



Office of the Chief Financial Officer and Treasurer

August 17, 2023

The Honorable Eric J. Holcomb
Governor of the State of Indiana
Statehouse
Indianapolis, IN 46204

Dear Governor Holcomb:

At its meeting on August 4, 2023, the Purdue University Board of Trustees approved the planning, financing, construction and award of construction contracts for Wetherill Lab Drain and Supply Line Replacement Phase I on the West Lafayette campus.

This project will replace water supply piping systems and plumbing equipment in the basement of the Wetherill Laboratory of Chemistry and include preparation work for future planned phases.

The project will provide greater service reliability, modern plumbing systems and address water safety concerns in the building.

The estimated total project cost is \$2,100,000 and will be fully funded by Repair and Rehabilitation Appropriations.

Subject to review by the Commission for Higher Education and recommendation by the State Budget Committee and the Budget Agency, we request your approval to proceed with this project. Attached are the completed forms that the Commission has prescribed for its review of such projects. We will be happy to answer any questions you or your staff may have or to provide any additional information that is needed.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Ruhl', written over a light blue horizontal line.

Christopher A. Ruhl
Chief Financial Officer and Treasurer

Attachments

c: Seth Hinshaw, Chief Financial Officer, Indiana Commission for Higher Education
Zachary Jackson, Director, Indiana State Budget Agency
Jasmine Williams, Assistant Director, Indiana State Budget
Kathleen Thomason, Comptroller, Purdue University
Anne Hazlett, Senior Director, Government Relations, Purdue University

PROJECT COST SUMMARY
Wetherill Lab Drain and Supply Line Replacement Phase I

Institution:	Purdue University	Budget Agency Project No.:	B-1-24-2-04
Campus:	West Lafayette	Institutional Priority:	N/A
Previously approved by General Assembly:	No	Previously recommended by CHE:	No
Part of the Institution's Long-term Capital Plan:	Yes		

Project Size:	N/A	N/A	ASF (2)	N/A	ASF/GSF
Net change in overall campus space:	N/A	GSF	N/A	ASF	

Total cost of the project (3):	\$ 2,100,000	Cost per ASF/GSF:	N/A	GSF
Total cost of the demolition:	\$ -		N/A	ASF
Funding Source(s) for project (4):	Amount	Type		
	\$ 2,100,000	Repair and Rehabilitation Appropriations		
Estimated annual debt payment (6):	\$0			
Are all funds for the project secured:	Yes			

Project Funding:
The project is being fully funded by Repair and Rehabilitation Appropriations, and all funds are secured.

Project Cost Justification
Since the project is utilities based, there is not a ASF or GSF associated with the work. This project's scope and cost are described more in the Capital Project Details section.

Estimated annual change in cost of building operations based on the project:	\$ -
Estimated annual repair and rehabilitation investment (5):	\$ 31,500

(1) Gross Square Feet (GSF)- Sum of all area within the exterior envelope of the structure.
(2) Assignable Square Feet (ASF)- Amount of space that can be used by people or programs within the interior walls of a structure. Assignable square feet is the sum of the 10 major assignable space use categories: classrooms, laboratories, offices, study facilities, special use facilities, general use facilities, support facilities, health care facilities, residential facilities and unclassified facilities. For information on assignable space use categories, see Space-Room Codes tab.
(3) Projects should include all costs associated with the project (structure, A&E, infrastructure, consulting, FF&E, etc.)
(4) Be consistent in the naming of funds to be used for projects. If bonding, note Bonding Authority Year (1965, 1929, 1927, etc.)
(5) Estimate the amount of funding the institution would need to set aside annually to address R&R needs for the project. CHE suggests 1.5% of total construction cost
(6) If issuing debt, determine annual payment based on 20 years at 4.75% interest rate
- If project is a lease-purchase or lease, adjust accordingly. Note the total cost of the lease in the project cost, and annual payments in project description

PROJECT DETAILED DESCRIPTION - ADDITIONAL INFORMATION
Wetherill Lab Drain and Supply Line Replacement Phase I

