



# Design Build Procurement Guide

**DESIGN BUILD PROCUREMENT GUIDE**

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## ABBREVIATIONS

Design Build	(DB)
Federal Highway Administration	(FHWA)
Project Manager	(PM)
Construction Engineering Inspection	(CEI)
Best Value Design Build	(BVDB)
Letters of Interest	(LOI)
Low Bid Design Build	(LBDB)
Request for Qualifications	(RFQ)
Request for Proposal	(RFP)
Statement of Qualifications	(SOQ)
Critical Path Method	(CPM)
Project Engineer	(PE)
Resident Engineer	(RE)
Massachusetts Highway Department	(MHD)

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 PURPOSE**

The design build procurement process is one of the tools the Department is authorized to use in delivering the transportation program for the Commonwealth. This document has been developed to establish Department guidelines and procedures to be utilized in the design build contracting process.

#### **1.2 AUTHORITY**

The use of design build procurement for “Public Works Projects” is subject to sub-section 14–21 of Chapter 149A of the General Laws as inserted by Section 27, Chapter 193 of the Acts of 2004. Chapter 149A allows for the use of design build for the construction, reconstruction, alteration, remodeling, and repairs of a public works project estimated to cost not less than \$5,000,000.00. All Federal Aid projects shall comply with 23 CFR 636 - Design Build Contracting Final Rule

#### **1.3 SCOPE**

The information presented in this guide provides the requirements for using the design build contracting method. The intent is to use the Department’s existing contracting systems to the extent possible, changing or adding only as necessary to facilitate the Design Build method of contracting.

#### **1.4 BACKGROUND**

Design build combines into a single contract the design, construction, and in certain cases, construction engineering and inspection services (CEI). All work shall be in accordance with MassHighway Design Standards and criteria, specifications, and contract administration practices. These projects allow the contractor and designer to work together on all phases of the project in an effort to reduce costs and expedite project delivery.

In 1998, the Massachusetts Legislature authorized the Department to use the design build process for the Route 3 North Transportation Improvement project. In 2004, this authority to use design build was further expanded to include all project types as a part of Chapter 193 OF THE ACTS OF 2004.

The design build contracting process and contract administration will follow standard MHD practices, unless differences are otherwise identified herein. The Boston Projects Division will be responsible for conducting the design build contracting process for projects. Throughout the procurement process, the relevant committee will apply MassHighway’s current guidelines for the RFQ/P

process and MassHighway procedures, as outlined by Standard Operating Procedure HED 03-23-1-000 where applicable and as further developed within this design build guideline. The design and construction criteria will be established specifically for each design build project and will be used as the basis for the evaluation and ranking of the Proposals.

## CHAPTER TWO

### DEFINITIONS

For purposes of this guideline, the following definitions shall apply:

- 2.1 **Advertisement** is the advertisement of a design build project similar to the advertisement for professional services currently used by the Department. The advertisement shall appear in the Central Register, Comm-PASS and shall be advertised in a newspaper of general circulation in the area in which the project is located or to be located.
- 2.2 **Best Value Design Build (BVDB)** means the highest overall value to the Department, considering quality and cost. The contract award is based on the lowest adjusted score, which is determined by dividing the price proposal by the technical proposal score.
- 2.3 **Bid Proposal** means a technical proposal and a separately sealed price proposal submitted by each Design Build Entity.
- 2.4 **Contracting Unit** is the unit within MassHighway that has been given the responsibility of procuring design build contract. This unit may mean either the Contracts Administration Office or Projects Division; whichever is appropriate for the task required.
- 2.5 **Construction Engineering Inspection Services (CEI)**, are the construction engineering services being required of the DB Entity. Services may include construction inspection, off-site plant inspection, materials sampling and testing, surveying, and other Quality Control functions as specified for the particular project.
- 2.6 **Department** is the Massachusetts Highway Department or MHD.
- 2.7 **Design Build**, a construction delivery system that provides responsibility for the delivery of design services and construction services within a single contract.
- 2.8 **Design Build Entity**, an individual, sole proprietorship, firm, partnership, joint venture, corporation, or other entity that provides design build services.
- 2.9 **Design and Construction Criteria Package** is the design and construction requirements that clearly define the criteria essential to ensure that the project is designed and constructed to meet the needs determined by the Department, which will be included in the RFP.

- 2.10 **Design Professional**, shall have the same meaning as "designer" as defined in section 38A 1/2 of chapter 7 which can be an individual, corporation, partnership, sole proprietorship, joint stock company, joint venture, or other entity engaged in the practice of architecture, landscaping architecture or engineers who will provide technical advise and professional expertise to the Department for the duration of the 2 phase design build selection process.
- 2.11 **Letters of Interest (LOI)** is the information provided by interested DB Entities in response to a project advertisement. A DB Entity desiring to be considered for a design build project must submit a Letter of Interest and provide the information required in the advertisement of the project.
- 2.12 **Low Bid Design Build (LBDB)** means the contract award is based on the lowest price responsive bid.
- 2.13 **Major Participant**, a private entity that would have a major role in the design or construction of the project as a member of the Design Build Entity.
- 2.14 **Non-Responsive** refers to any submission that does not meet the criteria identified in the RFQ or any Technical Proposal that does not comply with the criteria defined in the RFP.
- 2.15 **Prequalification** is the process used to identify DB Entities that meet certain criteria necessary to advance to the RFP stage of the selection process. The Architects and Engineers Review Board and the Construction Prequalification Committee shall be jointly responsible for determining the prequalification status of each DB Entity using information provided in LOI's, SOQ's, and on file from other Department prequalification procedures, or from other appropriate sources as necessary.
- 2.16 **Project** means the project to be designed and constructed as described in the public advertisement for the project.
- 2.17 **Project Manager (PM)** is the Department's designee responsible for the administration of the design build project.
- 2.18 **Request for Proposal (RFP)** the document issued by the Department to solicit proposals from pre-qualified design build entities for the purpose of entering into a design build contract.
- 2.19 **Request for Qualifications (RFQ)** the document issued by the Department for the purpose of creating a short list of qualified design build entities to respond to an RFP issued by the Department.

