

Owner's Guide to

QBS

Qualifications- Based Selection of Design Professionals



**Contains
QBS
Evaluation &
Selection
Forms**

ACEC

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ISBN: 978-0-910090-55-1

Table of Contents

Foreword	1
Acknowledgement.	2
Disclaimer.	2
1.0 Introduction and Overview.	3
2.0 The Importance of Quality Design	4
3.0 Basis for Procuring Professional Design Services through Qualifications-Based Selection.	5
3.1 Introduction	5
3.2 The Brooks A/E Act of 1972 and its Legacy	5
3.3 Public Policy and Sound Management Rationale for Using QBS	6
3.4 The Qualifications-Based Selection Process	7
4.0 QBS Selection Methodology – Step 1	8
4.1 Introduction	8
4.2 Identifying the General Scope of Work	8
4.3 Setting the Selection Time Frame.	9
4.4 Requesting Statements of Qualifications.	9
4.5 Contents of the Request for Statements of Qualifications	9
4.6 Evaluating the Statements to Develop a Short List	10
4.7 Tours of the Project Site	10
4.8 Evaluating and Ranking the Short-Listed Firms.	10
4.9 Interview Room Set-up	11
4.10 Possible Interviewing Guidelines	11
4.11 Ranking of Short-Listed Firms	12
5.0 Definition of Project Scope Under QBS – Step 2	13
5.1 Introduction	13
5.2 Developing the Scope of Services	13
5.3 Fee Proposal and Negotiation	13

6.0 Agreement of the Parties – Business Terms of the Contract – Step 314

6.1 Introduction 14

6.2 Compensation Estimates 14

6.3 Overhead 14

6.4 Establishing Engineering Fees 15

7.0 QBS and 21st Century Design and Construction Project Delivery16

7.1 Introduction to Alternative Project Delivery (APD) Methods 16

7.2 Implementing QBS in Alternative Project Delivery Methods 17

8.0 Additional Resources.19

Appendices

1. Illustration of Steps in QBS Selection 20

2. Sample RFQ (Request For Qualifications). 21

3. Sample Qualifications Evaluation Form (Unweighted) and Sample
Qualifications Evaluation Form (Weighted) 28

4. Sample Qualifications Evaluations Summary Form 31

5. Sample Notification to Highest Ranked Firm (Selected Firm). 32

6. Sample Notification to Firms Not Selected 33

7. Sample Invitation to Highly Ranked Firms for Interview 34

8. Sample Interview Issues and Score Sheet. 35

9. Sample Optional Form/Interview Score Sheet 37

10. Sample Group Interview Evaluation Form 38

11. Sample Notification to Firms Not Selected After Interview 39

12. ACEC Matrix of State QBS Laws. 40

13. EJCDC Document Titles 45

14. Where to Go for More Information About QBS 49

Foreword

The purpose of this manual is to provide guidance to facilities and infrastructure owners in the selection of design professionals. This information can also be used for training of staff in the Qualifications-Based Selection (QBS) process.

A significant determinant of success on a project is the selection of a highly qualified design firm with a thorough understanding of the client's needs and ability to competently undertake the project.

The Federal Government and most state agencies support and practice Qualifications-Based Selection (QBS) of design professionals as a successful and well documented procurement process that maximizes the value that taxpayers will receive on public projects. QBS is also used in the private sector by owners seeking quality project designs at fair and reasonable costs.

“With QBS, the owner gets a qualified, competent engineer who is known to have the qualifications for a specific project; and the taxpayer receives a quality infrastructure system that is well-designed and meets the required service life.”

*—Paul Kinsbella,
City of Phoenix
Water Services
Department*

Acknowledgement

The American Council of Engineering Companies extends thanks to the ACEC Management Practices Committee for its direction and guidance in the preparation of this document. In particular, the following contributors provided drafting and editing support for this publication:

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Disclaimer

The American Council of Engineering Companies and all individuals involved with the development of this Owner's Guide hereby disclaim any intention or responsibility for making this Owner's Guide to Qualifications-Based Selection of Design Professionals and its use a guarantee of error-free service and deliverables. The guidance provided herein can be of value to owners and a wide variety of firms in the design profession, but each owner and each firm must adapt the suggestions to fit each project and practice. Procurement laws vary between states and federal agencies, and the actual implementation of the Qualifications-Based Selection Process should be adapted in each state to conform to these laws.

1.0 Introduction and Overview

QBS is the foundation of federal procurement law as applicable to professional architect-engineer and related services. Based on Public Law 92-582 (also known as The Brooks Act) passed in 1972, "...it is to be the policy of the government to publicly announce all requirements for architectural and engineering services and to negotiate contracts for architectural and engineering services on the basis of demonstrated competence and qualifications for the type of professional services required." The intent of the law was to codify a system of procurement that used competence and related non-price attributes of the offer or as a method for selecting a successful professional services provider rather than on the basis of lowest price.

"The Transportation Department strongly endorses QBS as the preferred method of selecting qualified, competent and experienced professional engineering firms. Our state has a long history with QBS, and we are committed to its continued use."

*—Harold Linnenkohl,
Georgia Department
of Transportation*

2.0 The Importance of Quality Design

“Quality must be built in at the design stage.”

—W. Edwards Deming

Engineering design is a creative process that devises solutions to identified needs. The solution can take many forms – a structure, a technique, a product or other innovation depending on the problem. Talent, skill and experience are all relevant characteristics of the engineering consultant and design engineer. Problem solving by the engineer establishes the optimal solution to a particular situation based on opportunities and constraints. The process includes creative thinking, overcoming obstacles based on competing concepts, selecting the preferred solution, and moving from ideas to detailed design and construction. For many engineers, solving challenging problems in the built and natural environment through implementation of engineering design is the most satisfying feature of engineering practice.

Drawings and specifications are a principal product of the design professional's work. Their clarity and accuracy are major determinants of quality. Talent, skill and experience and a range of interpersonal and other factors also affect project quality and client satisfaction. All owners, whether municipalities, private companies or institutions, and the design professionals with whom they contract, seek the same result -- satisfaction in a job well done. Following an organized process for selecting and procuring professional services is an important first step to achieving a quality project.

Qualifications-Based Selection (QBS) is a process that enables the project owner to obtain the services of a highly qualified design professional at a fair and reasonable cost. QBS should be

considered an investment in quality, because the cost for a design professional's services will normally amount to only about one-to-two percent of the project's overall life-cycle costs. The right design professional will save the cost of their fees through project innovations, lower costs of operation and maintenance, and savings in ongoing energy costs. The quality of design has a profound impact on both the initial construction costs and future maintenance costs. The principles of QBS apply to the entire cost of a project, and focus on obtaining the best value for the taxpayer's dollar.

