

CAPITAL PROJECTS DETAIL

242 Valley City State University

Version: 2011-R03-00242

Date: 01/13/2011

Time: 12:01:54

Capital Project

Fire alarm upgrades in several buildings

	Request/Optional	Recommendation
Total Project Cost	245,000	0
General Fund	245,000	0
Federal Funds	0	0
Special Funds	0	0
Bonding	0	0

Is this a multibiennium project? No No of Biens: 1 Est. Costs 245,000

Future Increased Costs Associated with Project Approval

	2011-2013	2013-2015	2015-2017		2011-2013	2013-2015	2015-2017
Salaries and Wages	0	0	0	FTE	0.00	0.00	0.00
Operating Expenses	0	0	0	General Fund	0	0	0
Equipment > \$5,000	0	0	0	Federal Funds	0	0	0
IT Equipment > \$5,000	0	0	0	Special Funds	0	0	0
Special Lines	0	0	0	Total	0	0	0
Total	0	0	0				

Project Specifics and Justification

Upgrade outdated fire alarm systems including horns, strobe lights, and smoke and fire detection in several buildings. Current smoke detectors in most buildings are not connected to a monitoring system. Alarms are set off by the manual use of pull stations. In addition, replacement parts for the old system are difficult to find. An addressable fire alarm system that is monitored by powerhouse staff is vital to early detection and mitigation of smoke and fire hazards. This is a life safety issue.

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Capital Project			
Replace exterior campus lighting		Request/Optional	Recommendation
	Total Project Cost	183,000	0
	General Fund	183,000	0
	Federal Funds	0	0
	Special Funds	0	0
	Bonding	0	0

Is this a multibiennium project? No **No of Biens:** 1 **Est. Costs** 183,000

Future Increased Costs Associated with Project Approval								
	2011-2013	2013-2015	2015-2017		2011-2013	2013-2015	2015-2017	
Salaries and Wages	0	0	0	FTE	0.00	0.00	0.00	
Operating Expenses	0	0	0					
Equipment > \$5,000	0	0	0	General Fund	0	0	0	
IT Equipment > \$5,000	0	0	0	Federal Funds	0	0	0	
Special Lines	0	0	0	Special Funds	0	0	0	
Total	0	0	0	Total	0	0	0	

Project Specifics and Justification

Replace all underground electrical services and 18 current fixtures and add 10 new fixtures to provide better exterior lighting of campus. Adequate lighting is both a safety and an energy savings issue.

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Capital Project

Rhoades Science Center Addition and Renovation

Total Project Cost	Request/Optional	Recommendation
	10,836,000	7,971,000
General Fund	10,836,000	7,971,000
Federal Funds	0	0
Special Funds	0	0
Bonding	0	0

Is this a multiennium project? No No of Biens: 1 Est. Costs 10,836,000

Future Increased Costs Associated with Project Approval

	2011-2013	2013-2015	2015-2017		2011-2013	2013-2015	2015-2017
Salaries and Wages	44,000	46,200	48,510	FTE	0.00	0.00	0.00
Operating Expenses	180,000	183,600	187,272	General Fund	224,000	229,800	235,782
Equipment > \$5,000	0	0	0	Federal Funds	0	0	0
IT Equipment > \$5,000	0	0	0	Special Funds	0	0	0
Special Lines	0	0	0	Total	224,000	229,800	235,782
Total	224,000	229,800	235,782				

Project Specifics and Justification

L.D. Rhoades Science Center currently houses the departments of Science and Mathematics along with the campus Information Technology Center. The building was constructed in 1973 and contains 33,732 gross square feet. It has not had any significant upgrades since its construction except as required to remodel the building to accommodate the Information Technology Center. Since 1973 when the Rhoades Science Center first opened its doors, significant changes have evolved in the delivery of undergraduate science programs throughout the United States and as a result Rhoades Science Center as it currently exists cannot successfully support the new science education paradigm. What has been discovered to work is a hands-on, laboratory rich, collaborative environment in which students are active participants in the learning process - in other words, students learn science by doing science.

