Contact: Joan Racki

REGISTER OF UNIVERSITY OF IOWA
CAPITAL IMPROVEMENT BUSINESS TRANSACTIONS

Actions Requested: Consider recommending to the Board approval of the:

1. Following actions for the **Daum Residence Hall – Renovate Floors 1-8** 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 design professional selection process.
2. Permission to proceed with project planning for the **Utilities Distribution System – Reconstruct Currier Steam Tunnel at Burge Hall** and **Water Plant – Install Reverse Osmosis System** projects, and the selection of Shive-Hattery as the design professional for the Currier Tunnel project.
3. Project description and budget ($6,150,200) and the selection of Heery International as the design professional for the **UIHC Colloton Pavilion LL–L3 Replacement of Air Handling Units** project.
4. Ratification of Executive Director approval of a revised project budget ($18,870,000) for the **Power Plant – Air Regulations Compliance** project.

Executive Summary:

The University requests permission to proceed with project planning for three projects: **Daum Residence Hall – Renovate Floors 1-8**, **Utilities Distribution System – Reconstruct Currier Steam Tunnel at Burge Hall** and **Water Plant – Install Reverse Osmosis System**.

The Daum Residence Hall project would upgrade the finishes in the building, including flooring and paint in the student rooms and corridors, as well as renovation of elevator lobbies. The estimated project cost of $3,800,000 would be funded by University Housing renewal and improvement funds. The work would occur over three summer breaks. (See Attachment B for location.)

The Currier Steam Tunnel project would reconstruct approximately 435 lineal feet of the existing Currier Steam Tunnel north of the T. Anne Cleary walkway, from Davenport Street to Bloomington Street, as shown on Attachment C. The tunnel houses high and low pressure steam, condensate and telephone lines that serve University buildings on the north end of campus, including several residence halls and the North Campus Chilled Water Plant. The estimated project cost of $5,750,000 would be funded by Utilities System Renewal and Improvement Funds.

Construction associated with the Madison Street Residence Hall will be occurring in this area of campus, including the construction of a walkway connecting the new residence hall to the T.

Anne Cleary Walkway. Disruption of this part of campus would be minimized by coordinating the two projects. To aid in this coordination, the University requests permission to directly engage Shive-Hattery as the design professional for the project. The firm is the utility and site designer for the Madison Street Residence Hall project.

The reverse osmosis system project would install a reverse osmosis (RO) water filtration system within the existing University of Iowa Water Plant. (See Attachment D for location.) The Plant treats, monitors, and supplies water to the entire campus, including the University of Iowa Hospitals and Clinics. The water is used for both domestic (drinking) water and chilled water, used for cooling. A June 2015 report prepared by Howard R. Green Inc. recommended installation of the system, which would ensure continued compliance with water quality regulations and would improve the overall quality of the campus water supply. The current, estimated project cost is $5,300,000; this amount will be refined as planning proceeds. The project would be funded by Utility System Renewal and Improvement Funds.

The University requests approval of the project description and budget ($6,150,200) and the selection of Heery International of Iowa City as the design professional for the **UIHC – Colloton Pavilion LL–L3 Replacement of Air Handling Units** project, which would replace four air handling (AHU) units which have reached the end of their serviceable life. The project would be funded by University Hospitals Building Usage Funds.

The request to utilize Heery International as the design professional is based upon the firm's experience at UIHC, including ongoing work for replacement of AHU 23 (approved by the Board in August 2015), which is located in the same mechanical room as units to be replaced. The firm also has the background and experience with multi-phased projects in areas with extremely high levels of infection control that require complex coordination of enhancements to structure; phased installation and connection of mechanical and electrical systems; and the sequencing of temporary shut downs and changeovers to minimize the interruption and disruption to a critical service still in operation during construction.

The University requests ratification of Executive Director approval of a revised project budget ($18,870,000, an increase of $3,070,000) for the **Power Plant - Air Regulation Compliance** project, which would install new pollution control equipment to meet the new, more stringent federal emissions requirements (Boiler MACT [Maximum Achievable Control Technology] and NAAQS [National Ambient Air Quality Standards]) for the steam generating boilers at the Main Power Plant. The regulations became effective January 31, 2013 and require compliance by September 30, 2016.

