

**A PRESENTATION OF THE DESIGN FOR THE BIOLOGICAL SCIENCES  
RENOVATION/REPLACEMENT—PHASE 2 PROJECT WILL TAKE PLACE AT  
THE MAY BOARD MEETING**

SUI B-1

**MEMORANDUM**

**To:** Board of Regents

**From:** Board Office

**Subject:** Register of University of Iowa Capital Improvement Business Transactions for Period of March 23, 2000 through April 19, 2000

**Date:** May 8, 2000

**Recommended Action:**

Approve the Register of Capital Improvement Business Transactions for the University of Iowa.

**Executive Summary:**

The University of Iowa requests approval of the design and project description and budget (\$16,840,000) for the **Biological Sciences Renovation/Replacement—Phase 2** project, which will totally reconstruct the interior of the Old Biology building and renovate Biology 1 and 2 to meet the needs of modern science programs for the Department of Biological Sciences. The 2000 General Assembly appropriated \$14,700,000 for the project for FY 2001 – FY 2003; the project was the University's top priority in the Board's FY 2001 capital improvement request. The Governor, who has yet to act on the capital appropriations bill, recommended the project be financed by Academic Building Revenue Bonds.

Representatives of the University and the project architects, Brooks Borg and Skiles, will attend the Board meeting to present the design for the project. A booklet outlining the design is included with the Board's docket materials.

The University requests approval of the selection of Rohrbach Carlson to provide design services for the **Extension of Medical Education and Biomedical Research Facility** project which will construct a new biomedical research building that will form an extension to the Medical Education and Biomedical Research Facility currently under construction. Rohrbach Carlson will provide design development services and construction documents in consultation with Payette Associates, the architect for the Medical Education and Biomedical Research Facility, who will provide programming and schematic design services with participation by Rohrbach Carlson.

The University requests permission to proceed with project planning and the selection of Shive-Hattery to provide design services for the **University Parking Systems—Hawkeye Storage and Commuter Lot Expansion—Phase 3** project which will expand the lot to meet increasing demands for staff and student parking.

The University requests approval of the following project descriptions and budgets:

**Medical Laboratories—Replace Roofs** project (\$456,000) which will replace the materials on approximately half of the roof area of the building which are 17 years old and failing;

**Recreation Building—Replace Flooring** project (\$780,000) which will replace the deteriorated athletic playing surface on the main deck of the facility;

**University Hospitals and Clinics—Colloton Pavilion Elevator Banks F, G and H Lobbies** project (\$342,000) which will construct lobby areas for selected elevators in the Colloton Pavilion;

**Medical Laboratories—Renovate Rooms 2158 and 2160** project (\$283,000) which will upgrade research laboratory space for use by the Department of Pediatrics.

The University requests approval of a revised project budget (\$744,000) and construction contract change order (\$132,395) for the **Mayflower Residence Hall—Replace Roof** project for necessary repairs to the parapet wall and fascia prior to installation of the new roofing materials.

**Background and Analysis:**

**Biological Sciences Renovation/Replacement—Phase 2**

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
<u>Phases 1 and 2</u>			
Permission to Proceed		Oct. 1994	Approved
Program Statement		Nov. 1996	Approved
<u>Phase 1</u>			
Architect/Engineer Agreements			
Full Architectural Services (Brooks Borg and Skiles)	\$ 1,290,500	June 1996	Approved
Site Utility Design Services (Shive-Hattery)	34,102	Oct. 1997	Approved
Schematic Design		Nov. 1996	Approved
Project Description and Total Budget	17,710,000	Nov. 1996	Approved
Construction Contract Awards			
Chilled Water Extension (AAA Mechanical Contractors)	74,190	Dec. 1996	Ratified*
Renovate Annex (Mid-America Construction)	1,466,000	June 1997	Ratified*
Biology Building East (McComas-Lacina Construction)	9,554,390	Oct. 1997	Ratified*
Skywalk Connection (Taylor Ball)	843,000	Jan. 1999	Ratified*
<u>Phase 2</u>			
Architectural Agreements			
Final Schematic Design Services (Brooks Borg and Skiles)	115,000	Sept. 1998	Approved
Detailed Design Services (Brooks Borg and Skiles)	1,084,000	June 1999	Approved
Design		May 2000	Requested
Project Description and Total Budget	16,840,000	May 2000	Requested

\*Approved by Executive Director.