- 2.20 **Responsive Proposal**, a person, corporation, or other organization or DB Entity which has the capability to perform the requirements of the design build contract, has the integrity and reliability to assure good faith performance, and meets the qualifications component of the RFP.
- 2.21 **Selection Committee**, the committee established by the Department that will review proposals and recommend selection of best-value or low-bid proposals. The Selection Committee may also receive assistance from any sub-committees that evaluate the technical and or price proposals as needed.
- 2.22 **Technical Proposal** is the information provided to enable the Department to evaluate the capability of the DB Entity to provide the desired services. The design shall be sufficiently defined by drawings, narrative, and outline specifications to enable the Department to evaluate the level of quality of the proposed design and construction based on the scope of work requirements contained in the RFP.
- 2.23 **Statement of Qualifications** is the complete package received from a DB Entity in response to the Department's Request for Qualification (RFQ).
- 2.24 **Two-Phase Selection Process**, a procurement process in which the first phase consists of creating a short list of qualified design build entities as determined by responses to an RFQ. The second phase consists of the submission of technical and price proposals in response to an RFP.

## CHAPTER THREE

### BEST VALUE DESIGN BUILD PROCUREMENT PROCESS (BVDB)

The best value procurement process will be used to select the proposal with the best value to the Department and public, in which the combination of technical, quality, schedule, operating, and pricing factors meet or exceed the Department's requirements identified in the RFP. The Department will follow a specific decision making process to identify and select a project for using the design build method of procurement. Assessment of the project risks, project complexity, size, traffic management, and project schedule requirements will be required. The Department will also identify project development staffing needs and determine who (in-house or consultant) will perform services such as preliminary mapping and baseline survey, hydraulic analysis, geotechnical investigation, traffic management, right of way, environmental studies and permitting.

The Department will establish a multi-disciplined team to develop the RFQ and RFP documents prior to project advertisement. This will include identifying the project team members for the Selection Committee and any subcommittees. The project development team will identify the project goals, develop the preliminary design and construction scope of work, develop a detailed description of the project, collect the base data, identify the required design elements, identify environmental permitting requirements, identify ROW needs, etc. FHWA approval of the RFP is required prior to project advertisement on FHWA oversight projects.

#### 3.1 PREQUALIFICATION REQUIREMENTS

The Department will publish an advertisement requesting Letters of Interest (LOI) and announcing the availability of Request for Qualifications and Proposal packages (RFQ/P) in the same manner as a typical bidding for a professional services contract with the Department. The advertisement shall contain a description of the project, the required services, and any prequalification requirements of the DB Entity. Letters of Interest received by the deadline identified in the advertisement will be provided with an RFQ package. The RFQ package will request a Statement of Qualification (SOQ) which will be used in the short-listing step of the two-phase selection process. The Low Bid Design Build process will not utilize the short-listing step referenced above. A "Draft RFP" may be provided with the RFQ package if available.

Advertisements requesting Letters of Interest (LOI) shall be advertised in a newspaper of general circulation in the area in which the project is located or to be located and in the central register established under section 20A of chapter 9. A minimum of two weeks notice will be allowed for the submission of the LOI.

### **3.2 DEVELOPMENT OF DESIGN AND CONSTRUCTION CRITERIA**

The project description and detailed scope of work is the most important aspect of the project development and should be developed early in the process. This information provides the vehicle to ensure that the project team understands the complete project and provides a common basis for distribution of project teamwork tasks. The project description should define the purpose of the project, its limits, unique conditions, design elements, physical components, schedule issues, traffic management parameters, and other items as necessary to fully describe the project.

If the project is subject to FHWA oversight as identified in MHD's current Project Oversight Agreement with FHWA, the RFP shall be consistent with 23 CFR Parts 636 and submitted for FHWA approval prior to authorization and release of the RFP to the DB Entities. It is critical that FHWA be involved throughout the development of the design and construction criteria in order to expedite FHWA's final RFP approval.

Design and construction criteria should clearly and completely identify design build requirements/services, including any information, data, and services to be furnished by the Department and must be included in the RFQ/P package including the relative weighted average to be assigned each criteria. The RFP shall identify the cost basis, low-bid or best value, by which the Department evaluate proposals.

The design and construction criteria shall provide a summary of the project's objectives and furnish sufficient information upon which DB Entities may prepare bid proposals (i.e. technical and price proposals). Criteria may include geo-technical analysis, surveying, environmental permitting, right of way, utility coordination, etc. The design and construction criteria shall state the specifications, design criteria, and standards to be used in the design and construction of the project unless otherwise referenced in the RFP.

### **3.3 CONTRACT NUMBER ASSIGNMENT**

The Contracting Unit will obtain a contract number and enter the project into the Department's Fiscal Management system for monitoring as a design build project. On Federal Highway Oversight Projects a Federal Aid number will also be required.

### **3.4 ADVERTISEMENT**

The Department will publish an advertisement requesting Letters of Interest (LOI) and announcing the availability of Request for Qualifications and Proposal packages (RFQ/P) in the same manner as a typical bidding for a professional services contract with the Department. A minimum of two weeks will be allowed from the time of the advertisement to the deadline for submitting Letters of Interest. The advertisement shall contain a description of the project, the required services, and any prequalification requirements of the DB Entity. Letters of Interest received by the deadline identified in the advertisement will be provided with an RFQ package. The RFQ package will request a Statement of Qualification (SOQ) which will be used in the short-listing step of the two-step selection process. A "Draft RFP" may be provided with the RFQ package if available.

Advertisements requesting Letters of Interest (LOI) shall be advertised in a newspaper of general circulation in the area in which the project is located or to be located and in the central register established under section 20A of chapter 9.

