Utah Department of Transportation

Construction Manager General Contractor Selection

Manual of Instruction

June 2011

Summary

This is a manual of instruction that gives direction on how the selection process occurs on Construction Manager General Contractor (CMGC) projects. UDOT sees benefit in the CMGC process because it allows the contractor and designer to work together, fostering better quality, innovation, risk management, and cost and schedule savings. As the owner, UDOT controls design decisions and receives the cost savings from innovation (typically 6% to 10%) and risk management (typically 10% to 15%). Change orders and overruns run 40% to 60% less than Design Bid Build or Design Build. In addition, UDOT can benefit from new innovations that can result in time and cost savings to the Department. Finally, in addition to managing cost, schedule, and quality, the CMGC process allows the team to adjust scope after contractor selection. This provides more confidence in the pricing and enables the addition of work that was not considered in the original RFP.

Prior to release of the Request for Proposals (RFP) for CMGC services, the project team has evaluated the risks of the project and obtained approval to deliver the project with the CMGC method. The use of this method must be approved by the Region Director, the UDOT technical committee, and for federally funded projects, FHWA must give their approval. Typically, some level of preliminary engineering has been done to provide a general scope of work, identify risks, and estimate quantities of major items.

The UDOT Innovative Contract Engineering team provides support in the CMGC selection, design, and bid opening process. UDOT Consultant Services provides support in the CMGC selection process to include assistance with the preparation and release of the RFP and coordination of schedules and tasks required to complete selection of a contractor.

CMGC requires support from the Project Manager (PM) throughout the design process. The PM will take inputs and opinions from the contractor and designer and be required to make decisions that affect quality, scope, budget, and schedule. In addition contractor innovations should be evaluated and risk managed to reduce cost and manage schedule. The services of a consultant to assist the PM in program management should be considered.

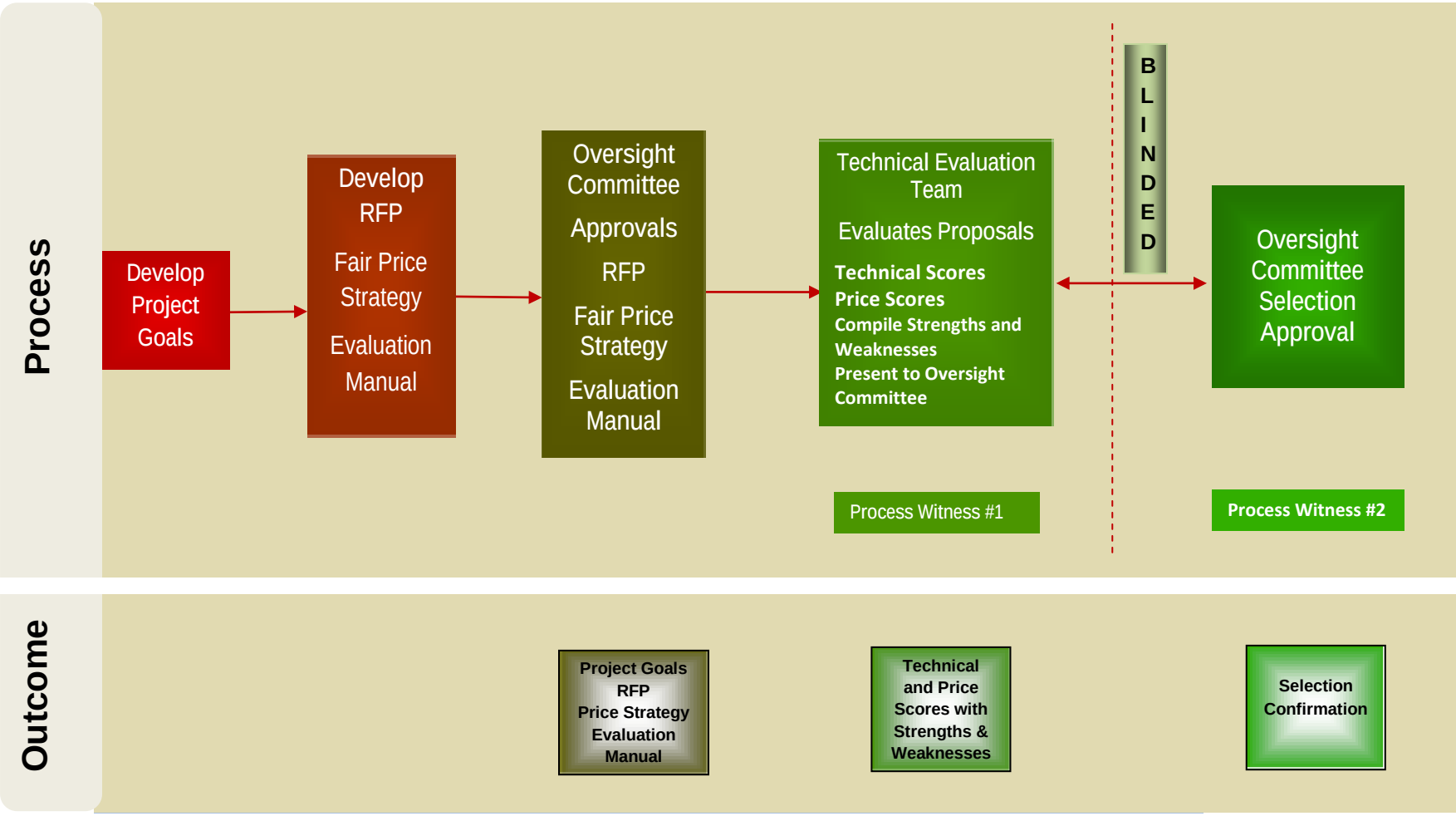
CMGC is a “best value” selection process because it includes technical and price components. The relative weight of the score for price vs. technical sets the relative importance of these two components. Price elements were included so that price can be evaluated in additional to technical merits to ensure best value in the selection process. In addition, prices offered by the contractor in their proposal set expectations for the construction award process.