Phase 2 of this project includes the complete interior reconstruction of Old Biology (constructed in 1902), and renovation of the heating, ventilating and air conditioning systems and life safety components of Biology 1 and 2 (constructed in 1965 and 1971, respectively).

Old Biology, originally constructed for the College of Medicine, was one of the first permanent buildings constructed on campus. The building consists of four floors with approximately 30,200 gross square feet of space. The renovation project will remove the top floor of the building (originally constructed to hold animals) to permit construction of a mechanical penthouse. The space on the remaining three floors will be gutted with the exception of the floors, corridor walls, and interior structural elements. The areas will be reconstructed to include 13 research laboratories, support facilities, and faculty offices. The project will also include the installation of a sprinkler system, replacement of windows, and cleaning and waterproofing of the building exterior. The renovation project will result in the equivalent of a new building.

Biology 1 and 2, which consist of approximately 74,300 gross square feet, will be upgraded to provide modern mechanical, electrical, and communications systems, and to address life safety and deferred maintenance deficiencies. Current plans for the project include construction of two teaching laboratories and reconstruction of a ramp connecting the top levels of Old Biology and Biology 1 to meet accessibility requirements (eliminating the need to construct a new elevator). The project will also include the installation of new ceilings and lighting in the building corridors, interior painting, and cleaning and re-caulking of the exterior. In addition, the project will include installation of a new emergency generator to serve the Biology complex.

Since state funding for the Phase 2 project has been authorized (subject to approval by the Governor) and the design is complete, the University requests approval of the design and project budget at this time to allow the project to proceed as soon as possible. The University anticipates commencing construction in the Old Biology Building in early July following vacation of the building and completion of asbestos abatement.

Iowa Code Chapter 304A, Art in State Buildings program, requires the inclusion of fine art elements in a state building or a group of state buildings equal to no less than one-half of one percent of the total building(s) cost. Accordingly, the University has indicated that the funds allocated for Art in State Buildings in the Phase 1 project budget will be increased to provide the required funding (a minimum of \$172,750) for both phases of the project.

Project Budget

Construction	\$ 13,341,000
Design, Inspection and Administration	
Consultants	1,180,500
Design and Construction Services	695,500
Asbestos Abatement	253,000
Art in State Buildings	0 *
Contingencies	<u>1,370,000</u>
 TOTAL	 <u>\$ 16,840,000</u>
Source of Funds:	
State Appropriations	\$ 14,700,000
Gifts and Income from Treasurer's	
Temporary Investments	<u>2,140,000</u>
 TOTAL	 <u>\$ 16,840,000</u>

\* Included in Phase 1 project budget.

Extension of Medical Education and Biomedical Research Facility

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Nov. 1999	Approved
Architectural Selection (Rohrbach Carlson)		May 2000	Requested

This project will provide a facility with up to 110,000 gross square feet of additional biomedical research space to accommodate the current and anticipated growth in the College of Medicine's research activities.

The University is preparing to proceed with development of the building program and design for the extension project. The goal of this project is to replicate as many details as possible from the main facility consistent with the program requirements and the Health Sciences Master Plan.

Design services for the Medical Education and Biomedical Research Facility were provided by Payette Associates of Boston, Massachusetts. The firm was selected based on its previous record in the design of large science buildings. The University wishes to retain the services of an Iowa architectural firm to provide design services for the extension project. The selected firm would consult with Payette Associates to ensure design continuity between the two facilities to the extent possible.

The University received expressions of interest from six firms to provide design services for the project. Four of the firms were selected for interviews with the University Architectural Selection Committee, with representatives from the College of Medicine and the Board Office. One of the four firms canceled its interview due to illness, and the remaining three firms were interviewed on April 5, 2000.

The University requests approval of the selection of Rohrbach Carlson to provide design services for the project. The firm was selected primarily due to the experience on similar projects by the two principals with the firm while employed with another architectural firm. In addition, the firm has provided very satisfactory performance on recent smaller University projects, including projects on the Health Sciences campus.