Bids for the project were opened on August 27, 2015; the four bids received all exceeded the construction estimate, with the low bid exceeding the construction estimate by 14%. To permit award of the construction contract, the Executive Director approved the revised project budget; ratification of this action is now requested. The initial and revised project budgets are being funded by Utility System Revenue Bonds.

Details of the Projects:

Daum Residence Hall – Renovate Floors 1-8

Project Summary

	Amount	Date	Board Action
Permission to Proceed with Project Planning		Oct. 2015	Requested
Initial Review and Consideration of Capital Project Evaluation Criteria		Oct. 2015	Receive Report

This project would install drywall veneer, new flooring and paint in student rooms and corridors on floors 1-8 of Daum Residence Hall. Student room closets would be replaced with a standard wire closet shelving system used in modernized halls. New acoustical ceilings, lighting, draperies, access panels and towel bars would be installed in the student rooms. Each floor lounge would have new doors, a new study room, roller shades, acoustical ceiling and lighting. Stairwell ceilings will be painted. Renovation of the elevator lobbies on floors 2-8, including new tile finish on walls, new flooring, paint, convectors, and emergency phones, would occur. Asbestos abatement of old flooring and pipe covers is also included.

Utilities Distribution System – Reconstruct Currier Steam Tunnel at Burge Hall

Project Summary

	Amount	Date	Board Action
Permission to Proceed with Project Planning		Oct. 2015	Requested
Design Professional Selection (Shive-Hattery, Iowa City)		Oct. 2015	Requested

The structural integrity of the Currier Steam Tunnel was assessed in 2015 as part of a regular program of care for underground utilities. Significant deterioration was identified in the tunnel; temporary wood shoring was installed in a 300-foot section of the tunnel to provide added structural support until the reconstruction occurs. The reliability of this tunnel is critical to ensuring steam and telephone service to the north end of campus. The current condition with shoring restricts the access for maintenance personnel.

Water Plant – Install Reverse Osmosis System

Project Summary

	Amount	Date	Board Action
Permission to Proceed with Project Planning		Oct. 2015	Requested

The University's Water Plant, constructed in 1963, is located at the intersection of Burlington Street and the Iowa River. The facility treats, monitors and supplies water to the entire campus, including the University of Iowa Hospitals and Clinics. It also enables operation of the nearby Main Power Plant.

The Water Plant sources the majority of its water from the Iowa River. To stay within the regulated maximum nitrate levels during peak nitrate seasons, the river water must be blended with lower nitrate water from a well that produces water from the Jordan Aquifer. Since the existing Jordan Aquifer well has a limited capacity, and because there is not a second well to provide redundancy in the event of a failure, a reverse osmosis filtration system will reduce nitrates and improve overall water quality without reliance on the Jordan Aquifer well.

UIHC – Colloton Pavilion LL–L3 Replacement of Air Handling Units

Project Summary

	Amount	Date	Board Action
Project Description and Budget	$6,150,200	Oct. 2015	Requested
Selection of Design Professional (Heery International, Iowa City)		Oct. 2015	Requested

Three of the four air handling units (AHU) to be replaced (AHUs 1, 2 and 24) are located in lower level two of the Colloton Pavilion (JCP), while AHU-15 is located within level three of the Pavilion. They serve the administrative office suite on level one and inpatient units on levels two and three, with AHU-15 specifically serving the level three inpatient unit. Each of the new units will need to be significantly larger in size than the unit it is replacing due to current code and HEPA (high-efficiency particulate air) filtration requirements. Implementation of this project will complete the HVAC infrastructure modernization for JCP, providing the conditioned air capacity for higher acuity inpatient units that may require HEPA filtration.

