FIXED-PRICE DESIGN-BUILD

Procurement Guide

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WaterDesignBuild.org

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Fixed-Price Design-Build Procurement Guide

Section 1. Fixed-Price Design-Build Procurement Documents

1.1 Introduction

The fixed-price design-build (FPDB) delivery method for water and wastewater projects combines the owner's direct control over the concept of the project with the design-builder's innovative and unique solution to meet specific goals and drivers and establish performance and technical requirements. With the increased use of various collaborative delivery methods, the Water Design-Build Council (WDBC) produced this user-friendly guide to provide directions on addressing the steps in an effective FPDB procurement process, including the request for qualifications (RFQ) and request for proposals (RFP) sample template documents.

The following discussion within this document does not constitute legal advice, and readers are advised to consult with their own legal counsel for a determinative ruling on their authority under applicable state and local laws. Additional guidance on this topic is provided in Section 6.2 - Legal Authority.

Before electing to use the FPDB method and embarking on the procurement process, owners should verify that state and local procurement laws allow for its use. Owners should also pay careful attention to the specified requirements for procurement, as these will affect not only the type of process used (i.e., single-step or two-step process, and price-based or best-value-based selection), but often the required content of the SOQ and proposal submissions as well.

To procure a design-builder using the FPDB method, owners may choose between two approaches, which provide options to evaluate price and non-price factors through either a single-step or two-step procurement process, with this guide defining best-value selection as a best practice. The FPDB procurement documents associated with this guide facilitate an owner's use of a two-step process. The first step involves the solicitation of statement of qualifications (SOQ) submittals and shortlisting a group of proposing firms after evaluation of the SOQ submittals. The second step encompasses the issuance of an RFP and receipt of proposals from the shortlisted firms.

Owners will always have the option to consider a prescriptive- vs. performance-based set of requirements within the request for proposals. If an owner elects to pursue a single-step procurement, elements of both the RFQ and the RFP should be combined into a single document then called the request for proposals (RFP).

It should be noted that using a single-step procurement approach can save owners time, since the intermediate step of ranking SOQ submittals and announcing a short list is eliminated. The downside of the single-step procurement approach, however, is that some proposing firms may not compete where there is no short list developed, given the cost of proposal preparation and resource commitment required to prepare a competitive

offer. (WDBC and the Design-Build Institute of America [DBIA] consider a two-step procurement approach to be a best practice.)

In all cases, owners can select and negotiate a contract with a single firm responsible for the design, construction, commissioning, and start-up for a defined project. If the owner and the top-ranked firm are unable to successfully negotiate a contract, the owner will always have the right to go to the next ranked firm and move forward with negotiations with this latter party.

Fixed-price design-build (FPBD) is a delivery method in which a single fixed price, which encompasses both design and construction of a project, is established when the contract is signed. Figure 1 depicts the progression of activities for a FPDB project and the relationship of the owner, design-builder, and, if applicable, the owner's advisor. FPDB is almost always used when an owner has defined the project requirements and scope of work sufficiently for proposing firms to accurately predict the project cost early in the procurement process.

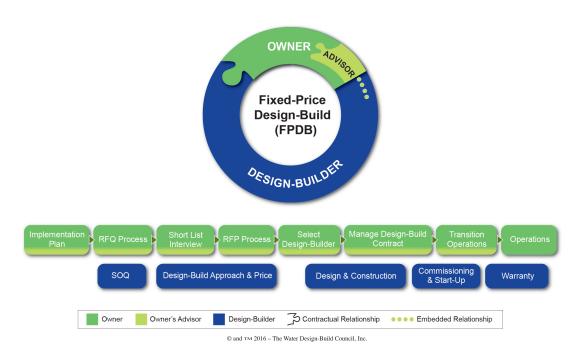


Figure 1. Fixed-Price Design-Build Procurement Overview

Due to the complexity of many water and wastewater projects, owners using FPDB will often incorporate a conceptual design (design criteria document) and detailed project requirements into the RFQ and RFP. Procurement for a FPDB project may therefore be costlier to an owner when compared to other collaborative delivery methods, due to the cost of preparing the more detailed procurement documents. In addition, FPDB is often costlier for proposing firms, as they may expend significant effort and resources during the procurement stage to prepare and offer a competitive technical and price proposal.

Procurement for FPDB differs substantially from progressive design-build (PDB) procurement in several ways. First, while a PDB proposal includes pricing for design up to \sim 60% to 90% complete + preconstruction services,

the proposal for a FPDB always includes an "all-inclusive" price for the complete design, construction, commissioning, and start-up of a project. Secondly, there is no formal "off-ramp" (comparable to that for progressive design-build) in FPDB should the design-builder and owner be unable to negotiate a contract and price for completion of the design, construction, and commissioning of a specific project. (It should be noted that a provision of "termination for convenience" is normally included in the FPDB agreement and could be considered the "off-ramp" for FPDB.) Lastly, the contract requirements for FPDB and PDB are dramatically different. (Refer to the DBIA agreement forms for both FPDB and PDB.)

Figure 2 depicts the steps in a procurement for both single- and two-step procurement approaches. The figure also depicts the project circumstances that might warrant selection of either the single- or two-step procurement process.

