DGS-30-456
(Rev. 06/17)

Construction Management at Risk
Procurement Review Submittal Form

General Project Information

Agency Name:	Virginia Polytechnic Institute and State University	
Is the agency a covered institution per §2.2-4379?		Yes
Project Name:	Student Wellness Improvements	
Project Number:	208-L00054-000	

Other Project Information

Advising A/E Name:	CannonDesign	License Number:	407004238
COV Sections: §2.2-4380.B.2, §2.2-4381.C.2			
Attach written determination for use of CM at Risk.			
COV Sections: §2.2-4380.C.2, §2.2-4380.B.1; §2.2-4381.D.2, §2.2-4381.C.1			
Is the procurement process proposed a two-step process?			Yes
COV Sections: §2.2-4380.C.2, §2.2-4380.B.7; §2.2-4381.D.2, §2.2-4381.C.7			

Agency Reasons for Use of CM at Risk

Construction Cost (COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	Yes
Building Use (COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	Yes
Project Timeline (COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	Yes
Need for Project Phasing (COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	Yes
Project Complexity (COV Sections: §2.2-4381.B.1, §2.2-4380.C.4, §2.2-4381.D.4)	Yes
Value Eng. and/or Constructability Analysis Concurrent with Design (COV Sections: §2.2-4381.A)	Yes
Need for Quality Control/Vendor Prequalification (COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	Yes
Need for Cost/Design Contol (COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	Yes

Supporting Information for Procurement Method Selection

Project Use (i.e. lab, classroom, office, etc.): (COV Sections: §2.2-4380.C.3; §2.2-4381.D.3)

The projects consists of the complete renovation of War Memorial Hall along with critical renovations to McComas Hall to address expanding needs for student counseling services, student health services, and expanded fitness programming. The key enabler of this effort will include relocation of the Cook Counseling Center to War Memorial Hall to free up space in McComas Hall for the expansion of the Schiffert Health Center.

War Memorial Hall:

War Memorial Hall, built in 1925 is approximately 201,000 gross square feet and is a marquee architectural presence next to the historic Virginia Tech Drillfield. The proposed improvements include renovating approximately 175,000 gross square feet, demolition of approximately 26,000 gross square feet of the east side of the building, and a 38,000 gross square foot replacement addition on the east side of the building. The final size of the facility will be approximately 213,000 gross square feet and is affectively a whole building renovation. The improvements will provide space for the programs described below, will address deferred maintenance and code requirements, and will install air conditioning to the building.

- Cook Counseling Center and Hokie Wellness will be located on the third floor creating a centrally located environment for counseling and coordination of prevention, educational intervention, and treatment services. This will consolidate offices currently distributed in multiple locations, inclusive of McComas Hall, into one central location.

- Recreational Sports will be located on the first and second floors and will include five (5) basketball courts, four (4) racquetball courts, two (2) squash courts, an expanded weight and cardio area, multipurpose rooms, a performance laboratory to support the wellness program, and office space for recreation sports administration.

- The department of Human Nutrition, Foods, and Exercise (HNFE) will shift to the second floor from the third floor to make space for counseling services moving from McComas. The space will include a research clinic laboratory with three (3) procedure rooms, two (2) consultation rooms, food preparation area, biochemistry laboratory, metabolic work area, and open metabolic areas.

- The School of Education will remain in the historic front section of War Memorial Hall with renovated and updated offices, three (3) large classrooms, two (2) small classrooms, conference rooms, computer laboratory, and research space.

McComas Hall:

The proposed construction to Schiffert Health Center in McComas Hall renovates 19,000 square feet in the area vacated by counseling services to accommodate the growing needs of the existing student health services due to enrollment growth. A reconfiguration will alleviate inadequate service conditions that currently exist in the Schiffert Health Center and address privacy and confidentiality protocols for students.

Construction Cost:	$48,000,000	(COV Sections: §2.2-4380.C.3; §2.2-4381.D.3)		
Project schedule: (COV Sections: §2.2-4380.C.3; §2.2-4381.D.3)	Design Start Date	11/20/2017	Design Compl. Date	1/8/2019
	Const. Start Date	3/6/2019	Const. Compl. Date	12/7/2021
	Attach bar chart schedule to illustrate fast tracking or other schedule complexities. (COV Sections: §2.2-4380.C.3, §2.2-4380.C.4; §2.2-4381.D.3, §2.2-4381.D.4)			

Additional description to highlight key attributes that affect the project complexity, need for value engineering/constuctabilitiy analysis, qualitiy control/vendor prequalification, and cost/design control as indicated by "Yes" answers above:

Evaluation of the following aspects of this project fully justify the use of CMaR in lieu of Design-Bid-Build Delivery Method. The use of a CMaR is essential to this project for the reasons outlined below:

Construction Cost

Budgetary constraints on this project are so severe that significant programmatic and facilities improvement goals have had to be reduced to realize the project. Accordingly, there is an enhanced need to very tightly manage construction costs.

• Pre-construction services: Collaborative involvement by the CMaR with the A/E throughout the preliminary design and working drawing phases well before construction begins will better inform design processes, enhance project cost estimation, ensure sequencing of work is efficiently planned and budgeted, and provide constructability analysis—all of which are critical to the maintaining overall project costs within budget.
• Establishment of Guaranteed Maximum Price (GMP): This project is a critical component in making the planned enrollment growth at Virginia Tech a success. Current wellness programs and their facilities will not accommodate the planned growth without this project. Establishment of a GMP will eliminate the possibility of a D-B-B bid bust that could derail project execution timelines.

