1. Qualifications-Based Selection

What is it?

Qualifications-based selection (QBS) is a procurement method that focuses on qualitative criteria such as qualifications, experience, and past performance as the basis for selection. Price is not considered a part of the selection process (*1, 2*). STAs have experience procuring architectural and engineering services using QBS. However, this document refers to the use of QBS for selecting a contractor to provide services during design and construction, most likely with the use of the CM/GC delivery method.

Why use it?

When an STA has a project that requires input from the contractor during design, the STA may decide to procure the contractor at the same time as the designer. In these cases, the design and specifications information is limited or non-existent, making it difficult to ask a contractor to provide a price for the project.

STAs also may use qualifications as a first step to selecting a contractor. To limit the proposals/bids received for a project, the STA can pre-qualify select contractors. The pre-qualified contractors are then allowed to submit a proposal for the project during the second step of procurement, which then asks the contractor to provide a price for the project.

What does it do?

QBS allows the STA to select a contractor without the contractor providing a price for the project. The procurement is based on qualification criteria such as past performance, structure of the contracting organizations, and others. In many cases, STAs use QBS to select a contractor for the CM/GC delivery method.

How to use it?

Procuring a contractor using QBS utilizes a request for qualifications (RFQ), which requests statement of qualifications from interested firms. Based on a qualifications-based selection process used by Arizona Department of Transportation, the following steps outline how to select a contractor using QBS (3).

1. General: The contractor is to be selected based on qualifications, which involves the submission of a statement of qualifications (SOQ) for all interested firms. The agency then develops a final list from the responsive submittals. The final list of submittals is then evaluated and interviews may be conducted. The contractor is then selected based on demonstrated competency and the required qualifications.
2. Advertisement of project: The agency notifies the highway industry of an impending project and that SOQs will be accepted for the project. In advertising for a contractor, the agency follows a solicitation process similar to the acquisition of professional services (e.g. architects, engineers, consultants). The advertisement must include a general description of the work, the requirements for pre-qualification, and any additional technical requirements. The estimated project cost and required completion time will also be included in the advertisement. The selection process schedule, included in the advertisement, summarizes the deadlines for submitting SOQs and establishes the deadlines for final listing of firms and the award of the contract.
3. Pre-submittal conference for the statements of qualifications: A pre-submittal meeting is held for all interested contractors to discuss the scope of the project, to introduce the agency project team, to clarify the selection process, to discuss the project package, and to answer any questions contractors may have about the process.
4. Request for statement of qualifications: The Request for SOQs should include the criteria for the selection process, design requirements, pre-construction scope of work, project constraints, utilities, environmental reports, right-of-way, and construction requirements. Organization of the request for SOQs uses the following order:
   1. Solicitation advertisement
   2. Description of the selection process
   3. SOQ formatting instructions and documentation requirements along with scoring criteria
   4. Oral interview requirements
   5. The pre-construction scope of work
   6. The construction scope of work
   7. A copy of the designer’s scope of work
   8. The pre-construction contract agreement
   9. The construction contract agreement
5. Statement of Qualifications Requirements: The request for SOQs needs to include all specific documentation requirements and procedures that each interested contractor must follow. It is advised to use past projects that have used qualifications-based selection as a starting point for developing the request for SOQs, but remember to tailor the request to the specific project.

The project team develops and includes in the request for SOQs the general content, evaluation criteria, and scoring requirements based on the specific project. The project team must establish the required content of each submittal on a section-by-section basis, determine the evaluation criteria to use, and decide on the scoring breakdown for the proposal.

1. Contractor Question and Answers: During the selection process, the agency receives questions regarding the technical aspects of the project, SOQ formatting, availability of agency reports and records, and procedural issues. The project team will review the questions and discuss the question before submitting a response.

If required, the project team may issue addenda to ensure fairness and maintain a level playing field for all potential contractors. No direct discussions about the project between the agency and interested contractors may take place once the project is advertised.