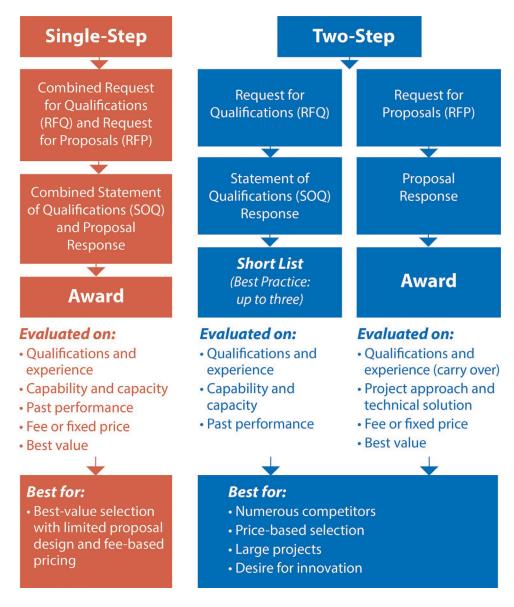


Figure 2. Comparison of Single-Step and Two-Step FPDB Procurement Process

1.2 WDBC Procurement Documents

The WDBC's fixed-price RFQ and RFP procurement documents are available as Word files. After deciding which procurement process is best suited to achieve the identified project's objectives and its drivers, (single-step vs. two-step), an owner can then adapt the documents to prepare a customized RFQ and RFP template that will support the procurement of a design-builder for their project.

Additional references for owners using the FPDB method of project delivery include:

- Water and Wastewater Design-Build Handbook, Fourth Edition (WDBC, 2016) and the Water Design-Build Council website: www.waterdesignbuild.org
- DBIA Done Right Design-Build Best Practices Water and Wastewater Sector (2015)

Section 2. The Fixed-Price Design-Build (FPDB) Delivery Model

A fixed-price design-build (FPDB) model is a collaborative delivery method in which a "single" fixed price encompasses both design and construction of a project and is established when the project agreement is executed. FPDB is used when the owner has defined the project requirements and scope of work sufficiently for proposing firms to accurately predict the project cost and delivery schedule during the procurement process.

Due to the complexity of many water and wastewater projects, owners using FPDB procurement will often incorporate some level of design (design criteria document) and detailed project requirements into the RFQ and RFP.

2.1 RFQ: Qualifications

The content required by the RFQ should be designed to aid the owner in determining whether, and to what extent, the proposing firm is qualified to design and construct a specific project, including type, size, and scope. The SOQ should include past performance on similar projects, as well as specific experience of proposed key personnel. The owner should establish minimum qualification requirements for screening SOQs as they are received and should include those requirements in the RFQ.

The information required for the submission of a statement of qualifications is presented in detail in Section 4 - Required Content of Submissions.

2.2 RFP: Performance-Based versus Prescriptive-Based Procurement

The FPDB RFP has been structured to allow owners to develop the technical requirements for a project based on their specific needs. The RFP may encourage proposing firms to be innovative in their approach to the solutions for an owner's project needs by defining performance-based elements as part of the technical requirements. The RFP also allows owners to dictate the specific characteristics of a project that the owner wants to have included as part of all proposing firms' proposed solutions by providing prescriptive-based elements as part of the technical requirements. More often, a "hybrid" approach is used that combines some prescriptive- and performance-based elements. Regardless of the specific technical requirements included in an RFP for FPDB, some level of design - typically 10-30% complete - will be key to the content of a proposing firm's technical proposal.

Performance-based requirements. The RFP for a performance-based FPDB procurement may include background information on the project site, technical and performance criteria (e.g., new water treatment plant to deliver "X" mgd and have certain quality for finished water), construction requirements, minimum quality standards, and operational objectives. This type of RFP will not include specific design approaches to achieve those objectives. Owners often prefer performance-based FPDB procurements when they are open to considering various design approaches and the application of innovative technology to achieve required performance. Performance-based requirements give proposing firms flexibility and can result in innovative and cost-effective proposals.

Prescriptive-based requirements. The RFP for a prescriptive FPDB procurement typically includes preliminary design drawings, a description of specific design concepts, and mandatory owner preferences for equipment or systems. It requires proposing firms to submit their own designs that are approximately 10% to 30% complete as the basis of their technical proposal. Owners often prefer prescriptive FPDB procurement when they already have a clear idea of what the project scope should be as well as their system and equipment preferences. Procurement for a prescriptive-based FPDB project delivery can limit proposing firms' innovation and creativity. In some cases, owners may allow the proposing firms to offer alternative technical concepts (ATCs) as part of a prescriptive FPDB proposal, but only after the ATCs have been vetted out and demonstrated not to deviate from the prescriptive requirements and the owner's goals for a specific project.

Figure 3 provides a side-by-side comparison of performance-based and prescriptive-based technical criteria.

