

MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Register of University of Iowa Capital Improvement Business Transactions for Period of December 17, 2004, Through February 3, 2005

Date: March 2, 2005

1. Take the following actions for the major capital projects, as defined by Board policy.
 - a. **East Campus Recreation Center/Field House Renovation** project (see pages 3 through 6).

Approve the selection of OPN Architects, Cedar Rapids, Iowa, to provide Phase 1 master planning services to study alternatives for replacing facilities that will be razed to permit construction of the Recreation Center on the selected site.
 - b. **University Hospitals and Clinics—Magnetic Resonance Imaging (MRI) Center Renovation and System Installation—Phase 2** project (see pages 7 through 11).
 1. Acknowledge receipt of the University's final submission of information to address the Board's capital project evaluation criteria (pages 10 and 11);
 2. Accept the Board Office recommendation that the project meets the necessary criteria for Board consideration; and
 3. Approve the schematic design and project description and budget (\$3,750,000) with the understanding that this approval will constitute final Board approval and authorization to proceed with construction.
 2. Approve the revised project budget (\$2,826,000), construction contract award to McComas-Lacina Construction (\$2,360,000), and deduct Change Order #1 to the construction contract (\$311,200), for the **Dey House Addition—Glenn Schaeffer Library** project (see pages 12 through 14).
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Executive Summary:

Requested Approvals

Approval of the selection of OPN Architects, Cedar Rapids, Iowa, to provide Phase 1 master planning services to study alternatives for replacing the facilities to be razed for the Recreation Center portion of the **East Campus Recreation Center/Field House Renovation** project, which would construct an indoor recreation facility and renovate Field House recreation facilities to improve the University's recreational offerings for students, faculty and staff (see page 3).

Schematic design and project description and budget (\$3,750,000) for the **University Hospitals and Clinics—Magnetic Resonance Imaging (MRI) Center Renovation and Systems Installation—Phase 2** project which would complete the renovation of the Magnetic Resonance Imaging (MRI) Center to accommodate the installation of state-of-the-art MRI systems, improve the function of the Center's support facilities, and upgrade building systems (see page 7).

- The schematic drawings are included as Attachments C through E to this memorandum.

Revised project budget (\$2,826,000), construction contract award to McComas-Lacina Construction (\$2,360,000), and deduct Change Order #1 to the construction contract (\$311,200), for the **Dey House Addition—Glenn Schaeffer Library** project which would construct a free-standing, two-story building immediately to the west of the Dey House to provide additional space for The Iowa Writers' Workshop (see page 12).

- Following two bid openings for the construction contract, each of which resulted in the receipt of bids which significantly exceeded the consultant's estimate, the University reviewed in detail the project.
- This review resulted in a revised exterior design which was presented to the Board at its February 2005 meeting, along with the associated revised project budget, construction contract award, and deduct construction change order.
- Based on its review of the revised exterior design and the associated costs, the Board asked the University to pursue additional fund raising options and design modifications to restore, as much as possible, the original exterior elements to the building.
- The revised project budget, construction contract award, and deduct change order presented for Board approval at the March meeting would allow the project to proceed with a modified exterior design generally consistent with the original building design.
- The location of the Dey House is indicated on Attachment F; elevations showing the original exterior design, the February 2005 proposed design, and the current design, are included as Attachment G.

- The exterior changes from the original building design to the March 2005 design would be limited to a simplified wall design and the substitution of aluminum windows for wood clad windows.
- The required approvals for the project were received prior to the Board's adoption of the policy for major capital projects in June 2003; therefore, the Board's capital project evaluation criteria do not apply to this project.

Background and Analysis:

East Campus Recreation Center/Field House Renovation

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Initial Review and Consideration of Capital Project Evaluation Criteria		Sept. 2004	Received Report
Permission to Proceed		Sept. 2004	Approved
<u>Phase 1—Replacement Facilities</u>			
Architectural Selection—Master Planning Services (OPN Architects, Cedar Rapids, IA)		March 2005	Requested

Background

The amount of the University's indoor recreation space is significantly below the national and regional averages. The vast majority of the University's recreation space is currently located in the 74 year old Field House; these facilities do not correspond with the current student demand for recreational services.

The Field House pool, which is the only pool on campus, is original to the building's construction and is deteriorating; the pool requires continual maintenance and has a limited life expectancy.

The University wishes to increase the availability of campus recreation facilities so that the amount of space is more consistent with the space of its peer institutions. Additional facilities would improve students' quality of life, as well as student recruitment and retention.

Project Scope

Consistent with the Master Plan for Student Services presented to the Board in September 2004, the University proposes to construct an east campus Recreation Center, and renovate portions of the Field House existing recreation facilities. The facilities would serve the recreational and wellness needs of the student population, as well as University faculty and staff.

As presented to the Board in September 2004 when it granted permission to proceed, the project would include the following components:

- Construction of an east campus, multi-level indoor recreation facility of approximately 150,000 gross square feet which would provide aquatic and fitness activities to complement the existing activities at the Field House and at other campus recreation locations;
- Partial renovation of the Field House;
- Construction of a parking area to serve the new facility and to meet campus parking needs (to be funded as a separate project); and
- Relocation of existing functions/units at the proposed project site.

The east campus Recreation Center would emphasize “drop-in” fitness activities such as aquatics and individual fitness and wellness programs.

- The aquatics function would replace the deteriorating Field House pool, which would be decommissioned.

The Field House would continue to focus on court sports, team sports and intramural activities.

