

07/02/13

BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

I.3. Capital Planning and Budget Committee

Thursday, July 11, 2013  
UW-Madison  
Room 1920, Van Hise Hall  
Madison, Wisconsin

1:00 p.m. Meeting of the Capital Planning and Budget Committee – Room 1920

- a. Approval of the Minutes of the June 6, 2013 Meeting of the Capital Planning and Budget Committee
- b. UW-Madison: Authority to Increase the Scope and Budget of the Elizabeth Waters Residence Hall Renovation Project  
[Resolution I.3.b.]
- c. UW-Platteville: Approval of the Revised Design Report of the Residence Hall Renovations-Phase I Project and Authority to (1) Increase the Project Scope and Budget, (2) Seek a Waiver of Wis. Stats s.16.855 to Allow Single Prime Bidding, (3) and Construct the Project  
[Resolution I.3.c.] *Deferred 7/10/2013*
- d. UW System: Authority to Construct All Agency Maintenance and Repair Projects  
[Resolution I.3.d.]
- e. Building Commission Report
- f. Closed session for purposes of considering personal histories, as permitted by s.19.85(1)(f), *Wis. Stats.*, related to the naming of a facility at UW-Madison

Authority to Increase the Scope and Budget  
of the Elizabeth Waters Residence Hall  
Renovation Project, UW-Madison

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the UW-Madison Interim Chancellor and the President of the University of Wisconsin System, authority be granted to increase the budget of the Elizabeth Waters Residence Hall Renovation project by \$3,041,700 Program Revenue-Cash for a revised estimated total project cost of \$10,141,700 Program Revenue-Cash.

# THE UNIVERSITY OF WISCONSIN SYSTEM

## Request for Board of Regents Action August 2013

1. Institution: The University of Wisconsin-Madison
2. Request: Authority to increase the budget of the Elizabeth Waters Residence Hall Renovation project by \$3,041,700 Program Revenue-Cash for a revised estimated total project cost of \$10,141,700 Program Revenue-Cash.
3. Project Description and Scope: This project involves selective renovations in Elizabeth Waters Hall located at 1200 Observatory Drive on the UW-Madison campus. As approved in 2012, the project had three main components: renovation to the hall's food service functions, renovations of mechanical systems, upgrades to building finishes, and reconstruction and landscaping of the north terrace and patio.

The additional scope requested includes the installation of a fire suppression system for the entire 143,600 GSF building including resident rooms, common areas, and the kitchen/dining area.

4. Justification: This project was enumerated as part of the 2011-13 Capital Budget and approved for construction in June of 2012. Justifications for the project were submitted both times.

In the fall of 2012, UW-Madison made a commitment to sprinkler all of its low-rise residence halls by 2025. Subsequent to that commitment, a study was completed to identify the scope and cost of that work. By then, the Elizabeth Waters Renovation project was close to bidding. Bidding was delayed to allow for incorporation of a sprinkler system into the project. This additional work is being funded with savings from two recent housing projects, the Lakeshore (Dejope) Residence Hall-Phase I project and the Carson Gulley Renovation project.

5. Revised Budget and Schedule:

Construction	\$8,548,300
Design	628,166
DFD	360,800
Contingency	604,434
Total Project Cost	\$10,141,700

BOR Approval	July 2013
SBC Approval	August 2013
Bid Opening	November 2013
Start Construction	May 2014
Substantial Completion	September 2015

6. Previous Action:

August 19, 2010  
Resolution 9801

Recommended that the Elizabeth Waters Renovation project be submitted to the Department of Administration and the State Building Commission as part of the UW System 2011-13 Capital Budget at an estimated total project cost of \$7,100,000 Program Revenue Supported Borrowing. The project was subsequently enumerated at that level and funding amount.

June 8, 2012  
Resolution 10078

Approved the Design Report and granted authority to construct the Elizabeth Waters Residence Hall Renovation project at a total estimated project cost of \$7,100,000 Program Revenue Supported Borrowing.

