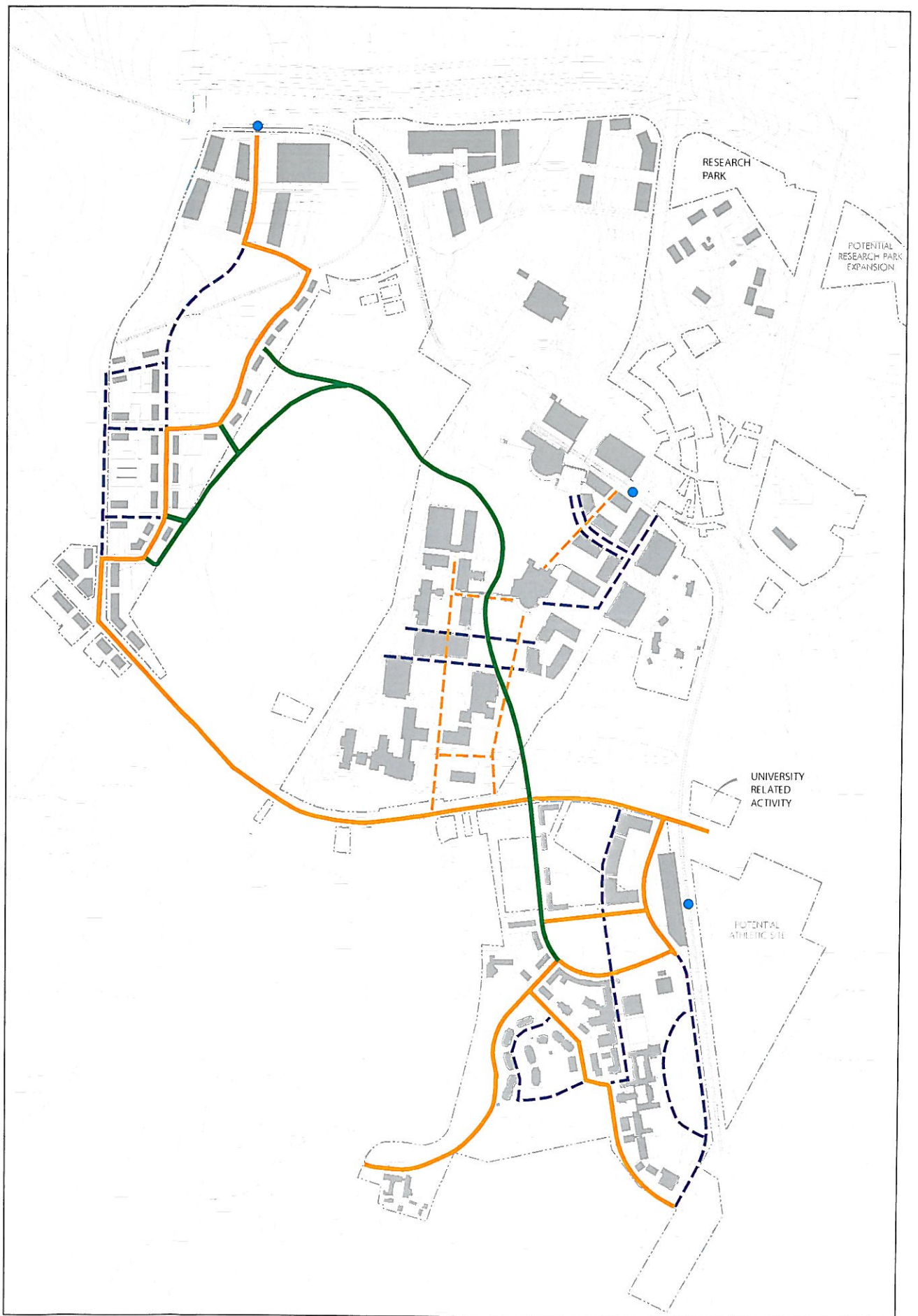
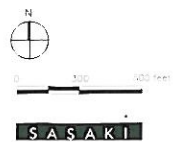


FIGURE 9: PEDESTRIAN CIRCULATION

UNIVERSITY OF MISSOURI
St. Louis Missouri

March 8, 2002

- Primary Pedestrian Corridors
Valley and Open Space
- Primary Pedestrian Corridors
Along Road
- On Designated Pathways
- Secondary Pedestrian Corridors
- Metro Link Station



UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

Within the West University Precinct, primary pedestrian routes will be established along the east north-south connector road from the Campus Town to the North Hanley Metro Link Station. This route will be linked with the valley corridor where the north-south connector road intersects with Katherine and Jenny Roads and at another point half way between Jenny Road and Geiger Road.

A primary pedestrian corridor will also be established along Natural Bridge Road from East Entrance Drive to the Campus Town. This route will connect all areas of the North and South Campuses with the Campus Town.

Primary Pedestrian Corridors on Designated Pathways

There are four other primary pedestrian corridors along designated pathways, all of which are located within the North Campus. These are as follows:

- From Natural Bridge Road at the former main entrance drive through the Science Quadrangle, Jefferson Library to the existing quadrangle.
- From Stadler Hall through the valley to the Millennium Center
- From Lucas Hall to the Millennium Center over the new Millennium Center footbridge.
- From the Millennium Center to the UMSL-North Metro Link Station.

Secondary Pedestrian Corridors

The master plan also designates secondary pedestrian corridors, which support and connect to the primary routes. The secondary pedestrian corridors are as follows:

South Campus

- The east segment of South Drive and the new Daughters of Charity entrance drive.
- From Marillac Hall through the center of the South Campus Common and Health District Green to Natural Bridge Road.

North Campus

- From University Center Garages I and II to the Millennium Center and PAC.
- From the Millennium Center to the J.C. Penney, University Center complex.
- From West Campus Drive north and south of the Jefferson library, through the valley to the new College of Education complex.
- From West Campus Drive to the primary valley corridor on the north side of the Computer Center Building

West University Precinct

The secondary pedestrian corridors within the West University precinct consist of sidewalks along the new road network connecting with Hanley Road and the two north-south connecting roads, and along the west north-south connecting road to Geiger Road.