To support the scientific collaboration adequate Faculty/Student Research Laboratories and spaces for interaction among faculty and students outside the Laboratories will need to be provided as the existing Rhoades Science Center has very little of this space. Another trend has been the integration of technology to support and enhance the laboratory experience. Computers and other electronic instruments have proliferated in the laboratories and support spaces, requiring more bench space and access to IT systems. Multi-media audiovisual equipment is becoming commonplace not only in classrooms, but in the teaching laboratories as well. This is related to another trend of greater integration of laboratory and lecture activities within the same space. This requires proper room proportions and clear sight lines to allow visibility to the 'teaching wall' including chalk or marker boards, projection screens and other educational technology.

The typical Rhoades Science Center floor-to-floor height of 12'-8" makes distribution of modern mechanical, fume hood exhaust, plumbing and electrical systems extremely challenging. A more prevalent floor-to-floor height in new science buildings is 15' to 16'. This fact suggests that the most 'systems intensive' laboratory and laboratory support spaces should be considered for new construction with a more appropriate floor-to-floor height.

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Additional space is required to accommodate increased enrollments in STEM related programs which have grown in excess of 200% since FY 2000 and to provide space for STEM programs and the DCB Collaborative Nursing program. New Faculty-Student research labs support the hands-on, laboratory rich, collaborative environment in modern science education. Additional space is also required for Physics and Earth Science labs which were displaced by growth in the campus Information Technology Center.

The proposed project provides for the construction of a 26,600 square foot addition. The request is to fund the project from state general funds, totaling \$10,836,000.

Project Cost Estimate

New Construction Costs:

General Construction	4,737,374
Mechanical Construction	1,517,727
Electrical Construction	694,897
New Construction Subtotal	6,949,998

Remodel/Renew Construction Costs:

Remodel Existing Building	1,622,343
Renew Existing Building	785,297
Existing Construction Subtotal	2,407,640

Total Construction Costs 9,357,638

Construction Contingency 469,751

Soft Costs:

A&E Fees	748,611
Asbestos Abatement	30,000
Reimbursables/Mailing/Printing	50,000
Soils Testing & Survey	10,000
Telecommunications	50,000
Furniture, Fixtures & Equipment	120,000
Soft Cost Subtotal	1,008,611

Total Project Cost 10,836,000

Estimated Change in Operating Cost

The addition of 26,610 sf of laboratory, classroom, and office space will impact operating costs annually, estimated as follows:

Personnel: \$20,000

Utilities: \$65,000

Repair/Maintenance/Supplies: \$25,000

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Purpose for the Project and Response to the Major Capital Project Priorities

1. Project addresses life, health and safety requirements:

- Addresses significant air quality problems in the science labs.
- Corrects all building code deficiencies by updating the building to current code requirements including fire and life safety requirements such as safe exiting from the science labs, properly sized egress doors, and providing fire sprinklers for the building.

2. Project addresses compliance with local, state or federal law or requirements:

- Corrects all ADA deficiencies. Provides accessible toilets, elevator and lab benches in the science labs.

3. Project preserves current assets:

- Replaces deteriorating lab equipment and waste, water and gas distribution systems.
- Clean stained limestone cladding at greenhouse
- Replaces existing inefficient mechanical systems with new energy efficient systems.
- Modernizes antiquated classrooms, labs and offices.

4. Project represents new strategic investments through the enhancement of current assets and the creation of new assets:

- Provides "smart classroom" technology to all classrooms, labs and lecture halls to facilitate multimedia instruction.
- Provides new space for STEM operations.
- Accommodates growth in STEM disciplines. VCSU has experienced a 200% increase in STEM related majors since FY 2000.
- Replaces existing inefficient mechanical systems with new energy efficient systems.
- Provides new space for DCB Collaborative Nursing program.

5. Project corrects significant deferred maintenance:

- Upgrades non-compliant elevator.
- Tuck pointing of brick facade.
- Replaces corroded ceiling grid and diffusers and light fixtures.
- Upgrades air handler and controls system.
- Steam valve replacement.

6. Project addresses a critical maintenance need defined by those which must be addressed, and which, if neglected, could result in substantial damage to the structural integrity of the building:

- Not applicable to this project.

