Six Year Capital Outlay Plan

2014-2020

Published

July 16, 2013

Agency Ranking	Capital Budget Request Title	Total Funding Request
1	Expand the Central Utility Plan, Fairfax Campus	$ 175,000
2	Construct Academic VII / Research III, Phase I	$ 8,002,000
3	Construct Life Sciences Lab Building, Prince William	$ 4,560,000
4	Renovate Robinson Hall and Harris Theater (Phased)	$ 98,504,000
5	Improvements to Utility Distribution Infrastructure - Fairfax	$ 45,234,000
6	Renovate Campus Library, Phase II	$ 40,300,000
7	Construct Housing VIII	$ 15,661,000
8	Improvements to Telecommunications Infrastructure	$ 7,758,000
9	Construct Fairfax Mixed Use Development (PPEA)	$ -
10	Renovate Science & Tech I	$ 43,682,000
11	Renovate King Hall & Construct New Addition	$ 66,727,000
12	Renovate Johnson Center, Learning Commons and Dining Phases 2&3	$ 26,095,000
13	Construct Facilities Complex, Fairfax Campus	$ 43,379,000
14	Construct Academic VIII / Research IV	$ 126,164,000
15	Construct Prince William Academic/Research IV Building	$ 60,200,000
16	Renovate Enterprise Hall	$ 43,109,000

George Mason University - Capital Planning
Project Information

Proposed Capital Projects - 2014- 2020

PTY	Planner	PM	Capital Budget	Building/Project Name	Project Sponsor	Project Space Type	Description/Program Need	Bi	Project SF (GSF)	Project Cost			Project Cost/ GSF	Project Category	Revenue Source	Estimated Op& Maint	Est. Annual Debt Service	Funding Phases					Year Requested					
										Total	GF	NGF						Full Funding	Pre-Planning	Detail Planning	Construction	Equipment	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
1	Backus	Herman		Expand Central Utility Plan FFX Campus	Calhoun	Physical Plant	Expand current Central Utility Plant on Fairfax Campus - FF&E	14-16		$ 175,000	$ 175,000			FF&E	State GF/GMU RB							$ 175,000	$ 175,000					
2	Manno	Boekle		Construct Academic VII/Research III FF&E	Prohaska	Academic/ Research	This request is for FF&E for already authorized Academic VII Project	14-16	165,593	$ 8,002,000	$ 8,002,000			FF&E	State GF							$ 8,002,000	$ -	$ -	$ 8,002,000			
3	Manno	Boekle		Construct Bull Run Hall IIIB Addition - Life Sciences Building - FF&E	Burris	Academic/ Research	This request is for FF&E for already authorized Bull Run Hall Phase IIIB Project	14-16	123,000	$ 4,560,000	$ 4,560,000	$ -	$ 491	New Construction and Renovation	State GF							$ 4,560,000	$ -	$ -	$ -	$ 4,560,000		
4	Long/ Staulcup	Herman	Sana	Demolish Robinson Hall and Construct New Academic building + Harris Theater Reno.	D.B. Davis	Academic/ Research	New construction provides the opportunity to create innovative, technology rich collaborative learning environments with enough flexibility to meet new future space needs.	14-16	215,161	$ 98,504,000	$ 95,955,000	$ 2,549,000	$ 458	Demolition, New Construction and Renovation	State GF/GMU RB - ICR	$ 65,330	$300K/10yr (3%)	$ 98,504,000	$ 250,000	$ 6,895,280	$ 81,118,720	$ 10,240,000	$ 7,145,280		$ 27,039,573	$ 32,159,573	$ 27,039,573	$ 5,120,000
5	Backus	Kaminski	Matt	Improvements to Utility Distribution Infrastructure - Fairfax	Calhoun	Physical Plant	This project replaces 16,070 linear feet of chilled water piping within the campus thermal infrastructure loop system. It also builds 150 linear feet of new tunnel and hot water piping to enable increased redundancy in the hot water system in the north east sector of the Fairfax Campus as well as building 700 linear feet of new chilled water piping to serve and interconnect the north west sector of the Fairfax Campus.	14-16	N/A	$ 45,234,000	$ 45,234,000	$ -	N/A	Renovation	State GF			$ 45,234,000	$ 250,000	$ 3,166,380	$ 41,817,620		$ 3,416,380	$ 10,454,405	$ 10,454,405	$ 10,454,405	$ 10,454,405	
6	Wolfe	Iszard	Sana	Renovate Campus Library (Phase 2)	Zenelis	Provost	Renovation of library towers after addition is completed - this will require small addition (30K) on the existing front of the towers facing the Quad.	14-16	121,339	$ 40,300,000	$ 40,300,000	$ -	$ 332	Renovation and Addition	State GF			$ 40,300,000	$ 250,000	$ 2,821,000	$ 32,772,000	$ 4,457,000	$ 3,071,000	$ 16,386,000	$ 20,843,000			
7	Long	Pickens	Matt	Rappahannock Classrooms	Pascarell/ Provost	Academic	Provides innovative, technology rich collaborative learning environments which will offset loss of classrooms during Robinson construction. Also provides a prominent presence for Global programs to support and engage both international and domestic students.	14-16	36,000	$ 15,661,000	$ 15,661,000	$ -	$ 435	New Construction	State GF	$ 502,885		$ 15,661,000	$ 250,000	$ 1,096,270	$ 12,473,730	$ 1,841,000	$ 1,346,270	$ 6,236,865	$ 8,077,865			
8	Backus	Kaminski	Matt	Improvements to Telecom Infrastructure	Hughes/Pitt	ITU	Enables ongoing development on West Campus and in Southwest Sector of the Fairfax Campus	14-16	N/A	$ 7,758,000	$ 7,758,000	$ -	N/A	New Construction	State GF			$ 7,758,000	$ 250,000	$ 543,060	$ 6,403,940	$ 561,000	$ 2,714,242	$ 4,482,758	$ 561,000			
9	Wolfe/ Long			Construct Mixed Use Development Fairfax (PPEA)	Davis	Auxiliary	Provides growth in on campus, housing, dining, retail and infrastructure to support it.	14-16																				
										$ 220,194,000	**$ 217,645,000**	**$ 2,549,000**																
10	Manno/ Staulcup		Sana	Renovate Sci&Tech I/Planetary Hall (Phased)	COS Dean	Academic	This project is required to continue improvement and growth of academic, instruction and research spaces for Chemistry/Biochemistry department and School of Physics, Astronomy and Computational Science within the College of Science.	16-18	100,000	$ 43,682,000	$ 43,682,000	$ -	$ 437	Renovation	State GF			$ 43,682,000	$ 250,000	$ 2,878,050	$ 36,927,950	$ 3,626,000		$ 250,000	$ 2,878,050	$ 36,927,950	$ 3,626,000	
11	Manno/ Staulcup		Sana	Construct Addition and Renovate David King Hall	DB Davis/ COS Dean	Academic/ Research	This project consists of two phases and- provides new academic/instructional and research space for CHSS and COS. The first phase of the project will be to provide a 60K GSF addition and the second phase will include complete renovation of the existing 86K GSF David King Hall.	16-18	146,000	$ 66,727,000	$ 56,443,205	$ 10,283,175	$ 457	New Construction and Renovation	State GF/GMU RB - ICR for 50% research space	$ 836,786	$1.2M/10 yr (3%)	$ 66,727,000	$ 250,000	$ 3,396,810	$ 57,930,190	$ 5,150,000		$ 250,000	$ 3,396,810	$ 28,965,095	$ 28,965,095	$ 5,150,000
12	Long/ Wolfe		Matt	Renovate JC Phase 2 (Learning Commons and Dining Phases 2&3)	Kraner/ Zenelis	Dining/ Provost	General Fund portion is JC learning commons library consolidation on floor 2 and 3 in order to expand revenue generating and program opportunities on first floor of JC. Non General Fund $ provides upgrades to dining venues and additional seats in dining area.	16-18	69,400	$ 26,095,000	$ 5,000,000	$ 21,095,000	$ 376	Renovation	GF/ GMU RB		$1.9M/15yr(4%)	$ 26,095,000	$ 250,000	$ 1,826,650	$ 17,413,350	$ 6,605,000			$ 2,076,650	$ 17,413,350	$ 6,605,000	
13	Backus		Matt	Constr Facilities Complex - Fairfax Campus	Calhoun/ Spaine	Physical Plant	Provides space required for supporting new E&G and Auxiliary buildings on Fairfax Campus	16-18	109,412	$ 43,400,000	$ 43,400,000		$ 397	New Construction and Renovation	State GF/ GMU RB	$ 600,000		$ 43,400,000	$ 250,000	$ 2,080,800	$ 39,263,200	$ 1,806,000			$ 2,330,800	$ 39,263,200	$ 1,806,000	
14	Manno		Sana	Engineering Building 2 - Phase I	Ken Ball	Academic/ Research	New 200,000 GSF building to support the growth of existing programs and the development of 2 new programs: Mechanical Engineering and Aerospace Engineering. Within the 200,000 GSF building will be administrative & faculty offices as well as highly specialized and state-of-the art labs, classrooms and design / testing spaces. 50,000 GSF of the total amount is propsed to be lease space for an identified Federal Client	16-18	200,000	$ 126,164,000	$ 70,967,000	$ 55,197,000	$ 631	New Construction	State GF/GMU RB - ICR for 50% of research space	$ 2,774,234	$3.5M/25yr (4%)	$ 126,164,000	$ 250,000	$ 8,831,480	$ 106,943,520	$ 10,139,000		$ 250,000	$ 8,831,480	$ 53,471,760	$ 53,471,760	$ 10,139,000
										$ 306,068,000	**$ 219,492,205**	**$ 86,575,175**																
15	Wolfe		Sana	Construct PW Academic and Research Building	Research VP	Research	Partnership with Prince William County and/or Private Industry etc....	18-20	100,000	$ 60,200,000	$ 45,150,000	$ 15,050,000	$ 602	New Construction	State GF/GMU RB ICR for 50% of Research Space	$ 1,388,876	$1.3M/15 yr (4%)	$ 60,200,000	$ 250,000	$ 4,214,000	$ 50,536,000	$ 5,200,000					$ 250,000	$ 4,214,000
16	Manno		Sana	Renovate Enterprise Hall	Dean SOM	Academic	This project is currently envisioned as renovations to update infrastructure & technology for this 100,000 GSF Building. Renovations will also focus on updates to existing classroom wing to provide classrooms suitable for management/business education and renovations to create a well defined graduate and executive programs presence.	18-20	100,000	$ 43,109,000	$ 43,109,000	$ -	$ 431	Renovation	State GF			$ 43,109,000	$ 250,000	$ 3,017,630	$ 35,009,370	$ 4,832,000					$ 250,000	$ 3,017,630
										$ 103,309,000	**$ 88,259,000**	**$ 15,050,000**																
										$ 629,571,000	**$ 525,396,205**	**$ 104,174,175**						**$ 1,054,051,052**	**$ 5,000,000**	**$ 62,020,710**	**$ 881,894,290**	**$ 105,722,000**	**$ 33,920,624**	**$ 69,372,328**	**$ 146,197,383**	**$ 295,223,358**	**$ 182,938,308**	**$ 73,137,455**
																							14-16 Biennium	**$ 103,292,952**	**16-18 Biennium**	**$ 441,420,742**	**18-20 Biennium**	**$ 256,075,763**

Notes

CapitalBudgetRequest

Expand the Central Utility Plan, Fairfax Campus

Overview

Agency	George Mason University (247)
Project Code	18043
Project Type	Stand-alone Equipment Acquisition
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Approved
Building Name	Central Heating & Cooling Plant
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Central Heating and Cooling Plant
Infrastructure Element	Central Heating / Cooling Plant
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

Project #247-18043 is a previously approved project. This capital request is for furnishing and equipment (FF&E) funding for the project.

Justification

FF&E funding for his project is essential for meeting project objectives and supporting the Univerity's academic and instructional mission.

Alternatives Considered

Costing Methodology

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Equipment Purchase	2015	0100 - General Fund	2395 - Undistributed Plant and Equipment	$175,000
			Total	$175,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$0	$0	$0
Sitework & Utility Construction	$0	$0	$0
Construction Cost Total	$0	$0	$0
Design & related Services from Other Costs tab	$0	$0	$0
Inspection & Testing Services from Other Costs tab	$0	$0	$0
Project Management & Other Costs from Other Costs tab	$0	$0	$0
Furnishings & Movable Equipment	$175,000	$175,000	$0

Construction Contingency	$0	$0	$0
Total Project Cost	$175,000	$175,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost		0	$0
Total Project Cost		0	$0

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services			
A/E Reimbursables			
Specialty Consultants (Food Service, Acoustics, etc.)			
CM Design Phase Services			
Subsurface Investigations (Geotech, Soil Borings)			
Land Survey			
Archeological Survey			
Hazmat Survey & Design			
Value Engineering Services			
Cost Estimating Services			
Other Design & Related Services			
Design & Related Services Total			
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)			
Project Testing Services (conc., steel, roofing, etc.)			
Inspection & Testing Services Total			
Project Management & Other Cost Items			
Project Management (inhouse or consultant)			
Work By Owner			
BCOM Services			
Advertisements			
Printing & Reproduction			
Moving & Relocation Expenses			
Data & Voice Communications			
Signage			
Demolition			
Hazardous Material Abatement			
Utility Connection Fees			
Utility Relocations			
Commissioning			
Miscellaneous Other Costs			
Project Management & Other Costs Total			

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0

GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

No supporting documents for this adjustment

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Erik Backus	06/20/2013 12:14 PM	06/20/2013 12:14 PM
Continue Drafting	Erik Backus	06/20/2013 12:14 PM	06/20/2013 12:18 PM
Continue Drafting	Erik Backus	06/20/2013 05:50 PM	06/20/2013 05:52 PM
Continue Drafting	Erik Backus	06/20/2013 06:06 PM	06/20/2013 06:09 PM
Continue Drafting	Erik Backus	06/20/2013 06:13 PM	06/20/2013 06:13 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 10:03 PM	06/20/2013 10:04 PM
Agency Review Step 1	Matthew Johnson	06/21/2013 08:39 AM	06/21/2013 08:43 AM
Ready for DPB Submission	Matthew Johnson	06/21/2013 08:55 AM	06/21/2013 08:56 AM
Ready for DPB Submission	Cathy Wolfe	06/21/2013 10:57 AM	06/21/2013 10:57 AM
Ready for DPB Submission	Cathy Wolfe	06/21/2013 11:05 AM	06/21/2013 11:05 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:23 PM	06/21/2013 04:24 PM
DPB Review	Anne Smith	06/25/2013 03:23 PM	06/25/2013 03:23 PM
DPB Review	Anne Smith	06/25/2013 03:26 PM	06/25/2013 03:27 PM
DPB Review	Anne Smith	06/25/2013 04:23 PM	06/25/2013 04:24 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:40 AM	06/26/2013 07:41 AM
Continue Drafting	Cathy Wolfe	07/01/2013 06:16 AM	07/01/2013 06:17 AM
Agency Review Step 1	Matthew Johnson	07/02/2013 03:33 PM	07/02/2013 03:34 PM
Agency Review Step 1	Tom Calhoun	07/03/2013 10:32 AM	07/03/2013 10:32 AM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:27 PM	07/03/2013 04:27 PM
DPB Review	Anne Smith	07/03/2013 06:06 PM	07/03/2013 06:06 PM
DPB Review	Anne Smith	07/04/2013 03:36 PM	07/04/2013 03:36 PM
DPB Review	Anne Smith	07/04/2013 03:36 PM	07/04/2013 03:37 PM
DPB Review	Anne Smith	07/08/2013 10:06 AM	07/08/2013 10:06 AM
DPB Review	Anne Smith	07/09/2013 03:43 PM	07/09/2013 03:45 PM
DPB Review	Anne Smith	07/10/2013 11:12 AM	07/10/2013 11:13 AM
DPB Review	Anne Smith	07/11/2013 12:51 PM	07/11/2013 12:52 PM
DPB Review			

CapitalBudgetRequest

Construct Academic VII / Research III, Phase I

Overview

Agency	George Mason University (247)
Project Code	
Project Type	
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Approved
Building Name	
Project Location	
Facility/Campus	
Source of Request	Agency Request
Building Function	Academic Instruction & Research
Infrastructure Element	
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

Project #247-17999 is a previously approved project. This Capital Request is for furnishings & equipment (FF&E) funding for the project.

Justification

FF&E funding for this project is essential for meeting project objectives and supporting the Univeristy's academic and instrcutional mission.

Alternatives Considered

Costing Methodology

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Equipment Purchase	2016	0100 - General Fund	2295 - Undistributed Equipment	$8,002,000
			Total	$8,002,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$0	$0	$0
Sitework & Utility Construction	$0	$0	$0
Construction Cost Total	$0	$0	$0
Design & related Services from Other Costs tab	$0	$0	$0
Inspection & Testing Services from Other Costs tab	$0	$0	$0
Project Management & Other Costs from Other Costs tab	$0	$0	$0
Furnishings & Movable Equipment	$8,002,000	$8,002,000	$0

Construction Contingency	$0	$0	$0
Total Project Cost	$8,002,000	$8,002,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost		0	$0
Total Project Cost		0	$0

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services			
A/E Reimbursables			
Specialty Consultants (Food Service, Acoustics, etc.)			
CM Design Phase Services			
Subsurface Investigations (Geotech, Soil Borings)			
Land Survey			
Archeological Survey			
Hazmat Survey & Design			
Value Engineering Services			
Cost Estimating Services			
Other Design & Related Services			
Design & Related Services Total			
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)			
Project Testing Services (conc., steel, roofing, etc.)			
Inspection & Testing Services Total			
Project Management & Other Cost Items			
Project Management (inhouse or consultant)			
Work By Owner			
BCOM Services			
Advertisements			
Printing & Reproduction			
Moving & Relocation Expenses			
Data & Voice Communications			
Signage			
Demolition			
Hazardous Material Abatement			
Utility Connection Fees			
Utility Relocations			
Commissioning			
Miscellaneous Other Costs			
Project Management & Other Costs Total			

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0

GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

No supporting documents for this adjustment

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Laura Manno	06/19/2013 11:32 AM	06/19/2013 11:32 AM
Continue Drafting	Laura Manno	06/19/2013 11:33 AM	06/19/2013 11:50 AM
Continue Drafting	Laura Manno	06/19/2013 11:58 AM	06/19/2013 11:58 AM
Continue Drafting	Tom Calhoun	06/20/2013 11:35 AM	06/20/2013 11:35 AM
Continue Drafting	Laura Manno	06/20/2013 12:06 PM	06/20/2013 12:08 PM
Continue Drafting	Laura Manno	06/20/2013 12:08 PM	06/20/2013 12:09 PM
Continue Drafting	Laura Manno	06/20/2013 01:50 PM	06/20/2013 01:53 PM
Continue Drafting	Laura Manno	06/20/2013 03:38 PM	06/20/2013 03:38 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 10:23 PM	06/20/2013 10:25 PM
Agency Review Step 1	Matthew Johnson	06/21/2013 08:44 AM	06/21/2013 08:50 AM
Ready for DPB Submission	Matthew Johnson	06/21/2013 08:53 AM	06/21/2013 08:55 AM
Ready for DPB Submission	Cathy Wolfe	06/21/2013 10:58 AM	06/21/2013 10:58 AM
Ready for DPB Submission	Cathy Wolfe	06/21/2013 11:03 AM	06/21/2013 11:03 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:31 PM	06/21/2013 04:32 PM
DPB Review	Anne Smith	06/25/2013 03:31 PM	06/25/2013 03:32 PM
DPB Review	Anne Smith	06/25/2013 04:15 PM	06/25/2013 04:15 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:59 AM	06/26/2013 07:59 AM
Continue Drafting	Cathy Wolfe	07/01/2013 05:47 AM	07/01/2013 05:48 AM
Continue Drafting	Cathy Wolfe	07/02/2013 02:16 PM	07/02/2013 02:20 PM
Agency Review Step 1	Tom Calhoun	07/03/2013 04:17 PM	07/03/2013 04:18 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:27 PM	07/03/2013 04:27 PM
DPB Review	Anne Smith	07/04/2013 03:37 PM	07/04/2013 03:38 PM
DPB Review	Anne Smith	07/08/2013 10:08 AM	07/08/2013 10:09 AM
DPB Review	Anne Smith	07/09/2013 03:45 PM	07/09/2013 03:47 PM
DPB Review	Anne Smith	07/09/2013 03:48 PM	07/09/2013 03:49 PM
DPB Review	Anne Smith	07/10/2013 11:09 AM	07/10/2013 11:10 AM
DPB Review	Anne Smith	07/11/2013 12:49 PM	07/11/2013 12:51 PM
DPB Review			

CapitalBudgetRequest

Construct Life Sciences Lab Building, Prince William

Overview

Agency	George Mason University (247)
Project Code	
Project Type	New Construction
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Approved
Building Name	Bull Run Hall
Project Location	Northern Virginia
Facility/Campus	GMU--Prince William campus
Source of Request	Agency Request
Building Function	Academic Instruction & Program Support
Infrastructure Element	
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

Project #247-18000 is a previously approved project. This Capital Request is for furnishings & equipment funding (FF&E) for the project.

Justification

FF&E funding for this project is essential for meeting project objectives and supporting the University's academic and instruction mission.

Alternatives Considered

Costing Methodology

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Equipment Purchase	2017	0100 - General Fund	2295 - Undistributed Equipment	$4,560,000
			Total	$4,560,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$0	$0	$0
Sitework & Utility Construction	$0	$0	$0
Construction Cost Total	$0	$0	$0
Design & related Services from Other Costs tab	$0	$0	$0
Inspection & Testing Services from Other Costs tab	$0	$0	$0
Project Management & Other Costs from Other Costs tab	$0	$0	$0
Furnishings & Movable Equipment	$4,560,000	$4,560,000	$0

Construction Contingency	$0	$0	$0
Total Project Cost	$4,560,000	$4,560,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost		0	$0
Total Project Cost		0	$0

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services			
A/E Reimbursables			
Specialty Consultants (Food Service, Acoustics, etc.)			
CM Design Phase Services			
Subsurface Investigations (Geotech, Soil Borings)			
Land Survey			
Archeological Survey			
Hazmat Survey & Design			
Value Engineering Services			
Cost Estimating Services			
Other Design & Related Services			
Design & Related Services Total			
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)			
Project Testing Services (conc., steel, roofing, etc.)			
Inspection & Testing Services Total			
Project Management & Other Cost Items			
Project Management (inhouse or consultant)			
Work By Owner			
BCOM Services			
Advertisements			
Printing & Reproduction			
Moving & Relocation Expenses			
Data & Voice Communications			
Signage			
Demolition			
Hazardous Material Abatement			
Utility Connection Fees			
Utility Relocations			
Commissioning			
Miscellaneous Other Costs			
Project Management & Other Costs Total			

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0

GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

No supporting documents for this adjustment

Workflow History

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Agency Review Step 1	Cathy Wolfe	06/20/2013 10:21 PM	06/20/2013 10:23 PM
Agency Review Step 1	Matthew Johnson	06/21/2013 08:51 AM	06/21/2013 08:53 AM
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Ready for DPB Submission	Tom Calhoun	06/21/2013 04:32 PM	06/21/2013 04:33 PM
DPB Review	Anne Smith	06/25/2013 03:23 PM	06/25/2013 03:25 PM
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DPB Review	Anne Smith	07/09/2013 03:47 PM	07/09/2013 03:48 PM
DPB Review	Anne Smith	07/10/2013 11:10 AM	07/10/2013 11:11 AM
DPB Review	Anne Smith	07/11/2013 12:47 PM	07/11/2013 12:48 PM
DPB Review			

CapitalBudgetRequest

Renovate Robinson Hall and Harris Theater (Phased)

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	New Construction/Improvement
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Submitted
Building Name	Robinson Hall A & B Wings
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Academic and Instructional Spaces
Infrastructure Element	Classroom / Office
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

Previously - in the 2011 Capital Submission – this project was submitted as a renovation/addition project. The current request changes that and instead seeks authorization and funds for Robinson Hall Demolition/New Construction & Harris Theater Renovation.

Comprehensive studies have identified critical deficiencies in the existing buildings, some of which are difficult if not impossible to overcome as a renovation project alone. Some of these include:

• Structural Grid not appropriately designed to support learning space design/classrooms (Column locations that limit classroom size and configuration)
• Floor-to-floor ceiling/slab heights that are too low and therefore limit classroom size and technology implementation
• MEP systems that are beyond useful life and that have very poor efficiency resulting in high O&M costs and comfort issues
• A building that does not meet ADA guidelines for Accessibility
• Exterior envelope that is not only extremely inefficient but which is also starting to fall apart. Water damage has now led to bricks falling off of the façade/parapet creating a safety risk
• Hazardous Materials throughout the building (asbestos, lead paint, etc.)
• Facilities Condition Index (FCI) rating of 64% which falls within the “Consider Replacement” Category (FCI measures condition of an asset relative to its replacement value)
• Harris Theater’s dependence on Robinson Restroom facilities. (Harris Theater is used as a public venue and therefore should have restrooms to support the theater)

Therefore, the proposed project will include the phased demolition of Robinson Hall (A & B wings), the construction of a new 192,000 GSF academic & research facility on the existing Robinson A site, a 2,000 GSF addition to Harris Theater to add restrooms and interior renovations of Harris Theater to correct critical deficiencies. With the exception of the footprint required to add the 2,000 GSF to Harris Theater, the current Robinson B Site will be cleared following building demolition and landscaped open space until that site is required for future development.

Proposed Project Scope Breakdown (GSF):

• 188,729 GSF Demolition Robinson A and Robinson B
• 192,000 GSF New Construction - Academic & Research Building
• 2,000 GSF New Construction – Harris Theater Restroom Addition
• 21,161 GSF Renovation – Critical Deficiencies Harris Theater

As the building currently houses the largest number of University classrooms on campus (42), it is critical that project scope include construction of new state-of-the-art University classrooms designed to support the latest teaching & learning pedagogies. George Mason is also in the process of implementing its College Co-location plan which seeks to consolidate academic programs and support spaces within each College

into adjacent and/or nearby locations. Robinson Hall is a critical component of this co-location plan. Today, the College of Humanities and Social Sciences (CHSS) is dispersed throughout the Fairfax campus resulting in loss of efficiency and missed collaborative opportunities. The proposed project will consolidate most CHSS academic departments, some research centers and CHSS Administration within the new Robinson Hall.

Today, Harris Theater is physically connected to and dependent on Robinson B and is therefore considered a part of this project scope. Proposed project must include interior renovations within Harris Theater to address the most critical deficiencies including but not limited to: ADA accessibility, rigging/catwalk safety issues, poor house lighting, etc.

Additionally, Harris Theater has no public restrooms making it totally dependent on Robinson B. Proposed project scope plans to build a small 2,000 GSF addition onto Harris Theater to provide necessary restrooms for this public venue. The inclusion of this addition in the project not only addresses critical need but also severs the dependency on Robinson B which is ultimately required in order to complete this replacement project.

This project will need to be a phased project as Robinson B space will be required as swing space while Robinson A is demolished and the new building is constructed. Following Completion of the new building, the Robinson B can be demolished and the 2,000 GSF addition to Harris can be constructed while interior renovations to Harris are completed. Project will require Harris Theater to be offline for some or most of this time. Required phasing of work adds complexity and costs to this project.

Justification

Robinson Hall (A&B) and Harris Theater were constructed in 1975 which means by 2019, these buildings will be 44 years old. Buildings have had no major renovations since opening in 1975. The age and condition of these facilities has resulted in poorly functioning and inefficient systems including but not limited to exterior envelope, HVAC, lighting, and plumbing systems. Much of Robinson is not currently sprinkled and windows & roofing systems have outlived their useful and functional lives. IT infrastructure in these buildings is antiquated, limited and does not serve the needs of our faculty, staff and students well. The proposed demolition and new construction plans to address each of these issues and to improve energy efficiency. This project will correct deficiencies identified in the Preliminary FM Global Risk Report issued to George Mason University in March of 2009, as well as address the current multi-million dollar maintenance reserve backlog for Robinson A & B and Harris Theater. Project will also make sustainability a high priority and will consider sustainable options for each component of the design.