Building Use

• The Cook Counseling Center, Schiffert Health Center, Recreational Sports Program and the HNFE Department are integral and synergistic operations. It's essential they maintain continuity of services during construction. Collaborative CMaR engagement throughout design will better inform the project delivery sequencing necessary to enable this priority.

Project Timeline

• Project completion milestones must adhere to the academic calendar. Use of a CMaR mitigates risk to the overall project schedule. Engagement by the CMaR with affected organizations during pre-construction and construction phases is essential to meeting project milestones.
• Involvement of the CMaR in developing procurement strategies for long-lead items will mitigate risks to project construction schedules.

Need for Project Phasing

This project will require a minimum of four (4) phases to implement:

Phase 1a:
- Demolish portion of War Memorial Hall
- Build replacement/addition
- Renovate historic 1925 portion of War Memorial Hall

Phase 2a:
- Move Cook Counseling Center into new addition at War Memorial Hall
- Renovate vacated Cook Counseling area at McComas Hall to expand Schiffert Health Center

Phase 1b:
- Renovate recreational sports spaces and primary circulation areas at War Memorial Hall

Phase 2b:
- Temporarily move Schiffert Health Center Activities to new health center space at previous location of Cook Counseling Center
- Renovate Schiffert Health Center

• The complexity and timing of these highly integrated phases make it essential for CMaR pre-construction engagement to ensure well-orchestrated phase execution throughout construction

Project Complexity

• This project consists of major renovations to two buildings on remotely located sites on campus. Renovation projects are inherently more complicated that green-field construction. These project characteristics drive the need for a highly qualified and experienced contractor.
• Project challenges: Construction operations within occupied facilities, medical clinic construction requirements within McComas Hall, historical significance of the existing War Memorial Hall, tight jobsite area constraints within the main campus and the historic Drillfield precinct, traffic and pedestrian congestion, limited circulation and lay-down areas, and simultaneous construction on two remotely located project sites drive the need for selection of a contractor with appropriate experience and capability.
• Use of two-step procurement procedures will help ensure selection of a CMaR with the expertise and experience necessary to overcome the above-listed challenges and fully execute this project.

Value Engineering and/or Constructability Analysis Concurrent with Design

• As previously stated, this project has ambitious goals with a very tight budget. Value Engineering coupled with constructability analysis throughout the project design phases is essential to project budgetary success—and overall project success. These project control mechanisms are best incorporated through use of the CMaR process and cannot be as effectively implemented by conducted a third party 40-hour value engineering analysis.

Need for Quality Control/Vendor Prequalification

• Use of two-step procurement procedures will help ensure selection of a CMaR with the expertise and experience necessary to overcome the above-listed challenges and fully execute this project.
• Pre-construction involvement of the CMaR throughout the design process will better ensure appropriate quality control measures are in place and that high quality facilities are delivered during the construction phase

Need for Cost/Design Control

• Overall complexity of the project across multiple building sites with simultaneous construction operations and tightly orchestrated movement/relocation of ongoing student services programs opens the risk for higher construction costs. Involvement of a CMaR with full exposure to the project throughout pre-construction and construction phases is essential to controlling project costs in this complex environment.
• Collaborative involvement of the CMaR working alongside the design team throughout the design process will ensure constructability analyses mechanisms and design controls are in place to ensure university requirements are met and project goals are realized.

(COV Sections: §2.2-4380.C.4; §2.2-4381.D.4)

Submitted by: Christopher H. Kious Phd, PE, Date: 2-21-18

Signature:

Title: Associate Vice President and Chief Facilities Officer
(Agency Head or Authorized Representative)

For DGS Use Only

Based upon the information provided by the Agency, the use of Construction Management at Risk is NOT recommended for this project.

Recommended by: W. M. Coppa 2/27/18

W. Michael Coppa, RA
Acting Director, Division of Engineering and Buildings

VIRGINIA TECH

Facilities Contracts
Sterrett Center
230 Sterrett Drive
Blacksburg, Virginia 24061

MEMORANDUM

TO: Christopher H. Kiwus, Associate Vice President and Chief Facilities Officer

FROM: DT Dwyn Taylor, Assistant Vice President for Operations and Construction
LF Lynn Eichhorn, Interim Director of Facilities Contracts
GM Grant Morris, Director of Capital Construction and Renovations
SB Shellie Black, Senior Contracts Officer
TJ Travis Jessee, Supervisory Project Manager

DATE: February 21, 2018

SUBJECT: Student Wellness Improvements
Project # 208-L00054-000
Project Delivery Method

Your approval is requested to implement the referenced project using the Construction Management at Risk (CMaR) delivery method.

A qualifications based CMaR construction delivery method is recommended for this project due to the following reasons as further documented in the attached CMaR Procurement Review Submittal Form that will be forwarded to the Virginia Department of General Services (DGS) for their review:

Construction Cost
Building Use
Project Timeline
Need for Project Phasing
Project Complexity
Value Engineering and/or Constructability Analysis Concurrent with Design
Need for Quality Control/Vendor Prequalification
Need for Cost/Design Control

APPROVAL:

2/21/18

Associate Vice President and Chief Facilities Officer — Date