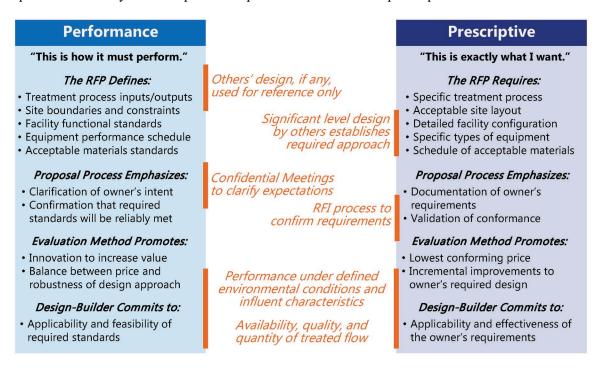


Figure 3. FPDB Performance-Based and Prescriptive-Based Criteria

"Hybrid" requirements. Deciding between prescriptive- and performance-based requirements can also result in the need to strike an appropriate balance between certainty and innovation as shown in Figure 3. It is possible for an RFP to effectively blend the two approaches into a hybrid approach. Owners that have preferred scope elements for a portion of the project may define those as prescriptive requirements in the RFP, while expressing other aspects purely in terms of performance criteria. In this scenario, the owner will communicate how a project is to perform but may include some specific preferences and requirements in a hybrid approach used in FPDB. The use of hybrid criteria as a combination of performance-based and prescriptive-based technical criteria is depicted in Figure 4.

Information required for the submission of a proposal is discussed in detail in Section 4 - Required Content of Submissions.

Performance	Hybrid	Prescriptive
"This is how it must perform."	"This how it must perform, with some specific preferences."	"This is exactly what I want."
Best Practice: Constrain potential solutions only as necessary to maintain required standardization or to eliminate risky, totally unproven technologies.	The RFP Defines: Process parameters and specific constraints or requirements Site boundaries minimum functional restrictions Required equipment and materials by exception only Proposal Process Emphasizes: Understanding of owner's intent and basis of specific requirements Confirmation of overall approach and validation of conformance	Best Practice: Define prescriptive requirements by exception only when clearly needed to maintain compatibility, integrate with existing systems, or avoid known, documented risks.
Design-Builder Commits to: • Applicability and feasibility of required standards	where applicable Evaluation Method Promotes: Innovation to increase value Balance between price and robustness and conformance of design approach	Design-Builder Commits to: Applicability and effectiveness of the owner's requirements

Figure 4. FPDB Performance-Based, Hybrid, and Prescriptive-Based Criteria

Section 3. Key Considerations with Fixed-Price Procurement

3.1 Procurement Flow Chart

Figure 5 depicts the sequence of all possible actions to be taken by owners and proposing firms for a FPDB procurement effort. It should be noted that some of the activities may not be included in a specific procurement because all are subject to owner preference, complexity, and size of the project.

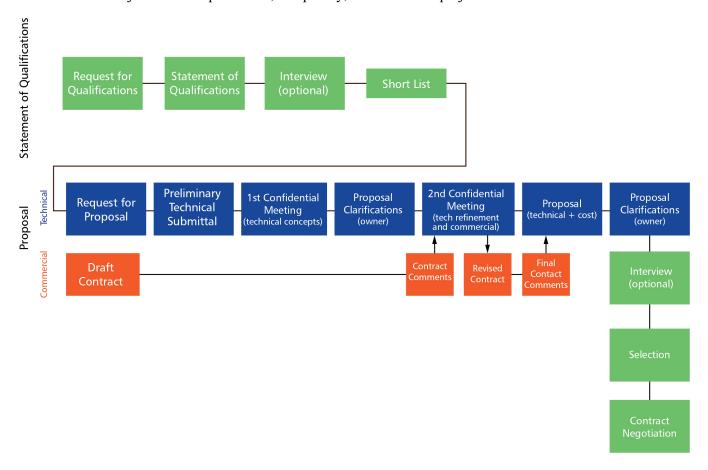


Figure 5. FPDB Procurement Flowchart

3.2 Two-Step and Single-Step Process

The procurement steps in Figure 5 represent the components that are commonly used in a two-step procurement process. If an owner elects to pursue a single-step procurement, elements of both the RFQ and the RFP should be combined into a single document, which is defined as a "request for proposals" (RFP). If a single-step process is used, the steps in the flowchart for procurement would eliminate those associated with the "statement of qualifications" and subsequently start with the first box on the "proposal" line.

3.3 Pre-Submittal Meeting

When engaged with a FPDB procurement, many owners find it beneficial to initially meet with firms prior to the release of the RFQ and/or RFP. These meetings give the owner an opportunity to consider feedback from the market and individual potential proposers prior to initiating the procurement process.

3.4 Shortlisting of Proposing Firms

The single largest difference between the single-step and two-step procurement processes is the separation of the qualifications (RFQ) and technical/cost portions of the procurement (RFP). The rationale behind having this separation in a two-step procurement is to limit the number of proposing firms that participate in the preparation of a proposal. The effort required to properly respond to a fixed-price RFP often requires a significant investment by the proposing firms. By limiting the participation in the RFP to a "short list" of firms, owners are likely to attract more qualified firms to participate in the response to the RFQ than they would if the selection were compressed in a single-step process. Potential design-build firms are more likely to make a modest investment in a qualifications submittal to determine if they "qualified" to move on to the next round than spend a larger, more significant amount on a single-step procurement process.

The RFQ for a two-step process allows owners to determine the number of proposing firms they want to shortlist and move into the proposal phase of the procurement. It is recommended that the number of shortlisted proposing firms be kept to a minimum to encourage potential design-builders to participate in the procurement process.