- The University plans to evaluate the conversion of the Field House pool area for improved fitness and wellness functions.

Recreation
Center Proposed
Site

Based on a site feasibility study, the University identified a proposed east campus site for the Recreation Center at the southwest corner of Burlington and Madison Streets, directly south of the Library. (A map identifying this location is included as Attachment A.) The feasibility study concluded that this site would best meet the objectives of the proposed Recreation Center and would accommodate future expansion of the facility.

- The Recreation Center, and a parking area for 140 vehicles, would be located in the block between Burlington and Court Streets.
- The University anticipates that the new East Campus Chilled Water Plant, an 8,000 ton chilled water plant to be located adjacent to the University Power Plant, would also be constructed at this site.
 - The Board authorized permission to proceed with project planning for the East Campus Chilled Water Plant project in December 2004; the University anticipates beginning construction in late 2005.
- An additional parking area for 175 vehicles is proposed for the block immediately to the south of Court Street.

Project Site/
Master Plan
Relocation Study

A number of University structures and a parking lot are currently located at the proposed site as identified on Attachment A. The removal of the existing structures and parking lot from the site, and the relocation of these functions is necessary to accommodate construction of the East Campus Recreation Center, the East Campus Chilled Water Plant, and parking areas at this location.

The University wishes to undertake a master planning study to identify alternatives for the relocation of these functions and the associated costs.

The functions to be relocated from the site include Facilities Management shops, service and storage buildings, and the Department of Public Safety offices.

- Photographs of the structures currently located at the site are included as Attachment B.

The Facilities Management structures are nearing the end of their useful lives; the University reports that these structures will need to be replaced in the foreseeable future, regardless of the construction of the proposed Recreation Center project.

- The Facilities Management structures total approximately 105,000 gross square feet.

The Department of Public Safety was relocated to trailers more than seven years ago when its previous facility was razed to accommodate construction of the College of Engineering's Seamans Center; the trailers were intended to provide only a temporary location.

- The University reports that the trailers are completely inadequate to accommodate the critical security functions of the Department of Public Safety.
- The Public Safety offices total approximately 5,000 gross square feet.

The site also includes Parking Lot 27 which provides parking for 84 vehicles.

The master planning study would identify relocation alternatives for these functions and would focus, but not exclusively, on relocating facilities to the south edge of campus in the vicinity of the University Services Building. The relocation study area is identified on Attachment A.

The plan would identify opportunities for the consolidation of facilities which would produce improved operational and management efficiencies.

Relocation alternatives to be evaluated would include the consolidation of functions within existing University facilities; leasing or purchasing additional space; and construction of replacement space.

The University will return to the Board with the recommendations of the completed master planning study at a future meeting.

Anticipated
Costs/Funding

Based upon preliminary square footage estimates and historical cost data, the University's preliminary cost estimate for both the construction of the east campus Recreation Center and the renovation of the Field House is between \$50 million and \$55 million; the University anticipates this amount would also include relocation costs for the existing units at the site.

- The relocation costs, including the cost estimates for leasing, purchasing or constructing new space, will be further refined during the master planning process.

The University anticipates funding construction of the Recreation Center and renovation of the Field House with the sale of revenue bonds to be supported by student fees, as well as non-student user fees.

At this time, the University proposes funding the construction of the parking areas with parking system improvement funds.

The University anticipates funding relocation costs from several sources, including the East Campus Recreation Center project budget and other University sources that support facilities services and public safety.

- The specific funding proportions and amounts would be determined as part of the master planning study.

Master Planning
Agreement

The University requests approval of the selection of OPN Architects, Cedar Rapids, Iowa, to undertake the master planning study for the relocation.

The firm successfully planned and designed the existing University Services Building (1999) and provided an analysis of future expansion options for the related Facilities Management operations in the area.

The University believes the firm's knowledge of the project elements and challenges would ensure an expedient master planning process that would contribute to the timely commencement of construction of the East Campus Recreation Center.

**University Hospitals and Clinics—Magnetic Resonance Imaging (MRI) Center
Renovation and Systems Installation—Phase 2**

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
<u>Magnetic Resonance Imaging (MRI) Systems Installation (Phase 1)</u>			
Master Plan Study			
Feasibility Study Agreement (HDR, Architects, Des Moines, IA)	\$ 99,310	Nov. 2002	Approved
Permission to Proceed with Project Planning Architectural Agreement—Design Development through Construction Phase Services (HDR, Architects, Des Moines, IA)	92,530	June 2003	Approved
Final Review and Consideration of Capital Project Evaluation Criteria		Oct. 2003	Approved
Program Statement		Oct. 2003	Approved
Schematic Design		Oct. 2003	Approved
Project Description and Total Budget	2,131,000	Oct. 2003	Approved
Construction Contract Award (Knutson Construction Services Midwest)	934,200	Feb. 2004	Ratified
<u>Magnetic Resonance Imaging (MRI) Center Renovation and Systems Installation—Phase 2</u>			
Initial Review and Consideration of Capital Project Evaluation Criteria		Sept. 2004	Received Report
Permission to Proceed with Project Planning Architectural Agreement (Durrant Architects, Dubuque, IA, in association with PDC Midwest, Hartland, WI)	246,000	Dec. 2004	Approved
Program Statement		Feb. 2005	Not Required*
Final Review and Consideration of Capital Project Evaluation Criteria		March 2005	Requested
Schematic Design		March 2005	Requested
Project Description and Total Budget	3,750,000	March 2005	Requested

* Approved by Executive Director in accordance with Board procedures.