Project Budget

Construction	$4,920,000
Planning, Design, and Management	738,200
Contingency	492,000
TOTAL	$6,150,200

Source of Funds: University Hospitals Building Usage Funds

Power Plant – Air Regulations Compliance

Project Summary

	Amount	Date	Board Action
Environmental Study Agreement (Sebesta Blomberg & Assoc; Cedar Rapids)	$ 139,287	Sept. 2012	Not Required*
Permission to Proceed with Project Planning		Apr. 2014	Approved
Design Professional Agreement – Pre-Design through Design Development (PRVN Consultants; Muscatine)	335,000	Oct. 2014	Not Required*
Design Professional Agreement - Construction Documents through Construction Administration (PRVN Consultants; Muscatine)	784,551	Feb. 2015	Not Required*
Project Description and Budget	15,800,000	Apr. 2015	Requested
Design Professional Agreement Amendment	78,000	May 2015	Not Required*
Construction Contract Award (Carl A. Nelson & Co; Burlington)	13,400,000	Sept. 2015	Not Required*
Revised Project Description and Budget	18,870,000	Oct. 2015	Ratification

*Approved by Executive Director, consistent with Board policies

The four bids received for the project all exceeded the design professional's construction estimate. Following the bid opening, the design professional and owner's representative reviewed the bid information and interviewed the lowest bidder. Explanations for the higher than anticipated bids were substantially higher costs for in-plant demolition; having to place new equipment within tight plant spaces; having to coordinate the project work around plant operations, including fall and spring outages; and higher labor costs. To meet federal deadlines, the project needs to be completed by September 30, 2016.

Project Budget

	Initial Budget April 2015	Revised Budget Oct. 2015
Construction	$12,000,000	$14,560,718
Planning, Design and Management	2,600,000	2,860,696
Contingency	1,200,000	1,448,586
TOTAL	$15,800,000	$18,870,000
Source of Funds:		
Utility System Revenue Bonds	$15,800,000	$18,870,000

Daum Residence Hall – Renovate Floors 1-8
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 core values of the University include excellence, learning, community, diversity, integrity, respect and responsibility. Strategies to accomplish these core values include recruiting and retaining a talented student population, promoting effective learning environments and promoting a welcoming climate that enhances the education experience. The residence halls are an important factor in students' decisions to attend the University and they have direct impact on the retention and success of the students. University Housing's master plan includes updating of residence hall finishes and building systems as part of its long-term renovation and maintenance plan.