Each advertisement shall include, as a minimum, the name and description of the project, the District and County location of the project, the major type(s) of work required, any minor types of work that are required for the project (but not normally associated with the major work), the estimated construction cost of the project (if applicable), prequalification requirements, how and where DB Entities can respond, any additional technical qualifications desired, the time frames for Letters of Interest and submitting bid proposals, the number of copies to be received, how respondents will be selected, and tentative dates for short-list and final selection.

All advertisements should summarize the Department's selection schedule for the prospective DB Entities. The selection schedule should provide an outline of specific calendar dates, and clearly identify the time allotted for the preparation of qualification statements for design build proposals. Advertisements should also include the "posting" date and bid solicitation protest rights. Each project advertisement should be drafted to fit the unique needs of that particular project.

### **3.5 PREPARATION OF REQUEST FOR QUALIFICATIONS (RFQ)**

The Department shall contract for the duration of the 2 phase selection process with a Design Professional to provide technical advice and professional expertise to the Department; but, in retaining the services of a design professional the awarding authority may utilize the services of a design professional already in the employ of the Department, or if the Department does not already have in its employ the design professional, the awarding authority shall procure the services

of a design professional pursuant to sections 38A 1/2 to 38O, inclusive, of chapter 7. The Design Professional must be in place before issuing the RFQ.

The RFQ shall serve as the basis by which MHD will create a short-list ranking of Design Build Entities that are qualify to receive an RFP in phase 2 of the 2phase selection process. The RFQ will be provided to each DB Entity submitting a letter of interest. The RFQ shall contain the date certain by which Statement of Qualification (SOQ) responses to said RFQ are due. The RFQ should also include all performance criteria and measures that will be utilized during the evaluation process.

The RFQ requests interested proposing teams (Proposers) to submit a well-defined package outlining historical information related to capabilities, experience, and past performance on specific issues pertinent to the design build project. Project team organization, key project team members, individual team history will be required. The evaluation criteria and scoring system will be clearly identified in the RFQ. The goal of the evaluation of the SOQ's is to select a minimum of two and up to five highest ranked Proposers based on their experience in specific areas that are important for the design build project. Proposers may be required to give an oral presentation to the Selection Committee or to otherwise provide clarifying information needed to properly evaluate qualifications. Requested information will include past work experience on projects similar in size and scope, any terminations from work or failure to complete work, any lawsuits filed against any of the major participants, any prior business record of the officers or principals of the major participants, and the safety record of major participants; said information shall be provided for the past 3 years; References, including references from previous clients, bank references, surety references, and a complete record of public project record for the 3 years before submission of the request for qualifications; Bonding capacity, which shall be evidenced by a commitment letter from an approved surety;

MHD shall establish a Selection Committee which will be responsible for the evaluation and ranking of the Statement of Qualifications (SOQ) on the basis of the evaluation criteria set forth in the RFQ. The designated individuals shall have design build experience in design and/or construction and be approved by the Chief Engineer.

The evaluations shall specify in writing:

- 1) for each evaluation criterion, a rating of each response as highly advantageous, advantageous, or not advantageous, and the reasons for the rating.
- 2) A composite rating for each SOQ using said ratings as highly advantageous, advantageous, or not advantageous, and the reasons for said composite rating. MHD will investigate and verify all information

received. All financial information, trade secrets or other information customarily regarded as confidential business information shall not be deemed to be public information and shall remain confidential to the extent permissible under current law.

DB Entities achieving a composite rating that falls within the scoring range of highly advantageous or advantageous shall be eligible to receive an RFP in phase 2 of the 2-phase selection process. MHD may develop a short list of any number of DB Entities who will receive an RFP, except that if MHD fails to identify at least 2 DB Entities who qualify to receive an RFP, MHD shall re-advertise the project and renew the RFQ process. A draft RFP may be issued at the same time as the RFQ is being issued for review and comment by prospective DB Entities. It is recommended that the short-listing be limited to no fewer than 2 and no more than 5 of the most qualified DB Entities as determined by the SOQ rankings by total composite scores achieved using the criteria and weighted averaged identified in the RFQ.

### **3.6 PREPARATION OF REQUEST FOR PROPOSALS (RFP)**

The components of the RFP Package are based on the Department's standard bid proposal documents, with some additional components that identify the selection process requirements and criteria to be used. If the project is subject to FHWA oversight, the RFP shall be submitted for FHWA approval prior to authorization and release of the RFP to the short-listed DB Entities. The RFP will contain the necessary information to describe the project, the technical requirements for the designing and constructing the project, the method for selecting the DB Entity, the scoring process to be used, quality criteria, and relative weight assigned to the criteria must be contained in the RFP. The RFP will become the basis for the contract and the means to administer the contract.

#### **3.6.1 Project Time/Schedule**

All RFP's shall state a time period in which the services and/or work are to be delivered. Time of performance requirements in the RFP are best stated in elapsed consecutive calendar days from the date identified in the contract notice-to-proceed. In this way, changes in the schedule to solicit, receive, evaluate, and select an award can be changed without affecting the project schedule. In those instances where the completion date is critical, the RFP must include a "but-not-later-than" qualifier in the project schedule.

The DB Entity's project schedule should depict at what stage in the Design build process the DB Entities intends to build each element/phase of the project. The DB Entity's project schedule shall be developed using critical

path method (CPM) techniques (or other appropriate scheduling techniques based on the type of project) and specify the time frame for interim events. These events may include submittal requirements of the DB Entities, such as design development drawings, or construction documents. They may also include requirements of the Department directly or through a third party, e.g., site availability, completion of an environmental report/permits or the delivery of Department-furnished equipment or materials.

Again, the interim deadline requirements should be stated in elapsed days and may be an obligation of the DB Entities or Department. The obligation of the Department to complete specific submittal reviews (if required) within a specified time period may also be included in the project schedule.

It is recommended that the RFP require a 30 to 90 day plans preparation period and the required review period be front-loaded into the project schedule prior to allowing the contractor to begin actual construction. This will allow the design process to get out ahead of the contractor as well as providing sufficient time for the Department to conduct its conformity reviews. This plans preparation time must be clearly spelled out in the RFP so that the DB Entities can include it in their contract time calculation.