Background

In recent years, the patient volume of the UIHC Magnetic Resonance Imaging (MRI) Center, located in the lower level of Colloton Pavilion, has exceeded its capacity.

- Over the past two decades, the growth in patient volume exceeded 700 percent, which created significant scheduling backlogs and delayed the receipt of diagnostic information for patient treatment, and disrupted research studies.

- The age of the MRI scanning equipment has also hampered the efficiency of the MRI Center.

The MRI Center previously housed three MRI units. UIHC has completed the Phase 1 renovation project of the Center which addressed approximately 6,000 gross square feet at a cost of \$2.1 million.

- This phase replaced one of the three existing MRI units (installed in 1993), and provided a fourth unit for the Center.
- With completion of this phase, the MRI Center can now better accommodate patient demand, including shortened patient wait times; however, the MRI Center is in need of expansion capacity to meet future demand.

Phase 2

In September 2004, the University received permission to proceed with the Phase 2 renovation project which would remodel the remaining 9,000 gross square feet of space in the MRI Center at an estimated cost of \$3.8 million, excluding equipment costs.

- This phase would replace the two remaining older MRI units (one was upgraded in 1995 and one installed in 1998), and provide a fifth unit for the Center.

The project would also provide improvements to the patient and support facilities to enhance the overall functionality of the Center.

Program Statement

The program statement for the **MRI Center Renovation and Systems Installation—Phase 2** project, which was approved by the Executive Director in accordance with Board policies adopted at its November 2004 meeting, includes three MRI procedure rooms and associated computer and control rooms; patient waiting, reception, dressing and holding areas; physician reading rooms and offices; and support space for the Center.

Schematic Design

The schematic drawings are included as Attachments C through E to this memorandum.

The following are highlights of the interior design.

- Entrance to the MRI Center would occur from an east interior corridor; a reception desk, waiting room and restroom would be located at this entrance area.
- A unisex patient dressing room, with restroom, would be located immediately adjacent to the reception/waiting area along the Center's north/south corridor; two patient holding areas would be located to the north and south along the corridor.

- Two MRI scanning rooms (one existing and one new), and the associated equipment rooms and control areas, would be located along the west wall and would be accessible from the north/south corridor.
- Another existing MRI scanning room, with equipment room and control area, would remain in the northern portion of the space; the three new physician offices would also be located in this area.
- The two reading rooms would be located along the east wall, north of the waiting area; a secured entrance area would serve the corridor located between the two reading rooms.

The Phase 1 and Phase 2 project areas would be connected by the north/south corridor.

Square Footage Table

The square footages in the schematic design of Phase 2, which are identical to those presented with the building program, are outlined below.

Detailed Building Program and Schematic Design

MRI Procedure Rooms (3)	1,795	
Computer/Equipment Rooms (3)	470	
Control Rooms (3)	440	
Outpatient Waiting, Reception, Dressing and Toilet Areas	1,245	
Holding Areas (2)	225	
Physician Reading Rooms (2)	1,025	
Offices (3)	565	
Housekeeping, Storage, Utility Closets	<u>525</u>	
Total Net Assignable Space	6,290	nsf
Anticipated Gross Square Feet	9,070	gsf
Anticipated Net-to-Gross Ratio = 69 percent		

Schedule

The University plans to begin construction in the spring of 2005, with completion anticipated in the summer of 2006.

Funding

University Hospitals Building Usage Funds.

Project Budget

Construction	\$ 3,000,000
Professional Fees	300,000
Planning and Supervision	150,000
Contingencies	<u>300,000</u>
TOTAL	<u>\$ 3,750,000</u>

Evaluation Criteria	Since the project meets the Board's definition of a major capital project, the University has provided the following information in response to the Board's evaluation criteria.
Institutional Mission/Strategic Plan	Completion of this project will provide the Magnetic Resonance Imaging Center with the facilities and imaging technology required for it to meet its mission of providing state-of-the-art diagnostic services to all patients cared for within the UIHC. The UIHC's educational and research missions will also be enhanced by making available the most up-to-date imaging technology for training radiology residents and fellows in the application and use of MRI and to provide physicians and research scientists in the disciplines of Radiology, Oncology, Radiation Oncology, Otolaryngology, Thoracic Surgery, Psychiatry and Neurology with the imaging technology required for them to remain competitive in obtaining federal funding for clinical research studies. The project also supports several of the UIHC's current Strategic Plan goals and objectives, most notably by differentiating the UIHC clinically, by enabling the UIHC to excel in all aspects of service to our patients and their families and referring providers, by facilitating opportunities for operational and clinical efficiencies, and by making possible incremental growth in service volume and revenue, and by implementing or enhancing interdisciplinary interaction and collaboration to enrich the patient care, teaching and research missions of the UIHC.
Other Alternatives Explored	The project is required to provide the necessary space and facilities to accommodate the growth in MRI services. The project does not involve expansion of the Center's space, only reconfiguring it. The MRI Center was opened 20 years ago and has not undergone any significant renovation for over 12 years. Over the past two decades the majority of MRI Center diagnostic services have shifted from inpatient procedures to those now provided outpatients, although the MRI Center was not designed to accommodate a large outpatient mix or to efficiently handle the large volume of patients currently requiring MRI scans. In FY 2004 over 13,500 MRI procedures were performed at the UIHC. This represented a nearly 17% increase over the previous year. Most market projections predict requests for MRI services will increase by a minimum of 5% per year for the next five years. To help meet the increasing number of requests for MRI examinations a technologically outmoded unit that was utilized for over ten years has been replaced and a fourth unit became operational in November, 2004. This Phase II project will involve replacing one of the two remaining MRI scanners and installing a new MRI system. This work will be undertaken in a phased manner in order to keep the MRI Center in operation during construction. There are no viable alternatives available to accommodate the growth in services and to make MRI imaging services available to our patients and their physicians. Without upgrades to the space and equipment, it will not be possible for the UIHC to accommodate the clinical and research demand for this technology.

