DGS-30-456
(Rev. 10/18)

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:	Renovate & Expand Carrier Library	
Project Number:	216-18485-000	

Other Project Information

Advising A/E Name:	Moseley Architects	License Number:	410000059
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 scope of the project includes renovation of the existing 121,200 Carrier Library with new finishes, building systems and life safety systems to meet the new technological and spacial standards for higher education libraries. The scope also include a 69,300 gsf addition to address the campus wide deficit of 157,542 gsf of library space and will create more functional space in Carrier Library with the removal of the 2 structural stacks in the existing building and additions. Collections that have been stored across campus will be able to be showcased under one central area. Flexibility of space is important and the implementation of more digital components will be a vital influence for this project and to the future of library resources. The new addition creates a new entrance and welcoming face on Grace Street and improves ADA guidelines, pedestrian circulation and connectivity to the north side of campus.

Construction Cost:	$72,965,646	(COV Sections: §2.2-4380.C.3; §2.2-4381.D.3)		
Project schedule:	Design Start Date	5/25/2021	Design Compl. Date	PD submittals by 4/12/2022
(COV Sections: §2.2-	Const. Start Date	tbd	Const. Compl. Date	tbd

4380.C.3; §2.2-4381.D.3)	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:

Construction Cost: Given the massive size of the building, and the needed updated to the various "additions" from years past along with the tightly congested area where work will be completed, this project will be of extremely high cost. Also given the current unknown workforce conditions, unknown supply chain and unknown resources, the project cost could cause many hurdles. Unforeseen limestone and karst topography may pose challenges for a conventional foundation system. As site conditions become more fully known during the early stages of design, sub-surface bedrock or other conditions may drive the need for alternative foundation systems and below grade building characteristics. Collaborative involvement by the CM-at-Risk with the A/E throughout the schematic design and through 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 which will be critical to maintaining overall project costs within budget.

Project Phasing and Complexity: This project has a 30-month construction duration planned. Space optimization and a building with up to date technological advancement in the heart of campus are in high demand and is pushing the timeline for this project. Being a pool-funded project as well is driving the need to get a CM on board early and hopefully optimize project mobilization/start. Engagement by the CM during pre-construction phases will inform the design and necessary phasing needed to address the complexities of this project. Questions to consider by a CM being on board early are: 1. Will it be most cost effective and less disruptive to take the building offline for the duration of construction or complete the work in phases. 2. Will collaboration with the designer, BIM modeling and on-site investigations by the CM better determine the most feasible "runs" and spaces for the relocation of utilities, hvac and mechanical systems. 3. Will subject matter experts and subcontractors be able to identify the pros and cons of building systems/options early in the design phase, such as; rooftop or surface mounted equipment. Answers to these questions will be valuable in estimating the cost of construction through various phasing options and be essential in identifying project milestones and coordination of long-lead items (i.e. steel, air-handler units, and IT infrastructure components).

Multiple renovations to Carrier Library have been undertaken through various construction eras: the 30's, 60's

Multiple renovations to Carrier Library have been undertaken through various construction eras, the 50's, 60's and 80's. Those various methods and previous phases of construction over the years pose many unknown constructability conditions. Asbestos testing is also a factor as well and may inform the need for early-release packages. Material breakdown over time and material/construction continuity throughout the building can also be identified early. The CM can investigate these conditions during design phases and help guide the design, suggest alternative options or methods, help with ordering and lead times, and most importantly minimize unnecessary costs early on. Partnering with a CM will also allow for interactions with key subcontractors early on that can address concerns that may impact this current renovation/expansion such as: unsuitable soils, energy efficiencies, special concerns related to the physical and philosophical changes of library function and focus, and connectivity issues in building infrastructure but also how the building connects to the rest of campus.

The site is very tight and located in the core of campus adjacent to the Quad, parking decks, dining facilities, classrooms, and administrative buildings that all lend to high concentrations of pedestrian and vehicular traffic. The impacts include: high volume vehicle and pedestrian traffic management challenges, little to no adjacent laydown area, just-in-time material deliveries, extensive underground utilities coordination requirements, shared project borders and associated project site control systems. We want to ensure optimal management and construction techniques are identified early, which will minimize disruptions, minimize costs, and ensure the safety actions needed for the area, further minimizing any delays that may result from the inability to study patterns and processes before work commences.

Prequalification and Strong/Diverse Vendor Pool: The use of CM-at-Risk will allow the University and the CM to be strategic about the partners/subcontractors that can be utilized for this project. The objective is to have a CM identify and prequalify strong, diverse subcontractors that can be vital influences in key trades, provide unique perspectives and input, and ultimately further the SWaM goals of the University and the Commonwealth that have been at a deficit on previous projects and identified as a need for improvement in studies.

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

Submitted by: _____ Date: Aug 12, 2021

Signature: _____

Title: AVP FOR FINANCE

(Agency Head or Authorized Representative)

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Based upon the information provided by the Agency, the use of Construction Management at Risk is recommended for this project.

Recommended by: _____

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