It may be appropriate to allow certain construction activities (such as geotechnical investigations and clearing and grubbing) during this plans preparation period. Specifics requirements should be included in the RFP identifying these activities.

### **3.6.2 Payout Schedule**

The RFP must clearly address the invoicing and payment process including a payout schedule. The payout schedule should be based on major, well-defined tasks related to the DB Entity's CPM (or other appropriate) schedule. The payout schedule should also include provisions for tracking MBE/DBE participation. Generally, the details of the payout schedule are to be worked between the selected DB Entities and the Department after the project is awarded. Examples of payout schedules are based on monthly or percentage of completion of work schedules.

### **3.6.3 Technical Proposal**

The RFP shall include well-defined technical proposal requirements. This should include detailed instructions regarding the content and format.

#### **3.6.4 Price Proposal**

The RFP shall include well-defined Price Proposal requirements. Design Build projects are bid lump sum and are paid through a payout schedule based on major work items or tasks. The DB Entity's price proposal shall include the lump sum price, as well as the standard bid blank forms.

The Project Manager should include the appropriate Design Build Bid Items that reflect the scope of the work in the Bid Proposal Form.

#### **3.6.5 Subcontract Services**

The RFP shall contain language that allows DB Entities to subcontract portions of their work. Major Participants in the DB Entities (i.e., contractor or designer) cannot be changed after contract award without written consent of the Department. Failure to receive approval on such a change may result in contract cancellation.

#### **3.6.6 MBE/DBE Requirements**

The RFP/Specifications shall address the Department's commitment to diversity in contracting. Utilization of women and minority-owned businesses is encouraged by the Department to be used on all projects. Contact the Civil Rights office for current contract requirements.

#### **3.6.7 Technical Proposal Evaluation Criteria**

The RFP shall include the evaluation criteria and scoring process and relative weight thereof to be used by the Selection Committee to evaluate technical proposals on all Best Value or Low Bid Design Build projects. The criteria shall be established by the Selection Committee to meet the specific needs of a particular project.

#### **3.6.8 General Liability Insurance, Professional Liability and Contract Bonding**

**General Liability Insurance:** The RFP/Specifications must include current Standard Specifications regarding general liability.

**Professional Liability:** The RFP/Specifications shall stipulate the amount of professional liability insurance required and term (the length of time) of coverage.

**Contract Bonding:** The RFP/Specifications must require applicants to be capable of providing evidence of a performance and payment bond in the full amount of their total Design Build contract.

### **3.6.9 Public Involvement**

Since public involvement is an important aspect of the project development, it is imperative that the Project Manager, working with the appropriate District staff, defines in the RFP the level of coordination/involvement required for a particular project. Public involvement includes communicating to all interested persons, groups and government organizations information regarding the development of the project.

### **3.6.10 Design and Construction Quality Control and Quality Assurance**

The Quality Assurance Program is a critical component of the design and construction of the project. It represents assurances to the Department that the Design Build Entity is executing in accordance with the contract documents. The Department will provide the quality assurance and independent testing, but the established QC/QA Program is the backbone for which the Department will gauge compliance. The Contract Provisions should require that the QC/QA Program submitted with the proposal be brought into conformance with the Department's requirements prior to execution of the contract. The Department must negotiate the provisions of the QC/QA Program and finalize an acceptable Program prior to award of a contract.

## **3.7 CONSIDERATIONS FOR RFP DEVELOPMENT**

Formulation of the RFP package is a significant effort that should not be overlooked in project scheduling, or underestimated. This is the portion of the contract in which the Department has the opportunity to properly define the desired outcome. The team members need to ensure that the required information is incorporated into the RFP. This section describes some of the considerations necessary for developing the major components of the RFP.

- 1) Prior to advertisement, existing right of way must be verified and a determination made if the project can be built within existing right of way.

If additional right of way will be needed, a decision must be made in the identification stage if right of way services will be included in the Design Build contract or handled separately.

Design build contracts may be advertised and awarded prior to right of way activities being completed. Construction activities may not begin on any portion of such projects until such time as title to all necessary right of way and easements necessary for the construction of that portion of the project has been vested in the state or a local government entity and a right of way certification for construction for that portion of the project has been issued.

- 2) Design Build Entities may be required to provide independent Construction Engineering Inspection services as part of the Quality Control and Quality Assurance program. It should be determined in the early identification stage if this will be part of the RFP. Certain requirements must be met including FHWA regulation CFR 637.205 which regulates contractor sampling and testing to be used for acceptance.
- 3) The Department will put together an experienced multi-disciplined team to assist in the development of the request for proposal information. Team members need to be identified early so that all engineering disciplines that are essential to the type of work in the scope are aware of their role and responsibilities. One recommendation is to assign a Project Manager at the stage of project scope development, in order to have that person on the MHD Design Build team. This allows project management and field personnel to become familiar with the process.
- 4) The type of funding must be identified in order to include the correct bid documents in the request for proposal. If federal funds are involved, all the normal procedures for approval and authorization must be followed.
- 5) Stipends: The issue of reimbursement for the preparation of the technical proposals needs to be addressed up front so that funds are made available. Federal funds may be used to reimburse short-listed DB Entities for their effort in the preparation of the technical proposal. If the job is relatively small and not complex a stipend should not be offered.