Over several years, 2 different pre-planning studies were conducted to identify scope, schedule, budget and phasing for this project. A Facilities Condition Index (FCI) report was also prepared to assess the existing building systems and the time line & cost of repair or replacement. As a result of these studies, it was determined that the near term costs to renovate and maintain the existing space in Robinson Hall (A&B) would exceed 60% of the cost of new construction. Based on the FCI rating scale, this places this building lower than the rating of “Poor” and instead places it in a category where replacement should be considered. A summary report has been attached which demonstrates some of these findings as well as a summary of the most recent pre-planning efforts.

As our largest academic & instruction building on campus, serving the greatest number of students it is problematic that this building does not meet ADA guidelines for Accessibility. Furthermore, the building has started to create safety issues as water problems have recently resulted in brick falling from roof parapets in several locations.

Classrooms are poorly designed, undersized and antiquated with students crammed into each room via old-school tablet arms. Lighting is also insufficient. Further exacerbating the problem is the existing column grid and the floor-to-floor slab heights. Column grid spacing and low slab/ceiling heights limit classroom size and configurations. Options for flexible and/or collaborative, problem based learning are almost impossible given current room design. In the proposed project, classrooms will be right-sized and designed to provide flexible options to support a variety of teaching/learning styles.

As the College of Humanities and Social Sciences and the university have grown, the amount of space occupied by the CHSS departments and programs in Robinson has not kept pace. These units are in need of additional growth space to coincide with increased enrollment growth since CHSS serves not only its majors, but it also provides much of the general education curriculum needs for the University at large. As the faculty has expanded, the college has reduced or eliminated reception areas, meeting rooms, and any remaining collaboration spaces in order to provide office and research space. The 2009 Space Needs Analysis conducted by Paulien & Associates showed the college with a deficit of 46,000 ASF (70,000 GSF) in 2009 and a projected deficit of 91,000 ASF (138,000 GSF) by year 2017.

In addition, the departments and programs of CHSS are spread over many buildings at Mason’s Fairfax campus. A major goal of the university and CHSS is to co-locate departments and programs with similar missions. This project will allow us to meet that need and for the unit to improve efficiency in terms of shared staff, equipment, and spaces. More importantly, the co-location of similar programs will increase the synergy among these programs, their faculty, and their students, and help forge a stronger intellectual community. Besides gaining space efficiencies, this project will promote productivity through increased collaboration, shared promotion of curricular offerings and events, joint research projects, and so on.

As CHSS looks toward increased enrollment in their globally-focused academic programs, it needs to provide a better presentation of these offerings to students, a one-stop-shop, if you will, where students can learn about the different academic programs and get centralized advising about which program will best suit their goals. Co-locating the global programs is a crucial step in meeting this need and supporting the growth of global programs.

The work proposed for Harris Theater has been limited to only that work to address critical deficiencies which impact health, safety, accessibility and basic functional use of the space.

Alternatives Considered

In preparation for both the 2011 and 2013 Capital Submission, George Mason University has worked with outside design teams (via term contract) to study a variety of options. For some time, the option to renovate Robinson Hall (A&B wings) was carefully considered and even submitted as our 2011 Capital request. Further study in 2013 into projected University growth, pedagogical shifts in teaching/learning, status of existing building conditions (including 2 more years of new maintenance & repairs issues and deferred maintenance costs) now clearly points to demolition and new construction as the most appropriate solution. Even the most extensive renovations would still leave the facility poorly designed to support University needs.

Additionally, Campus Planning has worked closely with the College of Visual & Performing Arts (CVPA) who is a primary user of Harris Theater. Though there are many upgrades desired for that facility, attention has been paid to only include in this request renovations which are seen an essential for safe, accessible and basic functional use of the facility. All nice-to-have requests for renovation have been tabled for further consideration and fund raising efforts.

Costing Methodology

George Mason University contracted with Perkins Eastman to conduct a pre-planning study for this project. The scope of this study included macro level programming, site analysis, concept level design and concept level cost estimating. The cost estimate was based on the findings of programming and concept design as well as an understanding of site related improvements discovered and defined durning the site analysis phase of work.

It is anticipated that this project will be funded by a combination of State General Fund, and Research Indirect Cost Recovery for Mason's share of the research space funding.

This project's funding will not have an impact on tuition or student fees.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2015	0100 - General Fund	2322 - Construction, Buildings	$95,955,000
Full Funding	2015	0815 - 9(D) Debt Service - Construction Costs	2322 - Construction, Buildings	$2,549,000
			Total	$98,504,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$68,811,000	$68,811,000	$0
Sitework & Utility Construction	$3,691,000	$3,691,000	$0
Construction Cost Total	$72,502,000	$72,502,000	$0
Design & related Services from Other Costs tab	$8,566,000	$8,566,000	$0
Inspection & Testing Services from Other Costs tab	$1,277,000	$1,277,000	$0
Project Management & Other Costs from Other Costs tab	$4,468,000	$4,468,000	$0
Furnishings & Movable Equipment	$10,240,000	$10,240,000	$0
Construction Contingency	$1,451,000	$1,451,000	$0
Total Project Cost	$98,504,000	$98,504,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost	GSF	0	$0
Construction Cost	GSF	215,161	$337

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$7,209,000	$7,209,000	
A/E Reimbursables	$146,000	$146,000	
Specialty Consultants (Food Service, Acoustics, etc.)	$734,000	$734,000	
CM Design Phase Services	$272,000	$272,000	

Subsurface Investigations (Geotech, Soil Borings)	$60,000	$60,000	
Land Survey	$45,000	$45,000	
Archeological Survey	$0	$0	
Hazmat Survey & Design	$0	$0	
Value Engineering Services	$60,000	$60,000	
Cost Estimating Services	$40,000	$40,000	
Other Design & Related Services			
Design & Related Services Total	$8,566,000	$8,566,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$555,000	$555,000	
Project Testing Services (conc., steel, roofing, etc.)	$722,000	$722,000	
Inspection & Testing Services Total	$1,277,000	$1,277,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$555,000	$555,000	
Work By Owner	$2,339,000	$2,339,000	
BCOM Services	$170,000	$170,000	
Advertisements	$8,000	$8,000	
Printing & Reproduction	$115,000	$115,000	
Moving & Relocation Expenses	$216,000	$216,000	
Data & Voice Communications	$399,000	$399,000	
Signage	$107,000	$107,000	
Demolition			
Hazardous Material Abatement	$0	$0	
Utility Connection Fees	$194,000	$194,000	
Utility Relocations	$0	$0	
Commissioning	$365,000	$365,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$4,468,000	$4,468,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$65,330
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):16/07/2019

Supporting Documents

File Name	File Size	Uploaded By	Upload Date	Comment
Rob-Harris Exec Summary for PB upload.pdf	1,465,244	Laura Manno	6/19/2013	Robinson Hall Demo/New Construction & Harris Theater Renovation

Workflow History

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DPB Review	Anne Smith	07/09/2013 03:49 PM	07/11/2013 12:45 PM
DPB Review			

Pre-planning Study 2013

George Mason University
Robinson Hall Demolition/New Construction
and Harris Theater Renovation

Date: June 21, 2013

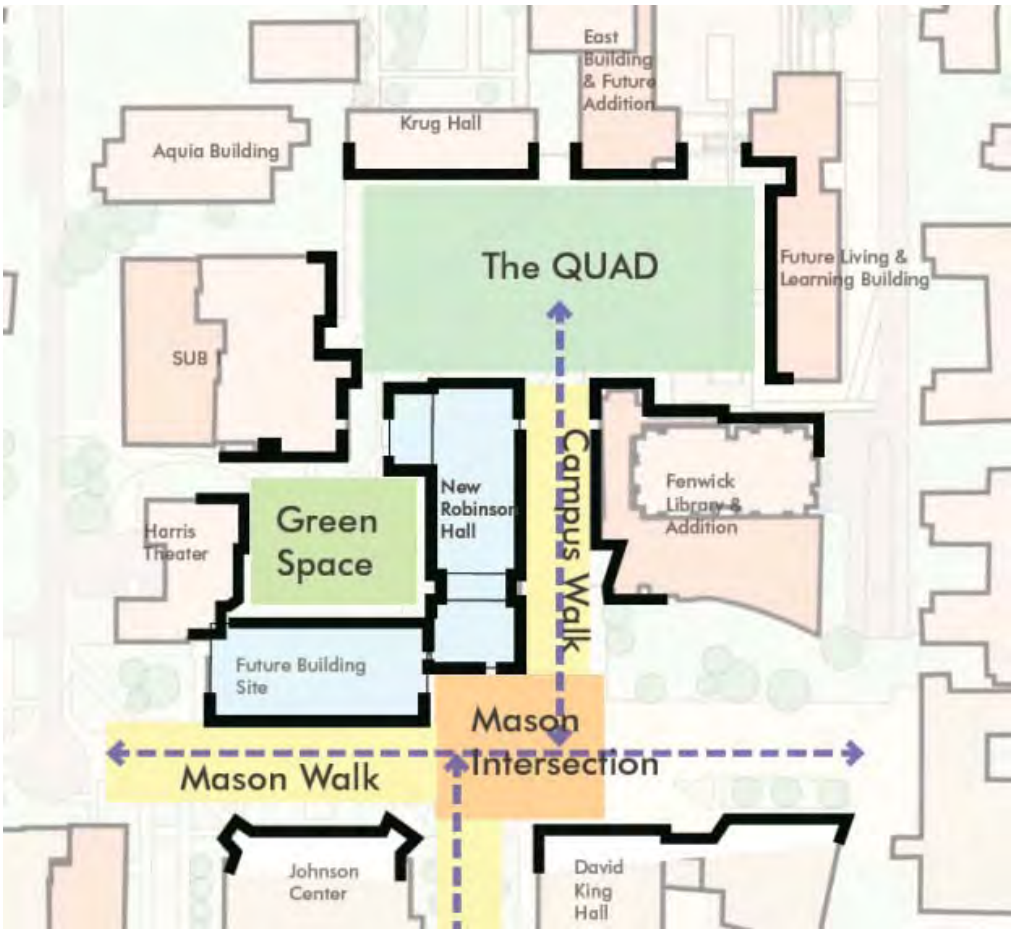


Table of Contents

Executive Summary

Agency: George Mason University
Project Title: Demo Robinson A/B, Construct Replacement of A, Renovate Harris
Project Code: 247- (TBD)
Biennium: 2014-2016

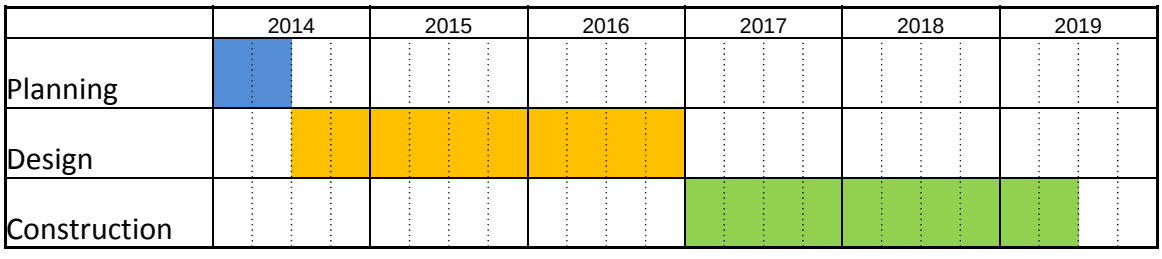
1. Project Scope Square Footage

Demolition Robinson A/B	188,729 GSF
New Construction Academic & Research	192,000 GSF
New Construction Harris Theater Restrooms	2,000 GSF
Renovation Harris Theater Critical Deficiencies	21,161 GSF

2. Project Budget

1	Acquisition of Property	0
2	Acquisition of Plant	0
3	Building and Built-in Equipment	68,811,000
4	Sitework and Utilities	3,691,000
5	Architectural and Engineering Fees	7,209,000
6	Loose Furnishings and Equipment	10,240,000
7	Contingencies	1,451,000
8	Project Inspection	555,000
9	Other Costs	6,547,000
	Total Cost:	98,504,000

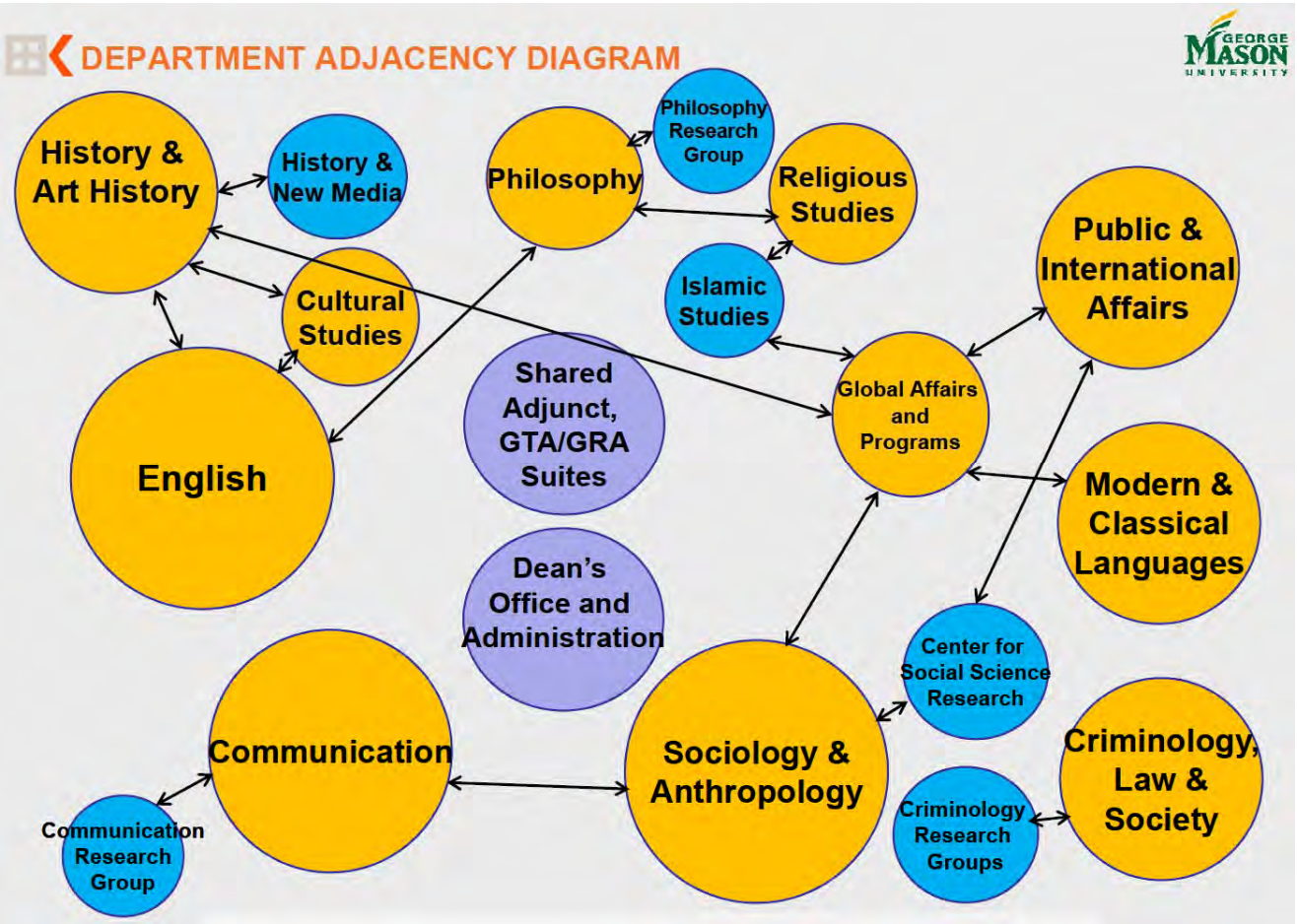
3. Project Schedule:



Statement of Program Definition:

GEORGE MASON UNIVERSITY - ROBINSON HALL SPACE PROGRAM					
	Occupancy /Quantity	ASF /Occupant	ASF - Academic Instruction/ CHSS	ASF - Research	ASF - Univ. Classrms
Administration					
Department Total	**46**		**5,668**		
English					
Department Total	**141**		**13,375**		
Communication					
Department Total	**126**		**7,676**	**0**	
Public and International Affairs					
Department Total	**124**		**6,684**		
History and Art History					
Department Total	**140**		**8,606**		
Center for History and New Media					
Department Total	**16**			**3,750**	
Criminology, Law and Society					
Department Total	**61**		**4,667**	**2,400**	
Modern and Classical Languages					
Department Total	**87**		**7,500**		
Sociology and Anthropology (SOAN)					
Department Total	**53**		**4,820**	**0**	
Philosophy					
Department Total	**25**		**2,473**	**600**	
Religious Studies					
Department Total	**14**		**1,570**		
Cultural Studies					
Department Total	**33**		**1,339**		
Global Programs					
Department Total	**16**		**2,620**		
Center for Global Islamic Studies					
Department Total	**0**			**0**	
African & African American Studies					
Department Total			**314**		
Shared Conference					
Conference Total			**4,825**	**600**	
DoIT Classroom Technology Support Office					
IT Instructional Support Total	**16**		**1,826**		
University Classrooms					
Total	**30**		**0**		**34,910**
Community Space					
Department Total			**6,000**		
Building Support					
Department Total			**4,564**		
CHSS Future Growth					
Growth Total	0		**0**	**0**	
TOTAL AREA PROGRAMMED					
Proposed Assignable Square Footage (ASF)			**84,526**	**7,350**	**34,910**
Overall Gross Square Feet (66% Efficiency)			**128,070**	**11,136**	**52,894**
Total GSF New Academic Building				**192,100**	
Total GSF Harris Theater Entry/Restroom Addition				**2,000**	
Total New Construction GSF				**194,100**	
Total Office Space Occupants	**865**				

Functional Adjacency Requirements:



Project Estimate:

10	Estimated Total Planning Costs	9,010,000
11	Estimated New Construction Costs	70,545,000
12	Estimated Improvements Costs	1,956,000
	Itemized "9, Other Costs"	
1	Project Management In Capital Project Budget:	555,000
2	Special Consultants (if not included in A&E Fees):	0
	A. Commissioning	365,000
	B. Site Survey/EIR	45,000
	C. Specialty Consultants	734,000
	D. Archaeological Survey	0
3	Asbestos and Lead Based Paint Survey & Design	0
4	Asbestos Abatement	0
5	Independent Cost Estimates	40,000
6	Value Engineering	60,000
7	Subsoil Investigations	60,000
8	Construction Testing Services	722,000
9	Printing	115,000
10	Advertisements	8,000
11	Work by Owner	2,339,000
12	Signage	107,000
13	Miscellaneous Utility Charges	194,000
14	Moving Expenses	216,000
15	Miscellaneous Other Costs (Itemize)	0
	A. BCOM Review Inspection Fees	170,000
	B. A/E Reimbursibles	146,000
	C. CM Design Phase Services	272,000
	D. Demolition	0
	E. Data and Voice Communications	399,000
	F. Utility Relocations	0
	Total Other Costs:	6,547,000

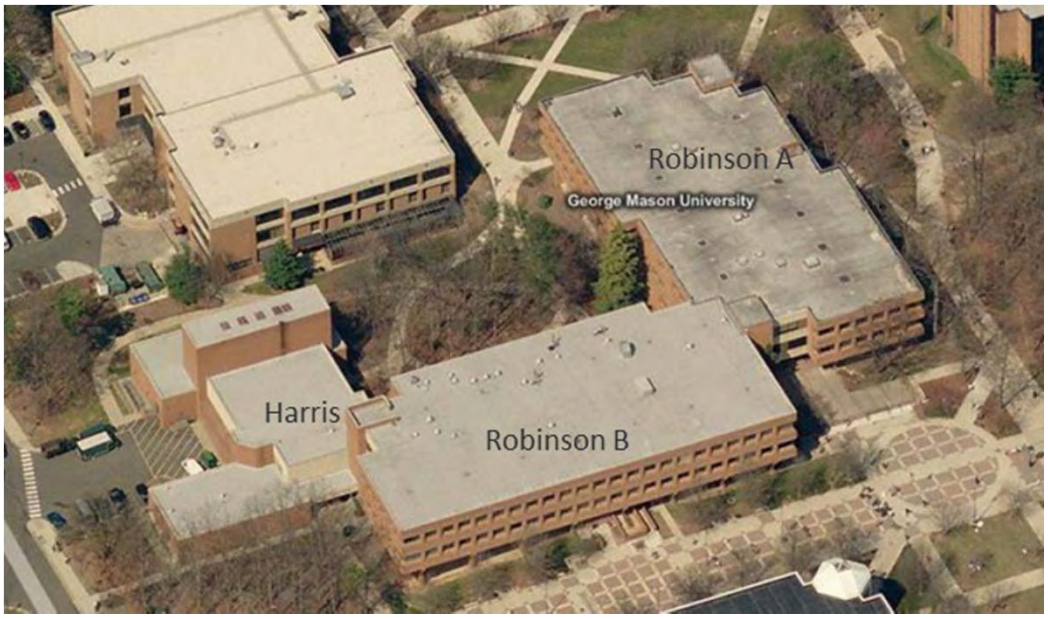
Cost Per SF Project :

Robinson A/B Demolition & New Construction of 194,000 GSF (Includes 192,000 GSF Academic Building + 2,000 GSF Addition to Harris Theater)	**$489/GSF**
Harris Renovation (critical needs)	**$168/GSF**

Cost Per SF Construction:

Robinson A/B Demolition & 194,000 GSF New Construction (Includes 192,000 GSF Academic Building + 2,000 GSF Addition to Harris Theater)	**$364/GSF**
Harris Renovation (critical needs)	**$92/GSF**

Existing Conditions:

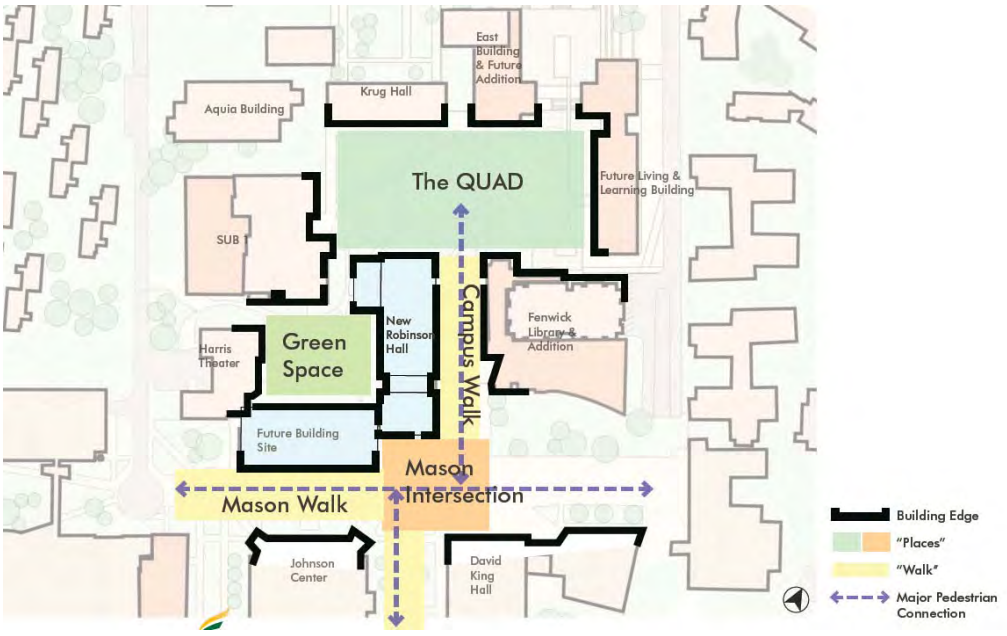


Recent Parapet Deterioration/Repair

Antiquated and Overcrowded Classrooms

Project Description:

- Project will provide state-of-the art University classrooms designed to support the latest teaching & learning pedagogies.
- New Building will consolidate most College of Humanities & Social Sciences (CHSS) academic departments, some CHSS research centers and CHSS administration in alignment with the University co-location plan for academic units.
- New construction will be designed with appropriate floor to floor heights and structural grid layouts to provide the opportunity to create innovative, technology rich collaborative learning environments with enough flexibility to meet new future space needs.
- State of the art building systems and energy efficient construction will significantly reduce operating costs and potentially reduce demand on central plant.
- Consolidation of Robinson Hall into one new building with increased density also creates a future high value building site in the center of campus academic core.
- Scope includes required maintenance and code renovations to Harris Theater as well as a 2,000 GSF addition to provide much needed restroom facilities for this public venue



Project Justification:

- Robinson Hall (A&B) and Harris Theater were constructed in 1975 which means by 2019, these buildings will be 44 years old. Buildings have had no major renovations since opening in 1975.
- Robinson Hall is the largest University classroom building at George Mason University. Existing classrooms are poorly designed, undersized and antiquated with students crammed into each room via old-school tablet arms. Lighting is also insufficient. Options for flexible and/or collaborative, problem based learning are almost impossible given current room design. In the proposed project, classrooms will be right-sized and designed to provide flexible options to support a variety of teaching/learning styles.
- As our largest academic & instruction building on campus, serving the greatest number of students it is problematic that this building does not meet ADA guidelines for Accessibility.
- Much of Robinson Hall is not currently sprinkled
- Existing building systems have reached or exceeded their life expectancy and require significant re-investment.
- Exterior skin is failing. Poor original detailing, water infiltration and corroding masonry ties have created an actual safety hazard due to falling bricks.
- Existing concrete structure has limitations (low floor to floor height, inflexible structural grid) which will impact ability to create flexible and functionally adequate spaces to align with future strategic vision.
- There are numerous deficiencies identified in the Preliminary FM Global Risk Report issued to George Mason University in March of 2009; additionally there is a current multi-million dollar maintenance reserve backlog for Robinson A & B and Harris Theater.
- near term costs to renovate and maintain the existing space in Robinson Hall (A&B) would exceed 60% of the cost of new construction. Based on the FCI rating scale, this places this building in a category where replacement should be considered.

Project Justification:

0.2 - What is an FCI?

A **Facility Condition Index** (**FCI**) measures the condition of an asset (building, site element, portfolio, etc) relative to its replacement value. FCI allows comparisons of the *relative* condition of buildings of different sizes, uses and cost. (One *absolute* measure of condition could be the dollar value of its needs, which if used to help decide priorities, might tend to weigh large buildings more heavily all the time.) The FCI is calculated as a ratio of the sum of the near term needs for an asset(s) divided by its replacement value.