The following pages document the selection process to ensure consistency and objectivity in the selection of a contractor. The selection team includes team members from the Region and Central offices as well as industry participation from the AGC and ACEC communities.

In addition, this document provides guidance as to the development of project goals and defines team members' roles and responsibilities to assist in the procurement and advertising of a UDOT CMGC project.

Table of Contents

CMGC Selection Process



Blinded - Conceal the identity of the Contractors submitting the Proposals; Ensures Proposals are reviewed objectively and that the possibility of bias, whether real or perceived is avoided.

Development of Project Goals

1. Project Team and Region Leadership identify goals to recommend to the Region Director in coordination with the Oversight Committee.

   Limit the number of Project Goals from 3-6; optimally 4.

   The goals should be generally based on the following:

   - Quality
   - Scope
   - Budget
   - Schedule
   - Impacts to the Public

2. Prioritize goals for the project. The goals and priority of these goals should be consistent throughout the selection, design, and construction process.

3. Oversight committee must approve project goals.

Develop Request for Proposal (RFP), Fair Price Strategy, and Evaluation Manual

1. Include Project Goals and key issues in the RFP.

2. Link Project Goals to the selection criteria below that are used in the CMGC RFP:

   a. Capability of the Contractor
   b. Approach to Project
   c. Design Process support
   d. Price
   e. Approach to price
      i. Pricing details
      ii. Innovations
      iii. Risks and Risk Management

3. Assign selection criteria points considering the project goals and their priority.

4. Develop sub criteria as needed and assign a point value.

5. Select bid items with quantities representative of the project and include a description of measurement and payment for each. There should be sufficient design completed to supply estimates of major bid item quantities It is recommended that the bid items account for no less that 30% (by cost) of the total expected construction cost unless otherwise approved by Region Director.

6. Establish the Fair Price Strategy to be applied to the contractors proposed construction price at bid opening after design is complete. Establishing a pricing approach that is approved by the Oversight Committee can avoid uncertainty in the bid opening process at the end of design. Approaches to Fair Price Strategy are included as an attachment.

