



SOUTH CAMPUS MASTER PLAN

EXECUTIVE SUMMARY

University of Illinois at Urbana-Champaign

June 1999

1. INTENT

During the first decades of the twenty-first century, it is planned that the South Campus of the University of Illinois at Urbana-Champaign will increase in land area by fifty percent and add nearly 1.9 million square feet of new buildings. The purpose of the South Campus is to guide future change on the South Campus by defining the organization of land uses, patterns of vehicle and pedestrian circulation, and the structure of campus open space.

2. THE SOUTH CAMPUS TODAY

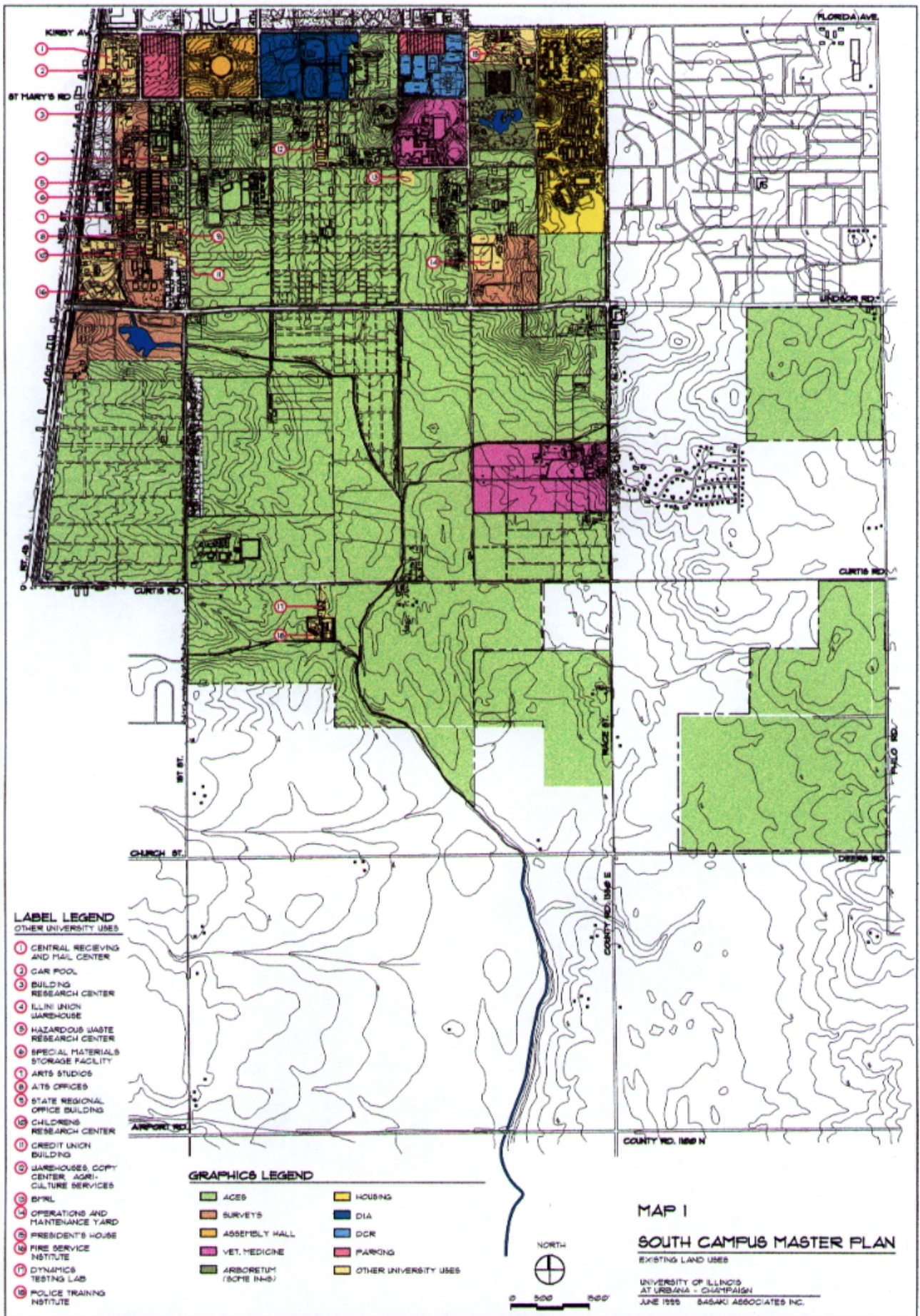
The South Campus is a University-owned land area of approximately 3,400 acres (five square miles) located south of Kirby-Florida Avenue. The South Campus is bounded on the west by the Illinois Central and Gulf Railroad, on the south by Church Street, and on the east by Race Street and Philo Road. Map No. 1 shows the South Campus and existing University land uses.



The South Campus

The College of Agriculture, Consumer and Environmental Sciences (ACES) presently is assigned 2,727 acres, or 79 percent of the South Campus. Twenty-six other University-related units occupy facilities in the South Campus area. The largest of these are the College of Veterinary Medicine, the Division of Intercollegiate Athletics, the State Surveys, the United States Department of Agriculture (USDA), the Division of Campus Recreation, the Assembly Hall, the Fire Service Institute, the Police Training Institute, Campus Housing and the University Arboretum.

