

Contact: Sheila Doyle

REGISTER OF UNIVERSITY OF IOWA
CAPITAL IMPROVEMENT BUSINESS TRANSACTIONS

Actions Requested: Consider recommending to the Board:

1. Approval of the following actions for the **Regulated Waste Management Facility** and **University Hospitals and Clinics – Autopsy Suite Relocation** projects, major capital projects as defined by Board policy.
 - a. Acknowledge receipt of the University's initial submission of information to address the Board's capital project evaluation criteria (see Attachment 1 for the **Regulated Waste Management Facility** and Attachment 2 for the **University Hospitals and Clinics – Autopsy Suite Relocation**);
 - b. Accept the Board Office recommendation that the projects meet the necessary criteria for Board consideration; and
 - c. Authorize permission to proceed with project planning, including the architectural selection process.
2. Approval of the project description and budget (\$5,000,000) for the **Power Plant – Replace Cooling Water Pump House Facility** project.

Executive Summary: The **Regulated Waste Management Facility** project would construct a modern facility to consolidate and improve the University's waste management operations which are currently housed in four obsolete structures on the Oakdale Campus. The estimated project cost of \$6,500,000 would be funded by the sale of Utility Enterprise Revenue Bonds with debt service expenditures to be paid by hazardous waste fees and utilization charges.

The **University Hospitals – Autopsy Suite Relocation** project would renovate space in the General Hospital to provide a modern, academic autopsy/forensic pathology facility. The Suite is currently located in the basement of the Medical Laboratories Building in inadequate facilities. The estimated project cost of \$2,800,000 would be funded by University Hospitals Building Usage Funds.

The **Power Plant – Replace Cooling Water Pump House Facility** project would relocate the Power Plant's cooling water pump house facility and upgrade the pumping equipment to improve the reliability of the Power Plant, increase cooling water production capacity, and improve accessibility and security for the equipment. The project budget of \$5,000,000 would be funded by the sale of Utility Enterprise Revenue Bonds.

Details of Project: Regulated Waste Management Facility

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Initial Review and Consideration of Capital Project Evaluation Criteria		Nov. 2005	Receive Report
Permission to Proceed with Project Planning		Nov. 2005	Requested

The U.S. Environmental Protection Agency (EPA) regulates waste generation and management activities at the University. The University's Health Protection Office is responsible for the proper handling and ultimate disposal of hazardous wastes resulting from the University's teaching, research, patient care, and operational activities. The goals of the Health Protection Office hazardous waste management program include: protecting employee health and safety; protecting the environment; reducing the amount of hazardous waste generated; and complying with hazardous waste regulations.

The University's regulated waste management operations are currently housed in four buildings on the Oakdale Campus: the Oakdale Waste Transfer Station, Oakdale Superintendent's Building, Chemical Storage and Transfer Facility, and Oakdale Waste Storage Facility. The buildings have reached the end of their functional lives.

The University proposes to construct a new waste management facility on the Oakdale Campus to replace the four obsolete structures and consolidate the University's waste management operations in a modern facility. The proposed project was included in the University's FY 2004 through FY 2006 capital improvement plans previously presented to the Board. The building would help improve the efficiency of the University's waste management operations and its compliance with regulatory requirements.

Details of Project: University Hospitals – Autopsy Suite Relocation

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Initial Review and Consideration of Capital Project Evaluation Criteria		Nov. 2005	Receive Report
Permission to Proceed with Project Planning		Nov. 2005	Requested

The existing UIHC Autopsy Suite, located in 3,200 gross square feet of space on the lower level of the Medical Laboratories Building, is 75 years old and spatially and environmentally inadequate to meet the demands of a modern autopsy/forensic pathology service. The facility's lack of space, its location and design inhibit strict adherence to safety protocols; it poses security risks to staff, families, and pathology research.

The Suite's deficiencies include: space limitations which hamper the ability to perform simultaneous autopsy procedures; lack of a visitation room which requires families to use the central receiving room to view their loved ones; a location in the Medical Laboratories Building which is inconvenient for staff, physicians and families of deceased patients; and an air handling system that does not provide adequate ventilation and has been cited by the College of American Pathologists.

