

Contact: Joan Racki

REGISTER OF UNIVERSITY OF IOWA
CAPITAL IMPROVEMENT BUSINESS TRANSACTIONS

Actions Requested: Consider:

1. Permission to proceed with project planning for the following projects: **Substation L Control Building – Upgrade System**, including the utilization of Stanley Consultants as the design consultant, and **Utilities Distribution System – Connect Boyd Law Building to Chilled Water System**, including the design consultant selection process.
2. Approval of the following actions for the **Ambulatory Surgery Center and Main Operating Room Suite Expansions** project:
 - a. Acknowledge receipt of the University's final submission of information to address the Board's capital project evaluation criteria (see Attachment A);
 - b. Accept the Board Office recommendation that the project meets the necessary criteria for Board consideration; and
 - c. Approve the schematic design, project description and budget (\$20.9 million), with the understanding that approval will constitute final Board approval and authorization to proceed with construction.

Executive Summary: The University requests permission to proceed with project planning, including the use of Stanley Consultants as the design consultant, for the **Substation L Control Building – Upgrade System** project, which would replace and modernize electrical switch gear at Substation L to ensure reliable future power supply and service. Attachment B includes a map showing the location of Substation L, one of two major electrical substations on campus. The \$5.0 million estimated cost of the project would be funded by utility system revenue bond proceeds.

The **Utilities Distribution System – Connect Boyd Law Building to Chilled Water System** project, for which the University requests permission to proceed with project planning including the design consultant selection process, would connect the Boyd Law Building to the campus chilled water distribution system, replacing cooling by the Building's cooling towers which are in need of significant repair or replacement. The \$2.7 million estimated cost of the project would be funded by utility system renewal and improvement funds and building renewal funds. Attachment C shows the location of the Boyd Law Building and the project.

At its April 2011 meeting, the Board granted permission to proceed with project planning for the **Ambulatory Surgery Center and Main Operating Room Suite Expansions** project, which would accommodate significant growth in surgical case volumes experienced in the Ambulatory Surgery Center (ASC) and Main Operating Room (MOR) Suite. The project would develop four new ASC operating rooms and necessary support facilities on the fourth level of the Pomerantz Family Pavilion west addition rooftop to augment the existing eight operating rooms. The project would also develop two additional operating rooms in the MOR Suite; currently there are 30 operating rooms on portions of the fifth levels of the Colloton and Pappajohn Pavilions. The Board is requested to approve the schematic design and project description and budget

(\$20.9 million funded by University Hospitals Building Usage Funds) for the project. The schematic design booklet is included with the Board's agenda materials and the project locations are shown in Attachment D.

Details of the Projects:

Substation L Control Building – Upgrade System

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Sept. 2011	Requested
Design Professional Selection (Stanley Consultants; Muscatine, IA)		Sept. 2011	Requested

University electrical service is supplied by two major substations - Substation L located on the east side of the campus, and Substation U located on the west side. This project would replace and modernize electrical switch gear at Substation L. A study evaluated the capacity of the existing electrical across-campus tie (ACT), which connects Substations L and U and the Main Power Plant for critical electrical service redundancy; the study also investigated Substation L's protective relays. The results of this study and plans to increase power generation at the Main Power Plant revealed the need to replace and modernize Substation L switch gear to ensure reliable future power supply and increased capacity of the ACT. The latter is needed to provide back-up power to the new Pappajohn Biomedical Discovery Building and other key west campus research buildings.

The University requests permission to continue to utilize Stanley Consultants, Inc. for the design of this project, waiving the normal consultant selection process. Not only did the firm provide the current fault study work, but it was also the project engineer chosen through the formal consultant selection process for the similar upgrade to the west campus Substation U.

Utilities Distribution System –Connect Boyd Law Building to Chilled Water System

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Sept. 2011	Requested

The cooling towers serving Boyd Law Building, which was constructed prior to the development of the University's central chilled water system, are in need of significant repair or replacement. Building projects in the general area have extended the chilled water pipe network to the general vicinity of the Building, making it more economically viable to connect it to the system. The University believes that connecting the Building to the chilled water distribution system is a more cost effective solution than replacing the towers and maintaining an independent

cooling system. The project includes extending the chilled water distribution piping, replacing chilled water coils, and removing existing building chilled water generation equipment.