The South Campus is surrounded on the north, east and west by land that is largely developed in institutional, residential and commercial uses. The south and southeast boundaries abut agricultural land. The interior of the South Campus is subdivided by a grid of public roads that impose varying degrees of disruption to University programs and operational continuity. Smaller, two-lane roads such as Curtis Road present minimal disruption, whereas Windsor Road is a major hazard and barrier to continuity. Topographically, the South Campus is defined by higher elevations along its east, west and north edges, surrounding the Embarras River drainage basin, which runs generally north to south through the center of the South Campus area. The areas closest to the Embarras River are defined by poor drainage, variable soils and periodic flooding. Upland areas are typically better drained, and composed of more uniform and productive soils.



LABEL LEGEND
OTHER UNIVERSITY USES

- 1 CENTRAL RECEIVING AND MAIL CENTER
- 2 GAR. POOL
- 3 BUILDING RESEARCH CENTER
- 4 ILLINI UNION WAREHOUSE
- 5 HAZARDOUS WASTE RESEARCH CENTER
- 6 SPECIAL MATERIALS STORAGE FACILITY
- 7 ARTS STUDIOS
- 8 ARTS OFFICES
- 9 STATE REGIONAL OFFICE BUILDING
- 10 CHILDRENS RESEARCH CENTER
- 11 CREDIT UNION BUILDING
- 12 WAREHOUSES, COPY CENTER, AGRI. CULTURE SERVICES
- 13 BPHL
- 14 OPERATIONS AND MAINTENANCE YARD
- 15 PRESIDENT'S HOUSE
- 16 FIRE SERVICE INSTITUTE
- 17 DYNAMICS TESTING LAB
- 18 POLICE TRAINING INSTITUTE

GRAPHICS LEGEND

- | | |
|--|---|
| ACES | HOUSING |
| SURVETS | DIA |
| ASSEMBLY HALL | DCR |
| VET. MEDICINE | PARKING |
| ARBORETUM (SCHE 114-B) | OTHER UNIVERSITY USES |

MAP I
SOUTH CAMPUS MASTER PLAN
EXISTING LAND USES

UNIVERSITY OF ILLINOIS
AT URBANA - CHAMPAIGN
JUNE 1988 SASAKI ASSOCIATES INC.

3. THE PLANNING NEED

- **Response to Change**

In 1990, a Master Plan was prepared for the South Campus. Since that time, changes have occurred which require the plan to be updated. Among the most significant changes were the reorganization of the College of ACES; the decision by ACES not to acquire non-contiguous land for the relocation of crop sciences; the incremental acquisition by ACES of contiguous land south of Curtis Road; the reexamination of the use of the Cruse Farm for continued crop science research rather than for a research park; the increased land demand by Campus Recreation and Intercollegiate Athletics for intramural, informal recreation and competition fields; the decision by the State Surveys to meet their building space needs on the main campus rather than constructing new facilities east of First Street; and the construction of Windsor Road.



Obsolete Facilities along St. Mary's Road need to be replaced.

- **The Need for Research Land**

In addition to the need to respond to these changes, there is a fundamental need to improve and expand the College of ACES research facilities and land resources if the College is to remain relevant and competitive in a rapidly evolving global context. The College faces serious problems with obsolete facilities immediately south of Saint Mary's Road, such as the 1918 cattle barn and feed mill. It is not feasible to operate modern research and teaching programs with the existing facilities. They require replacement and redefinition on land that is sufficiently separated from urbanized areas and meets modern environmental requirements. Therefore, ACES desires to move its facilities to contiguous lands south of Windsor Road. By moving most of its operations south of Windsor Road, ACES will overcome the program fragmentation and severe safety problems associated with Windsor Road.

