

MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Register of University of Iowa Capital Improvement Business Transactions for Period of August 17, 2000 through September 20, 2000

Date: October 9, 2000

Recommended Actions:

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

Executive Summary:

The University of Iowa requests permission to proceed with project planning for the **University Hospitals and Clinics—Development of a Center for Excellence in Image Guided Radiation Therapy** project which will provide state-of-the-art radiation systems for use by the Division of Radiation Oncology of the UIHC Department of Radiology.

The University requests approval of the following items for projects at University Hospitals and Clinics:

Project description and budget (\$992,000) for the **University Hospitals and Clinics--Boyd Tower and General Hospital Second Floor Utility Distribution Upgrade and Corridor Refurbishment** project which will upgrade the utility distribution system and refurbish 10,000 square feet of public corridors on the second floor of the Boyd Tower and General Hospital;

Project description and budget (\$747,000) and architectural agreement with Neumann Monson (\$62,200) for the **University Hospitals and Clinics--University Hospital School--Utility Relocation, Registration, Conference Center/Support Areas and Corridor Upgrade** project which will upgrade and relocate various utility systems, renovate the registration/reception lobby, and provide a replacement conference room facility for the University Hospital School;

Engineering agreement with Design Engineers (\$60,500) for the **University Hospitals and Clinics--General Hospital Sprinkler System Improvements--Phase B** project which will continue the installation of additional sprinkler systems throughout University Hospitals;

Engineering agreement with A and J Associates (\$43,100) for the **University Hospitals and Clinics--Faculty and Staff Office and Locker Room Development** project (\$43,100) which will develop space for use by the Department of Anesthesia and the Surgical Intensive Care Unit;

Engineering agreement with Shive-Hattery (\$28,300) for the **University Hospitals and Clinics--Carver Pavilion "D" Bank Service Elevators Modernization** project which will upgrade three elevators which serve the Carver Pavilion; and

Amendment #1 (\$10,100) to the engineering agreement with ZBA, Inc., for the **University Hospitals and Clinics--University Hospital School HVAC System Replacement--Phase A** project which will provide compensation for expanded design services.

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

Lindquist Center--Provide Emergency Power project (\$297,000) which will install an emergency generation system to provide a back-up power source for the Lindquist Center which houses a portion of the operations of the University's Information Technology Services; and

Biology Building--Upgrade Primary Electrical Service project (\$282,000) which will upgrade the external electrical service for the Biology Building Complex.

The University requests approval to enter into an architectural agreement with Rohrbach Carlson (\$65,500) for the **Hillcrest Residence Hall--Renovate Public Restrooms and Recreation Room** project which will upgrade restroom and locker areas and a recreation room located adjacent to the Hillcrest Dining Hall.

The University requests approval of Amendment #1 (\$63,500) to the agreement with OPN Architects for the **Institute of Hydraulics Research--Hydraulics Laboratory Modernization** project which will increase the architectural fee to correspond with an expanded project scope.

Background and Analysis:

Development of a Center of Excellence in Image Guided Radiation Therapy
Possible Sources of Funds: Hospital Revenue Bonds, Gifts and Grants, and/or
University Hospitals Building Usage Funds

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Sept. 2000	Requested

The University proposes to develop the Center in the lower level of a new wing to be constructed on the west side of the Pomerantz Family Pavilion. The Center would encompass approximately 27,000 gross square feet of space and would provide the first computer-guided radiation delivery facility in the world. This will include sophisticated radiation systems which will pinpoint the specific location for the radiation stream, with a high level of accuracy, based on an image of the area to be treated rather than a manual estimation. This Center would enhance the quality of care and capabilities for providing life-saving therapy to patients through the introduction of luminary technologies and advanced approaches to treatment. It would feature uniform application of stereotactic tumor localization; enhanced integration of diagnostic imaging for treatment planning; and linkage of radiation oncology treatments to biologic and gene therapy treatment advances.

The services of the Division of Radiation Oncology are currently provided in the Latourette-Kerr Radiation Oncology Center, which is located on the first floor of the General Hospital. The current size, configuration and location of the Center severely limit the use of state-of-the-art technologies, including those which can deliver three-dimensional therapies, and advanced treatment techniques.

The regulatory requirements for radiation shielding levels have dramatically increased since the existing radiation therapy vaults were developed. The addition of the required shielding level to these vaults would unacceptably reduce the size and the operational features of the existing equipment. Therefore, upgrading the existing radiation facilities to accommodate larger and more sophisticated treatment applications does not appear to be a feasible option.

The need for state-of-the-art radiation treatment facilities and technologies is significant and growing. Approximately 2,400 new cancer patients are diagnosed each year at the UIHC; approximately half of these patients would benefit from radiation therapy. However, since many advanced radiation treatment modalities cannot be undertaken, only about 25 percent of the patients diagnosed are treated at UIHC.