1. Selection team: The selection team receives, reviews, and evaluates all responsive SOQs in order to determine the final list of contractors. The selection team consist of at least three members that may be department employees of outside consultants. At least one member needs to be a senior management employee of a licensed contractor, at least half of the team must be professionally licensed engineers or architects. Finally, no member can have any interest in the project or association with the project that can be construed as a conflict of interest with potential contractors, designers, or subcontractors.
2. Contractor interviews: Each potential responsive contractor is invited to participate in an oral interview. Each interview will be held separately with each firm. The length, location, and format of the interview will be detailed in the request for SOQs. As a minimum, the format should include an oral presentation by the contractor addressing their plan and approach to the project followed by a question and answer session. The order of the interviews shall be random and can be determined and published well ahead of the interview dates. The notification will include information about location, set the number of people allowed to attend, state the amount of time allotted for each interview, and include any scheduling constraints. The selection team develops a list of standard questions before the interviews. Then, during the interview, each selection team member individually grades the oral presentations.
3. Evaluation and Selection of Contractor: Each member of the selection team will individually grade both the SOQs and the interviews for each contractor using the approved scoring sheet. Each member then submits their grades to the project team, which then meets to discuss strengths and weaknesses of each proposal. During the discussion, members are allowed to adjust their scores accordingly. When a member’s score exceeds 1.65 times the standard deviation of all scores (plus or minus), that member’s score is not included.

Each selection team member should provide written comments on each firm. These comments and notes are used to compile de-briefs with the contractors. Contractor de-briefs cannot occur until after the pre-construction contract has been executed with the selected contractor.

Scores for each firm is calculated by adding individual team member’s scores for both the SOQs and interviews, then calculating the average. Each firm is then ranked by the score and the list is submitted to the state engineer to begin negotiations with the top ranked firm.

1. Pre-construction services negotiations: The agency enters into negotiations with the highest ranked firm. If the agency is unable to negotiate a satisfactory contract with the highest ranking firm, then the agency terminates the negotiations. Also, if during negotiations, the agency requests the contractors “best and final offer” and rejects the offer, then negotiations are terminated. At the termination of negotiations, the agency then moves onto the second-highest ranked firm to begin negotiations. This process is repeated until an agreement is reached or a determination is made to reject all the firms on the final list.
2. Award of pre-construction services contract: Following the development of a budget and an agreeable method of payment for the services to be provided during pre-construction, the project and selection team will make a recommendation to the State Engineer’s office, which then issues the notice to proceed.

When to use it?

Most STAs use QBS to select a contractor when using the CM/GC delivery method. QBS is also used as a pre-qualification tool to limit the pool of bidding firms to the most qualified organizations.

Limitations?

The major drawback to using QBS procurement is the lack of a firm price being presented by the proposing firms. Although qualifications are the main source of selection, many STAs can be discouraged by the lack of knowing what the project will cost once it goes to construction.

Who uses it?

Arizona, Colorado, Florida, Maine, Michigan, Minnesota, Nevada, Oregon, Utah

Examples

Example 1) Nevada Department of Transportation

The Nevada Department of Transportation (NDOT) recently procured a contractor for a construction manager at risk (CMAR) project near Lake Tahoe (4). The project is a four mile stretch of mountainous road along SR 207 (Kingsbury Grade Road) and the scope of work includes 13inch full-depth pavement reconstruction, improving roadway drainage and stormwater runoff quality, improving poor sight-distance at Tramway Drive, relocating utilities, increasing the pedestrian visibility with improved lighting, handling complex maintenance of traffic, and improving sidewalk, curb and gutter, and compliance with ADA requirements. Due to the project’s location near the resort area of Lake Tahoe, specific and complex traffic constraints had to be met during construction, especially during the busy tourist summer months. Therefore, NDOT determined that CMAR would be the optimal delivery method for this project in order to determine the best traffic maintenance to use during design and to accelerate the project delivery schedule to no more than 18 months.

Procuring the contractor for the Kingsbury Grade Road project utilized a qualifications-based selection approach. A request for proposal (RFP) was issued on April 10, 2013. Five firms provided responsive proposals for the Kingsbury Grade Road project. Using a similar process as outlined by Arizona DOT, a selection team comprised of members from both internal and external to NDOT evaluated the received proposals using a pre-determined scoring system to rate the qualifications.