Impact on Other Facilities and Square Footage	This project will not result in the abandonment, transfer or demolition of existing facilities.
Financial Resources for Construction Project	The project will be funded through University Hospitals Building Usage Funds acquired from depreciation allowances of third parties underwriting the cost of patient care plus hospital net earnings from paying patients. No state capital appropriated dollars will be involved. The ten-year internal rate of return for this project is 58% with a payback period of 1.8 years.
Financial Resources for Operations and Maintenance	The source of funds to cover the associated operating and maintenance costs will be hospital-operating revenues derived from providing patient care services.
External Forces	The ability to perform state-of-the-art MRI procedures is critical in meeting the complex diagnostic needs of our patients and their referring physicians. As noted previously, the growth in clinical demand for these services is expected to continue. The new and faster MRI systems will be of major import in permitting the MRI Center to accommodate this growth. In addition, many researchers require the latest MRI technology to conduct their research and remain competitive for NIH research funding. This renovation project will ensure that the latest MRI technology will be available to them.

Dey House Addition—Glenn Schaeffer Library

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		June 2001	Approved
Architectural Selection (OPN Architects, Cedar Rapids, IA)		Nov. 2001	Approved
Architectural Agreement (OPN Architects)	\$ 144,000	April 2002	Approved
Program Statement		May 2002	Approved
Schematic Design		July 2002	Approved
Project Description and Total Budget	2,466,000	May 2003	Approved
Construction Contract Award	Reject Bids	Oct. 2003	Ratified
Revised Project Budget	2,691,000	Feb. 2005	Denied
Construction Contract Award (McComas-Lacina Construction)	2,360,000	Feb. 2005	Denied
Construction Change Order #1 (McComas-Lacina Construction)	- 390,000	Feb. 2005	Denied
Revised Project Budget	2,826,000	March 2005	Requested
Construction Contract Award (McComas-Lacina Construction)	2,360,000	March 2005	Requested
Construction Change Order #1 (McComas-Lacina Construction)	- 311,200	March 2005	Requested

Background

This project would construct an addition to the Dey House, an 1857 residential structure with historic significance, which houses the University of Iowa Program in Creative Writing (The Iowa Writers' Workshop).

- The Dey House is located on the east campus to the southwest of the President's Residence. (A map is included as Attachment F.)

The addition would provide expanded faculty office space to accommodate the Workshop's instructional sessions, a library area to house collections produced by Workshop graduates, a reading room (student commons) for public readings by Workshop students and guest authors, two classrooms, and eight graduate student offices.

Bids were first received for the project in July 2003; all of the bids exceeded the consultant's estimate by more than 25 percent and were rejected.

In an effort to reduce the project scope, the University undertook value engineering analyses prior to the second bid opening which was held in May 2004. The bids received exceeded the consultant's estimate by at least 30 percent, primarily due to increased steel prices.

Following the second bid opening, the University reviewed the construction contract with the low bidder, McComas-Lacina Construction Company, and OPN Architects, architect for the project, in an effort to further reduce the project scope without seriously jeopardizing the University's programmatic, functional and operational needs.

This resulted in changes to the building exterior consisting of a simplified design for the roof, windows and walls, a reduction in the number of window areas, and the substitution of aluminum windows for wood clad windows.

This revised exterior design was presented to the Board at the February 2005 meeting, along with the associated revised project budget, construction contract award, and construction change order.

Based on its review of the revised exterior design and the associated costs, the Board asked the University to pursue additional fund raising options and design modifications in an effort to restore the original exterior elements to the building.

March Requested
Approvals

The University now requests approval of a revised project budget, award of the construction contract, and approval of a deduct change order to the construction contract, to allow the project to proceed with a modified exterior design generally consistent with the original design approved in July 2002.

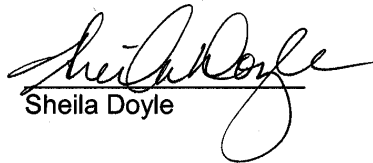
- Elevations showing the original exterior design, the February 2005 proposed design, and the current design, are included as Attachment G.
- The exterior changes from the original building design would be limited to a simplified wall design and the substitution of aluminum windows for wood clad windows.
 - The only substantive change to the building interior would be the removal of a stairway designed only as a convenience.
- The revised budget of \$2,826,000 is an increase of \$360,000 over the initial project budget approved in May 2003. (The revised budget is an increase of \$135,000 over the budget presented with the February 2005 design.)
 - Any portion of the additional \$135,000 cost that cannot be funded with private gifts would be paid from Income from Treasurer's Temporary Investments and/or Building Renewal Funds.
- The construction contract award to the low bidder, McComas-Lacina Construction, would be for the Base Bid of \$2,360,000.
- The deduct change order of \$311,200 would reduce the construction contract to \$2,048,800, which is within the revised construction budget.