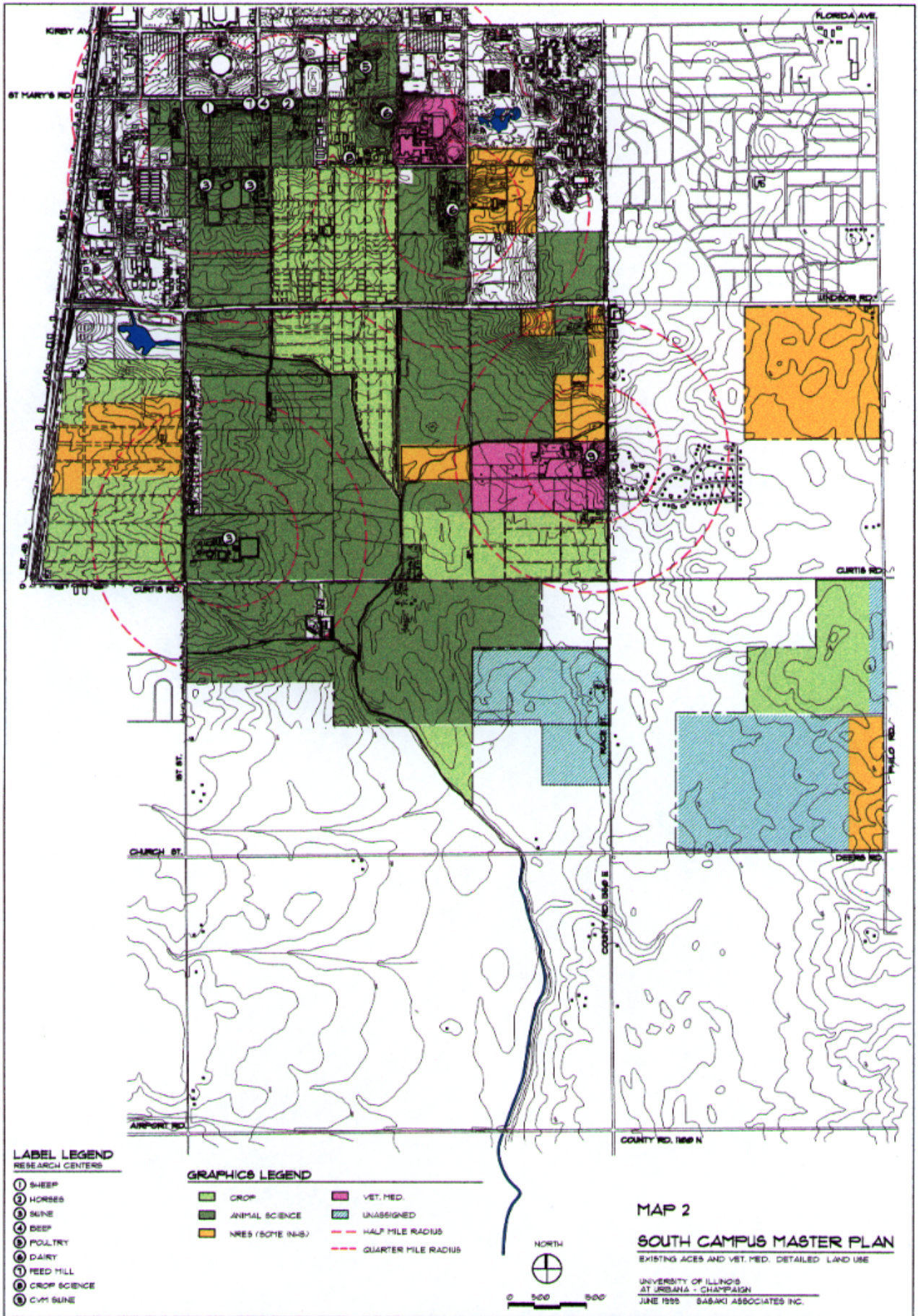


Windsor Road is a major hazard and barrier to College of ACES operations.

The move will allow ACES to remedy existing land deficits, provide adequate land for the rotation of crop science experiments and provide a land reserve for the future. The move will also provide the opportunity to overcome existing program dispersal and fragmentation of research and instructional programs by roads. Map No. 2 shows the existing dispersed pattern of ACES land uses.

The projected need for additional ACES research land amounts to 2,418 acres. This amount includes 655 acres to replace anticipated losses; 458 acres to meet existing deficits and growth requirements; and 1,305 acres for a future land reserve. See Exhibit 1.

The ACES building requirements amount to approximately 1,100,000 gross square feet. Nearly all of the new building requirements are replacement facilities for the obsolete physical plant north of Windsor Road. See Exhibit 2.



LABEL LEGEND

RESEARCH CENTERS

- ① SHEEP
- ② HORSES
- ③ SWINE
- ④ DEEP
- ⑤ POULTRY
- ⑥ DAIRY
- ⑦ FEED MILL
- ⑧ CROP SCIENCE
- ⑨ CIVIL SWINE

GRAPHICS LEGEND

- | | |
|--|--|
| CROP | VET. MED. |
| ANIMAL SCIENCE | UNASSIGNED |
| NRES (SOPE IN-S) | HALF MILE RADIUS |
| | QUARTER MILE RADIUS |

MAP 2

SOUTH CAMPUS MASTER PLAN

EXISTING ACRES AND VET. MED. DETAILED LAND USE

UNIVERSITY OF ILLINOIS
AT URBANA - CHAMPAIGN
JUNE 1955 SASAKI ASSOCIATES INC.



EXHIBIT 1

College of ACES South Campus Land Requirements

<u>Research and Teaching Units</u>	<u>Present Land Assignment</u>	<u>Proposed Future Land Assignment</u>
• Crop Section	691 ac	933 ac
• Natural Resources and Environmental Sciences Section	435 ac	505 ac
• Animal Section	1,366 ac	1,747 ac
• Unassigned Reserve	235 ac	1,305 ac
• Total	2,727 ac	4,490 ac

Notes:

1. The difference between Present ACES Land and Proposed Future Land is 1,763 acres. However, anticipated losses of ACES land to other University uses and possible sale affects the land acquisition requirement as follows:

Proposed Future ACES Land Need	4,490 acres
Existing ACES Land	<u>2,727 acres</u>
Needed New Acquisition	1,763 acres
Anticipated Losses	<u>655 acres</u>
Total Required Acquisition to Satisfy ACES Land Needs	2,418 acres

2. The most essential acquisitions for ACES are those required to meet the identified needs of the Crops Section, Animal Section and the Natural Resources and Environmental Sciences Section. Acquisition of the unassigned future reserve is less urgent. Of the total proposed 2,418.56-acre acquisition, 1,117.91 acres are needed to meet the foreseeable needs of the Crops, Animal and Natural Resources and Environmental Sciences Sections, and 1,300.65 are for land reserve.