The project would renovate approximately 5,600 gross square feet of space on the first floor of the General Hospital to provide contemporary facilities for UIHC's Autopsy Service, and develop an adjacent garage of approximately 300 gross square feet. The project would be designed to meet the safety, educational and service requirements of a modern, academic autopsy/forensic pathology service, which include: the physical separation of autopsy activities from administrative and public areas; a dedicated family viewing and bereavement room; a safe, secure and convenient location for staff, visitors, family members, storage needs and pathology research; autopsy rooms designed to accommodate the necessary equipment and staff, permit the isolation of infectious cases, and meet Biological Safety Level (BSL) 2 and BSL 3 containment protocols; an efficient and effective air handling system that provides proper ventilation for all areas; and dedicated meeting and educational space.

The General Hospital space to be renovated is currently occupied by the UIHC Department of Finance and Accounting Services, which would be relocated prior to initiating the renovation project. (Relocation sites are currently under evaluation.) The Medical Laboratories Building space would be assigned for use by the Carver College of Medicine.

Details of Project: Power Plant—Replace Cooling Water Pump House Facility

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed with Project Planning Engineering Agreement		Nov. 2004	Approved
(Stanley Consultants, Muscatine, IA)	\$ 403,900	Nov. 2004	Approved
Project Description and Budget	5,000,000	Nov. 2005	Requested

The University utilizes water from the Iowa River to cool steam turbine condensers and associated equipment located within the University's Power Plant. The pumps that draw the water are located in the pump house facility near the Power Plant along the Iowa River.

Recent inspections of the pump house and equipment, which have served the Power Plant for a number of years, indicated significant deterioration of the facility's steel structure. In addition, the pumping equipment has outlived its service life and is in serious need of replacement.

The project would relocate the pump house functions to within the Power Plant and upgrade the basic pumping components; these actions would improve the reliability of the Power Plant, increase cooling water production capacity to meet power plant operational demands, improve accessibility for maintenance of the pumping equipment, and improve security.

The project budget of \$5,000,000 would be funded by the sale of Utility Enterprise Revenue Bonds. (See Agenda Item 7.)

**Regulated Waste Management Facility
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: The University Health Protection Office's (HPO's) waste management operation provides a primary support service for virtually all major University activities since it manages high-risk, highly regulated waste materials generated from routine business activities of the institution. This service manages discarded or byproduct materials from routine activities within the health care, research, academia, outreach, construction/renovation and facility operations. Though essentially invisible to the University and surrounding community, waste management is a primary infrastructure activity that promotes ongoing institutional missions.

The University of Iowa has identified the need to replace its aging waste management facilities, located on the Oakdale Campus. The project also supports several of the University's current Strategic Plan goals and objectives, most notably under the Strategy: Improve the Infrastructure...by "Streamlining the operations of the regulatory and administrative offices that govern and support the research enterprise".

This proposed facility will replace four existing structures and consolidate waste management and office activities into a single facility. This will result in a significant improvement in environmental, health and safety as well as markedly improve efficiency of this primary infrastructure activity.

Other Alternatives Explored: Many alternatives to this project were examined. They included: a proposal to integrate activities with the City of Iowa City; move facility to Iowa City campus; move to other off-campus location; move to current Oakdale laundry facilities; and outsourcing of operations. All were rejected as non-viable for various reasons such as the extreme nature of hazards with University waste; inadequate space; equipment limitations; site limitations and concerns; code limitations; and lack of fiscal savings.

The original site study for the Oakdale campus performed in 2002 by Rietz involved adding to and remodeling the existing Oakdale Waste Storage Facility, Building #378. This was rejected because of site limitations that resulted in an inefficient design, and because the poor construction of Building #378 was not conducive to remodeling. The building is simply a metal pole building with a concrete floor.

Most recently, The University of Iowa, along with OPN Architects, Inc. and CUH2A conducted a conceptual study in spring of 2004. During the course of the study, several options and alternatives were again reconsidered, including: new facility as an addition onto the existing Building 378, remodeling the existing radiation component of that building only; new facility built adjacent and connected to the existing Building 378, relocate hazardous operations into new facility and remodel only a small portion of Building 378 for year-round use, and leave remainder of Building 378 as is for low hazard operations; entirely new facility on a contiguous site in the same area, eventually decommissioning the three existing structures, including Building 378; and entirely new facility on a vacant site located at the end of Old Road south of the Hydraulics Building. The study team recommended the last option, based on operational considerations and impact to the Oakdale Campus.

