

July 11, 2019

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

Dear Governor Holcomb:

At its meeting on July 2, 2019, the Purdue University Board of Trustees approved the planning, financing, construction and award of construction contracts for the Engineering and Polytechnic Gateway building on the West Lafayette campus.

The project will construct a new, 255,000 gross square foot facility to support increased enrollment in both the College of Engineering and the Polytechnic Institute by providing instructional space, teaching labs, design studios, research space and collaborative space. The existing Nuclear Engineering Building and Michael Golden Engineering Laboratories and Shops will be demolished to make way for the new building.

This project was originally planned to be delivered in two phases. A recent pledge of donor funding will allow both phases to commence as one project. This \$140,000,000 project will be funded by fee-replaced debt in the amount of \$60,000,000, gift funds of \$74,034,070 and operating funds-reserves of \$5,965,930.

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,



William E. Sullivan  
Treasurer and Chief Financial Officer

Attachments

- c: Alecia Nafziger, Associate Commissioner and Chief Financial Officer, Indiana  
Commission for Higher Education
- Zachary Jackson, Director, Indiana State Budget Agency
- Kathleen Thomason, Comptroller, Purdue University
- Anthony Hahn, Director, State Relations & Policy Analysis, Purdue University

**PROJECT COST SUMMARY**  
**Engineering and Polytechnic Gateway Building**

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-19-1-08A
<b>Campus:</b>	West Lafayette	<b>Institutional Priority:</b>	One
<b>Previously approved by General Assembly:</b>	Yes	<b>Previously recommended by CHE:</b>	Yes
<b>Part of the Institution's Long-term Capital Plan:</b>	Yes		

<b>Project Size:</b>	255,000 GSF (1)	144,685 ASF (2)	0.567392157 ASF/GSF
<b>Net change in overall campus space:</b>	149,640 GSF	81,500 ASF	

<b>Total cost of the project (3):</b>	\$ 140,000,000	<b>Cost per ASF/GSF:</b>	549.01961 GSF
<b>Total cost of the demolition:</b>	\$ -		967.61931 ASF
<b>Funding Source(s) for project (4):</b>	Amount	Type	
	\$ 60,000,000	Fee Replaced Debt	
	\$ 74,034,070	Gift Funds	
	\$ 5,965,930	Operating Funds-Reserves	
<b>Estimated annual debt payment (6):</b>	\$4,414,905		
<b>Are all funds for the project secured:</b>	No		

**Project Funding:**  
A portion of funding was provided by the state through Fee-Replaced Debt, and the remainder will come from Gift Funds and Operating Funds-Reserves. Unsecured Gift Funds will be back-stopped by Operating Funds-Reserves.

**Project Cost Justification**  
This project is similar to the project listed in the comparable project section though it is larger.

<b>Estimated annual change in cost of building operations based on the project:</b>	\$ 842,111
<b>Estimated annual repair and rehabilitation investment (5):</b>	\$ 2,100,000

(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**  
**Engineering and Polytechnic Gateway Building**

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-19-1-08A
<b>Campus:</b>	West Lafayette	<b>Institutional Priority:</b>	One

**Description of Project**

The Engineering and Polytechnic Gateway facility will be a 255,000 GSF facility located where Nuclear Engineering and Michael Golden Engineering Laboratories and Shops stand today. This project was originally envisioned as two phases. A recent pledge of donor funding will allow both phases to commence as one project.

Serving both the College of Engineering and the Polytechnic Institute, the building will act as a new entrance/gateway to Purdue's academic campus and provide an eastern terminus to the student success corridor (which runs along Third Street from Horticulture Park to Grant Street), consistent with Purdue's new campus master plan.

Instructional laboratories, classrooms research space and collaborative spaces will be included with the goal of maximizing shared spaces between the two colleges with collaborative inter-disciplinary opportunities.

The College of Engineering is planning to house the following programs in the Gateway Building: First Year Engineering ,Office of Future Engineers, Industrial Engineering, Nuclear Engineering, and the following student success programs:

- Women in Engineering Program
- Minority Engineering Program
- Office of Engineering Student Success
- Global Engineering Programs and Partnerships
- Engineering Honors Program
- Engineering Undergraduate Research Office
- Office of Professional Practice
- Student Organizations

The Polytechnic Institute is planning to house a variety of instructional spaces, teaching labs and faculty/administrative offices for the School of Engineering Technology, the School of Construction Management Technology, Computer Information Technology, Computer Graphics Technology, as well as academic advising space and the Office of Student Recruiting, Retention and Diversity.

**Need and Purpose of the Program**

The Engineering and Polytechnic Gateway facility will accommodate enrollment growth in both the College of Engineering and the Polytechnic Institute. Completion of the building will result in an increase in the quality and quantity of instructional lab space for multiple departments.

Additionally, the new building will incorporate digital infrastructure to expand the on-campus learning environment to the online world, allowing for growth in online course offerings and the creation of virtual laboratories.