The pedestrian network will be completed with a series of tertiary corridors that connect buildings, major corridors and parking garages and lots.

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

4. PROGRAM ACCOMMODATION AND PHASING

The master plan embodies a strategy for the accommodation of the academic support, residential, recreation/athletic, parking, and other facilities that are envisioned over the next five years and beyond. If fully implemented, the five year program will total approximately 900,000 square feet in new and expanded facilities (including 500,000 square feet of structured parking), plus another 500,000 square feet in renovated space. In the future, up to another 1.3 million square feet, (including another 300,000 square feet of structured parking) could be accommodated on the North and South Campuses, and more than 800,000 square could be accommodated within the West Residential Precinct.

Table 2 outlines the overall master plan program and phasing of program elements. Figure 10 (Phase 1) and Figure 11 (Phase 2) show the accommodation and phasing of program within the different areas of the campus.

4.1 Academic and Support Facilities

The plan concentrates new academic and support facilities principally within each of the identified districts located on the North Campus, and within the Health Profession School District on the South Campus. New buildings will be developed on infill sites or surface parking lots to complete or create quadrangles, consistent with the pattern of development already established on the campus.

Within the next five years, the plan accommodates 255,000 GSF of academic and support uses in new facilities, plus another 368,000 GSF in renovated buildings. In the future, the plan accommodates another 800,000 GSF of academic and support facilities, which includes up to 180,000 GSF of cultural uses within the Cultural District.

4.2 Housing

An important objective for the University is to create a vibrant student residential community on the campus. To achieve this objective, the University has established as a target the development of 2,500 on-campus residence spaces. With nearly 1,000 beds currently existing in the South Campus residence halls, the University Meadows apartments and the Mansion Hill condominiums, the master plan will need to accommodate 1,500 additional beds.

The master plan strategy for housing is to concentrate student housing and support amenities within the South Campus residential area and the West Residential Community.

South Campus

New student housing will be created by reclaiming space vacated by the professional schools in Seton Hall, Marillac Hall, and the South Campus Classroom complex to student residence and support space, and by developing new residences around the new South Campus Lawn, and on infill sites between University Meadows and Seton Hall. The estimated capacity of each of these sites is as follows:

- | | |
|----------------------------------------------------|-----|
| • Seton Hall renovation: | 85 |
| • Marillac Hall: | 265 |
| • South Campus Classroom building: | 85 |
| • South Campus Lawn: | 320 |
| • Infill between Marillac Hall and Bellerive Hall: | 220 |

UNIVERSITY OF MISSOURI ST. LOUIS MASTER PLAN UPDATE

Table 2: Program Distribution - March 2002

North Campus (Phase I)

| New Facilities/Additions | Program/Use | Building Area | |
|---------------------------------------|------------------------------|----------------|----------------|
| | | GSF | ASF |
| Academic and Support | | | |
| College of Education Building | College of Education | 140,000 | 91,000 |
| International Students Center | International Student Center | 18,000 | 12,000 |
| Alumni Center | Alumni Relations | 15,000 | 10,000 |
| GSB Addition | Music Department | 40,500 | 27,000 |
| Library Addition | Library | 22,500 | 15,000 |
| UC/JC Penney Addition | Business Administration | 22,500 | 15,000 |
| Total New Facilities/Additions | | 255,000 | 170,000 |

Re-use or Renovation

| | | | |
|-----------------------------------|-------------------------|----------------|----------------|
| Academic and Support | | | |
| General Services Building | Music Department | 55,000 | 36,000 |
| Telecommunity Center | Mercantile Museum | 15,000 | 10,000 |
| Mercantile Exhibition Space | Library Expansion | 15,000 | 10,000 |
| UC/JC Penney | Business Administration | 85,500 | 57,000 |
| Other Facility | General Services | 55,000 | 36,000 |
| Total Re-use or Renovation | | 225,500 | 149,000 |

Parking

| | | | | Spaces |
|----------------------|---------|----------------|-----|--------------|
| East Garage Phase II | Parking | 239,400 | N/A | 684 |
| North Garage | Parking | 232,400 | N/A | 664 |
| Total Parking | | 471,800 | | 1,348 |

South Campus (Phase I)

| New Facilities/Additions | Program/Use | Building Area | | Beds |
|---------------------------------------|-------------|----------------|----------------|------------|
| | | GSF | ASF | |
| Housing/Student Life | | | | |
| Residences (Seton Hall Addition) | Housing | 105,000 | 70,000 | 300 |
| Residences (SC Lawn) | Housing | 109,900 | 73,000 | 314 |
| Total New Facilities/Additions | | 214,900 | 143,000 | 614 |

Re-use or Renovation

| | | | | |
|--------------------------------|------------------------|---------|--------|--|
| Academic and Support | | | | |
| Normandy Hospital | College of Nursing | 42,000 | 28,000 | |
| Normandy Hospital | School of Optometry | 60,000 | 40,000 | |
| Normandy Hospital | Nursing Administration | 19,500 | 13,000 | |
| Normandy Hospital | Nursing Library | 21,000 | 14,000 | |
| Sub-Total Academic and Support | | 142,500 | 95,000 | |

| | | | | Beds |
|-----------------------------------|----------------------------|----------------|----------------|------------|
| Housing/Student Life | | | | |
| Marillac Hall | Housing | 75,000 | 50,000 | 265 |
| Seton Hall | Housing | 30,000 | 20,000 | 85 |
| South Campus Classroom Building | Housing | 30,000 | 20,000 | 85 |
| South Campus Computer Building | Recreation/student service | 15,000 | 10,000 | |
| Barnes Library | Recreation/student service | 30,000 | 20,000 | |
| South Campus Computer Building | Recreation/student service | 15,000 | 10,000 | |
| Education Administration Building | Recreation/student service | 9,000 | 6,000 | |
| Techonology & Learning Center | Recreation/student service | 6,000 | 4,000 | |
| Sub-Total Housing/Student Life | | 210,000 | 140,000 | 435 |
| Total Re-use or Renovation | | 352,500 | 235,000 | 435 |