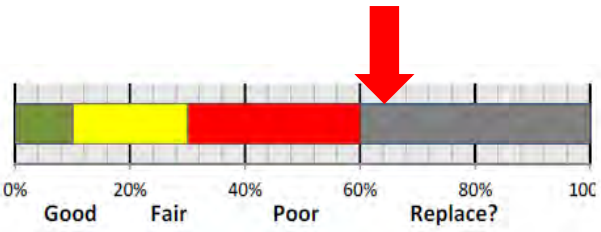
How do you calculate the FCI?

$$FCI = \frac{\sum [\text{Select* Near Term** Needs, in \$\$}]}{\text{Current Replacement Value, in \$\$}}$$

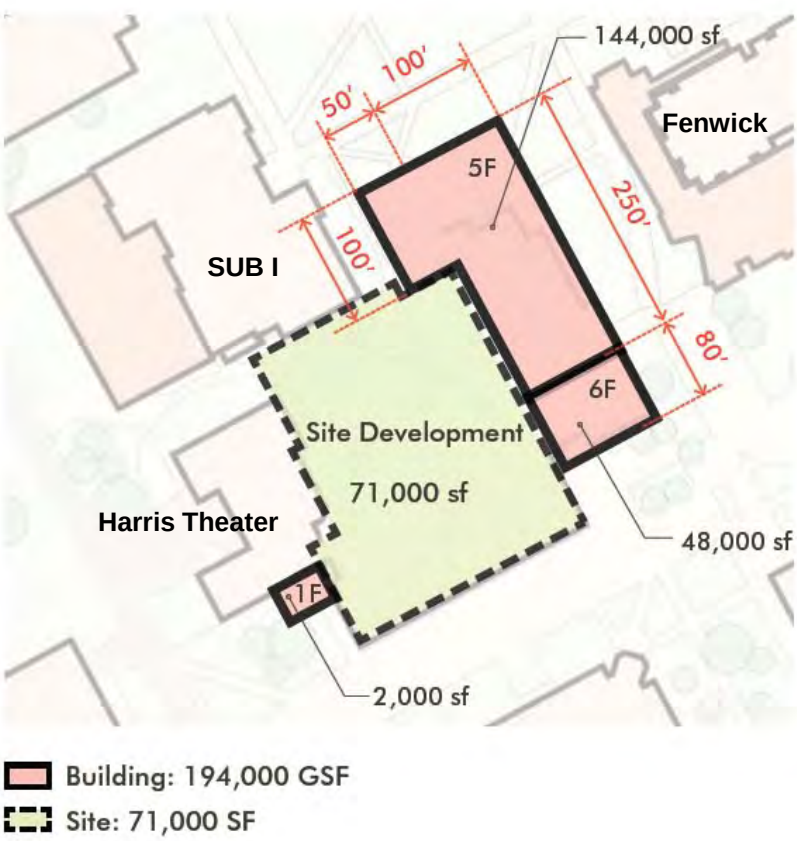
Robinson FCI Score:

64%

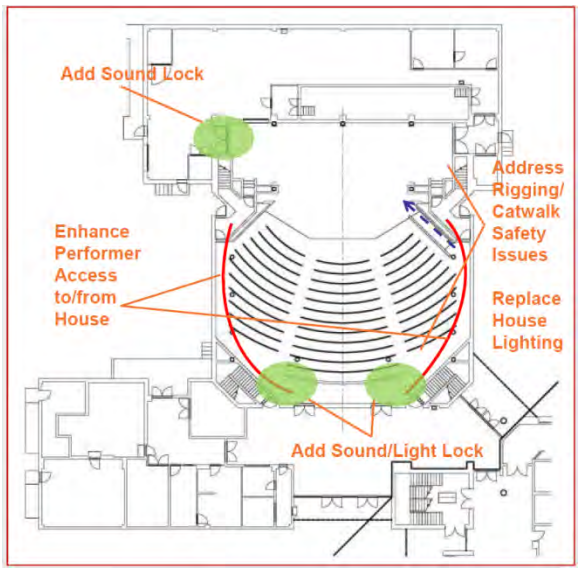
= "Replace?"

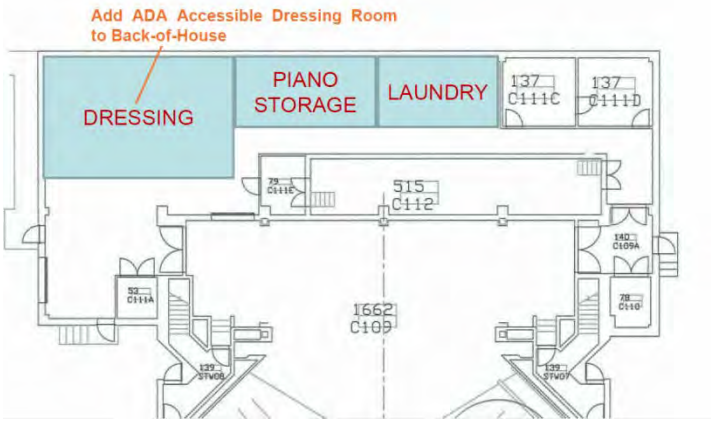


Development Options:



Harris Theater Renovation (illustrates core updates)





Analysis of Options:

In preparation for both the 2011 and 2013 Capital Submission, George Mason University has worked with outside design teams (via term contract) to study a variety of options. For some time, the option to renovate Robinson Hall (A&B wings) was carefully considered and even submitted as our 2011 Capital request as a renovation/addition project. Further study in 2013 into projected University growth, pedagogical shifts in teaching/learning, status of existing building conditions (including 2 more years of new maintenance & repairs issues and deferred maintenance costs) now clearly points to demolition and new construction as the most appropriate solution. Even the most extensive renovations would still leave the facility poorly designed to support University needs.

Phasing and coordination with other ongoing projects:

The demolition of Robinson A is dependent upon the completion of the Academic VII/Research III project as some Robinson tenants must relocate to Academic VII before Robinson demolition can begin. Once those tenants have moved, Robinson B will be used as swing space for CHSS and others during demolition of Robinson A and new construction work.

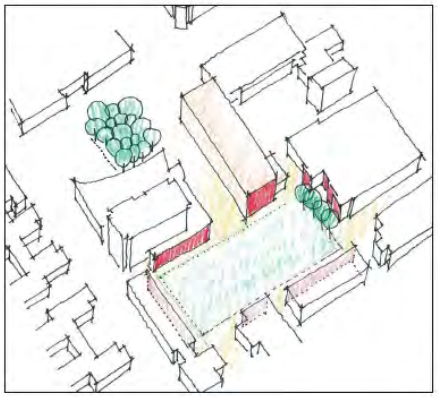
The Robinson Hall project schedule has been closely coordinated with the 2013 request for General Funds to support the academic instruction and program space for the Rappahannock building. Completion of the Rappahannock building in 2017 would provide additional classrooms which will be much needed to offset initial classrooms losses once Robinson Hall goes off-line for demolition & construction in 2017.

Upon completion of the new Robinson A building, all appropriate academic units and classrooms will be relocated into that new facility leaving Robinson B empty and ready for demolition. Coordinated with that demolition, new construction for the 2,000 GSF addition to Harris Theater may begin. Also at that time, renovation work in the Theater should occur to consolidate down time to Harris due to renovation work and installation of new restrooms. Harris Theater will need to be offline for some time during this renovation/addition period.

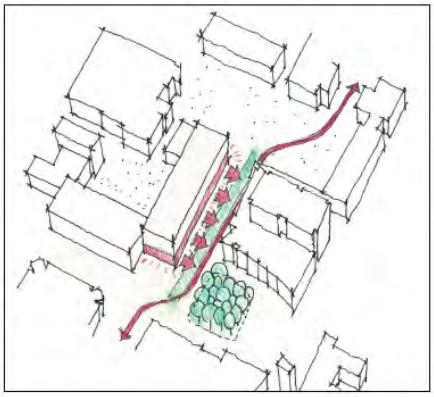
Campus Plan Objectives

The Public Space and Building Design Principles study completed in 2013 considered issues related to campus spaces, circulation, density, service access, and view corridors. Two options were identified. Option 1, the selected option, suggested demolition of Robinson A/B and new construction of the full program on the site of Robinson A. Option 2 also suggested demolition of Robinson A/B but proposed that the new building be constructed on the site of Robinson B.

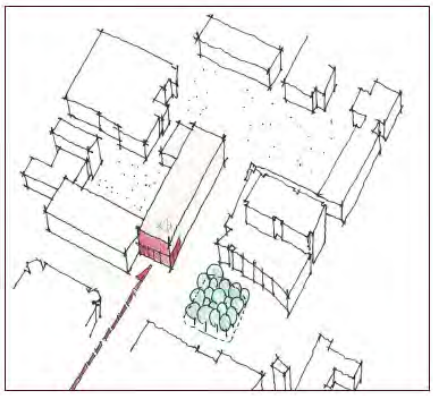
The selected option enhances the University master plan by creating a stronger and more appropriately scaled Quad, reinforcing the pedestrian connection from the North Plaza to the Quad, increasing density at the center of campus, and establishing a future development site.



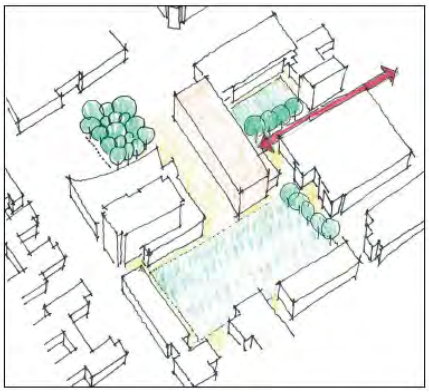
Building walls should contribute to formalizing the Quad.



Active and transparent ground floor along Campus Walk.



Terminate view from Enterprise Hall and express entry.



Service Through Green Space.

CapitalBudgetRequest

Improvements to Utility Distribution Infrastructure - Fairfax

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	Improvements-Energy Efficiency
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	New Project
Building Name	Central Heating & Cooling Plant
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Replacement/Upgrade of Campus Thermal Energy Distribution System
Infrastructure Element	Site Heating/Cooling Distribution
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

This project replaces 16,070 linear feet of chilled water piping within the campus thermal infrastructure loop system. It also builds 150 linear feet of new tunnel and hot water piping to enable increased redundancy in the hot water system in the north east sector of the Fairfax Campus as well as building 700 linear feet of new chilled water piping to serve and interconnect the north west sector of the Fairfax Campus. Additionally, while replacing the chilled water lines underneath the north Plaza of the Johnson Center, upgrade and replace the failing paver system for that plaza. This work is envisioned to be executed in two Phases or Stages:

Phase/Stage 1: 8,300 LF of Chilled Water Pipe (larger size) and North Plaza Retrofit (2014-2016 Biennium)
Phase/Stage 2: 7,770 LF of Chilled Water Pipe 150 LF of Tunnel/HTHW Pipe, Adding 700LF chilled water link to North Loop (2016-2018 Biennium)

All design and design documentation is planned in Phase/Stage 1 for this project to maximize the efficiency of the project design.

Justification

This project primarily is focused on replace existing transite (asbestos product), PVC and fiberglass cooling pipes that are at, or past, life expectancy. Most of these systems were placed early in the life of the chilled water system and have not been replaced and have started to exhibit failure as repair frequency has increased. As a consequence this project will emplace more reliable and longer lasting steel piping conforming to the campus standard seen in piping installations since the early 2000s. In order to make the system more survivable, this project creates loop redundancy within housing area by interconnection (for heating and cooling) near Commonwealth and Dominion Halls. This will increase reliability and increase redundancy in the case of failure in the cooling loop system (and part of the heating loop system). Lastly, this project continues the high level of efficient energy production for the Fairfax Campus through the continued use of district energy. This creates operational savings throughout the campus.

Alternatives Considered

The University considered several options in lieu of this project, but this was the best short and long term strategy that could be adopted. One option is a replacement in-kind option which would result in a shorter life span and less effective loop system. While this option may be able to save money, it is only incremental savings for the first cost and would increase operating costs over the next ten years or more. Another option considered was to consider separate cooling plants in the various buildings. This second option would require a much more massive initial cost, create acoustic and other challenges on a college campus that requires controlled study and education environments, and greatly increase ongoing maintenance and operations costs. Mason’s chiller plant is in excess of 90% efficient in its use of energy, and while stand-alone systems come close to this level, there is a loss in the efficiency of incrementally sized units rather than a central plant that can provide a more granular service capacity to meet building needs.

Costing Methodology

The costing methodology used for this project is based upon both historical and contemporary cost data.

In order to provide as accurate as possible estimates of cost for Capital Budget submissions, George Mason University employed the services of an independent cost consultant 2009. As a benchmark for construction costs, historical cost data from 23 projects at Mason was used. To the extent this project scope was characterized within these past projects, these costs were escalated to the current day. Beyond the specific construction costs, other non-construction historic costs derived from over 40 GMU projects were utilized as a basis to determine all other cost portions of the submission.

In addition to historic data, a current design build contractor, executing chilled water line work on the Fairfax Campus within another project already authorized, provided budget level cost data for the construction and related work that is anticipated in this project. This data was used to validate historic data and also validate escalation estimates.

It is noted that all projects are escalated at the DEB anticipated level into the future based upon planned mid-points of construction.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2015	0100 - General Fund	2133 - Utilities	$45,234,000
			Total	$45,234,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$6,265,000	$6,265,000	$0
Sitework & Utility Construction	$31,634,000	$31,634,000	$0
Construction Cost Total	$37,899,000	$37,899,000	$0
Design & related Services from Other Costs tab	$2,729,000	$2,729,000	$0
Inspection & Testing Services from Other Costs tab	$854,000	$854,000	$0
Project Management & Other Costs from Other Costs tab	$2,746,000	$2,746,000	$0
Furnishings & Movable Equipment	$247,000	$247,000	$0
Construction Contingency	$759,000	$759,000	$0
Total Project Cost	$45,234,000	$45,234,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost		0	$0
Total Project Cost		0	$0

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$2,232,000	$2,232,000	
A/E Reimbursables			
Specialty Consultants (Food Service, Acoustics, etc.)	$335,000	$335,000	
CM Design Phase Services			
Subsurface Investigations (Geotech, Soil Borings)	$32,000	$32,000	
Land Survey	$65,000	$65,000	
Archeological Survey			
Hazmat Survey & Design	$20,000	$20,000	
Value Engineering Services	$35,000	$35,000	
Cost Estimating Services	$10,000	$10,000	
Other Design & Related Services			

Design & Related Services Total	$2,729,000	$2,729,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$474,000	$474,000	
Project Testing Services (conc., steel, roofing, etc.)	$380,000	$380,000	
Inspection & Testing Services Total	$854,000	$854,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$569,000	$569,000	
Work By Owner	$1,498,000	$1,498,000	
BCOM Services			
Advertisements	$20,000	$20,000	
Printing & Reproduction	$44,000	$44,000	
Moving & Relocation Expenses			
Data & Voice Communications			
Signage			
Demolition			
Hazardous Material Abatement	$35,000	$35,000	
Utility Connection Fees	$100,000	$100,000	
Utility Relocations	$100,000	$100,000	
Commissioning	$380,000	$380,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$2,746,000	$2,746,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

No supporting documents for this adjustment

Workflow History

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Continue Drafting	Erik Backus	05/31/2013 08:32 AM	05/31/2013 08:46 AM

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Agency Review Step 1	Cathy Wolfe	07/02/2013 02:28 PM	07/02/2013 02:28 PM
Agency Review Step 1	Tom Calhoun	07/03/2013 04:09 PM	07/03/2013 04:12 PM
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DPB Review			

CapitalBudgetRequest

Renovate Campus Library, Phase II

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	New Construction/Improvement
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Submitted
Building Name	Fenwick Library
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Campus Library - Study Spaces and Stacks
Infrastructure Element	
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

This project is the final phase of the Fenwick Research Commons (Fenwick Library) project and includes renovation of 90K GSF in towers B and C as well as a 32,000 GSF addition to the building to complete the architectural treatment of the existing towers and provide ground floor compact shelving and additional study and collaboration spaces primarily in the addition.

The project also includes the demolition of existing A wing of Fenwick Library (25K GSF). This portion of the building was originally constructed in 1968 containing space that is functionally inadequate. Once A wing is demolished, the main quad on campus will be extended to a size that will better support the needs of a University the size that George Mason University has grown to over the past two decades. Site work is included within this project to support upgrade of the full quad.

It is anticipated that the cellular spaces found at the perimeter of the stack towers will be retained and/or returned to group or individual study spaces. Due to space constraints in the existing library these spaces have been taken over as staff office spaces reducing the number of available study seats.

The renovation will encompass upgrading of elevators, mechanical, electrical and HVAC systems. The current library project (17695) is being expanded to install a fire suppression system and upgrade fire alarm in towers B and C to support a single building construction classification. Restrooms will be expanded and upgraded and finishes will also be updated to match the current Library addition.

Justification

Once the Fenwick Library addition project (17695) is completed this renovation project in the towers will need to follow since many spaces will be vacated into the new addition - wing A will be completely vacated at completion of current project.

With the exception of the newly installed fire suppression system, the towers which were originally constructed in 1978 and 1982 have not undergone a major renovation since they were constructed.

This second and final phase of the Fenwick Research Commons improvements on Fairfax Campus are integral to the Library's mission for providing high quality scholarly study and research environments, improving the navigability of collection areas, expand holdings of unique special collections and archives with greater accessibility and to celebrate the library's presence as the center of intellectual life for the University.

It is critical to start the planning and detailed design for this project so that coordination can be completed and ready for a construction start when the A wing is completed at the end of the phase 1 project. Since there is no swing space available on campus to relocate the entire library while this project was constructed in one phase it became necessary to break the project into two parts. If this project remains unfunded the space will become vacant in the A wing and create increased maintenance requirements.

Alternatives Considered

Previously the project was envisioned in 3 phases, however work done during the Fenwick Library Addition project (17695) concluded that the project can be completed in 2 phases with this being the final phase.

Costing Methodology

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2015	0100 - General Fund	2322 - Construction, Buildings	$40,300,000
			Total	$40,300,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$26,710,000	$26,710,000	$0
Sitework & Utility Construction	$3,195,000	$3,195,000	$0
Construction Cost Total	$29,905,000	$29,905,000	$0
Design & related Services from Other Costs tab	$2,983,000	$2,983,000	$0
Inspection & Testing Services from Other Costs tab	$600,000	$600,000	$0
Project Management & Other Costs from Other Costs tab	$1,756,000	$1,756,000	$0
Furnishings & Movable Equipment	$4,457,000	$4,457,000	$0
Construction Contingency	$599,000	$599,000	$0
Total Project Cost	$40,300,000	$40,300,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost	GSF	122,000	$245

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$2,542,000	$2,542,000	
A/E Reimbursables	$96,000	$96,000	
Specialty Consultants (Food Service, Acoustics, etc.)	$75,000	$75,000	
CM Design Phase Services	$152,000	$152,000	
Subsurface Investigations (Geotech, Soil Borings)	$25,000	$25,000	
Land Survey	$13,000	$13,000	
Archeological Survey	$0	$0	
Hazmat Survey & Design	$25,000	$25,000	
Value Engineering Services	$30,000	$30,000	
Cost Estimating Services	$25,000	$25,000	
Other Design & Related Services			
Design & Related Services Total	$2,983,000	$2,983,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$300,000	$300,000	
Project Testing Services (conc., steel, roofing, etc.)	$300,000	$300,000	
Inspection & Testing Services Total	$600,000	$600,000	
Project Management & Other Cost Items			

Project Management (inhouse or consultant)	$300,000	$300,000	
Work By Owner	$330,000	$330,000	
BCOM Services	$75,000	$75,000	
Advertisements	$4,000	$4,000	
Printing & Reproduction	$0	$0	
Moving & Relocation Expenses	$243,000	$243,000	
Data & Voice Communications	$304,000	$304,000	
Signage	$25,000	$25,000	
Demolition	$0	$0	
Hazardous Material Abatement	$0	$0	
Utility Connection Fees	$200,000	$200,000	
Utility Relocations	$50,000	$50,000	
Commissioning	$225,000	$225,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$1,756,000	$1,756,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

File Name	File Size	Uploaded By	Upload Date	Comment
Renovate Library Phase II - Pre-planning Study Summary -6_21_2013.pdf	2,080,386	Cathy Wolfe	6/21/2013	Renovate Campus Library - Fenwick Research Commons - Preplanning Study

Workflow History

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DPB Review			

Pre-planning Study - 2013

George Mason University
Renovate Fenwick Research Commons:
Phase II

Date: June 21, 2013

Table of Contents

Executive Summary

Agency: George Mason University
Project Title: Renovate Campus Library Phase II
Project Code: 247-
Biennium: 2014-2016

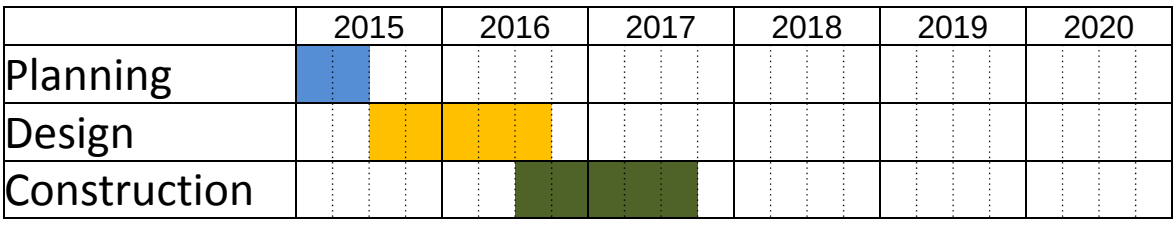
1. Project Scope Square Footage

New Construction	32,000 GSF
Renovation	90,000 GSF
Demolition	25,000 GSF

2. Project Budget

1	Acquisition of Property	0
2	Acquisition of Plant	0
3	Building and Built-in Equipment	26,710,000
4	Sitework and Utilities	3,195,000
5	Architectural and Engineering Fees	2,542,000
6	Loose Furnishings and Equipment	4,257,000
7	Contingencies	599,000
8	Project Inspection	300,000
9	Other Costs	1,897,000
	Total Cost:	**39,500,000**

3. Project Schedule:



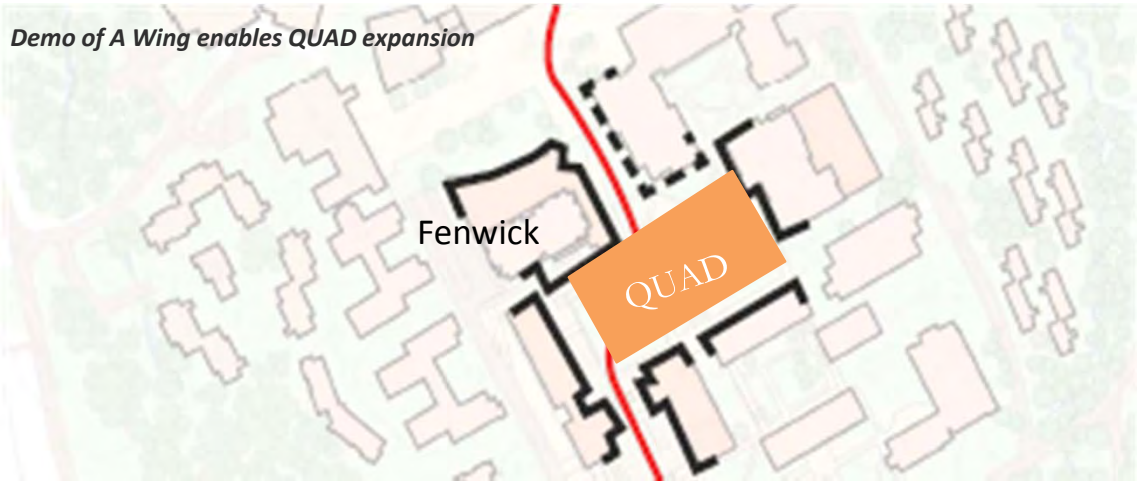
Project Description:

1. As an extension of the Phase I project, the primary programmatic goals for the Fenwick Research Commons:

    - Provide improved scholarly research and focused study environments
    - Provide technology-enhanced collaborative study spaces
    - Celebrate the presence on the campus as the center of intellectual life for the university
    - Enhance access to the distinctive collections and knowledge specialists
    - Improve navigability of collection areas
    - Expand Special Collections and Archives with greater accessibility

2. Provide necessary system and infrastructure improvements to the B and C towers of the library originally constructed in 1978 and 1982. Goal to improve efficiency and operations of existing bldg. Deferred Maintenance Backlog is currently $12M. FCI Score is .19 – due to on-going improvements to Towers B&C.

3. Demolish existing A wing originally constructed in 1967 and expand the main campus quad.



Project Costs:

10	Estimated Total Planning Costs	5,700,000
11	Estimated New Construction Costs	43,400,000
12	Estimated Improvements Costs	0
	Itemized "9, Other Costs"	
1	Project Management In Capital Project Budget:	600,000
2	Special Consultants (if not included in A&E Fees):	0
	A. Commissioning	400,000
	B. Site Survey/EIR	100,000
	C. Specialty Consultants	900,000
3	Asbestos and Lead Based Paint Survey & Design	0
4	Asbestos Abatement	0
5	Independent Cost Estimates	100,000
6	Value Engineering	100,000
7	Subsoil Investigations	100,000
8	Construction Testing Services	500,000
9	Printing	200,000
10	Advertisements	100,000
11	Work by Owner	2,700,000
12	Signage	100,000
13	Miscellaneous Utility Charges	300,000
14	Moving Expenses	100,000
15	Miscellaneous Other Costs (Itemize)	0
	A. BCOM Review Inspection Fees	100,000
	B.	
	C.	
	D.	
	Total Other Costs:	6,400,000

Cost Per SF Project : $332/GSF

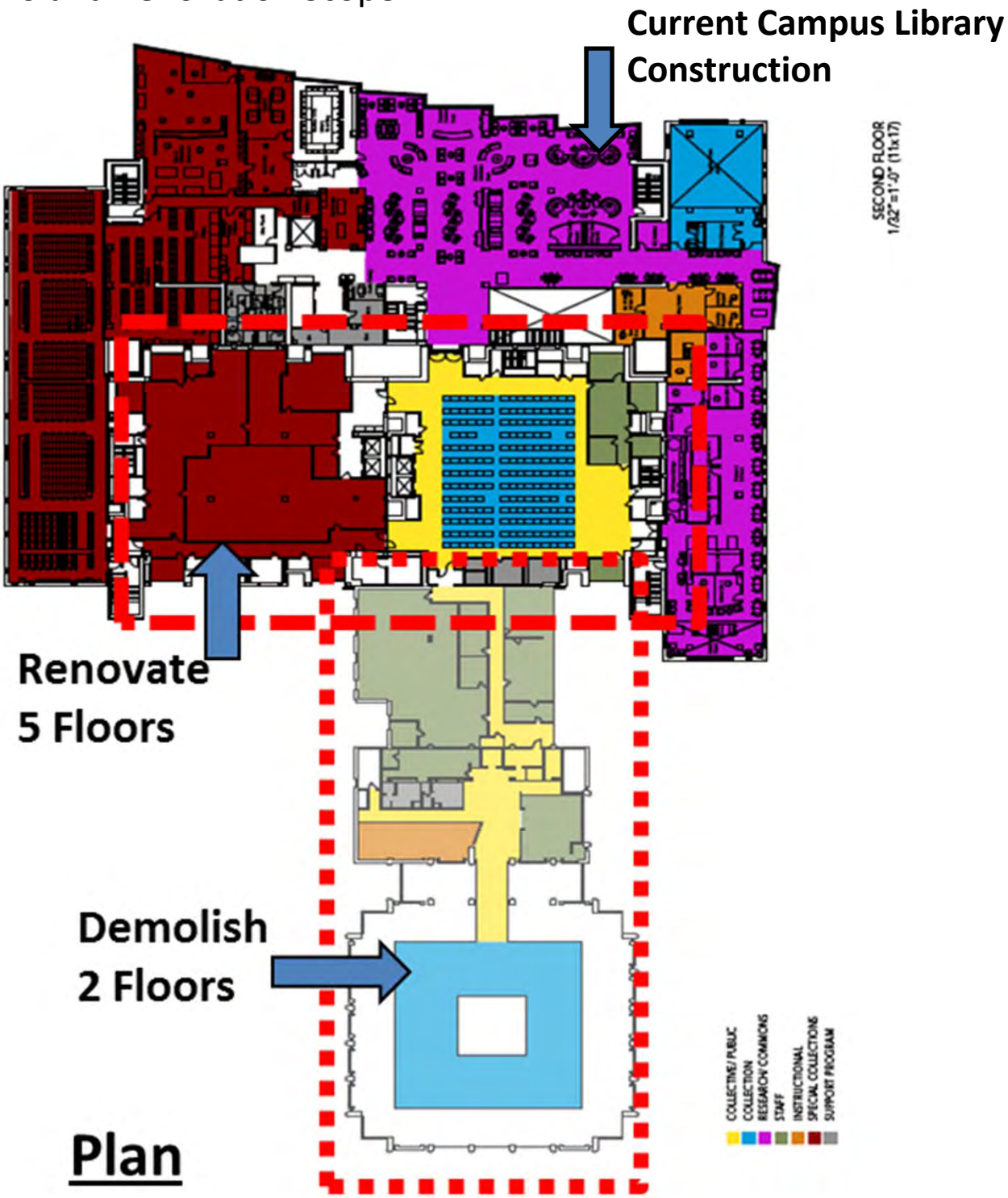
Project:	**FENWICK LIBRARY ADDITION- PHASE III**
Client:	**GEORGE MASON UNIVERSITY**
Location:	FAIRFAX, VA
Architect:	Shepley Bulfinch Richardson & Abbott
Documents:	Conceptual Drawings dated 4-11-13
Estimate Type:	CONCEPTUAL ESTIMATE
	BCOM Project #247-17695-000
Estimate No.:	GMUF LIII-6-01
Estimate Date:	April 18, 2013
Addition	31,545
Renovation	89,794
GROSS GSF:	121,339 GSF
Schedule:	18 Months

ESTIMATE SUMMARY BY DGS-30-224 FORM LINE NO.