Once a project has been identified for Design Build procurement:

- 1) Preliminary design work may be required prior to advertisement. Such work may include survey, geotechnical data, right of way, permitting and/or other items of work. The more information available, the more detailed the scope of work will be to the prospective DB Entities. A decision needs to be made as to how much preliminary design work will

- be done. A reasonable target would be a 25% design effort with any specific complex issues being identified in the scope of work prior to advertisement. Preliminary environmental studies and permitting requirements need to be assessed.
- 2) Set up a preliminary schedule for the development of the RFQ and RFP documents. Consider the terminology normally used and that which is used with design build projects. It may not be the same and needs to be understood by all parties. The Draft RFP should be complete and ready to go at the time the advertisement appears. This means that a design build schedule is very front-end loaded for scope development, scope review, appropriate approvals and advertisement time. Federal funded projects require FHWA's involvement throughout the development of the RFP. FHWA authorization of the RFP should not be left to the last minute.
  - 3) Writing an RFP is time consuming and requires review by various disciplines within the Department and FHWA. Allow for at least two reviews. Allow time, up front, to make modifications knowing that each item listed in the procedure must be addressed. The more detailed the work the more time will be needed to write the RFP. A decision to include construction engineering inspection work must be made early so that it can be included in the RFP.
  - 4) Department review times must be identified in the RFP. These times are absolute. If MHD review comments are not provided to the DB Entity by the cut-off date, the DB Entity may encounter delays and may be entitled to additional time and costs associated with the delay in receiving the review comments. The Project Manager should discuss this with the design review sections to ensure their understanding. Explain that the review times are significantly shorter (about 15 days) than those for normal design projects. The reviews are, however, for "meeting design criteria" only, and not final approval.
  - 5) Although there are established DB Entities, most of the responses to Department advertisements for Design Build projects will be received from two separate companies that have teamed up specifically for a DB project. The contractor or consultant may lead. Contractors have more bonding capacity than consultants. Consultants tend to know the professional services contracting procedures more thoroughly and are more familiar with writing technical proposals than contractors.

### 3.8 SHORT LIST EVALUATION GUIDELINES

The purpose of this section is to provide guidelines that will allow the Selection Committee to take all the SOQ received by the deadline stated in the RFQ and reduce them to a ranked listing in the order of the highest composite score achieved by each DB Entity (i.e., Short List).

The RFQ requests interested proposing teams (Proposers) to submit a well-defined package outlining historical information related to capabilities, experience, and past performance on specific issues pertinent to the design build project. Project team organization, key project team members, individual team history and current workload will be required. The evaluation criteria and scoring system will be clearly identified in the RFQ. The goal of the evaluation of the SOQ's is to select a minimum of two and up to five top ranked Proposers based on their experience in specific areas that are important for the design build project. Proposers may be required to give an oral presentation to the Selection Committee or to otherwise provide clarifying information needed to properly evaluate qualifications.

The Committee shall take into consideration the following criteria as it applies to the project. Not all criteria will apply or may have little value for the particular project. The committee should determine in advance the criteria and its importance in the evaluation of the SOQ's to produce the ranked short list. The criteria to be considered and included in the RFQ are:

- 1) Past Performance Grades: Contractor, Designer, and CEI (if CEI is included in contract)
- 2) Joint experience of the DB Entities working together
- 3) Design Build experience of the DB Entities
- 4) Similar type work experience
- 5) The current workload of the DB Entities
- 6) Time delays on past projects
- 7) Experience of key personnel to be assigned to the project.
- 8) Safety record
- 9) DB Entity's organization, resources and location.
- 10) Environmental record
- 11) Incidents of litigation/disputes history
- 12) Other categories the Selection Committee determines

The following are definitions of the above criteria:

- 1) **Past Performance:** Evaluate past performance of the primary Contractor as listed in the Contractor Past Performance Evaluation Report. See the Qualifications Engineer in the State Construction Office to obtain any information and or reports. Primary Designer past

performance should also be evaluated using the A&E Board past ratings and reviews.

- 2) **Joint Experience of the DB Entities Working Together:** It may be beneficial to have information about experience that the major DB Entities' members have had in the past. Traditional projects may have involved the Designer and Contractor working together during construction. This could include but not be limited to Design Build. They may have a history of working with each other that has supported their coming together as a Design Build Entity. Many Consultants use Contractors for constructibility reviews as well as Contractors using Consultants for design issues. This past history can also include projects where the Consultant member designed the project and the Contractor built the project. Even though some of these projects may or may not have been transportation projects, it still demonstrates that the DB Entities have a confidence level in each other that has led to teaming again. This may be considered a positive in the short-listing process, as compared to a Designer and Contractor that have not worked together in the past.
- 3) **Design Build Experience of the DB Entity:** Consider the individual DB Entity members' past experience with Design Build projects of similar type (i.e. bridge, roadway, building, etc.) as well as the experience of the complete team on past Design Build projects in other states. Consider the overall project type, as well as the complexity and unique features, of past projects as compared to the demands of the subject project. Past Design Build experience could be drawn from projects contracted by other DOTs, private industry, or local governments. The criteria should carry a heavy emphasis on very sensitive projects. Projects, such as a complex bridge project, would be the standard for giving the criteria a heavy emphasis.
- 4) **Similar Work Type Experience:** Consider experience that clearly demonstrates that the Design Build Entity has performed construction of the same type, scope, and complexity as the advertised project. For example, if the advertised project is a three-mile long precast segmental bridge, then the contractor should be able to show, as a minimum, experience with segmental construction – precast would be good, but cast-in-place is acceptable – and with repetitive type operations. If the advertisement is for a predominantly roadway project and the Contractor's experience is mainly with bridges, the DB Entity may not be considered as a strong candidate.
- 5) **Current Workload:** Verification of the DB Entity's bonding capacity should exclude any team unable to bond the project from being considered.

- 6) **Time Delays on Past Projects:** Timely completion of past projects should carry a heavy emphasis. DB Entities who have demonstrated the ability to finish jobs on time when they have encountered conditions differing from those represented in the plans on current or past MHD projects should be given greater consideration.
- 7) **Experience of Key Personnel:** Consider the experience of key personnel who are proposed, by the DB Entities, to be in charge of the day-to-day work on the project. This includes the key persons in responsible charge of construction, design, inspection, and testing.
- 8) **Safety Record:** The DB Entity's performance in the safety area can be considered by past performance on construction projects or any citations by OSHA for safety violations.
- 9) **DB Entity's Organization and Regional Experience:** Organization of the proposed DB Entity and sub-consultants should be evaluated for ability to do the job; the location of the DB Entity for ability to work together as a cohesive team should also be evaluated. The DB Entity's members experience with local and state government, permit and regulatory agencies, and community groups can also be evaluated.
- 10) **Environmental Record:** The performance of the DB Entities can be evaluated by reviewing citations from DEP, EPA, etc. This information will most generally be published in the daily clips or newspaper articles. District Construction personnel's experience with the DB Entities with NPDES requirements can also be used.
- 11) **Incidents of Litigation/Disputes History:** Consider a history of contractor claims pertaining to additional compensation or time extensions, that are not negotiated and resolved through a Supplemental Agreement, or final estimate quantities disputes that proceed, after final acceptance, to circuit court or arbitration. Also, a history of disputes being escalated to Dispute Review Board (i.e., disputes may be initiated by Contractor or Owner, generally contractor initiates) should be considered.
- 12) **Other:** There may be other criteria, unique to the proposed project, that warrants inclusion in the initial evaluation that is not listed above. The Department must recognize this in the development of the RFQ and RFP packages.