7. Develop an evaluation manual with goals linked to selection criteria. The project team does not develop this independently. Consulting Services has boiler plate evaluation manuals that have been developed on past projects with the support of Innovative Contract Engineering. The Project Manager is given options and makes decisions on how selection criteria points are distributed in the evaluation manual to be consistent with project goals.

8. Obtain approval from the Oversight Committee prior to RFP advertisement for the:

    a. Project Goals and priority
    b. RFP
    c. Fair Price Strategy
    d. Evaluation manual

9. FHWA must concur on RFP for federally funded projects before advertisement.

Oversight Committee Roles and Responsibilities

1. Oversight Committee consists of three senior leaders
    a. Typically consists of the Director of Project Development as the chair, the Region Director, and another Region Director or their designees as appointed.

2. Meet with the Technical Evaluation Team early in the process to discuss the project and agree on the purpose and objective of the project

3. Prior to advertising the RFP the Oversight Committee approves
    a. Project goals and priority,
    b. Selection criteria, and sub criteria,
    c. Fair price strategy, and
    d. Evaluation manual

4. Approves updates to goals, values, evaluation manual, and selection criteria throughout the development of the project.
    a. Approve prior to the RFP being advertised

5. Review selection by the Technical Evaluation team

a. Ask for clarification as needed.

Technical Evaluation Team Roles & Responsibilities

1. Technical Evaluation Team guidance
    a. By statute, the team must consist of 7 voting members (R916-4-5).
    b. The team is balanced between UDOT region and central participants.
        i. Regional voting members consists of:
            1. Project Manager.
            2. Region Manager or Technical Expert.
        ii. Central voting members consist of:
            1. Director for Construction & Materials.
            2. Innovative Contracting Engineer
        iii. One other voting team member usually with a technical expertise relevant to the project.
    c. The team has voting members from industry.
        i. ACEC representative.
        ii. AGC representative.
    d. The team can use non-voting members as technical advisors as they see fit. These advisors are free to express their finding and opinions to the voting members.

2. Prior to proposal due date, read and understand the contents of the RFP.

3. Read and understand the contents of the evaluation manual (goals, evaluation criteria, sub-criteria, and qualitative assessment guidelines).

4. Each member evaluates and scores each technical proposal against the goals and criteria in the RFP independent of other team members. Do not discuss scores with other team members.
    a. Analyze and score proposals based on the criteria and relevant project goals as shown in the evaluation manual using the qualitative assessment guide to determine your score. The qualitative assessment guide is included in this MOI.
    b. Identify Strengths and Weaknesses
    c. Identify Added Value provided by
        i. Innovations
        ii. Business Advantage
        iii. Construction Means and Methods
        iv. Constructability and Design Reviews
        v. Sub contractor selection and control

5. Each member submits the scores for the technical evaluation to Consultant Services. Consultant Services will then send to each member the approach to price portion of the proposal.

6. Each member evaluates and scores each approach to price proposal independent of other team members. Do not discuss scores with other team members.
    a. Analyze and score the price details for accuracy, completeness, and relevance to prices proposed for selected bid items.
    b. Score how the price details support an open book process.
    c. Score cost controls using Risk Management.
    d. Score cost controls using innovations
    e. Score the contractor's approach to supporting the teams design effort.

7. Evaluation Process and Rules:
    a. Sores are submitted to Consulting Services
    b. The team (including nonvoting members) discusses each technical proposal. The discussion is to focus on the details of what contractors have included or left out of their proposal.
    c. Voting team members may adjust their scores to make adjustments for omissions prior to seeing the tabulated scoring results of the technical evaluation team.
    d. Sores are submitted to Consulting Services.
    e. The team (including nonvoting members) discusses cost proposal. The discussion is to focus on the details of what contractors have included or left out of their proposal. Scores are not included in this discussion.
    f. Voting team members may adjust their scores only prior to seeing the tabulated scoring results of the technical evaluation team.
    g. Scores are opened to the group and scores that are in a 10% minority or 1.65 standard deviations from the mean are considered invalid and removed from the scoring process. This is done to remove any potential or perceived bias.
    h. Include estimated added value or risk mitigation identified in the analysis.
    i. Provide justification for each item identified in the analysis.
    j. Present blinded results to the Oversight Committee.