The University has held discussions with both Rohrbach Carlson and Payette Associates to ensure that design responsibilities could be clearly assigned to each party to accomplish the design intent for the project. As the result of these negotiations, Payette will have primary responsibility for programming and schematic design for the project with participation by Rohrbach Carlson. At the completion of schematic design, the major responsibility for design services will transfer to Rohrbach Carlson for the preparation of design development and construction documents. Payette Associates will consult with Rohrbach Carlson during this stage, as necessary, to maintain design continuity with the Medical Education and Biomedical Research Facility.

The University will return to the Board for approval of the negotiated agreements. The architectural fees will be funded by institutional gifts and earnings.

University Parking Systems—Hawkeye Storage and Commuter Lot Expansion—  
Phase 3

Source of Funds: Parking Services Improvement and Replacement Funds

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		May 2000	Requested
Architectural Selection (Shive-Hattery)		May 2000	Requested

This project will expand the Hawkeye Storage and Commuter Lot which is located on the University's far west campus. The lot serves as a commuter parking facility for employees and students and is served by the Cambus system.

The parking lot currently consists of approximately 7.3 acres with a capacity of 1,000 parking stalls. The University is proposing to expand the lot to the south and southwest to include an additional area of approximately 3.9 acres with 500 additional parking stalls. Maps showing the location of the parking lot and the proposed expansion area are included as Attachments A and B on pages 14 and 15.

The University anticipates that the project will include the construction of the new parking area, installation of new lighting and security cameras, and landscaping. In addition, the University plans, in the future, to construct a small shelter at the site to serve commuters waiting for the bus service. The total estimated project cost is approximately \$1.3 million.

The University also requests approval of the selection of Shive-Hattery to provide design services for the project. The University will return to the Board for approval of the negotiated agreement.

Medical Laboratories—Replace Roofs

Source of Funds: Building Renewal Funds

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 456,000	May 2000	Requested

This project will replace ten separate roof sections, totaling approximately 13,300 square feet, of the Medical Laboratories building. The existing roof areas consist primarily of a rubber membrane roofing material which is 17 years old and failing, having surpassed its life expectancy. Because of the condition of the roof, extensive maintenance is needed and there is a possibility that water may penetrate through the roof and damage the interior.

The project will include removal of the existing rubber membrane roofing material and insulation, and installation of new insulation, flashing, and rubber membrane roofing material in nine of the roof areas. The rubber membrane roofing system is recommended for the Medical Laboratories roof since it is extremely congested with rooftop mechanical equipment which results in various penetrations of the roofing material and an above average level of foot traffic to service the equipment. While the same material will be used for the roof replacement to provide the necessary durability, a different installation method will be utilized which is expected to improve further the maintainability and the longevity of the roof.

The project will also include the application of a fluid coating to a 2,500 square feet metal roof area over the animal care offices. These operations are housed in a metal building on the roof which is surrounded by one of the roof areas being replaced. The metal roof area, which is 30 years old, will be treated with the coating to seal exposed fasteners and metal panel lap joints, and to restore the metal material which contains some surface rust. This treatment will help to prolong the life of the roof.

In addition, the project will include restoration of the masonry parapet wall, tuckpointing and sealing.

Permission to proceed with the project was not required since the project budget does not exceed \$1,000,000. Design services for the project will be provided by Benchmark, Inc.

Project Budget

Construction	\$ 372,000
Design, Inspection and Administration Consultants	24,730
Design and Construction Services	21,570
Contingency	<u>37,700</u>
TOTAL	<u>\$ 456,000</u>

Recreation Building—Replace Flooring

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 780,000	May 2000	Requested

This flooring area, which is used for intercollegiate competition in tennis and indoor track, consists of approximately 65,000 square feet with three layers of flooring material. This material includes the original flooring which was installed with the building construction in 1969, a second layer that was installed in the 1970s, and a third layer which was added in 1988. The flooring suffers from moisture condensation and has deteriorated, which creates a hazardous condition.

The project will include: removal of all layers of existing flooring from the concrete slab; transporting and disposal of all mercury-containing flooring materials in accordance with all local, state, and federal regulations (to be coordinated by the University's Health Protection Office); repair, leveling and preparation of the existing concrete slab; installation of the new flooring; and striping of the new floor to support athletic activities. Work is scheduled for completion prior to August 15, 2000.

Permission to proceed with the project was not required since the project budget does not exceed \$1,000,000.