The purpose of this Guide is to provide a “ready reference” for selecting qualified design professionals and establishing the framework for a successful project. This Guide presents recommended procedures for conducting a qualifications-based selection process, defining a scope of services which adequately addresses the needs of a specific project, negotiating a fair compensation commensurate with the services provided, and preparing a legal agreement. Regardless of past experience in selecting design professionals and procuring professional services, the procedures set out in the Guide will help illuminate, clarify and streamline the selection and negotiation process.

Owners who follow these procedures will gain confidence that they are procuring services that represent the greatest value to their organizations. For public entities, this Guide describes the applicable rules and regulations governing the selection and contracting of design professionals, and outlines the procedures for ensuring compliance with legislation. Design professionals who study the Guide's contents can better organize and prepare to participate in the selection process. When a well-conducted selection and negotiation process sets the tone for an efficiently managed project with scope and responsibilities clearly defined, both owner and engineer can move toward a common goal of successful project completion.

3.0 Basis for Procuring Professional Design Services through Qualifications-Based Selection

3.1 Introduction

In retaining a design professional, an owner or manager should be guided by one primary consideration: the qualifications of the firm for the specific project to be undertaken. In short, selecting a design professional should be by the same criteria that apply to choosing a physician or other reputable professional, including the skill, reputation, past performance, technical competence, and commitment to the owner's interests.

The QBS process is the most widely endorsed method for selecting a design professional by public owners. It is recommended by the American Bar Association, the American Public Works Association and various other groups, as well as the Associated General Contractors of America and all the major design professional organizations and associations. The QBS process is employed by all agencies of the federal government, most state governmental agencies, and hundreds of local communities throughout North America.

3.2 The Brooks A/E Act of 1972 and its Legacy

Public Law 92-582 (commonly known as the Brooks Act and passed by Congress in 1972), amended the Federal Property and Administrative Procedures Act of 1949 regarding the United States Government's selection procedures for the procurement of Architectural and Engineering Services. The Brooks A/E Act states "The Congress hereby declares it to be policy of the federal government to publicly announce all requirements for architectural and engineering services, and to negotiate contracts for architectural and engineering services on the basis of demonstrated competence and qualification for the type of professional services required and at fair and reasonable prices."

The Brooks A/E Act is a competitive procurement approach that involves a simple two-part procedure: First, the contracting officer makes a selection of the most qualified A/E from the pool of offerors on the basis of competence and qualifications, and second, the contracting officer enters into negotiations with the selected professional(s) to arrive at a fair and reasonable price. In 1988, Congress enacted amendments to the Act which served to clarify certain definitions; and to explicitly include related design and construction services, which are normally part of architect/engineer projects. The Brooks A/E Act has worked well since its adoption; assuring that all architectural and engineering services for the federal government are procured using qualifications-based selection procedures and resulting in quality projects for public owners.

3.3 Public Policy and Sound Management Rationale for Using QBS

Every problem or project is unique, with its own technical challenges. At the outset of most projects, it is sometimes difficult for the prospective user to fully grasp the complexities of the project or the variety of professional services that may be required to develop a solution. The qualified design professional can fill these needs on behalf of the owner.

The design professional serves as the trusted advisor to the owner. He or she represents the owner's interests in day-to-day dealings with contractors, suppliers, equipment manufacturers and others providing goods and services for the project. For this reason, it is vital that the owner and the design professional share a "client-agent" relationship characterized by trust, respect and effective communication. QBS fosters this type of relationship by bringing the owner and the design professional together as a team, and enabling them to define the project in detail and agree upon the necessary services that will be required to make the project a reality.

A recent study by researchers at the University of Colorado and the Georgia Institute of Technology specifically looked at the public policy benefits of QBS, and reached five conclusions about why QBS should be the methodology of choice for procuring professional design services:

- 1) **Cost-Effectiveness** — QBS projects helped to ensure that projects stayed on time and on budget, with outcomes better than the national average when compared to an entire project pool. Where QBS was used to engage design professionals, projects experienced cost growth of only three percent, nearly three-and-a-half times lower than with other forms of procurement.

- 2) **Lower Risks** – On projects where QBS was employed, owners were able to refine scope and explore alternatives with their designer to reduce complexity and improve technical solutions, so that final designs resulted in predictable costs and schedules.
- 3) **Protects Intellectual Property** – Through the use of Request for Qualifications (RFQ) and the respondents' use of Statements of Qualifications (SOQ), the QBS process protects the design professional's intellectual property during the procurement process, allowing the Owner to gain innovative solutions for their project during scope generation, preliminary design and design-development.
- 4) **Owner Capacity-Building** – The close relationship between project Owner and design professionals fostered by the QBS process allowed Owner organizations to gain knowledge and insight based on the shared project experience.
- 5) **Highly-Satisfied Owners** – For a variety of reasons, most Owners ranked their experience with QBS procurement "very high" due to factors of trust, control over contract costs and the ability of the process to answer not only technical questions directly related to the project, but its ability to help in areas of sustainability, human stakeholder factors and facility/infrastructure flexibility.

To find out more about the University of Colorado/Georgia Institute of Technology QBS nationwide survey, *An Analysis of Issues Pertaining to Qualifications-Based Selection* see the Appendix for reference information.

3.4 The Qualifications-Based Selection Process

Studies by the Construction Industry Institute and the Federal Facilities Council have shown that owners who involve the services of the design professional as early as possible in planning their projects gain the most benefits. The design professional can utilize the owner's available information and ideas to create workable plans with options which allow the owner to make sound decisions on what specific options should be implemented.

With adequate and proper planning early in the project (a key ingredient in quality), costly decisions or duplication of effort can be

minimized. One of the most beneficial aspects of QBS is the joint development of the Scope of Services during the negotiation process. Owners should consider the QBS process as a valuable information exchange. They can learn from the firms submitting information, and especially from those being interviewed. Owners are not committed to any financial obligation until a selection is made and an agreement is entered into (however, owners should be prepared to pay for any legitimate preliminary studies or schematic designs required for submittal by the design firm.)

The QBS process usually includes the following three steps:

Step 1 - Selection Process

- A. The owner identifies the general scope of work for the project.
- B. The selection time frame for procuring professional design services is established.
- C. A request for statements of qualifications is published.
- D. Statements of qualifications are received and evaluated.
- E. All firms are informed of their rating and ranking (optional).
- F. A short-list of firms to be interviewed (if interviews are necessary) may be determined.
- G. A tour of the site and/or facility may be arranged for the short-listed firms.
- H. Interviews are conducted and the firms ranked, based on their project approach, project team, timetable and overall understanding of the project.
- I. The firm most qualified for the specific project is selected.