				BUILDING			SITEWORK & UTILITIES		
DGS 30-224 LINE	DESCRIPTION	TOTAL COSTS	COST PER SF	DIRECT COSTS	INDIRECT COSTS	BUILDING COST	DIRECT COSTS	INDIRECT COSTS	SITE WORK COST
1	FOUNDATION	$ 118,468	$ 0.98	$ 88,919	$ 29,549	$ 118,468	$ -	$ -	$ -
2	SLAB-ON-GRADE	$ 78,192	$ 0.64	$ 58,680	$ 19,503	$ 78,192	$ -	$ -	$ -
3	STRUCTURAL FRAME	$ 920,198	$ 7.58	$ 690,684	$ 229,514	$ 920,198	$ -	$ -	$ -
4	SUPPORTED FLOOR	$ 478,440	$ 3.94	$ 360,108	$ 118,332	$ 478,440	$ -	$ -	$ -
5	ROOF STRUCTURE	$ 134,881	$ 1.11	$ 101,277	$ 33,604	$ 134,881	$ -	$ -	$ -
6	ROOFING	$ 267,550	$ 2.21	$ 200,893	$ 66,757	$ 267,650	$ -	$ -	$ -
7	STAIRS	$ 448,054	$ 3.70	$ 336,962	$ 111,972	$ 448,054	$ -	$ -	$ -
8	ELEVATORS	$ 1,080,495	$ 8.90	$ 811,000	$ 269,495	$ 1,080,495	$ -	$ -	$ -
9	EXTERIOR WALLS	$ 475,033	$ 3.90	$ 356,050	$ 117,983	$ 474,033	$ -	$ -	$ -
10	INTERIOR WALLS	$ 257,198	$ 2.12	$ 193,048	$ 64,150	$ 257,198	$ -	$ -	$ -
11	INTERIOR FINISHES	$ 3,069,613	$ 25.22	$ 2,296,489	$ 763,129	$ 3,059,613	$ -	$ -	$ -
12	DOORS & HARDWARE	$ 266,403	$ 2.20	$ 200,025	$ 66,468	$ 266,403	$ -	$ -	$ -
13	WINDOW & GLAZED WALLS	$ 2,774,445	$ 22.87	$ 2,082,448	$ 691,997	$ 2,774,445	$ -	$ -	$ -
14	SPECIALTIES	$ 516,288	$ 4.25	$ 387,500	$ 128,788	$ 516,288	$ -	$ -	$ -
15	PLUMBING (DOMESTIC)	$ 703,483	$ 5.80	$ 528,021	$ 175,461	$ 703,483	$ -	$ -	$ -
16	HVAC SYSTEM	$ 7,843,015	$ 64.64	$ 5,888,624	$ 1,956,192	$ 7,843,015	$ -	$ -	$ -
17	FIRE PROTECTION	$ 661,961	$ 5.46	$ 496,856	$ 165,105	$ 661,961	$ -	$ -	$ -
18	POWER	$ 1,127,526	$ 9.29	$ 846,302	$ 281,226	$ 1,127,528	$ -	$ -	$ -
19	LIGHTING	$ 1,977,964	$ 16.30	$ 1,484,624	$ 493,340	$ 1,977,964	$ -	$ -	$ -
20	SPECIAL ELECTRICAL	$ 1,097,632	$ 9.05	$ 823,863	$ 273,770	$ 1,097,632	$ -	$ -	$ -
21	SPECIAL SYSTEMS	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
22	**SUBTOTAL**	**$ 24,285,939**	**$ 200.15**	**$ 18,228,561**	**$ 6,057,388**	**$ 24,285,939**	**$ -**	**$ -**	**$ -**
23	INTERIOR DEMOLITION	$ 200,081	$ 2.46	$ 224,488	$ 74,598	$ 299,081	$ -	$ -	$ -
24	HAZARDOUS MATERIAL ABATEMENT	$ 334,730	$ 2.76	$ 251,242	$ 83,488	$ 334,730	$ -	$ -	$ -
25	**SUBTOTAL**	**$ 24,919,750**	**$ 205.37**	**$ 18,704,308**	**$ 6,215,442**	**$ 24,919,750**	**$ -**	**$ -**	**$ -**
26	BUILT-IN EQUIPMENT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
27	**TOTAL BUILDING**	**$ 24,919,750**	**$ 205.37**	**$ 18,704,308**	**$ 6,215,442**	**$ 24,919,750**	**$ -**	**$ -**	**$ -**
28	EXT. ELECTRICAL DISTRIBUTION	$ 285,794	$ 2.19	$ -	$ -	$ -	$ 189,500	$ 96,294	$ 285,794
29	AREA LIGHTING	$ 126,569	$ 1.04	$ -	$ -	$ -	$ 95,000	$ 31,569	$ 126,569
30	EXT. MECHANICAL DISTRIBUTION	$ 33,308	$ 0.27	$ -	$ -	$ -	$ 25,000	$ 8,308	$ 33,308
31	WATER DISTRIBUTION SYSTEM	$ 66,615	$ 0.55	$ -	$ -	$ -	$ 50,000	$ 16,615	$ 66,615
32	SANITARY SEWER	$ 66,615	$ 0.55	$ -	$ -	$ -	$ 50,000	$ 16,615	$ 66,615
33	STORM DRAINAGE SYSTEM	$ 99,923	$ 0.82	$ -	$ -	$ -	$ 75,000	$ 24,923	$ 99,923
34	**SUBTOTAL UTILITIES**	**$ 658,822**	**$ 5.43**	**$ -**	**$ -**	**$ -**	**$ 494,500**	**$ 164,322**	**$ 658,822**
35	ROADS	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
36	PARKING	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
37	EARTHWORK	$ 1,033,245	$ 8.52	$ -	$ -	$ -	$ 775,535	$ 257,710	$ 1,033,245
38	LANDSCAPING	$ 466,305	$ 3.84	$ -	$ -	$ -	$ 350,000	$ 116,305	$ 466,305
39	SITE IMPROVEMENTS	$ 545,044	$ 4.49	$ -	$ -	$ -	$ 409,100	$ 135,944	$ 545,044
40	FENCING	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
41	SPECIAL BLDG. FOUNDATIONS	$ 699,455	$ 5.76	$ 525,000	$ 174,455	$ 699,455	$ -	$ -	$ -
42	SITE DEMOLITION	$ 779,004	$ 6.42	$ -	$ -	$ -	$ 584,708	$ 194,296	$ 779,004
43	**SUBTOTAL SITEWORK**	**$ 3,523,055**	**$ 29.03**	**$ 525,000**	**$ 174,455**	**$ 699,455**	**$ 2,119,341**	**$ 704,257**	**$ 2,823,597**
44	**TOTAL SITEWORK & UTILITIES**	**$ 4,181,877**	**$ 34.46**	**$ 525,000**	**$ 174,455**	**$ 699,455**	**$ 2,613,841**	**$ 868,579**	**$ 3,482,420**
	INDIRECT COSTS (INCLUDED ABOVE)	*COSTS*		*% COSTS*					
	GM GCs	$ 1,668,606		5.28%					
	GM Bonds	$ 185,667		0.59%					
	GM Liability/ Builder's Risk Insur.	$ 195,506		0.62%					
	GROSS RECEIPTS TAXES	$ 39,396		0.12%					
	GM FEE (Includes Precon)	$ 656,294		3.00%					
	DESIGN CONTINGENCY (10.0%)	$ 2,184,315		10.00%					
	CONSTRUCTION CONTINGENCY (3%)	$ 656,294		3.00%					
	LEED PREMIUM FOR SILVER	$ -		0.00%					
	ESCALATION (30 months @ 4%/year)	$ 2,184,315		10.00%	(escalation start date from estimate of 4/18/13)				
	TOTAL PERCENTAGE OF INDIRECT COSTS			33.23%					
	TOTAL CONSTRUCTION IN FUTURE DOLLARS	**$ 29,101,827**	**$ 239.84**	**$ 19,229,308**	**$ 6,389,898**	**$ 25,619,203**	**$ 2,613,841**	**$ 868,579**	**$ 3,482,420**

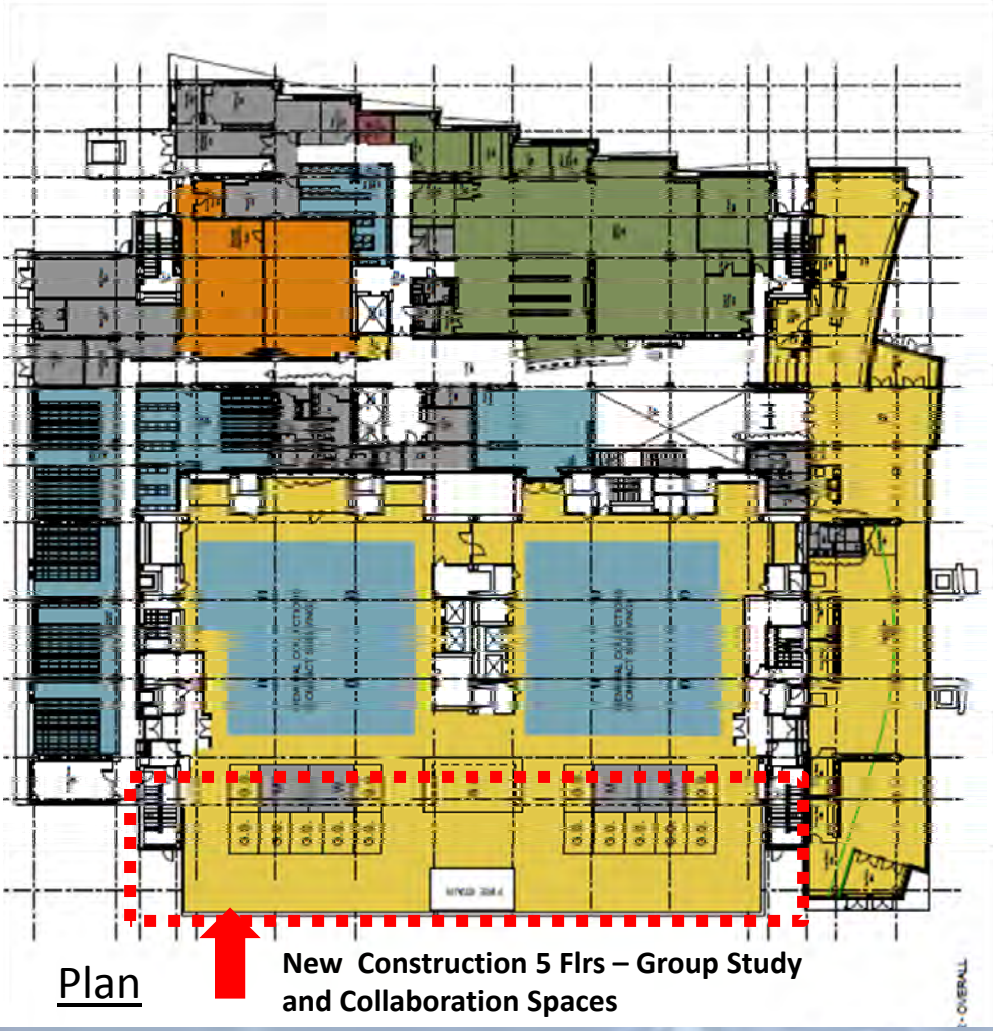
Concept Design:

Proposed Concept Plan –
Demo and Renovation Scope:



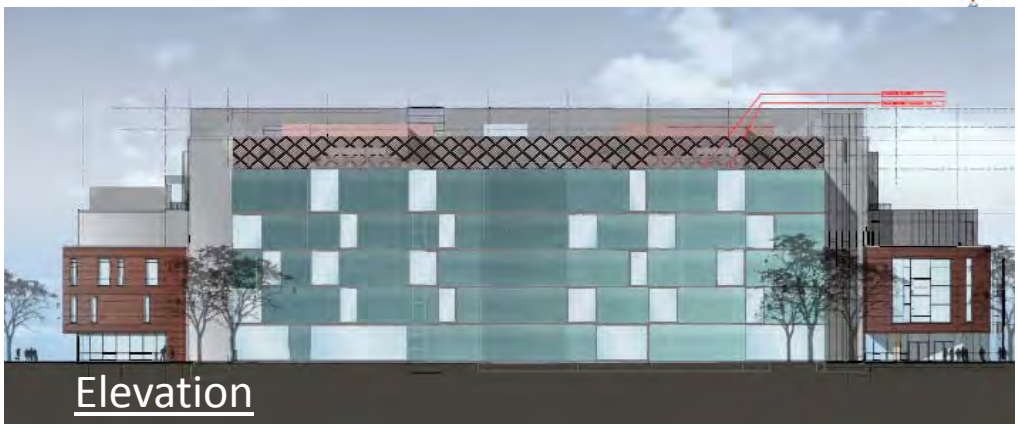
Concept Design:

Proposed Concept Plan –
New Construction:



Plan

New Construction 5 Flrs – Group Study and Collaboration Spaces



Elevation

Program Execution:

Schedule:

Fenwick Phase I – fully authorized and General Funded:

Construction Start – Spring 2013
Construction Complete - Summer 2015

Fenwick Phase II:

Design Start – Summer 2014
Construction Start – Fall 2015
Construction Complete – Fall 2017

CapitalBudgetRequest

Construct Housing VIII

Overview

Agency	George Mason University (247)
Project Code	
Project Type	
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Approved
Building Name	
Project Location	
Facility/Campus	
Source of Request	Agency Request
Building Function	General Fund Supplement to Previously Approved Housing VIII - Academic Instruction & Programs
Infrastructure Element	
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

This project is being submitted as a General Fund Supplement to an already approved housing project (247-17570-005). George Mason University is seeking to build a new mixed-use building in the heart of campus using a combination of already granted housing authority and General Fund support for Academic Instruction and program support space.

The proposed project plans include 2 floors of classroom and global program space beneath 4 floors (approximately 248 beds) of housing totaling 36,000 GSF. This mixed use offers opportunities for existing and new Living Learning Communities (LLC) that bring national and international students together in an exciting and diverse cross-cultural environment. Additionally Mason is considering including several small apartment-style living spaces for visiting global scholars within the upper floor housing units. Having these scholars living in the same space as our students will create new opportunities for more informal interaction around topics of student/faculty interest and it will support Mason's international engagement overall. This connection of students and scholars in the same space in the center of campus highlights Mason's commitment to both global initiatives and scholarship.

The Rappahannock Global Center for Students and Scholars will attract both current and prospective students to the exciting range of global academic and student life activities Mason offers. The building should include a large central programming space, co-location of student-oriented & globally focused offices/programs and innovative classroom designs. Such spaces will be designed to facilitate easy intercultural engagement with students and scholars from across the globe intellectually, culturally and socially.

The centerpiece of Rappahannock would be the Global Center for Students and Scholars, a global programming space where faculty and students will come together for lectures, research presentations, cultural showcases, international films, culturally catered events, and living learning community activities specifically focused on global and international topics and issues. A spacious, glass-fronted programing space would create a global "fishbowl" to draw members of the campus community into the building's activities and events. Equipped with full technological resources, global activity kiosks, international television stations, clocks showing international time zones, international news resources, and a rotating exhibit for cultural artifacts, this space will be an attractive & vibrant space which showcases Mason's commitment to global awareness, education and collaborations.

In addition, key globally and internationally focused offices and programs will be incorporated into this global center to provide services to our students as they seek globally focused activities & offerings and seek opportunities to connect to the wider world. Some of these programs include: the Center for International Student Access (CISA), Office of International Programs & Services (OIPS), English Language Institute, and the Center for Global Education.

University classrooms shared by all disciplines will be an integral part of this 2-floor global center. Classrooms will be new state-of-the-art University classrooms designed to support the latest teaching & learning pedagogies and will be designed to provide flexible options to support a variety of teaching/learning styles. In support of growing distance education (D.E.) and hybrid options, classrooms should be equipped with technology that not only supports innovative in-class learning but also helps connect our classrooms to others here and around the world via

video conference, Skype, etc. With global initiatives and education being the focus of this mixed use building, the ability to connect to global partners in real time from these classrooms could open up a new world of collaborative opportunities and cultural awareness.

Justification

In order for George Mason University to move closer to its strategic goal of becoming a leading global university, our students need a centrally located and thoughtfully integrated space for living and learning that will bring them together with one another and with Mason's faculty to explore what it means to lead in a globalizing world.

Today Mason's many global programs and offerings are distributed across campus making it challenging for faculty, staff and students to find consolidated answers to global questions. By co-locating global academic initiatives, student activities, and services, Rappahannock's central location will provide a one-stop-shop for information about university-wide global opportunities.

Today, there is already a shortage of space to accommodate our growing global initiatives. The Center for International Student Access (CISA) has seen dramatic growth and has exceeded expectations for enrollment. Sadly there is currently no permanent long-term home for our CISA operations and their offices are routinely bounced from one swing space to another. Similarly in Spring 2014 Mason will launch programs in Songdo Korea as part of the Songdo Global University; therefore, there is now need for a global office focused on our new Korean initiatives. There is no known location for this group as well. There is no doubt additional new programs will also develop creating additional space needs for global interests on campus. With Mason's commitment to global education, these and other programs need a consolidated and high profile location to showcase opportunities and to promote cross cultural sharing.

Classrooms in this building are also required. As a growing number of University buildings are reaching the age where substantial renovations are required, many existing university classrooms will be taken offline either temporarily or permanently while renovations occur. Right-sizing of existing university classrooms across campus will also likely add to potential deficit situations as some classrooms will be lost to right-size others. The proposed Rappahannock classrooms will not only meet the need for new and innovative classroom types for Mason but they will also help to alleviate strain on older, worn out classrooms across campus and to address deficits over time.

This project has been carefully coordinated with our 2013 Capital request for Robinson Hall Demolition/New Construction and Harris Theater Renovations. Robinson Hall, currently Mason's largest University classroom building, holds 42 classrooms within 2 wings. Those buildings have exceeded their useful life and demolition / new construction is now proposed. At the time of demolition work, no less than 24 classrooms will go offline at any given time. New classrooms in Rappahannock have been coordinate to help offset those losses. Even once Robinson's replacement building has been completed, it is likely classrooms in that building will total less than the original 42; therefore Rappahannock classrooms help to alleviate both a short-term and long-term loss of existing classrooms.

Alternatives Considered

Mason's offices of Campus Planning and Space Management have been working closely with our globally focused programs to try and find answers to their space needs. George Mason University continues to suffer from a significant space deficit; therefore despite best efforts, we struggle to find enough available space on campus to meet needs in general. Given the nature of the global center and the numbers of students it will serve a high profile and accessible space needs to be developed. We currently have no amount of space large enough and located in an accessible area to offer. To achieve this goal, new construction will be required.

We have done our best to try and capitalize on projects in the pipeline and authority already granted to minimize this request for new construction funds. The mixed-use building option uses an already authorized project – Housing VIII B – to help create a holistic and vibrant global environment while limiting the new funding request to only 2 floors which serve academic instruction and programs.

Costing Methodology

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2015	0100 - General Fund	2322 - Construction, Buildings	$15,661,000
			Total	$15,661,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$10,975,000	$10,975,000	$0
Sitework & Utility Construction	$1,111,000	$1,111,000	$0
Construction Cost Total	$12,086,000	$12,086,000	$0
Design & related Services from Other Costs tab	$809,000	$809,000	$0
Inspection & Testing Services from Other Costs tab	$98,000	$98,000	$0
Project Management & Other Costs from Other Costs tab	$585,000	$585,000	$0

Furnishings & Movable Equipment	$1,841,000	$1,841,000	$0
Construction Contingency	$242,000	$242,000	$0
Total Project Cost	$15,661,000	$15,661,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost	GSF	36,000	$336
Total Project Cost	GSF	36,000	$435

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$605,000	$605,000	
A/E Reimbursables	$13,000	$13,000	
Specialty Consultants (Food Service, Acoustics, etc.)	$91,000	$91,000	
CM Design Phase Services	$51,000	$51,000	
Subsurface Investigations (Geotech, Soil Borings)	$11,000	$11,000	
Land Survey	$16,000	$16,000	
Archeological Survey	$0	$0	
Hazmat Survey & Design	$0	$0	
Value Engineering Services	$11,000	$11,000	
Cost Estimating Services	$11,000	$11,000	
Other Design & Related Services			
Design & Related Services Total	$809,000	$809,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$37,000	$37,000	
Project Testing Services (conc., steel, roofing, etc.)	$61,000	$61,000	
Inspection & Testing Services Total	$98,000	$98,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$37,000	$37,000	
Work By Owner	$282,000	$282,000	
BCOM Services	$35,000	$35,000	
Advertisements	$2,000	$2,000	
Printing & Reproduction	$15,000	$15,000	
Moving & Relocation Expenses	$18,000	$18,000	
Data & Voice Communications	$81,000	$81,000	
Signage	$18,000	$18,000	
Demolition	$0	$0	
Hazardous Material Abatement	$0	$0	
Utility Connection Fees	$36,000	$36,000	
Utility Relocations	$0	$0	
Commissioning	$61,000	$61,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$585,000	$585,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$502,885

NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	3.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):01/07/2017

Supporting Documents

File Name	File Size	Uploaded By	Upload Date	Comment
Rappahannock Exec Summary for PB System.pdf	486,819	Laura Manno	6/20/2013	Rappahannock Summary Report for PB System

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Laura Manno	06/20/2013 12:43 PM	06/20/2013 12:43 PM
Continue Drafting	Laura Manno	06/20/2013 12:43 PM	06/20/2013 01:16 PM
Continue Drafting	Laura Manno	06/20/2013 03:38 PM	06/20/2013 03:38 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 10:26 PM	06/20/2013 10:38 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 10:38 PM	06/20/2013 10:38 PM
Agency Review Step 1	Cathy Wolfe	06/21/2013 12:29 AM	06/21/2013 12:30 AM
Agency Review Step 1	Cathy Wolfe	06/21/2013 06:03 AM	06/21/2013 06:03 AM
Agency Review Step 1	Cathy Wolfe	06/21/2013 06:06 AM	06/21/2013 06:14 AM
Agency Review Step 1	Matthew Johnson	06/21/2013 09:06 AM	06/21/2013 09:07 AM
Ready for DPB Submission	Cathy Wolfe	06/21/2013 10:56 AM	06/21/2013 10:57 AM
Ready for DPB Submission	Cathy Wolfe	06/21/2013 11:05 AM	06/21/2013 11:06 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:20 PM	06/21/2013 04:21 PM
DPB Review	Anne Smith	06/25/2013 03:37 PM	06/25/2013 03:52 PM
DPB Review	Anne Smith	06/25/2013 04:14 PM	06/25/2013 04:14 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:59 AM	06/26/2013 08:00 AM
Continue Drafting	Cathy Wolfe	07/01/2013 05:35 AM	07/01/2013 05:44 AM
Agency Review Step 1	Cathy Wolfe	07/01/2013 05:44 AM	07/01/2013 05:47 AM
Agency Review Step 1	Cathy Wolfe	07/01/2013 05:55 AM	07/01/2013 05:57 AM
Agency Review Step 1	Cathy Wolfe	07/02/2013 02:30 PM	07/02/2013 02:31 PM
Agency Review Step 1	Tom Calhoun	07/03/2013 04:03 PM	07/03/2013 04:07 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:27 PM	07/03/2013 04:27 PM
DPB Review	Anne Smith	07/03/2013 06:11 PM	07/03/2013 06:18 PM
DPB Review	Anne Smith	07/04/2013 03:38 PM	07/04/2013 03:38 PM
DPB Review	Anne Smith	07/08/2013 10:11 AM	07/08/2013 10:11 AM
DPB Review	Anne Smith	07/09/2013 04:08 PM	07/09/2013 04:12 PM
DPB Review	Anne Smith	07/10/2013 11:05 AM	07/10/2013 11:07 AM
DPB Review	Anne Smith	07/10/2013 11:11 AM	07/10/2013 11:11 AM
DPB Review	Anne Smith	07/11/2013 12:53 PM	07/11/2013 12:54 PM
DPB Review			

Pre-planning Study

George Mason University
Rappahannock Housing VIIB
Global Living and Learning Center

Date: June 21, 2013

Table of Contents

Executive Summary

Agency: George Mason University
Project Title: Rappahannock – Classroom & Global Program
Project Code: 247- 17570-005(General Fund Supplement to Authorized Housing Project)
Biennium: 2014-2016

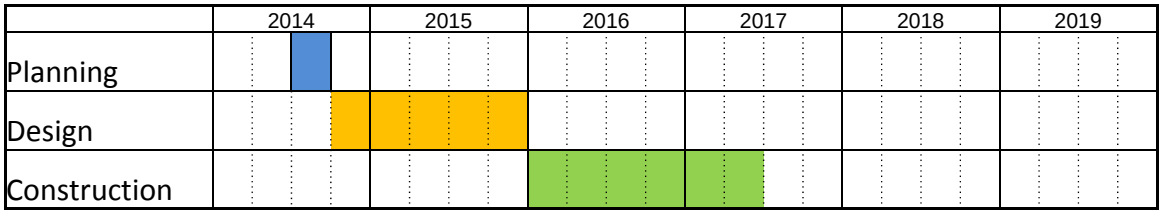
1. Project Scope Square Footage

New Construction 36,000 GSF

2. Project Budget

1	Acquisition of Property	0
2	Acquisition of Plant	0
3	Building and Built-in Equipment	10,975,000
4	Sitework and Utilities	1,111,000
5	Architectural and Engineering Fees	605,000
6	Loose Furnishings and Equipment	1,841,000
7	Contingencies	242,000
8	Project Inspection	37,000
9	Other Costs	850,000
	Total Cost:	**15,661,000**

3. Project Schedule:



Statement of Program Definition:

GEORGE MASON UNIVERSITY
RAPPAHANNOCK CLASSROOM & GLOBAL PROGRAM

Classroom Program	Seats	ASF/Seat	Quantity	ASF	Total ASF
Lecture Hall	90	25	1	2,250	2,250
Case Study Classroom	60	30	1	1,800	1,800
Classroom - Collaborative	25	40	6	1,000	6,000
Classroom	25	25	5	625	3,125
Total Classroom ASF			13		13,175
Gross SF (GSF) - Assumes 66% Efficiency					**19,962**

Global Program	Quantity	ASF	Total ASF
Center for International Student Access (CISA)			1887
Office for International Programs and Services (OIPS)			820
English Language Institute (ELI)			600
Global Incubator			1558
Pre-function/ Exhibit / Lobby	1	200	200
Programming Space (Global Lounge)	1	2400	2400
Catering Kithchen	1	500	500
Shared Conference Room	1	550	550
CGE Office	1	120	120
Global Central (Concierge)	1	200	200
Drop -In Office	1	120	120
Language Lab (Activity Center)	1	700	700
Table / Chair Storage	1	150	150
Collaborative Office/Work Area	1		400
Reception	1		300
Pantry	1	80	80
Total Global Program ASF			10,585
Gross SF (GSF) - Assumes 66% Efficiency			**16,038**
TOTAL GROSS SF (GSF)			**36,000**

