



COUNTY OF ALBEMARLE
Facilities & Environmental Services
Facilities Planning and Construction Division
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Memorandum

Date: February 26, 2020

To: Tom Winder, Purchasing Agent, County of Albemarle

From: Blake Abplanalp, Chief of Facilities Planning & Construction, FES

Project: Courts Complex Additions and Renovations, #16101

Re: Use of Construction Manager at Risk Contract for Courts Complex Additions and Renovations Project

Background:

Per the requirements of Chapter 28, Section 28-2 of the Albemarle County Purchasing Manual, Facilities and Environmental Services (FES) staff are requesting that construction for the Courts Complex Additions and Renovations project be procured utilizing the Construction Management at Risk (CMAR) method of project delivery. This Section requires that the Owner's first formal action shall be to request written authority and receive approval from the Board of Supervisors to use this construction management method. The request shall justify and substantiate that a CMAR contract meets the criteria found in this Chapter and Virginia Code § 2.2-4382. The request shall also include a written determination from the Purchasing Agent that sealed bidding is not practicable or is not fiscally advantageous.

This request would be contingent upon approval by the Board of Supervisors to add Construction Management at Risk method of procurement into the County Purchasing Manual at their 3/4/2020 meeting. Staff believes that this method of procurement and project execution would be advantageous for this project, both fiscally and in terms of project duration and the quality of the facilities to be constructed and renovated.

Summary:

Construction Management at Risk (CMAR) is an innovative approach to construction project delivery methods, useful in the completion of projects of various sizes, values and complexity. Using the CMAR method approaches project planning, design and execution in a different way than the traditional design-bid-build process. CMAR reduces the time to complete a construction project, reduces change orders during construction, and may reduce overall project costs.

CMAR is a delivery approach where a construction management firm acts as an owner's consultant during the pre-development phase of the project. The CMAR works with the design team by collaborating to provide input and review at various stages of design documents to develop cost-efficient approaches to a project. By being involved during the design process, potential change orders during construction are reduced. The CMAR is empowered to contact multiple subcontractors to provide pricing and technical advice pertaining to their respective trades. The CMAR participates in an ongoing value engineering / constructability and cost analysis process to identify cost and quality related issues on behalf of the Owner. This work results in more cost-efficient decisions on materials, equipment and methods of performing the work, fewer costly change orders and the subsequent project delays associated with those change orders.

The method requires the hiring of a company, most often a general construction contractor, with technical and financial capabilities appropriate to the project. A CMAR may be brought in during the initial planning and pre-planning stages, during the design and drawing phases, or at the pre-construction stage. The selection of a CMAR would be made through an initial Request for Proposals for Contractor Pre-Qualification (Phase 1), followed by a process to determine the contractor's Qualifications / Experience and Project Approach (Phase 2). This would occur while the design team is completing design documents through the schematic phase (approx. 35% complete) This would be followed by interviews of firms and three (3) would be selected to provide construction pricing based on the architect's completed schematic plans. One firm would be selected, and that firm should receive two contracts, one for pre-construction services and the second for construction and project close-out.

The Architect (A/E) will provide a cost estimate at the end of each design phase. The CMAR will work with the A/E to reconcile the cost estimates and ensure that the estimates are based on the same scope and assumptions. The CMAR will advise the design team and Owner of any defects, conflicts, ambiguities, discrepancies, or lack of clarity in the contract documents, and/or the applicability of proprietary materials or processes. The result of the reconciliation process shall be a single estimate to which both the CMAR and A/E agree reflects the estimated cost of the Project.

At this time, the CMAR will also begin the construction schedule development process, using input from subcontractors to help with schedule coordination. The CMAR also evaluates opportunities for early bid packages that do not require 100% completed construction documents.

At this juncture, the CMAR is also working toward providing a Guaranteed Maximum Price (GMP) for the construction work on the project. They will give the owner a final GMP construction cost. This price is the sum of the CMAR's fee, their profit margin, subcontractors' bids, and contingency. Increased cost control and accountability will result as the construction budget will be discussed as an open book relationship with the owner. All subcontractor pricing must be shared with the Owner as the CMAR works toward the final GMP.

The CMAR who acted as a consultant during the pre-development stage now assumes the role of a project manager and overseer. During the early stages of a project, the focus of the CMAR will be on cost control and schedule coordination, but once the project kicks off, its role will turn to design, structure, safety, logistics and execution issues.

Benefits:

Staff feel that the most significant benefit to the project is that executing the project in this manner will save an estimated 12 months on the project schedule. This would be accomplished by avoidance of change orders and associated delays due to the collaboration and coordination between the design team, construction professionals and the Owner. Identifying problems before construction starts, contractor constructability reviews and early bid packages also contribute to the anticipated improved schedule duration.

This improved schedule duration has a significant positive cost impact on the project. Over the last ten years, the annual inflation rate has fluctuated between 2.25% and 4.25%. The estimated construction cost for this project is approximately \$40,000,000, so applying the inflation rates we can estimate significant savings from our improved schedule. There would also be significant savings on the CMAR's general conditions costs. General conditions are the cost of being there, items like jobsite personnel, trucks, office trailers, storage trailers, phones, office equipment and dumpsters are just some of those costs. On a project this size, the general conditions costs are typically about \$7,500 per week. Anticipating the 12-month (52 weeks) improvement in our schedule, this equates to about another \$390,000 in estimated savings associated with executing this project per the CM at Risk model. These projected savings are vitally important to the project because of the current unpredictable bidding climate. While we factored inflation costs into our CIP Request, we are currently in a very volatile bidding / contractor market.

Conclusion:

County staff feel that it is in the best interests of Albemarle County to procure the Courts Complex Addition and Renovations project construction work utilizing a Construction Management at Risk contract. Staff requests that the Board of Supervisors and the Purchasing Agent approve this method of construction procurement because of the following benefits:

- Improved / shortened schedule that results in cost savings
- Improved / shortened schedule that results in shorter period of inconvenience for County Courts related staff
- Improved / shortened schedule that results shorter period of time associated with traffic and pedestrian interruptions in the Court Square area
- Aspects of project risk are passed to the CMAR, reducing the owner's potential overall risks. Once the owner accepts the guaranteed maximum price from the firm, any additional cost overruns become the obligation of the CMAR
- Improved quality due to collaboration between the architect, construction manager and Owner
- Reduction of costly, time consuming change orders
- A better planned and coordinated project with team members working together to achieve the project goals

Thank you for your time and consideration, if you have any questions, please contact FES Facilities Planning & Construction Chief, Blake Abplanalp at babplanalp@albemarle.org or 434-872-4501, Ext. 3244.