Ambulatory Surgery Center and Main Operating Room Suite Expansions

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		April 2011	Approved
Selection of Design Professional Heery International (Iowa City, IA)		April 2011	Approved
Initial Review and Consideration of Capital Project Evaluation Criteria		April 2011	Received Report
Design Professional Agreement	\$ 1,855,000	Aug. 2011	Not Required*
Program Statement		Aug. 2011	Not Required*
Schematic Design		Sept. 2011	Requested
Project Description and Budget	20,900,000	Sept. 2011	Requested
Final Review and Consideration of Capital Project Evaluation Criteria		Sept. 2011	Receive Report

*Approved by Executive Director, consistent with Board policies

Four new ambulatory surgery center (ASC) operating rooms and support facilities, including sterile equipment and supply staging space, and staff locker and office spaces, would be developed in approximately 16,000 gross square feet (GSF) of the 34,000 GSF to be constructed as a Fourth Floor addition on the west pod of the Pomerantz Family Pavilion. The remaining GSF of the addition would be completed at a later date, subject to Board approvals, when needed to accommodate future UIHC space needs. To better accommodate the present ASC case load and provide the required support for the new operating rooms, the existing ASC locker and conference area would be converted into 14 post-anesthesia recovery spaces. This location, just south of the existing 29 private pre and post-operative exam and recovery rooms, provides for efficient patient flow, from preparation for surgery through second stage recovery.

Two additional main operating rooms (MOR) would be created on level five of the Pappajohn Pavilion by converting an existing operating room equipment cleaning and storage room. A replacement for this room would be provided by in-filling light court space (approximately 2,300 net square feet) located on the fifth and sixth levels of the Carver Pavilion.

Mechanical infrastructure to support the new space for both project locations would be developed through the enclosure of sections of roof top above each project site.

The new exterior shell for the ASC project will be designed to match level 3 of the existing building, extending the existing design vertically. The precast panel system and aluminum window system will be repeated on the new floors, creating a cohesive building exterior.

The intent is to achieve at a minimum a LEED (Leadership in Energy and Environmental Design) silver rating for the ASC component of the project.

The MOR project will include the addition of a new mechanical penthouse. The area will be clad with pre-cast concrete panels to match the existing pavilion's precast facade. The light well build-out will re-utilize existing precast panels and window systems.

The following provides a summary of the functions and net assignable square feet (NASF) for the ASC and the MOR Suite as included in the program document and schematic design:

Function	NASF
<u>Ambulatory Surgery Center</u>	
Operating Rooms (4)*	2,075
Operating Room Support	2,575
Post Anesthesia Care Unit	2,326
Physician and Staff Lockers / Lounge	3,789
Physician and Staff Offices and Support	2,042
Building Support	<u>374</u>
Total NASF	13,181
Mechanical Penthouse	14,087
Unfinished Shell Space	17,522

*Two rooms will be finished to meet current demand and two rooms will be developed for future fit-out as justified by patient volumes

<u>Main Operating Room Suite</u>	
Operating Rooms (2)	1,345
Sterile Core & Support	569
Levels 5 & 6 Storage Room In-fills	<u>2,300</u>
Total NASF	4,214
Mechanical Penthouse	2,194

Construction of the ASC Expansion component is scheduled to begin in the third quarter of FY 2012 and be completed in the first quarter of FY 2014. Construction of the MOR Suite Expansion is scheduled to commence in the third quarter of FY 2012 and be completed in the second quarter of FY 2013.

