<u>**REGISTER OF UNIVERSITY OF IOWA**</u>
<u>**CAPITAL IMPROVEMENT BUSINESS TRANSACTIONS**</u>

<u>**Actions Requested**</u>**:** Consider approval of:

1. Permission to proceed with project planning for the **Data Center** project, a major capital project 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 A);

   b. Accept the Board Office recommendation that the project meets the necessary criteria for Board consideration; and

   c. Authorize permission to proceed with project planning, including the architectural selection process.

2. Project description and budget ($1 million) for the **Raze International Center** project, which would demolish the functionally-obsolete facility and clear the site for future construction of the College of Public Health Academic Building. **(ROLL CALL VOTE)**

<u>**Executive Summary**</u>**:** The **Data Center** project would construct a new computer data center to house and protect the computing and networking systems critical to the daily operations of the University and University Hospitals and Clinics. The proposed facility would replace the University's outdated and undersized data centers (located in Jessup Hall and the General Hospital) and individual collegiate-hosted servers located across campus, as well as provide additional space for research-computing servers.

Recent assessments of the University and UIHC data centers concluded that they are deficient in several critical infrastructure categories (architectural, electrical, mechanical, fire protection, and security); the University and UIHC are at risk of losing campus computing services due to these deficiencies. The data centers are also nearing capacity and soon will be unable to accommodate requests for new computing services. In addition, the collegiate-hosted servers across campus are housed in environments that lack the stringent heating, ventilation and air conditioning requirements for operation of the computer servers.

The University is exploring various potential sites for the facility on the Oakdale campus. The estimated project cost of $28 million would be funded with University and UIHC infrastructure funds, and the sale of revenue bonds (with debt service payments from the user organizations).

The **Raze International Center** project would demolish the International Center building, which is located on the University's west campus, south of Art Building West and north of Westlawn (see Attachment B for map). The International Center is functionally obsolete, and its demolition is necessary to clear the site for future construction of the College of Public Health Academic Building. The $1 million project budget would be funded by Income from Treasurer's Temporary Investments.

Regents Policy Manual 9.02(D)1 requires Board authorization to dispose of buildings with an estimated fair market value of $10,000 or more, by roll call vote.

The International Center, which totals approximately 73,000 gross square feet, was constructed in 1935 and an annex was added in 1959. The building housed the College of Law prior to completion of the Boyd Law Building in 1986, and it most recently housed International Programs and the Division of Continuing Education, which are in the process of relocating to other facilities.

The project would include asbestos abatement (where necessary) prior to demolition, and disposal and recycling of demolished materials. The University anticipates combining the demolition construction contract with the site preparation work for the College of Public Health Academic Building to optimize cost efficiencies at the site.

Details of Projects:

Data Center

Project Summary

	Amount	Date	Board Action
Permission to Proceed		Aug. 2007	Requested
Initial Review and Consideration of Capital		Aug. 2007	Receive
Project Evaluation Criteria			Report

Raze International Center

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 1,000,000	Aug. 2007	Requested

Project Budget

Construction	$ 765,833
Design, Inspection and Administration	161,300
Contingencies	72,867
TOTAL	$ 1,000,000
Source of Funds:	
Income from Treasurer's Temporary Investments	$ 1,000,000

Data Center

<u>Evaluation Criteria</u>

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.

<u>Institutional Mission/Strategic Plan</u>: Information Technology (IT) is vital to the University. It extends broadly across the clinical academic, research, administrative and outreach aspects of the campus for virtually every UI student, faculty and staff member. Investments in IT are strategic for the University and directly support many of the goals in *The Iowa Promise*, The University of Iowa's Strategic Plan for 2005-2010. Most day-to-day campus activities involve the use of IT in some form. This critical dependency on Information Technology requires reliable, sustainable, and available set of computer systems and networks. The proposed data center is the foundation for providing IT services with those required characteristics.

Recent assessments of the ITS data centers in Jessup Hall and the General Hospital, show that both are deficient in most every critical infrastructure category including architectural, electrical, mechanical, fire protection, and security. The University and UIHC are at high risk of losing computing services due to the inadequacy of these facilities. Furthermore, the institution is nearing capacity in the current data centers, and will soon be unable to accommodate requests for new computing services. Many of these requests come from the ever increasing use of technology, especially in support of clinical activities and for increased IT support of research. Recent audits have also exposed the risks of collegiate-hosted servers that are typically housed in rooms that were never designed for computing servers.

<u>Other Alternatives Explored</u>: Upgrades needed to meet minimal requirements for the existing network and computing equipment within those facilities have been explored. However, most of the improvements required to meet minimum standards are impossible or prohibitively expensive due to the limitations of the existing Jessup Hall and General Hospital buildings. Both buildings are old, and were not designed to support data centers. They cannot be expanded adequately in terms of space, electrical requirements or cooling needs.