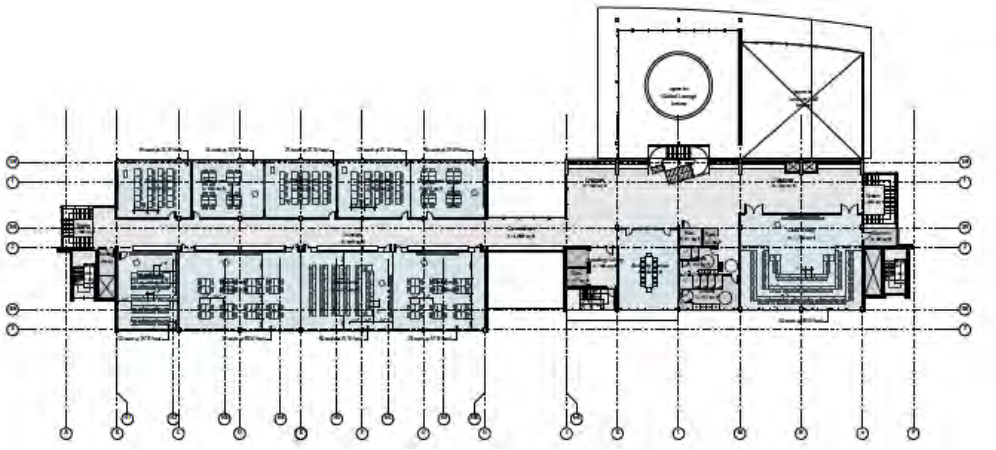
Cost Per SF Project :
New Construction of 36,000 GSF $435/GSF

Cost Per SF Construction:
New Construction of 36,000 GSF $336/GSF

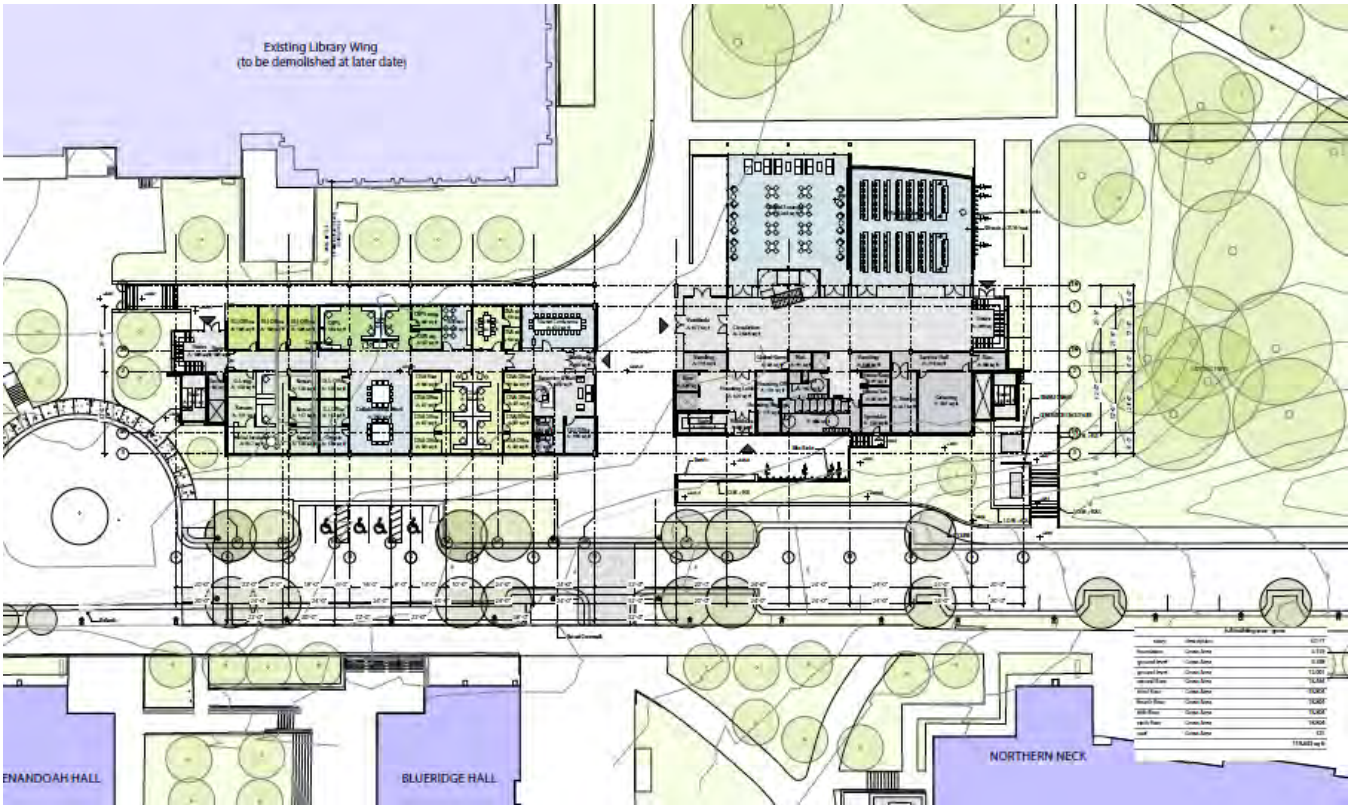
Cost Estimate:

10	Estimated Total Planning Costs	810,000
11	Estimated New Construction Costs	12,329,000
12	Estimated Improvements Costs	0
	Itemized "9, Other Costs"	
1	Project Management In Capital Project Budget:	37,000
2	Special Consultants (if not included in A&E Fees):	
	A. Commissioning	61,000
	B. Site Survey/EIR	16,000
	C. Specialty Consultants	91,000
3	Asbestos and Lead Based Paint Survey & Design	0
4	Asbestos Abatement	0
5	Independent Cost Estimates	11,000
6	Value Engineering	11,000
7	Subsoil Investigations	11,000
8	Construction Testing Services	61,000
9	Printing	15,000
10	Advertisements	2,000
11	Work by Owner	282,000
12	Signage	18,000
13	Miscellaneous Utility Charges	36,000
14	Moving Expenses	18,000
15	Miscellaneous Other Costs (Itemize)	
	A. BCOM Review Inspection Fees	35,000
	B. A/E Reimbursibles	13,000
	C. CM Design Phase Services	51,000
	D. Demolition	
	E. Data and Voice Communications	81,000
	D. Utility Relocations	
	Total Other Costs:	850,000

Floor Plans:



Second Floor Plan - Classrooms



Ground Floor Plan – Global Program

3-D Model Images**:**

Project Description:

This project is being submitted as a General Fund Supplement to an already approved housing project (247-17570-005). George Mason University is seeking to build a new mixed-use building in the heart of campus using a combination of already granted housing authority and General Fund support for Academic Instruction and program support space.

The proposed project plans to include 2 floors of classroom and global program space beneath 4 floors (approximately 248 beds) of housing. This mixed use offers opportunities for existing and new Living Learning Communities (LLC) that bring national and international students together in an exciting and diverse cross-cultural environment. Additionally Mason is considering including several small apartment-style living spaces for visiting global scholars within the upper floor housing units. Having these scholars living in the same space as our students will create new opportunities for more informal interaction around topics of student/faculty interest and it will support Mason's international engagement overall. This connection of students and scholars in the same space in the center of campus highlights Mason's commitment to both global initiatives and scholarship.

The Rappahannock Global Center for Students and Scholars will attract both current and prospective students to the exciting range of global academic and student life activities Mason offers. The building should include a large central programming space, co-location of student-oriented & globally focused offices/programs and innovative classroom designs. Such spaces will be designed to facilitate easy intercultural engagement with students and scholars from across the globe intellectually, culturally and socially.

The centerpiece of Rappahannock would be the Global Center for Students and Scholars, a global programming space where faculty and students will come together for lectures, research presentations, cultural showcases, international films, culturally catered events, and living learning community activities specifically focused on global and international topics and issues. A spacious, glass-fronted programing space would create a global "fishbowl" to draw members of the campus community into the building's activities and events. Equipped with full technological resources, global activity kiosks, international television stations, clocks showing international time zones, international news resources, and a rotating exhibit for cultural artifacts, this space will be an attractive & vibrant space which showcases Mason's commitment to global awareness, education and collaborations.

In addition, key globally and internationally focused offices and programs will be incorporated into this global center to provide services to our students as they seek globally focused activities & offerings and seek opportunities to connect to the wider world. Some of these programs include: the Center for International Student Access (CISA), Office of International Programs & Services (OIPS), English Language Institute, and the Center for Global Education.

University classrooms shared by all disciplines will be an integral part of this 2-floor global center. Classrooms will be new state-of-the-art University classrooms designed to support the latest teaching & learning pedagogies and will be designed to provide flexible options to support a variety of teaching/learning styles. In support of growing distance education (D.E.) and hybrid options, classrooms should be equipped with technology that not only supports innovative in-class learning but also helps connect our classrooms to others here and around the world via video conference, Skype, etc. With global initiatives and education being the focus of this mixed use building, the ability to connect to global partners in real time from these classrooms could open up a new world of collaborative opportunities and cultural awareness.

Project Benefits/Justification:

The University will develop more fully its leading role as a global university, through diverse international partnerships and the extension of global and environmental awareness in all educational programs.

—2014 Strategic Plan, George Mason University

- Provides a prominent presence for Global programs to support and engage both international and domestic students.
- By co-locating global academic initiatives, student activities, and services, Rappahannock's central location will provide a one-stop-shop for information about university-wide global opportunities.
- Mixed-use program creates an opportunity for existing and new International Living Learning Communities (LLC).
- Already approved housing component (Housing VIII B) of this mixed-use building provides an additional 248 beds to meet increased demand for on campus housing particularly for International and Out of State students.
- Provides new state-of-the-art University classrooms designed to support the latest teaching & learning pedagogies and to provide flexible options to support a variety of teaching/learning styles.
- Rappahannock classrooms will not only meet the need for new and innovative classroom types for Mason but they will also help to alleviate strain on older, worn out classrooms across campus and to address classrooms deficits caused by renovations and/or right-sizing over time. Rappahannock will immediately be used to help offset classroom losses resulting from Robinson Hall Renovations
- Provides space to help offset current space deficiencies for academic instruction and programs
- Provides a permanent location for the Center for International Student Access program (CISA) which is currently bouncing from swing space to swing space.
- Provides program space for new Korean programs as well as space to develop other new global initiatives

Alternatives Considered:

Mason's offices of Campus Planning and Space Management have been working closely with our globally focused programs to try and find answers to their space needs. George Mason University continues to suffer from a significant space deficit; therefore despite best efforts, we struggle to find enough available space on campus to meet needs in general. Given the nature of the global center and the numbers of students it will serve a high profile and accessible space needs to be developed. We currently have no amount of space large enough and located in an accessible area to offer. To achieve this goal, new construction will be required.

We have done our best to try and capitalize on projects in the pipeline and authority already granted to minimize this request for new construction funds. The mixed-use building option uses an already authorized project – Housing VIII B – to help create a holistic and vibrant global environment while limiting the new funding request to only 2 floors which serve academic instruction and programs.

CapitalBudgetRequest

Improvements to Telecommunications Infrastructure

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	Improvements-Infrastructure Repairs
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Submitted
Building Name	
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	
Infrastructure Element	

Contains significant technology costs? Yes

Contains significant energy costs? No

Agency Narrative

Agency Description

8,350 LF of Ductbank, 34,300 LF of Cable (various sizes), 100 Manhole Improvements, 30 Telecom Room HVAC Upgrades, and other improvements discussed in the narrative below focusing on three goals:

Goal 1: Survivability
Over time, George Mason has developed a robust infrastructure between its network cores to provide reliable communications services. All of the core facilities have diverse connections and both the voice and data core systems have redundant equipment located in physically separate facilities. This design, however, leaves individual buildings vulnerable to a loss of phone and data service should a construction accident or other disturbances disrupt certain key pathways.

At this time, each building is connected to a single core with copper, multi-mode and single-mode fiber. By adding additional single-mode fiber to a second core using as little ductbank in common as possible, reliability can be greatly enhanced. Such redundancy would also reduce the impact of the relocation of ductbank segments due to construction projects.

Similarly, although the intercampus optical network that connects the Prince William, Arlington, and Fairfax campuses is designed for redundancy in the metro area, a single point of failure exists at the entry to Fairfax Campus. An outage at that point can disable the University's network and Internet services to both Arlington and Prince William campuses. A similar, correctable, situation exists at the Prince William Campus

The proposed capital project would fund the additional infrastructure pathways (ductbank, conduit and fiber) on the Fairfax Campus necessary to provide connections to alternate core facilities for major buildings and the intercampus optical network entrances at the Fairfax and Prince William Campuses to ensure that critical voice and data services remain available in the event that a key pathway is severed.

Goal 2: Support West Campus Expansion
Voice and data services to buildings on the west side of Ox Road ("West Campus") are supported via an existing infrastructure path which includes a node located behind the Recreation and Athletic Complex (RAC.) Physical distances, as well as current and expected future land use, make a West Campus building the preferred location for this node. As existing buildings in that sector are not well suited to this use, the proposed project would fund planning, design, and construction for a dedicated telecommunications core facility, with suitable emergency power and cooling capacity, to be located on the West Campus property. Communications ductbanks and the associated fiber and copper cables would be extended to the core both from the existing infrastructure and from buildings on the west campus that have been built but currently have no communications infrastructure (the existing baseball and softball fields as well as the pavilion and maintenance building being built as part of the Campus Drive project). Some of the active communications equipment required to support the West Campus node would be relocated from other buildings on campus but the network core equipment would need to be included in this project.

A future Telecommunications Infrastructure project will provide an alternate path connection to the West Campus Core via a diverse route from

the primary route constructed in this project. Because this alternative path will run through areas designated as future building sites, we want to wait for those buildings to be designed before installing ductbank in those areas. This future project will also include other buildings that are impractical to provide alternative paths to at this time.

Goal 3: Correct Telecommunications Infrastructure Problems
In 2007 George Mason University commissioned a consulting team to perform a strategic assessment of the university's telecommunications infrastructure. The resulting study identified a significant number of issues impacting the security, safety, and environmental conditions of Mason's telecommunications rooms and pathways. These problems endanger the reliability and security of the university's voice and data communications systems. Although many of the problems in the study have been addresses, the following major problems identified in the assessment study still need to be addressed by this proposed capital project:

•Sump pumps with appropriate drainage to be installed in 30 communications manholes
•Ventilation grills still need to be installed in 11 telecommunications rooms on Fairfax campus
•HVAC (additional cooling) to be added to 10 telecommunications rooms on Fairfax campus
•Additional infrastructure deficiencies also need to be addressed.

These include:
•Providing locking mechanisms for the 100+ handholes/manholes
•Repairing damage to manhole chimneys and penetrations on 20 vaults
•Providing grounding, racking and ladders where missing/damaged in 40 vaults

Justification

This project increases the survivability of the telecom infrastructure system at the Fairfax, Arlington, and Prince William Campuses. It provides redundant network connections to minimize widespread planned outages for campus development at Fairfax. This project will support Fairfax West Campus Development by establishing a West Campus Core and infrastructure that connects it to East Campus. Lastly it corrects existing network infrastructure problems: drainage/sump pumps, ventilation, HVAC in MDF locations.

The most critical portion of the project is the creation of the West Campus core and pathways. Buildings requiring communications services are being built with no means to provide service to them. Any future 'large scale' building (Residence Hall, research building) on the West Campus will absolutely require communications services. The new, diverse physical pathways for the Fairfax Campus buildings should be scheduled as soon as possible. The correction of issues identified in the 2007 infrastructure assessment, and subsequently, should also begin at this time, with completion targeted for no later than 2016.

Alternatives Considered

The University considered an alternative that would segment portions of this project into other future capital requests. By putting some of these connections, especially the west campus core and the southwest sector connection in other projects, the primary stated objective of creating more survivability of the system will not be achieved. Over the last 4 years, on an annual basis, in order to facilitate various capital projects, the University has had to execute a network wide shut down over the Christmas/New Year's timeframe. Capital projects have incurred, therefore, premium costs in order to pay overtime, acceleration, lost institutional productivity, and other costs on top of what would be a base infrastructure cost for their project to connect to the campus grid/network infrastructure. If a more segmented approach to this proposed project is considered, the result will be continued periodic major network shutdowns for years to come, at a cost premium for both general fund and non-general fund projects on the Fairfax Campus. Thus the net result of an alternative to this project will be increased, long-term cost liability to the Commonwealth.

Costing Methodology

The costing methodology used for this project is based upon both historical and contemporary cost data.

In order to provide as accurate as possible estimates of cost for Capital Budget submissions, George Mason University employed the services of an independent cost consultant 2009. As a benchmark for construction costs, historical cost data from 23 projects at Mason was used. To the extent this project scope was characterized within these past projects, these costs were escalated to the current day. Beyond the specific construction costs, other non-construction historic costs derived from over 40 GMU projects were utilized as a basis to determine all other cost portions of the submission.

In addition to historic data, a current design build contractor, executing telecom work on the Fairfax Campus within another project already authorized, provided budget level cost data for the construction and related work that is anticipated in this project. This data was used to validate historic data and also validate escalation estimates.

It is noted that all projects are escalated at the DEB anticipated level into the future based upon planned mid-points of construction.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2015	0100 - General Fund	2395 - Undistributed Plant and Equipment	$7,758,000
			Total	$7,758,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$1,356,000	$1,356,000	$0
Sitework & Utility Construction	$4,022,000	$4,022,000	$0
Construction Cost Total	$5,378,000	$5,378,000	$0
Design & related Services from Other Costs tab	$848,000	$848,000	$0
Inspection & Testing Services from Other Costs tab	$337,000	$337,000	$0
Project Management & Other Costs from Other Costs tab	$492,000	$492,000	$0
Furnishings & Movable Equipment	$595,000	$595,000	$0
Construction Contingency	$108,000	$108,000	$0
Total Project Cost	$7,758,000	$7,758,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost		0	$0
Total Project Cost		0	$0

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$646,000	$646,000	
A/E Reimbursables			
Specialty Consultants (Food Service, Acoustics, etc.)	$81,000	$81,000	
CM Design Phase Services			
Subsurface Investigations (Geotech, Soil Borings)	$41,000	$41,000	
Land Survey	$40,000	$40,000	
Archeological Survey			
Hazmat Survey & Design			
Value Engineering Services	$30,000	$30,000	
Cost Estimating Services	$10,000	$10,000	
Other Design & Related Services			
Design & Related Services Total	$848,000	$848,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$68,000	$68,000	
Project Testing Services (conc., steel, roofing, etc.)	$269,000	$269,000	
Inspection & Testing Services Total	$337,000	$337,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$68,000	$68,000	
Work By Owner	$375,000	$375,000	
BCOM Services	$25,000	$25,000	
Advertisements	$4,000	$4,000	
Printing & Reproduction	$20,000	$20,000	
Moving & Relocation Expenses	$0	$0	
Data & Voice Communications			
Signage	$0	$0	
Demolition			
Hazardous Material Abatement	$0	$0	
Utility Connection Fees	$0	$0	

Utility Relocations			
Commissioning	$0	$0	
Miscellaneous Other Costs	$0	$0	
Project Management & Other Costs Total	$492,000	$492,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Technology Component

Description of the technology component of the project

This proposed capital project would fund additional infrastructure pathways (duct bank, conduit, fiber and copper lines) necessary to ensure critical voice and data services remain available in the event a key pathway is severed.

Voice and data services to buildings on the west side of Ox Road (“West Campus”) are supported via an existing infrastructure path which includes a node located behind the Recreation and Athletic Complex (RAC.) Physical distances, as well as current and expected future land use, make a West Campus building the preferred location for this node. Communications duct banks and the associated fiber and copper cables would be extended to the hut. Most of the active communications equipment required to support the West Campus node would be relocated from other buildings on campus.

Primary uses of the building included in this project

The proposed project would fund planning, design, and construction for a dedicated telecommunications hut with suitable emergency power and cooling capacity to be located on the West Campus property.

Explain how technology cost estimates were developed

Technology Cost Estimate

Cost Type	Cost

Supporting Documents

No supporting documents for this adjustment

Technology Component

Description of the technology component of the project

This proposed capital project would fund additional infrastructure pathways (duct bank, conduit, fiber and copper lines) necessary to ensure critical voice and data services remain available in the event a key pathway is severed.

Voice and data services to buildings on the west side of Ox Road (“West Campus”) are supported via an existing infrastructure path which includes a node located behind the Recreation and Athletic Complex (RAC.) Physical distances, as well as current and expected future land use, make a West Campus building the preferred location for this node. Communications duct banks and the associated fiber and copper cables would be extended to the hut. Most of the active communications equipment required to support the West Campus node would be relocated from other buildings on campus.

Primary uses of the building included in this project

The proposed project would fund planning, design, and construction for a dedicated telecommunications hut with suitable emergency power and cooling capacity to be located on the West Campus property.

Explain how technology cost estimates were developed

Technology Cost Estimate

Cost Type	Cost

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Erik Backus	05/24/2013 04:09 PM	05/24/2013 04:09 PM
Continue Drafting	Erik Backus	05/24/2013 04:09 PM	05/24/2013 04:10 PM
Continue Drafting	Erik Backus	05/24/2013 05:08 PM	05/24/2013 05:18 PM
Continue Drafting	Erik Backus	05/24/2013 05:24 PM	05/24/2013 05:39 PM
Continue Drafting	Erik Backus	05/28/2013 03:33 PM	05/28/2013 03:42 PM
Continue Drafting	Matthew Johnson	05/29/2013 03:32 PM	05/29/2013 03:34 PM
Continue Drafting	Erik Backus	05/31/2013 09:08 AM	05/31/2013 09:22 AM
Agency Review Step 1	Matthew Johnson	06/10/2013 05:06 PM	06/10/2013 05:09 PM
Agency Review Step 1	Cathy Wolfe	06/11/2013 05:09 PM	06/20/2013 03:31 PM
Continue Drafting	Erik Backus	06/20/2013 03:39 PM	06/20/2013 03:42 PM
Continue Drafting	Erik Backus	06/20/2013 05:51 PM	06/20/2013 06:00 PM
Continue Drafting	Erik Backus	06/20/2013 06:09 PM	06/20/2013 06:10 PM
Continue Drafting	Erik Backus	06/20/2013 06:12 PM	06/20/2013 06:13 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 10:06 PM	06/20/2013 10:09 PM
Agency Review Step 1	Matthew Johnson	06/21/2013 09:08 AM	06/21/2013 09:14 AM
Ready for DPB Submission	Cathy Wolfe	06/21/2013 10:02 AM	06/21/2013 10:05 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:14 PM	06/21/2013 04:19 PM
DPB Review	Anne Smith	06/25/2013 04:20 PM	06/25/2013 04:21 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:55 AM	06/26/2013 07:55 AM
Continue Drafting	Cathy Wolfe	07/01/2013 06:19 AM	07/01/2013 06:21 AM
Agency Review Step 1	Cathy Wolfe	07/02/2013 02:31 PM	07/02/2013 02:32 PM
Agency Review Step 1	Tom Calhoun	07/03/2013 04:01 PM	07/03/2013 04:03 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:27 PM	07/03/2013 04:27 PM
DPB Review	Anne Smith	07/04/2013 03:30 PM	07/04/2013 03:30 PM
DPB Review	Anne Smith	07/08/2013 09:55 AM	07/08/2013 09:55 AM
DPB Review	Anne Smith	07/08/2013 09:58 AM	07/08/2013 09:58 AM
DPB Review	Anne Smith	07/09/2013 04:13 PM	07/09/2013 04:44 PM
DPB Review	Anne Smith	07/11/2013 12:42 PM	07/11/2013 12:43 PM
DPB Review			

CapitalBudgetRequest

Construct Fairfax Mixed Use Development (PPEA)

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	New Construction
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	New Project
Building Name	
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	
Infrastructure Element	

Contains significant technology costs? No

Contains significant energy costs? No

Agency Narrative

Agency Description

This project is described as a mixed use residential, retail, dining facility that will include supporting site work and infrastructure (road work, heating and cooling). While the complete program has not been determined at this time. it is anticipated that there will be a minimum of 2000 residential beds, retail and residential dining facilities. The university intends to explore opportunities with private partners to provide this housing in multiple phases on university-owned land through PPEA acquisition procedures. Exact scope and delivery schedule will be determined during an Interim Agreement phase after selection of a partner. At this point, the university envisions partitioning a portion of an area approximately 60 acres in size on the east side of the Fairfax Campus for this purpose. The site currently is either undeveloped or is used for surface parking lots. Ultimate construction will require replacement of these existing parking spaces as well as addition of any parking required as part of the development. The university may subdivide this project and seek construction of only a portion of the 2000 bed requirement with this project. During development discussion with partners, the university will explore options with developers for construction of other auxiliary-supported facilities as part of a mixed use development.

Justification

This housing is necessary to support Commonwealth goals to deliver an additional 100,000 degrees over the next ten years and George Mason University's initiatives to meet these goals. The university currently houses approximately 6,000 undergraduate students on the Fairfax Campus. Despite this number, the university has been unable to support the housing requests of undergraduate transfer students and graduate students. This has severely limited our ability to support undergraduate students transferring from community colleges or other four-year institutions elsewhere in the Commonwealth. Lack of available graduate housing is severely limiting the university's ability to attract graduate students and is consequently severely impacting our ability to increase the level of funded research conducted at George Mason University. Both of these factors are compounded by the lack of affordable housing near the Fairfax campus. To meet these needs, the university must provide facilities on campus. Use of PPEA may allow the university to provide the physical assets required without increase debt burden.

Alternatives Considered

Costing Methodology

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
		-	-	
			Total	$0

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$0	$0	$0
Sitework & Utility Construction	$0	$0	$0
Construction Cost Total	$0	$0	$0
Design & related Services from Other Costs tab	$0	$0	$0
Inspection & Testing Services from Other Costs tab	$0	$0	$0
Project Management & Other Costs from Other Costs tab	$0	$0	$0
Furnishings & Movable Equipment	$0	$0	$0
Construction Contingency	$0	$0	$0
Total Project Cost	$0	$0	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost		0	$0
Total Project Cost		0	$0

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services			
A/E Reimbursables			
Specialty Consultants (Food Service, Acoustics, etc.)			
CM Design Phase Services			
Subsurface Investigations (Geotech, Soil Borings)			
Land Survey			
Archeological Survey			
Hazmat Survey & Design			
Value Engineering Services			
Cost Estimating Services			
Other Design & Related Services			
Design & Related Services Total			
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)			
Project Testing Services (conc., steel, roofing, etc.)			
Inspection & Testing Services Total			
Project Management & Other Cost Items			
Project Management (inhouse or consultant)			
Work By Owner			
BCOM Services			
Advertisements			
Printing & Reproduction			
Moving & Relocation Expenses			
Data & Voice Communications			
Signage			

Demolition			
Hazardous Material Abatement			
Utility Connection Fees			
Utility Relocations			
Commissioning			
Miscellaneous Other Costs			
Project Management & Other Costs Total			

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

No supporting documents for this adjustment

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Cathy Wolfe	06/21/2013 12:36 AM	06/21/2013 12:36 AM
Continue Drafting	Cathy Wolfe	06/21/2013 05:47 AM	06/21/2013 05:55 AM
Agency Review Step 1	Cathy Wolfe	06/21/2013 05:55 AM	06/21/2013 05:56 AM
Ready for DPB Submission	Cathy Wolfe	06/21/2013 12:24 PM	06/21/2013 12:27 PM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:09 PM	06/21/2013 04:13 PM
DPB Review	Anne Smith	06/25/2013 04:22 PM	06/25/2013 04:23 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:42 AM	06/26/2013 07:42 AM
Continue Drafting	Cathy Wolfe	07/01/2013 06:22 AM	07/03/2013 09:29 AM
Agency Review Step 1	Tom Calhoun	07/03/2013 09:30 AM	07/03/2013 09:49 AM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:27 PM	07/03/2013 04:27 PM
DPB Review	Anne Smith	07/08/2013 10:05 AM	07/08/2013 10:06 AM
DPB Review			

CapitalBudgetRequest

Renovate Science & Tech I

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	Improvements-Other
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Submitted
Building Name	Science & Tech 1
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Academic and Instructional Space
Infrastructure Element	Office / Classroom
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

This project includes the phased renovation of 100,000 GSF of the Planetary Hall/Science and Technology I building. The building supports science education and student/faculty collaborative research for the Chemistry/BioChemistry department, and the School of Physics, Astronomy, and Computational Sciences and was originally constructed in 1987 and has an FCI of .49. Due to the age of the building, the existing science instructional and research labs need extensive infrastructure updates, as well as health and safety code updates. The building does not meet technology and infrastructure standards for today's STEM education, so renovations are necessary to improve instructional and research environments for students and faculty.