8. Deliverables:
    a. Prepare all blinded information for Oversight Committee
        i. Summarize contractors approach
        ii. Summarize contractors cost
        iii. Summarized risks and innovations

iv. Present overall score
v. Summary of strength and weaknesses to be given at contractor debrief

9. Process Witness:
    a. Consulting services acts as a process witness for selecting the contractor in a CMGC delivery method. They ensure that the selection team follows the policy and process defined for CMGC

Oversight Committee Selection Approval

1. Approves contractor selection
2. Supports project goals throughout the design and construction process.
3. Rejects selection
    a. Re-advertise
    b. Select another delivery method

Qualitative Assessment Guide

Selection Team members will individually review and score each Proposal category according to the criteria set forth in the RFP. Team members will evaluate each category sub-factor listed in this Evaluation Manual and assign those sub-factors a Qualitative Assessment Percentage according to the scoring range listed below:

90-100%	The Proposer's qualifications are exceptional. The Proposer demonstrates a complete understanding of the subject and an approach that significantly exceeds the stated requirements and objectives of this project. The Proposal communicates an outstanding level of quality.
70-89%	The Proposer's qualifications are above average. The Proposer demonstrates a strong understanding of the subject and an approach that meets the stated requirements and objectives of this project. The Proposal communicates a high level of quality.
40-69%	The Proposer's qualifications are adequate. The Proposer demonstrates a general understanding of the project and an approach containing some weaknesses/deficiencies regarding the stated requirements and objectives of this project. The proposal communicates an average level of quality.
20-39%	The Proposer's qualifications raise questions about the Proposer's ability to successfully complete the work. The Proposer demonstrates a vague understanding of the project and an approach containing significant weaknesses/deficiencies regarding the stated requirements and objectives of this project. The Proposal communicates a below-average level of quality.
0-19%	The Proposer's qualifications do not indicate the likelihood that the work will be completed successfully. The Proposer demonstrates insufficient understanding of the subject and an approach that fails to meet the stated requirements and objectives of this project. The Proposal communicates a low level of quality.

Fair Price Strategies

Listed below are a number of Fair Price Strategies that may be implemented by a project. The list is not inclusive because there are other possible approaches. Only three of the strategies have been applied by the department. The project team should select a strategy and present it to the Oversight Committee for approval for use on the proposed project.

1. Target Strategy

This strategy makes use of fully loaded prices provided by the contractor for selected items listed in the RFP. Fully loaded prices include direct and indirect costs such as profit and overhead. This strategy begins with the selection of representative items in the project that are at least 30% of the projected cost. The expectation of the contractor is that these prices will be the same at the end of design when the bid is opened unless clear justification for change can be shown. FHWA requires this comparison on federally funded projects. This first step in price validation is the center rung of the targeted approach.

The second rung of the target is the comparison of local prices to the contractor's price. If for example the project is an urban reconstruction in an area like Salt Lake City then the cost of items in Salt Lake County may be used to compare to the contractors prices.

The final rung of the target looks at the total cost of the project using the Engineers Estimate (EE) and the Independent Cost Estimate (ICE). Both of these estimates are essential because they provide independent verification of the total price from separate perspectives. The EE is as accurate a predictor of cost as the ICE production estimate.

The EE begins with state averages, and/or pricing from similar projects, and considers current market conditions. This estimate is to be shared with the contractor throughout the design process so that scope and design changes can be made to stay within budget. This comparison to the contractor's price is essential for us to know the cost or our design decisions. It is also essential to know where and why we disagree on cost issues. Variations in individual line items should be resolved in design so that each estimator knows what is included in each line item and the measurement and payment being applied. These differences should not wait for bid opening to be resolved or contract award will be delayed.

The ICE as a production estimate considers project specific conditions and market conditions. The ICE acts as a competing contractor bid at bid opening. The ICE estimate is hidden from the contractor and the engineer during the design process. The ICE is revealed at bid opening.

It is advisable to get the Oversight Committee to agree to the not to exceed limits for both the ICE and/or the EE so the contractor knows our price expectations in design. With these limits

we can make a decision to stop the CMGC process at any time if the contractor is not meeting our price expectations.