Step 2 - Jointly Develop Scope of Project

Negotiations are conducted relative to the project's scope, professional services required, and fee and payment schedules with the top-ranked firm. If an agreement cannot be reached with the top ranked firm, those negotiations are ended and negotiations begun with the second highest ranked firm (however, most negotiations between owners and the highest ranked firm are successful).

Step 3 - Contract Agreement

- J. An agreement covering the understandings reached during negotiations above is executed, and a notice to proceed is issued by the Owner to the successful architect-engineer.
- K. All firms involved receive post-selection communications about the project award.

4.0 QBS Selection Methodology – Step 1

4.1 Introduction

The objective in Step 1 is to arrive at a short list of three-to-five firms or individuals most qualified to perform the work, based on a preliminary scope of the work and project-specific evaluation criteria provided by the owner, and then to determine the firm most qualified under the specific proposed project circumstances with which negotiations will then be conducted to establish a contractual arrangement. This step enables the public owner to communicate to the design professionals what must be accomplished and is expected from the architect-engineer team. It also enables the design professionals to respond to the solicitation with focused Statements of Qualifications. These qualifications are evaluated and ranked by the selection committee, with the goal of selecting the firm or individual most qualified for the project.

4.2 Identifying the General Scope of Work

To begin the selection process, the owner identifies the scope and particular needs of the project. Just as the owner needs information about the qualifications and competence of the design professional firms, the firms need to know the project requirements. A properly defined and communicated scope of work saves time, money and effort for both the owner and the design professionals. Based on the Owner's scope of work, the firm has information not only to base a decision to pursue the project but also to tailor their statement of qualifications directly to the project requirements. This provides the owner with a more uniform basis for evaluating the responses.

Items normally included in a general statement of the scope of work for a public project are:

1. Owner's name and contact person (clearly identified as the only person to contact for information on the project), mailing address, telephone and fax number, as appropriate.
2. Project name (identification) and location.
3. Project outline, including intended size, function, capacity and other general anticipated requirements (i.e. renovation, modernization, demolition, additions, new construction, energy, land use, and site selection considerations).
4. Descriptions of completed studies, surveys, and/or preliminary feasibility work relevant to the project and available to the firms which will be responding.
5. Anticipated project target dates, including completion of design work, beginning of construction and planned project completion date.
6. Requirements for further feasibility studies of program planning prior to design and construction, if appropriate.
7. Description of any other projects in process or planned for the same site or time frame, which may affect the scope of work.
8. Description of the design professional selection process.
9. Additional or unique requirements/considerations.
10. Anticipated time line for the project completion.

As appropriate, other items may be added to the solicitation to provide general guidance to the interested firms and meet the needs of the owner. Inclusion of all services the owner wishes the design professional to provide, such as feasibility studies, program development, design, construction coordination and budget development, should be generally outlined in the document.

4.3 Setting the Selection Timeframe

To keep the process of selecting a design professional advancing smoothly, owners should establish a schedule for completion of the selection process. Establishing the time frame communicates requirements with the firms and prevents misunderstandings and last-minute “surprises” which might delay the process.

The time frame for each public project will differ, depending upon the nature of the project, the concerns of the owner, and other factors. The suggested time frame for an average QBS project is approximately six-to-eight weeks (plus or minus) to allow proper planning and administration at each step of the selection process. Depending upon the status of the owner’s project, adjustments can be made to accommodate the owner’s needs.

4.4 Requesting Statements of Qualifications (SOQ)

After the owner has prepared a general scope of work, the next phase of the QBS process is to invite qualified firms to submit professional resumes/statements of qualifications. At this point, the owner must decide whether the invitation will be made to all interested firms, or whether this information will be solicited from a targeted group of firms.

Many governmental agencies are required to publicly advertise their intent to contract for design services and to permit all interested firms to submit a statement of qualifications. Other agencies maintain files on qualified professional firms and offer their projects only to a pre-selected list of firms. Private owners are not required to publicly advertise their projects, although some private owners do follow this process. In most cases, private owners screen and select a preferred group of design firms in advance of the actual need for services, then offer their projects to these firms as needs arise.

To simplify the task of comparing the relative qualifications and experience of various firms,

many owners have adopted the use of a standard form for Architects and Engineers to use in providing this information, such as the Federal Form SF330. These forms encompass an overall profile of the firm including size, experience, volume of business, areas of specialization, the firm’s experience with projects of similar type, and the special expertise of personnel who would be assigned to the project.

4.5 Contents of the Request for Statements of Qualifications

Regardless of whether the invitation to submit Statements of Qualifications take the form of a public advertisement or a letter or memorandum sent to a limited number of firms, it should include the following:

- The general scope of work for the project.
- The project owner’s name, and name, address and telephone number of the project contract person (including e-mail website addresses).
- A list of information each firm should include in its statement of qualifications, such as the names of firm owners, number of years in business, the types of services offered, approach to quality, background on key technical personnel, similar projects designed by the firm, projects underway, references, etc.
- The number of copies of qualifications statements and other documents required for submission.
- The relative weight to be given to evaluation factors.
- A policy that Statements of Qualifications received after a set deadline will not be considered.
- A sample Request for Qualifications (RFQ) can be viewed in Appendix 2.

4.6 Evaluating the Statements to Develop a Short List

The ultimate goal of the evaluation of SOQs is to narrow the field of qualified firms to a “short list” of three-to-five firms. Each firm should be evaluated on the basis of its experience on similar projects, expertise of its key professional staff, its physical equipment and facilities, references and other factors of importance to the owner.

This evaluation can be conducted by one individual or by a selection committee appointed by the owner. Governmental agencies often have specific rules or policies regarding the make-up of design professional selection committees. It is up to the owner to ensure that the selection committee is composed of competent individuals able to make an intelligent selection decision based on factual information, and that each Statement of Qualifications is evaluated on the same basis by each member of the selection committee. The selection committee should document the proceedings and decisions, in the event questions arise later about any decisions made.

A sample tally sheet such as is normally used in the evaluation of the Statements of Qualifications is provided in the appendix. Frequently, an owner will attach more importance to certain firm qualifications than others. For example, experience on similar projects might be most important. The form can be tailored to meet those concerns simply by assigning a higher weight to those factors that are of greatest concern to the owner.

Before meeting to perform the evaluations, the owner should check the references of each firm under consideration. This check should not be limited to the references supplied by the firms. The owner should ask the listed references for other references that are aware of the design professional's capabilities.

