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

Construction Management at Risk
Procurement Review Submittal Form

General Project Information

Agency Name:	Virginia State University	
Is the agency a covered institution per §2.2-4379?		Yes
Project Name:	DEMOLISH/REPLACE DANIEL GYM AND DEMOLISH HARRIS HALL	
Project Number:	212-18333-000	

Other Project Information

Advising A/E Name:	EYP Architecture & Engineering	License Number:	401008260
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 VSU Academic Commons project will consolidate the College of Humanities and Social Sciences together with the College of Education into a shared facility. The new facility will contain an estimated gross area of 175,000 SF. Specialty spaces include an active classroom / study learning environment, a black box theater, a natatorium and gymnasium with an elevated running track. Additional specialized spaces include active academic classrooms, media laboratories, broadcast production labs, language and literature labs, art and design department ceramics labs and studios, multipurpose auditoriums, distance learning technologies, faculty offices, and support spaces. Final site work for the Academic Commons will not be completed until after the demolition of Harris Hall. The demolition of Daniel Gymnasium will follow. The total project cost is estimated at $82,872,000. Specific technically complex programmatic construction requirements are the pool, gym with elevated track, Black Box Theater, TV studio, recording studio.

Construction Cost:	$55,624,000	(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	10/25/2017	Design Compl. Date	12/3/2019
	Const. Start Date	7/2/2019	Const. Compl. Date	6/1/2021
	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:

This project will be constructed with specialized spaces for physical training, recreational sports labs, a pool and associated spaces, and a gymnasium with an elevated running track. During construction the pool will require an environmental boundary between the natatorium and the academic areas to limit vapor leaving the natatorium, controlled access to the natatorium and designation of any wet areas outside of the natatorium, and routing of pool chemical delivery from a site perspective and/or through the building. Mechanical systems between pool and other space types will require careful balancing and coordination to maintain appropriate humidity, and odor control. The inclusion of the swimming pool will require specialty sound absorption to allow for a space conducive for teaching and learning in a high-humidity environment.

The program of the building uniquely combines multiple space types with functionally different structural, mechanical, technology, and utility infrastructure requirements. These requirements vary between the differing needs of classroom and office spaces, a large natatorium, a black box theatre, fitness rooms, and a ceramics area. The wide range of spaces will also require specialty acoustical treatments, enhanced sound isolation, and quiet mechanical systems. The Black Box Theatre requires specially-designed mechanical systems which can move a significant volume of air extremely quietly. This will likely require sound attenuators, large ducts and duct lining. The theater walls / entrances will need to have a high STC performance, and large quantities of specialty sound absorbing and sound diffusing treatments will be needed throughout the Black Box. Spaces incorporating audiovisual equipment, especially distance learning and conferencing systems, require quieter-than typical and low-reverberant environments, in order to allow them to work easily, and not transmit/record extraneous noise.

The inclusion of a performance space adds multiple construction complexities to the project which include:
- Complex structure and structural requirements to support the performance rigging and theatre equipment systems used for production.
- Extensive electrical infrastructure to support theatrical lighting and performance power
- Extensive data networks to support theatrical lighting and performance a/v systems used for production

VSU's academic program constraints require phasing of construction which allows design simultaneous with construction using an early release site and foundation package, a core and shell package, and completion with an interior construction package. The design will be complete in the late autumn of 2019, yet we will start construction in July of 2019.

VSU Harris Hall includes a terrace on the west side of the building which has exterior stairs to the second floor auditorium. The terrace overlaps the proposed site of the Academic Commons according to the VSU 2017 refreshed masterplan. Part of the Harris Hall terrace will be demolished during the utility and foundation construction for the proposed building. The Harris Hall terrace auditorium access will require construction modifications to maintain pedestrian access to the auditorium during construction. The demolition of Harris Hall will require close daily coordination with pedestrian and vehicular traffic due to the adjacency of the completed building. Final site work for the Academic Commons project will not be completed until after the demolition of Harris Hall.

Existing utilities are currently routed through Harris Hall and the area of construction of the new facility and will need to be relocated. Since these lines service multiple buildings that need to remain in service throughout the construction period, pre-construction coordination of required service interruptions and system testing is critically important. Steam lines, storm and sanitary sewers will be extended outside of the primary construction zone and will also need to be closely coordinated with University operations for continuity of vehicular and pedestrian movements around and across the areas of work as well as for continuous operation of adjacent facilities. It is anticipated that the water main will need to be extended for more than 1000' to serve the project. It will run parallel to another active project, and it will require coordination of service switch over for multiple buildings in addition to vehicular and pedestrian safety concerns. Because of the potentially fluid nature of the University calendar to accommodate events and because there are multiple systems and utility providers involved in relocations and/or extensions, pre-construction services expertise is required during the design of the sitework. Pre-construction services will also aid with designing the foundation where records indicate a possible abandoned road bed.

The project will require complex structural system coordination due to the long and short span conditions required by various space types, high ceiling spaces, and needs for structural isolation of some spaces.

Pre-construction services from a CM at risk support the project with Value Engineering and constructability reviews during the early design process. These services ensure the project timeline is as efficient as possible, and that the project budgets are maintained.

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

Submitted by: Jonathan A Taylor Date: 7/12/2018

Signature: Jonathan A Taylor

Title: Director of Capital Outlay

(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 recommended for this project.

Recommended by: W. M. Coppa 7/16/18

W. Michael Coppa, RA

Acting Director, Division of Engineering and Buildings