

## Construct Academic and Student Programs Building

project 12 of 15

### Virginia Polytechnic Institute and State University (208)

#### General Information

Project Type:  Project Code:  Start Year:

Agy Priority:  Location:  Facility:

Building #:  Building Name:

Building Function:

Is this an Umbrella Project?  OR a higher education blanket project?

Projected time to submit working drawings:  months

Projected time to occupy facility or complete project:  months

Projected time to award construction contract:  months

Included in the existing Six Year Capital Plan

#### Contact Information

Name:

Email:

Phone:

#### Agency Narrative

##### Description

This project has been on the University's plan since 2005 and is included as a high priority to provide instructional space, dining services, and student union services on the north side of campus. The proposed project is envisioned as a 63,000 gross square foot, four story building. The building plan includes two floors of instructional space and two floors of dining service space. The two lower floors will be modern, multi-venue dining services with a target capacity of 700 seats and the top two floors will be state-of-the-art instructional space with large classrooms that allow for flexible learning arrangements.

The proposed building will be located on the north side of campus in the heart of the instructional enterprise. The scope of the project is based on the need to replace about 750 dining seats on the north side of campus in anticipation of renovating Shultz Hall to instruction from dining and the need to provide six additional large-size general assignment classrooms.

##### Justification

###### Program Description:

The University has developed a way to provide undergraduate and graduate students a convenient facility that will provide an array of needed instructional spaces and support services. The opportunity for instructional programs to share a building with student auxiliary services will be an innovation for Virginia Tech as it works to meet student expectations. The dining space will include multiple, modern food service venues with capacity to serve 700 students at one time on the north side of campus in the hub of academic activity. Dining spaces will also permit special function seating including full-battalion communal dining for the Corps of Cadets. The upper floors will house space for six classrooms, three on each floor. The instructional space will provide needed class and seminar space during the class day, and will double as student activity space, tutorial space, and student group-work space after hours. An upper floor will also house the Services to Students with Disabilities program, ideally located in this facility to provide services within the surrounding academic core of campus.

The University's strategic plan includes three scholarship domains: Learning, Discovery, and Engagement; and three Foundational Strategies: Development of the Organization, Investment in the Campus Infrastructure, and Effective Resource Development, Allocation, and Management. This project supports several key domains and strategies of the strategic plan, and the specific goals of each area addressed by this project are listed below.

**Learning:** (1) Contribute to the holistic and transformative educational experiences of Virginia Tech undergraduate and graduate students; (2) Improve the capital assets that underpin student learning and support programs; (3) Invest in departmental and university-level support for undergraduate education; and (4) Strengthen and integrate all aspects of the undergraduate academic experience, including the academic experience for transfer students.

**Engagement:** Engage students, at the undergraduate and graduate levels, in opportunities for service learning and experiential education that prepare them to serve a diverse and complex marketplace and society while building the capacity of communities.

**Foundational Strategies:** Effectively manage the University's space and land resources for learning, living, and work.

#### Existing Facilities:

Overall, the University does not have sufficient or adequate general assignment classrooms or support space for students seeking individual and group work space and group seminar space. The new problem-based curricula requirements for students to work in teams to research and develop cross-disciplinary solutions have evolved since virtually all of the academic space has been constructed on the Virginia Tech campus. These informal work areas are not available in sufficient quantities on the University campus. The lack of this type of space is becoming a point of dissatisfaction among students and a recruitment deterrent. This project will include instructional space to address the most pressing of these student expectations.

The north side of campus includes outdated dining and limited student unions' space. The existing dining facility, Shultz Hall (1962), is obsolete for dining service and its structure prohibits adequate renovations to meet student expectations. Shultz Hall will be abandoned by the dining program and turned over to the academic program for conversion to a fitting instruction program, the Cyber Arts and Creative Technologies Laboratory. The existing student union facility, G. Burke Johnston (1990), is overcrowded and can not meet student demand for study, group meeting, and student organization space. This project will address a significant level of the need for these auxiliary enterprise services.

#### Funding Plan:

The program includes Educational and General instructional space to support instruction education and auxiliary enterprise space for dining services and student services. The occupancy plan includes two floors for instructional areas and two floors for auxiliary enterprises.

The project total cost is \$45.153 million and the funding plan calls for \$10 million of General Fund support and \$35.153 million of nongeneral fund support. The auxiliary enterprises are bearing the site and foundation costs, and the University is requesting the state to cover only the marginal costs of adding two floors for the instructional program. The nongeneral fund component is requested as a revenue bond authorization that will be repaid by revenue generated from the dining program operations and student fees related to the university unions and student activities.

The University's Board of Visitors approved this project as an item on the 2008-2014 and the 2010-2016 capital plans. To expedite the project and avoid about a year of inflation, the Board of Visitors initiated a planning authorization under restructuring as a 100 percent nongeneral fund activity. If General Fund support is approved for the project, the planning may convert to the state funded project and the construction will be managed as a state activity. If General Fund support is not approved for the project, the University may move forward with only the auxiliary enterprise components; the instructional program component may be deferred.