Institution:	Purdue University	Budget Agency Project No.:	B-1-24-2-04
Campus:	West Lafayette	Institutional Priority:	N/A

Description of Project

This project is the first of a planned four phase lab drain line replacement in Wetherill Laboratory of Chemistry on the West Lafayette campus. The potable and laboratory water supply piping systems and associated plumbing equipment will be replaced in the basement. Plumbing equipment including water heaters, water softeners and wastewater equipment that are at the end of their service lives will be replaced. Preparation work and line connectors will be included in this project to accommodate planned future phases. This project will replace water supply piping systems and plumbing equipment in the basement and include preparation work for future planned phases.

Need and Purpose of the Program

The project will provide greater service reliability by replacing failing equipment that requires disruptive shutdowns for repairs, adopting single building plumbing equipment and eliminating current multi-building softened water feeds and multiple waste lines. Wetherill Laboratory of Chemistry currently receives softened water from equipment in a separate building. Having a designated water softener reduces the dependence on the other in the event of failure. Eliminating several waste lines reduces the maintenance required on aging underground utility infrastructure.

Modern plumbing systems will be provided to laboratories, Additionally, planned work will address water safety concerns by separating drinking water from that used for laboratory functions. This project addresses multiple failing plumbing piping systems that have resulted in loss of property and service continuity issues. It also provides the foundation for three future planned phases of related work.

New plumbing piping has a life expectancy of approximately 80 years, and new plumbing equipment such as water heaters will last approximately 40 years.

This project is included in Purdue's FY24 Repair and Rehabilitation budget.

Wetherill Laboratory of Chemistry was constructed in phases in 1929 and 1950.

Space Utilization

This project does not have a net impact on total assignable campus space.

Comparable Projects

Hillenbrand Residence Hall Sewer Replacement and Bathroom Repair, Phase III & IV (2019)

- o \$4,312,000
- o Repaired and renovated the bathrooms on floors 1-8 of the south tower ("A") of both wings.

The comparable project served a residence hall, whereas the proposed project will occur within a classroom and research building. The proposed project includes domestic water and the sanitary system.

Background Materials

CAPITAL PROJECT REQUEST FORM
INDIANA PUBLIC POSTSECONDARY EDUCATION
INSTITUTION CAMPUS SPACE DETAILS FOR Wetherill Lab Drain and Supply Line Replacement Phase I

(INSERT PROJECT TITLE AND SBA No.)	Current Campus Totals			Subtotal Current and Future Space	Capital Request		Net Future Space
	Current Space in Use	Space Under Construction (1)	Space Planned and Funded (1)		Space to be Terminated (1)	New Space in Capital Request (2)	
A. OVERALL SPACE IN ASF							
Classroom (110 & 115)	335,609	(2,532)	18,301	351,378	-	-	351,378
Class Lab (210,215,220,225,230,235)	798,413	(16,463)	24,260	806,210	-	-	806,210
Non-class Lab (250 & 255)	1,705,678	25,281	(662)	1,730,297	-	-	1,730,297
Office Facilities (300)	2,337,380	(46,473)	26,472	2,317,379	-	-	2,317,379
Study Facilities (400)	416,131	55,895	13,307	485,333	-	-	485,333
Special Use Facilities (500)	1,207,887	8,486	1,124	1,217,497	-	-	1,217,497
General Use Facilities (600)	977,156	(27,128)	16,832	966,860	-	-	966,860
Support Facilities (700)	2,881,468	(876)	(8,559)	2,872,033	-	-	2,872,033
Health Care Facilities (800)	220,687	-	(1,900)	218,787	-	-	218,787
Resident Facilities (900)	2,424,325	-	111,146	2,535,471	-	-	2,535,471
Unclassified (000)	129,184	-	-	129,184	-	-	129,184
B. OTHER FACILITIES							
(Please list major categories)							
TOTAL SPACE	13,433,918	(3,810)	200,321	13,630,429	-	-	13,630,429

Notes:

- Space/Room codes based on Postsecondary Ed Facilities Inventory and Classification Manual (2006)