**Space Utilization**

The Nuclear Engineering Building and Michael Golden Laboratories and Shops currently occupy the proposed site for the Gateway Building. Nuclear Engineering is a one-level 1950s building with a 16,300 square foot footprint. Michael Golden Laboratories and Shops is a two-level building built in 1910 with a 43,000 square foot footprint. Michael Golden Laboratories and Nuclear Engineering will be demolished as part of this project.

**Comparable Projects**

The STEM Teaching Lab Facility (approved in 2018) is a student-focused laboratory building that consists primarily of wet and dry teaching laboratories and support space and also includes collaboration space and some common areas. The STEM facility has a slightly higher costs per square feet due to a higher concentration of lab space.

- \$64,000,000
- 111,344 GSF / 62,891 ASF
- \$575/GSF; \$1,017/ASF

**Background Materials**

**CAPITAL PROJECT REQUEST FORM**  
**INDIANA PUBLIC POSTSECONDARY EDUCATION**  
**INSTITUTION CAMPUS SPACE DETAILS FOR Engineering and Polytechnic Gateway Building**

(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)	
<b>A. OVERALL SPACE IN ASF</b>							
Classroom (110 & 115)	331,337	-	-	331,337			331,337
Class Lab (210,215,220,225,230,235)	618,037	56,497	-	674,534	23,982	92,500	743,052
Non-class Lab (250 & 255)	1,611,875	7,701	-	1,619,576	27,788	9,825	1,601,613
Office Facilities (300)	2,249,946	8,324	4,177	2,262,447	9,962	34,670	2,287,155
Study Facilities (400)	400,281	12,918	-	413,199	1,319	7,490	419,370
Special Use Facilities (500)	1,215,997	4,493	-	1,220,490			1,220,490
General Use Facilities (600)	926,226	44,900	-	971,126		200	971,326
Support Facilities (700)	3,011,944	-	-	3,011,944	134		3,011,810
Health Care Facilities (800)	88,753	-	89,901	178,654			178,654
Resident Facilities (900)	2,570,466	175,550	-	2,746,016			2,746,016
Unclassified (000)	31,815	-	-	31,815			31,815
<b>B. OTHER FACILITIES</b> (Please list major categories)							-
<b>TOTAL SPACE</b>	<b>13,056,677</b>	<b>310,383</b>	<b>94,078</b>	<b>13,461,138</b>	<b>63,185</b>	<b>144,685</b>	<b>13,542,638</b>

Notes:

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

Space under construction includes: MJIS Addition, STEM Teaching Lab Facility, ABE Renovation/Addition, Meredith South, Third Street North

Space planned and funded includes: Vet Med Teaching Hospital

Space to be terminated includes: MGL and NUCL

**CAPITAL PROJECT COST DETAILS**  
Engineering and Polytechnic Gateway Building

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-19-1-08A
<b>Campus:</b>	West Lafayette	<b>Institutional Priority:</b>	One

**ANTICIPATED CONSTRUCTION SCHEDULE**

	<u>Month</u>	<u>Year</u>
<b>Bid Date</b>	March	2020
<b>Start Construction</b>	March	2020
<b>Occupancy (End Date)</b>	December	2022

**ESTIMATED CONSTRUCTION COST FOR PROJECT**

	<u>Cost Basis</u> (1)	<u>Estimated Escalation Factors</u> (2)	<u>Project Cost</u>
<b>Planning Costs</b>			
a. Engineering			\$ 4,430,000
b. Architectural			\$ 5,765,000
c. Consulting			\$ 591,000
<b>Construction</b>			
a. Structure			\$ 67,189,000
b. Mechanical (HVAC, plumbing, etc.)			\$ 29,575,000
c. Electrical			\$ 23,275,000
<b>Movable Equipment</b>			\$ 4,812,500
<b>Fixed Equipment</b>			\$ 875,000
<b>Site Development/Land Acquisition</b>			N/A
<b>Other (Material Testing, PM Fees, Relocation)</b>			\$ 3,487,500
<b>TOTAL ESTIMATED PROJECT COST</b>	\$ -	\$ -	\$ 140,000,000

(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

### Engineering and Polytechnic Gateway Building

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-19-1-08A
<b>Campus:</b>	West Lafayette	<b>Institutional Priority:</b>	One

	<b>GSF OF AREA AFFECTED BY PROJECT</b>			
	<b>149,640</b>			
<b>ANNUAL OPERATING COST/SAVINGS (1)</b>				
	Cost per GSF	Total Operating Cost	Personal Services	Supplies and Expenses
1. Operations	2.25	\$ 336,863	298,631	38,231
2. Maintenance	1.64	\$ 245,630	194,121	51,508
3. Fuel	-	\$ -		
4. Utilities	1.73	\$ 259,619		259,619
5. Other	-	\$ -		
<b>TOTAL ESTIMATED OPERATIONAL COST/SAVINGS</b>	<b>5.63</b>	<b>\$ 842,111</b>	<b>\$ 492,753</b>	<b>\$ 349,359</b>

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

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