3.5 Confidential Meetings

Following the issuance of the RFP, an owner can choose to conduct individual meetings with each proposing firm. These meetings are typically held after the submission and review of the preliminary technical proposal. They are intended to promote open discussion between the owner and the proposing firm on the concepts presented in the preliminary technical proposal. The primary goal of the individual meetings is to identify elements or features of the proposing firm's technical approach that may be inconsistent with the goals and requirements of the RFP. Meeting agendas are typically developed to allow:

- a) Proposing firms to present the contents of the preliminary technical submittal to the owner and convey the value and benefit of the proposing firm's approach to meeting the owner's project requirements as defined in the RFP.
- b) The owner to understand each proposing firm's technical approach/concepts and to review for compliance with the owner's project requirements as defined in this RFP.
- c) The owner to evaluate any alternative technologies or concepts and, through an addendum, to inform all proposing firms of any proposed components that are found to be objectionable.
- d) Clarification of the owner's project requirements through addenda to the RFP.
- e) Proposing firm's comments on the RFP, including the draft fixed-price design-build contract, and the owner to clarify the draft fixed-price design-build contract after consideration of proposing firm's comments.

The owner may also follow up these meetings with requests to proposing firms to clarify portions of the preliminary (and final) technical proposals to better understand the submittal.

3.6 Contract Review and Comment / Contract Negotiations

The RFQ and RFP documents assume that the owner will provide a draft fixed-price design-build contract as part of the RFP. The RFP allows proposing design-build firms to make comments and suggested revisions to the draft FPDB contract and present these during the confidential meetings for discussion with the owner. (Owner can decide at which meetings these comments are discussed.) The purpose is to allow the owner to revise the draft FPDB contract (if deemed necessary) and re-issue the draft contract to the proposing firms prior to the submittal of the final technical and price proposal. The RFP also has provisions to allow proposing firms to make final comments to the draft FPDB contract with the submission of the final technical proposal.

The owner is under no obligation to accept any proposed changes to the draft contract or re-issue the draft contract during the procurement. Owners are also not obligated to incorporate any of the proposed changes into the final FPDB contract during contract negotiations with the successful firm. The purpose of having each proposing firm submit contract comments is to allow the owner to have insight into contract terms and conditions that may impede execution of the final FPDB contract with the selected design-build firm.

3.7 Interviews

The RFQ does not specifically address the element of conducting interviews during this part of the procurement process. It is recommended that interviews not be conducted as part of the SOQ process and that they be reserved for the proposal phase of the procurement. It is recognized that some owners may still want to conduct interviews during this process (for a variety of reasons) so it is shown as an "optional" task in the Figure 5 flowchart.

Interviews are accounted for in the procurement schedule of the RFP (Section 4.3) and are recommended after the submission and review of the final technical proposals. It should be noted that the comparative evaluation criteria in Section 6.3 of the RFP does not account for a scoring of the interview. If a score is to be assigned to the interview, Section 6.3 of the RFP should be modified accordingly to represent a weighted percentage (and corresponding number of points) allocated to the interview.

3.8 Stipends

The issue of whether a stipend should be offered to proposing firms that are not successful in a FPDB competition is one that is normally considered when proposing firms are required to include detailed design documentation with their proposal. Some states have legislation requiring that a stipend be provided. Stipends are one of the many considerations for owners when embarking on a FPDB procurement. This remuneration not only promotes competition, but may also give the owner rights to all the ideas presented by the unsuccessful proposing firms upon execution of a release in return for the stipend. Ownership of documents and concepts included in FPDB proposals is one of the many legal issues that should be considered by an owner's team when utilizing FPDB. Overall, the payment of stipends is not considered universal and is an item that should be addressed prior to initiating a procurement and in conjunction with budgeting for a project inclusive of the costs of procurement support activities.

Section 4. Required Content of Submissions

4.1 Introduction

Owners are generally experienced in preparing procurement documents for contracting with professional services and bidding construction projects. Some of those concepts and methods are aligned with the shortlisting process of proposing firms after an SOQ is submitted. Following the shortlisting of proposing firms (when using a two-step procurement process), the RFP is developed and addresses the technical requirements as noted in Section 2 of this guide plus other information that an owner seeks to know about a proposing firm, including project references for proposing firm members and personnel. The RFP may also include a draft project contract that defines commercial terms and conditions and risk allocation from the owner's perspective.

The WDBC fixed-price RFQ and RFP documents were developed to be comprehensive and they include submission requirements commonly requested by owners for FPDB delivery. The RFQ requires proposing firms to submit an SOQ and enables owners to assess the qualifications and capabilities of the proposing firm's design-builders. The RFP requires a technical and price proposal while enabling owners to evaluate a specific proposing firm's project approach and its pricing for the project. These template documents are meant to provide a foundation that enables owners to customize an RFQ or RFP that best suits their specific needs. The tables on the following pages summarize the submission requirements included in the RFQ and RFP documents.

4.2 Statement of Qualifications (SOQ)

The content required by the RFQ should be designed to aid the owner in determining whether, and to what extent, the proposing firm is qualified to design and construct the specific project, including type, size, and scope. The SOQ should include past performance on similar projects, as well as specific experience of proposed key personnel. The owner should establish those requirements that are "pass/fail" versus those that will be scored as the basis for evaluating the SOQ submittals. Table 1 summarizes the submission requirements contained in the model RFQ document.