**Confidentiality:** Critical to the validity of the selection process is the absolute necessity for confidentiality. Each Department participant in the evaluation

process for either the RFQ or RFP shall sign a “Confidentiality and Non-Disclosure Agreement” and a “No Conflict of Interest Statement”.

The Selection Committee may take many approaches to reach a short list. The short list should be a list with the preferred ranking. A scoring matrix will be developed by the Selection Committee to identify the categories and the associated weighted averages for the scoring system. The list should also have a narrative comment summary of strengths and/or weaknesses as identified by the Committee of each DB Entity. The evaluation categories and scoring weighted averages (scoring matrix) will be developed and identified prior to distribution of the RFQ/P.

### **3.9 PRE-PROPOSAL MEETING FOR SHORT-LISTED DB ENTITIES**

Prior to the RFP due date, a pre-proposal meeting will be held, with FHWA being invited on oversight projects, in order to discuss the project in detail and to clarify any concerns that the short-listed DB Entities may have.

The purpose of this meeting is to provide a forum for all concerned parties to discuss the proposed project, answer questions on the design and construction criteria identified in the RFP, CPM schedule, and method of compensation, instructions for submitting proposals, and other relevant issues. No questions should be answered relating to the project objectives after the information cutoff date. The DB Entities should be instructed to direct all questions after the meeting to one entity, either the Project Manager or the Contracting Section.

During and after the meeting, it is the responsibility of the Department to ensure that each short-listed DB Entity develops their technical proposal with the same information. If one DB Entity receives information from the Department relating to the project prior to the information cutoff date, the Department will ensure that all short-listed DB Entities receive the same information in a timely fashion. The project file will clearly document all communications with any DB Entity regarding the design and construction criteria by the Contracting Section or the Project Manager.

At the conclusion of the meeting or when it is reasonable to assume that no further changes regarding design and construction criteria will be required, the Contracting Section, along with the Project Manager, will update the criteria, as necessary. The updated criteria shall be made available to each member of the Selection Committee prior to the evaluation of the technical proposals. Also, should significant changes result from the meeting, the short-listed DB Entities shall be provided the updated criteria or any changes occurring in the RFP. (FHWA must approve such change.)

### **3.10 PROPOSALS SUBMITTED BY SHORT-LISTED DB ENTITIES**

The Department shall request proposals from no fewer than two DB Entities. DB Entities will be asked to develop and submit proposals based on the RFP. Proposals will be segmented into two parts: Technical Proposals and Price Proposals. Technical and price proposals will be received by the date, time and appropriate office, as noted in the instructions. Technical and price proposals shall be submitted in separate packages (with the price proposal sealed) and the appropriate bid deposit.

Price proposals shall include all DB package forms (i.e., Bid Bond, DBE Utilization Summary Form, etc.) The office receiving the proposals will send the technical proposals to the Selection Committee and hold sealed price proposals until technical proposal scores are compiled by the Selection Committee. If a DB Entity withdraws from consideration after the Department requests a proposal, the Department may continue, if at least two proposals are received.

#### **3.10.1 Technical Proposals**

Technical proposals should include a detailed project schedule using CPM (or other techniques as appropriate), preliminary design plans, preliminary specifications, technical reports, calculations, permit requirements, total contract time and other data requested in response to the RFP. The package shall indicate clearly that it is the technical proposal and shall clearly identify the DB Entity's name, project description, or any other information required.

#### **3.10.2 Price Proposals**

Price proposals shall include one lump sum cost for all design, construction, and construction engineering and inspection (if CEI is included) of the proposed project. The package shall clearly indicate that it is the price proposal and shall clearly identify the DB Entity's name, project description, and any other information required.

### **3.11 THE PROPOSAL EVALUATION PROCESS**

#### **3.11.1 Evaluation Overview**

The Selection Committee shall first determine whether the proposals meet the Pass/Fail criteria and whether the proposals are otherwise responsive to the requirements of the RFP. Committee members shall evaluate the appropriate components of the proposals against the criteria contained in

the RFP and submit their findings to the full Committee. Following the oral presentations, Committee members shall revise their evaluation sheets and narratives, where appropriate. Standard MHD evaluation forms will be used as modified for project specific criteria.

A Price Evaluation sheet for each proposal (identified by number) will be completed by the Selection Committee members also. The Selection Committee shall use the remaining evaluation sheets in preparing their initial rankings along with appropriate narratives to support the evaluations.

The RFP will identify a specific period of time for Proposers to submit questions and written requests for clarifications during the development of their proposals. All inquiries must be in writing and directed to the Department's Project Manager identified in the RFP. Answers to all substantive questions will be made available to all RFP recipients via e-mail; and when appropriate, revisions, substitutions, or clarifications will be issued as official addenda to the RFP.

The RFP may allow for a process to review technical submittals prior to final submission for the purpose of determining the Department's willingness to accept an alternative proposal prior to the submittal due date.