Based upon the evaluation of the Statements of Qualifications and reference checks, lesser-qualified firms can be eliminated from

consideration, leaving a short-list of three-to-five firms for further consideration. For smaller projects it is recommended that three firms be short-listed. For a large project, a short list of four or five may be desirable.

All firms that submit a Statement of Qualifications make a significant commitment of time and expense when they do so. As a good business practice, the owner should promptly notify the firms not selected for further consideration, as well as those who are short-listed for the project.

4.7 Tours of the Project Site

Providing the short-listed firms with a tour of the project site can be one of the most important parts of the selection process. A tour of the project site gives these firms the opportunity to obtain first-hand information about the proposed project and the owner's specific needs, and may aid in addressing unforeseen problems with the project site. Tours could be available as early as when the notice of solicitation is issued. In some cases, a tour may not be necessary; such determinations should be made on a case-by-case basis.

4.8 Evaluating and Ranking the Short-Listed Firms

The owner may also decide to interview representatives of each short-listed firm. These interviews give the owner the opportunity to compare the firms' creative approaches to the design process, as well as their interpretation and understanding of the project.

Almost as important, interviews give the owner an important insight into each firm's management style and communications abilities. For this reason, the owner should require that all short-listed firms send its owners or key managers, as well as the lead engineers and other professionals who will be responsible for the work, to these interviews.

Each short-listed firm could also be asked to produce a technical proposal which describes in detail the firm's technical approach to the project; its plan for managing and performing the required work; the personnel to be assigned to the project; the proposed work schedule; the firm's current work load; the office in which the work will be performed; and other project-specific information. This technical proposal can be used as a forerunner to the interviews, in conjunction with, or as a substitute for the interviews. Technical proposals should be required only when the project is relatively complex or large, and if the significance of the project justifies the expense and time to the short-listed firms and the owner.

The process of utilizing technical proposals will add several weeks, and commensurate cost, to the preparation time for the short-listed firms. The owner will also require technically experienced staff, as well as additional time to adequately review the technical proposals.

4.9 Interview Room Set-Up

When interviews with short-listed firms are conducted, the physical set-up for the interview should be comfortable, with good acoustics and ample room. A separate waiting area should be provided for other firms to be interviewed. Equipment such as audio-visual screens and flip charts will be useful, although most firms will bring the equipment they need. Since equipment set-up time may cause some delays, two rooms should be used, if possible. While one firm is being interviewed in the first room, another firm can set up in the second room. This ensures that important interview time is not spent checking equipment.

Interviews are usually held in closed sessions, unless applicable statutes or regulations require an open public meeting. In such cases, the firms should be notified of this special requirement in advance.

4.10 Possible Interviewing Guidelines

The following are suggested guidelines for setting up and conducting the interviews:

- Set schedules in advance with short-listed firms to ensure that all interviewed firms have had equal opportunity to prepare presentations.
- Adequate time should be scheduled for each presentation, usually 45 minutes. A 45-minute interview is fair, reasonable, and informative for most project selections, with more time being allowed for unusual or complex projects. For example, five minutes for introductions and preliminary remarks by the interview chair; 20 minutes for the presentation of the qualifications; 15 minutes for questions and answers; and five minutes for a closing summary by the team leader. Schedule adequate time between interviews for the committee to discuss the presentation privately before beginning the next interview.
- Schedule all interviews on the same day, if possible. This permits the committee members to compare all of the interviewed firms while information is fresh in their minds, and ensures consistent interview scoring. Using 45-minute interviews, an owner can easily schedule the three-to-five short-listed firms in one day, including committee rating, discussion and decision time.
- The Statement of Qualifications should identify the evaluation criteria for the scoring system and should be sent to all firms as an attachment to Statement of Qualifications.

- While it is appropriate to question firms about their approach to the design of a project, the owner should not ask for an actual design solution during the interview. Appropriate and responsive designs require considerably more interaction between the owner and design professional than is possible during the selection phase.
- Owners may want to ask firms how they plan to develop an appropriate level of compensation for their professional services. However, compensation amounts are best resolved through detailed discussions with the firm selected, and only after there is a comprehensive and mutual understanding of the actual scope of services. There is no solid basis on which to finalize a fee until after a detailed and specific scope of work is negotiated.
- Team building should begin in the interview process. The ability of the interviewed firm to interact with the owner is an important factor in determining the future success of the proposed project.
- Let all firms know when the selection decision will be made and when they will receive a communication regarding their status. It is recommended that, if possible, the committee's decision be made shortly after having ample time to evaluate and compare qualifications of the interviewed firms.

4.11 Ranking of Short-Listed Firms

A sample copy of an evaluation form is included in the appendix of this Guide (Appendix 10). The evaluation form, which includes a weight and a score for each criteria/question, is a useful instrument for scoring, ranking and ultimately selecting a compatible and qualified firm.

“QBS is an invaluable tool for us – it consistently delivers high quality, on-time infrastructure projects for the citizens of New York.”

*—William O’Conner,
NY State Office of
General Services*

During the scoring process, all firms should be evaluated separately by each member of the selection committee. The chairperson of the selection committee should compile the individual score sheets when the evaluations are complete. This system provides a documented record of the selection process as support for the committee's actions. The selection committee should take time to achieve the final ranking and selection by consensus, rather than just by majority vote. A single reviewer should not be permitted to unduly influence the outcome of the selection process.

After the ranking of firms is completed, a memo should be prepared and mailed to all firms who participated in the interview process. The memo normally lists (in alphabetical order) all short-listed firms and the order in which the committee ranked them. It is customary for owners to provide this information as a courtesy to the finalists.

5.0 Definition of Project Scope Under QBS – Step 2

5.1 Introduction

The top-ranked firm from Step 1 is invited to participate in Step 2 of the QBS process. The objective of Step 2 is to understand the owner's needs and expectations and to jointly define the scope of the project, the services required, and the contract form. During this phase, the owner will explain the needs and objectives of the project in more detail and the design professionals will be able to respond and make suggestions (based on their experience) and thereby gain a better understanding of the owner's needs and expectations.

Additionally, this phase gives the owner access to the advice and expertise of the top-ranked firm in developing the most appropriate final scope for the project.

5.2 Developing the Scope of Services

After a mutual understanding of project scope is determined, the owner and the highest ranked firm are engaged as a team developing solutions for the project. They often begin by discussing the project in detail, gaining a better understanding of important issues, such as overall goals for the project. The owner expresses his objectives for the project and the design professional obtains as much specific information as possible about these aspirations and requirements. This exchange, which can take several days on a major project, leads to the development of the detailed scope of services, which is the foundation of an agreement between the two parties.

