

**DGS-30-456**

(Rev. 02/22)

## Construction Management at Risk Procurement Review Submittal Form

**General Project Information**

Agency Name:	James Madison University		
Is the agency a covered institution per §2.2-4379?			Yes
Project Name:	Construct Student Housing		
Project Number:	216-18771-000		

**Other Project Information**

Advising A/E Name:	Kirk Morris	License Number:	401018582
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)	No
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)	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 scope of the new Student Housing project includes the construction of a 400 -500 bed building with a mix of traditional single and double style units for freshmen, as well as suite and apartment style units for upperclassmen. Other amenities will include study spaces, classrooms, laundry and lounge space. Rooms will be designed to be flexible and allow for personal expression. This project will improve the architecture, infrastructure, technology and life safety aspects to enhance student life, promote community and meet the demands of today's students.				
Construction Cost:		\$68,466,005	(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	9/15/2025	Design Compl. Date	12/3/2026
	Const. Start Date	2/15/2027	Const. Compl. Date	6/28/2028
	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 university has progressed with the procurement of the design team for the new student housing project. The Construction Manager at Risk (CMaR) delivery method as compared to Design/Build and Design-Bid-Build, is necessary for James Madison University's new student housing project due to an expedited timeline and the complexity of the program integrating multiple uses within a single facility. The project will combine a mix residential function for both upper classman and freshman, as well as complex academic and community components.

**Project Timeline:**

Given the 16-month construction timeline, CMaR represents the sole viable method to meet the accelerated project completion date. Should the deadline be exceeded by even a single day, it would lead to a delay of an entire year, resulting in significant financial losses for the university, amounting to millions in lost revenue. Coordination during the design phase is necessary to enabling crucial input on constructability, project phasing, and the selection and procurement of long lead items. As this facility will incorporate multiple DOAS units and chillers, which typically have lead times of 30 to 40 weeks, along with electrical equipment such as switchgear, switchboards, transformers, emergency generators, and fuses that require 40 to 50 weeks for delivery, it is imperative that the construction manager selects and procures this equipment early to adhere to the expedited schedule. In contrast, the design-bid-build approach necessitates that contractors provide shop drawings for this equipment as part of their bidding process.

**Project Complexity:**

JMU's new student housing facility will feature a mixed-use building; levels 2-5 will consist of a blend of traditional single, traditional double, and suite-style units catering to both freshmen and upperclassmen. Each floor will include pod-style bathrooms, laundry facilities, lounge areas, and academic study spaces. Approximately one-third of the ground floor will be designated for residential units; however, the majority will serve alternative purposes, such as mechanical, public, and academic spaces for the College of Integrated Science and Engineering (CISE). CISE will house a groundbreaking high bay research lab on the ground floor, the first of its kind. This lab will incorporate various design features to support a wide range of engineering and research activities, contributing to a highly intricate design for a residential facility. The complexities of residential and lab occupancy separation, fire and life safety will be of utmost importance. Design features will include large overhead doors leading to the exterior, trolley cranes for handling materials and equipment, a wind tunnel, hooded hot work/welding and machining stations, cleaning stations, a band saw station, and an acoustics lab. The lab will offer multiple multi-use and physically adaptable workstations. The generation of significant heat, sparks, and hazardous fumes from welding/hot work and the use of harsh chemicals for cleaning necessitates advanced fire protection, grease interceptor, ventilation, and exhaust systems—all of which will be flexible and adjustable based on the specific tasks at hand. The lab will be equipped with physically adaptable fume extraction and dust collection arms to eliminate harmful fumes and particulates from the workstations and surrounding air. These systems will be integrated and coordinated with the overall building systems and pre-programmed through Building Automation Systems (BAS).

The development of a residential facility that incorporates a distinctive academic environment, like the high bay CISE lab, necessitates a degree of design and coordination that exceeds standard practices. It is essential to prioritize and finalize the lab's MEP design at an early stage. Mitigating noise and vibration will be of paramount importance. Given that the lab will feature advanced and intricate HVAC systems, specialized equipment, and increased acoustical standards, it is crucial to make these decisions, coordinate the systems and procure items early to account for long lead times.


**Site Constraints:**

The new student housing facility will be located directly beside the recently constructed Jennings Hall and existing University Boulevard – a major thoroughfare for the City of Harrisonburg. During the construction of the new student housing facility, the City of Harrisonburg will be undergoing a major reconstruction project to straighten University Boulevard as a means to streamline traffic through this section of the City and university. University Boulevard is the only road serving the new student housing site; careful coordination between a construction manager and the City will be critical to minimize scheduling and delivery conflicts between the university's housing project and city-managed roadway project. Construction for the new student housing project will also be occurring over two academic school years, requiring a well-coordinated and sequenced/phased schedule to minimize disruptions to surrounding facilities and students. Coordination during the sequencing, design and logistics phase will dramatically decreases any negative impacts this capital project could have on the university and surrounding community.

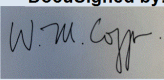
(COV Sections: §2.2-4380.C.4; §2.2-4381.D.4)

Submitted by: Craig Short

Date: 10/6/15

Signature: 

Title: Associate Vice President of Business Services  
(Agency Head or Authorized Representative)

For DGS Use Only	
Based upon the information provided by the Agency, the use of Construction Management at Risk	
<b>IS Approved</b> <del>recommended</del> for this project.	
Recommended by:	<div><div>DocuSigned by:</div><div></div><div>02C0454B5CA44EF...</div></div>
W. Michael Coppa, RA Director, Division of Engineering and Buildings	