The Department may require each Proposer an opportunity to present a fortifying presentation of their proposal. Approximately one week after the proposals are submitted, each Proposer may be allowed to make a one-hour oral presentation to all members of the Selection Committee. The presentation will afford the Proposers the opportunity to highlight the significant aspects of their technical proposal and their understanding of the project and offer a chance for the Selection Committee to ask clarifying questions. The Selection Committee shall decide in advance as to what Proposal information may require clarification and which of the design build entity's key personnel it wishes to interview. The oral presentation shall not be used to fill in missing or incomplete information that was required in the written proposal. The oral presentation shall not be used as an opportunity by the Proposers to improve or supplement their proposals. This step in the selection process will be clearly identified in the RFP.

Following the review of any subcommittee reports and the qualitative ratings, the Selection Committee will determine if clarifications will be required. The Selection Committee will notify in writing each Proposer for which clarifications of their proposal is required in accordance with the schedule contained in the RFP. Oral presentations may be requested and will serve the purpose of assisting the Committee in understanding,

clarifying the proposals. Committee members may request each Proposer to address any and all incomplete and/or information and issues and may request the submission of additional information for the purpose of clarifying and improving the Committee's understanding of its proposal.

### 3.11.2 Qualitative Ratings

Each major category (i.e. Design, Construction, Operations and Maintenance, Finance/Joint Development) and each subcategory will be qualitatively evaluated by each reviewer and assigned a rating as follows:

**EXCEPTIONAL (90-100):** The proposer has demonstrated an approach that is considered to significantly exceed stated requirements/objectives and provides a consistently outstanding level of quality. There is very little or no risk that this proposer would fail to meet the requirements of this aspect of the work. There are essentially no weaknesses in this item of the proposal.

**GOOD (80-89):** The proposer has demonstrated an approach which is considered to exceed stated requirements/objectives and offers a generally better than acceptable quality. There is little risk that this proposer would fail to meet the requirements of this aspect of the work. Weaknesses, if any, are very minor.

**ACCEPTABLE (70-79):** The proposer has demonstrated an approach that is considered to meet the stated requirements/objectives and has an acceptable level of quality. The proposal, for this aspect of the work, demonstrates a reasonable probability of success. Weaknesses are minor and can be readily corrected.

**POOR (60-69):** The proposer has demonstrated an approach that fails to meet stated requirements/objectives as there are weaknesses and/or deficiencies, but they are susceptible to correction through oral presentations. The response is considered marginal in terms of the basic content and/or the amount of information provided for evaluation, and the proposer should be capable of providing an acceptable or better proposal for this item.

**UNACCEPTABLE (0-60):** The proposer has demonstrated an approach that contains significant weaknesses/deficiencies and/or unacceptable quality. The proposal fails to meet the stated requirements/objectives and/or lacks essential information and is conflicting and/or unproductive. There is no reasonable likelihood of success; weaknesses/deficiencies are so major and/or extensive that a major revision would be necessary.

The Committee will use the guide as a means of converting the applicable weighting factors to the qualitative ratings established in the review of the proposals. The guide will enable the Committee to apply the appropriate weight to each selection factor as set forth in the project specific proposal evaluation process.

### **3.11.3 Selection Criteria**

Detailed selection criteria to be used by the Selection Committee and sub-committees will be identified in the RFP and will be detailed for each specific project. Committee members shall refer to these criteria when completing the evaluation sheets.

The Committee will evaluate each DB Entity's technical proposal. The rating and technical evaluation process is extremely important and should be accomplished using one of two methods or another objective formula clearly detailed in the RFP, (the FHWA must be provided one copy of technical proposal for oversight projects only at the same time to insure consistency with the design criteria specified in the RFP).

#### Method 1

Each Selection Committee member is responsible for scoring the DB Entity's proposal in the areas of their expertise only. In other words, a roadway design engineer would not develop scores for evaluation criteria related to bridge design, but rather only score items, such as approach roadways, MOT, and environmental impacts appropriate to their level of expertise. A minimum of three (3) scores are required for each evaluation criteria prior to averaging the scores for the development of a final technical proposal score.

#### Method 2

Each Committee member is responsible for obtaining a score for each evaluation criteria by selecting other persons to assist them in those areas where they do not possess an appropriate level of expertise. As an example, a bridge designer may call upon a roadway designer for assistance in scoring each DB Entity's roadway approach details and MOT, and a permitting or environmental person for input on environmental mitigation details. Each committee member must use a different person to assist them in the areas where they do not pose the appropriate level of expertise so that each committee member can't call on the same

expert already use by another member. All evaluation criteria will receive a score from each committee member prior to averaging the scores for the development of a Final technical proposal score for each proposal.

Each Committee member will then submit a final technical proposal scoring form for each DB Entity's Proposal to the Selection Committee Chairperson. During this technical review process, it is recommended that the Committee members meet together to discuss their thoughts on each proposal. This is intended to be a structured meeting to discuss concerns and to determine how well each proposal met the criteria. Rating points for each proposal should not be discussed at this meeting. The purpose of the meeting is to give each reviewer a better understanding of the technical merits of each proposal, not to develop a group score.

The Selection Committee shall notify all short-listed DB Entities of the date, time, and location of the public opening of the sealed price proposal.

The Selection Committee shall publicly open the sealed price proposals and divide each DB Entity's price proposal by the technical score to obtain an adjusted score. The following example shows how the selection formula would work:

DB ENTITY	TECHNICAL SCORE	PRICE	ADJUSTED SCORE
A	90	\$6.7 Million	74,440
B	80	\$6.5 Million	81,250
C	70	\$6.3 Million	90,000

### **3.12 SELECTION COMMITTEE RECOMMENDS AWARD**

Unless all proposals are rejected, the Selection Committee will recommend to approve and enter into final contract negotiations with the DB Entity with the lowest adjusted score. In the advertisement and pertinent bid documents, the Department shall reserve the right to reject all proposals and waive minor proposal irregularities.

The Department shall post the results and provide written notification to each DB Entity submitting a proposal of the award of the project or rejection of all proposals within thirty (30) days of final selection or determination to reject all proposals.