5.3 Fee Proposal and Negotiation

When the detailed scope of services is agreed upon, the design professional can develop and submit a detailed fee proposal to the owner. If the proposed fee is more than the owner has budgeted; the two work together to modify the scope of services so that the owner is fully aware of limitations or problems that might result. Such a working relationship greatly enhances the opportunity for a quality project.

If an agreement on the scope of services and compensation cannot be reached, discussion with the first-ranked firm may be terminated, and the owner can initiate talks with the second-ranked firm. However, it is not normally difficult to reach an agreement with the highest ranked firm, since by its very nature, the QBS process fosters in-depth communication and understanding between the owner and design professional.

Given the important nature of the services, the owner and the design professional enter into a written agreement, which will bind the parties within the terms of a contract. The parties may wish to use the standard forms of agreement that have been developed by the Engineers Joint Contract Documents Committee (EJCDC). The EJCDC documents are widely used, time tested, and drafted to fairly protect the interests of the owners, design professionals, and contractors. This family of contract documents can be found in the ACEC bookstore at www.acec.org or online at ContractsCentral.net.

6.0 Agreement of the Parties – Business Terms of the Contract – Step 3

6.1 Introduction

Step 3 is one of the major benefits of the QBS process, for it is at this point that the owner is able to retain the design professional on the basis of an acceptable fee proposal. It is important to note that the owner still has the option to negotiate the price, renegotiate the scope, or terminate the negotiations and move on to the second-ranked firm.

Completion of the QBS selection process assures the owner that the most qualified design professional has been selected for the project. And the design professional, through this time-honored process, has a good understanding of the needs and expectations of the owner and the project.

6.2 Compensation Estimates

The selected design professional is both a professional and a business person in providing design services. A design professional not only delivers highly technical services and acts as the client's trusted advisor, but at the same time needs to recover all costs and earn a fair profit to remain in business. The common law concept of business balance prohibits paying a little and receiving a lot. The purpose of this section is to explain how the design professional charges for professional services, so owners will be fully informed when they enter into negotiations to establish a fair and reasonable price for services related to their project.

6.3 Overhead

The most obvious costs to the design professional are direct labor costs of staff, and expenses incurred in the development of design solutions, project plans and specifications, and in the observation of construction. Another very real cost of services, however, is overhead necessary to operate a business office, to maintain equipment and supplies, and to provide support staff services. This overhead cost is usually expressed as a percentage of direct salary cost. Overhead items may include the following:

Direct Salary Overhead

- Federal FICA
- Employment Taxes
- Paid Time Off
- Retirement or Incentives
- Group Insurance
- Unemployment Benefits

General Overhead

- Administrative Salaries
- Stenography
- Bookkeeping
- Continuing Education
- Business Development
- Office Supplies
- Legal and Accounting
- Interest Expense
- Rent and Utilities
- Business Taxes
- Insurance
- Communications
- Dues and Subscriptions
- Depreciation

Total overhead may be expected to vary from 150% to 200% of direct labor costs. Specialty firms may have a higher overhead, but may be more efficient in direct labor charges.

6.4 Establishing Engineering Fees

Compensation for engineering services are calculated and established by a variety of methods:

- Lump Sum or Fixed Fee is commonly used when the project scope and enumeration of required services are well-defined at the outset of the project and can be mutually agreed upon during negotiations.
- Salary Cost Times a Multiplier may be used for preliminary services where many of the project requirements and alternate solutions need to be determined. This method includes compensation based upon all direct payroll costs (salaries, fringe benefits, payroll taxes, social security contributions) times a multiplier which compensates for overhead and pre-tax profit, plus direct non-salary expenses (travel, communications, supplies, sub-consultants). As part of the negotiations, sometimes a maximum fee or “not-to-exceed” is agreed upon.
- Cost Plus a (predetermined) Fixed Fee may be used in situations involving research, studies, investigations, experimental work, estimates for alternative types of construction and other similar services. With this method, the “cost” includes all direct payroll, direct non-payroll, and overhead (indirect) costs. The “fixed fee” is a lump sum amount, agreed upon during negotiations to cover any non-reimbursable costs, pre-tax profit, and readiness to serve. The “fixed-fee” does not change regardless of the future variations in the overall costs.

“Using QBS in choosing the successful team provided the agency and the public with a better-performed job, using more reliable and suitable methods that protected historic structures.”

*—Paul Cloyd,
National Park Service*

- Cost Per Unit is occasionally used when the fee may be based upon portions of the work (such as in highway design where the fee can be stated as “so much per mile”).
- Per Diem (hourly fee) may be employed when the scope of the work is not fully developed, the work is irregular, or key people are required. This could include consultation in highly specialized areas, such as appraisals, feasibility studies, investigation of conditions, collection of data, and court or public hearing testimony.

7.0 QBS and Alternative Project Delivery Methods

7.1 Introduction to Alternative Project Delivery (APD) Methods

Alternative Project Delivery (APD) methods are processes to for delivering projects using other than the traditional “design-bid-build” approach (design-bid-build is also called Design/Contract-Build). These other APD methods may be beneficial to an owner in certain circumstances as alternatives to the traditional approach (provided they are allowed by jurisdiction). A brief summary of various APD methods are listed below:

Design-Build (DB): The owner hires a design-builder team (design professional and builder) to prepare the final design and construct the project, usually at a fixed price. It is highly recommended that the owner retain an independent advisor/design professional to assist with defining project objectives, addressing project risk, designing a procurement process and managing the procurement process. An owner’s advisor/design professional should also assist the owner through the procurement, and with oversight through the contract (design and construction) phase. Many variations of DB are used including Design-Build-Operate (DBO) where the DB firm continues operations and maintenance service after construction. This method may also be known as Turn Key.

Construction Manager (CM): The owner retains a design professional, and then contracts with a CM firm to manage the construction project as an agent of the owner. The CM then packages the design and lets contracts directly with a builder on behalf of the owner for construction. In this method, the CM does not construct any work and is not “at risk”

for budget or schedule. The owner’s design professional remains active throughout the project to assist the owner.

Construction Manager at Risk (CMAR): The owner retains a design professional, and then hires a CMAR firm to manage the construction project on behalf of the owner. The CMAR packages the design and lets contracts directly to subcontractors for the construction. Some work may be self-performed by the CM firm. In this method, the CM is “at risk” for budget or schedule since they are contracting directly with the subcontractors. The owner’s design professional remains active throughout the project to assist the owner.