Authority to Construct All Agency  
Maintenance and Repair Projects,  
UW System

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the President of the University of Wisconsin System, authority be granted to construct various maintenance and repair projects at an estimated total cost of \$3,835,000 (\$705,900 General Fund Supported Borrowing; \$2,868,000 Program Revenue Supported Borrowing; \$261,100 Program Revenue-Cash).

# THE UNIVERSITY OF WISCONSIN SYSTEM

## Request for Board of Regents Action July 2013

1. **Institution:** The University of Wisconsin System
2. **Request:** Authority to construct various maintenance and repair projects at an estimated total cost of \$3,835,000 (\$705,900 General Fund Supported Borrowing; \$2,868,000 Program Revenue Supported Borrowing; \$261,100 Program Revenue-Cash).

**ENERGY CONSERVATION**

INST	PROJ. NO.	PROJECT TITLE	Z030	WS10	AGF0	GIFT/GRANT	Z450	TOTAL
MSN	13C2U	Multi-Bldg Energy Conservation, Ph. 6	\$ -	\$ 2,868,000	\$ -	\$ -	\$ -	\$ 2,868,000
EC SUBTOTALS			\$ -	\$ 2,868,000	\$ -	\$ -	\$ -	\$ 2,868,000

**UTILITY REPAIR AND RENOVATION**

INST	PROJ. NO.	PROJECT TITLE	Z080	T570	AGF0	GIFT/GRANT	Z450	TOTAL
MSN	13E4T	CSHP CW Dist Pump VFD Inst	\$ 396,400	\$ -	\$ 146,600	\$ -	\$ -	\$ 543,000
MSN	13E4Y	Walnut St Tunnel Stanchion Repl	\$ 309,500	\$ -	\$ 114,500	\$ -	\$ -	\$ 424,000
URR SUBTOTALS			\$ 705,900	\$ -	\$ 261,100	\$ -	\$ -	\$ 967,000

	GFSB	PRSB	CASH	GIFT/GRANT	Z450	TOTAL
AUGUST 2013 TOTALS	\$ 705,900	\$ 2,868,000	\$ 261,100	\$ -	\$ -	\$ 3,835,000

3. **Description and Scope of Project:** This request provides maintenance, repair, renovation, and upgrades through the All Agency Projects Program.

### **Energy Conservation**

**MSN - Multi-Building Energy Conservation, Phase 6 (\$2,868,000):** This project implements energy conservation opportunities (ECOs) throughout ~651,000 GSF in two research buildings (Waisman Center and Wisconsin Institute for Medical Research). Waisman project work includes reducing air supply flow and outside air intake quantities for nine air handling units, retrofitting new variable air volume systems on five air handling units, and upgrading the general building HVAC system and fumehood exhaust system to allow low-flow operation. Wisconsin Institute for Medical Research project work includes reducing air supply flow and outside air intake for eight air handling units, providing new air flow setback capabilities for spaces not containing fumehoods, and providing occupancy based air flow setbacks for spaces containing fumehoods.

The Department of Administration and the University of Wisconsin System embrace high-performance green building standards and energy conservation for state facilities and operations. 2005 Act 141 requires each agency to develop energy cost reduction plans. Plans must include all system and equipment upgrades that will pay for themselves in energy cost reductions over their useful life. The energy savings performance contracting

program provides a process for UW System to effect energy cost reductions in existing buildings and utility systems.

This project will assist UW-Madison in complying with these energy reduction goals. The implementation of the energy conservation opportunities (ECOs) identified in this request will result in an anticipated annual energy cost savings of approximately \$287,000 with a simple payback of 9.9 years. This is below the state energy fund simple payback requirement of 16 years or a 20-year payback with repayment at a 5.25% bond rate and a 3% inflation rate.

