All Agency Project Request

2013 - 2015 Biennium

Agency	Institution	Building No.	Building Name
University of Wisconsin	La Crosse	285-0E-0012	MURPHY LIBRARY

Project No. 14C1Y

Project Title Murphy Library Ext Envelope Repr

Project Intent

This project repairs the building exterior envelope to reduce moisture infiltration, allow normal expansion and contraction of building materials and assemblies, and eliminate a serious life safety issue.

Project Description

Project work includes removing all exterior stone panels from the building addition to inspect for damage, repairing or replacing all damaged limestone materials, removing and reattaching all stone support haunches with new epoxy, install new support angles and stone support haunches at all stone panel locations as per original design, replacing anchor straps from backup structure to be compatible and suitable for 2-inch thick limestone, and reinstalling all exterior stone panels with new perimeter sealants. Install a new cap flashing and roofing base flashing at the backs of reinstalled stone panels to connect to roof system and reinstall metal parapet coping cap. All failed, weathered, and inappropriately applied sealants will be replaced. Damaged face brick will be replaced and mortar will be repointed as required. Masonry efflorescence will be investigated to determine a cause and repaired accordingly. All cracked limestone discovered will be repaired and all limestone panels will be cleaned. The deteriorated plaster soffit sections and interior finishes damaged by project work will be repaired. Problem area landscaping will be regraded and modified to improve drainage.

Project Justification

The conventional stone panel support system installed on the the building addition is not sufficient to properly support the thin stone without damage. Too much weight is exerted on the epoxy connections at the support haunches by the stack of stone panels above causing them to fail. The stone panels are too thin for the type of anchor straps employed for lateral support and are susceptible to damage as dynamic loading is applied. Failure of these connections has occurred in at least two locations, causing the stone panels to fall from their proper location. These panels were saved from falling to the ground by a combination of the pins between the stone panel and support haunches and the panels becoming wedged between the adjacent panels. While the limestone panels on the original building are 2-inches thick as well, they show no obvious signs of movement or damage. Many factors may be contributing to the limestone panel failure on the building addition, including but not limited to: limestone type and in quarry location, limestone handling and installation procedures, epoxy brand and application procedure, backup structure relative strength and stiffness, and panel anchorage detailing. These factors vary enough that some or all negatively impact the limestone performance on the building addition, but not the original building.

The exterior envelopes have deteriorated and the damage is accelerating where the joint sealants and mortar joints have failed. The building sealants are cracked and dried, allowing moisture penetration in several problem areas.

A/E Consultant Requirements

☑ A/E Selection Required?

Consultants should have specific expertise and experience in the design and coordination of exterior masonry envelope repair and restoration 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.

Commissioning

☑ Level 1

☐ Level 2

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Project Budget

Construction Cost:		$570,000
Haz Mats:		$0
Construction Total:		$570,000
Contingency:	15%	$85,500
A/E Design Fees:	8%	$45,600
DFD Mgmt Fees:	4%	$26,200
Equipment/Other:		$0
		$727,300

Funding Source(s)

	Total
GFSB - Utilities Repair & Renovation [Z080]	$727,300
PRSB - []	$0
Agency/Institution Cash []	$0
Gifts	$0
Grants	$0
Building Trust Funds [BTF]	$0
Other Funding Source	$0
	$727,300

Project Schedule

SBC Approval:	04/2014
A/E Selection:	05/2014
Bid Opening:	03/2015
Construction Start:	05/2015
Substantial Completion:	09/2015
Project Close Out:	12/2015

Project Contact

Contact Name: Scott Schumacher

Email: <sschumacher@uwlax.edu>

Telephone: (608) 785-8916 x

Project Scope Consideration Checklist

	Y	N
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 #...	☐	☑
3. Are hazardous materials involved? If yes, what materials are involved and how will they be handled?	☐	☑
Hazardous materials abatement is not anticipated on this project. Comprehensive building survey inventory data is not available on Wisconsin's Asbestos & Lead Management System (WALMS) <http://walms.doa.state.wi.us/>.		
4. Will the project impact the utility systems in the building and cause disruptions? If yes, to what extent?	☐	☑
5. Will the project impact the heating plant, primary electrical system, or utility capacities supplying the building? If yes, to what extent?	☐	☑
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.	☐	☑
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? ☑ ☐

    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. ☐ ☑