EXHIBIT 2

College of ACES South Campus Building Requirements

<i>Research and Teaching Units</i>	<i>Building Gross Sq. Ft. Required</i>
• Crop Section	135,000
• USDA	30,000
• Natural Resources and Environmental Sciences Section	97,000
• Animal Section	
Intensive Research and Education Center	135,000
Feed Stores Operation	62,000
Animal Sciences Center Office	33,000
Beef Cattle Unit	63,000
Dairy Cattle Unit	163,000
Horse Unit (Joint with Veterinary Medicine)	81,000
Poultry Unit	41,000
Sheep Unit	20,000
Swine Units	223,000
<i>Total Proposed ACES Building Requirements</i>	<i>1,083,000</i>

- **Other University Growth Needs**

In addition to the ACES land and facilities requirements, there is a need to provide for other University units on the South Campus. Land needs total 202 acres and include 25 acres for the Division of Intercollegiate Athletics, 29 acres for the Division of Campus Recreation, 20 acres for expansion of the Veterinary Medicine Research Center, 40 acres for University affiliated Technology-Commercialization Facilities, 70 acres for the University Arboretum, and 18 acres for long range University support facilities. Building needs total 1,329,000 gross square feet and include tennis expansion facilities for the Division of Intercollegiate Athletics, expansion of warehouse space for general University use, Technology-Commercialization Facilities, and Veterinary Medicine Basic Sciences Building Expansion. It has been determined that the significant building space needs of the State Surveys and additional Fine Arts Studio space will be accommodated on the Main Campus. Therefore, of the total 1,329,000 gross square feet program demand, only 1,012,000 will be accommodated on the South Campus. The building and land needs of non-ACES units on the South Campus are summarized in Exhibit 3.

4. MASTER PLAN OBJECTIVES

The objectives of the South Campus Master Plan are:

1. To accommodate the long-term research land replacement and growth needs of the College of ACES in a way that fosters interdisciplinary relationships, efficiency of operation, matches program needs to the characteristics of the land and maintains close proximity to the main campus.
2. To accommodate the land and building requirements of other University units on the South Campus and develop land use patterns that consolidate related uses, encourage land conservation, and create useful open space and natural areas for research, recreational and educational purposes.
3. To improve pedestrian and bicycle systems on the South Campus and enhance the landscape quality along pedestrian, bicycle and vehicular corridors.
4. To avoid circumstances where public roads compromise the safety and efficient operation of the South Campus research facilities.
5. To identify land for acquisition and possible sale or exchange.

EXHIBIT 3

South Campus Building and Land Requirements of Other University Units

<u>Unit</u>	<u>Additional Building Gross Sq. Ft. Required</u>	<u>or</u>	<u>Land Required</u>
• Division of Intercollegiate Athletics			
– Tennis Center Expansion	40,000		2 ac
– Tennis Stadium	50,000		4 ac
– Future Expansion Building	85,000		2 ac
– Outdoor Tennis Expansion			2 ac
– Women’s Softball Field			4 ac
– Soccer Practice Field			3 ac
– Soccer Game Field			3 ac
– Parking			5 ac
• Division of Campus Recreation			
– Intramural Fields			7 ac
– Multipurpose Fields			10 ac
– Softball Fields			5 ac
– Informal and Club Play Fields			7 ac
– Service Building	6,000		
• University Arboretum			70 ac
• State Natural History Survey	147,000*		
• State Geologic Survey	98,000*		
• State Water Survey	72,000*		
• College of Veterinary Medicine			
– Basic Sciences Building Expansion	40,000		
– Research Center Expansion			20 ac
• General University Warehouse Consolidation and Expansion	50,000		
• Illini Union Warehouse	18,000		
• Police Training Institute	23,000		
• Technology-Commercialization Facilities	550,000		40 ac
• Future University Support Facilities on Existing Water Survey Site	150,000		18 ac
TOTALS	1,329,000		202 ac

Note: Asterisked items will be accommodated on the Campus north of Kirby-Florida Avenues. The units noted are presently located on the South Campus.

5. SUMMARY OF MASTER PLAN RECOMMENDATIONS

The following recommendations define the primary proposals of the South Campus Master Plan.

