

**DGS-30-456**

(Rev. 10/18)

## Construction Management at Risk

### Procurement Review Submittal Form

**General Project Information**

Agency Name:	Virginia Commonwealth University (236)		
Is the agency a covered institution per §2.2-4379?	Yes		
Project Name:	Arts and Innovation Academic Building		
Project Number:	236-18500-000		

**Other Project Information**

Advising A/E Name:	Clifford V. Gayley	License Number:	401017588
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)	No
Need for Project Phasing (COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	No
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 Control (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 proposed 209,500 gross square foot Arts and Innovation Academic Building will be located on the southeast corner of Broad and Belvidere Streets, consolidating arts and innovation programs in a single location. It will be home to new hybrid classroom-laboratories, interdisciplinary performance and makerspaces, and creative incubators for rapidly growing partnerships across arts, business, medicine, and engineering. The facility must be highly flexible with the ability to rapidly reconfigure space on a regular basis. The activities in this building will range from opera to quantum computing; integrating				
Construction Cost:	\$186,888,000 (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	11/1/2021	Design Compl. Date	5/1/2024
	Const. Start Date	2/1/2024	Const. Compl. Date	8/1/2026
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/constructability analysis, quality control/vendor prequalification, and cost/design control as indicated by "Yes" answers above:

The Art Innovation Academic facility is a unique multi-discipline facility where the consolidation of use and function is a fundamentally more efficient use of long-term resources. To accomplish this functionality, complex interrelated elements must be constructed to work independently and holistically with the facility creating the potential for very high costs. Elements like the proper earth retention system for a zero lot-line deep foundation system against urban infrastructure, critical infrastructure pathways within orchestra pits, theatre seating systems and fly-towers, noise and vibration isolating connections between spaces, and others that require a CMaR team's input to inform design with material and constructability detail. Focus will not only be on value management, but will require cost containment strategies of uniquely complicated systems to encompass economic volatility and material availability.

During the construction process highly complex performance systems and assemblies will require significant coordination and collaboration with varied project specialists due to the innovative multi-discipline building use. This design collaboration will include efforts to ensure space amenities and configurations meet the needs of multi-functional space to operate at a top national level. Among the unique challenges of this project are the many acoustical details that must be evaluated to keep the sounds of a musical performance on a lower level from intruding on a theatrical performance on the top level all while the entirety of the facility keeps the sounds of Broad St. from affecting any spaces acoustics. Without the input of the CMaR team, the ability to build a facility that works together with special relationships that must function independently would likely fail when the details intersect.

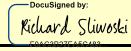
It is very rare that a single facility would have class laboratories and performance theaters under the same roof. Facilities like this one supporting multi-disciplinary functions are uncommon and complex as the difference in those environments must overcome unique challenges to avoid creating adverse effects to the other spaces. These unique issues require specialized installers to work with the design team to overcome constructability issues. This unique scenario is compounded by the large size of the facility where this cross collaboration will be much greater than a single intersection further increasing the complexity of the project.

Due to the availability of many critical facility components specific to performing arts and digital technology, value engineering and constructability analysis concurrent during design with suppliers and installers will be paramount in ensuring availability of cost and functionally effective components. Equipment like performance theatre sound systems, lighting and actor rigging systems, and advanced media production technology have widely variable cost scales. The rate of technological advancement affecting many of these systems is fast paced which increases the impact of the CMaR's construction input during design.

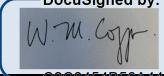
With so many intersecting functions and construction assemblies, the quality of those installations must be exact. Construction partners vetted for their responsible experience with these specialized systems will be paramount to not only install the components, but to provide feedback if an adverse condition exists. Without the ability to vet those with an adequate experience and competency with these components would likely set the vendor up to fail and ultimately the project. VCU upholds its responsibility to ensure the success of construction partners. The functions described above are critical elements to do so.

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

Submitted by: Richard F. Sliwoski Date: 9/19/2023

Signature: 

Title: Associate Vice President, Facilities Management  
(Agency Head or Authorized Representative)

<b>For DGS Use Only</b>	
Based upon the information provided by the Agency, the use of Construction Management at Risk <b>IS</b> recommended for this project.	
Recommended by:	<p>DocuSigned by:  W. Michael Coppa, RA Director, Division of Engineering and Buildings</p>