

All Agency Project Request

2011 - 2013 Biennium

<u>Agency</u>	<u>Institution</u>	<u>Building No.</u>	<u>Building Name</u>
University of Wisconsin	Eau Claire	285-0C-9924	Utility - Site Steam & Condensate

<u>Project No.</u>	11H1B	<u>Project Title</u>	Lower Campus Steam Loop Ext
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Project Intent

This project completes the lower campus central steam and condensate utility loop by constructing ~900 LF of new steam and condensate lines enclosed in concrete box conduit; constructing three (3) new utility pits; and connecting Hibbard Hall and Schofield Hall. This project also provides a connection point for the future Education Building (08A1Z).

Project Description

PHILLIPS HALL TO PIT A: Construct ~750 LF of new concrete box conduit containing 8-inch high pressure steam (HPS) and 4-inch condensate piping from the north end of Phillips Hall north to new utility Pit A. Construct three (3) new utility pits, one north of Garfield Avenue and near the southwest corner of Hibbard Hall (Pit A), one near the southwest corner of Zorn Arena (Pit B), and one near the northwest corner of Schneider Hall (Pit C). The new pit locations will form a logical north-south utility corridor between Phillips Hall and Hibbard Hall along established pedestrian pavements, and avoid conflicts with the electrical/telecommunications corridor that is already established.

PIT B: Pit B will serve as the connection point for the new Education Building and Zorn Arena combined service in Project 08A1Z. Construct Pit B with required fittings, valves, and anchors to accommodate this service.

PIT C TO SCHOFIELD HALL: Construct ~150LF of new concrete box conduit containing 6-inch HPS and 3-inch condensate piping from Pit C west to the underground vault room (site of original campus central heating plant) at the southeast corner of Schofield Hall.

Project work includes demolition and removal of steam pits and box conduits being replaced, patching and waterproofing of pits and building walls, temporary summer heating service to the Davies Center and Schofield Hall. Coordination of site access, site utilities, and site activities with the new Education Building will be required. Project work also includes clearing and grubbing, pedestrian pavement removal and replacement, landscaping and site restoration for all project areas.

Project Justification

Historically, the lower campus was served by a single steam pipe source constructed in 1966 from the upper campus heating plant to the lower campus, routed along campus hill and Garfield Avenue. This arrangement did not allow maintenance service without shutting down the majority of lower campus. During 2010, a steam loop extension was constructed (09A1Z), connecting Phillips Hall, Schneider Hall, the School of Nursing, and the new student center. This project completes the lower campus steam loop, allowing all facilities to be served from at least two directions, and providing flexible operations and maintenance management.

This project replaces and provides redundancy for some of the oldest (1950s vintage) central steam system components and increases capacities to the remote east campus which has the largest demand load. Completing the steam loop will increase the efficiency and reliability of the entire system, provide additional capacity during normal operations, and redundant capacity during critical service periods.

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A/E Consultant Requirements

A/E Selection Required?

Consultants should have specific expertise and experience in the design and coordination of central steam distribution system extension and renovation projects as part of a design team. Work includes site surveys, acquiring field data, and verifying as-built conditions to assure accurate development of design and bidding documents, designing the steam line system and pits, production of necessary design and bidding documents and construction oversight. Consultants should indicate specific projects from past experience (including size, cost, and completion date) in their letter of interest and when known, include proposed consulting partners and specialty consultants.

Commissioning

- Level 1
- Level 2

Project Budget

Construction Cost:		\$2,031,000	
Haz Mats:		\$10,000	
Construction Total:		\$2,041,000	
Contingency:	15%	\$306,200	
A/E Design Fees:	8%	\$163,300	
DFD Mgmt Fees:	4%	\$93,900	
Equipment/Other:		\$0	
		\$2,604,400	

Funding Source

GFSB - Infrastructure [Z450]	
PRSB - Utilities Repair & Renovation [T570]	
Agency/Institution Cash []	
Gifts	
Grants	
Building Trust Funds [BTF]	
Other Funding Source	

Total

GFSB - Infrastructure [Z450]	\$1,510,600
PRSB - Utilities Repair & Renovation [T570]	\$1,093,800
Agency/Institution Cash []	\$0
Gifts	\$0
Grants	\$0
Building Trust Funds [BTF]	\$0
Other Funding Source	\$0
\$2,604,400	

Project Schedule

- SBC Approval: 09/2011
- A/E Selection: 10/2011
- Bid Opening: 03/2012
- Construction Start: 05/2012
- Substantial Completion: 09/2012
- Project Close Out: 12/2012

Project Contact

- Contact Name: Terry L. Classen, P.E.
- Email: <classetl@uwec.edu>
- Telephone No.: (715) 836-5278 x

Project Scope Consideration Checklist

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1. Will the building or area impacted by the project be occupied during construction? If yes, explain how the occupants will be accommodated during construction.

All project work will be coordinated through campus physical plant staff to minimize disruptions to daily operations and activities.
2. Is the project an extension of another authorized project? If so, provide the project #...

08A1Z and 09K1Z.
3. Are hazardous materials involved? If yes, what materials are involved and how will they be handled?

Required hazardous materials abatement (mechanical piping insulation) has been included in the estimated project schedule and project budget. Comprehensive building survey inventory data is not available on Wisconsin's Asbestos & Lead Management System (WALMS) <<http://walms.doa.state.wi.us/>>.

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4. Will the project impact the utility systems in the building and cause disruptions? If yes, to what extent?
- All project work will be coordinated through campus physical plant staff to minimize disruptions to daily operations and activities.
5. Will the project impact the heating plant, primary electrical system, or utility capacities supplying the building? If yes, to what extent?
- This project provides additional distribution and redundancy for the central campus steam system.
6. Are other projects or work occurring within this project's work area? If yes, provide the project # and/or description of the other work in the project scope.
- Project work must be coordinated with 08A1Z (Education Building), especially Pit B. Coordination between projects will include fencing, traffic control, surface restoration, temporary access, underground utilities, etc.
7. Have you identified the WEPA designation of the project...Type I, Type II, or Type III?
- Type III.
8. Is the facility listed on a historic register (federal or state), or is the facility listed by the Wisconsin Historical Society as a building of potential historic significance? If yes, describe here.
9. Are there any other issues affecting the cost or status of this project?
10. Will the construction work be limited to a particular season or window of opportunity? If yes, explain the limitations and provide proposed solution.
- Project work is seasonal. Preferred project work schedule should be limited to late spring, summer, and/or early fall months if possible.
11. Will the project improve, decrease, or increase the function and costs of facilities operational and maintenance budget and the work load? If yes, to what extent?
12. Are there known code or health and safety concerns? If yes, identify and indicate if the correction or compliance measure was included in the budget estimate, or indicate plans for correcting the issue(s).
13. Are there potential energy or water usages reduction grants, rebates, or incentives for which the project may qualify (i.e. Focus on Energy <<http://www.focusonenergy.com>> or the local utility provider)? If yes, describe here.
14. If this is an energy project, indicate and describe the simple payback on state funding sources in years and the expected energy reduction here.