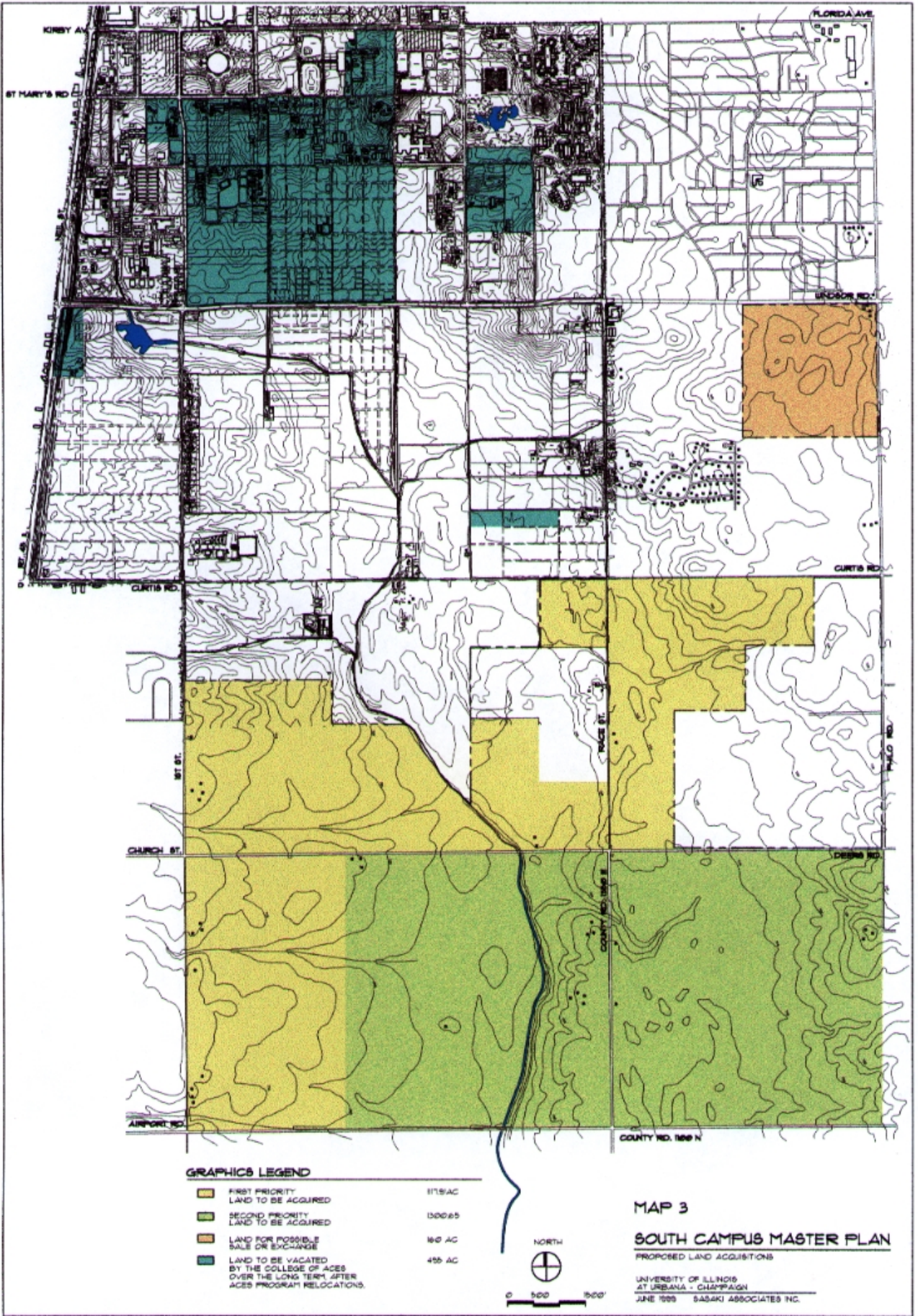
1. It is recommended that approximately 1,118 acres of land immediately south of the campus be acquired to remedy existing deficits, offset the anticipated losses and reassignments of ACES land and to meet the foreseeable growth needs of the College. Furthermore, it is proposed that an additional 1,300 acres be acquired over time to provide a land reserve for future ACES research needs that will likely arise from technological changes, expansion of special crop varieties and other unforeseen developments in agriculture. Map No. 3 shows the land areas for proposed acquisition. It is recommended that the land north of Church Street and land to the immediate east of First Street, south of Church Street be given the highest priority for acquisition. This will allow for the relocation of the Animal Science Centers and will secure land with suitable soil uniformity, soil type and drainage for Crop Science research.