Project Schedule The University plans to begin construction in the spring of 2005 for completion in the spring of 2006.

Funding Gifts to the University, Income from Treasurer's Temporary Investments, and/or Building Renewal Funds.

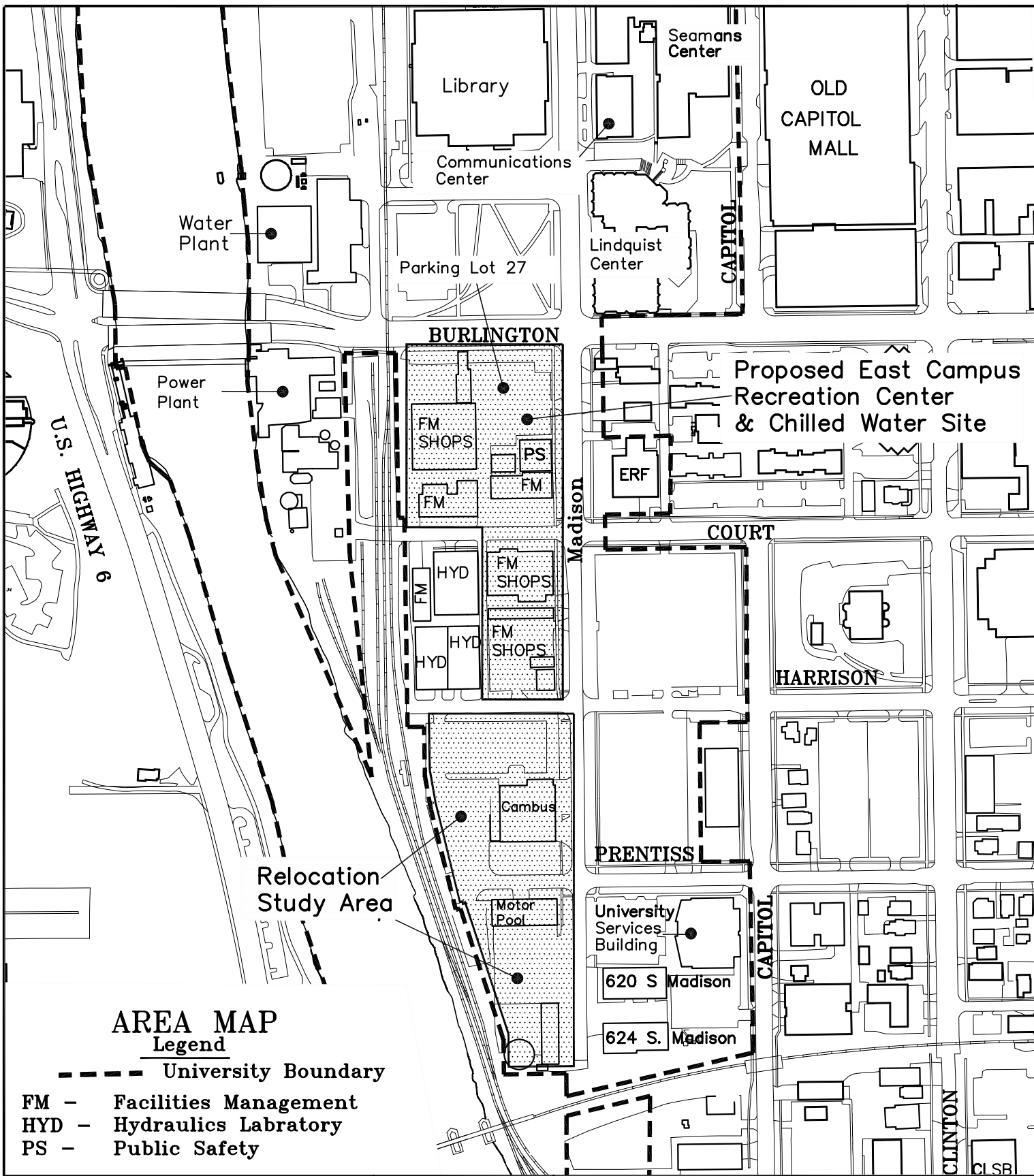
Project Budget

	Initial Budget <u>May 2003</u>	Revised Budget <u>March 2005</u>
Construction	\$ 1,934,750	\$ 2,211,800
Design, Inspection and Administration		
Consultants	195,035	250,100
Design and Construction Services	129,500	224,000
Art Work	12,150	12,400
Contingency	<u>194,565</u>	<u>127,700</u>
TOTAL	<u>\$ 2,466,000</u>	<u>\$ 2,826,000</u>


Sheila Doyle

Approved: 
Gregory S. Nichols

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AREA MAP
Legend

--- University Boundary

- FM - Facilities Management
- HYD - Hydraulics Laboratory
- PS - Public Safety



THE UNIVERSITY OF IOWA

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Plotted: February 16, 2005



AGENDA ITEM 19
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Scale: 1" = 300'

East Campus Recreation Center
Phase 1

Replacement Facilities Study

East Campus Recreation Center Phase 1 - Replacement Facilities

Photos of facilities to be displaced

Public Safety Trailer



View from Madison St.



View of Main Entry

Facilities Management Shops and Offices



Campus Shops Bldg.



Equipment Services



Court St. Building (Util.)