2. Production Strategy

This strategy replaces the Engineers Estimate with a production estimate. The purpose is to make a direct comparison to direct costs. The contractor is asked to reveal direct costs for each line item, excluding profit and overhead. Production rates, crew size, equipment types, equipment rates and utilization are discussed along with supervision and oversight. The profit and overhead are fixed in the competitive selection process and applied on the total of direct costs.

This approach offers many advantages however the department still requires a bid opening compared to an ICE. Bid openings require fully loaded cost numbers for each line item. To acquire fully loaded numbers it is recommended that the contractor spread his profit and overhead as he would in a conventional bid. When profit and overhead is spread equally then inconsistencies occur for some line items when compared to local costs. Therefore this fair price strategy requires the contractor to provide loaded and unloaded numbers for each line item.

3. Blind Bid Strategy

The Blind Bid strategy is used in conjunction with any of the before listed strategies in which the ICE is hidden from the contractor. In the blind bid process a spreadsheet of prices are provided at planned intervals in which the EE and the contractor prices are listed for each line item and compared to the ICE. The ICE is not revealed but the contractor knows if his numbers are within 10%. The purpose is to identify specific line items that need additional discussion and resolution before the bid opening. This is especially useful on large projects where the costs may be accounted for differently in the ICE, EE, and Contractor estimates. It is important that the components of each line item is understood equally by all the estimators.

This is a valuable tool for complex projects. It is not recommended for projects less than 5 million. Projects between 5 and 20 million should not have more than one blind bid opening. It is highly recommended on projects of 20 million or more and it is especially relevant for projects that exceed 50 million.

Definitions & Terms

23CFR Highways 636.103, any item in [ ] refers to language typical to the UDOT process.

Best value selection means any selection process in which proposals contain both price and qualitative components and award is based upon a combination of price and qualitative considerations.

Blinded means conceal the identity of the Contractors submitting the Proposals. Ensures Proposals are reviewed objectively and that the possibility of bids, whether real or perceived, is avoided.

Clarifications mean a written or oral exchange of information which takes place after the receipt of proposals when award without discussions is contemplated. The purpose of clarifications is to address minor or clerical revisions in a proposal.

Communications are exchanges, between the contracting agency and offerors, after receipt of proposals.

Competitive acquisition means an acquisition process which is designed to foster an impartial and comprehensive evaluation of offerors' proposals, leading to the selection of the proposal representing the best value to the contracting agency.

Contracting agency means the public agency awarding and administering a CMGC contract. The contracting agency may be the STD or another State or local public agency.

Deficiency means a material failure of a proposal to meet a contracting agency requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level.

Design-bid-build means the traditional project delivery method where design and construction are sequential steps in the project development process.

CMGC is a delivery process that engages the contractor through a design contract to participate in project design efforts with the intent of awarding a construction contract should the price proposed by the contractor meets the owner’s expectations.

Price proposal means the price submitted by the offeror to provide the required construction services.

Proposal modification means a change made to a proposal before the solicitation closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

Proposal revision means a change to a proposal made after the solicitation closing date, at the request of or as allowed by a contracting officer, as the result of negotiations.

Request for Proposals (RFP) means the document that describes the procurement process, forms the basis for the final proposals and may potentially become an element in the contract.

Single-phase selection process means a procurement process where price and/or technical proposals are submitted in response to an RFP. Short listing is not used.

Solicitation means a public notification of an owner's need for information, qualifications, or proposals related to identified services.

Technical proposal means that portion of a design-build proposal which contains design solutions and other qualitative factors that are provided in response to the RFP document.

Tradeoff means an analysis technique involving a comparison of price and non-price factors to determine the best value when considering the selection of other than the lowest priced proposal.

Weakness means a flaw in the proposal that increases the risk of unsuccessful contract performance. A significant weakness in the proposal is a flaw that appreciably increases the risk of unsuccessful contract performance.

Weighted criteria process means a form of best value selection in which maximum point values are pre-established for qualitative and price components, and award is based upon high total points earned by the offerors.