#### Options Considered

Other options considered but not selected include leasing facilities, renovating existing facilities, or delaying the project entirely. New construction is the selected option because it is the most effective solution to the shortage of instructional, dining, and student services space on the north side of campus. Lease property is not available in the area of campus needed for the services and no facilities are available for renovation. Delaying the project to a future biennium is not a desired option because without adequate, modern instruction and student services space, the University can not meet the demands and expectations of current or prospective students.

#### Costing Methodology

The costs are based on schematic cost estimates from professional consulting services. Virginia Tech has secured the services of Burt Hill Architects to perform architectural and engineering services and Skanska as the Construction

Manager. During the development of Schematic Design documents, a 63,000 gross square foot program was validated with a total project cost of \$45.153 million. This cost aligns with the schematic design phase estimate developed by the A/E and hard cost numbers historically seen by the University for this type of facility. Project costs are estimated to the mid-point of construction using three percent escalation in accordance with the instructions for developing the Six-Year Capital Outlay Plan.

**Project Costs**

1. Aquisition of Property:	\$0
2. Acquisition of Plant	
3. Building and Built-in Equipment	\$28,986,000
4. Sitework and Utilities	\$4,348,000
5. Architectural and Engineering Fee	\$3,127,000
6. Loose Furnishings and Equipment	\$2,114,000
7. Contingencies	\$1,333,000
8. Project Inspection	\$840,000
9. Other Costs	\$4,405,000
<b>Total Cost</b>	<b>\$45,153,000</b>

The following items (10, 11, 12) are included in above costs

10. Estimated Total Planning Costs:	\$3,640,000
11. Estimated New Construction Costs:	\$35,769,000
12. Estimated Improvements Costs:	\$0

**Itemized "9. Other Costs"**

1. Project Management In Capital Project Budget:	\$560,000
2. Special Consultants (if not included in A & E fees):	
A. Scheduling Consultant	\$0
B. HVAC Commissioning	\$289,000
C. Furniture Design	\$106,000
3. Asbestos and lead based paint survey and design:	\$0
4. Asbestos abatement:	\$0
5. Independent Cost Estimates:	\$27,000
6. Value engineering	\$0
7. Subsoil investigations:	\$78,000
8. Construction testing services:	\$226,000
9. Printing	\$10,000
10. Advertisements	\$3,000
11. Work by owner	\$1,992,000
12. Signage	\$35,000
13. Miscellaneous utility charges	\$0
14. Moving expenses	\$0
15. Miscellaneous other costs (itemize):	

A. Native Stone	\$408,000
B. Review Process	\$19,000
C. Other	\$652,000
D. _____	

**Operating and Maintenance Costs**

	1st Year	2nd Year
1. Personal Services	\$107,229	\$257,351
2. Nonpersonal Services	\$166,950	\$400,680
3. Equipment	\$50,000	\$7,500
<b>Total O and M</b>	<b>\$324,179</b>	<b>\$665,531</b>
4. FTE Employees:	6.00	6.00
5. One Time Costs:	\$42,500	\$0
6. Cost Savings	\$0	\$0
7. FTE Savings	\$0	\$0

8. Planned start date of new O and M costs  
(if different than the beginning of the fiscal year)

**Funding Requests**

F Year	GF	NGF	Tax Debt	9c Debt	9d Debt	Total Request
2011	\$10,000,000	\$0	\$0	\$35,153,000	\$0	\$45,153,000
Funding Phase: Construction						

**Prior Funding**

Biennium	Appropriation Act	Act Item	Funding Source	Project Code	Amount
2008-10	Administrative Action	Board Resolution	Nongeneral Fund	L0007	\$2,720,000

**Project Scope**

1. Acquisition - Property	<input type="text" value="0"/>	Sq. Ft. / Acres	Cost per Sq. Ft. or Acre	<input type="text" value="n/a"/>
2. Acquisition - Plant	<input type="text" value="0"/>	Sq. Ft.	Cost per Sq. Ft.	<input type="text" value="n/a"/>
3. New Construction	<input type="text" value="63,000"/>	Sq. Ft.	Cost per Sq. Ft.	<input type="text" value="\$568"/>
4. Improvements	<input type="text" value="0"/>	Sq. Ft.	Cost per Sq. Ft.	<input type="text" value="n/a"/>
5. Capacity	<input type="text" value="0"/>	Beds/Units	Cost per bed/unit	<input type="text" value="n/a"/>

**Capital Lease**

Name of Lessor:

Space Requirements:

Need for Leased Space:

Time Period

Proposed Effective Date of Lease:  Proposed Duration:  months

Include Periodic Renewal:  Renewal at option of:  Renewal Extension Period:  months

Lease payments that would be made during the six year capital planning period

Fund	Year1	Year2	Year3	Year4	Year5	Year6
	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0
<i>subtotals</i>	\$0	\$0	\$0	\$0	\$0	\$0

Total lease payments for six year period:

Total payments for the duration/terms of the lease:

**Energy Component**

Energy Component Description

Annual Energy Operating Costs by Energy Type and Fund Source

Energy Type	Fund Source	Cost
Total		\$0

Cost Estimate for Energy Component

Subcomponent	Cost
Materials Cost	\$0
Labor Cost	\$0
Engineering & Design Cost	\$0
Total	\$0

Annual Cost Savings for Energy Component

Fund	Savings
	\$0
Total	\$0

PID: 5552