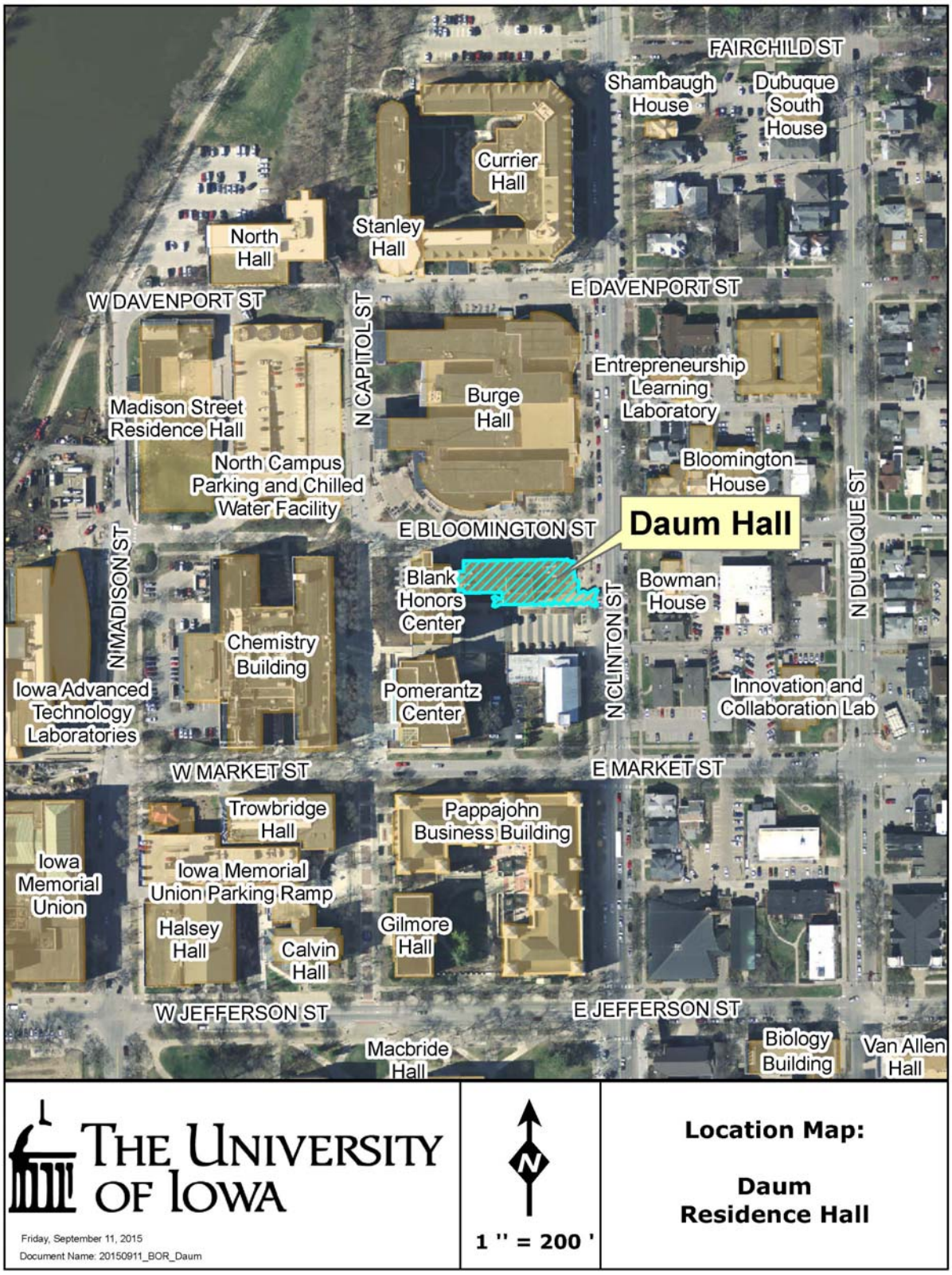
Other Alternatives Explored: Daum Hall, the designated honors house on the UI campus, continues to be a popular residence hall and must maintain a level of quality expected by students choosing to live there. Appropriately maintaining Daum Hall and all of the residence halls in the UI Housing system is a critical part of making these halls functional for the long-term. Continuing to utilize finishes and lighting that are at the end of their lifespan creates increasing maintenance costs and frequent service calls. This project will improve the hall and is a well-timed investment in maintaining the hall for years to come.

Impact on Other Facilities and Square Footage: No space will be abandoned or demolished.

Financial Resources for Construction Project: The project will be funded through University Housing renewal and improvement funds generated from residence system room and board charges.

Financial Resources for Operations and Maintenance: The space is currently maintained by University Housing; therefore, operating and maintenance funds already exist in the operating budget.