Project Budget

Construction	\$16,632,615
Professional Fees	1,718,000
Planning and Supervision	831,385
Project Contingencies	<u>1,718,000</u>
TOTAL	\$20,900,000

Source of Funds: University Hospitals Building Usage Funds

**Ambulatory Surgery Center and Main Operating Room Suite Expansions
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 contribute to UI Hospitals and Clinics' efforts in meeting all elements of the UI Health Care mission, "Changing Medicine, Changing Lives." It will greatly enhance the UI Hospitals' capabilities for delivering superb patient care, innovative educational programs and facilitating pioneering discoveries. The project is also supportive of each of the six major goals that have been established in UI Health Care's Strategic Plan for FY 2010-2012 by providing the facilities that are required to assist UI Health Care's efforts 1) to provide world class healthcare services to optimize health for everyone, 2) to advance world class discovery through excellence and innovation in biomedical and health services research, 3) to develop world class health professionals and scientists through excellent, innovative and humanistic educational curricula for learners at every stage, 4) to foster a culture of excellence that values, engages and enables our workforce, 5) to create an environment of inclusion where individual differences are respected and all feel welcome, and 6) to optimize a performance-driven business model that assures financial success.

Other Alternatives Explored: With regard to the ASC, the original ASC design was predicated on the future ability to expand into the adjacent roof top space when surgical procedure volume justified an expansion. The existing exterior west wall of the present ASC was designed and constructed as a permanent but "removable" wall to facilitate installation of additional operating rooms and support space. Consequently, this is the least disruptive and most cost effective method available to increase patient service capacity.

Multiple alternatives were researched in an effort to provide the MOR with the additional operating room capacity needed to meet increasing case demand. Displacement and relocation of departments to the north, into RCP, and to the south, into JPP, were considered:

1. The relocation of UIHC's clinical laboratories and Department of Pathology faculty and staff offices from level 5 of Roy Carver Pavilion and development of new operating rooms and support facilities in this space, which is north of the existing MOR on Level 5 Colloton, was studied. However, no suitable alternative site for relocating the clinical laboratories could be identified.
2. A modification to Alternative #1 which would add two new operating rooms in space now occupied by Pathology faculty and staff offices on level 5 Carver Pavilion was studied, but as with the first alternative, a suitable replacement space for the departmental offices, which require close proximity to the laboratories, could not be identified.
3. Developing the additional operating rooms and support facilities in what is currently the Pain Medicine Clinic on level 5 John Pappajohn Pavilion was also evaluated. However, as with the other alternatives, no suitable location for the Pain Medicine Clinic could be identified.

After ruling out the aforementioned alternatives, the option of choice was determined to be conversion of the existing MOR Suite equipment maintenance and storage room space. This