In addition, advanced facilities and technologies are needed for education in radiation oncology and to promote further the multidisciplinary oncology research conducted through the University of Iowa Cancer Center, which was recognized as a National Cancer Institute in July 2000. This designation will facilitate collaborative research endeavors between University scientists and experts in cancer research at other centers throughout the nation, thereby providing the best in cancer research and clinical treatment to Iowans. Improving the UIHC radiation treatment capabilities will play a major role in delivering the highest quality comprehensive care to cancer patients and is an important element in moving the University's Cancer Center into a position of national prominence, thereby attracting additional research resources to the state.

The University reviewed 14 alternative sites throughout University Hospitals for development of the Center. The sites were evaluated based on their size, their distance from the Clinical Cancer Center, accessibility, the cost to develop the area, and the impact on existing UIHC operations. The University also concluded that an underground area would be required to protect best other UIHC areas from the Center's radiation levels. As a result of this review, the University has determined that construction of a new below-grade addition on the west side of the Pomerantz Family Pavilion would best meet the requirements for the Center. The University believes this location would provide an ideal site for developing state-of-the-art technologies, including those that will emerge well into the 21st century. This location would allow the Center to provide properly-shielded radiation units in accordance with recently-approved safety requirements. The site will also accommodate future installation of replacement technologies.

The estimated cost for construction of the Center is approximately \$25.6 million; cost figures will be further developed and refined as planning proceeds. The project may be funded with a combination of hospital revenue bonds, gifts and grants, and University Hospital Building Usage Funds. The source of funds will be further reviewed prior to presentation of the project budget for Board approval.

University Hospitals and Clinics—Boyd Tower and General Hospital Second Floor Utility Distribution Upgrade and Corridor Refurbishment

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	\$ 992,000	Oct. 2000	Requested

This project will include removal of the existing obsolete fire alarm system and installation of a new system with fire and smoke dampers to meet current fire safety codes. The project will also include removal, replacement and relocation of the heating, ventilating and air conditioning duct to meet fire code requirements and improve access to all utilities in the area, and removal of abandoned telecommunications system components. Additional work will include replacement of the corridor ceiling, wall and floor finishes, and carpeting.

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

Project Budget

Construction	\$ 793,600
Architectural/Engineering Support	79,400
Planning and Supervision	39,600
Contingency	<u>79,400</u>
TOTAL	<u>\$ 992,000</u>

University Hospitals and Clinics—University Hospital School—Utility Relocation,
Registration, Conference Center/Support Areas and Corridor Upgrade

Source of Funds: University Hospital School Building Usage Funds

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 747,000	Oct. 2000	Requested
Architectural Agreement (Neumann Monson)	62,200	Oct. 2000	Requested

This project will upgrade and relocate, as necessary, the heating, ventilating, electrical, fire protection and mechanical systems in the University Hospital School to meet current building codes and facility requirements. The project will also renovate the registration/reception lobby, and develop a conference facility with support functions in 6,500 square feet of existing space which currently houses various support functions. Development of the conference room is necessary to replace a similar area that was lost with a previous renovation project to expand health care functions in the Hospital School. In addition, the building corridor areas will be modified to provide proper corridor wall separation to ensure a safe exit route in accordance with fire safety codes.

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

The University also requests approval to enter into an agreement with Neumann Monson to provide design services for the project. The agreement provides for a fee of \$62,200, including reimbursables.

Project Budget

Construction	\$ 598,000
Architectural/Engineering Support	59,800
Planning and Supervision	29,400
Contingency	<u>59,800</u>
TOTAL	<u>\$ 747,000</u>

Lindquist Center—Provide Emergency Power

Source of Funds: Information Technology Services Income

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 297,000	Oct. 2000	Requested

The emergency generation system is needed to provide protection, in the event of a power outage, for those operations of the University's Information Technology Services which are located in the Lindquist Center.

The project will include installation of a 250 kilowatt generator and switch; construction of exterior pathways leading to the service point in the lower level of the building; and interior distribution and connections.

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

Project Budget

Construction	\$ 237,000
Design, Inspection and Administration	
Consultants	23,000
Design/Construction Services	12,500
Contingency	<u>24,500</u>
TOTAL	<u>\$ 297,000</u>

Biology Building—Upgrade Primary Electrical Service

Source of Funds: Utilities Enterprise Improvement and Replacement Fund

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 282,000	Oct. 2000	Requested

Phase 2 of the Biological Sciences Renovation/Replacement project, which is currently under construction, includes the upgrade of the heating, ventilating, and air conditioning systems in Old Biology and Biology I and II. These improvements will increase the electrical requirements for the Complex.

This project will replace the three existing electrical transformers that currently serve the buildings with a single transformer large enough to serve the entire Complex. An electrical vault located on the west side of Old Biology will be enlarged to accommodate the new transformer and the associated switchgear.

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

Project Budget

Construction	\$ 252,000
Design, Inspection and Administration	5,000
Contingency	<u>25,000</u>
TOTAL	<u>\$ 282,000</u>

Hillcrest Residence Hall—Renovate Public Restrooms and Recreation Room

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Architectural Agreement (Rohrbach Carlson)	\$ 65,500	Oct. 2000	Requested

This project will renovate approximately 3,500 square feet of space on the first floor of the Hillcrest Dining Hall. The project will include the renovation and upgrade of the existing women's and men's public restrooms, staff locker rooms, and recreation room (which houses exercise equipment). The project will replace the plumbing fixtures in the restroom and locker areas, and install new light fixtures, upgrade the mechanical and electrical service, and provide new interior finishes for the recreation room.