Project Budget

Construction	\$ 680,000
Design, Inspection and Administration	32,000
Contingency	<u>68,000</u>
TOTAL	<u>\$ 780,000</u>
Source of Funds:	
Recreation Building Surplus Funds	\$ 600,000
Department of Athletics Revenues	<u>180,000</u>
TOTAL	<u>\$ 780,000</u>

University Hospitals and Clinics—Colloton Pavilion Elevator Banks F, G and H Lobbies

Source of Funds: University Hospitals Building Usage Funds

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 342,000	May 2000	Requested

This project will construct lobby areas for Colloton Pavilion elevator banks F, G, and H. The construction of the lobbies is needed to meet code requirements for smoke control.

Permission to proceed with the project was not required since the project budget does not exceed \$1,000,000.

Project Budget

Construction	\$ 273,600
Architectural/Engineering Support	27,400
Planning and Supervision	13,600
Contingency	<u>27,400</u>
TOTAL	<u>\$ 342,000</u>

Medical Laboratories—Renovate Rooms 2158 and 2160  
Source of Funds: College of Medicine Gifts and Earnings

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 283,000	May 2000	Requested

This project will modernize approximately 1,400 square feet of space in the Medical Laboratories building. The project will include demolition; installation of new casework; widening of selected doorways; electrical improvements; installation of new ceiling and flooring; and painting.

Permission to proceed with the project was not required since the project budget does not exceed \$1,000,000.

Project Budget

Construction	\$ 243,900
Design, Inspection and Administration	
Consultants	5,000
Design and Construction Services	9,500
Contingency	<u>24,600</u>
TOTAL	<u>\$ 283,000</u>

Mayflower Residence Hall—Replace Roof

Source of Funds: Dormitory Improvement Reserves

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 611,000	April 1999	Approved
Engineering Agreement (Benchmark)	28,810	April 1999	Approved
Construction Contract Award (D. C. Taylor)	351,414	July 1999	Ratified*
Revised Project Budget	744,000	May 2000	Requested
Construction Change Order #1	132,395	May 2000	Requested

\* Approved by Executive Director.

The University is proceeding with the project to replace the 40,000 square feet roof area of the Mayflower Residence Hall, which includes removal of the original roofing system installed in 1966 and an overlay installed more than 15 years ago. These roofing components had reached the end of their useful lives.

As the roof replacement project progressed, extensive deterioration of the parapet wall and fascia was discovered along the roof's perimeter. This damage is the result of moisture penetration and was not evident until the roofing materials were removed. This condition must be repaired as part of the roof replacement project to ensure proper installation of the new roofing material. Delaying the repairs until the roof replacement is complete would result in a high risk of damage to the new roofing system and would require replacement of additional roofing materials.

The University requests approval of Change Order #1 in the amount of \$132,395 to the construction contract with D. C. Taylor for the additional work. D. C. Taylor will subcontract with Taylor Ball for the repairs. Taylor Ball was selected based on quotations received from four contractors to complete the work.

The change order requires approval of a revised project budget in the amount of \$744,000, an increase of \$133,000. The additional funds for the revised budget will be provided by Dormitory Improvement Reserves.

Project Budget

	<u>Initial Budget April 1999</u>	<u>Revised Budget May 2000</u>
Construction	\$ 482,150	\$ 615,150
Design, Inspection and Administration Consultants	36,200	36,200
Design and Construction Services	20,350	20,350
Contingency	<u>72,300</u>	<u>72,300</u>
TOTAL	<u>\$ 611,000</u>	<u>\$ 744,000</u>