The renovation of Planetary Hall/Science and Technology I will be done in phases and requires that portions of the building, including university classrooms, remain operational during renovation which will add complexity and cost to the project. Initial planning assumes a floor by floor renovation, so the project includes five stages (basement thru 4th floor). Because of the phasing of this project, numerous temporary facilities will be required to relocate existing office and lab spaces while the floor by floor renovation takes place. Initial estimates assume that up to 15,000 GSF of temporary trailer/swing space may need to be provided. Temporary space will include scientific laboratory space (for Chemistry and Physics primarily), university classroom space, and office spaces.

In addition to providing modern science instructional and research labs, this project will allow Mason to meet its goals for energy use and sustainability by providing a more energy efficient facility. Sustainability is a key cross-disciplinary component of the curriculum of the science-based programs that will be located in this building, so this project will allow us to have a facility that better reflects that principle in practice.

Justification

Although Planetary Hall/Science and Technology I has had minor renovations and upgrades over the years, it has not had a major renovation since it was built in 1987. A complete renovation of the HVAC and infrastructure systems is needed to handle current/planned laboratory loads. This renovation project will address a current backlog of $4.9 million in deferred maintenance budget requests for this facility, and will correct deficiencies identified in the Preliminary FM Global Risk Report issued to George Mason University in March of 2009. IT infrastructure improvements are also needed to support increased technology needs for instructional and student/faculty collaborative research facilities that will be located in the building.

The physical sciences (Physics, Astronomy, Chemistry/Biochemistry) departments will remain located in this building, along with the Computational Sciences program. Teaching labs and classrooms within these programs need to be renovated to allow for a more modern approach to science education. The research laboratories need to be enhanced and additional labs need to be created to allow the College of Science to hire new experimental scientists, and to develop new methods for instruction in the physical sciences.

The space constraints and lack of updated teaching facilities prevents Mason students from receiving enhanced learning opportunities, and prevents the College of Science from recruiting students who may come from high schools with better laboratory facilities that are currently available within this building. Renovating this facility assures that the College of Science can continue to meet the goals of STEM education

initiatives, including K-12 camp instruction that occurs during the summer and at other times throughout the year. Having this access to the latest technology and equipment is essential for assuring that current (and potential future) Mason students are marketable to future employees. In addition, the College of Science must have state of the art research laboratories to recruit top tier faculty, so providing updated labs in Planetary Hall/Science and Technology I will enable growth in sponsored research activity.

Impact if Not Funded:
•Continued maintenance reserve budget requests to update/repair aging MEP systems and building infrastructure

•Inability to meet growth needs for Chemistry/BioChemistry department and the School of Physics, Astronomy, and Computation Sciences

•Inability to update instructional science labs and research labs to meet STEM initiatives and provide students and faculty with the most up-to-date technologies available for instructional support and research opportunities

•Inability to provide a modern science instruction and research complex as developed in the College of Science Master Plan. The Exploratory Hall/Science and Technology II Addition/Renovation project that was just completed is the first stage of this overall master plan. The addition that was added in that project connects Planetary Hall/Science and Technology I to the existing Exploratory Hall/Science and Technology II building, so updating Planetary Hall/Science and Technology I is essential to providing students in all science majors with the same access to modern instructional and research facilities.

Alternatives Considered

No alternatives were considered since it is not possible to demolish the existing building and construct a new building. There are no other spaces to move the existing occupants to, so this project must be accomplished via a phased renovation as outlined above. The existing building will already have connections to the Science and Technology II Addition that is currently being constructed, so pedestrian pathways and safety requirements have been established that incorporate the existing Science and Technology I building which make renovation of this building the most cost effective solution for updating it to meet new program requirements.

Costing Methodology

As a benchmark for construction costs, historical cost data from 23 projects with construction currently underway (or recently completed) at GMU were used, to the extent they characterized projects in the 2010-16 plan; otherwise, cost data from RS Means was used to characterize the cost for the projects requested.

Where estimates were available from the prior budget request submission (2010-2016), they were evaluated, modified (based on this developed cost model), and escalated into the planned biennium with quantities adjusted to meet current scope data.

Beyond the specific construction costs, historic costs derived from over 40 GMU projects executed in the previous 4 years were utilized as a basis to determine all other cost portions of the submission. It is noted that all projects are escalated at the DEB anticipated level into the future based upon planned mid-points of construction.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2017	0100 - General Fund	2322 - Construction, Buildings	$43,682,000
			Total	$43,682,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$29,177,000	$29,177,000	$0
Sitework & Utility Construction	$1,114,000	$1,114,000	$0
Construction Cost Total	$30,291,000	$30,291,000	$0
Design & related Services from Other Costs tab	$3,786,000	$3,786,000	$0
Inspection & Testing Services from Other Costs tab	$606,000	$606,000	$0
Project Management & Other Costs from Other Costs tab	$3,779,000	$3,779,000	$0
Furnishings & Movable Equipment	$4,614,000	$4,614,000	$0
Construction Contingency	$606,000	$606,000	$0
Total Project Cost	$43,682,000	$43,682,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost	GSF	0	$0

Construction Cost	GSF	100,000	$303
Total Project Cost	GSF	100,000	$437

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$3,030,000	$3,030,000	
A/E Reimbursables	$61,000	$61,000	
Specialty Consultants (Food Service, Acoustics, etc.)	$465,000	$465,000	
CM Design Phase Services	$150,000	$150,000	
Subsurface Investigations (Geotech, Soil Borings)	$0	$0	
Land Survey	$0	$0	
Archeological Survey	$0	$0	
Hazmat Survey & Design	$20,000	$20,000	
Value Engineering Services	$30,000	$30,000	
Cost Estimating Services	$30,000	$30,000	
Other Design & Related Services	$0	$0	
Design & Related Services Total	$3,786,000	$3,786,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$303,000	$303,000	
Project Testing Services (conc., steel, roofing, etc.)	$303,000	$303,000	
Inspection & Testing Services Total	$606,000	$606,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$303,000	$303,000	
Work By Owner	$1,853,000	$1,853,000	
BCOM Services	$150,000	$150,000	
Advertisements	$4,000	$4,000	
Printing & Reproduction	$51,000	$51,000	
Moving & Relocation Expenses	$100,000	$100,000	
Data & Voice Communications	$275,000	$275,000	
Signage	$50,000	$50,000	
Demolition	$0	$0	
Hazardous Material Abatement	$500,000	$500,000	
Utility Connection Fees	$190,000	$190,000	
Utility Relocations	$0	$0	
Commissioning	$303,000	$303,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$3,779,000	$3,779,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):01/01/2020

Supporting Documents

File Name	File Size	Uploaded By	Upload Date	Comment
2013 Exec Summary S&TI-Planetary Hall.pdf	369,218	Joy Staulcup	6/13/2013	Executive Summary - Science & Tech I/Planetary Hall Renovation

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Laura Manno	06/13/2013 10:32 AM	06/13/2013 10:32 AM
Continue Drafting	Laura Manno	06/13/2013 10:32 AM	06/13/2013 01:52 PM
Continue Drafting	Joy Staulcup	06/13/2013 04:19 PM	06/18/2013 05:29 PM
Continue Drafting	Joy Staulcup	06/20/2013 01:16 PM	06/20/2013 01:19 PM
Continue Drafting	Joy Staulcup	06/20/2013 04:03 PM	06/20/2013 04:04 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 06:12 PM	06/20/2013 11:00 PM
Agency Review Step 1	Matthew Johnson	06/21/2013 09:22 AM	06/21/2013 09:23 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:46 PM	06/21/2013 04:46 PM
DPB Review	Anne Smith	06/25/2013 04:20 PM	06/25/2013 04:20 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:55 AM	06/26/2013 07:55 AM
Continue Drafting	Cathy Wolfe	07/02/2013 02:32 PM	07/02/2013 02:49 PM
Agency Review Step 1	Tom Calhoun	07/03/2013 03:49 PM	07/03/2013 03:51 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:01 PM	07/03/2013 04:01 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:27 PM	07/03/2013 04:27 PM
DPB Review	Anne Smith	07/04/2013 03:31 PM	07/04/2013 03:31 PM
DPB Review	Anne Smith	07/08/2013 09:56 AM	07/08/2013 09:57 AM
DPB Review			

George Mason University
Planetary Hall/Science & Technology I Renovation

Date: June 11, 2013

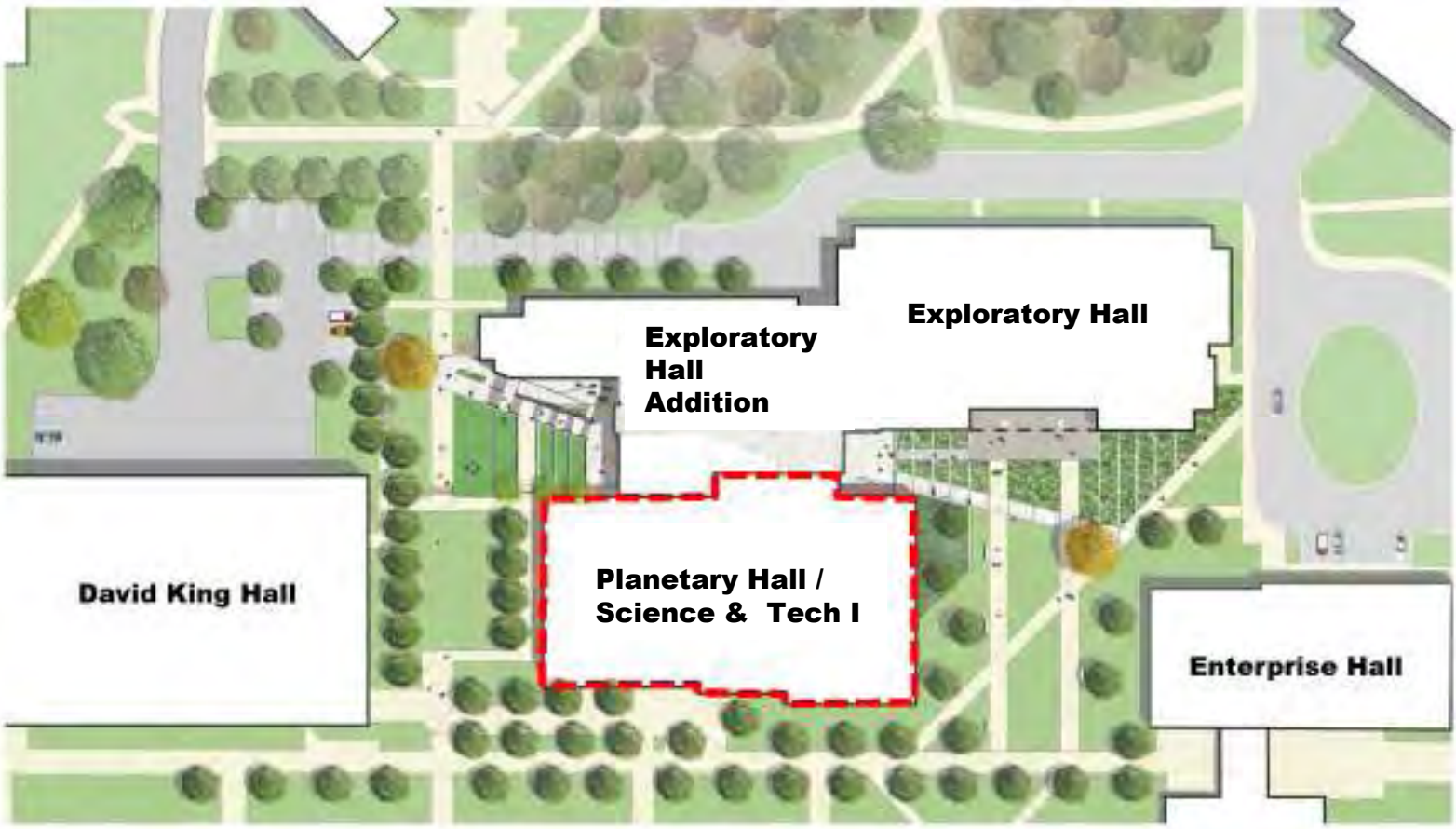


Table of Contents

Executive Summary

Agency: George Mason University
Project Title: Science & Technology I Renovation
Project Code: 247- (TBD)
Biennium: 2016-2018

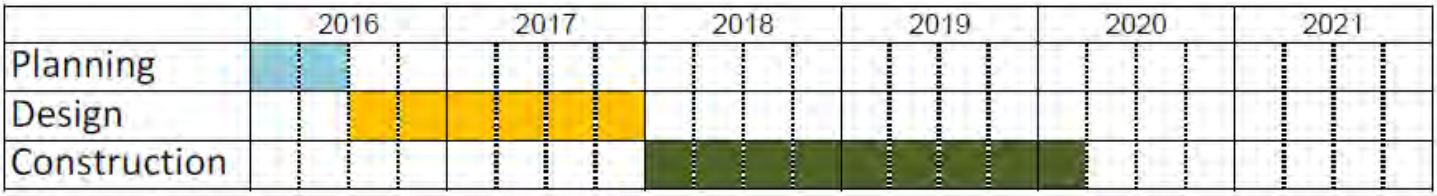
1. Project Scope Square Footage

Renovation **100,000 GSF**

2. Project Budget

1	Acquisition of Property	0
2	Acquisition of Plant	0
3	Building and Built-in Equipment	29,177,000
4	Sitework and Utilities	1,114,000
5	Architectural and Engineering Fees	3,030,000
6	Loose Furnishings and Equipment	4,614,000
7	Contingencies	606,000
8	Project Inspection	303,000
9	Other Costs	4,838,000
	Total Cost:	**43,682,000**

3. Project Schedule:



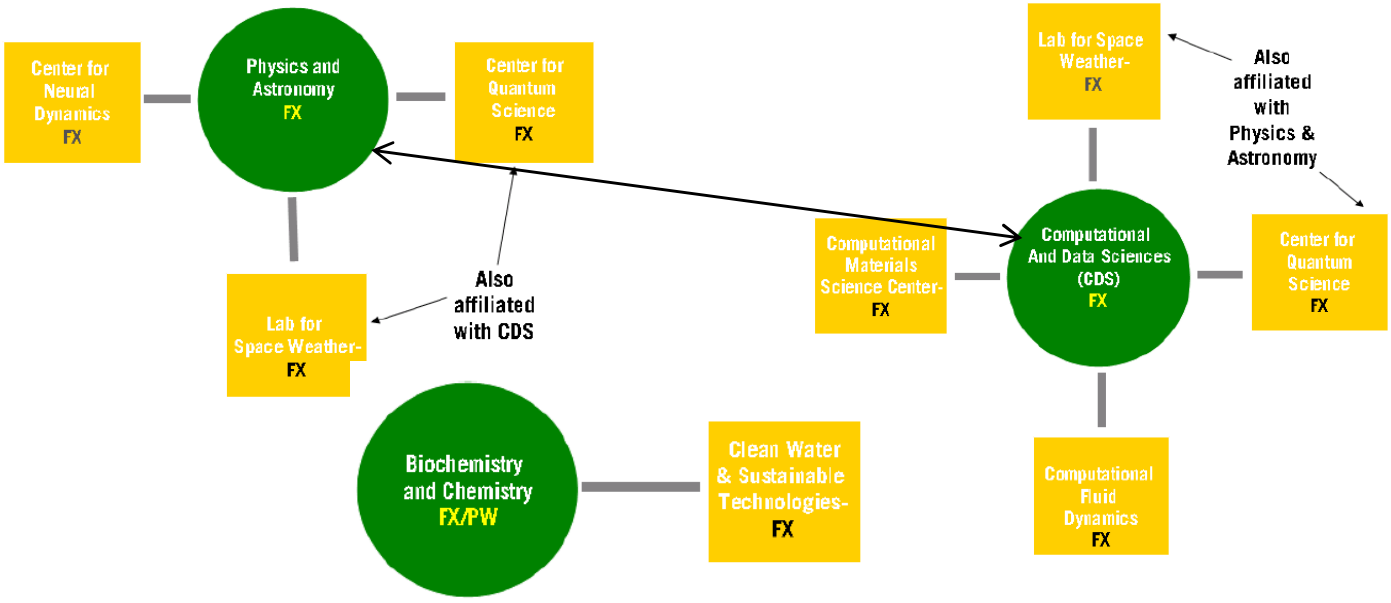
Statement of Program Definition:

S&T 1 Program Summary		Academic Year 2016-17 Target							
	Existing S&T 1	S&T 1 New							S&T1
	Total NSF	Total NSF	Teaching Labs	Research Labs	Offices	Conf Room	Support	Storage	Total NSF
COS Academic Programs									
College of Science Administration	1,232	1,832	0	0	0	600	1,232	0	1,832
Chemistry & Bio-Chemistry	17,300	21,600	10,230	4,650	5,120	0	1,360	240	21,600
Physics and Astronomy	13,988	19,318	8,680	3,720	3,920	0	1,158	1,840	19,318
Computational and Data Sciences	508	6,544	930	930	4,384	0	0	300	6,544
Total	**33,028**	**49,294**	**19,840**	**9,300**	**13,424**	**600**	**3,750**	**2,380**	**49,294**
Shared / MEP and Core									
Environmental Health and Safety	600	600							600
University Classrooms	10908	15,500							15,500
Contingency SF (10%)		**6,539**							**6,539**
Net Subtotal		**65,394**							**65,394**
Total Net Square Feet		**71,933**							**71,933**
Net to Gross Efficiency (Estimated)		0.72%							
Total Gross Square Feet		**99,907**							

Note: Program summary includes information from 2009 College of Science Master Plan for COS departments that will be included in Planetary Hall/S&T 1 program, plus additional estimated non-COS program.

Gross to Net SF: 72% efficiency factor

Functional Adjacency Requirements:



Cost Estimate :

	The following Items (10, 11, 12) are included in above costs	
10	Estimated Total Planning Costs	4,000,000
11	Estimated New Construction Costs	30,291,000
12	Estimated Improvements Costs	0
	Itemized "9, Other Costs"	
1	Project Management In Capital Project Budget:	303,000
2	Special Consultants (if not included in A&E Fees):	
	A. Commissioning	303,000
	B. Site Survey/EIR	0
	C. Specialty Consultants	465,000
	D. Archaeological Study	0
3	Asbestos and Lead Based Paint Survey & Design	20,000
4	Asbestos Abatement	500,000
5	Independent Cost Estimates	30,000
6	Value Engineering	30,000
7	Subsoil Investigations	0
8	Construction Testing Services	303,000
9	Printing	51,000
10	Advertisements	4,000
11	Work by Owner	1,853,000
12	Signage	50,000
13	Miscellaneous Utility Charges	190,000
14	Moving Expenses	100,000
15	Miscellaneous Other Costs (Itemize)	
	A. BCOM Review Inspection Fees	150,000
	B. A/E Reimbursables	61,000
	C. CM Design Phase Services	150,000
	D. Demolition	0
	E. Data & Voice Communications	275,000
	F. Utility Relocations	0
	Total Other Costs:	4,838,000

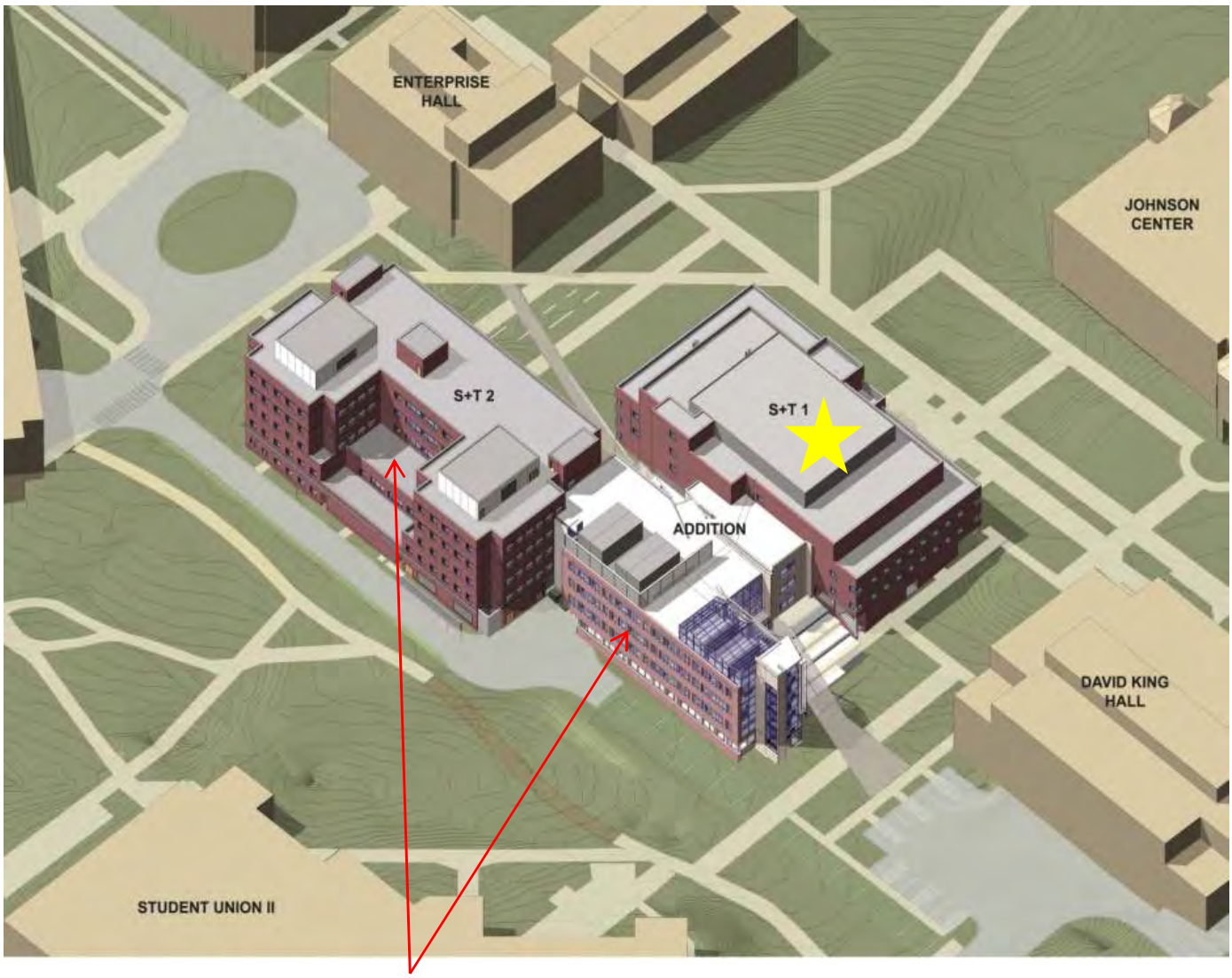
Cost Per SF Project : $437/GSF

Cost Per SF Construction:

Renovation $303/GSF

Concept Design:

Site Plan

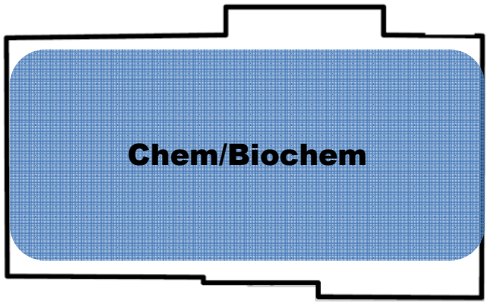


The renovation of Exploratory Hall/S&T 2 and the construction of the Addition to Exploratory Hall/S&T 2 is complete. The addition provides a direct connection between Planetary Hall/S&T 1 and Exploratory Hall/S&T 2.

Concept Design (continued):

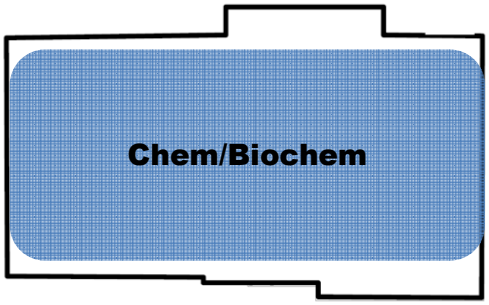
Floor Plan

4th Floor



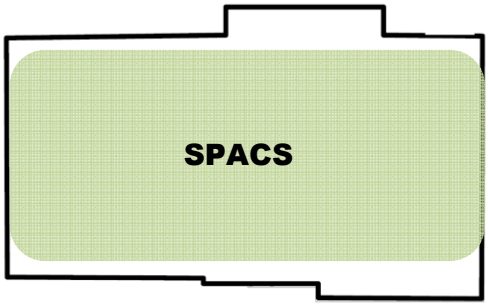
Chemistry/Biochemistry instructional and research labs

3rd Floor



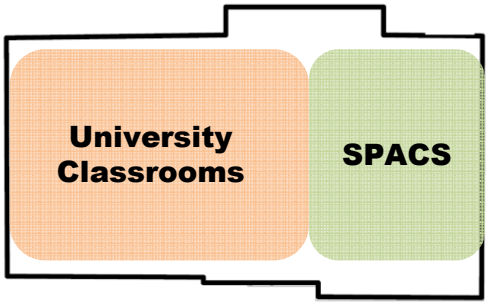
Chemistry/Biochemistry academic/instructional support

2nd Floor



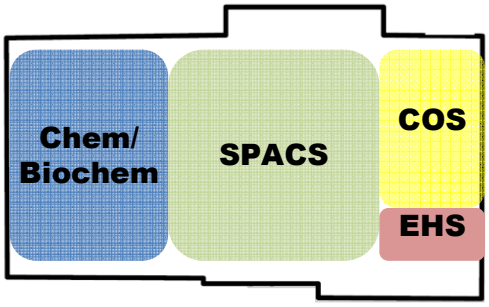
School of Physics, Astronomy, and Computational Sciences instructional and research labs, academic/instructional support

1st Floor



School of Physics, Astronomy, and Computational Sciences academic/instructional support, University Classrooms

Ground Floor



Chemistry/Biochemistry research/support, School of Physics, Astronomy, and Computational Sciences research/instructional support, College of Science instructional support, Environmental Health and Safety

Program Execution Options:

Analysis of Options –

Planetary Hall/Science and Technology I will require a complete renovation due to the age of the existing facility. The option to demolish the existing building and construct a new building is not financially feasible. Renovating the current facility is the most cost effective option for updating MEP and other infrastructure systems , for providing updated science instructional and research labs, and for providing classrooms that are more aligned with today's instructional technology use.

Necessary Phasing or Sequencing -

The renovation of Planetary Hall/Science and Technology I will be done in phases, and requires that portions of the building, including university classrooms, remain operational during renovation which will add complexity and cost to the project. Initial planning assumes a floor by floor renovation, so the project includes five stages (basement thru 4th floor). Because of the phasing of this project, numerous temporary facilities will be required to relocate existing office and lab spaces while the floor by floor renovation takes place. Initial estimates assume that up to 15,000 GSF of temporary trailer/swing space may need to be provided. Temporary space will include scientific laboratory space (for Chemistry and Physics primarily), university classroom space, and office spaces.

Coordination with other ongoing projects

Existing Chemistry instructional labs will come off-line during construction. Two flexible biology/chemistry labs in Exploratory Hall/S&T II will provide some of the chemistry instructional labs that will be needed during the renovation of the floors that Chemistry now occupies in Planetary Hall/Science and Technology I. However, temporary/modular labs and office facilities will need to be constructed to accommodate all instructional and office needs before the phased renovation can begin. The renovation of Planetary Hall/Science and Technology I is the last phase of the overall project to provide updated modern science teaching facilities to support university STEM initiatives.

Site Analysis:

Options Considered

Planetary Hall/Science and Technology I will require a complete renovation to provide modern science instructional and research facilities to support faculty and student program needs, so no other options have been considered.

Issues specific to topography, utilities or environment

Since this project involves the renovation of an existing building, there are no issues with topography or environment. Utility relocations were included in the Exploratory Hall/Science and Technology II addition/renovation project and were coordinated with the planned future renovation of Planetary Hall/Science and Technology I.