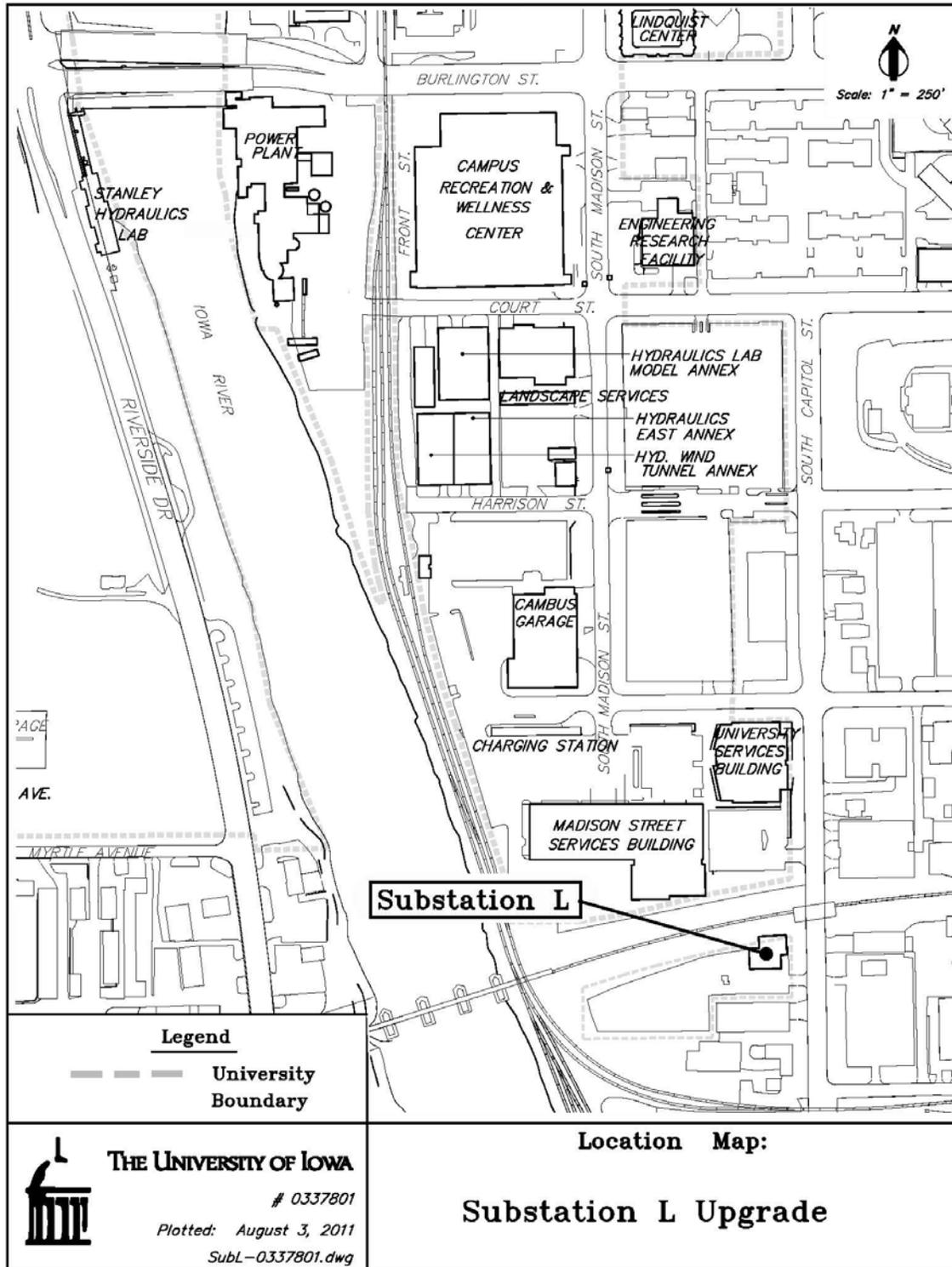
option is the most cost effective and least disruptive and most expeditious alternative for expanding MOR Suite operating room capacity.

