

## CapitalBudgetRequest

Repair Derring Hall Envelope	
Overview	
Agency	Virginia Polytechnic Institute and State University (208)
Project Code	18674
Project Title	Repair Derring Hall Envelope
Project Type	Improvements-Other
Biennium	2024-2026
Budget Round	Initial Bill
Bill Version	Regular Session
Request Type	Previously Submitted
Project Location	Roanoke Area
Facility/Campus	Derring Hall
Source of Request	Agency Request
Infrastructure Element	Maintenance / Repairs
Contains O & M costs? No	
Contains significant technology costs? No	
Contains significant energy costs? No	
Possible that project will be used by other than a state or local governmental entity, or for research under sponsored programs (higher education)? No	
Agency Narrative	
<p>Agency Description</p> <p>Executive Summary:</p> <p>Virginia Tech places a high priority on facility maintenance and mitigating deferred maintenance. The university's commitment is demonstrated by fully embracing the state's FICAS system for facility monitoring, aggressively addressing repairs, exceeding the 85 percent E&amp;G Maintenance Reserve spending requirement every biennium since the introduction of the performance requirement, establishing a nongeneral fund Maintenance Reserve program in 1996 for its auxiliary enterprises, and allocating funds to address routine maintenance funding.</p> <p>The state's General Fund Maintenance Reserve program has been the lynchpin for the university to address deferred maintenance for its E&amp;G facilities. However, several facilities have deferred maintenance needs that exceed the limits of the Maintenance Reserve program.</p> <p>The Capital Budget Request Instructions released in May 2023 include a new capital priority for "funding requests to address a significant maintenance reserve-type issue at an existing facility", as well as the Administration's stated capital priority number 4 of "renovations necessary for prolonging the life of existing spaces"; and this request is to repair the building envelope of Derring Hall.</p> <p>Project Description:</p> <p>Derring Hall was built in 1969, is 208,000 gross square feet, has a Facility Condition Index score of 55 percent, and is the university's largest undergraduate science laboratory instruction building.</p> <p>Derring Hall is an essential building to deliver required undergraduate courses to students; however, the building is at risk because of significant spalling, delamination, and cracking of the exterior concrete walls, columns, parapets, and window sealants. A recent engineering study documented over 330 spalls, some as large as six square feet.</p> <p>Routine maintenance and Maintenance Reserve projects are not sufficient to address the repair needs of the building. The envelope is progressively deteriorating with accelerating moisture damage.</p>	

The university commissioned a consultant study that shows the necessary long-term repair solution is to remove the loose concrete and install an overlaid system to confine future spalls and protect the building from future moisture damage.

These repairs would extend the service life of the building by 25 years.

**Justification**

**Program Description:**

This Maintenance Reserve-like project will make critical repairs to Derring Hall which is a primary facility for life sciences instruction.

**Funding Plan:**

The scope of this project is entirely Educational and General programming: thus, the funding plan calls for 100 percent General Fund support.

**Options Considered:**

Deferring the project was considered but not selected because the progressive deterioration of the building is increasing the risk of a shortened service life and disruption to student instruction.

Implementing the significant repairs through Maintenance Reserve is not an option because the project cost is beyond the \$2 million threshold.

**Methodology**

**Cost Explanation and Methodology:**

The project cost is \$16.83 million. The project costs are estimated to a mid-point of construction in 2025 using the current CR-1 Project Planning form (as of February 2023).

The 2023 project cost amount is based on internal estimates developed by university staff using historical comparables of on-campus work. The costing analysis utilized past and current projects that concerned numerous repairs altogether within an academic building. The project is planned to utilize the traditional Design, Bid, Build delivery method.