After reviewing the proposals and ranking them, the top three firms were then short-listed and invited to an oral interview with the NDOT project selection team. The interviews all took place on May 13th, 2013. The selection team then made their final rankings and provided the deputy director and the FHWA with the recommended contractor to award the project. Once the deputy director and FHWA signed off on the recommended firm, NDOT moved into negotiations with the recommended firm for the pre-construction services contract.

Example 2) California Department of Transportation (Caltrans)

Caltrans developed a formal process to select contractors using QBS through the use of the Brooks Act to procure construction management services associated with a CM at risk (CMAR) contract. Information about the Brooks Act is found at <http://www.nauticalcharts.noaa.gov/ocs/hsrp/archive/march2005/brooksAct_92-582.pdf>.

The Brooks Act, which more formally addresses the selection of architect and engineer professional services, applies to selection of CM services in the state of California. Using QBS requires that projects be advertised and ranked based on published weighted criteria for experience, capabilities, availability, and qualification. Once the top rated company is determined, Caltrans moves into negotiations for pre-construction services with the top rated company. If negotiations fail with the top rated company, Caltrans then moves to the second top rated company and negotiates with that firm.

The Caltrans QBS selection process includes three elemental processes:

1. An advertisement of a Request for Qualifications (RFQ): The RFQ should include general information that identifies Caltrans as the entity soliciting SOQs from qualified companies. The RFQ identifies the estimated contract amount, term, location of intervies, and day and location of the negotiation of the contract. In terms of the project, the RFQ needs to include the scope of work (pre-construction and construction), identifying the required CM services, the percent design complete, schedule of performance, anticipated milestones, location of the project/work, availability and work hours, personnel requirements, equipment requirement, deliverables, standards of the poject, goals and objectives for the delivery of the project, and any documents that Caltrans should provide. Finally, in terms of rating of SOQs, the RFP at a minimum must include information on the proposal criteria, weights of the criteria, and the rating descriptors.
2. Submission Of SOQs from Interested Contractors: A prospective CMAR contractor submits an SOQ that identifies the following items:
   * Contract information
   * Point of contact
   * Proposed team
   * Organization chart
   * Resumes of proposed key personnel including the project manager
   * Example projects for proposed team’s qualifications for the contract
   * Key personnel participation in example projects
   * Additional information
   * General qualifications
   * Work force analysis chart
   * Resources
   * Location of resources
3. Evaluation of the SOQs and Selection of a Contractor: The evaluation process is conducted by Caltrans panels composed of members that collectively have experience in architecture, engineering, construction, government, and relationed acquisition matters. The evaluation panel measures each SOQ against the criteria mentioned in the RFP.

The evaluation panel then ranks the contractors according to an identified ranking system that can include professional qualifications, experience with CMAR, performance record and review and analysis of the contractor’s workload as a measurement criteria (which is included in the RFQ).

At the conclusion of the evaluation, Caltrans develops a short-list of the top-ranked SOQs. At this point, Caltrans as the option to conduct oral interviews with the top ranked contractors or conduct open discussions for further information on the short listed contract’s qualifications. Caltrans then selects the CMAR contractor based on this process and the scoring outcome, with Caltrans proceeding with negotiations with the highest ranked contractor for the CMAR project.

References

1. American Association of State Highway and Transportation Officials (AASHTO). *Primer on Contracting for the Twenty-First Century*. 5th ed., AASHTO Subcommittee on Construction, Washington, DC, 2006.
2. El Wardani, A. Marwa, John I. Messener, and Michael J. Horman. Comparing Procurement Methods for Design-Build Projects. *Journal of Construction Engineering Management*, American Society of Civil Engineers, Vol. 132, No. 3, 2006, pp. 230-238.
3. Arizona Department of Transportation (ADOT). *Construction Manager at Risk (CMAR) Guide*, Intermodal Transportation Division, ADOT Construction Group, September 2010.
4. Nevada Department of Transportation (NDOT). Kingsbury Grade Pavement Reconstruction Project, 2014. <http://kingsburyproject.com/> [Accessed May 14th, 2014].