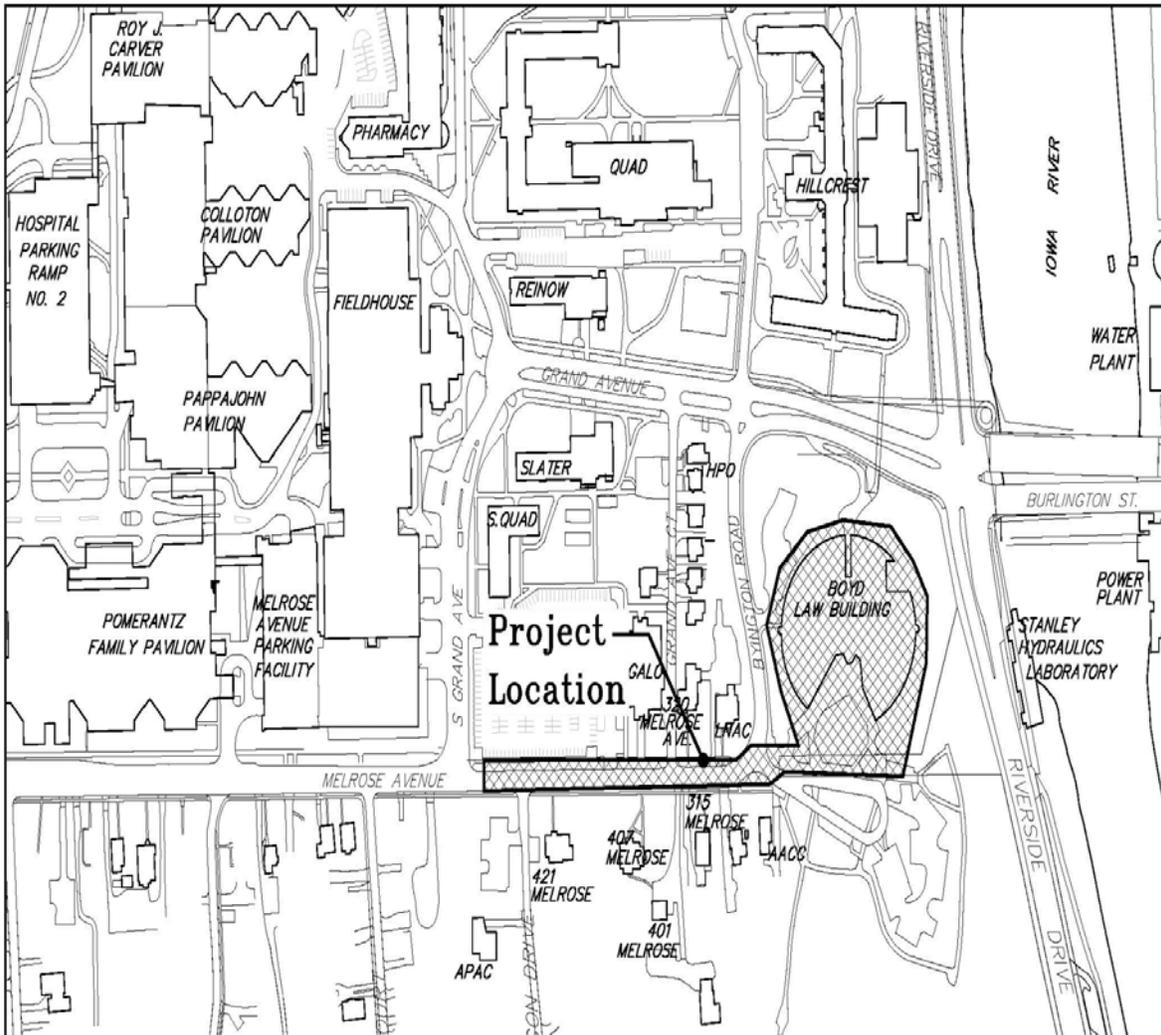
Impact on Other Facilities and Square Footage: This project will not result in the abandonment, transfer or demolition of existing facilities.

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 preliminary estimate for the internal rate of return over the life of the project is 27.3%.