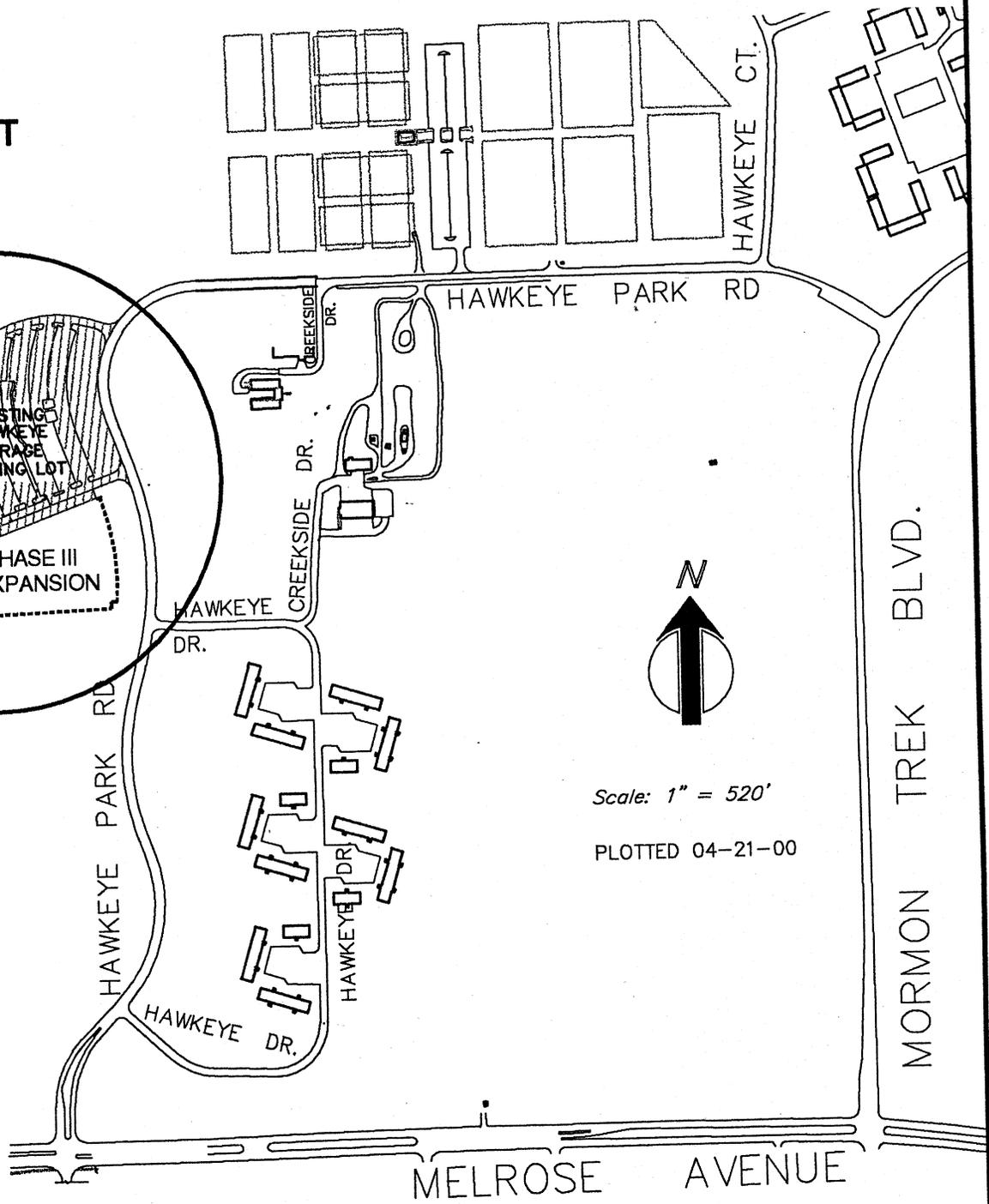
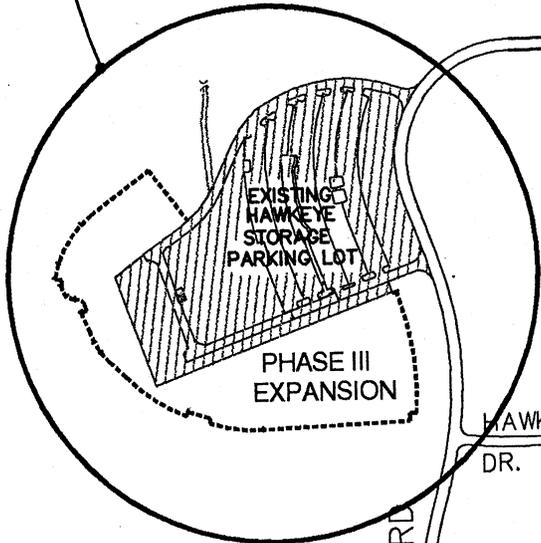
\*\*\*\*\*

Included in the University's capital register for Board ratification are project budgets under \$250,000, construction contracts awarded by the Executive Director, the acceptance of completed construction contracts, and final reports. These items are listed in the register prepared by the University and are included in the Regent Exhibit Book.