(1) Identify in a footnote the specific facilities that are included in the data in these columns. Do not include pending approval, non-submitted projects or non-funded projects

Space under construction includes:

- Schleman/Stewart Renovation
- Whistler Mechanical Project
- Ross-Ade Stadium Renovation
- Zucrow High Speed Propulsion Lab
- Mackey Locker Rooms Renovation
- Brown Family Hall Renovation
- Libraries Study Space Renovation
- University Hall and Related Renovations

Space planned and funded includes:

- Life Sciences Phenotyping Greenhouse Building
- Nursing and Pharmacy Education Building
- Northwest Chiller Plant System Improvements
- Vawter Hall Electrical Enhancements and Replacement
- PMU 2nd Floor Hospitality Renovation
- Mechanical Engineering Building Renovation
- Birck Nanotechnology Center Clean Room Modernization and Related Renovations
- Chilled Water Capacity Enhancement Projects
- Runway 5-23 and Intermediate Connector Taxiway
- Purdue Airport Terminal
- Grant Street Parking Garage Repairs
- Hillenbrand Residence Hall South
- Shealy Hall Roof Replacement
- Shreve Hall Electrical Enhancements and Replacement
- University and Schleman Halls Strategic Transformer Replacement

(1) There is no assignable space terminated as part of this project.

(2) There is no assignable space added as part of this project.

CAPITAL PROJECT COST DETAILS
Wetherill Lab Drain and Supply Line Replacement Phase I

Institution:	Purdue University	Budget Agency Project No.:	B-1-24-2-04
Campus:	West Lafayette	Institutional Priority:	N/A

ANTICIPATED CONSTRUCTION SCHEDULE

	<u>Month</u>	<u>Year</u>
Bid Date	March	2024
Start Construction	October	2024
Occupancy (End Date)	June	2025

ESTIMATED CONSTRUCTION COST FOR PROJECT

	Cost Basis (1)	Estimated Escalation Factors (2)	Project Cost
<u>Planning Costs</u>			
a. Engineering	\$ 250,000		N/A
b. Architectural	\$ -		N/A
c. Consulting	\$ -		N/A
<u>Construction</u>			
a. Structure (Civil)	\$ 50,000		N/A
b. Mechanical	\$ 1,350,000		N/A
c. Electrical	\$ 50,000		N/A
<u>Movable Equipment</u>	\$ -		N/A
<u>Fixed Equipment</u>	\$ 50,000		N/A
<u>Site Development/Land Acquisition</u>	\$ -		N/A
<u>Other (PM fee, insurance, contingencies, printing)</u>	\$ 350,000		N/A
TOTAL ESTIMATED PROJECT COST	\$ 2,100,000	\$ -	N/A

(1) Cost Basis is based on current cost prevailing as of: (INSERT MONTH AND YEAR)

(2) Explain in the Description of Project Section of the "Cap Proj Details" schedule the reasoning for estimated escalation factors

CAPITAL PROJECT OPERATING COST DETAILS
Wetherill Lab Drain and Supply Line Replacement Phase I

Institution:	Purdue University	Budget Agency Project No.:	B-1-24-2-04
Campus:	West Lafayette	Institutional Priority:	N/A

		<u>GSF OF AREA AFFECTED BY PROJECT</u>			
<u>ANNUAL OPERATING COST/SAVINGS (1)</u>					
	Cost per GSF	Total Operating Cost	Personal Services	Supplies and Expenses	
1. Operations	N/A	\$ -	\$ -	\$ -	-
2. Maintenance	N/A	\$ -	\$ -	\$ -	-
3. Fuel	N/A	\$ -	\$ -	\$ -	-
4. Utilities	N/A	\$ -	\$ -	\$ -	-
5. Other	N/A	\$ -	\$ -	\$ -	-
TOTAL ESTIMATED OPERATIONAL COST/SAVINGS	N/A	\$ -	\$ -	\$ -	-

Description of any unusual factors affecting operating and maintenance costs/savings.

This project will have a negligible impact on operating and maintenance costs/savings.

(1) Based on figures from "Individual Cap Proj Desc" schedule