7. Project meets a compelling programmatic or accreditation justification consistent with campus mission and strategic goals:

- Provides research space to continue to attract external funding and to encourage hands-on science instruction and faculty-student interaction.
- Provides a state of the art Science facility for expanded programs to attract students and to become competitive with other Colleges and Universities in the region.

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8. Project has been partially funded by the legislature in a previous biennium, but is not yet complete:

- In the previous biennium, the legislature partially funded this project by providing funds for a Pre-design study and Schematic Design to better determine cost and needs.

9. Project is highly rated by campus and is supported by significant outside funding:

- This project was the number two campus project in the last biennium and is number one for the current biennium.

10. Space will be used to advance a specific program or activity that is a high priority of the state:

- Provides new space for STEM operations. Growth in STEM-related majors has been in excess of 200% since FY 2000.
- Provides new space for DCB Collaborative Nursing program, to support the critical need for nurses in the region.

11. Project addresses an urgent infrastructure need:

- Not applicable to this project

12. Project is consistent with campus master plan and institutional priorities:

- The project is consistent with Campus Master Plans dating back to 1994 including the 2008 Master Plan where it was the number two priority project and the 2010 master plan where it is the number one priority.

13. Project is necessary based on clearly demonstrated condition of existing space:

- Not applicable to this project.

14. Project positions institution to remove or re-purpose obsolete or unnecessary facilities:

- Relocates the macro invertebrate and toxicology labs from inadequate and poorly ventilated space in McCarthy hall to Rhoades addition. Re-purposes McCarthy space to much needed Tech Ed expansion and provide classroom space for STEM teacher workshops.

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Capital Project			
Brick and mortar tuckpointing			
	Total Project Cost	Request/Optional	Recommendation
		229,000	0
	General Fund	229,000	0
	Federal Funds	0	0
	Special Funds	0	0
	Bonding	0	0

Is this a multibiennium project? No **No of Biens:** 1 **Est. Costs** 229,000

Future Increased Costs Associated with Project Approval							
	2011-2013	2013-2015	2015-2017		2011-2013	2013-2015	2015-2017
Salaries and Wages	0	0	0	FTE	0.00	0.00	0.00
Operating Expenses	0	0	0				
Equipment > \$5,000	0	0	0	General Fund	0	0	0
IT Equipment > \$5,000	0	0	0	Federal Funds	0	0	0
Special Lines	0	0	0	Special Funds	0	0	0
Total	0	0	0	Total	0	0	0

Project Specifics and Justification

Replace/repair bricks and mortar on exterior of old brick buildings to prevent decay, water damage, or loss of bricks.

VCSU will repair and replace bricks and mortar on the exterior west and north walls of Vangstad Auditorium and Foss Music Hall as part of routine tuckpointing. Tuckpointing is a critical maintenance task which keeps water from entering the brick wall cavity. If water is allowed to get past the mortar and into the wall, brick failure may occur such as cracking or the brick may become unattached and fall from the building.

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Capital Project			
Lokken Field Turf		Request/Optional	Recommendation
	Total Project Cost	0	815,000
	General Fund	0	0
	Federal Funds	0	0
	Special Funds	0	815,000
	Bonding	0	0

Is this a multibiennium project? No No of Biens: 1 Est. Costs 995,000

Future Increased Costs Associated with Project Approval								
	2011-2013	2013-2015	2015-2017		2011-2013	2013-2015	2015-2017	
Salaries and Wages	0	0	0	FTE	0.00	0.00	0.00	
Operating Expenses	0	0	0					
Equipment > \$5,000	0	0	0	General Fund	0	0	0	0
IT Equipment > \$5,000	0	0	0	Federal Funds	0	0	0	0
Special Lines	0	0	0	Special Funds	0	0	0	0
Total	0	0	0	Total	0	0	0	0

Project Specifics and Justification

Installation of artificial turf at Lokken football field.