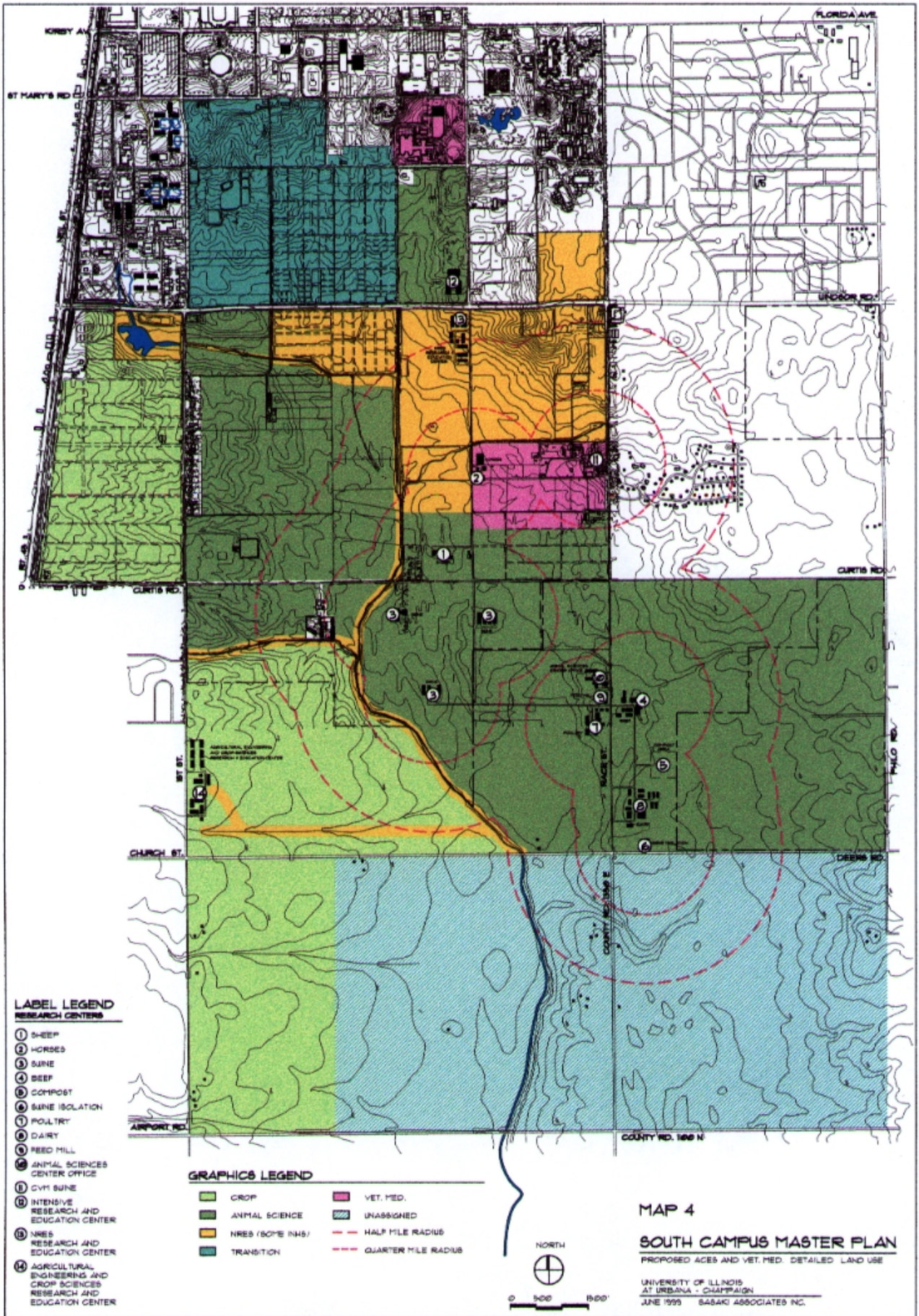
2. It is proposed that the land resources of the three major sections of ACES that require research land be organized to consolidate their operations on land best suited to serve these research programs.. The sections are the Crops Section, the Animal Section, and the Natural Resources-Environmental Science Section (NRES). Map No. 4 shows the proposed assignments of land within the College of ACES. The clustering of Crop, Animal and NRES research will afford operational efficiencies and stimulate interdisciplinary work among the Sections. Appropriate buffers are proposed around the research centers. Crop Science land is determined on the basis of the soil uniformity, productivity and drainage characteristics. The area north of Windsor Road identified on Map No. 4 as “Transitional,” is land that will remain assigned to ACES for the foreseeable future, but which can be vacated by ACES at a future time after the ACES facilities in the transition area are retired or relocated. The facilities that presently occupy the transition area are shown on Map No. 2.

