

# All Agency Project Request

2013 - 2015 Biennium

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<b><u>Agency</u></b>	<b><u>Institution</u></b>	<b><u>Building No.</u></b>	<b><u>Building Name</u></b>
University of Wisconsin	Madison	285-0A-9920	Utility - Site Mechanical

<b><u>Project No.</u></b>	13E4Y	<b><u>Project Title</u></b>	Walnut St Tunnel Stanchion Repl
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## **Project Intent**

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 Description**

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 stanchions will be installed adjacent to the failing stanchions. The existing stanchions and pipe supports will be removed after the completion of new work. New supports will include larger pipe saddles that accommodate insulation thicknesses consistent with current DFD State specifications. After the failing stanchions have been removed along with the under-sized pipe saddles, insulation and jacket repairs will be made at both the new and demolished stanchion locations. A measured effort will be made to inhibit or stop penetration of water at problematic tunnel joints by means of sealant injection.

## **Project Justification**

The utility tunnel between the Walnut Street Heating Plant and UW Hospital and Clinics was constructed when the Hospital was constructed in the mid-1970's. 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 the steel stanchions. 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. New and existing stanchions will be protected with a corrosion-resistant paint system to maximize life. The tunnel construction joints that have been most prone to penetration of water after a storm event will be injected with a chemical sealant as a means to inhibit or stop the infiltration.

## **A/E Consultant Requirements**

Consultants should have specific expertise and experience in the design and coordination of underground utility systems including walkable utility tunnels 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, and production of necessary design and bidding documents. 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.

A/E Selection Required?

## **Commissioning**

- Level 1
- Level 2

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## Project Budget

Construction Cost:	\$354,200	
Haz Mats:	\$0	
Construction Total:		
Contingency: 15%	\$53,100	
A/E Design Fees: 8%	\$28,300	
DFD Mgmt Fees: 4%	\$16,300	
Equipment/Other:	\$0	
<b>\$451,900</b>		

## Funding Source

GFSB - Utilities Repair & Renovation [Z080]	\$329,900
PRSB - []	\$0
Agency/Institution Cash [AGF0]	\$122,000
Gifts	\$0
Grants	\$0
Building Trust Funds [BTF]	\$0
Other Funding Source	\$0
<b>\$451,900</b>	

## Project Schedule

SBC Approval: 08/2013  
 A/E Selection: 09/2013  
 Bid Opening: 02/2014  
 Construction Start: 04/2014  
 Substantial Completion: 09/2014  
 Project Close Out: 12/2014

## Project Contact

Contact Name: Jeffrey A. Pollei, P.E.  
 Email: <jpollei@fpm.wisc.edu>  
 Telephone No.: (608) 890-1067 x

## Project Scope Consideration Checklist

- |  | <b><u>Y</u></b>                     | <b><u>N</u></b>                     |
|--|-------------------------------------|-------------------------------------|
| 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.<br><br><i>All project work will be coordinated through campus physical plant staff to minimize disruptions to daily operations and activities.</i>   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Is the project an extension of another authorized project? If so, provide the project #...  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Are hazardous materials involved? If yes, what materials are involved and how will they be handled?<br><br><i>Hazardous materials abatement is not anticipated on this project. Comprehensive building survey inventory data is not available on Wisconsin's Asbestos &amp; Lead Management System (WALMS) &lt;<a href="http://walms.doa.state.wi.us/">http://walms.doa.state.wi.us/</a>&gt;.</i> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Will the project impact the utility systems in the building and cause disruptions? If yes, to what extent?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Will the project impact the heating plant, primary electrical system, or utility capacities supplying the building? If yes, to what extent?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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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.
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?    
Completion of this project will decrease operational maintenance costs.
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.