


Capital Project Stage Gate II: Milam Hall Roof, Seismic and Rooftop Unit Renewal

BACKGROUND

The Milam Hall Roof, Seismic and Rooftop Unit (RTU) Renewal project was not originally projected to reach the \$5M cost threshold for Board review. Current pricing of the major components now indicate that the project cost will be \$5,300,000. The following information is provided for the Board’s consideration of advancing this project to construction phase pursuant to the [Approval of Capital Projects policy](#).

PROJECT SUMMARY

	Roof Area	28,000 square feet
	Estimated project budget	\$5,300,000
	State CIR	\$4,300,000
	E&G CIR	\$1,000,000
	Deferred maintenance reduction	\$5,000,000
	Carbon Reduction	40 tons / year
	Estimated project completion	Fall 2023
	Location	2520 SW Campus Way, Corvallis Campus
	MILAM HALL	

Milam Hall was constructed in 1914 and has long been one of OSU’s most cherished and prominent academic and research buildings. The project consists of replacing the roof on the entire building, installing new fall protection and roof ladders and improving the roof drainage system. Seismic work includes frame bracing at the parapets and constructing a horizontal shear-plane diaphragm under the roof.

Insulation will be added at the Central Building and East Wing attics and penthouse walls to align with OSU’s energy-efficiency standards. Rigid roof insulation will be used on the attic-less West Wing roof. At both the Central building and East Wing cornices, work is planned to remove the existing failing finish and repaint. The brickwork and cast stone above these cornices will be cleaned and replaced or repointed in select areas.

Since the new roofing and increased insulation will compel the rebuilding of equipment curbs, all rooftop equipment such as exhaust fans, HVAC units and ductwork is being evaluated. Those elements with five or fewer years in expected remaining lifespan will be replaced.

ADVANCING OSU'S STRATEGIC GOALS

Goal 1 Preeminence in Research, Scholarship and Innovation	Goal 2 Transformative Education That is Accessible to All Learners	Goal 3 Significant and Visible Impact in Oregon and Beyond	Goal 4 Culture of Belonging, Collaboration and Innovation
Milam Hall is a prominent academic and research building. Timely replacement of the roof and systems will keep this asset useful.	Safe and comfortable learning spaces are important to a transformative education.	Milam Hall is one of OSU's cherished historic buildings that has hosted generations of research and teaching impactful in the state and beyond.	The structural improvements and seismic safety are intended to protect students, staff, faculty and guests.

IDENTIFICATION OF RISKS AND MITIGATION STRATEGIES

The following risks have been identified for the project. Given these risks, the owner and design contingencies have been set at 10% and 10%, respectively.

Risks	Likelihood	Severity	Consequences	Mitigation Strategy
<i>Undiscovered conditions</i>	Medium	Medium	A renovation carries an inherent risk of the actual construction or conditions being different from archived documents or even explorative inspection and testing. Unexpected conditions could present a risk to final cost, schedule, and/or the quality and scope of the project.	The contingencies noted above will be in place to cover unexpected costs.
<i>Labor and materials availability</i>	Medium	Medium	Availability of resources presents risk to cost, schedule, and possible scope, especially given potential impacts of the COVID-19 pandemic.	This risk is mitigated by the contingencies stated above through contractual language that allows COVID-related schedule changes without incurring additional costs.
<i>Higher than expected construction</i>	Medium	Medium	This risk is based on national/regional economics more than labor availability (above), but these risks are	This risk is mitigated by an annual escalation factor 3.5% to midpoint of construction.

<i>market escalation</i>			similar and interconnected. Cost estimates and bids will include cost implications related to the COVID-19 pandemic.	
<i>Project delay</i>	Low	Low	Funding, permitting, logistical, contractual, or any reason for substantial delays in construction present not only schedule vulnerability, but also subject the project to further escalation in materials and labor costs. Stretching the construction period would likely increase the cost for the contractor to manage the project and pay for general conditions.	This risk is mitigated by having a team in place that considers critical activities, appropriate timelines, and measures to avoid and accommodate delays.

TOTAL COST OF OWNERSHIP

The estimated life cycle ownership costs for the Milam Hall Roof, Seismic and Rooftop Unit Renewal project are summarized in the following table. A *pro forma* is not included as the project is not utilizing debt or revenue financing.

Forecasted Total Cost of Ownership Milam Hall Roof, Seismic and Roof Top Unit Renewal Project	
ITEM	COST
Total Project Cost	\$5,300,000
Capital Improvement and Renewal (CIR) Funds	\$5,300,000
Total Cost Avoidance	(\$5,000,000)
Removal of Deferred Maintenance	(\$5,000,000)

RECOMMENDATION

Staff recommend that the Finance and Administration Committee recommend to the Board approval of a total capital budget of \$5.3M for the Milam Hall Roof, Seismic and Rooftop Unit Renewal project and advancing the project to the construction phase.