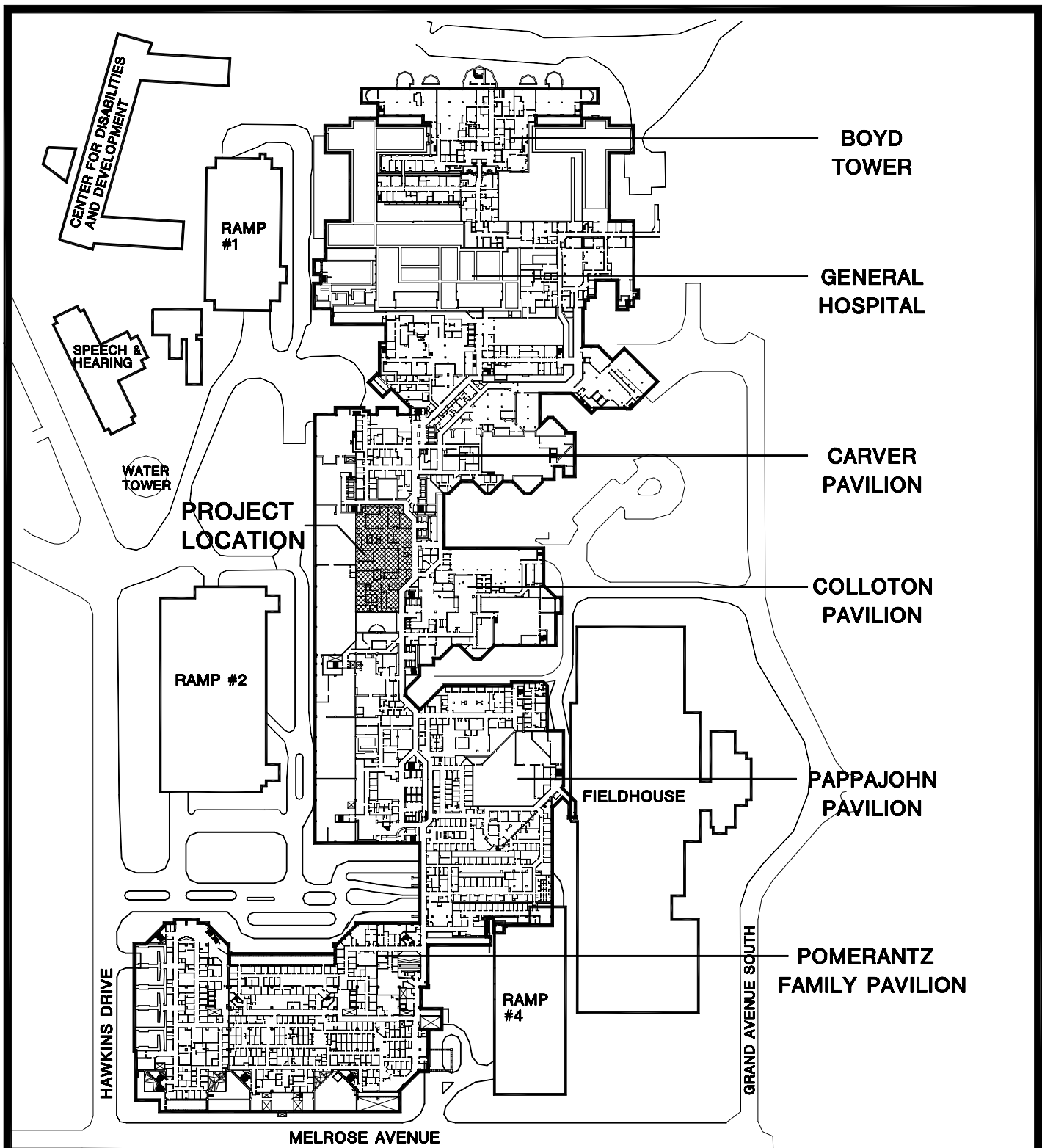
Electrical Shops



Trades Shops



Shops Yard/Old Laundry

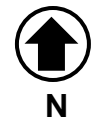


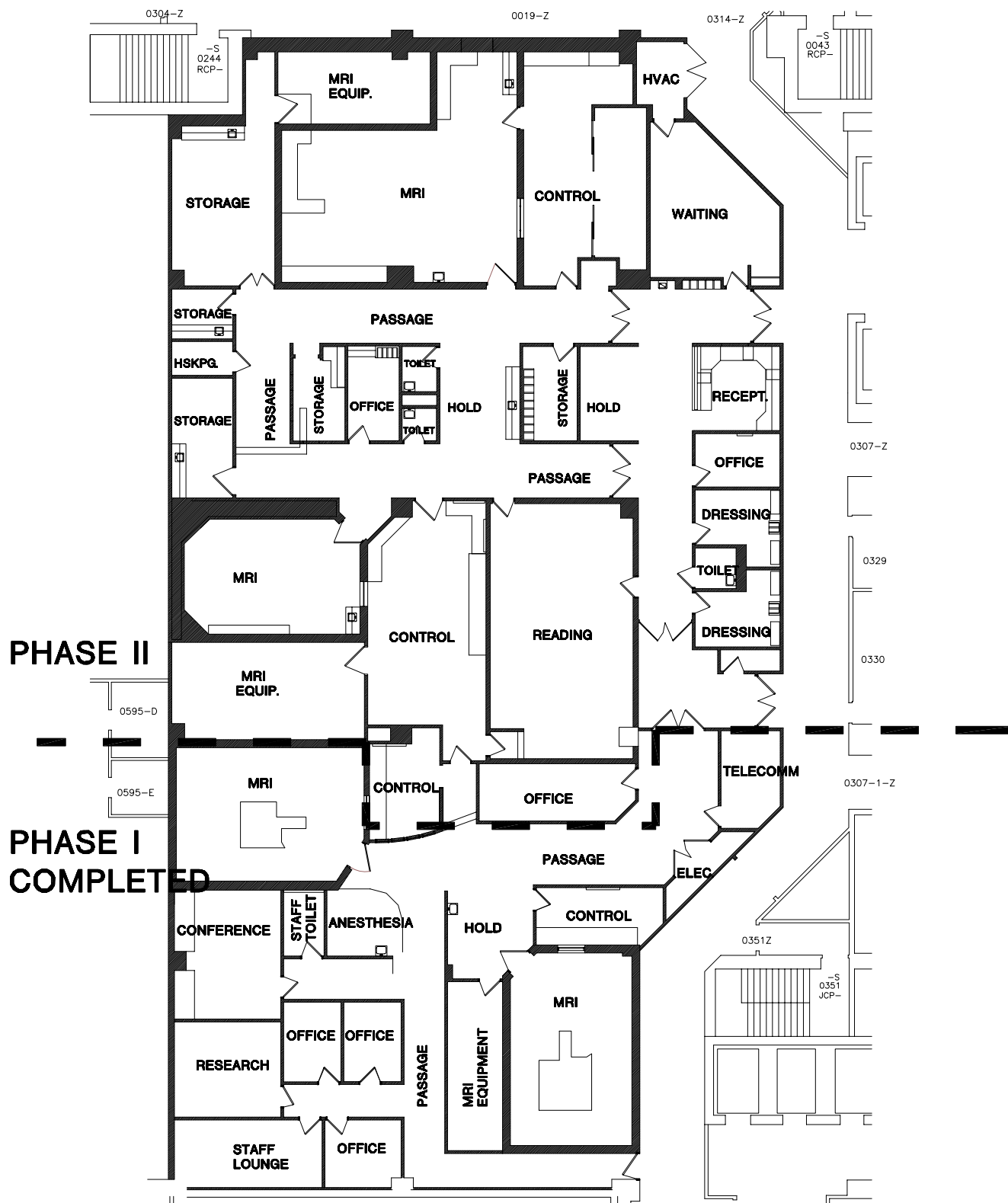
LOCATION MAP



UIHC LOWER LEVEL FLOOR PLAN

**MRI CENTER RENOVATIONS AND SYSTEMS
INSTALLATION – PHASE II**



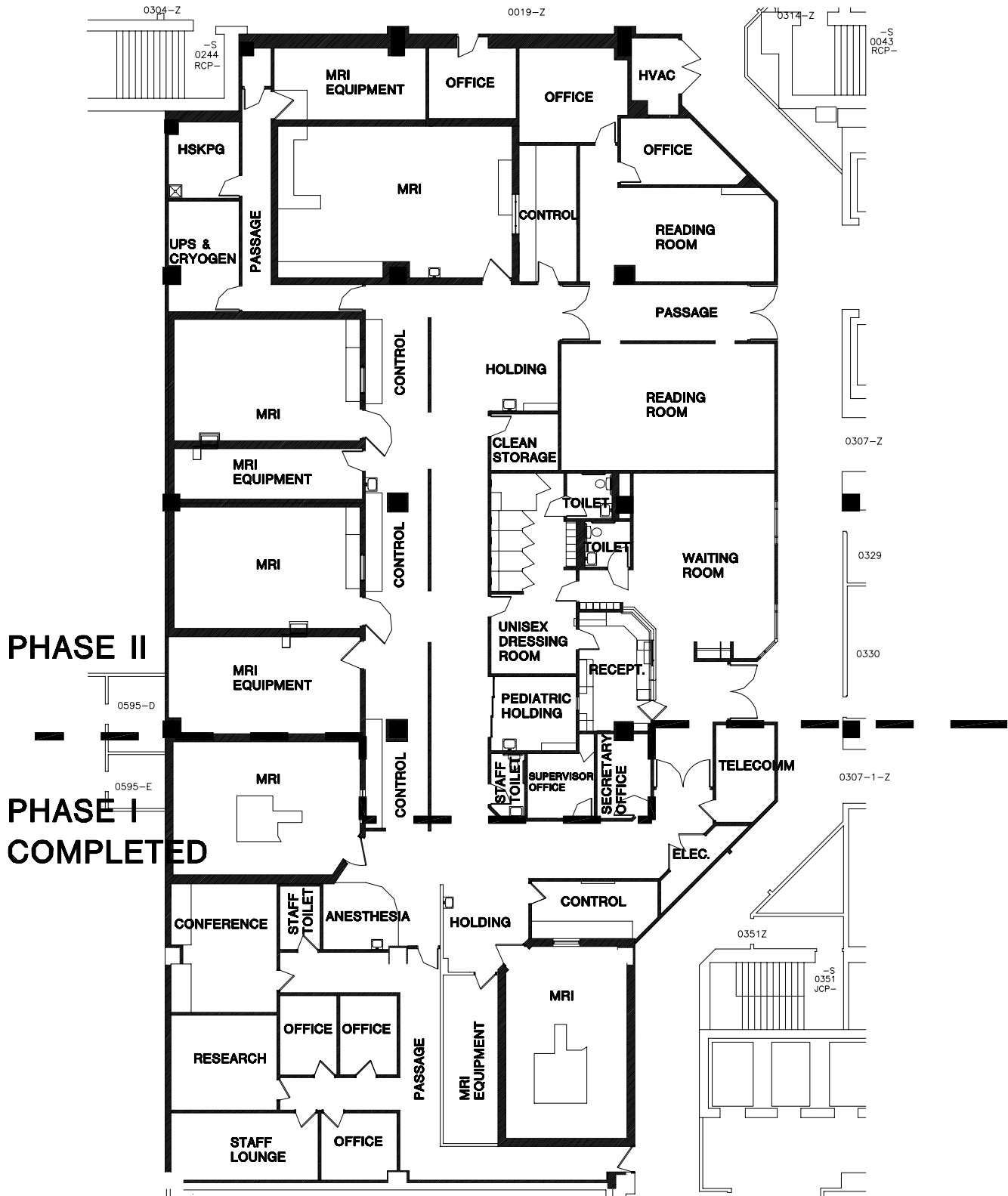