### **Utility Repair and Renovation Requests**

MSN - Charter Street Heating Plant Chilled Water Distribution Pump Variable Frequency Drive Installation (\$543,000): This project installs a new variable frequency drive (VFD) system for a constant speed 1,000 HP chilled water distribution pump located at the Charter Street Heating Plant (CSHP). Project work includes furnishing and installing a new VFD with a bypass motor starter. The circuit and over-current protection serving the 1,000 HP motor will be modified per manufacturer recommendations. Existing chilled water pressure and flow sensors will be wired to the VFD controller as input for chilled water flow control. The VFD controller output will be connected to the existing chilled water plant digital control system for indication of all run and fault conditions. New ductwork will connect the VFD cabinet to an existing air handling system to direct filtered cooling air to the VFD enclosure. An equipment mezzanine will be required to locate the VFD in an area that complies with NEC access requirements for the equipment.

Controlling both chilled water distribution pumps will maximize operating flexibility and provide energy efficient delivery of chilled water to campus buildings. There are two 1,000 HP chilled water distribution pumps at CSHP and a VFD control was recently added (10J1M). The existing VFD does not have a bypass motor starter. The proposed VFD must include a bypass starter in case of controller failure within either the VFD or if the cooling air is disrupted. The bypass starter enables pump operation at full constant speed to ensure chilled water delivery to campus until the VFD failure(s) are addressed. Providing cooling air to the VFD enclosure will ensure equipment longevity and increased operating reliability.

MSN - Walnut Street Utility Tunnel Stanchion Replacement (\$424,000): This project replaces pipe supports (stanchions) and concrete housekeeping pads, and performs limited joint sealing work in the utility tunnel located between the Walnut Street Heating Plant and UW Hospital and Clinics. Project work includes replacing ~110 stanchions and ~180 concrete housekeeping pads under stanchions. All stanchions will be coated with a corrosion-inhibiting paint system. New supports will include larger pipe saddles that accommodate insulation thicknesses consistent with current DFD State specifications. Piping insulation jacket repairs will be made at both the new and demolished stanchion locations. A measured effort will be made to inhibit or stop water penetration at problematic tunnel joints by means of sealant injection.

This utility tunnel was constructed when the hospital was constructed in the mid-1970s. Located directly on top of the tunnel are ductbanks which provide a raceway for the primary electrical feeders and signal communication wiring to the hospital. The concrete structure of the utility tunnel is in good condition but when the tunnel was constructed, most of the stanchions were located directly under the construction joints in the roof and walls of the tunnel. Minor water leaks at the joints have caused accelerated corrosion of steel stanchions positioned directly below. Locating new stanchions adjacent to the failing stanchions will move the new stanchions away from the concrete joints of the tunnel. Existing stanchions that are not replaced will receive new concrete housekeeping pads to provide corrosion protection from water accumulation on the tunnel floor. The tunnel construction joints that have been most prone to water penetration after a storm event will be injected with a chemical sealant as a means to inhibit or stop the infiltration.

4. Justification of the Request: UW System Administration and the Division of Facilities Development (DFD) continue to work with each institution to develop a comprehensive campus physical development plan, including infrastructure maintenance planning. After a thorough review and consideration of approximately 450 All Agency Project proposals and over 4,500 infrastructure planning issues submitted, and the UW All Agency Projects Program funding targets set by DFD, this request represents high priority University of Wisconsin System infrastructure maintenance, repair, renovation, and upgrade needs. This request focuses on existing facilities and utilities, targets the known maintenance needs, and addresses outstanding health and safety issues. Where possible, similar work throughout a single facility or across multiple facilities has been combined into a single request to provide more efficient project management and project execution.

5. Budget:

General Fund Supported Borrowing .....	\$	705,900
Program Revenue Supported Borrowing .....		2,868,000
Program Revenue-Cash .....		<u>261,100</u>
<b>Total Requested Budget \$</b>		<b>3,835,000</b>

6. Previous Action: None.