4.3 Proposal

The RFP should request the specific information required to fully evaluate the proposing firm's technical and project delivery approach, ability to perform the stated scope of services, project management and approach, design, scheduling, permitting, procurement, construction, interface with existing owner's team, commissioning, and start-up and training of the owner's operating personnel. The proposal's content should be in the form of a series of narratives/drawings outlining and illustrating the proposed approach for dealing with the key project challenges and owner's concerns.

The list of requirements in Table 2 is for an RFP that is part of a two-step procurement process; therefore, it does not include information that would be provided in the preceding SOQ. If using a single-step procurement process, the owner would include many of the requirements outlined for an RFQ as part of the single-step RFP.

Table 1. Typical Requirements for Fixed-Price Design-Build SOQ

PART	SUMMARY OF CONTENTS	COMMENTS
Transmittal Letter	Identifies the design-builder and provides contact information.	Limited to 2 pages on respondent's letterhead; signed by an authorized representative able to commit to the obligations contained in the SOQ. Letter must include the contact's name, address, phone number and email address and specify the design-builder's contract signatory with the owner. May include other information deemed relevant by the respondent.
Part 1: Executive Summary	Provides a first-glance overview of the SOQ contents, highlighting important features.	Limited to 3 pages providing a concise overview of the key elements of the SOQ and summary reference to the SOQ requirements and information.
Part 2: Design-Builder Profile	Provides overall general, legal, financial, insurance and performance bonds information; also needed is the designated office location of the design-builder.	Required financial and legal information typically apply to the design-builder and not to subconsultants/subcontractors. In the case of a joint venture, both parties must provide requested information.
Part 3: Project Team	Describes additional firms and key personnel: Organization charts and team structure Roles and responsibilities Resumes for key personnel	RFQ can either mandate key personnel positions or leave it to the discretion of respondent. Should require organizational chart depicting firms and key personnel reporting structure.
Part 4: Experience	Must describe the performance history and experience of the project team on similar projects and provide information concerning safety.	RFQ should specify maximum number of reference projects and should encourage reference projects with similar size and scope. Enables owner to evaluate the safety record of potential proposers.

The RFP was developed based on the concept of requiring two proposal submittals — preliminary technical proposal and a final technical proposal. The list of requirements in Table 2 is based on the requirements for the final technical proposal. The preliminary technical proposal requirements are more limited in nature. The requirements of the preliminary technical proposal are denoted in the table with an asterisk.

Table 2. Typical Requirements for Fixed-Price Design-Build RFP

PART	SUMMARY OF CONTENTS	COMMENTS
VOLUME 1 - Technical Proposal		
Transmittal Letter*	Identifies the design-builder and provides contact information.	Limited to 2 pages, on the proposer's letterhead, and signed by an authorized representative who can commit to the proposal obligations. It must include the name, address, phone number and e-mail address for the proposer's contact, the design-builder's signatory for all contract documents as well other relevant information.
Part 1: Executive Summary	Provides a first-glance overview of the proposal contents, highlighting important features.	The executive summary contents should be concisely stated in no more than 5 pages with requirements or guidelines for the organization.
Part 2: Updated SOQ*	Confirm prior SOQ and describe any changes to project team or key personnel.	RFP can allow proposer to refer to its prior SOQ and should require owner approval of any proposed changes to the SOQ.
Part 3: Design-Build Plan	 Includes: General overview of project delivery Development of collaborative relationship with owner Quality management Interface of design and construction staff during each phase of the project Subcontracting plan Project schedule Project milestones Risk register Change management 	RFP may emphasize elements of the project delivery approach and issues critical to project success. RFP can require brief descriptions of the approach to quality management, communications, and risk management. RFP may request sample plans from past projects.

PART	SUMMARY OF CONTENTS	COMMENTS
Part 4: Technical Proposal*	Includes: Design approach Selected treatment process Experience with selected treatment processes Ability to meet performance standards Redundancy Hydraulic profile Specific details relating to: Site/civil Major equipment Architecture and aesthetics Electrical Instrumentation and control	Explains how the proposed design meets or exceeds the RFP design and construction requirements. Describes the process flow diagram of treatment process components/unit processes. Identifies specific experience with proposed treatment processes if differing from those specified in RFP; provides references of successful projects; and explains how the proposed changes to the treatment process meet regulatory approvals. Describes the project site design and layout with reference to specific site/civil drawings and equipment to be used. Provides an analysis of the project site and the proposed architectural design, and its relationship to the surrounding area. Describes the proposed electrical system design, including distribution to major facilities and power needs. Provides an overview of the hardware, software, and instrumentation of the proposed SCADA system with a preliminary I/O list.
Part 5: Fixed-Price Design-Build Contract Markup	Description of the significant revisions to the draft fixed-price design-build contract	Allows proposer to identify terms and conditions of the draft contract that they want the owner to consider modifying or adding. Owner is under no obligation to accept any of the changes suggested by the proposer.
Appendix A	Detailed red-line mark-up of the revisions to the fixed-price design-build contract proposed in Part 5	Provides a mark-up of the draft contract to detail the suggested language revisions to the draft contract that are addressed in Part 5 of the proposal.