Construction Manager / General Contractor (CMGC): The owner retains a design professional to prepare a design can and also hires a separate CMGC builder to collaborate and advise in the design process. Another independent design professional can be hired by the owner to assist with defining project objectives, addressing project risk, designing a procurement process, and managing the procurement process. When a portion of the design is ready for construction, the owner may contract with the CMGC builder or go out for bids if an agreement cannot be reached with between owner and CMGC builder. The design professional responsible for the design can remain active throughout the project to assist the owner with construction oversight. This ADP method is also known as **Early Contractor Involvement (ECI)** or **Integrated Project Delivery (IPD)** (when all project stakeholders are involved in the process).

Best Value Contracting (BVC): The owner hires a design professional to prepare a design and a request for proposal from contractors. The project is then awarded to the contractor offering the best combination of price and other factors, instead of solely to the contractor with the lowest bid. This method is also known as **Source Selection**.

BIM Models (Building Information Modeling):

This is a technology that uses three dimensional modeling and databases to integrate complex designs. This is not a specific delivery method but is becoming more prevalent as technology improves.

Public-Private Partnerships (PPP): This is a financing methodology whereby a private entity will contract with the owner to take an ownership interest in the project in exchange for capital to either finance the work or use for other purposes. This also is not a specific delivery method but a trend that is growing in response to lack of available public resources.

The preceding list is not complete and the brief descriptions are only intended to provide a summary for understanding how selection of the design professional through QBS fits in. Alternative project delivery systems continue to develop. The use of any APD system should be done carefully and with processes that consider the benefits and risks of APD versus the traditional approach - with the ultimate goal of meeting the owner's needs.

ACEC has devoted considerable resources to researching and drafting an informative publication entitled the *"Project Delivery Systems Owner's Manual"* that details some of the benefits and risks of each of five different delivery systems. This publication may be obtained through www.BooksforEngineers.com.

7.2 Implementing QBS in Alternative Project Delivery Methods

With a cursory understanding of several APD methods, we can now describe how QBS can be used within those processes to select the design professional. QBS is an ideal fit for traditional design-bid-build project delivery wherein the design professional is engaged directly by the owner (through the QBS selection process) to provide complete design services culminating in

project plans, specifications and other data that can be used by construction contractors to bid on and construct the work.

Because QBS is a procurement methodology rather than an overall project delivery system, it can (and should) be used in any Alternative Project Delivery method. QBS should be integrated into the APD methods listed above through the following approaches:

Design-Build (DB), Design-Build-Operate (DBO) and Turn Key: The advisor/design professional hired by the owner to develop the concept design and assist through the DB procurement and construction phases should be selected based on the standard QBS process.

For the DB team, the selection is typically based on a two-step process involving: 1) a statement of qualifications (SOQ stage) to short-list DB teams, and 2) the short-listed DB teams submit a final price proposal and technical proposal (proposal stage). The criteria for short-listing the DB team through the statement of qualifications should specifically require a significant weighting be given to the "qualifications of the design professional." For example, in a two-step selection process where the DB firms are short-listed, the designer's qualifications weighting should probably not be less than 25 percent of the overall score (for projects that don't need significant design innovation) and may be as high as 75 percent in certain circumstances (when a proper design is an overriding consideration). In the proposal stage, the designer's qualifications as they relate to the project goals (defined by the owner in the RFP) should again be a consequential weight in the overall score. Scoring criteria may include such things as key personnel dedicated to the project, past experience, approach to problem solving, and innovation, and design/quality process.

Construction Manager (CM): The design professional hired to assist through the CM procurement and construction phases should be selected based on the standard QBS process. The CM firm, as a professional service provider working as an owner-advocate, should also be selected through the QBS process.

Construction Manager at Risk (CMAR): The design professional hired to assist through the CMAR procurement and construction phases should be selected based on the standard QBS process. The CMAR firm can be selected on a combination of qualifications and price. As an alternative, the CMAR can be selected based on the lowest price after a QBS-based prequalification process.

Construction Manager / General Contractor (CMGC), Early Contractor Involvement (ECI) and Integrated Project Delivery (IPD): The design professional and the advisor/design professional (if separate) should be selected based on the standard QBS process. The CMGC builder is typically selected based on a combination of qualifications as well as unit pricing on major components of the proposed construction.

Best Value Contracting (BVC) or Source Selection: The design professional hired by the owner to create the design, the request for proposal, and construction support should be selected based on the standard QBS process. The construction project is awarded to the contractor offering the best combination of price and other factors based on the proposal requirements.

BIM Models (Building Information Modeling): The design professionals hired by the owner to develop the design and BIM system and to provide owner support through construction should be selected based on the standard QBS process. In addition to the design professionals, the owner may opt to hire specialty contractors through QBS at the same time to collaborate in the design (Early Contractor Involvement).

Public-Private Partnerships (PPP): The design professional hired by the owner that can work with the PPP entity through construction should be selected based on the standard QBS process. Often the PPP entity will provide DB, DBO or Turnkey services that will need another

engineer's involvement. The selection of that design professional by the PPP entity should be done through a QBS process.

QBS is used to assist clients in finding the firm that is best qualified to perform the professional services that a client needs, and it can be used for all projects where owners want to consider multiple attributes in their selection. Costs are not excluded from the QBS process, but rather introduced later in the process after the entity deemed most qualified to do the work is determined. What is most important to the client is that the resulting design solves their problems. QBS can be used on standard projects and on projects requiring special technical capabilities; on straightforward projects or when the project is absolutely unique – regardless of whether that uniqueness stems from technical, geographical or political challenges.

The basic process of selection by qualifications has stood the test of time and is now finding its way into related forms of professional procurement. Some states have enacted QBS-type legislation that now applies (beyond the A/E community) to other professional services providers such as developers and construction managers.

The American Public Works Association, in the *APWA Red Book on Qualifications-Based Selection*, says that "...the public interest is best served when governmental agencies select architects, engineers and related professional technical consultants for projects and studies through Qualifications-Based Selection (QBS) procedures. Basing these selections on qualifications and competence (rather than price) fosters creativity and flexibility, improves the delivery of professional services, increases value to the owner in construction and life cycle expenses, and minimizes the potential for disputes and litigation."

