

Capital Project Stage Gate I: Owen Hall Remediation

BACKGROUND

The Owen Hall Remediation project is a response to flooding damage to the building and is not on the Capital Forecast, though the improvements to the classrooms and the alarms upgrade are part of the E&G Capital Improvement and Renewal (CIR) plan. The following information is provided for consideration by the Finance & Administration Committee to advance this project to the next phase of design development pursuant to the [Approval of Capital Projects policy](#). The design development phase includes completion of project drawings and early work such as selective demolition and site preparation.

PROJECT SUMMARY

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|  <p style="text-align: center;">Owen Hall classroom damage</p> | Gross square feet/ affected area | 63,167/ 20,025 |
| | Estimated project budget | \$5,000,000 |
| | Estimated Insurance Reimbursement | \$2,000,000 |
| | Capital Renewal Funds | \$3,000,000 |
| | Deferred maintenance reduction | \$2,200,000 |
| | Estimated project completion | Fall Term 2021 |
| | Location | Campus Way |
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On June 27, 2020, Owen Hall sustained significant water damage from a failed cooling water connection on a research apparatus. The flooding occurred on the fourth floor and damaged the three floors beneath, including a clean room, a computer lab, office space, the main IT room and two general purpose classrooms. Estimates of the necessary repairs are approximately \$2.0M, consisting of replacement of the clean room surfaces as well as flooring, walls, ceilings, lighting fixtures and other damage.

The damaged general-purpose classrooms and two other adjacent classrooms were already scheduled to be renovated in summer 2022 to improve accessibility associated with the sloped concrete floor, update the pedagogy configuration and renew the general condition after 35 years of service. Renovation of the classrooms will cost an additional \$3.0M above the water damage, reaching the threshold for Board approval on the total project. CIR funds have previously been allocated for this improvement.

The project will also include a fire alarm system upgrade, as the original system is past its expected life, and a Distributed Antenna System for first responders. For cost and schedule efficiencies, the classroom renovation and safety system upgrades will be accomplished within the same project as the building repair.

Removal of damaged material has already occurred, and additional construction activities related to the repair are proceeding to make the space useable for the current occupants.

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 A Culture of Belonging, Collaboration and Innovation |
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| The Owen Hall clean room, laboratories, computer room and support spaces are vital components of the College of Engineering’s research and education ecosystem. | The tiered and rigidly configured classrooms will be reconstructed as flat-floor learning environments: fully accessible, more flexible and responsive to current and future needs. | In continuous use since 1988, thousands of OSU students and faculty have benefitted from the Owen Hall cleanroom. Work in the facility has led to numerous advances in science and technology, as well as industrially-relevant discoveries. Multiple Oregon-based companies have advanced the foundational research work carried out in this facility. | The project will modernize Owen Hall’s classroom pedagogy to reflect current teaching principles and future aspirations to be more accessible, more flexible and more collaborative. |

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 5%, respectively. As the construction will be conducted via a firm fixed-price contract, the construction contingency is at the bidder’s discretion and will be within the price offered.

| Risks | Consequences | Mitigation Strategy |
|--------------------------------|--|---|
| <i>Insurance Reimbursement</i> | Approximately 40% of the funding is expected to come from OSU’s property insurers; OSU faces a | OSU and its contractors are working closely with the insurance adjuster to ensure that the scope of work is |

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| | financial risk should costs associated with water damage not be fully reimbursed. Insurers will reimburse for covered costs that are reasonable, necessary and thoroughly documented. | understood, any differences resolved and agreed to, and that costs are substantiated and documented. |
| <i>Undiscovered conditions</i> | 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. | Water damaged surfaces have been removed and exposed. The contingencies noted above will be in place to cover unexpected costs. |
| <i>Labor and materials availability</i> | 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 market escalation</i> | This risk is based on national/regional economics more than labor availability (above), but these risks are similar and interconnected. Cost estimates and bids will include cost implications related to the COVID-19 pandemic. | This risk is mitigated by an annual escalation factor 3.5% to midpoint of construction. |
| <i>Project delay</i> | 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. |
| <i>COVID-19 Effects</i> | Construction delays due to possible disruption of supply chain, construction inefficiencies from worker availability and physical distancing requirements. | OSU is working with contractors on physical distancing practices during construction. OSU managers, designers, and the contractor will make extra efforts to mitigate supply chain disruptions by being flexible with alternate materials and schedule. |

TOTAL COST OF OWNERSHIP

The estimated life cycle ownership costs for the Owen Hall Remediation project are summarized in the following table.

| Forecasted Total Cost of Ownership Owen Hall Remediation | |
|---|----------------------|
| ITEM | COST |
| Total Project Cost | \$5,000,000 |
| Capital Renewal | \$3,000,000 |
| Estimated Insurance Reimbursement | \$2,000,000 |
| Total Cost Avoidance | (\$2,200,000) |
| Removal of Deferred Maintenance | (\$2,200,000) |

RECOMMENDATION

Staff recommend that the Finance & Administration Committee approve advancing the Owen Hall Remediation project to the next phase of design development.