PART	SUMMARY OF CONTENTS	COMMENTS
VOLUME 2 - Drawings, Diagrams, and Plans		
Drawings, Diagrams, and Plans*	Preliminary drawings (which may include): Plant layout General project arrangement Building layout/elevations Grading and drainage Access roadways Site underground piping and electrical Large diameter yard piping Hydraulic profile Process flow diagrams Unit processes Electrical P&IDS Construction staging/traffic control Landscaping Process control and instrumentation Preliminary specifications as defined for the project	Submitted as a half-size set of bound preliminary design drawings to demonstrate the proposer's understanding of the project requirements and critical elements of the project.
VOLUME 3 - Cost Proposal		
Cost Proposal	Fixed price with any assumptions/ qualifications related to the price	RFP may require components that comprise the fixed price to be included in the cost proposal for the project.

 $^{(\}mbox{*})$ Denotes parts that are required as part of the preliminary technical proposal

Section 5. Evaluation Criteria and Scoring Methodology

5.1 Introduction

Evaluation criteria and scoring methodologies should be designed to select a design-builder with the highest probability of achieving all of the owner's project goals and objectives. There are many variations in how an owner may choose to evaluate and score an SOQ or proposal. In many cases, local procurement rules or state statutes drive the formulation of evaluation criteria and scoring methodology.

Regardless of specific procurement rules and project goals, owners must ensure that the evaluation criteria and scoring methodology are fair, clear, and transparent to proposing firms. If transparency is lacking, the result may be limited interest among design-builders. The owner also risks the procurement being challenged after selecting the design-builder, which can result in project delays.

5.2 Best-Value Selection

Best-value selection is commonly used for FPDB procurement efforts. Owners are governed by specific procurement rules and policies that define the specific process for utilizing best-value methodology in selecting a design-builder. Infrequently, some owners only consider price in the selection after receipt of a FPDB proposal since it may be their view that any of the shortlisted proposing firms can deliver their project successfully. In most cases, owners deploy scoring methodology with customized weighting for scoring the criteria of FPDB proposals. The weighting for price can vary as little as 25%, but no greater than 50% vs. consideration of the proposing firm's team make-up, its qualifications, and its project approach, including technical solution and schedule.

For all FPDB procurements, the proposing firm must include a price based on conforming to the RFP requirements and aligned with the scope of work it offers with its proposal. The fixed price is finalized after selection and negotiation of the final scope of work and commercial terms and conditions, as the latter may be adjusted by the owner during negotiations and set within the final executed project agreement (see Figure 6).

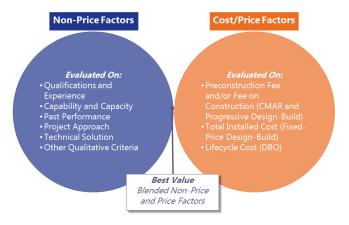


Figure 6. Evaluation Criteria: Best-Value Selection

5.3 Evaluation Criteria

The RFQ and RFP documents provide suggested evaluation criteria utilizing a best-value methodology leading to a fair and accurate assessment of the proposing firms. The submission requirements in the RFQ and RFP provide the information needed to apply the criteria. Owners can and should modify criteria in the template documents to reflect their procurement requirements and to capture proposers' information, qualifications, and capabilities that are important to the owner or unique to their project.

5.4 Scoring Methodology

Once the owner establishes evaluation criteria for the SOQ or proposal, it needs to develop a weighting system or scoring methodology. There are numerous ways to score SOQs and proposals. One is the pass/fail method, where owners establish standards for each criterion, and the SOQ or proposal either meets or does not meet these standards. This system can be modified to assign degrees of responsiveness to each criterion. One of the most common means of scoring is by assigning a set number of points for each criterion in the RFQ or RFP and awarding points (from 0 to the maximum assigned to that criterion) based on how well the design-builder meets each criterion.

For each evaluation criterion, the documents include suggested weighting percentages which reflect the relative importance of each one. The suggested weightings in the model documents are shown as examples only. Cost proposals should not be weighted to a point where they overshadow the qualifications of the proposing design-builders. For FPDB procurements, close attention should be given to the weighting of price vs. technical, management approach, schedule, risk allocation, and related qualifications-based criteria.

Owners need to set the ultimate weighting of the evaluation criteria based on the goals established for the project and the requirements of state and local procurement laws. Defining what is important for the success of a project will help guide the relative weighting and point assignment for the evaluation criteria established in the RFQ and RFP.

Section 6. The Fixed-Price Design-Build Contract

6.1 Form of Contract

WDBC recommends as a best practice that the owner include a draft, project-specific fixed-price design-build contract for consideration, as the commercial issues and risk allocation will be best defined in such a draft agreement. The FPDB procurement documents are set up such that a draft contract is included with the RFP to the shortlisted proposing firms. The RFQ template is designed such that a draft fixed-price design-build contract term sheet can be included with the RFQ for larger, more complex projects. An example of items that could be addressed in the term sheet is provided as Appendix A.

Sources for model FPDB agreements are the Design-Build Institute of America, the EJCDC, and ConsensusDocs.

6.2 Legal Authority

[Note: The following discussion does not constitute legal advice, and readers are advised to consult with their own legal counsel for a determinative ruling on their authority under applicable state and local laws.]