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Capital Project			
Restroom renovations and accessibility upgrades			
	Total Project Cost	Request/Optional	Recommendation
	General Fund	210,000	0
	Federal Funds	0	0
	Special Funds	0	0
	Bonding	0	0

Is this a multibiennium project? No **No of Biens:** 1 **Est. Costs** 210,000

Future Increased Costs Associated with Project Approval								
	2011-2013	2013-2015	2015-2017		2011-2013	2013-2015	2015-2017	
Salaries and Wages	0	0	0	FTE	0.00	0.00	0.00	
Operating Expenses	0	0	0	General Fund	0	0	0	
Equipment > \$5,000	0	0	0	Federal Funds	0	0	0	
IT Equipment > \$5,000	0	0	0	Special Funds	0	0	0	
Special Lines	0	0	0	Total	0	0	0	
Total	0	0	0					

Project Specifics and Justification

Renovate and modernize restrooms to meet ADA accessibility code in several academic and administrative buildings.

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Capital Project			
Parking lot improvements and hill slide mitigation			
	Total Project Cost	Request/Optional	Recommendation
	General Fund	245,000	0
	Federal Funds	245,000	0
	Special Funds	0	0
	Bonding	0	0

Is this a multiyear project? No No of Biens: 1 Est. Costs 245,000

Future Increased Costs Associated with Project Approval								
	2011-2013	2013-2015	2015-2017		2011-2013	2013-2015	2015-2017	
Salaries and Wages	0	0	0	FTE	0.00	0.00	0.00	
Operating Expenses	0	0	0	General Fund	0	0	0	0
Equipment > \$5,000	0	0	0	Federal Funds	0	0	0	0
IT Equipment > \$5,000	0	0	0	Special Funds	0	0	0	0
Special Lines	0	0	0	Total	0	0	0	0
Total	0	0	0					

Project Specifics and Justification

Resurface/replace various campus parking lots and mitigate damage from hillside on McCarthy parking lot and roadway. Several parking lots on campus are in need of resurfacing/replacement to provide safe and attractive parking for students, faculty, staff, and visitors.

The hill on the south side of the McCarthy classroom building slides after a heavy rain. The dirt covers the south edge of a road and parking lot. This request would provide funding to drive sheetpiling into the ground at the bottom of the hill and construct a retaining wall to eliminate the continual cleanup after slides and to mitigate damage from a future major hillside.

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Capital Project			
Office and classroom modernization			
	Total Project Cost	Request/Optional	Recommendation
		218,000	0
	General Fund	218,000	0
	Federal Funds	0	0
	Special Funds	0	0
	Bonding	0	0

Is this a multibiennium project? No **No of Biens:** 1 **Est. Costs** 218,000

Future Increased Costs Associated with Project Approval								
	2011-2013	2013-2015	2015-2017		2011-2013	2013-2015	2015-2017	
Salaries and Wages	0	0	0	FTE	0.00	0.00	0.00	
Operating Expenses	0	0	0					
Equipment > \$5,000	0	0	0	General Fund	0	0	0	
IT Equipment > \$5,000	0	0	0	Federal Funds	0	0	0	
Special Lines	0	0	0	Special Funds	0	0	0	
Total	0	0	0	Total	0	0	0	

Project Specifics and Justification

Refresh paint, flooring, lighting, ceiling tiles and furniture in several classrooms and offices to provide safe, attractive, modern facilities and prevent more costly repairs.

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Capital Project			
Vangstad Auditorium Life Safety and Accessibility			
	Total Project Cost	Request/Optional	Recommendation
	General Fund	245,000	0
	Federal Funds	245,000	0
	Special Funds	0	0
	Bonding	0	0

Is this a multibiennium project? No No of Biens: 1 Est. Costs 245,000

Future Increased Costs Associated with Project Approval								
	2011-2013	2013-2015	2015-2017		2011-2013	2013-2015	2015-2017	
Salaries and Wages	0	0	0	FTE	0.00	0.00	0.00	
Operating Expenses	0	0	0	General Fund	0	0	0	0
Equipment > \$5,000	0	0	0	Federal Funds	0	0	0	0
IT Equipment > \$5,000	0	0	0	Special Funds	0	0	0	0
Special Lines	0	0	0	Total	0	0	0	0
Total	0	0	0					

Project Specifics and Justification

Construct handicapped accessible north entryway into Vangstad Hall and renovate the hallway that leads to the south elevator in the lower level of Vangstad. This project would provide the only handicapped accessible access to several connected classroom and administrative buildings on the north side of campus.