Total Phase I

| | | | | |
|-----------------------------|--|----------------|---------|--------------|
| Academic and Support | | | | |
| New Facilities | | 255,000 | 170,000 | |
| Re-use or Renovation | | 368,000 | 149,000 | |
| Housing | | | | |
| New Facilities | | 214,900 | 143,000 | 614 |
| Re-use or Renovation | | 210,000 | 140,000 | 435 |
| Parking | | 471,800 | | 1,348 |

UNIVERSITY OF MISSOURI ST. LOUIS MASTER PLAN UPDATE

Table 2: Program Distribution - March 2002

North Campus (Phase II)

| New Facilities/Additions | Program/Use | Building Area | |
|---------------------------------------|-----------------------------|----------------|----------------|
| | | GSF | ASF |
| Academic and Support | | | |
| <i>Mercantile Museum</i> | Mercantile Collection | 24,000 | 16,000 |
| <i>Sciences Buildings</i> | General Academic | 180,000 | 120,000 |
| <i>Fine Arts Building</i> | Fine Arts Program | 67,500 | 45,000 |
| <i>WDG II Arts Building</i> | General Academic | 45,000 | 30,000 |
| <i>Arts/Culture Facility</i> | Arts/Culture Facility | 180,000 | 120,000 |
| <i>Education II</i> | General Academic | 75,000 | 50,000 |
| Total New Facilities/Additions | | 571,500 | 381,000 |
| Re-use or Renovation | | | |
| | Residence/Conference Center | | |
| Beffa Property (est. bldg. area) | Center | 48,000 | 32,000 |
| Total Re-use or Renovation | | 48,000 | 32,000 |

South Campus (Phase II)

| New Facilities/Additions | Program/Use | Building Area | | |
|---------------------------------------|---------------------------|----------------|----------------|---------------|
| | | GSF | ASF | |
| Academic and Support | | | | |
| <i>Health Sciences I</i> | College of Nursing | 112,500 | 75,000 | |
| <i>Health Sciences II</i> | School of Optometry (new) | 90,000 | 60,000 | |
| <i>Health Sciences III</i> | Dentistry/Other | 90,000 | 60,000 | |
| Sub-Total Academic and Support | | 292,500 | 195,000 | |
| Housing/Student Life | | | | |
| <i>Marillac/Bellerive Infill</i> | Housing | 57,000 | 38,000 | 163 |
| <i>University Meadows Infill</i> | Housing | 46,500 | 31,000 | 133 |
| Sub-Total Housing/Student Life | | 103,500 | 69,000 | 296 |
| Total New Facilities/Additions | | 396,000 | 264,000 | 296 |
| Parking | | | | |
| | | | | <i>Spaces</i> |
| South Campus Garage | | 298,550 | | 853 |
| Total Parking | | 298,550 | | 853 |

Total Phase 2

| | | | | |
|-----------------------------|--|----------------|---------|------------|
| Academic and Support | | | | |
| New Facilities | | 864,000 | 576,000 | |
| Re-use or Renovation | | 48,000 | 32,000 | |
| Housing | | | | |
| New Facilities | | 103,500 | 69,000 | 296 |
| Re-use or Renovation | | n/a | n/a | n/a |
| Parking | | 298,550 | | 853 |

West University Precinct

| New Facilities/Additions | Program/Use | Building Area | | <i>Beds</i> |
|---------------------------------------|-----------------------|----------------|----------------|-------------|
| | | GSF | ASF | |
| Housing | Student/Other Housing | 254,800 | 170,600 | 728 |
| Campus Town | Retail/Recreation | 300,000 | 200,000 | |
| Total New Facilities/Additions | | 554,800 | 370,600 | 728 |