Before electing to use the FPDB method and embarking on the procurement process, owners should verify that state and local procurement laws allow for its use. Owners should also pay careful attention to the specified requirements for procurement, as these will affect not only the type of process used (i.e., single-step or two-step process, and price-based or best-value-based selection), but often the required content of the SOQ and proposal submissions as well.

The authority for public owners to engage in collaborative methods of project delivery is generally controlled by applicable state legislation. General information regarding state legislation relating to collaborative project delivery is summarized below.

- Many states permit the use of project delivery methods other than traditional design-bid-build for water and wastewater infrastructure, most of which are design-build.
- Some states have uniform rules for collaborative project delivery that apply both to state agencies and local jurisdictions as well as municipal utilities and special districts.
- Some states are prescriptive in defining the selection process and selection criteria, while other states give municipalities and special districts considerable discretion in their procurement process.
- Some states have different rules for charter cities vs. general-law cities, with charter cities generally
 having broad discretion and general-law cities having restricted discretion in the use of project delivery
 methods.
- Some states limit the use of collaborative project delivery to projects in a certain size range, or to a specific number of projects in each year; some may even require annual reports to a state procurement commission or to the state legislature.

6.3 Project Risk

Effective risk management addresses who is responsible for owning, mitigating, or managing risk. All collaborative delivery methods encompass risk allocation that differs substantially from that inherent in design-bid-build (DBB). For example, in FPDB project delivery, the design-build team is the single point of accountability for design, construction, and commissioning of a project, whereas the risks are divided among the designer, contractor, vendor, and owner in DBB projects. The risk allocation commonly considered with FPDB is shown in Table 3.

A preliminary risk analysis should be prepared by an owner as it plans a procurement effort. This preliminary risk analysis should consider legislative requirements, industry best practices, lessons learned, and the ability of either the design-builder or the owner to mitigate a given risk. This early assessment of risks and an owner's view of the allocation of same are key to drafting an initial version of the project agreement. Although neither the owner nor the design-builder can or should accept all the project risks, each party must be willing to accept appropriate and reasonable risks to realize the benefits of collaborative delivery.

Using a systematic process to assess risks and identify procedures to manage them can yield significant cost and schedule benefits to both the owner and the design-builder. Early implementation of risk-reduction strategies by the owner (such as site investigations, pilot studies, means and methods evaluation, and permit planning) can prove particularly beneficial. Collaborative delivery firms experienced with complex water and wastewater projects tend to apply prudent and systematic risk-management analysis when developing proposals.

	PRIMARY RESPO	PRIMARY RESPONSIBILITY	
RISK	Design-Builder	Owner	
Land and Easement Acquisition		Х	
Technical Requirements		Х	
Project Design	Х		
Building and Administrative Permits	Х		
Coordination with Existing Facilities	Shared	Shared	
Environmental Approvals and Permits	Shared*	Shared*	
Fines and Penalties	Х		
Proprietary Processes or Equipment	Shared	Shared	
Quality and Quantity of Influent (raw water)		Х	
Quality and Quantity of Effluent (finished water)	X		
Project Performance/Acceptance	Х		
Site Conditions		Х	
Schedule	X		
Cost of Constructed Project to GMP	X		
Construction Warranty	Х		
Third-Party and Professional Liability	Х		
Uncontrollable Circumstances	Shared	Shared	
Materials Cost Escalation	TBD	TBD	

^{*}Permit is in the name of the owner; design-builder is responsible for the preparation of the documents needed to obtain the permit.

Section 7. Definitions

Best Value – A procurement selection process that looks at factors other than just price, such as qualifications and technical approach.

Design-Builder – The entity that is selected to enter into the fixed-price design-build contract with the owner and that will be the single point of accountability to the owner for delivery of the project.

Fixed-Price Design-Build (FPDB) – A project-delivery method in which a single fixed price, which encompasses both designing and constructing the project, is established when the contract is signed. FPDB is used when the owner has defined the project requirements and scope of work sufficiently for proposing firms to develop a unique solution and accurately predict the project cost early with the submittal of their proposal. The owner's technical requirements, as expressed in procurement documents, can be prescriptive (well-defined), performance-based (define what the project is expected to do), or a hybrid of the two. The last approach is most commonly used for fixed-price procurements, where an owner specifies certain scope elements to provide some latitude for a project. The fixed price is aligned with a fixed scope of work.

Performance-Based Requirements – Criteria in an RFP that focus on measurable plant performance criteria and operational objectives rather than specific details.

Prescriptive-Based Requirements – Specific details within an RFP that may include design drawings and/or a description of specific design approaches that proposers are required to include in their proposed design.

Single-Step Process – A procurement process that involves a single submission (typically a proposal) from a proposing firm. The submission will typically include elements relating to qualifications, technical approach, and price as part of the response to the RFP.

Stipend – A pre-determined monetary amount paid to unsuccessful proposers to 1) help offset the costs of the proposal preparation and 2) allow owners to use the ideas and designs of unsuccessful proposers because they have paid for the technical data in that proposal.

Two-Step Process – A procurement process that involves two separate submissions (typically a statement of qualifications (SOQ) and a proposal) from proposers. The SOQ typically contains elements relative to the qualifications of the proposer. The proposal typically contains elements relative to the technical approach to the project and price.