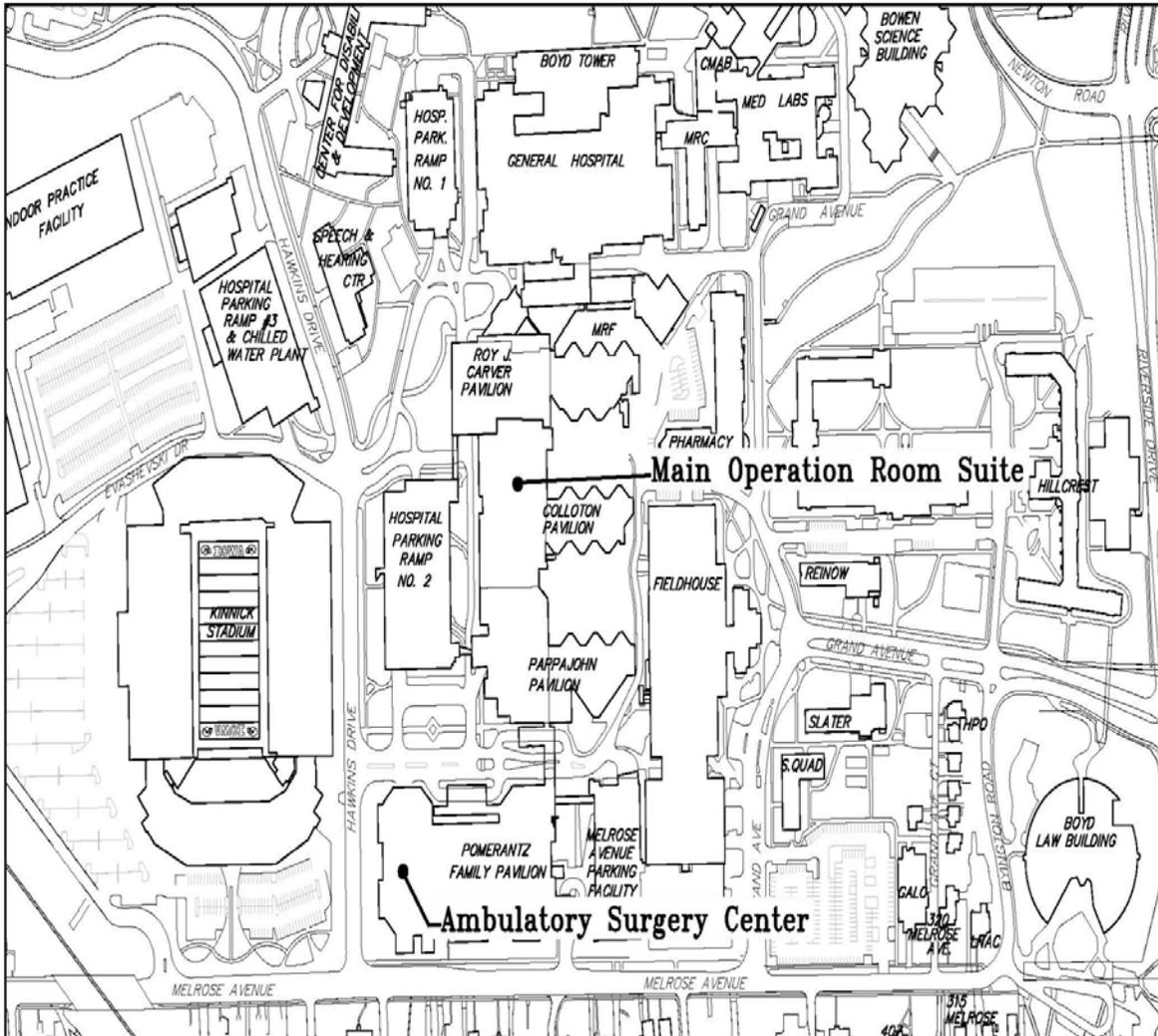
Financial Resources for Operations and Maintenance: The source of funds to cover the associated operating and maintenance costs will be hospital operating revenues derived from providing patient care services.

External Forces Justifying Approval: The renovation and expansion of this unit is an important element in enabling the UIHC to meet all components of its tripartite mission. Patient care will be enhanced through expanded facilities and the design of these facilities will be focused on providing a more comfortable and patient-friendly environment. The design will meet all building codes and standards, as well as standards from the 2010 Edition of the Guidelines for Design and Construction of Healthcare Facilities, developed by The Facility Guidelines Institute with assistance from the U.S. Department of Health and Human Services and published by the American Society for Healthcare Engineering of the American Hospital Association, which recommend single patient rooms for new hospital construction. These guidelines are used by Iowa and 41 other states to regulate hospital licensing and construction; and, will also be used by Medicare and the Joint Commission to develop new regulations and standards. The design will also meet Health Insurance Portability and Accountability Act (HIPAA) requirements for patient privacy and confidentiality.





<p>THE UNIVERSITY OF IOWA 3-Exhibits\BOR\ ChilledWaterToBLB.dwg # 0369301 Plotted: August 3, 2011</p> 	<p>N  Scale: 1"=200'</p>	<p>Location Map: Utilities Distribution System Connect Boyd Law Building to Chilled Water</p>
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<p>THE UNIVERSITY OF IOWA</p>  <p>3-Exhibits\BOR\UIHC.dwg</p> <p>Plotted: August 16, 2011</p>	<p>N</p>  <p>Scale: 1"=300'</p>	<p>Location Map:</p> <p>UIHC Ambulatory Surgery Center and Main Operating Room Suite Expansions</p>
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