Impact on Other Facilities and Square Footage: The new facility will replace HPO's chemical storage facility (Building #244, 2,480 square feet) known as the Batcave; offices in the Oakdale Superintendent's Building (Building #235, 2,840 square feet); and the Oakdale Waste Storage

Facility (Building #378, 8,633 square feet) used for radioactive waste. The unit is also assuming responsibility for Facilities Management biohazardous waste management program, incorporating this activity into the new facility, and thus replacing the existing Oakdale Waste Transfer Station (approximately 500 square feet).

Financial Resources for Construction Project: The project will be funded through Utility Enterprise Improvement Bonds. The bonds would be used to finance project costs with the bond payments to be derived from hazardous waste fees and charges based upon utilization.

Financial Resources for Operations and Maintenance: HPO's waste management and disposal budget is an F & A cost recovery operation. As stated above, the project will be funded through Utility Enterprise Improvement Bonds. The bonds would be used to finance project costs with the bond payments to be derived from hazardous waste fees and charges based upon utilization. Operating costs of the facility are to be supported in like manner.

External Forces: Compliance with fire, health and safety law/codes will be addressed with this project.

**University Hospitals – Autopsy Suite Relocation
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: This project is an essential element in enabling UIHC to meet all components of its tri-partite mission by providing the necessary space for the Autopsy Service to continue to effectively meet its multiple requirements related to conducting post-mortem examinations and working with families of deceased patients and community morticians; to provide the facilities required to teach and train medical students, residents, and other health science trainees; and, to conduct clinical research. An adequately sized and designed autopsy suite located in relatively close proximity to UIHC's patient care units will foster positive, convenient and safe collaboration with clinicians and medical trainees at all levels. Accurate and timely information from autopsies improves the delivery of medical care. Placing the Autopsy Service in closer proximity to inpatient units will facilitate development of working relationships with clinicians that encourages their attendance at and contributions to the autopsy procedure. The information obtained during autopsy is vital for educational excellence in medicine. This includes initial medical student exposure to the autopsy as a valued medical procedure, prompt reporting of autopsy findings to clinicians for correlation of specific antemortem and postmortem diagnoses, and regular patient care conferences such as Morbidity & Mortality conferences (often not possible without information from well-performed autopsies). Some areas of research utilize biological specimens that can be obtained only from autopsies. These materials are unavailable if few autopsies are performed. Undertaking this project also supports several of UIHC's Strategic Plan goals, most notably by providing a continuously improving, safe environment for all patients and staff and by implementing a facilities plan that supports the projected future needs for the UIHC.

Other Alternatives Explored: The alternative to expand and renovate the existing autopsy suite was considered but due to space limitations and structural constraints it was determined not to be practical. Furthermore, maintaining a location within the Medical Laboratory Building would not resolve present inconveniences associated with the autopsy suite's remote location. A review of possible sites for developing the replacement autopsy suite indicated that there are no other viable alternatives available that will meet the multiple objectives realized by undertaking this project.

Impact on Other Facilities and Square Footage: The General Hospital space to be renovated is now occupied by the offices of UIHC's Department of Finance and Accounting Services. These offices will be relocated prior to initiating this project. The UIHC is now evaluating possible sites for these offices. On completion of this project approximately thirty-two hundred gross square feet of space on the lower level of the Carver College of Medicine's Medical Laboratory Building will become available for reassignment to meet other college space needs. Preliminary plans indicate approximately six thousand gross square feet of space will be required to accommodate the Autopsy Service's functions.

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 services to be provided as the result of this project are not ones that generate a significant level of revenue although they are essential to UIHC meeting all components of its tri-partite mission. Accordingly, it is not appropriate or meaningful to consider a return on investment for this specific project. The costs associated with

the development of this project, as with other similar non-revenue generating services, are supported by all UIHC revenue centers.

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: As previously noted, the autopsy suite has been cited by the College of American Pathologists for deficiencies associated with inadequate space, an inconvenient location within the UI healthcare complex, and lack of adequate ventilation. In addition to providing autopsy services for families and clinicians of UIHC patients, the UIHC Autopsy Service provides in-house or consulting autopsy and forensic pathology services for Iowa's three Department of Veterans Affairs Medical Centers, other regional medical centers, the Johnson County Medical Examiner's Office, other county medical examiner offices from throughout southeast Iowa, and the Iowa State Medical Examiner's Office. The facility deficiencies cited above hinder the Autopsy Service from fulfilling its mission and provide compelling justification for undertaking this project.