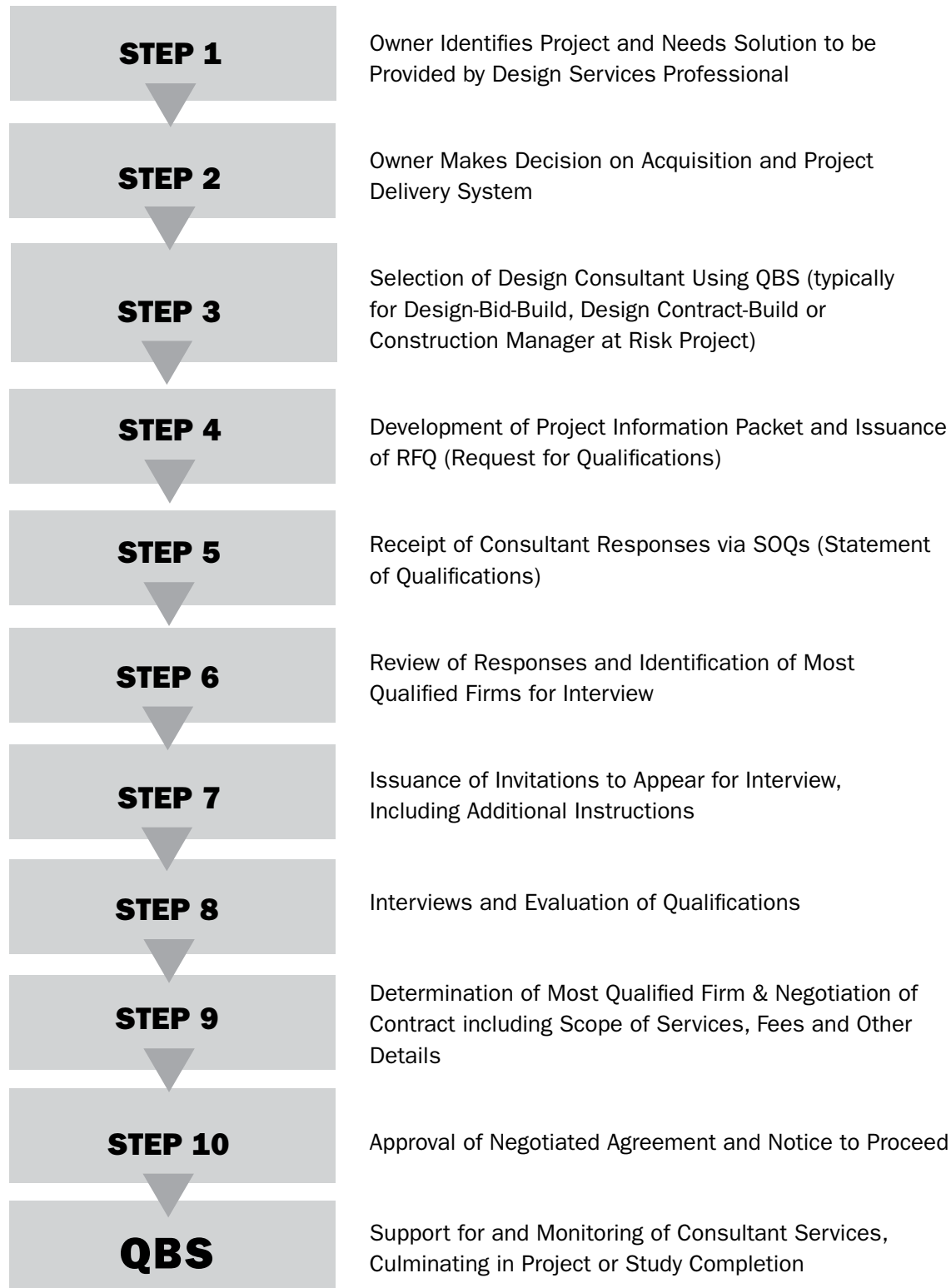
8.0 Additional Resources

Appendices

1. Illustration of Steps in QBS Selection
2. Sample Request For Qualifications
3. Sample Qualifications Evaluation Form (Unweighted) and Sample Qualifications Form (Weighted)
4. Sample Qualifications Evaluation Summary Form
5. Sample Notification to Highest Ranked Firm (Selected Firm)
6. Sample Notification to Firms Not Selected
7. Sample Invitation to Highly Ranked Firms for Interview
8. Sample Interview Issues and Score Sheet
9. Sample Optional Form / Interview Score Sheet
10. Sample Group Interview Evaluation Form
11. Sample Notification to Firms Not Selected After Interview
12. ACEC Matrix of State QBS Laws
13. EJCDC Document Titles
14. Where to Go for More Information About QBS

APPENDIX 1 – ILLUSTRATION OF STEPS IN QBS SELECTION

Important Steps in QBS Selection



REQUEST FOR QUALIFICATIONS
FOR
CONSULTING ENGINEERING SERVICES
FOR
GRANDE RONDE MODEL WATERSHED

Culvert, Bridge; Irrigation Diversion and Screening;
Stream Channel Relocation; and General
Watershed Restoration Projects

Grande Ronde Model Watershed Program
1114 J Avenue
La Grande, OR 97850

February 10, 2007

TABLE OF CONTENTS

	Page
Introduction	2
Section 1: RFQ Submittal and Closing Date	2
Section 2: Inquiries	3
Section 3: General Work Statement and Delivery Schedule	3
Section 4: RFQ Contents	5
Section 5: Proposal Evaluation and Consultant Selection	6
Section 6: General Information	7

Introduction

Grande Ronde Model Watershed Program, hereinafter known as GRMW, is seeking the services of a qualified Consulting Civil Engineering Firm to provide engineering services for the Planning, Preliminary Engineering, and Construction Engineering for various GRMW bridge, culvert, road, irrigation diversion/screening, stream channel and other general watershed restoration projects as the need arises. The contract is anticipated to start April 1, 2007, and will cover a period of three years with an option for renewal for two additional years. The GRMW reserves the right to amend this contract for additional time if it is in the best interest of the GRMW.

Separate work orders will be developed for each GRMW project. GRMW reserves the right to select a different Consulting Engineer for these projects if it is in the best interest of GRMW and/or funding entities to do so.

Section 1: RFQ Submittal and Closing Date

Six copies of the RFQ must be received by 4:00 p.m. local time on March 23, 2007. RFQs may not exceed 25 pages. Neither late nor faxed submittals will be acceptable. Firms submitting RFQs not in compliance with Section 4 will be considered non-responsive. RFQs must be addressed to the following:

Grande Ronde Model Watershed
Attn: Jeff Oveson
1114 J Avenue
La Grande, OR 97850
(541)663-0570

Section 2: Inquiries

- 1.1** Questions that arise prior to the RFQ deadline shall be addressed to the following:

Grande Ronde Model Watershed
Attn: Jeff Oveson
1114 J Avenue
La Grande, OR 97850
(541)663-0570

- 2.2** Consultants may be directed to submit questions in writing to GRMW no later than seven days prior to the submittal date. Substantive questions and answers will be provided to all RFQ recipients.