The University requests approval to enter into an agreement with Rohrbach Carlson to provide design services for the project. The agreement provides for a fee of \$65,500, including reimbursables. The initial design services will be used to establish the project description and budget, which will be presented for Board approval at a future date.

University Hospitals and Clinics—General Hospital Sprinkler System Improvements—Phase B

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	\$ 750,000	April 1999	Approved
Engineering Agreement (Design Engineers)	60,500	Oct. 2000	Requested

This project is the second phase of a three-phase project to install sprinkler systems in areas of the General Hospital currently without sprinkler protection. When all phases of the project are complete, the General Hospital will meet current National Fire Protection Association code requirements. The University has indicated that the delay with the Phase B project since approval of the project budget in April 1999 is attributable to delays with the Phase A project which provided the necessary infrastructure for the remaining work.

The University requests approval to enter into an agreement with Design Engineers to provide design services for the project. The agreement provides for a fee of \$60,500, including reimbursables.

University Hospitals and Clinics—Faculty and Staff Office and Locker Room Development

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	\$ 531,250	Sept. 2000	Approved
Engineering Agreement (A and J Associates)	43,100	Oct. 2000	Requested

This project will develop approximately 3,500 gross square feet of space on the fifth level of the Pappajohn Pavilion to provide faculty and staff offices for the Department of Anesthesia (3,000 gross square feet of renovated space) and a locker room to serve the Surgical Intensive Care Unit (500 gross square feet of completed shell space).

The University requests approval to enter into an agreement with A and J Associates to provide design services for the project. The agreement provides for a fee of \$43,100, including reimbursables.

University Hospitals and Clinics—Carver Pavilion “D” Bank Service Elevators Modernization

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	\$ 341,250	April 2000	Approved
Engineering Agreement (Shive-Hattery)	28,300	Oct. 2000	Requested

This project will install new controls and control panels to upgrade the three Carver Pavilion “D” bank elevators. Included is the installation of microprocessor controllers, electric motors, and car station controls and telephone to meet the Americans with Disabilities Act guidelines. The work to be undertaken will enhance the efficiency of the elevators and significantly reduce waiting time.

The University requests approval to enter into an agreement with Shive-Hattery to provide design services for the project. The agreement provides for a fee of \$28,300, including reimbursables.

Institute of Hydraulics Research—Hydraulics Laboratory Modernization

Source of Funds: Institute of Hydraulic Research Balances, Gifts, Building
Renewal and/or Income from Treasurer's Temporary
Investments

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Oct. 1999	Approved
Architectural Selection (OPN Architects)		March 2000	Approved
Architectural Agreement	\$ 205,000	April 2000	Approved
Program Statement		Sept. 2000	Approved
Schematic Design		Sept. 2000	Approved
Project Description and Total Budget	4,250,000	Sept. 2000	Approved
Architectural Amendment #1	63,500	Oct. 2000	Requested

This project will renovate the Hydraulics Laboratory to meet the modern teaching and research requirements of the Iowa Institute of Hydraulic Research of the College of Engineering. The current condition of the building is not conducive to contemporary research and teaching activities nor the recruitment of faculty, staff and students.

The University requests approval of Amendment #1 to the design agreement with OPN Architects. The amendment will increase the architectural fee by \$63,500. The original architectural fee was based on an early estimate of construction costs. Since that time, the scope of the project has increased and the estimated construction costs have increased by approximately \$650,000. (The project budget approved by the Board in September 2000 includes the increased construction costs.)

University Hospitals and Clinics--University Hospital School HVAC System Replacement – Phase A

Source of Funds: University Hospital School Building Usage Funds

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 360,000.00	April 1999	Approved
Engineering Agreement (ZBA, Inc.)	27,230.50	April 1999	Approved
Engineering Amendment #1	10,100.00	Oct. 2000	Requested

This project will upgrade 16,000 square feet of existing heating, ventilating and air conditioning systems on the second floor of the University Hospital School. This project is the first phase of a multiple-phased project to replace the outdated systems in the Hospital School which are more than 20 years old and have reached the end of their useful lives.

The University requests approval of Amendment #1 to the design agreement with ZBA, Inc. The amendment will provide compensation for expanded services which were to be provided by UIHC staff. However, the lack of UIHC staff currently available to provide these services now requires that they be provided by the project engineer.

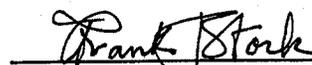
The amendment will provide for a variety of services including coordinating construction activities, processing of payment applications, coordinating utility shutdowns, reviewing change orders, providing access to secure areas, reviewing project completion and acceptance, and monitoring project disturbance.

Included in the University's capital register for Board ratification are five project budgets under \$250,000, five construction contracts awarded by the Executive Director, and the acceptance of seven completed construction contracts. 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