EXISTING FLOOR PLAN

MRI CENTER LOWER LEVEL COLLETON PAVILION

**MRI CENTER RENOVATIONS AND SYSTEMS
INSTALLATION – PHASE II**





PROPOSED FLOOR PLAN

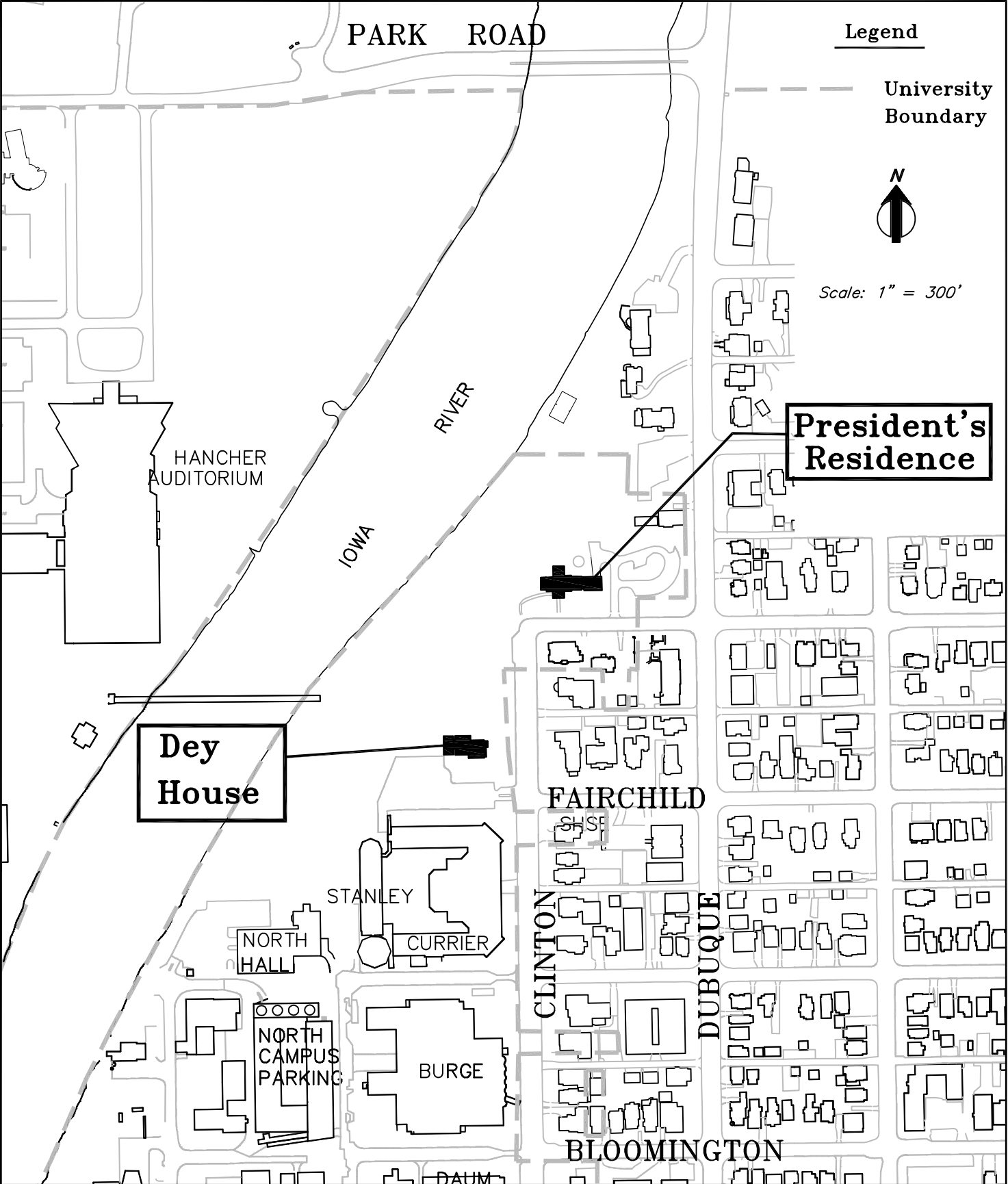
MRI CENTER LOWER LEVEL COLLOTON PAVILION

**MRI CENTER RENOVATIONS AND SYSTEMS
INSTALLATION – PHASE II**

AGENDA ITEM 19

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THE UNIVERSITY OF IOWA

Dey House.dwg

Plotted: January 12, 2005

Location Map:

AGENDA ITEM 19
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**Dey House and
President's Residence**



original design
July 2002



scaled back design
february 2005



current recommended design
march 2005