### **3.13 STIPENDS FOR UNSUCCESSFUL SHORT LISTED DB ENTITIES**

On Best Value Design Build (BVDB) projects only, where the Department intends to compensate the unsuccessful short-listed DB Entities for submitting a proposal, the Department must enter into a contract with each DB Entity immediately after short-listing. Before this contract is awarded the Contracting Unit or Project Manager will ensure that a request for encumbrance is approved by the Fiscal Management Office in accordance with the contract funds approval process. A contract is required to document the terms and conditions for compensation.

On BVDB projects, the unsuccessful short-listed DB Entities may receive compensation (lump sum) for their efforts in preparing a proposal if the proposal is determined to be responsive by the Selection Committee. The intent to compensate and the amount of this compensation will be noted in the RFP package. A stipend is not intended to compensate the DB Entities for the total cost of preparing the bid package. Compensation will be commensurate with the level of effort required to develop a bid proposal. In return, the Department shall reserve the right to use any of the concepts or ideas within the technical proposals, as the Department deems appropriate.

## CHAPTER FOUR

### LOW BID DESIGN BUILD (LBDB) BID PROCESS

As a general rule, the low bid approach should be used on projects where the design and construction criteria are concise, clearly defined, and innovation or alternatives are not being sought. This might include bridge projects with a specified foundation type, span lengths, and beam type. Resurfacing projects are restricted to the use of the Low Bid Design Build (LBDB) bid process.

#### 4.1 PREQUALIFICATION REQUIREMENTS

The Department will publish an advertisement requesting Letters of Interest (LOI) and announcing the availability of Request for Qualifications and Proposal packages (RFQ/P) in the same manner as a typical bidding for a professional services contract with the Department. The advertisement shall contain a description of the project, the required services, and any prequalification requirements of the DB Entity. Letters of Interest received by the deadline identified in the advertisement will be provided with an RFQ package. A "Draft RFP" may be provided with the RFQ package if available.

#### 4.2 CONTRACT NUMBER ASSIGNMENT

The Contracting Unit will obtain a contract number and enter the project into the Department's Fiscal Management system for monitoring as a design build project. On Federal Highway Oversight Projects a Federal Aid number will also be required.

#### 4.3 ADVERTISEMENT

The Department will publish an advertisement requesting Letters of Interest (LOI) and announcing the availability of Request for Qualifications and Proposal packages (RFQ/P) in the same manner as a typical bidding for a professional services contract with the Department. The advertisement shall contain a description of the project, the required services, and any prequalification requirements of the DB Entity. Letters of Interest received by the deadline identified in the advertisement will be provided with an RFQ package. A "Draft RFP" may be provided with the RFQ package if available.

Advertisements requesting Letters of Interest (LOI) shall be advertised in a newspaper of general circulation in the area in which the project is located or to be located and in the central register established under section 20A of chapter 9. A minimum of sixty (60) days is allowed from the date of advertisement to the

receipt of a Design Build Proposal. The actual length of time that the advertisement is publicized is at the discretion of the Department.

If a pre-bid meeting is to be held, the announcement must also provide the date, time, and location of the pre-bid meeting.

#### **4.4 PRE-BID MEETING FOR LOW BID DESIGN BUILD**

If the LBDB project is complex, a pre-bid meeting may be held in order to discuss the DB Project and clarify any concerns. This meeting may be waived if the complexity of the project does not warrant such a meeting.

#### **4.5 LBDB PREQUALIFICATION REQUIREMENTS**

The Department will publish an advertisement requesting Letters of Interest (LOI) and announcing the availability of Request for Qualifications and Proposal packages (RFQ/P) in the same manner as a typical bidding for a professional services contract with the Department. The advertisement shall contain a description of the project, the required services, and any prequalification requirements of the DB Entity. Letters of Interest received by the deadline identified in the advertisement will be provided with an RFQ package. A "Draft RFP" may be provided with the RFQ package if available.

Advertisements requesting Letters of Interest (LOI) shall be advertised in a newspaper of general circulation in the area in which the project is located or to be located and in the central register established under section 20A of chapter 9.

#### **4.6 PREPARATION OF REQUEST FOR PROPOSALS (RFP)**

Same as for *BVDB: Section 3.6*.

#### **4.7 BID OPENING FOR LOW BID DESIGN BUILD**

Under the LBDB process, the Department will publicly open the price proposals on the day, time, and location noted in the advertisement, and send the Selection Committee the technical proposals for only the lowest bid submitted.

#### **4.8 RESPONSIVENESS OF PROPOSALS**

The Selection Committee shall review the design concepts and preliminary designs of the lowest bidder proposed in order to assess the responsiveness of the lowest bidder's technical proposal compared to the Design and Construction Criteria Package.

In the event the lowest bidder's technical proposal is found to be non-responsive, the Selection Committee will then review the next lowest bidder's technical proposal to determine its responsiveness (FHWA must concur). A Bid Proposal is considered non-responsive if it does not contain all the required information and level of detail, or is non-compliant with the design and construction criteria defined in the RFP. It may be appropriate for the Department to contact the non-responsive DB Entities to discuss/clarify its concerns prior to moving on to the next lowest bidder. However, once determined that the low bidder is non-responsive, the process will continue until the lowest bidder having a responsive proposal is found.

Unless all proposals are rejected, the Selection Committee will recommend to the Chief Engineer, to approve and enter into negotiations with the DB Entity with the lowest responsive bid. The Department will then enter into a contract. The Department reserves the right to reject all proposals.

#### **4.9 SELECTION COMMITTEE RECOMMENDS TO AWARD TO DB ENTITY WITH THE LOWEST RESPONSIVE BID**

Unless all proposals are rejected, the Selection Committee will recommend to the Chief Engineer to award to the DB Entity with the lowest bid that has a responsive technical proposal. The Department will enter into a contract for the price proposed. In the advertisement and pertinent bid documents, the Department shall reserve the right to reject all proposals and waive minor proposal irregularities.

The Department shall post the results and provide written notification to each DB Entity submitting a proposal of the award of the project or rejection of all proposals within thirty (30) days of final selection or determination to reject all proposals.