CapitalBudgetRequest

Renovate King Hall & Construct New Addition

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	New Construction/Improvement
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Submitted
Building Name	King Hall
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Academic and Instructional and Research space
Infrastructure Element	Office / Classroom
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

This project includes the construction of a new 60,000 GSF addition to David King Hall, and a phased renovation of the existing 86,000 GSF building. The current building is shared between College of Science (COS) and College of Humanities and Social Sciences (CHSS) and was originally constructed in 1982 with an FCI of .49. Due to the age of the building, the existing CHSS and COS instructional and research spaces in the existing building need extensive infrastructure updates to maintain functionality. The addition to the building (Phase I) will provide updated facilities for the Psychology department (CHSS) to handle growth in both instruction and research as identified in the 2002 Sasaki Campus Master Plan. The completion of the addition is required to continue with the phased renovation of the existing David King Hall (Phase II). We will relocate much of the Psychology department instructional and research labs and support from the existing building to the addition which will facilitate the phased renovation of the existing building. The renovation of the existing building will provide updated instructional and research facilities for the Environmental Science and Public Policy program (COS), and will provide additional growth space for Psychology and other CHSS academic departments.

The existing facility lacks the infrastructure necessary to support current STEM (Science, Technology, Engineering, Math education) initiatives which negatively impacts collaboration opportunities with industry, recruitment of faculty and students, and sponsored research opportunities. This project will provide modern instructional and research facilities to support collaborative learning, undergraduate and graduate student research, and faculty sponsored research. This project will also provide additional university classroom space that will include the latest teaching technology to support faculty pedagogical needs. In addition, this project will allow Mason to meet its goals for energy use and sustainability by providing a more energy efficient facility which is an important part of the curriculum of the science-based programs that will be located in David King Hall.

Justification

The existing David King Hall building has not had a major renovation since it was built in 1982, so a complete renovation of the HVAC and infrastructure systems is needed due to the age and condition of the facility. This renovation project will address a current backlog of $2.8 million in deferred maintenance budget requests for this facility, and will correct deficiencies identified in the Preliminary FM Global Risk Report issues to George Mason University in March of 2009. IT infrastructure improvements are also needed to support increased technology needs for instructional and research facilities that will be located in David King Hall.

The Psychology Department is one of the strongest departments in CHSS, with large enrollments at all levels (1,127 undergraduate and 190 graduates). The department needs to provide appropriate academic department spaces, as well as spaces to support its student research activities. Psychology has been a leader in providing undergraduate research experiences through the Provost Sponsored Research Apprenticeship Program as well as the highly successful honors program in the major and other research courses. These programs enable the department to recruit and retain high profile undergraduates and provide them with experiences that directly translate into increased marketability. Because of the current space shortage, there are no opportunities to provide any collaborative spaces to allow graduates or undergraduates a place to gathering for meetings and project work. The renovation of the existing David King Hall, along with the addition, will enable psychology to plan for a better configuration for the academic department suite, faculty offices, and student collaboration spaces.

In addition to a strong instructional program, Psychology also has a large amount of sponsored research activity (FY12 research expenditures totals exceeded $5.4 million). The department's potential for growth in sponsored research is being held back by current space constraints, and the department currently leases space off campus to support research activity. This capital project would enable the department to more effectively configure its current research space and to bring its researchers that are now in other buildings and off campus spaces together in one location. Co-location has many advantages, among them, a more efficient use of space since researchers can better share facilities (as well as equipment and staff) and create a strong research community. The existing psychology research space in David King Hall is very cramped, and psychology faculty members are now reluctant to apply for additional sponsored program funding because they are concerned they will not have the space necessary to conduct additional research. This constraint affects their productivity, college sponsored program funding, and the college's ability to support additional graduate students with external funding. As a consequence, it also affects the department's ability to be nationally competitive for the best graduate students. This space constraint also affects the department's ability to be nationally competitive for the best faculty hires given the research space needs that accompany new, more active faculty.

The David King Hall renovation project will also provide growth space for the Environmental Science and Public Policy program, as well as updated instructional science and research labs to support this department's growth needs. Many of the science labs in David King Hall need infrastructure updates to meet the specific needs for environmental science instruction and research.

Impact if Not Funded:
• Continued maintenance reserve budget requests to update/repair aging MEP systems and building infrastructure

• Inability to meet growth needs for Psychology Department and Environmental Science and Public Policy department

• Inability to update instructional science labs and research labs to meet STEM initiatives and provide students and faculty with the most up-to-date technologies available for instructional support and research opportunities

Alternatives Considered

The addition to David King and the renovation of the existing building are the best ways to meet the co-location needs for the departments that will be housed in the building. Keeping Psychology in David King Hall allows the department to be adjacent to the remaining departments within the College of Humanities and Social Sciences which will be co-located in Robinson Hall (directly across the Johnson Center plaza from David King Hall). This location also allows the Environmental Science and Public Policy department to be adjacent to the other buildings that make up the College of Science complex (Science and Technology I and II that are next to David King Hall). Therefore, no other alternatives were considered since this building provices an ideal location to meet the University's Master College Co-Location Plan for these two academic units.

Costing Methodology

As a benchmark for construction costs, historical cost data from 23 projects with construction currently underway (or recently completed) at GMU were used, to the extent they characterized projects in the 2010-16 plan; otherwise, cost data from RS Means was used to characterize the cost for the projects requested.

Where estimates were available from the prior budget request submission (2010-2016), they were evaluated, modified (based on this developed cost model), and escalated into the planned biennium with quantities adjusted to meet current scope data.

Beyond the specific construction costs, historic costs derived from over 40 GMU projects executed in the previous 4 years were utilized as a basis to determine all other cost portions of the submission. It is noted that all projects are escalated at the DEB anticipated level into the future based upon planned mid-points of construction.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2017	0100 - General Fund	2322 - Construction, Buildings	$56,443,825
Full Funding	2017	0815 - 9(D) Debt Service - Construction Costs	2322 - Construction, Buildings	$10,283,175
			Total	$66,727,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$46,037,000	$46,037,000	$0
Sitework & Utility Construction	$2,167,000	$2,167,000	$0
Construction Cost Total	$48,204,000	$48,204,000	$0
Design & related Services from Other Costs tab	$6,088,000	$6,088,000	$0
Inspection & Testing Services from Other Costs tab	$966,000	$966,000	$0
Project Management & Other Costs from Other Costs tab	$3,850,000	$3,850,000	$0
Furnishings & Movable Equipment	$6,654,000	$6,654,000	$0

Construction Contingency	$965,000	$965,000	$0
Total Project Cost	$66,727,000	$66,727,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost	GSF	146,000	$0
Construction Cost	GSF	146,000	$330

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$4,821,000	$4,821,000	
A/E Reimbursables	$97,000	$97,000	
Specialty Consultants (Food Service, Acoustics, etc.)	$734,000	$734,000	
CM Design Phase Services	$219,000	$219,000	
Subsurface Investigations (Geotech, Soil Borings)	$32,000	$32,000	
Land Survey	$45,000	$45,000	
Archeological Survey	$0	$0	
Hazmat Survey & Design	$20,000	$20,000	
Value Engineering Services	$60,000	$60,000	
Cost Estimating Services	$60,000	$60,000	
Other Design & Related Services	$0	$0	
Design & Related Services Total	$6,088,000	$6,088,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$483,000	$483,000	
Project Testing Services (conc., steel, roofing, etc.)	$483,000	$483,000	
Inspection & Testing Services Total	$966,000	$966,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$483,000	$483,000	
Work By Owner	$1,336,000	$1,336,000	
BCOM Services	$150,000	$150,000	
Advertisements	$8,000	$8,000	
Printing & Reproduction	$79,000	$79,000	
Moving & Relocation Expenses	$146,000	$146,000	
Data & Voice Communications	$402,000	$402,000	
Signage	$73,000	$73,000	
Demolition	$0	$0	
Hazardous Material Abatement	$500,000	$500,000	
Utility Connection Fees	$190,000	$190,000	
Utility Relocations	$0	$0	
Commissioning	$483,000	$483,000	
Miscellaneous Other Costs	$0	$0	
Project Management & Other Costs Total	$3,850,000	$3,850,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$836,786
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	4.00

NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):01/04/2020

Supporting Documents

File Name	File Size	Uploaded By	Upload Date	Comment
2013 Executive Summary David King Addition-Renovation.pdf	239,624	Joy Staulcup	6/14/2013	Executive Summary David King Renovation/Addition

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Joy Staulcup	06/13/2013 02:38 PM	06/13/2013 02:38 PM
Continue Drafting	Joy Staulcup	06/13/2013 02:38 PM	06/20/2013 04:11 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 11:01 PM	06/20/2013 11:12 PM
Agency Review Step 1	Matthew Johnson	06/21/2013 09:33 AM	06/21/2013 09:38 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:41 PM	06/21/2013 04:43 PM
DPB Review	Anne Smith	06/25/2013 04:19 PM	06/25/2013 04:19 PM
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DPB Review	Anne Smith	07/04/2013 03:32 PM	07/04/2013 03:32 PM
DPB Review	Anne Smith	07/08/2013 10:00 AM	07/08/2013 10:01 AM
DPB Review			

George Mason University
David King Hall Addition/Renovation

Date: June 11, 2013

Table of Contents

Executive Summary

Agency: George Mason University
Project Title: David King Hall Addition and Renovation
Project Code: 247- (TBD)
Biennium: 2016-2018

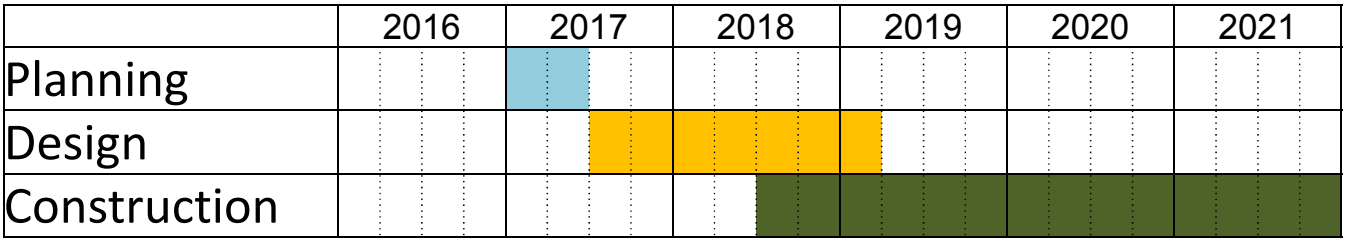
1. Project Scope Square Footage

Addition	**60,000 GSF**
Renovation	**86,000 GSF**

2. Project Budget

1	Acquisition of Property	
2	Acquisition of Plant	
3	Building and Built-in Equipment	46,037,000
4	Sitework and Utilities	2,167,000
5	Architectural and Engineering Fees	4,821,000
6	Loose Furnishings and Equipment	6,654,000
7	Contingencies	965,000
8	Project Inspection	483,000
9	Other Costs	5,600,000
	Total Cost:	**66,727,000**

3. Project Schedule:

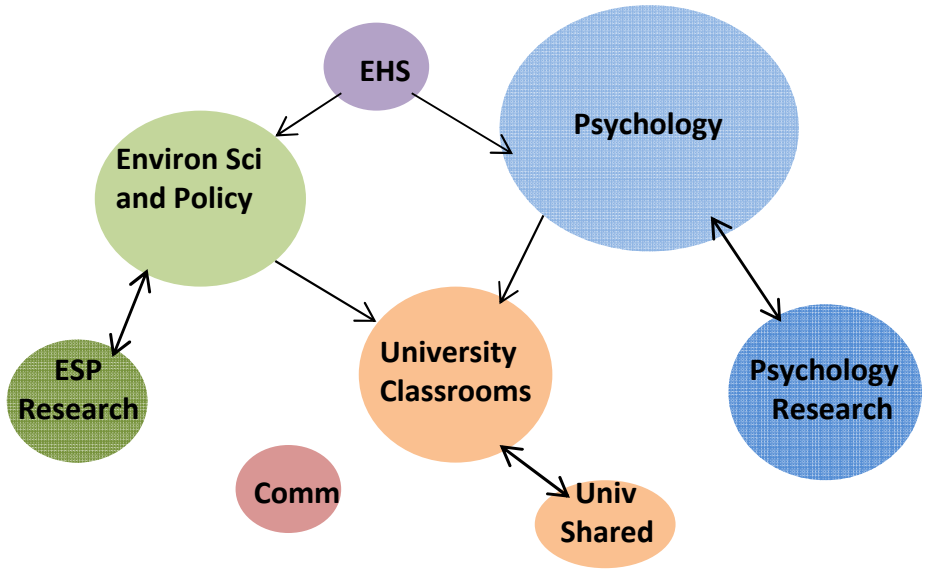


Statement of Program Definition:

David King Hall Program Summary		Academic Year 2017-18 Target		
	Existing DKH	DKH New		
	Total NSF	Total NSF	Acad/Instr	Research
Academic Programs				
Psychology	24,100	41,000	15,500	25,500
Communication	1,695	1,695	1,450	245
Environmental Science and Public Policy	5,800	12,821	4,700	8,121
Atmospheric, Oceanic, and Earth Science	1,200	1,200		1,200
CHSS (growth)		10,000	7,000	3,000
COS (growth)		10,000	6,000	4,000
Total	**32,795**	**76,716**		
Shared / MEP and Core				
Enivronmental Health and Safety	1,730	3,500	3,500	
University Shared		2,000	2,000	
University Classrooms	2,200	14,000	14,000	
Contingency SF (10%)		**9,621**		
Net Subtotal		**96,216**		
Total Net Square Feet		**105,837**		
Net to Gross Efficiency (Estimated)		0.72%		
Total Gross Square Feet		**146,996**		

Gross to Net SF: 72% efficiency factor

Functional Adjacency Requirements:



Cost Estimate :

	The following Items (10, 11, 12) are included in above costs	
10	Estimated Total Planning Costs	6,355,000
11	Estimated New Construction Costs	22,148,000
12	Estimated Improvements Costs	26,055,000
		0
	Itemized "9, Other Costs"	0
		0
1	Project Management In Capital Project Budget:	483,000
2	Special Consultants (if not included in A&E Fees):	0
	A. Commissioning	483,000
	B. Site Survey/EIR	45,000
	C. Specialty Consultants	734,000
	D. Archaeological Study	0
3	Asbestos and Lead Based Paint Survey & Design	20,000
4	Asbestos Abatement	500,000
5	Independent Cost Estimates	60,000
6	Value Engineering	60,000
7	Subsoil Investigations	32,000
8	Construction Testing Services	483,000
9	Printing	79,000
10	Advertisements	8,000
11	Work by Owner	1,336,000
12	Signage	73,000
13	Miscellaneous Utility Charges	190,000
14	Moving Expenses	146,000
15	Miscellaneous Other Costs (Itemize)	0
	A. BCOM Review Inspection Fees	150,000
	B. A/E Reimbursables	97,000
	C. CM Design Phase Services	219,000
	D. Demolition	0
	E. Data & Voice Communications	402,000
	F. Utility Relocations	0
	Total Other Costs:	5,600,000

Cost Per SF Project :

Renovation **$437/GSF**

Addition **$485/GSF**

Cost Per SF Construction:

Renovation **$314/GSF**

Addition **$354/GSF**

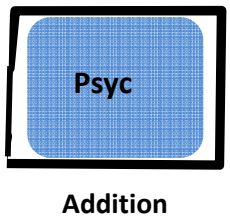
Concept Design:

Site Plan

Concept Design (continued):

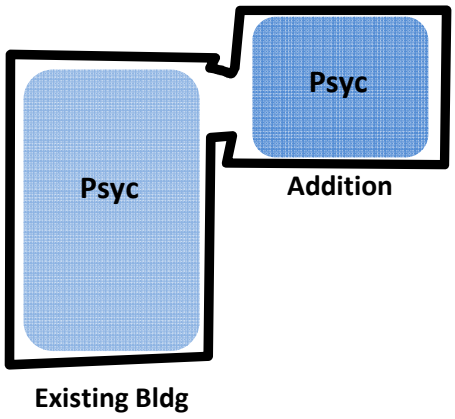
Floor Plan

4th Floor (Addition Only)



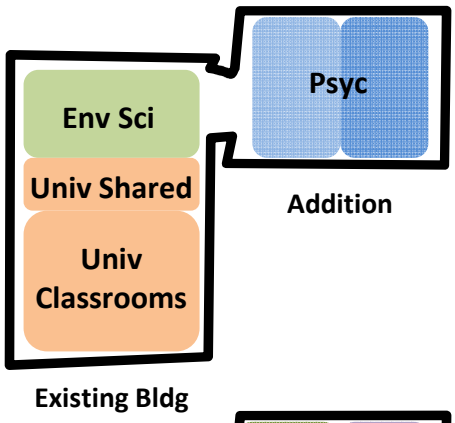
Psychology Research

3rd Floor



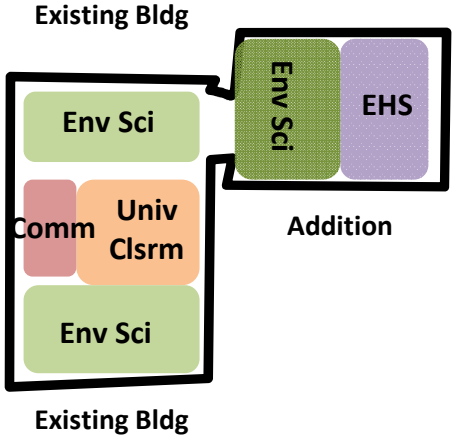
Psychology Academic/Instruction and Research

2nd Floor



Environmental Science and Public Policy Academic/Instruction, University Classrooms, Psychology Academic /Instruction and Research

1st Floor



Environmental Science and Public Policy Academic/Instruction and Research, University Classroom, Communication TV Production Instructional Lab, Service and Support Space

Program Execution Options:

Analysis of Options –

David King Hall will require a complete renovation due to the age of the existing facility. The 60,000 GSF addition to the existing building is required to meet growth needs for departments that currently occupy the building. Because there is no alternate space available in which to relocate current building occupants, the option to demolish the existing building and construct a new building that includes the additional GSF is not functionally feasible, nor is it financially feasible. The construction of the new addition will allow for users to be moved into new space as the existing building phased renovation takes place.

Necessary Phasing or Sequencing –

The construction of the Addition to David King Hall will take place as the first phase of this project. The completion of the addition is required to continue with the phased renovation of the existing David King Hall (Phase II). We will relocate much of the Psychology department instructional and research labs and support from the existing building to the addition which will facilitate the phased renovation of the existing building.

Coordination with other ongoing projects

Construction of the Addition/Renovation of David King Hall will need to be coordinated with the requested Planetary Hall/Science & Technology I renovation project in order to allow adequate construction staging area for this project. David King Hall is adjacent to Planetary Hall/Science & Technology I.

Site Analysis:

Options Considered

David King Hall will require a complete renovation , and additional GSF, to provide up-to-date instructional and research facilities to support faculty and student programming needs, so no other options have been considered.

Issues specific to topography, utilities or environment

Major utility and infrastructure relocations have been done to support a recently completed project (Exploratory Hall/Science and Technology II addition/renovation) and were coordinated in conjunction with the planned future renovation/addition of David King Hall. This prior infrastructure work will minimize utility relocations that must be done to support this project.

CapitalBudgetRequest

Renovate Johnson Center, Learning Commons and Dining Phases 2&3

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	Improvements-Other
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Submitted
Building Name	Johnson Center
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Learning Commons and Dining Services
Infrastructure Element	Library / Student Center
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

This project has two principal components and is related to other previously approved Capital Projects which are a combination of General Fund and Non-general Fund authorizations.

1. Learning Commons: The first General Fund component is to renovate approximately 26K assignable SF of space on the upper two floors of the Johnson Center. The renovated space will provide new spaces in support of Mason's undergraduate Learning Commons. The Learning Commons project will build on the aspirations and experiences of the current facility as an intellectual market place while striving to provide a robust new Learning Commons characterized by interactive technology. The project also envisions integrated services for Library, Information Technology and Academic Support reflecting the way students study and learn.

As an extension of the Fenwick Research Commons project, Shepley Bullfinch was engaged to complete a pre-planning study for this project. This project is related to the approved Fenwick Addition project due to the fact that when Fenwick is complete much of the collection that is currently housed in Johnson Center will move to the new addition's compact stack shelving areas leaving vacant stack spaces in JC which will need to be repurposed.

One other principal goal of this project is to create a facility which is easier and more efficient to operate. The current library and information technology services are stacked on three floors throughout the Johnson Center building. This creates increased operational costs due to highly distributed service points and staff spread out to multiple points throughout the building. This dispersed arrangement causes quite a bit of confusion for students trying to navigate the library system. This project will move the library off the first floor of the Johnson Center and reclaim some under- performing retail food venue and catering spaces on the 3rd floor of the facility. The project will consolidate service points and work to create more multi-functional flexible spaces that can be shared by all Learning Commons components.

2. Johnson Center Food Service Renovations – Phases 2 and 3: The second part of this project is enabled by moving the Library spaces off the first floor of the Johnson Center. The area vacated by the Library on the first floor is about 14K assignable SF and will be renovated into retail food service and program venues. This portion of the project seeks Non- General Fund authority and will be funded by self generated revenue associated with Mason's food service operations. This is the continuation of the implementation of the Anytime Dining concept on the Fairfax Campus.

The University engaged an architectural firm and food service consultant to assist with developing a pre-planning study for the Anytime Dining concept. This pre-planning study has defined the extents of this work and was used to develop cost estimates for the design and construction of this project.

This work is described as phases 2 and 3 of the Johnson Center Food Service Renovations and includes demolition of the existing library spaces on the first floor and reconstruction of two to three food service venues, seating areas and completion of the food court started during phase I of the previously authorized project.

Justification

The Johnson Center will be approximately 20 years old in the time frame of this project. The dining renovations work will include infrastructure upgrades to support the new dining functions.

The Learning Commons project will help to provide more efficient space as well as better identity for the services provided by the library, information technology and academic support. In addition multi-functional spaces will provide better utilization for all spaces in the Johnson Center.

This project will complete both the Library Master Plan and the implementation of Anytime Dining on the Fairfax Campus.

Alternatives Considered

Costing Methodology

George Mason University contracted with xxx to conduct a pre-planning study for this project. The scope of this study included macro level programming, site analysis, concept level design and concept level cost estimating. The cost estimate was based on the findings of programming and concept design as well as an understanding of site related improvements discovered and defined during the site analysis phase of work.

It is anticipated that this project will be funded by a combination general fund and self generated revenue.

This project's funding will not have an impact on tuition or student fees.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2017	0100 - General Fund	2322 - Construction, Buildings	$5,000,000
Full Funding	2017	0815 - 9(D) Debt Service - Construction Costs	2322 - Construction, Buildings	$21,095,000
			Total	$26,095,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$15,525,000	$15,525,000	$0
Sitework & Utility Construction	$0	$0	$0
Construction Cost Total	$15,525,000	$15,525,000	$0
Design & related Services from Other Costs tab	$2,451,000	$2,451,000	$0
Inspection & Testing Services from Other Costs tab	$273,000	$273,000	$0
Project Management & Other Costs from Other Costs tab	$930,000	$930,000	$0
Furnishings & Movable Equipment	$6,605,000	$6,605,000	$0
Construction Contingency	$311,000	$311,000	$0
Total Project Cost	$26,095,000	$26,095,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost	GSF	69,400	$224
Total Project Cost	GSF	69,400	$376

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$2,019,000	$2,019,000	
A/E Reimbursables	$41,000	$41,000	

Specialty Consultants (Food Service, Acoustics, etc.)	$233,000	$233,000	
CM Design Phase Services	$98,000	$98,000	
Subsurface Investigations (Geotech, Soil Borings)	$0	$0	
Land Survey	$0	$0	
Archeological Survey	$0	$0	
Hazmat Survey & Design	$0	$0	
Value Engineering Services	$30,000	$30,000	
Cost Estimating Services	$30,000	$30,000	
Other Design & Related Services	$0	$0	
Design & Related Services Total	$2,451,000	$2,451,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$117,000	$117,000	
Project Testing Services (conc., steel, roofing, etc.)	$156,000	$156,000	
Inspection & Testing Services Total	$273,000	$273,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$117,000	$117,000	
Work By Owner	$347,000	$347,000	
BCOM Services	$60,000	$60,000	
Advertisements	$4,000	$4,000	
Printing & Reproduction	$35,000	$35,000	
Moving & Relocation Expenses	$70,000	$70,000	
Data & Voice Communications	$145,000	$145,000	
Signage	$35,000	$35,000	
Demolition	$0	$0	
Hazardous Material Abatement	$0	$0	
Utility Connection Fees	$0	$0	
Utility Relocations	$0	$0	
Commissioning	$117,000	$117,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$930,000	$930,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

No supporting documents for this adjustment

Workflow History

Step Name	User Name	Claimed	Submitted
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Agency Review Step 1	Matthew Johnson	06/21/2013 09:38 AM	06/21/2013 09:40 AM
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DPB Review			

CapitalBudgetRequest

Construct Facilities Complex, Fairfax Campus

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	New Construction/Improvement
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Submitted
Building Name	
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Facilities Offices, Shops, Materials and Vehicle Storage
Infrastructure Element	
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

This project was previously submitted under the title - Physical Plant Addition - Fairfax Campus and is a part of the Commonwealth of Virginia approved 6 Year Capital Plan Request. This modified project proposes four main components that will bring Facilities plant and operations space up to current standards as well as serve the long term needs of George Mason University in terms of adjacencies, square footages, vehicular and pedestrian circulation, sustainable design, and future campus expansions. The site acreage impacted by this project is approximately 6 acres.

The four main components are described as follows:

1. Construct a new 60K GSF stand alone Facilities building that is built to house Facilities Management offices including administration, work control, energy management as well as many of the shop requirements (plumbing, HVAC, EMS, PM, electric, utilities, and grounds, offices for Facilities Administration, Campus Planning, Project Management and Construction, University Sustainability, Capital Finance and Real Estate. Re-purposing about 5K GSF of the facilities archives into the paint and signage shop and the construction of a new standalone 3K GSF auto shop. Construction of open and closed unconditioned sheds (23K GSF) will further define the project perimeter, offering shielding to the residential to the northeast and providing a secure edge to the complex.

2. Reconfiguration of the existing approximately 24K GSF warehouse facility to create greater storage capacity within the existing building footprint.

3. Relocation of the recycling center to the west campus.

The proposed project includes necessary utility tunnels and systems modifications to connect to the University central utility distribution system. In addition the project will be configured to provide a sound and visual barrier between the facilities complex and surrounding residential areas both on and off campus.
This project is fully space justified according the SCHEV standards and will eliminate the deficit in the Plant and Operations space available on the Fairfax Campus.

Upon completion of the new construction and renovations, the existing Facilities Administration building will be re-purposed to function as needed support spaces for lock shops and key control, housekeeping and possibly desktop support services which is currently be housed in a temporary modular facilities which is past its functional life.

The final part of this project includes the removal of the existing Maintenance Building which is approximately 17K GSF and built as a metal building in 1974.

Justification

Facilities staff exists in fragmented and cramped spaces in five separate buildings within the Facilities compound and one adjacent modular facility. There is insufficient space for work space, shop tools and supplies. The maintenance shops share warehouse space with the Purchasing Department. Studies document the shortage of available space in this warehouse.

Reflecting workload changes, Physical Plant work order requests have increased over 600% in the last 12 years reflecting the growth of the Fairfax campus. Total GSF at Fairfax campus increased from 415,000 in 1974 to 6,500,000 GSF in 2011, yet the size of the physical plant maintenance area has remained approximately the same until the 2009 addition of a carpenter shop area (3,500 ASF).

Constructed in 1974, the current physical plant building was designed to support a significantly smaller and less active campus than the University is today. The current Physical Plant Building does not meet building/environmental/energy codes, Occupational Safety and Health Administration (OSHA) codes, and Americans with disabilities Act (ADA) regulations. This project will also correct deficiencies in the existing Physical Plant building identified in the Preliminary FM Global Risk Report issued to George Mason University in March of 2009.

The current Physical Plant Building built in 1974 has been altered numerous times in an attempt to accommodate growth. However, these alterations, while partially alleviating emergency situations, have caused cramped environments and inefficient shop layouts. Shops and shop storage areas are now fragmented into several different geographical locations in previous closets and mechanical rooms.