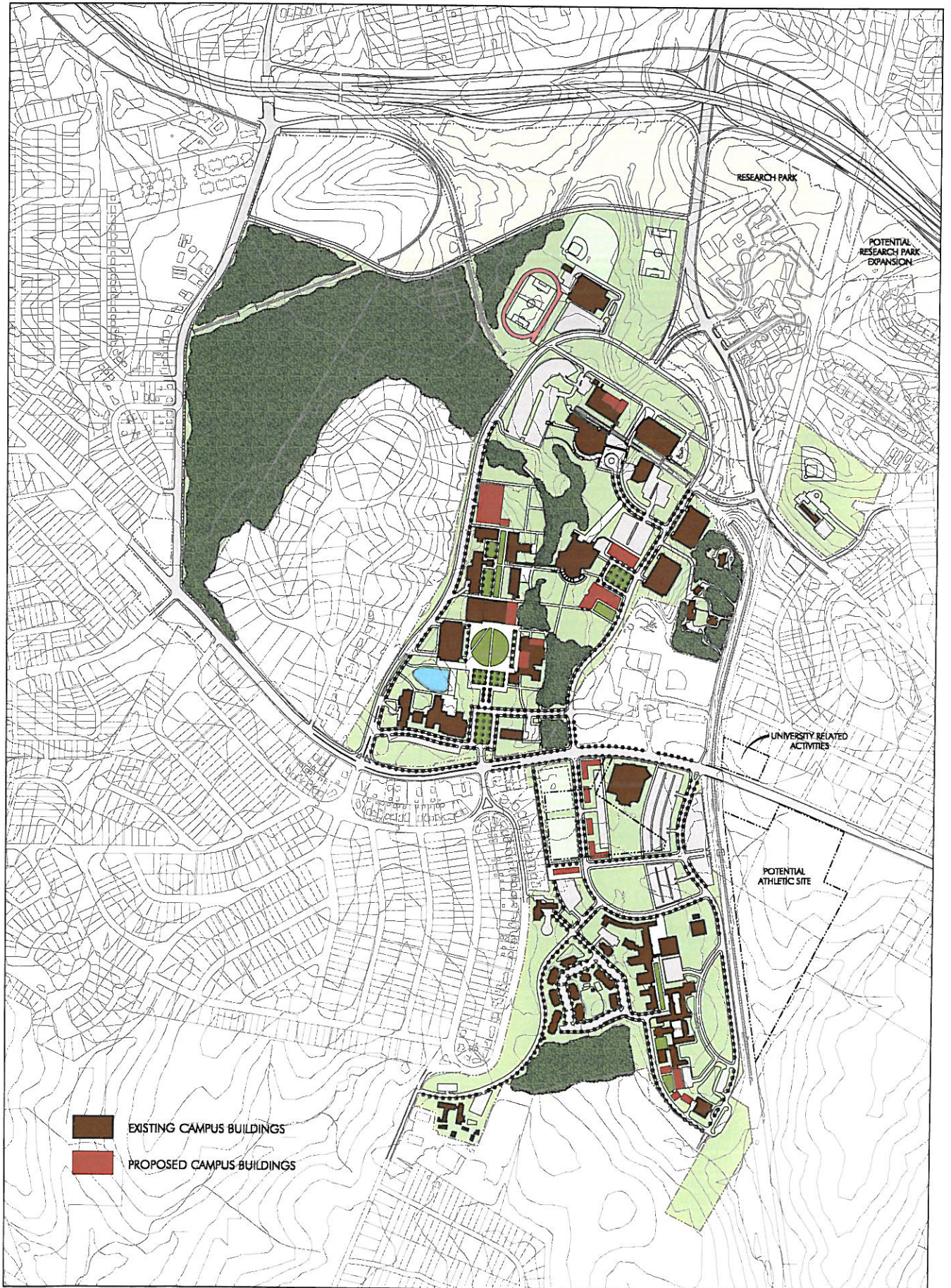


FIGURE 10 : PHASE I

UNIVERSITY OF MISSOURI

St. Louis, Missouri

March 8, 2002



SASAKI

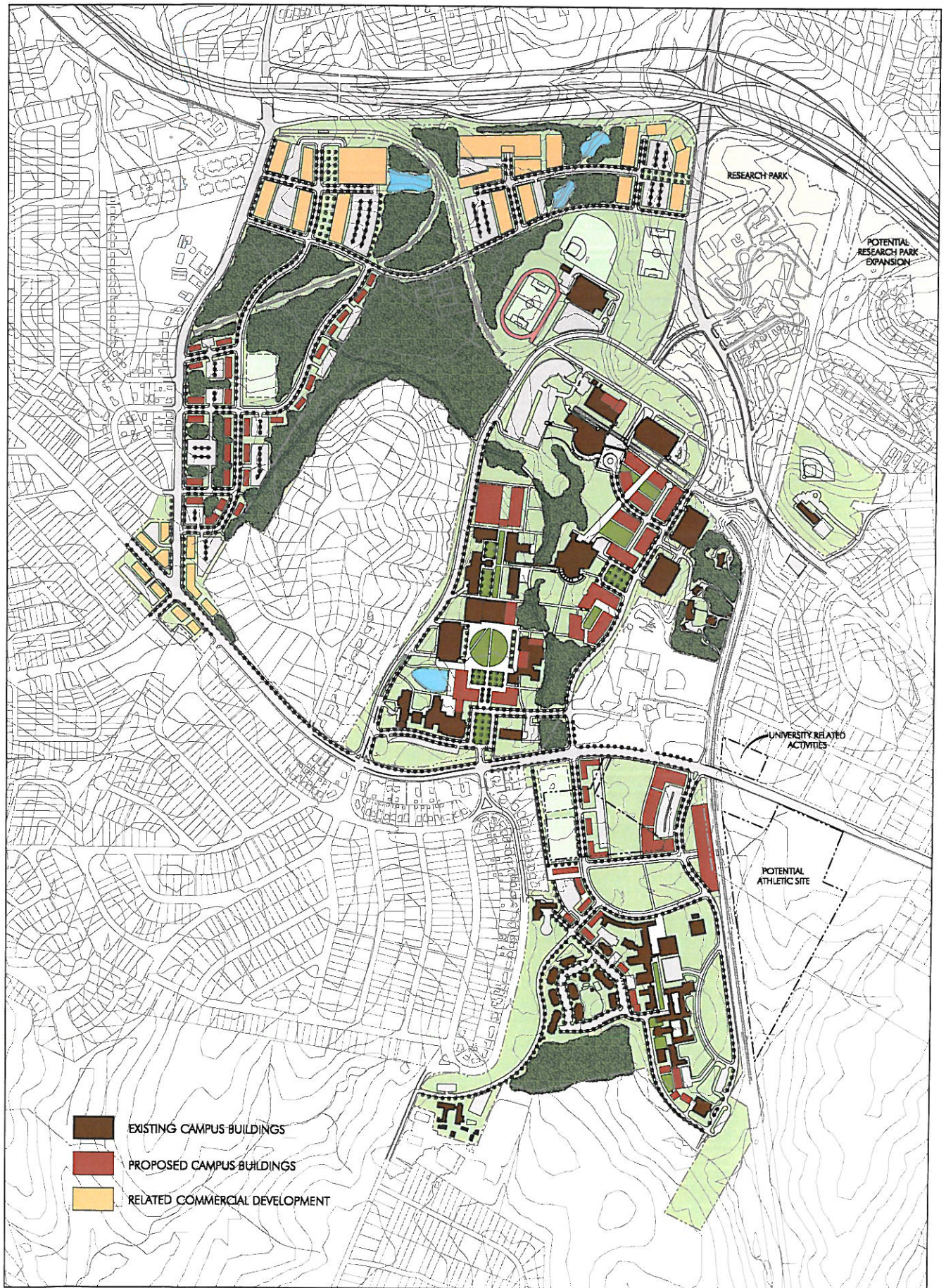


FIGURE 11 : PHASE II

UNIVERSITY OF MISSOURI
St. Louis, Missouri

March 8, 2002



SASAKI

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

- Infill between University Meadows and Seton Hall: 240
- Seton Hall additions: 300

It will not be possible to develop all of these sites for housing as some sites will need to be preserved for parking to support new residence beds. It is estimated that from 500 – 1,000 new beds can be accommodated on the South Campus.

The plan also accommodates several residential support amenities in vacated space, including a student recreation center in the Barnes Library building, and dining, student lounge, and common space within the South Campus Classroom complex and Education Administration building.

West Residential Community

The master plan provides for another 560,000 square feet of residential and support development within the West Residential Community. This area will accommodate the balance of the target 2,500 student residential beds, as well as possible faculty and staff housing.

