



Office of the Chief Financial Officer and Treasurer

August 22, 2025

The Honorable Mike Braun
Governor of the State of Indiana
Statehouse
Indianapolis, IN 46204

Dear Governor Braun:

At its meeting on August 8, 2025, the Purdue University Board of Trustees approved the planning, financing, construction and award of construction contracts for the Wade Utility Plant Condensate Polisher Installation on the West Lafayette campus.

This project will install new equipment at the Wade Utility Plant to purify steam condensate that is used in campus electricity production. The condensate polisher includes multiple tanks, filtration media, pumps and other supporting equipment.

This project will reduce impurities in the steam condensate to minimize build up and corrosion that occurs over time. This will extend the life of the campus turbine generators, boilers and auxiliary equipment.

The estimated total project cost is \$3,400,000 and will be fully funded by Operating Funds.

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'.

Christopher A. Ruhl
Chief Financial Officer and Treasurer

Attachments

c: Brooke Kile, Senior Associate Commissioner for Business Solutions, Indiana Commission for Higher Education
Chad Ranney, State Budget Director, Indiana State Budget Agency
Jonathan Eccles, Division Director, Indiana State Budget Agency
Kay Parker, Comptroller, Purdue University
Anne Hazlett, Senior Director, Government Relations, Purdue University

PROJECT COST SUMMARY
Wade Utility Plant Condensate Polisher Installation

Institution:	<u>Purdue University</u>	Budget Agency Project No.:	<u>B-1-26-2-06</u>
Campus:	<u>West Lafayette</u>	Institutional Priority:	<u>N/A</u>
Previously approved by General Assembly:	<u>No</u>	Previously recommended by CHE:	<u>No</u>
Part of the Institution's Long-term Capital Plan:	<u>Yes</u>		

Project Size:	<u>0</u> GSF (1)	<u>0</u> ASF (2)	<u>#DIV/0!</u> ASF/GSF
Net change in overall campus space:	<u>0</u> GSF	<u>0</u> ASF	

Total cost of the project (3):	<u>\$ 3,400,000</u>	Cost per ASF/GSF:	<u>#DIV/0!</u> GSF
Total cost of the demolition:	<u>\$ -</u>		<u>#DIV/0!</u> ASF

Funding Source(s) for project (4):	Amount	Type
	<u>\$ 3,400,000</u>	<u>Operating Funds</u>

Estimated annual debt payment (6):	<u>0</u>
Are all funds for the project secured:	<u>Yes</u>

Project Funding:

The project is being fully funded by Operating Funds, and all funds are secured.

Project Cost Justification

Since the project is equipment-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:	<u>\$ (564,802)</u>
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Estimated annual repair and rehabilitation investment (5):	<u>\$ 51,000</u>
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PROJECT DETAILED DESCRIPTION - ADDITIONAL INFORMATION

Wade Utility Plant Condensate Polisher Installation

Institution: Purdue University
Campus: West Lafayette

Budget Agency Project No.: B-1-26-2-06
Institutional Priority: N/A

Description of Project

This project will install a new polisher at the Wade Utility Plant to purify steam condensate that is used in the production of electricity and distribution of steam for campus use. The polisher consists of multiple tanks, two condensate pumps, a brine tank, valves and other supporting equipment. Utility tie-ins will be scheduled during the summer months when steam/condensate loads are lower.

The anticipated payback period is less than 6 years due to reduced repairs and extending the life of existing equipment.

Need and Purpose of the Program

The new condensate polisher will reduce impurities in the steam condensate, which will decrease the amount of build up and corrosion that happens over time. Less build up and corrosion will result in a reduced frequency of ongoing, costly repairs and ultimately extend the life of the campus turbine generators, boilers and auxiliary equipment. This project will ultimately increase the reliability of essential utility equipment and heating and electrical services to campus.

This project aligns with the Energy and Utilities Master Plan.

Space Utilization

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

Comparable Projects

While a similar recent project is not available, Purdue's Energy and Utilities department received a study from PRVN Engineering in 2023 to upgrade the demineralizer system at the Wade Utility Plant that was installed in 1989. The system purifies raw well water and combines it with returned condensate to supply ~20% of the boiler feedwater. The remaining 80% of feedwater (condensate) is not treated. Three demineralizer system options were suggested in the study, with conceptual cost estimates ranging from \$1.9-\$2.6M. As a frame of reference in that same study, the condensate polisher cost was estimated at \$714,000, compared to today's cost of \$1M (equipment only).

