

**Procurement Evaluation
Special Experimental Project No. 14 (SEP-14)
CM/GC – Construction Manager/General Contractor
December 2010**

Colorado Department of Transportation Initial Report: Procurement Phase
For SEP (Special Experimental Project) 14
CM/GC Contract for:
IM 703-348, Replacement of 2400 Medium Volt Master Control Centers
December 13th, 2010

A. Introduction

The Colorado Department of Transportation (CDOT) submits this initial report under the provisions of Special Experimental Project No. 14 (SEP 14) for the use of innovative contracting practices as written in the November 9, 2009 CDOT Workplan.

The Region 1 Mountain Project Management Team developed the necessary documentation, solicited proposals, and appointed a selection panel of five members to select a Construction Manager/General Contractor (CM/GC) services contractor. A CM/GC services contract has been executed for the Replacement of 2400 Medium Volt Master Control Cabinets located at the Eisenhower Johnson Memorial Tunnels (EJMT) in Clear Creek County, Colorado. This initial report includes a brief scope of the CM/GC project, a brief summary of the procurement process, effects on the bids received, estimates of cost and time savings, lessons learned thus far, and industry reaction to the process.

B. Scope

The scope of this project is to produce the final design and specifications for the replacement of the 2400v Motor Control Cabinets (MCC's) at the EJMT while successfully deploying the first CM/GC delivery method on a CDOT project.

The design work includes the selection of a replacement option from the Preliminary Report, electrical design, master control center procurement and shop drawing development, FOR plan development, and final plan development.

The CM/GC services work includes constructability reviews, cost savings reviews, value engineering proposals, plan set visual and written reviews, confirmation of all quantities, development of an open cost model for project development, and submittal of a GMP (Guaranteed Maximum Price) Proposal.

C. Procurement Process

During August through November 2009, CDOT evaluated different delivery systems to select a method that best fits the guidelines and project requirements for the 2400v MCC replacement. Design-Bid-Build, Design-Build, and CM/GC were individually researched. Disadvantages and advantages for each method were analyzed and compared. CM/GC was selected because of the requirement of CDOT control of the project site and to accelerate the design and construction schedules.

Within CDOT, support for a CM/GC pilot project was strong and the unit's thorough evaluation encouraged team endorsement of the delivery method. CDOT applied for SEP 14 approval. During this process, the FHWA team asked for specific information on Colorado law regarding Innovative Contracting. The Attorney General's office was consulted and found that while not specific in allowing CM/GC, statute did allow for multiple methods in innovated contracting. CDOT received procurement go ahead on January 25th, 2010 and developed Request for Proposal documents for a Design Consultant and a CM/GC services contractor. These documents were based on the Colorado State Buildings RFP documents and the Utah Department of Transportation CM/GC program.

CDOT advertised for a CM/GC services contractor and a design services consultant in parallel procurement processes to allow for both firms to begin working on the project simultaneously. Procurement began in March 2010 and selections were made in May 2010. Due to the relatively new processes, contract execution and Notice to Proceed for each firm was not successful until October 2010. This process included writing a CM/GC services contract based on the Colorado State Buildings contract while modifying the document to comply with all state and CDOT procedures. Team hierarchy, construction contract language, and roles and responsibilities were challenging revisions that were required to adapt to how CDOT does business.

The design consultant process followed the typical CDOT consultant selection process with changes to support the CM/GC delivery method. The CM/GC selection process was based on the Colorado State Buildings process and UDOT's CM/GC process. This included proposal guidelines, proposal requirements, scoring system for proposals and interviews, and the request for Cost Proposal Statement. This Cost Proposal was a proprietary item that, like a bid, would be confidential and unsealed after the interviews were complete.

The proposals, interview, and cost proposal from the contractors were scored on the following criteria by a 5 person selection panel.

Proposal – 60 Points

This document was a proposal from the Contractor with a 20 page limit that detailed the following information with point weights:

1. Project Management Team/Capability of the Contractor - 20 points
2. Project Approach - 10 Points
3. Project Innovations - 10 Points
4. CMGC Design Process - 20 Points

Interview – 20 Points

The interview was an hour meeting that included a short project presentation summarizing the proposal and a question/answer session. The questions were ten questions asked to each short listed contractor.

Cost Proposal – 20 Points

The Cost Proposal was a proprietary bid that included a proposed Preconstruction fee, Construction fee, cost of general conditions, and other reimbursable general conditions. The Preconstruction fee is the cost of completing the CM/GC services. The rest of the fees and

costs are part of the price of completing the construction of the project and would be rolled into the GMP during the design phase.

D. Bids Received

Due to the unique electrical work and size of the construction project, CDOT received only two proposals for both the CM/GC services and the design services Request for Proposals. This presented a situation where Chief Engineer approval to proceed with less than three proposers was required and granted based on the recommendation of the Region 1 Project Team.

E. Procurement Cost and Time Savings Estimates

A full Cost and Time savings analysis will be conducted after the design and construction phases are complete.

F. Lessons Learned

A 3.5 month delay due to process development and inexperience with CM/GC services procurement led the Project Team to make the following recommendations:

- Dedicated Agreements and Contracting Staff to help modify, process, and fast track alternative delivery method documents would greatly increase efficiency and deployment of CM/GC and other innovative contracting processes.
- CM/GC services selection for horizontal projects in the future should follow UDOT's established program of including bid items with estimated quantities for price scoring along with preconstruction and construction fee bids.
- Evaluation and analysis of scoring weight percentages should be a priority going forward with a CM/GC program at CDOT. Scoring and scoring directions should be revised to better evaluate horizontal construction projects with more complicated challenges.
- CDOT should establish an evaluation process to match projects with the best delivery method. This would provide documented comparisons to other delivery methods that can be independently verified.
- Standard documents should be developed by the Innovative Contracting Advisory Committee and utilized for future projects to provide a good foundation for project managers. These documents include standard templates for contracts, RFPs, scoring, and scoring directions. Feedback and pre-approval from the Agreements unit, Attorney General's Office, and the Office of the State Controller should be solicited.
- Industry participation and feedback should be solicited to improve and standardize CM/GC use at CDOT. Team support and buy in is a critical factor to CM/GC success.
- Communication to contractors to provide guidance on proposals and feedback on unsuccessful applications should be performed on each project.
- Revise the Cost Proposal Form to incorporate the cost of bid items into the bid and provide more detail into what constitutes the fees and reimbursable costs.

G. Industry Reaction

The two contractors who submitted proposal packages and interviewed for the project were debriefed on the procurement process. Feedback from the debrief meetings included:

- Confusion on what was included in the fees and reimbursable costs for the Cost Proposal contributed to a possible competitive gap in submissions.
- Pre-proposal workshop request to have more information on what CDOT is looking for and various challenges of the project.
- Contractors would prefer expedited and structured debriefs on how they can do better in future competitive best value processes.

The 2400 Medium Volt MCC Replacement project has entered into its design phase. While the Innovative Contracting Advisory Committee will begin to address CM/GC for CDOT's future use and has representation from the Colorado Contractors Association (CCA) and American Council of Engineering Companies (ACEC).

H. Design Phase Report and Overall Report

CDOT will submit its intermediate report after the design phase and an overall project report at the end of the construction phase. The overall report will incorporate the procurement and design phase reports.