4.3 Sports and Recreation Facilities and Fields

The plan concentrates on facilities for the University's Intercollegiate Athletics and Physical Education program around the existing Mark Twain Center, and introduces new student recreation facilities within the South Campus and West University Precinct to serve the future student residential communities in those areas. The plan for the Athletics and Recreation District consists of the following elements:

- Development of a new soccer field with spectator seating on the site of the existing field;
- Shifting the existing baseball field to accommodate the re-alignment of Geiger Road;
- Introduction of a new athletic field next to the new campus entrance drive to replace the field displaced by construction of the campus loop road; and
- Development of a 175-space surface parking lot on the site of the former field.

Within the South Campus, the plan introduces two new recreation fields within the South Campus Lawn and provides for the re-use of the Barnes Library for a fitness center. The plan introduces another field within the West Residential Community, which will create a focus for new development.

Additional athletic facilities will be needed in the future should the University's intercollegiate athletic program change from NCAA Division II to Division I. Potential facility needs could include a basketball arena, a track, additional fields, and a field house building. The plan identifies the property on the south side of Natural Bridge Road, east of the Metro Link tracks as a potential location for these facilities.

UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary - March 2002

Report to the Board of Curators

5. SPACE NEEDS ANALYSIS

5.1 Methodology

- The University's space needs were estimated using, where possible, CEFPI (Council of Educational Facilities Planners International) guidelines for different categories of institutional space. For space categories where CEFPI does not provide guidelines or where information was unavailable to apply CEFPI formulae, other standards were used to estimate space needs.

5.2 Enrollment and Growth

- The guideline calculations in this analysis were based on the University's Fall 2001 on-campus enrollment of 12,242 headcount (HC) undergraduate, graduate, and professional school students.
- Based on Fall 2001 enrollment of 12,242, UMSL projects growth of 2.6 percent per year. By Fall 2005, this would result in 13,542 on-campus students. The ten-year goal, including moderate additions of new degree programs, is 18,000 on-campus students.
- The analysis projects space needs growth at the same rate as enrollment growth.
- UMSL has nine comparator institutions. The median number of degree programs at these institutions is 150. UMSL has 89 degree programs and anticipates moderate degree program growth over the life of the master plan. It is acknowledged that program growth may not result in a proportional increase in enrollment.

5.3 Summary

UMSL will continue to cooperate with various community college districts to develop outreach centers. Space needs for those centers are being identified through a separate university effort. The following section summarizes the space needs analysis for existing space, and projected space needs for 2005 and long-term future enrollment of 18,000 headcount students.

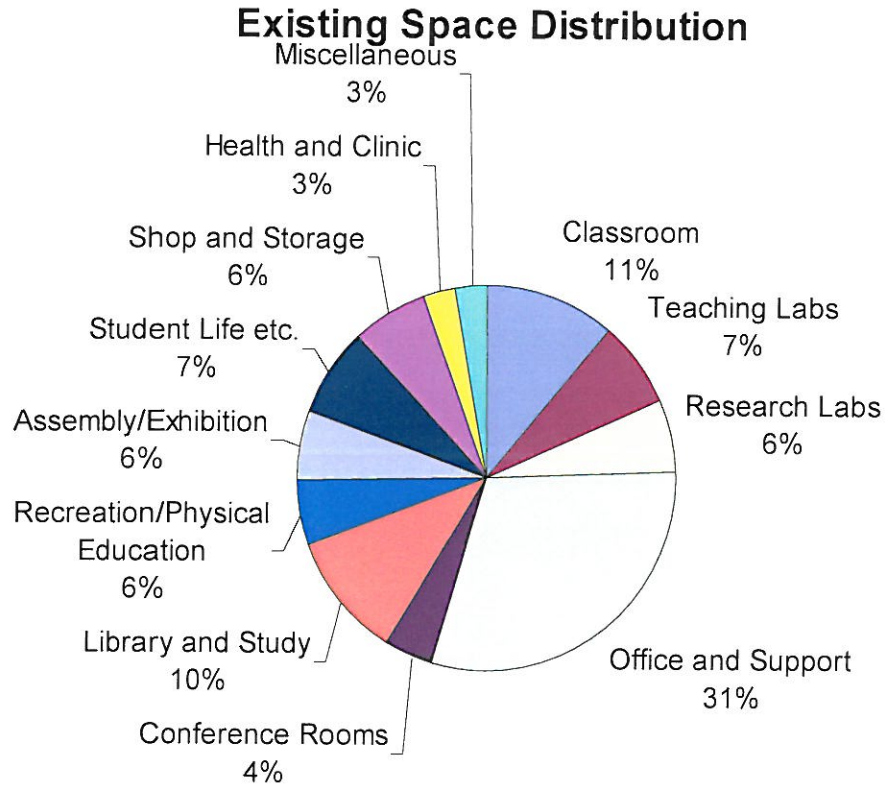
UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary - March 2002

Report to the Board of Curators

Existing Space Distribution

- UMSL currently has 1,075,000 ASF.
- Current enrollment is 12,242 headcount students.
- The University's space needs are approximately balanced with existing supply in some categories:
 - Classrooms
 - Research Labs
 - Conference Rooms
 - Recreation and Physical Education
 - Student Life



UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

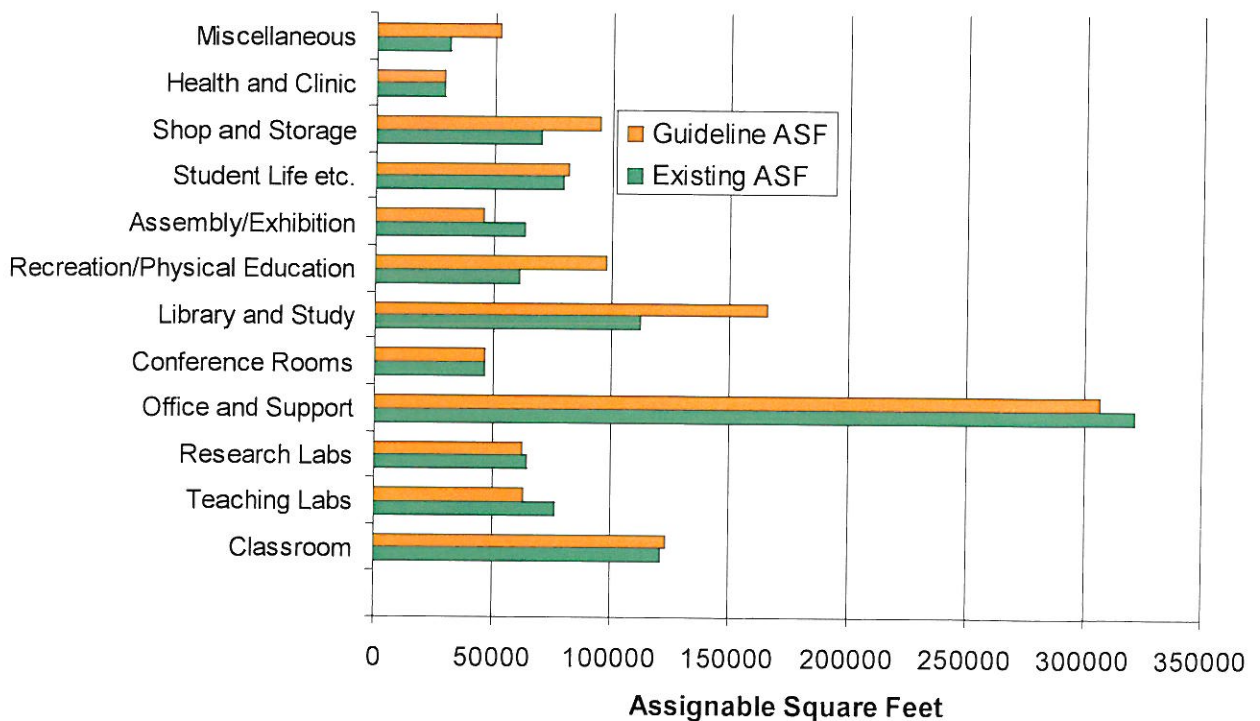
Master Plan Summary - March 2002

Report to the Board of Curators

Existing Space Needs

- New construction and renovation have created a surplus over current needs in some categories:
 - Office space 15,000 ASF (5%)
 - Teaching labs 13,000 ASF (20%)
 - Total surplus 28,000 ASF (2.3%)
- Office space surplus is misleading, as much of the space is in inappropriate buildings, such as former dormitories on the Incarnate Word campus, and with unworkable adjacencies.
- There is a surplus of 18,000 ASF in Assembly and Exhibition space attributable to the Mercantile Museum.
- Excluding the Mercantile Museum, there is a deficit of 10,000 ASF in Assembly and Exhibition space.
- There are deficits in other space categories:
 - Library and Study 53,000 ASF (47%)
 - Recreation and Physical Education 39,000 ASF (60%)
 - Shop and Storage 25,000 ASF (36%)
 - Other 20,000 ASF
 - Total deficit 150,000 ASF (12%)
- The Library space deficit does not reflect Central Library Repository space.
- Recreation and Physical Education reflects the estimated needs of student recreation, athletics and physical education.