Background Materials

CAPITAL PROJECT REQUEST FORM
INDIANA PUBLIC POSTSECONDARY EDUCATION
INSTITUTION CAMPUS SPACE DETAILS FOR Wade Utility Plant Condensate Polisher Installation

(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)	
<u>A. OVERALL SPACE IN ASF</u>							
Classroom (110 & 115)	324,254	51,092	-	375,346	-	-	375,346
Class Lab (210,215,220,225,230,235)	765,104	10,789	-	775,892	-	-	775,892
Non-class Lab (250 & 255)	1,761,714	29,332	-	1,791,046	-	-	1,791,046
Office Facilities (300)	2,288,249	9,457	(3,195)	2,294,511	-	-	2,294,511
Study Facilities (400)	457,018	41,979	(1,027)	497,970	-	-	497,970
Special Use Facilities (500)	1,245,282	(3,099)	-	1,242,182	-	-	1,242,182
General Use Facilities (600)	957,751	17,424	(60)	975,115	-	-	975,115
Support Facilities (700)	2,982,113	(53,301)	6,959	2,935,771	-	-	2,935,771
Health Care Facilities (800)	217,884	90	-	217,974	-	-	217,974
Resident Facilities (900)	2,424,637	111,146	-	2,535,783	-	-	2,535,783
Unclassified (000)	82,649	-	-	82,649	-	-	82,649
<u>B. OTHER FACILITIES</u> (Please list major categories)				-			-
TOTAL SPACE	13,506,654	214,909	2,677	13,724,240	-	-	13,724,240

CAPITAL PROJECT COST DETAILS
Wade Utility Plant Condensate Polisher Installation

Institution:	Purdue University	Budget Agency Project No.:	B-1-26-2-06
Campus:	West Lafayette	Institutional Priority:	N/A

ANTICIPATED CONSTRUCTION SCHEDULE

	<u>Month</u>	<u>Year</u>
Bid Date	June	2026
Start Construction	September	2026
Occupancy (End Date)	July	2027

ESTIMATED CONSTRUCTION COST FOR PROJECT

	<u>Cost Basis (1)</u>	<u>Estimated Escalation Factors (2)</u>	<u>Project Cost</u>
Planning Costs			
a. Engineering	\$ 300,000		\$ 300,000
b. Architectural	\$ 100,000		\$ 100,000
c. Consulting	\$ -		\$ -
Construction			
a. Structure	\$ -		\$ -
b. Mechanical (HVAC, plumbing, etc.)	\$ 1,000,000		\$ 1,000,000
c. Electrical	\$ 400,000		\$ 400,000
Movable Equipment	\$ -		\$ -
Fixed Equipment (condensate polisher)	\$ 1,000,000		\$ 1,000,000
Site Development/Land Acquisition	\$ -		\$ -
Other (PM fee, contingencies, insurance, etc.)	\$ 600,000		\$ 600,000
TOTAL ESTIMATED PROJECT COST	\$ 3,400,000	\$ -	\$ 3,400,000

CAPITAL PROJECT OPERATING COST DETAILS

Wade Utility Plant Condensate Polisher Installation

Institution:	Purdue University	Budget Agency Project No.:	B-1-26-2-06
Campus:	West Lafayette	Institutional Priority:	N/A

<u>ANNUAL OPERATING COST/SAVINGS (1)</u>	<u>GSF OF AREA AFFECTED BY PROJECT</u>			
	Cost per GSF	Total Operating Cost	Personal Services	Supplies and Expenses
1. Operations	-	\$ 13,200		13,200
2. Maintenance	-	\$ 33,656	33,656	
3. Fuel	-	\$ -		
4. Utilities	#DIV/0!	\$ 48,342		48,342
5. Other	-	\$ (660,000)		-660,000
TOTAL ESTIMATED OPERATIONAL COST/SAVINGS	#DIV/0!	\$ (564,802)	\$ 33,656	\$ (598,458)

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

Once installed, the new polishers will have an estimated \$95,000 per year in annual operations expenditures. However, the polishers will save on maintenance and ongoing costly repairs and extend the life of turbine generators, boilers and auxiliary equipment. The condensate polishers provide and produce high purity steam to run campus turbines, and any particulates and impurities cause severe corrosion which adds significant maintenance costs over time to the ancillary equipment and functions. The reliability of these ancillary functions for heating and cooling campus and providing electrical service is essential. We estimate the cost avoidances for reduced repairs to existing equipment to be in the range of \$660,000 per year.