**Funding Request**

Phase	Year	Subsubject	Fund	Amount
Full Funding	2025	2411 - Unallotted Capital Amount	01000 - General Fund	\$16,830,000
<b>Total</b>				<b>\$16,830,000</b>

**Project Costs**

Cost Type	Requested Funding
Acquisition Cost	\$0
Building & Built-in Equipment	\$15,183,264
Sitework & Utility Construction	\$0
<b>Construction Cost Total</b>	<b>\$15,183,264</b>
<b>DESIGN &amp; RELATED SERVICE ITEMS</b>	
<b>DESIGN &amp; RELATED SERVICE ITEMS</b>	
A/E Basic Services	\$642,381
A/E Reimbursables	\$2,855
Specialty Consultants (Food Service, Acoustics, etc.)	\$0
CM Design Phase Services	\$0
Subsurface Investigations (Geotech, Soil Borings)	\$0
Land Survey	\$0
Archeological Survey	\$0

Hazmat Survey & Design	\$0
Value Engineering Services	\$0
Cost Estimating Services	\$0
Other Design & Related Services	\$17,130
<b>Design &amp; Related Services Total</b>	<b>\$662,366</b>
<b>Design &amp; Related Services Total</b>	<b>\$662,366</b>
<b>INSPECTION &amp; TESTING SERVICE ITEMS</b>	
<b>INSPECTION &amp; TESTING SERVICE ITEMS</b>	
Project Inspection Services (inhouse or consultant)	\$75,659
Project Testing Services (conc., steel, roofing, etc.)	\$28,550
<b>Inspection &amp; Testing Services Total</b>	<b>\$104,209</b>
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<b>PROJECT MANAGEMENT &amp; OTHER COST ITEMS</b>	
<b>PROJECT MANAGEMENT &amp; OTHER COST ITEMS</b>	
Project Management (inhouse or consultant)	\$68,873
Work By Owner	\$4,283
BCOM Services	\$343
Advertisements	\$0
Printing & Reproduction	\$0
Moving & Relocation Expenses	\$0
A/V Cabling	\$0
IT Cabling	\$0
Telephone Cabling	\$0
A/V Equipment	\$0
IT Equipment	\$0
Telephone Equipment	\$0
Signage	\$0
Demolition	\$0
Hazardous Material Abatement	\$0
Utility Connection Fees	\$0
Utility Relocations	\$0
Commissioning	\$35,688
Miscellaneous Other Costs	\$92,788
<b>Project Management &amp; Other Costs Total</b>	<b>\$201,975</b>
<b>Project Management &amp; Other Costs Total</b>	<b>\$201,975</b>
Furnishings & Movable Equipment	\$0
Construction Contingency	\$678,186
<b>TOTAL PROJECT COST</b>	<b>\$16,830,000</b>

### Size and Scope

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	\$0
Construction Cost		0	\$0
Total Project Cost	gsf	208,000	\$81

### Supporting Documents

File Name	File Size	Uploaded By	Upload Date	Comment
<a href="#">CR-1 Derring Hall Envelope Repair 6.2023.xlsx</a>	602,301	Rob Mann	6/22/2023	

### Workflow History

User Name	Claimed	Submitted	Step Name	Submit Action
Rob Mann	06/22/2023 02:15 PM	06/22/2023 02:15 PM	Enter Capital Budget Request	Continue Working
Rob Mann	06/22/2023 02:15 PM	06/22/2023 02:16 PM	Continue Drafting	Continue Working
Matthew Digman	06/22/2023 02:17 PM	06/22/2023 02:17 PM	Continue Drafting	Continue Working
Matthew Digman	06/22/2023 02:19 PM	06/22/2023 02:22 PM	Continue Drafting	Continue Working
Matthew Digman	06/22/2023 02:27 PM	06/22/2023 02:29 PM	Continue Drafting	Continue Working
Matthew Digman	06/22/2023 02:44 PM	06/22/2023 02:57 PM	Continue Drafting	Continue Working
Rob Mann	06/22/2023 03:42 PM	06/22/2023 03:56 PM	Continue Drafting	Submit for Agency Review
Rob Mann	06/22/2023 03:56 PM	06/22/2023 03:56 PM	Agency Review Step 1	Ready for DPB Bulk Submit
Rob Mann	06/22/2023 05:11 PM	06/22/2023 05:11 PM	Ready for DPB Submission	Submit to DPB
			DPB Review	