Existing vs. Guidelines



UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

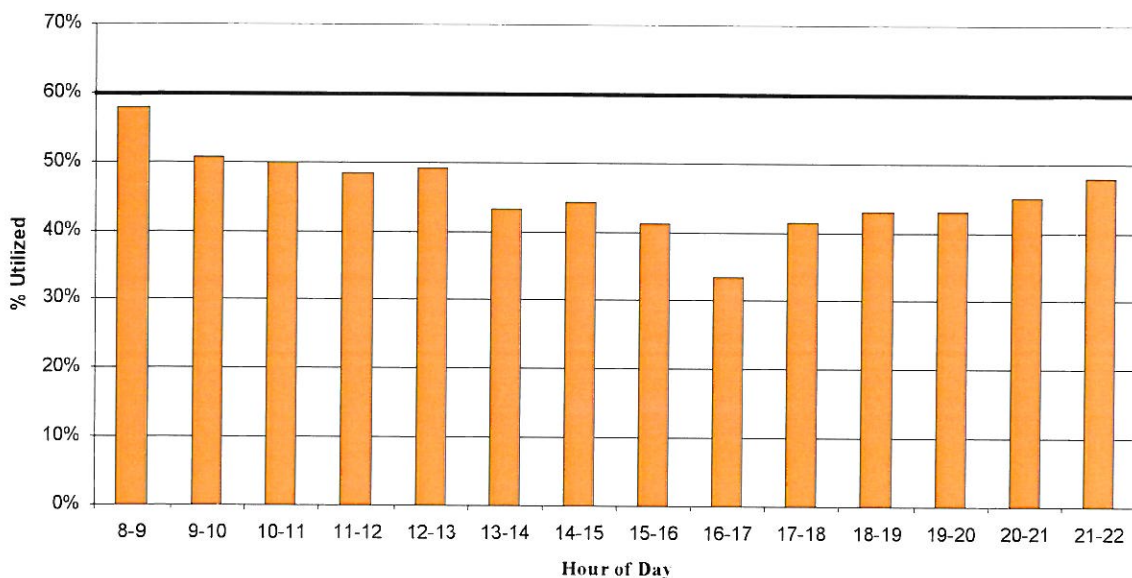
Master Plan Summary - March 2002

Report to the Board of Curators

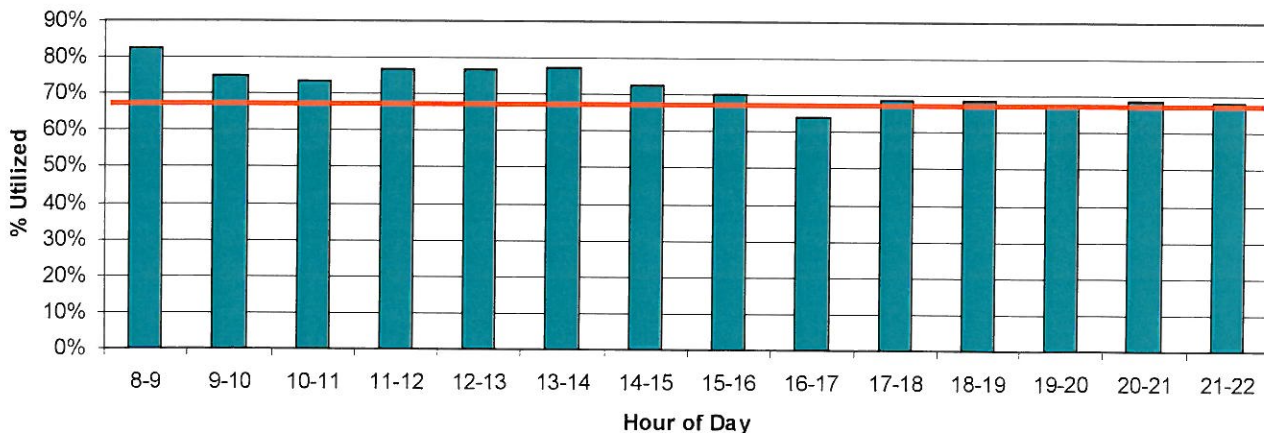
Seat Utilization

- Seats in classrooms at UMSL are filled at levels below the UMSL model, in spite of heavy scheduling. This is caused by the absence of appropriately sized classrooms, with classes frequently scheduled in rooms that are too large.
- When class size limitations are taken into account, occupancy is on average well above UMSL and national standards (see lower graph).

Classroom Seat Utilization
(UMC Model - Room Capacity)



Academic (Authorized Section) Capacity



UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

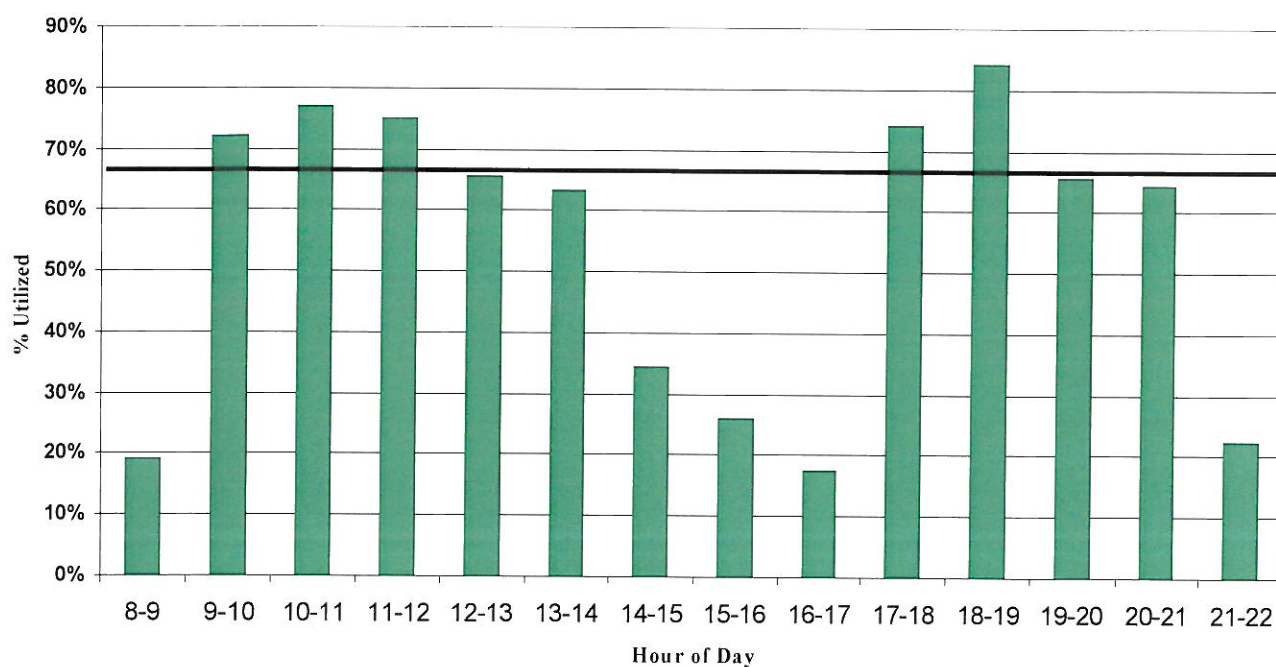
Master Plan Summary - March 2002

Report to the Board of Curators

Classroom Use

- For nine hours a day on weekdays, or 45 hours a week, UMSL's classrooms are scheduled *close to or above 67%*. The standard of 67% has been used by UMKC to estimate need for additional classroom space.
- Forty-five hours a week is a commonly used standard for measuring classroom use.
- UMSL is unable to schedule classes heavily outside the nine hours of heavy use because the majority of its students commute and have jobs which prevent their taking afternoon classes.

Classroom Utilization
(UMC Model-% of Classrooms Used by Hour)



UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

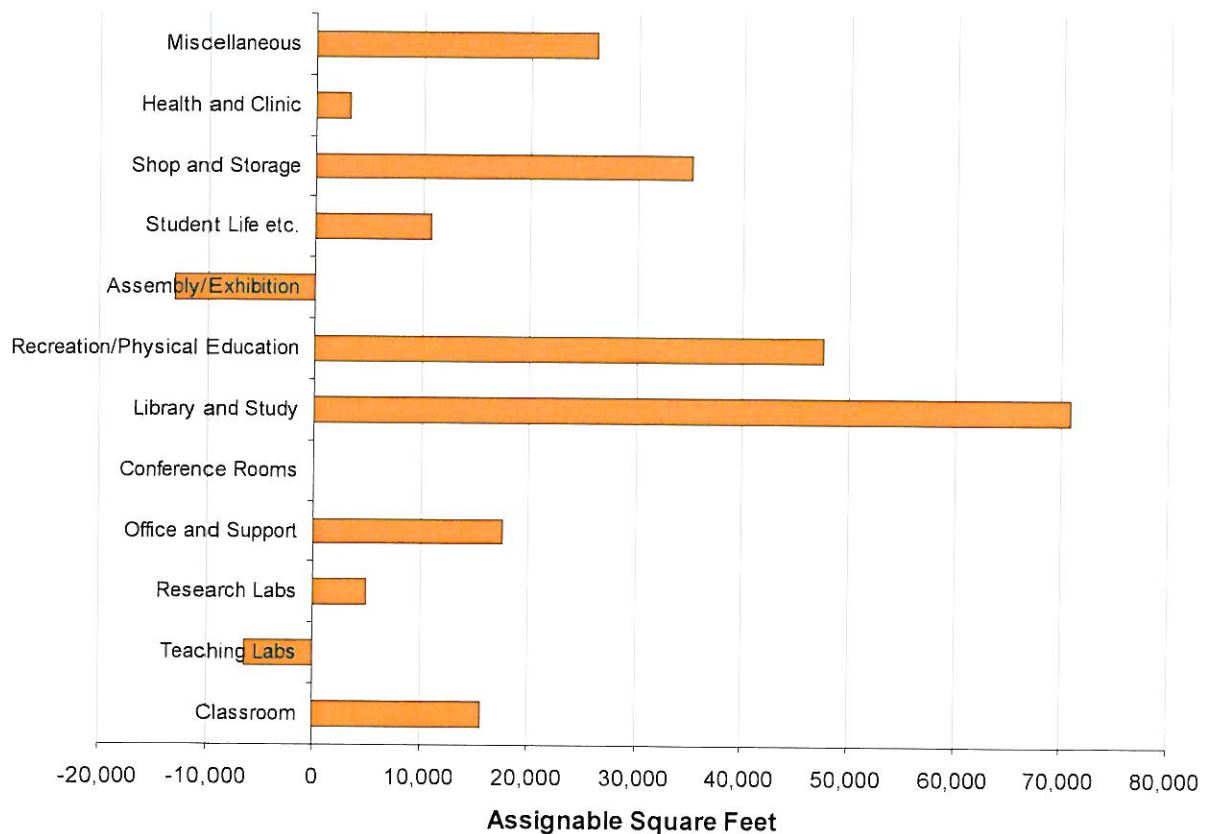
Master Plan Summary - March 2002

Report to the Board of Curators

2005 Space Needs

- Projected enrollment in 2005 is 13,542 headcount students.
- Surplus would disappear in all areas except Teaching Lab space (6,500 ASF or 8.5%).
- Exhibition surplus is attributable to the Mercantile Library.
- Deficit would increase in all areas, with some large deficits:
 - Classrooms 15,000 ASF (12.5%)
 - Library 70,000 ASF (63%)
 - Recreation/Physical Education 47,500 ASF (78%)
 - Shop and Storage 35,000 ASF (50%)
 - Total deficit 218,000 ASF (20%)

Space Needed in 2005



UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

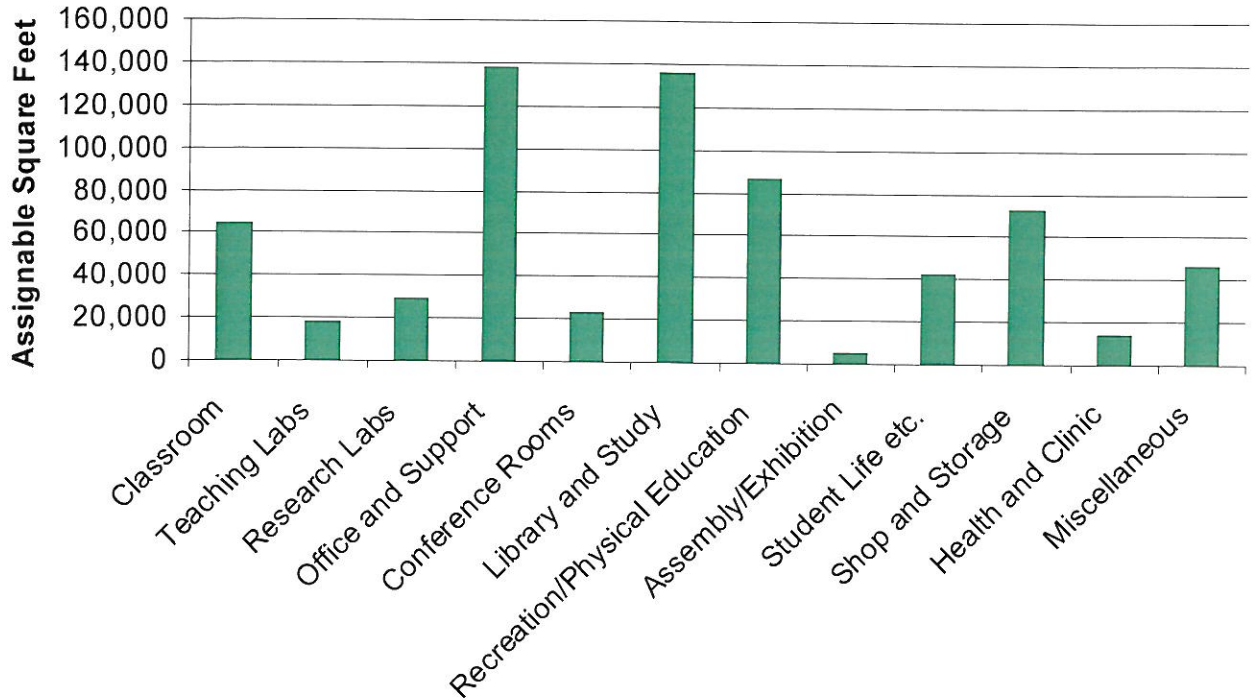
Master Plan Summary – March 2002

Report to the Board of Curators

Future Space Needs

- Future enrollment of 18,000 headcount students:
 - New academic programs similar to peers
 - Estimated total deficit of 625,000 ASF (58%)
 - New space required (not including residential) would total over 1 million gross square feet

Space Needed to Support 40 New Programs



UNIVERSITY OF MISSOURI-ST. LOUIS MASTER PLAN UPDATE

Master Plan Summary – March 2002

Report to the Board of Curators

Peer Institution Comparison

Peer Institutions:

University of Memphis

University of Wisconsin-Milwaukee

Wright State University

University of Texas-Arlington

Wichita State University

- UMSL is 5th of the six peer institutions where space use data was readily available for comparison
- Student life facilities and labs were notably in shorter supply at UMSL than at most peers

Assignable SF per Student FTE