Appendix A. Sample Fixed-Price Design-Build Term Sheet

The following summaries of specific principles are expected to be included in a fixed-price design-build contract. However, these principles should not be considered as all-inclusive or definitive as to the form or substance of the actual fixed-price contract provisions. The owner reserves the right to amend, modify, or delete any of these principles in the fixed-price contract to be issued with the RFP.

Term The performance timeframe, as defined in the contract, is expected to be _____ days following receipt of the notice to proceed from the owner and agreement of the parties. Ownership of Facilities The ___ owner will own the facilities and the plant site, and control the easements upon which project facilities are to be built. The owner will provide the design-builder with access to the project site and easements for fulfilling its obligations for design, construction, and start-up and acceptance testing, as defined in the contract.

3. Governing Law

The contract shall be governed as to validity, construction, and performance by the laws of the State of _____ and the parties hereto consent to the jurisdiction of the State of _____.

4. Governmental Approvals

The design-builder will be responsible for obtaining all construction-related permits, licenses, and approvals necessary for the construction of the facilities, including any building and storm water discharge permits, etc. The owner will be responsible for obtaining environmental permits and approvals, such as _______. The design-builder will be expected to assume the risk of the delays (subject to certain limited circumstances not within the design-builder's control) and non-issuance of, and the imposition of terms and conditions that are more costly than assumed for the issuance of any permit, license, and approval (other than those permits, licenses, and approvals to be obtained by the owner). The design-builder may be required to assist the owner in obtaining those permits and approvals that the owner is responsible for, including the preparation of permit application materials, coordination with the regulatory agencies, and other required assistance.

5. Design of the Facilities

The design-builder has sole responsibility for designing the facilities and assumes all design risk. The owner will review the design at specific designated milestones, defined within the contract, for consistency and compliance with design requirements included in the contract.

6. Construction and Acceptance Testing

The design-builder will be required to design and construct the facilities in accordance with the technical and construction requirements included in the contract; and in compliance with all applicable codes, permits, regulations and other laws, and good engineering and construction best practices. Following substantial completion of the project, the design-builder will conduct and successfully complete acceptance tests to demonstrate that the facilities can operate in accordance with the performance guarantees and the other acceptance standards that are defined in the contract.

7. Guaranteed Construction and Acceptance Schedule

The design-builder will be required to obtain all construction-related governmental approvals, successfully complete all design, construction, start-up and acceptance testing for the project, and achieve acceptance of the facilities by the specified date proposed by the owner and incorporated into the contract (defined as the "scheduled acceptance date"). Delay penalties (i.e., liquidated damages) will be payable by design-builder to the owner if the scheduled acceptance date is not met.

8. Fixed Price

The design-builder will design, construct, start up, perform the acceptance test, and obtain construction-related governmental approvals for a fixed price, which may be adjusted for owner-directed change orders and certain circumstances where an event of uncontrollable circumstances is compensable. The owner will monitor the construction work and progress for compliance with milestone payments, design, and construction requirements within the terms of the contract. In all cases, the design and construction of project components shall be predicated on maintaining the owner's ability to operate the facility at _______, as permitted by the state's existing regulatory agency.

9. Key Personnel

The design-builder must use key personnel presented and defined during the procurement process. Key personnel may not be substituted without the owner's approval.

10. Termination for an Event of Default

The owner will have the right to terminate the design-builder after notice and cure opportunity is given upon the occurrence of certain events of default including, without limitation, the design-builder's failure to perform any material obligation under the contract. The owner will also have the right to terminate the design-builder without notice or cure opportunity upon the occurrence of certain events of default, which include the failure to obtain and maintain any contract security instrument, the failure to achieve acceptance of the facilities, the persistent or egregious failure to meet certain performance guarantees, and the insolvency or bankruptcy of the design-builder.

11. Convenience Termination

The contract will provide that the owner will have the right, at any time, to terminate the contract for its convenience and without cause upon the payment for services performed to the date of such termination and with agreed upon documented costs incurred by the design-builder.

12. Uncontrollable Circumstances

Neither the owner nor the design-builder will be liable to the other for any failure or delay in performance of any obligation under the contract due to the occurrence of any act, event, or condition beyond a party's reasonable control (after exercising reasonable preventive and mitigative measures).

13. Indemnification

The design-builder will indemnify, defend, and hold harmless the owner and its officials, employees, representatives, agents, and contractors from and against any and all loss and expense arising from or in connection with the design-builder's (1) performance of, or failure to perform, its obligations under the contract, or (2) the negligence or willful misconduct of the design-builder or any of its officers, directors, employees, representatives, agents, or subcontractors in connection with the contract.

14. Required Insurance

The design-builder will be required to procure and maintain insurance during the design and construction of the project, the types and amounts of which will be specifically set in the contract.

15. Payment Bond and Performance Bond

The contract will require that the design-builder provide the owner, on or before the notice to proceed is issued by the owner, a payment bond and a performance bond, each in the amount of the fixed price. The design-builder shall maintain the payment bond and the performance bond until all acceptance tests are passed and the owner has approved the release of the bonds.

16. Limitation on Liability

The contract may include terms that would limit the liability of the design-builder during the design, construction, and start-up and acceptance testing phases of the project.

17. Forum for Dispute Resolution

The parties shall consent to the exclusive jurisdiction of the courts of the State of _____ located in ____ and each shall waive its right to a jury trial.