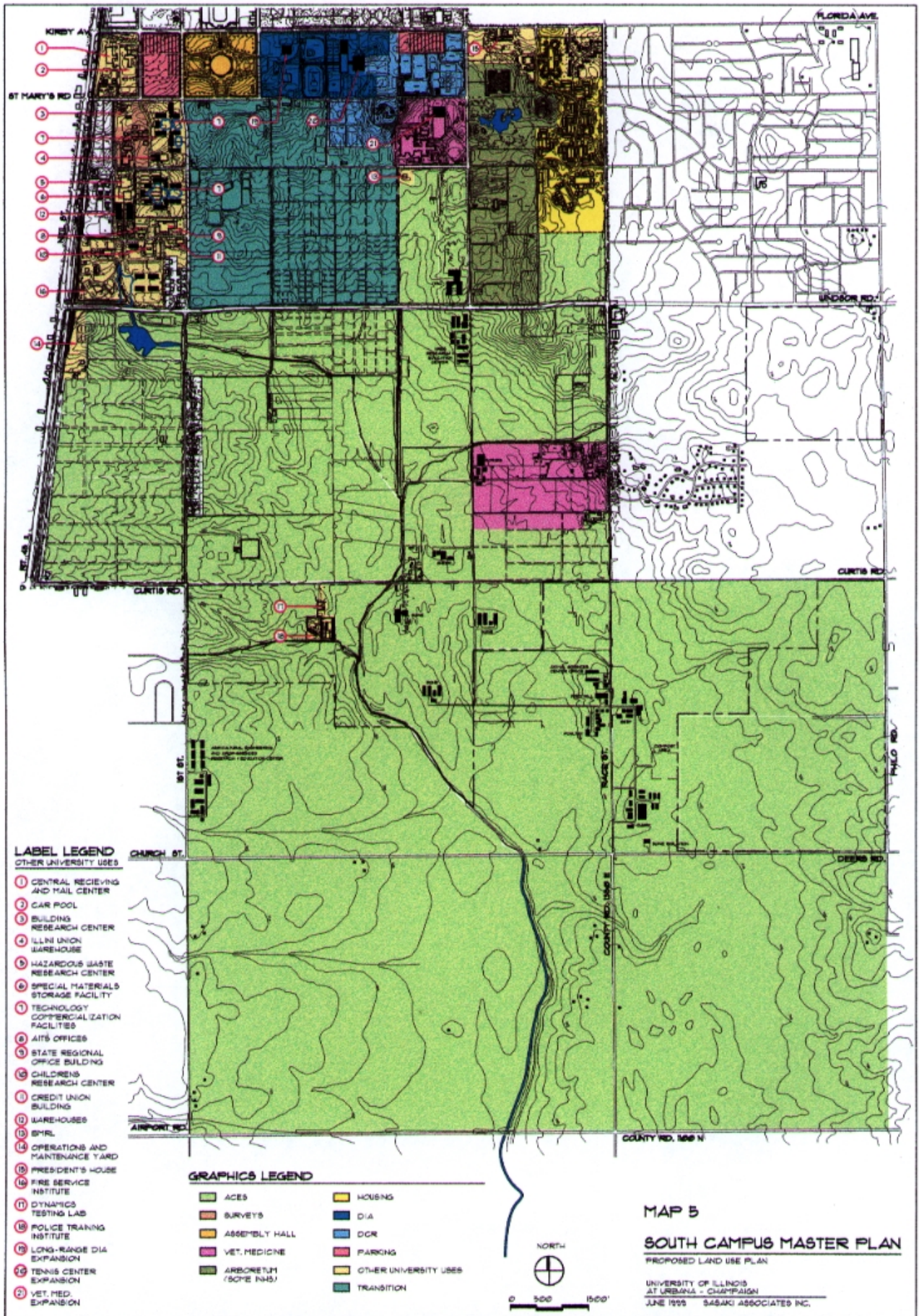
3. It is proposed that non-ACES uses on the South Campus be accommodated and consolidated as shown on Map No. 5 and as described below:
 - a. Locate Division of Intercollegiate Athletics and Campus Recreation facilities along the northern edge of the South Campus area between Fourth Street and Lincoln Avenue, immediately adjacent to existing athletics and recreation fields. In addition to the athletic facilities and play fields proposed, it is recommended that the land around the Round Barns, south of St. Mary’s Road be developed as parkland and dedicated to passive recreation.



It is proposed that recreation and athletic fields be expanded along St. Mary’s Road.







- b. Locate campus support functions and University affiliated Technology Commercialization facilities west of First Street between Kirby-Florida Avenue and Windsor Road. This proposal builds upon the existing use of the area west of First Street that already includes the campus central stores warehouse, the mailing center, the bookstore warehouse, special materials storage facility, waste management research center, state offices, Administrative Information Technology Services offices, the Children's Research Center, Fire Service Institute training facilities and the State Water Survey, Geologic Survey and Illinois Natural History Survey (INHS) offices and laboratories. It is proposed that all of the above existing uses, with the exception of the State Surveys, remain at their present sites. It is proposed that the majority of the State Surveys offices and laboratories would be relocated to new facilities on the Central Campus. The INHS ponds would be relocated to an appropriate site within the proposed land assigned to the National Resources Section in the College of ACES. The Surveys Annex and support buildings west of First Street would remain for Geologic and Natural History Survey use. Clustering University related activities in a dense configuration in the area west of First Street will promote land conservation, efficient infrastructure development and avoid campus sprawl.
 - c. Relocate the Operations and Maintenance bulk storage and staging yard from the Arboretum site on Lincoln Avenue to a site west of First Street at the northwest corner of the Cruse Farm.
 - d. Maintain campus married student housing on its present site along Race Street. As obsolete housing units are razed at the corner of Florida Avenue and Race Street, the land made available should be held as a land reserve for future possible University-related development.
 - e. Maintain the Dynamics Testing Laboratory and the Police Training Institute at their existing location on Curtis Road.
4. It is recommended that the University oppose plans to widen Curtis Road to a four-lane highway between Neil Street and Philo Road and plans to widen First Street south of Windsor Road to a four-lane highway. The expansion of these roads to four lanes would have negative consequences on the operational safety and efficiency of the ACES research facilities. Surface improvements to these two-lane roads will not impair University activities.
5. It is proposed that the Pell Farm be made available for sale or exchange. Sale or exchange consideration would occur at a future time when the research activities presently located there are completely transferred to a new site within the land designated for the NRES section of ACES. It is estimated that the transfer, once started, will take eight to ten years to complete.