External Forces Justifying Approval: None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Currier Hall
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Entrepreneurship Learning Laboratory
Burge Hall
Madison Street Residence Hall
North Campus Parking and Chilled Water Facility
Bloomington House
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Daum Hall
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N MADISON ST
Blank Honors Center
Bowman House
N CLINTON ST
Chemistry Building
Iowa Advanced Technology Laboratories
Pomerantz Center
Innovation and Collaboration Lab
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Trowbridge Hall
Pappajohn Business Building
Iowa Memorial Union
Iowa Memorial Union Parking Ramp
Halsey Hall
Calvin Hall
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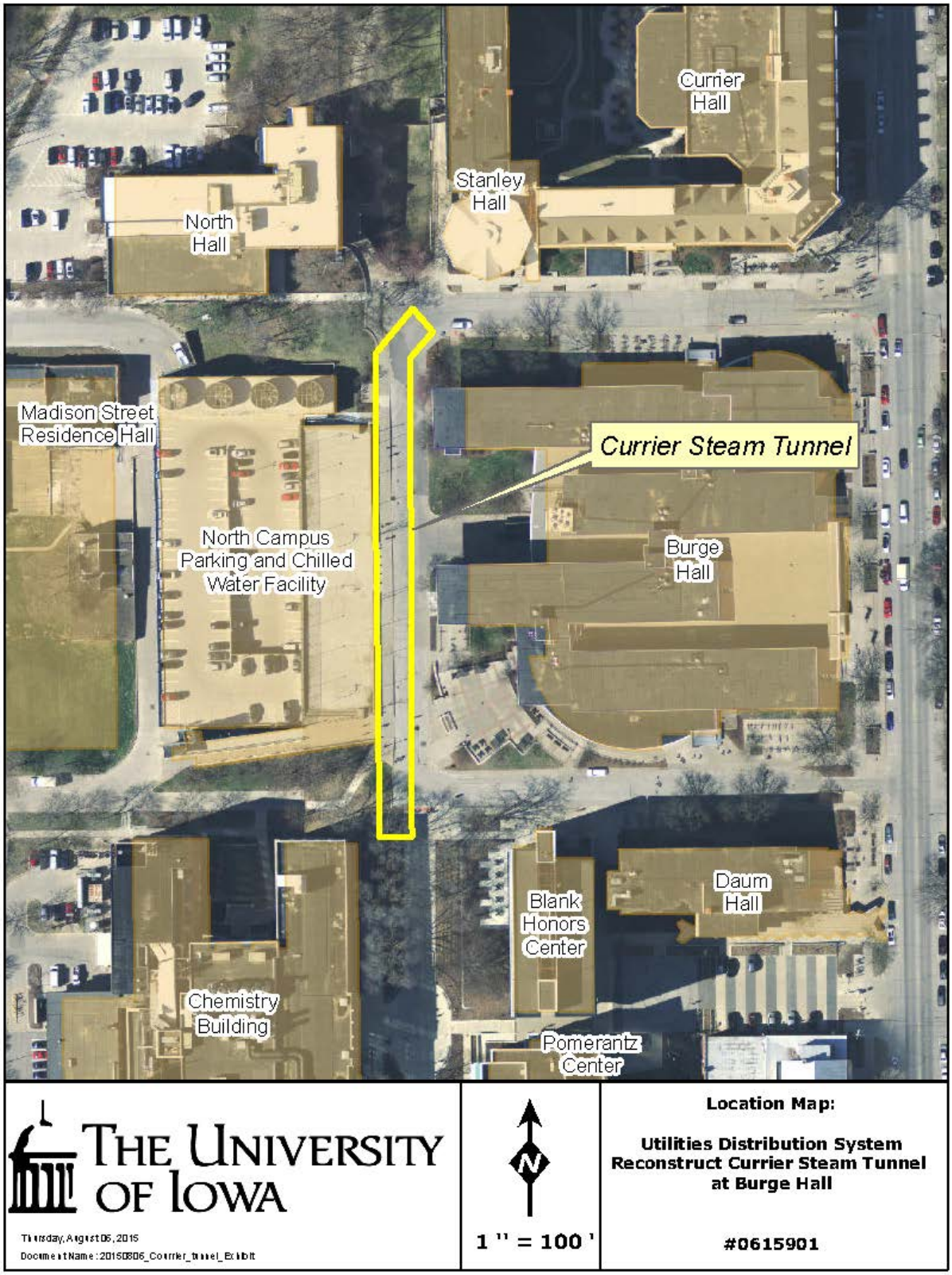
Location Map:
Daum Residence Hall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Madison Street Residence Hall
Currier Steam Tunnel
