

Report on Effectiveness of the Construction Manager at Risk Project Delivery Method

The project management plans described below, establish several elements or criteria for university project staff to manage and project reviewers to hold university project staff accountable to.

The third-party review addresses several elements necessary to conclude whether best value is achieved. (An interim review was recently completed for the Life Sciences project. It is too early in the contract for an interim audit for the arena.) Six of those elements are summarized below:

Qualified Team Selected: through the vetted Request for Proposals (RFP) process, UA staff is able to evaluate and select the firm and project team members best qualified to perform in the University's cost, quality and schedule interest. Team members are selected based on experience and proven success with complex facilities such as the Life Sciences building or the Sports Arena. The qualified team is selected based on a combination scoring of bid elements and qualifications.

High Quality Preconstruction Services: value analysis done through the design process helped the UAF team identify the best options for various building systems to ensure best value was achieved. Constructability issues were addressed and potential scope gaps were identified and handled to ensure a complete design and avoid costly change orders during construction.

Although still relatively early in the project, the advantages of having the CMAR contractor participate in the sports arena design process are already becoming apparent. The cost estimate for the 65% design came in significantly over budget. The Design Team and the CMAR contractor worked with the rest of the Project Team to modify the design to reduce cost without loss of program support or ability to generate revenue to cover operating costs. Projected O&M Costs have actually reduced as a result of the reduction and/or deletion of some of the building system components included in the original design. The Phase 2 construction package will include several additive alternates that will be incorporated into the project as construction progresses and remaining construction contingency funds can be utilized. This collaborative effort would not have been possible without the

process, evaluating the bid tabulations and signing off on the CMAR's recommended subcontractor award.

4. How does the university maintain control over the total General Conditions (GC) cost? How is the CMAR managed by the university to ensure accurate use of the GC budget?

First and foremost, the CMAR RFP must at least require the contractor's project staff rates are bid in the response to the RFP and ensure these rates are used in setting the GMP. The owner must also negotiate the GC's using the contractor's actual cost records, set the duration of the cost of the GC's (the duration of the project), and agree to those with the contractor. The CMAR must be needed to directly run the project, and scrutinize each line item in the GC cost for reasonableness. After the GMP is established, the owner's project team approves the GC's on a cost-plus basis such that the CMAR can only bill for actual time, equipment, and material spent directly managing the job. Finally, monthly review of the GC cost and quarterly financial reviews of all files related to the general conditions are tools that are used consistently to lower the final cost of the general conditions. Project staff must ensure any realized savings in the GC's is returned to the university.

Contingency Management

5. What are the different contingency types and amounts in the revised university contract?

- 1) Contractor Held Construction Contingency which is 2% of the maximum allowable construction cost (MACC),
- 2) Contractor Held Owner Contingency which is created from realized savings in Cost Plus line items and buy-outs of subcontracts, and
- 3) Owner Held Contingency which is 3% of the GMP.

6. What control does the university have over the contingency funds?

Project Management Plans

8. Have management plans been put into place? Are they being followed? How does the university know the CMAR contractor is being managed properly?

For the Life Sciences project UAF has implemented two management plans: the CMAR contractor Management Plan and the Project Management Plan. UAF files quarterly reports and plan updates with the Chief Facilities Officer (CFO) and holds quarterly meetings with all project participants and stakeholders to review project progress and outcomes, highlight and resolve issues, and allow the UAF Vice-chancellor and the CFO to offer input. UAF has contracted with a third party auditing firm experienced with the CMAR delivery method. Their report is delivered to the Vice Chancellor with a copy to the CFO, and provides an ongoing assessment of how UAF's project team is managing the contractor and following the management plan. Any recommendations in the report are reviewed at the quarterly stakeholders meeting or acted upon by project staff, as appropriate.

UAA is just beginning to set up management practices for the Sports Arena. UAA will be utilizing the services of a third party auditor and will include management practices in their review. The audit reports will be forwarded to the UAA Vice Chancellor Administrative Services and the Chief Facilities Officer, who will also receive quarterly briefings regarding contract status, after construction begins.

9. How are cost plus features of the CMAR contractor audited?

Monthly, the project team reviews each line item of the pay request and compares it to activity reports submitted daily by the CMAR and/or written by the team itself. The project team also requires a detailed budget forecast from the CMAR that annotates realized savings, subcontractor buy-outs, and anomalies in the project construction budget. On a quarterly basis, the university's fiscal team performs a financial review of the CMAR's bookkeeping and record keeping at their home office to ensure charges are being adequately coded to the correct categories, identify and correct any billing discrepancies, and determine if any other projects are being billed against the university's project (i.e. the project should not be used to provide cash flow for the contractor's other projects)

10. What are the expectations for the university's project team and how do the members ensure best value is achieved under a CMAR delivery method?

The members of the university's project team must have documented construction experience with similar projects, a thorough understanding of procurement laws and re

Excerpt from OAC's initial "CM at Risk Process Review" for Life Sciences Project

Summary of Performance against Objectives

The University of Alaska and its internal user groups are receiving good overall value from the Construction Manager at Risk (CMAR) delivery method. Led by UAF capital projects staff members, the project team has followed good industry practice in building solid collaborative project teams while maintaining cost competitiveness and transparency necessary for the (expenditure) of public funds.