Leased data center space from private companies was examined as an alternative to building a University-owned data center. The University commissioned a consultant to evaluate a customized proposal from a private company that included rates that were about half the market rates for other similar facilities. Even at these relatively low rates, the report estimated a 5-7 year break-even period when comparing leased facilities to constructing new, meaning that after 5-7 years a University-built facility is a better financial option. Since the life of a new data center facility is estimated at 20 years or more, building and operating a University facility is the preferred option. An on-campus facility also saves considerable operating expenses in terms of data network connectivity since the University does not need to procure connectivity off campus to access the facility.
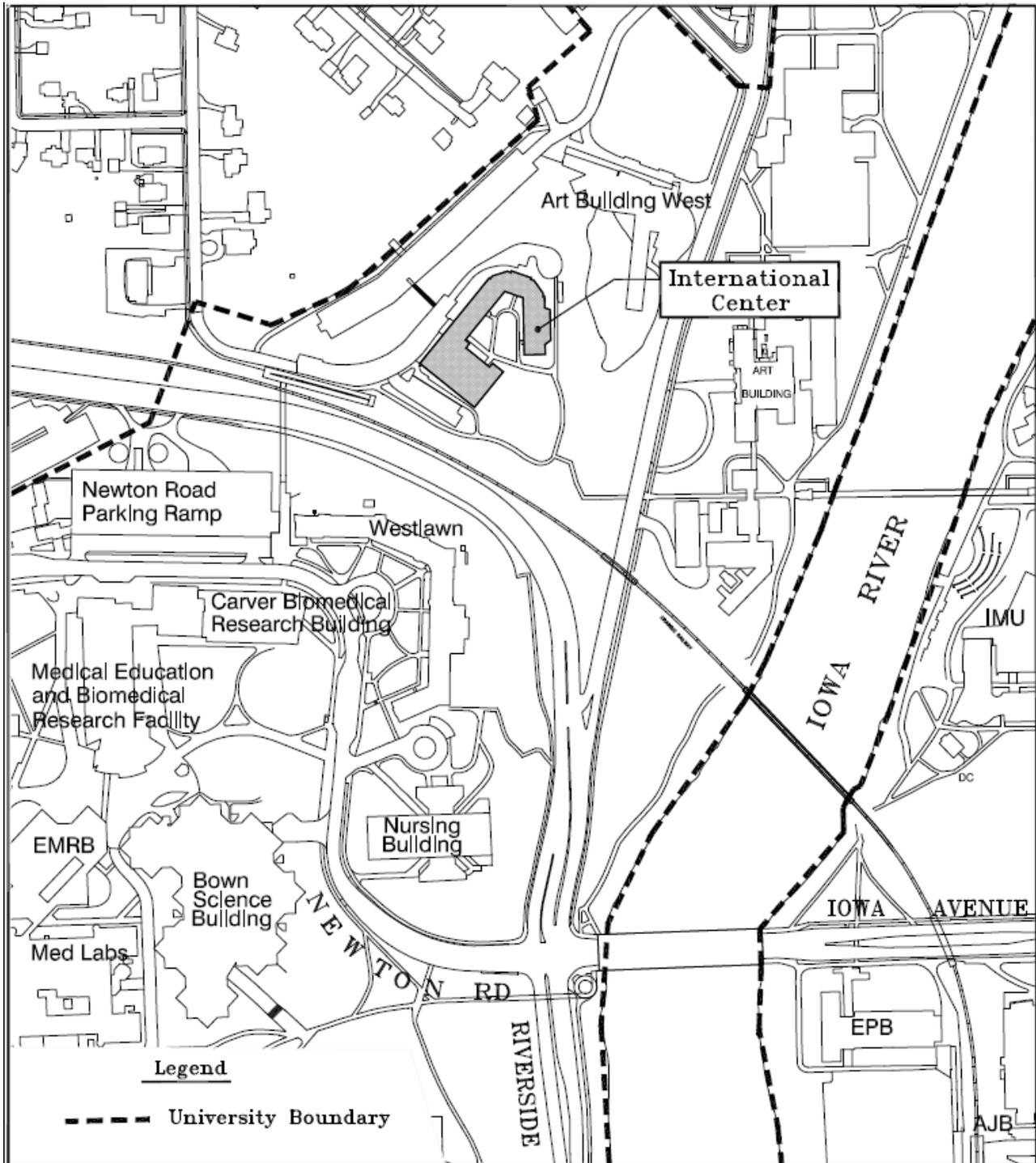
<u>Impact on Other Facilities and Square Footage</u>: Relocation of the academic and administrative data center from Jessup Hall would result in the transfer of 6,300 square feet to other University purposes. This space in Jessup Hall is in the center of the campus and attractive for other purposes involving student and faculty interactions. The General Hospital space would likely be abandoned as the space is functionally and operationally obsolete. Some collegiate space may also be available for other use, as isolated campus-wide departmental server space would be consolidated to the new facility.

Financial Resources for Construction Project: University of Iowa infrastructure funding, UIHC infrastructure funding, revenue bonds issued through the Telecom Enterprise / UIHC/ or another appropriate enterprise. Debt service will be paid by user organizations.

Financial Resources for Operations and Maintenance: These would be shared in accord with overall usage.

External Forces: There is heightened awareness to protect information technology resources in response to recent events, such as the fire in UNI's Gilchrist Hall, the break-in of UI's Seashore Hall and the 2006 tornado on the University of Iowa campus. Current best practices are to provide secure, "hardened" facilities to house mission-critical computing and network equipment. Neither the ITS or HCIS data centers can realistically be retrofitted into a "hardened" facility.

Some research grants are dependent on having modern-day data centers to house computing equipment. The University will be unable to secure those grants without an appropriate data server facility.

Art Building West

International Center

ART BUILDING

Newton Road Parking Ramp

Westlawn

Carver Biomedical Research Building

Medical Education and Biomedical Research Facility

EMRB

Bown Science Building

Med Labs

Nursing Building

NEWTON RD

RIVERSIDE

IOWA RIVER

IMU

DC

IOWA AVENUE

EPB

AJB

Legend

– – – University Boundary

THE UNIVERSITY OF IOWA

3-Exhibits\BOR\
IC-raze.dwg
Plotted: July 17, 2007

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Scale: 1" = 250'

Location Map

Raze International Center