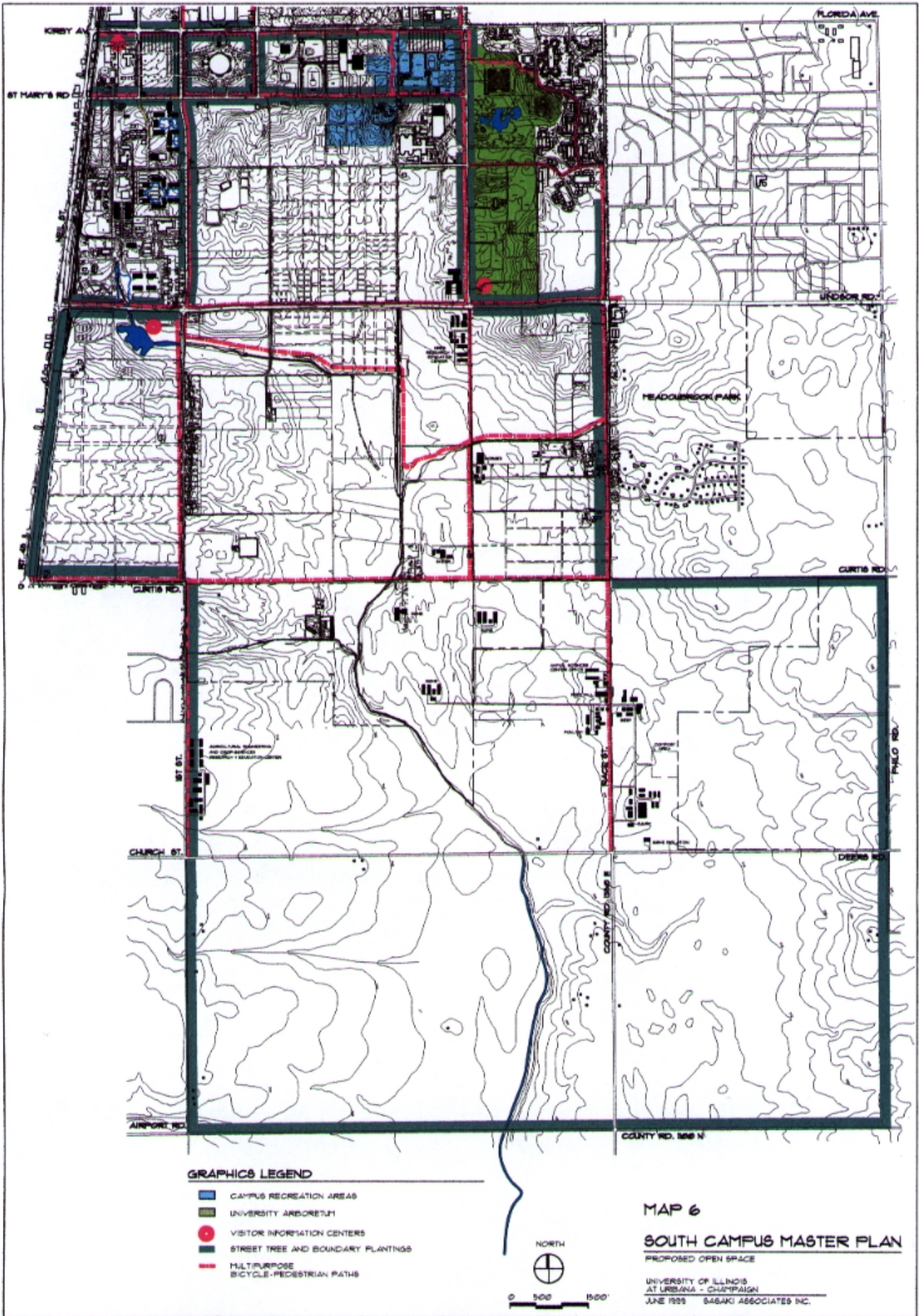
It is recommended that the University retain ownership of the land along the west side of Race Street between Florida Avenue and Windsor Road that is now occupied by married student housing and crop production fields for the dairy. In recent years, there has been private developer interest in this land. It would not be in the University's interest to sell this property because it is relatively close to and contiguous with the main academic campus.



Tree plantings will unify and beautify campus streets and boundaries.

Likewise, it is proposed that the University retain ownership of all the land it presently owns along Windsor Road between Lincoln Avenue and Neil Street. There has also been private developer interest in this land for commercial purposes. It would not be in the University's interest to sell this land because it would fragment University ownership and compromise future flexibility.

6. It is recommended that South Campus open space be developed and enriched through the measures described below and shown on Map No. 6.
 - a. Develop a riparian buffer zone along approximately 7 miles of the Embarras River, McCullough Creek and their tributaries. The buffer zone will provide erosion control benefits, stormwater quality enhancement, habitat improvement, trails for recreational use and significant area for research and education related to natural areas in association with agricultural activities.
 - b. Develop the area surrounding the Windsor Road stormwater detention pond as a native plants education and research area.
 - c. Reaffirm the 1990 Master Plan assignment of approximately 160 acres to the University Arboretum along the east side of Lincoln Avenue.
 - d. Devote the 15-acre area to the immediate west and south of the Round Barns to passive park use. This use will be compatible with the proposed adjacent Campus Recreation and DIA athletic fields and reinforce the character of the St. Mary's Road corridor as an open space area for sports and recreation.
 - e. Extend street tree plantings along First Street, Lincoln Avenue, St. Mary's Road and campus boundaries to unify and beautify the South Campus.
 - f. Expand the existing system of pedestrian walks and bicycle paths to make the South Campus more accessible for recreation, education and research use.



**Prepared for the
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