North Campus Parking and Chilled Water Facility
Burge Hall
Daum Hall
Blank Honors Center
Chemistry Building
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Reconstruct Currier Steam Tunnel
at Burge Hall
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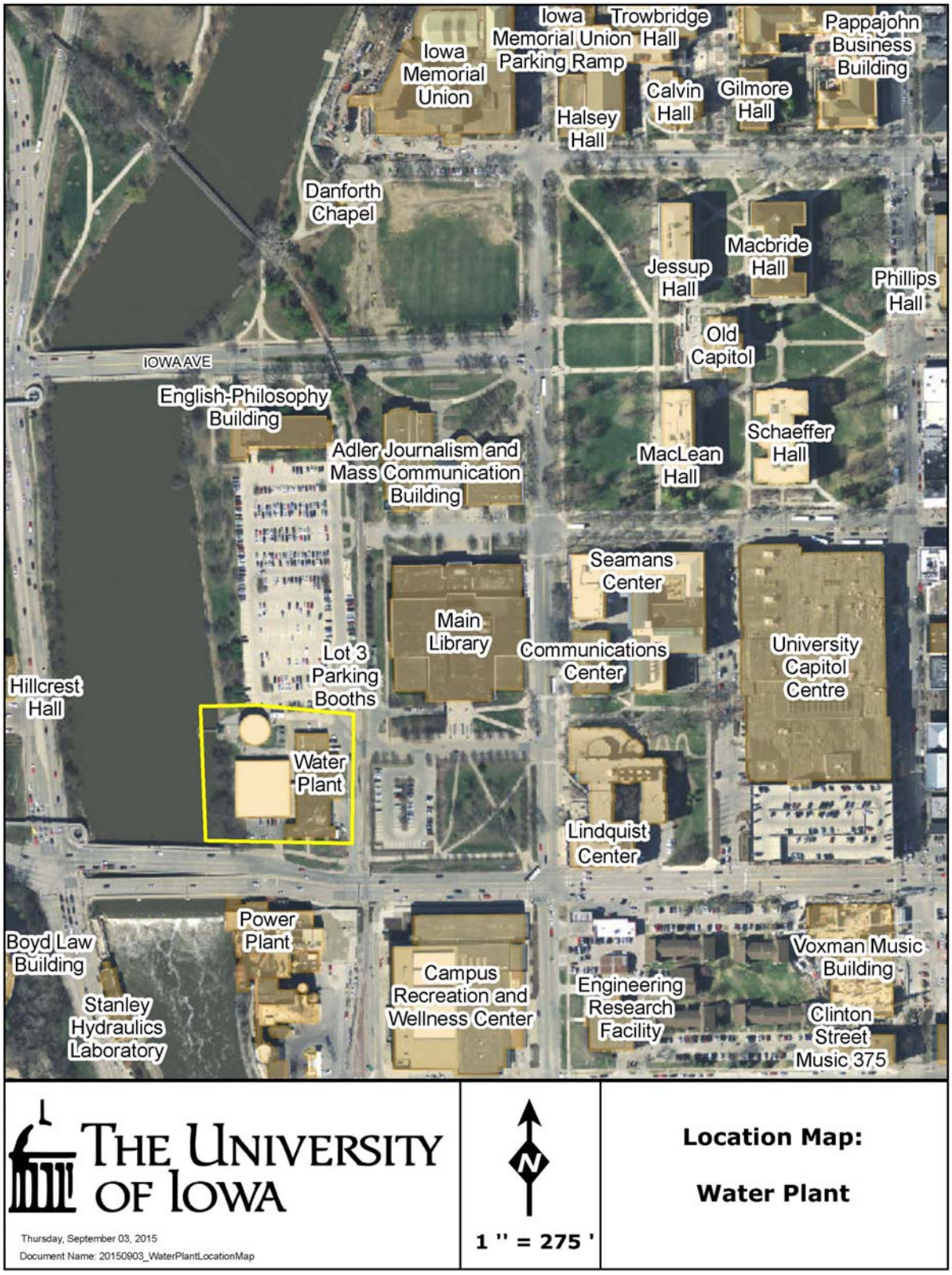
Iowa Memorial Union
Trowbridge Hall
Parking Ramp
Pappajohn Business Building
Iowa Memorial Union
Calvin Hall
Gilmore Hall
Halsey Hall
Danforth Chapel
Macbride Hall
Jessup Hall
Phillips Hall
Old Capitol
IOWA AVE
English-Philosophy Building
Adler Journalism and Mass Communication Building
MacLean Hall
Schaeffer Hall
Seamans Center
Main Library
Lot 3 Parking Booths
Communications Center
University Capitol Centre
Hillcrest Hall
Water Plant
Lindquist Center
Power Plant
Boyd Law Building
Voxman Music Building
Campus Recreation and Wellness Center
Engineering Research Facility
Stanley Hydraulics Laboratory
Clinton Street Music 375
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