  
\_\_\_\_\_  
Sheila Lodge

Approved:   
\_\_\_\_\_  
Frank J. Stork

PROJECT  
SITE



Scale: 1" = 520'

PLOTTED 04-21-00

SHEET 1 OF 2

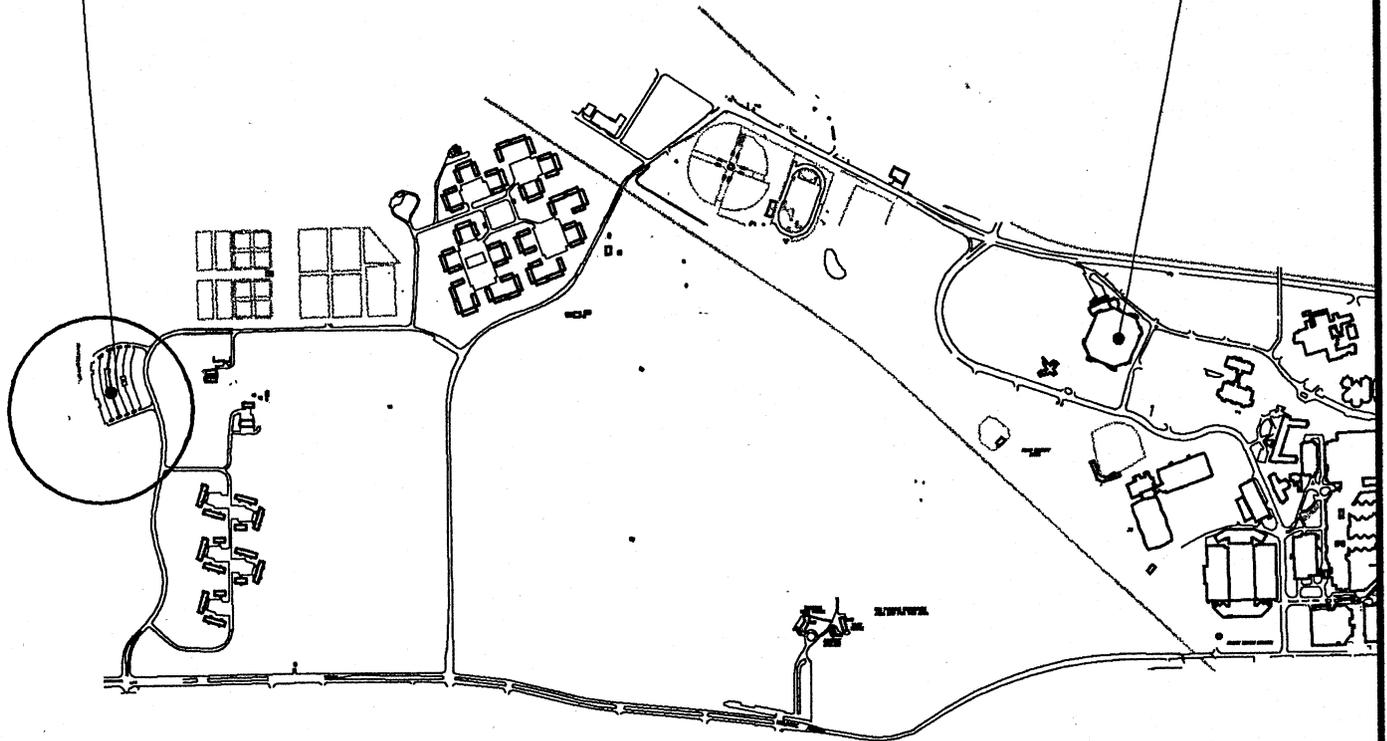
hawk-storage-pkg



THE UNIVERSITY OF IOWA  
**UNIVERSITY PARKING SYSTEMS**  
**HAWKEYE STORAGE AND COMMUTER LOT EXPANSION**  
**PHASE III**

Hawkeye  
Storage  
Parking

Carver  
Hawkeye  
Arena



*hawk-storage-pkg*

SHEET 2 OF 2



THE UNIVERSITY OF IOWA  
UNIVERSITY PARKING SYSTEMS  
HAWKEYE STORAGE AND COMMUTER LOT EXPANSION  
PHASE III