Impact if Not Funded:

Without additional interior and exterior physical plant space, the Facilities organization will be unable to support the rapidly growing campuses. Space will be unavailable to accommodate the staff and operations needed to maintain George Mason University as a top tier Virginia Institution.

Alternatives Considered

The original concept of this project included providing an addition to already fragmented Facilities Complex. Completion of a pre-planning study led the Facilities Leadership team to consider consolidating all Facilities Administrative and Operations into a single building placed on the site to provide better and safer circulation on the site for both pedestrians and vehicles.

The proposed project will meet the needs of current Facilities Management an Operations as well as providing opportunities for future growth as the campus continues to expand.

Costing Methodology

George Mason University contracted with Dewberry to conduct a pre-planning study for this project. The scope of this study included macro level programming, site analysis, concept level design and concept level cost estimating. The cost estimate was based on the findings of programming and concept design as well as an understanding of site related improvements discovered and defined during the site analysis phase of work.

It is anticipated that this project will be funded by a combination general fund and self generated revenue.

This project's funding will not have an impact on tuition or student fees.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2017	0100 - General Fund	2322 - Construction, Buildings	$43,379,000
			Total	$43,379,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$29,322,000	$29,322,000	$0
Sitework & Utility Construction	$5,838,000	$5,838,000	$0
Construction Cost Total	$35,160,000	$35,160,000	$0
Design & related Services from Other Costs tab	$4,029,000	$4,029,000	$0
Inspection & Testing Services from Other Costs tab	$780,000	$780,000	$0
Project Management & Other Costs from Other Costs tab	$1,417,000	$1,417,000	$0
Furnishings & Movable Equipment	$1,289,000	$1,289,000	$0
Construction Contingency	$704,000	$704,000	$0
Total Project Cost	$43,379,000	$43,379,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost	GSF	107,000	$329

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$3,396,000	$3,396,000	
A/E Reimbursables			
Specialty Consultants (Food Service, Acoustics, etc.)	$532,000	$532,000	
CM Design Phase Services			
Subsurface Investigations (Geotech, Soil Borings)	$21,000	$21,000	
Land Survey	$40,000	$40,000	
Archeological Survey			
Hazmat Survey & Design			
Value Engineering Services	$30,000	$30,000	
Cost Estimating Services	$10,000	$10,000	
Other Design & Related Services			
Design & Related Services Total	$4,029,000	$4,029,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$440,000	$440,000	
Project Testing Services (conc., steel, roofing, etc.)	$340,000	$340,000	
Inspection & Testing Services Total	$780,000	$780,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$440,000	$440,000	
Work By Owner	$421,000	$421,000	
BCOM Services	$30,000	$30,000	
Advertisements	$4,000	$4,000	
Printing & Reproduction	$2,000	$2,000	
Moving & Relocation Expenses	$110,000	$110,000	
Data & Voice Communications			
Signage	$5,000	$5,000	
Demolition			
Hazardous Material Abatement			
Utility Connection Fees	$150,000	$150,000	
Utility Relocations			
Commissioning	$255,000	$255,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$1,417,000	$1,417,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$1,272,415
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	8.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0

GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):01/08/2019

Supporting Documents

No supporting documents for this adjustment

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Erik Backus	05/24/2013 04:07 PM	05/24/2013 04:07 PM
Continue Drafting	Erik Backus	05/24/2013 04:07 PM	05/24/2013 04:07 PM
Continue Drafting	Erik Backus	05/28/2013 03:50 PM	05/28/2013 03:56 PM
Continue Drafting	Matthew Johnson	05/29/2013 03:31 PM	05/29/2013 03:32 PM
Continue Drafting	Erik Backus	06/03/2013 06:57 PM	06/03/2013 07:01 PM
Agency Review Step 1	Matthew Johnson	06/10/2013 05:08 PM	06/10/2013 05:13 PM
Agency Review Step 1	Cathy Wolfe	06/11/2013 05:11 PM	06/20/2013 03:29 PM
Continue Drafting	Erik Backus	06/20/2013 03:42 PM	06/20/2013 03:49 PM
Continue Drafting	Erik Backus	06/20/2013 05:35 PM	06/20/2013 05:49 PM
Continue Drafting	Erik Backus	06/20/2013 06:13 PM	06/20/2013 06:14 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 06:20 PM	06/20/2013 10:02 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 10:20 PM	06/20/2013 10:21 PM
Agency Review Step 1	Matthew Johnson	06/21/2013 09:24 AM	06/21/2013 09:25 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:44 PM	06/21/2013 04:45 PM
DPB Review	Anne Smith	06/25/2013 04:21 PM	06/25/2013 04:21 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:49 AM	06/26/2013 07:55 AM
Continue Drafting	Cathy Wolfe	07/01/2013 06:25 AM	07/01/2013 06:34 AM
Agency Review Step 1	Cathy Wolfe	07/02/2013 02:59 PM	07/02/2013 03:00 PM
Agency Review Step 1	Tom Calhoun	07/03/2013 10:45 AM	07/03/2013 10:49 AM
Ready for DPB Submission	Tom Calhoun	07/03/2013 03:58 PM	07/03/2013 03:59 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:27 PM	07/03/2013 04:27 PM
DPB Review	Anne Smith	07/04/2013 03:30 PM	07/04/2013 03:30 PM
DPB Review	Anne Smith	07/08/2013 09:54 AM	07/08/2013 09:55 AM
DPB Review	Anne Smith	07/08/2013 09:57 AM	07/08/2013 09:57 AM
DPB Review			

CapitalBudgetRequest

Construct Academic VIII / Research IV

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	New Construction
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Submitted
Building Name	
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Academic Instruction and Research
Infrastructure Element	Classroom / Laboratory
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

George Mason University requests funds to construct a new Instructional and Research facility for the Volgenau School of Engineering. This request is for a 200,000 GSF building which represents Phase I of the total new building requirement for a 513,000 GSF Engineering complex. This building will include new administrative offices, University & Departmental Classrooms, research & teaching laboratories, and outdoor design/staging/construction areas for the School's expanded academic and research programs. New administration areas will also be located here in order to serve the new & expanded programs and to provide faculty/staff offices adjacent to their program areas.

Currently the School is in the process of developing & planning for two new departments: Mechanical Engineering and Aerospace Engineering. Additionally, major growth is expected in several of their existing programs: Electrical & Computer Engineering; Civil, Environmental &Infrastructure Engineering (CEIE), and Bio-Engineering.

Research and teaching laboratories will include: wet, computational, mechanical engineering (including robotics), materials testing, vehicular tear-down and modification, wind tunnels and potentially a water channel. In addition, an outdoor design, construction and staging area will be required for large projects and testing. The University classrooms will reflect Mason's ongoing evolution of teaching pedagogy as well as address the portfolio of dramatically under-sized and aging classrooms on the campus.

Major site development and infrastructure work will likely be required as the open sites available to house the proposed Phase I building plus future phases will likely require development outside of Patriot Circle and on land not yet fully developed. Plazas, pedestrian walks, parking, and sustainability features such as bio-retention ponds will be incorporated into a comprehensive open-space plan that will help incorporate it into the campus at large. The project will be designed and constructed to meet at a minimum LEED Silver for New Construction and, given the University's desire to meet the American College and University Presidents' Climate Commitment, will aggressively address building and site energy use.

Justification

The Volgenau School of Engineering is uniquely positioned within both the Commonwealth of Virginia and the nation to respond to the growing need for more engineers, computer scientists, and information technology experts to tackle the grand challenges faced by society and to ensure our economic strength and vitality. However, expansion of existing programs and growth of new programs in strategically important areas will require a major investment in new academic and research facilities. The overwhelming majority of the Volgenau School's current programs and activities are housed in the Nguyen Engineering Building, which was occupied in April 2009. In a very short period of time, the Nguyen Building has nearly reached full occupancy, and there is little room for expansion. Further exacerbating our physical facility limitations, the Nguyen Building was not designed to accommodate any experimental programs, given the largely computational nature (modeling and simulation) of the VSE programs a decade ago. As existing programs such as Civil, Environmental, and Infrastructure Engineering and Bioengineering mature and grow we have immediate needs for additional laboratory space and equipment. Furthermore, the lack of significant new laboratory facilities is a potential show-stopper for the addition and growth of new, high-demand programs in mechanical, aerospace, chemical, and materials engineering that are vital to allow Mason researchers to contribute to education, scholarship, and research in sustainable energy, advanced

manufacturing, nanotechnology, and many other areas.

There is currently very strong interest among high school students in the areas of engineering within the Volgenau School, as well as computer science and information technology. Departments with particularly strong growth potential are Bioengineering, and Civil, Environmental, and Infrastructure Engineering. Demand for these programs is expected to accelerate with recent advances in biomedical technologies and health care needs, and enormous needs for investment in our civil infrastructure and transportation sector. Also, STEM initiatives are now beginning to show results and we therefore anticipate very robust growth trends that will continue well into the future. Numerous studies and forecasts support these predictions. Based on the needs of the Commonwealth and the nation, and the rapidly expanding market for new engineers, computer scientists, and information technology specialists, we expect to be able to double our total student enrollment by FY 2018. A significant percentage of our projected growth in enrollment comes from the strategic addition of new academic programs, most notably Mechanical Engineering (ME), which is currently the fastest growing engineering discipline in the country.

Nationwide, chemical engineering and aerospace engineering rank among the largest engineering disciplines, and currently these areas are not part of the Volgenau School's programs. Given the fact that Virginia has major investments and activities in the aerospace industry, with such major companies as Rolls-Royce recently relocating their North American headquarters to Virginia, and with a significant presence of federal agencies including NASA and FAA, adding aerospace programs at Mason will also bolster the Commonwealth's investments in this sector. Chemical engineering is another key area for the Commonwealth, supporting a number of commercial sectors including medical/pharmaceutical, energy, semiconductor manufacturing, and even agriculture. Materials engineering and science is a cross-cutting discipline that impacts all of the other engineering programs.
To meet these goals, an investment in new facilities is required. With investment in specialized facilities and careful strategic planning, over the next decade the Volgenau School is well-positioned to be regarded as a top-tier engineering school and a leader in engineering education throughout the Commonwealth of Virginia and the nation.

Alternatives Considered

George Mason has assessed existing facilities on each of our campuses and determined that there is no available space having the appropriate level of infrastructure and technology to support such highly specialized programs. Even the existing Engineering Building was not designed to accommodate increased wet labs or highly specialized teaching / research facilities required to support program growth and new programs in mechanical and aerospace engineering.

Costing Methodology

As a benchmark for construction costs, historical cost data from 23 projects with construction currently underway (or recently completed) at GMU were used, to the extent they characterized projects in the 2010-2016 plan; otherwise, cost data from RS Means was used to characterize the cost for the projects requested.

Where estimates were available from the prior budget request submission (2010-2016), they were evaluated, modified (based on this developed cost model), and escalated into the planned biennium with quantities adjusted to meet current scope data.

Beyond the specific construction costs, historic costs derived from over 40 GMU projects executed in the previous 4 years were utilized as a basis to determine all other cost portions of the submission. It is noted that all projects are escalated at the DEB anticipated level into the future based upon planned mid-points of construction.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2017	0100 - General Fund	2322 - Construction, Buildings	$70,967,000
Full Funding	2017	0815 - 9(D) Debt Service - Construction Costs	2322 - Construction, Buildings	$55,197,000
			Total	$126,164,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$89,491,000	$89,491,000	$0
Sitework & Utility Construction	$4,439,000	$4,439,000	$0
Construction Cost Total	$93,930,000	$93,930,000	$0
Design & related Services from Other Costs tab	$11,457,000	$11,457,000	$0
Inspection & Testing Services from Other Costs tab	$1,880,000	$1,880,000	$0
Project Management & Other Costs from Other Costs tab	$6,879,000	$6,879,000	$0
Furnishings & Movable Equipment	$10,139,000	$10,139,000	$0
Construction Contingency	$1,879,000	$1,879,000	$0
Total Project Cost	$126,164,000	$126,164,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost	GSF	200,000	$470
Total Project Cost	GSF	200,000	$631

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$9,393,000	$9,393,000	
A/E Reimbursables	$188,000	$188,000	
Specialty Consultants (Food Service, Acoustics, etc.)	$1,409,000	$1,409,000	
CM Design Phase Services	$300,000	$300,000	
Subsurface Investigations (Geotech, Soil Borings)	$32,000	$32,000	
Land Survey	$45,000	$45,000	
Archeological Survey	$30,000	$30,000	
Hazmat Survey & Design	$0	$0	
Value Engineering Services	$30,000	$30,000	
Cost Estimating Services	$30,000	$30,000	
Other Design & Related Services			
Design & Related Services Total	$11,457,000	$11,457,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$940,000	$940,000	
Project Testing Services (conc., steel, roofing, etc.)	$940,000	$940,000	
Inspection & Testing Services Total	$1,880,000	$1,880,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$940,000	$940,000	
Work By Owner	$2,732,000	$2,732,000	
BCOM Services	$150,000	$150,000	
Advertisements	$4,000	$4,000	
Printing & Reproduction	$134,000	$134,000	
Moving & Relocation Expenses	$200,000	$200,000	
Data & Voice Communications	$550,000	$550,000	
Signage	$100,000	$100,000	
Demolition	$0	$0	
Hazardous Material Abatement	$0	$0	
Utility Connection Fees	$190,000	$190,000	
Utility Relocations	$0	$0	
Commissioning	$1,879,000	$1,879,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$6,879,000	$6,879,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$1,849,489
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	15.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00

GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):01/10/2019

Supporting Documents

No supporting documents for this adjustment

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Laura Manno	06/14/2013 12:43 PM	06/14/2013 12:43 PM
Continue Drafting	Laura Manno	06/14/2013 12:43 PM	06/14/2013 12:46 PM
Continue Drafting	Laura Manno	06/19/2013 11:57 AM	06/19/2013 11:58 AM
Continue Drafting	Tom Calhoun	06/20/2013 11:27 AM	06/20/2013 11:27 AM
Continue Drafting	David Moore	06/20/2013 11:34 AM	06/20/2013 11:37 AM
Continue Drafting	Laura Manno	06/20/2013 01:30 PM	06/20/2013 01:38 PM
Continue Drafting	Laura Manno	06/20/2013 03:34 PM	06/20/2013 03:37 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 06:12 PM	06/20/2013 10:22 PM
Agency Review Step 1	Cathy Wolfe	06/20/2013 11:13 PM	06/20/2013 11:18 PM
Agency Review Step 1	Matthew Johnson	06/21/2013 09:40 AM	06/21/2013 09:44 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:39 PM	06/21/2013 04:40 PM
DPB Review	Anne Smith	06/25/2013 04:18 PM	06/25/2013 04:18 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:58 AM	06/26/2013 07:58 AM
Continue Drafting	Cathy Wolfe	07/01/2013 06:09 AM	07/01/2013 06:11 AM
Agency Review Step 1	Cathy Wolfe	07/02/2013 03:02 PM	07/02/2013 03:04 PM
Agency Review Step 1	Tom Calhoun	07/03/2013 10:42 AM	07/03/2013 10:45 AM
Ready for DPB Submission	Tom Calhoun	07/03/2013 01:53 PM	07/03/2013 01:55 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 03:51 PM	07/03/2013 03:52 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:00 PM	07/03/2013 04:00 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:18 PM	07/03/2013 04:18 PM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:27 PM	07/03/2013 04:27 PM
DPB Review	Anne Smith	07/03/2013 06:08 PM	07/03/2013 06:10 PM
DPB Review	Anne Smith	07/04/2013 03:33 PM	07/04/2013 03:34 PM
DPB Review	Anne Smith	07/08/2013 10:02 AM	07/08/2013 10:02 AM
DPB Review			

CapitalBudgetRequest

Construct Prince William Academic/Research IV Building

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	New Construction
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	New Project
Building Name	
Project Location	Northern Virginia
Facility/Campus	GMU--Prince William campus
Source of Request	Agency Request
Building Function	Academic and Research Facility
Infrastructure Element	
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

This project will support ongoing growth in enrollment and research growth on the Prince William campus. While no specific programming has been done for this facility it is anticipated it will be approximately 100K GSF in size and will be technically complex space to support state of the art instructional and research facilities.

Justification

As Mason positions itself as a leader in the area of bio-medical and life sciences research additional space for academic and instructional and research partnerships is critical.

Alternatives Considered

Costing Methodology

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2019	0100 - General Fund	2322 - Construction, Buildings	$45,200,000
Full Funding	2019	0815 - 9(D) Debt Service - Construction Costs	2322 - Construction, Buildings	$15,000,000
			Total	$60,200,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$42,500,000	$42,500,000	$0
Sitework & Utility Construction	$1,000,000	$1,000,000	$0
Construction Cost Total	$43,500,000	$43,500,000	$0
Design & related Services from Other Costs tab	$5,600,000	$5,600,000	$0

Inspection & Testing Services from Other Costs tab	$1,100,000	$1,100,000	$0
Project Management & Other Costs from Other Costs tab	$3,900,000	$3,900,000	$0
Furnishings & Movable Equipment	$5,200,000	$5,200,000	$0
Construction Contingency	$900,000	$900,000	$0
Total Project Cost	$60,200,000	$60,200,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	$0
Construction Cost	GSF	100,000	$435
Total Project Cost	GSF	100,000	$602

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$4,400,000	$4,400,000	
A/E Reimbursables			
Specialty Consultants (Food Service, Acoustics, etc.)	$900,000	$900,000	
CM Design Phase Services			
Subsurface Investigations (Geotech, Soil Borings)	$100,000	$100,000	
Land Survey	$100,000	$100,000	
Archeological Survey			
Hazmat Survey & Design			
Value Engineering Services	$50,000	$50,000	
Cost Estimating Services	$50,000	$50,000	
Other Design & Related Services			
Design & Related Services Total	$5,600,000	$5,600,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$600,000	$600,000	
Project Testing Services (conc., steel, roofing, etc.)	$500,000	$500,000	
Inspection & Testing Services Total	$1,100,000	$1,100,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$600,000	$600,000	
Work By Owner	$2,000,000	$2,000,000	
BCOM Services	$100,000	$100,000	
Advertisements	$50,000	$50,000	
Printing & Reproduction	$50,000	$50,000	
Moving & Relocation Expenses	$100,000	$100,000	
Data & Voice Communications	$250,000	$250,000	
Signage	$50,000	$50,000	
Demolition			
Hazardous Material Abatement			
Utility Connection Fees	$300,000	$300,000	
Utility Relocations			
Commissioning	$400,000	$400,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$3,900,000	$3,900,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):01/07/2022

Supporting Documents

No supporting documents for this adjustment

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Cathy Wolfe	06/20/2013 04:13 PM	06/20/2013 04:13 PM
Continue Drafting	Cathy Wolfe	06/20/2013 04:13 PM	06/20/2013 04:13 PM
Continue Drafting	Cathy Wolfe	06/20/2013 04:51 PM	06/21/2013 10:43 AM
Agency Review Step 1	Matthew Johnson	06/21/2013 10:47 AM	06/21/2013 10:47 AM
Ready for DPB Submission	Cathy Wolfe	06/21/2013 11:06 AM	06/21/2013 11:07 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:33 PM	06/21/2013 04:35 PM
Agency Review Step 1	Tom Calhoun	06/21/2013 04:36 PM	06/21/2013 04:38 PM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:38 PM	06/21/2013 04:38 PM
DPB Review	Anne Smith	06/25/2013 04:16 PM	06/25/2013 04:17 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:59 AM	06/26/2013 07:59 AM
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Agency Review Step 1	Cathy Wolfe	07/02/2013 03:05 PM	07/02/2013 03:14 PM
Agency Review Step 1	Cathy Wolfe	07/02/2013 03:14 PM	07/02/2013 03:15 PM
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DPB Review	Anne Smith	07/04/2013 03:35 PM	07/04/2013 03:35 PM
DPB Review	Anne Smith	07/08/2013 10:04 AM	07/08/2013 10:05 AM
DPB Review	Anne Smith	07/10/2013 11:13 AM	07/10/2013 11:14 AM
DPB Review			

CapitalBudgetRequest

Renovate Enterprise Hall

Overview

Agency	George Mason University (247)
Project Code	none
Project Type	Improvements-Other
Biennium	2014-2016
Budget Round	Initial Bill
Request Origin	Previously Submitted
Building Name	Enterprise Hall
Project Location	Northern Virginia
Facility/Campus	GMU--Fairfax campus
Source of Request	Agency Request
Building Function	Academic Instruction & Administration
Infrastructure Element	Classroom / Office
Contains significant technology costs? No	
Contains significant energy costs? No	

Agency Narrative

Agency Description

This project includes the renovation of 100,000 GSF of Enterprise Hall originally constructed in 1995 to support the needs of the George Mason University School of Management (SOM). This project will include infrastructure and technology upgrades as well as interior renovations to improve the upper level administrative and office portions of the building. The FCI for Enterprise Hall is .31 in 2013.

More extensive renovation work will be completed to renovate the classroom wing and lower floors of the administrative wing. The School of Management is in great need of specialized classrooms; renovations will therefore update existing classrooms to provide classrooms more aligned with SOM and University pedagogies.

Additionally, the Mason School of Management has been forced to operate without the benefit of a Graduate and Executive Education presence – common in most Schools of Management. Additionally, today all students must find their way through a maze of long dark corridors to find resources and support. SOM has indicated that the dated appearance of interiors and the extremely closed plan have impacted retention, recruiting and fund raising efforts. The proposed renovation intends to open up the plan to create visible resource centers and to create an interior design that is not only functional but also inviting.
The renovation will be conducted in stages to allow for existing university classrooms and offices spaces to be occupied during construction; this will add complexity and cost to the project.

Justification

At the requested year of funding, Enterprise Hall will be over 22 years old and will require updates to HVAC and infrastructure systems to meet sustainability and energy use goals of the university. Additional maintenance items, such as roof replacement and window replacement/repair will be addressed as part of this project. The IT infrastructure throughout the building will be updated, and the AV systems in the existing university classrooms will be updated to assure the latest teaching technology is available to meet pedagogical needs.
As noted previously, the current conditions of the existing building have created challenges for faculty, staff and students alike. The facility is in desperate need of upgrades and improvements both to improve building operation & maintenance and to better serve current and future students in undergraduate, graduate and executive programs. Existing classrooms do not meet the specific needs for management and business education and the current plan does not offer visible or even identifiable program support spaces for undergraduate, graduate and executive education.

Impact if Not Funded:
• Inability to update aging MEP systems and building infrastructure
• In ability to effectively support graduate and executive education programs
• Inability to update university classrooms to meet technology and pedagogical needs

Alternatives Considered

Over the last several years, the School of Management through the office of Campus Planning has funded independent design studies to assess current building opportunities and constraints and to suggest possible small-scale renovations that could improve current conditions. In each case, the studies have indicated that a Capital Project would be required.

Costing Methodology

As a benchmark for construction costs, historical cost data from 23 projects with construction currently underway (or recently completed) at GMU were used, to the extent they characterized projects in the 2010-16 plan; otherwise, cost data from RS Means was used to characterize the cost for the projects requested.

Where estimates were available from the prior budget request submission (2010-2016), they were evaluated, modified (based on this developed cost model), and escalated into the planned biennium with quantities adjusted to meet current scope data.

Beyond the specific construction costs, historic costs derived from over 40 GMU projects executed in the previous 4 years were utilized as a basis to determine all other cost portions of the submission. It is noted that all projects are escalated at the DEB anticipated level into the future based upon planned mid-points of construction.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2019	0100 - General Fund	2322 - Construction, Buildings	$43,109,000
			Total	$43,109,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost	$0	$0	$0
Building & Built-in Equipment	$31,096,000	$31,096,000	$0
Sitework & Utility Construction	$0	$0	$0
Construction Cost Total	$31,096,000	$31,096,000	$0
Design & related Services from Other Costs tab	$3,694,000	$3,694,000	$0
Inspection & Testing Services from Other Costs tab	$622,000	$622,000	$0
Project Management & Other Costs from Other Costs tab	$2,243,000	$2,243,000	$0
Furnishings & Movable Equipment	$4,832,000	$4,832,000	$0
Construction Contingency	$622,000	$622,000	$0
Total Project Cost	$43,109,000	$43,109,000	$0

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost	GSF	100,000	$0
Construction Cost	GSF	100,000	$311
Total Project Cost	GSF	100,000	$431

Other Costs

Cost Type	Total Project Costs	RequestedFunding	DGS Rec
Design & Related Service Items			
A/E Basic Services	$3,110,000	$3,110,000	
A/E Reimbursables	$63,000	$63,000	
Specialty Consultants (Food Service, Acoustics, etc.)	$311,000	$311,000	
CM Design Phase Services	$150,000	$150,000	
Subsurface Investigations (Geotech, Soil Borings)	$0	$0	
Land Survey	$0	$0	
Archeological Survey	$0	$0	
Hazmat Survey & Design	$0	$0	
Value Engineering Services	$30,000	$30,000	

Cost Estimating Services	$30,000	$30,000	
Other Design & Related Services			
Design & Related Services Total	$3,694,000	$3,694,000	
Inspection & Testing Service Items			
Project Inspection Services (inhouse or consultant)	$311,000	$311,000	
Project Testing Services (conc., steel, roofing, etc.)	$311,000	$311,000	
Inspection & Testing Services Total	$622,000	$622,000	
Project Management & Other Cost Items			
Project Management (inhouse or consultant)	$311,000	$311,000	
Work By Owner	$1,070,000	$1,070,000	
BCOM Services	$70,000	$70,000	
Advertisements	$4,000	$4,000	
Printing & Reproduction	$52,000	$52,000	
Moving & Relocation Expenses	$100,000	$100,000	
Data & Voice Communications	$275,000	$275,000	
Signage	$50,000	$50,000	
Demolition			
Hazardous Material Abatement	$0	$0	
Utility Connection Fees	$0	$0	
Utility Relocations	$0	$0	
Commissioning	$311,000	$311,000	
Miscellaneous Other Costs			
Project Management & Other Costs Total	$2,243,000	$2,243,000	

Operating and Maintenance Costs (Agency)

Cost Type	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
GF Dollars	$0	$0	$0	$0	$0	$0
NGF Dollars	$0	$0	$0	$0	$0	$0
GF Positions	0.00	0.00	0.00	0.00	0.00	0.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	$0	$0	$0	$0	$0	$0
GF Revenue	$0	$0	$0	$0	$0	$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

No supporting documents for this adjustment

Workflow History

Step Name	User Name	Claimed	Submitted
Enter Capital Budget Request	Laura Manno	06/13/2013 02:19 PM	06/13/2013 02:19 PM
Continue Drafting	Laura Manno	06/13/2013 02:20 PM	06/13/2013 02:20 PM
Continue Drafting	Laura Manno	06/14/2013 11:54 AM	06/14/2013 11:55 AM
Continue Drafting	Laura Manno	06/14/2013 02:01 PM	06/14/2013 02:07 PM
Continue Drafting	Laura Manno	06/20/2013 01:38 PM	06/20/2013 01:46 PM
Continue Drafting	Laura Manno	06/20/2013 03:37 PM	06/20/2013 03:37 PM
Agency Review Step 1	Cathy Wolfe	06/21/2013 12:06 AM	06/21/2013 12:27 AM
Agency Review Step 1	Matthew Johnson	06/21/2013 09:25 AM	06/21/2013 09:26 AM
Ready for DPB Submission	Tom Calhoun	06/21/2013 04:43 PM	06/21/2013 04:44 PM

DPB Review	Anne Smith	06/25/2013 04:19 PM	06/25/2013 04:20 PM
Agency Review Step 1	Tom Calhoun	06/26/2013 07:57 AM	06/26/2013 07:57 AM
Continue Drafting	Cathy Wolfe	07/02/2013 03:15 PM	07/02/2013 03:19 PM
Agency Review Step 1	Tom Calhoun	07/03/2013 10:32 AM	07/03/2013 10:35 AM
Ready for DPB Submission	Tom Calhoun	07/03/2013 04:27 PM	07/03/2013 04:27 PM
DPB Review	Anne Smith	07/04/2013 03:31 PM	07/04/2013 03:31 PM
DPB Review	Anne Smith	07/08/2013 09:58 AM	07/08/2013 10:00 AM
DPB Review			