Section 3: General Statement of Work and Delivery Schedule

3.1 General Work Statement

The objective of this work is to assist GRMW with the design and construction of a variety of projects as the need arises. Projects may include, but are not limited to, the following:

1. Irrigation Diversion Structure projects
2. Stream Channel relocation projects
3. Culvert/Bridge projects
4. Irrigation efficiency projects

3.2 Consultant's Responsibilities

The scope of work to be performed by the Consultant for various GRMW projects may include engineering services relating to the Planning, Preliminary Engineering, and Construction Engineering of the projects. A detailed Scope of Work will be provided for specific projects. Services to be provided may include some of, but not limited to, the following:

1. Assist the GRMW with development and planning of projects.
2. Prepare preliminary project costs.
3. Assist GRMW in the financial planning for projects including assistance with grant applications.
4. Meet with GRMW and representatives of local, state, and federal agencies as necessary.
5. Prepare conceptual designs and review the designs with the GRMW and applicable agencies and prepare preliminary cost estimates based on the conceptual designs.
6. Proceed with final design after GRMW has approved the conceptual design.

7. Complete the necessary mapping and detailed design of the projects, prepare detailed drawings, specifications, and contract documents, and make approximate estimates of the anticipated final costs based on the final designs.
8. Perform surveys and assist in negotiations for land rights when required.
9. Attend public meetings and conferences with GRMW and representatives of other agencies and interested parties.
10. Provide detailed drawings, specifications, and other contract documents stamped by a Registered Professional Engineer to GRMW and any other agency from which approval must be obtained prior to advertisement for bids.
11. Attend bid openings, tabulate bid proposals, analyze the bids, check bid forms and bonds, and assist GRMW in negotiating and awarding the contracts.
12. Meet with GRMW and contractors in preconstruction conferences.
13. Keep GRMW informed concerning progress of the work and attend meetings held by the Agency, regulating agencies, and contractor as they relate to the project.
14. Review shop and working drawings furnished by the contractor.
15. Provide general review and inspection of the contractor's work as construction progresses.
16. Provide construction staking as required.
17. Provide material testing services as required.
18. Review contractor's requests for progress payments and advise GRMW as to the extent of the work accomplished as of the date of the request.
19. Prepare change orders.
20. Provide GRMW with record drawings.
21. Make final inspection of projects and report same to GRMW and any other applicable agency.
22. Assist with the preparation of environmental review records or impact statements.
23. Assist in obtaining permits, applications, etc., as necessary for the work.
24. Assist GRMW with property surveys, property plats, legal descriptions, and other items necessary for negotiating for land rights and easements.
25. Assist with the preparation for and appearances before courts or boards on matters of litigation related to the projects.
26. Furnish consultations necessary to correct unforeseen project difficulties after GRMW accepts the work.
27. May provide a warranty inspection eleven months after GRMW accepts the project and prior to the expiration of the contractor's one-year warranty.

28. Insure compliance with applicable state and federal requirements and regulations specific to each project in accordance with funding sources.
29. Insure that the person in charge of the project is an Oregon licensed surveyor or Oregon registered engineer, as required by Oregon Revised Statutes.
30. Provide and use all safety equipment including (but not limited to) hard hats, safety vests and clothing required by applicable state and federal regulations.

Section 4: RFQ Content Requirements

4.0 No Fee Schedule

Costs will not be evaluated as part of the selection process. Costs will be negotiated after a Proposer is selected. A Preliminary Salary and Fee Schedule for any Proposer selected for contract negotiations must be submitted within five (5) days of the Proposer's notification of selection.

4.1 Consultant's Capabilities/Experience/References Max. Score 25

Outline the firm's capabilities and experience with regard to the requested services. The response should address the following:

- Experience with similar projects. Provide references.
- Internal procedures and/or policies related to work quality and cost control.
- Management and organizational structure.
- Capability to perform the work for the duration of the contract.

4.2 Project Team

Max. Score 25

Outline the firm's personnel who would work with the GRMW. The response should address the following:

- Extent of principal involvement.
- Names of key members who will be performing the work on these projects and their responsibilities.
- Qualifications and relevant individual experience, including subconsultants.
- Project manager's experience with similar projects and interdisciplinary teams.

- Names of key members who will be performing the work on these projects and their responsibilities.
- Qualifications and relevant individual experience, including subconsultants.
- Project manager's experience with similar projects and interdisciplinary teams.

4.3 Method of Approach

Max. Score 25

Outline the firm's approach to working with GRMW projects.

4.4 Understanding of Requested Services and Local Area

Max. Score 25

Outline the firm's understanding of the requested services and local area. The response should address items such as experience and familiarity with local conditions that could affect project construction success such as local materials sources, weather limitations, local contracting resources, etc.

Section 5: Proposal Evaluation and Consultant Selection

5.1 Evaluation Process

Statements of Qualifications submitted on time will be reviewed against the Pass/Fail criteria. SOQs meeting those criteria will be forwarded to an evaluation committee for scoring against the evaluation criteria below and ranking. The outcome of the evaluations may, at GRMW's sole discretion, result in (a) notice to a Proposer(s) of selection for tentative contract negotiation and possible award; or (b) further steps to gather more information for further evaluation. This often means notice of placement on an interview list with time and date of the interview. The selection process may be canceled if GRMW determines it is in the public interest to do so.

5.2 Evaluation Criteria

Each proposal will be judged as a demonstration of the consultant's capabilities and understanding of the services requested. Evaluation factors and maximum points will be as follows:

Criteria	Maximum Score:
A. Consultant's Capabilities/Experience/References	25
B. Project Team	25
C. Method of Approach	25
D. Understanding of Requested Services and Local Area	25
Total Maximum Score:	100

Section 6: General Information

- 6.1** GRMW may require any clarification or change it needs to understand the selected consultant's project approach.
- 6.2** The successful consultant must have Worker's Compensation Insurance covering work in Oregon. The successful consultant must also submit documents addressing insurance, non-collusion, tax law, debarment, and conflict of interest as part of the personal services contract.
- 6.3** GRMW reserves the right to reject any or all proposals, and is not liable for any costs the consultant incurs while preparing or presenting the proposal.
- 6.4** GRMW reserves the right to cancel this RFQ upon a good cause finding.
- 6.5** GRMW will award a contract to the consultant whose proposal, in the opinion of the GRMW Board of Directors and Staff, would be most advantageous to GRMW.
- 6.6** The selected consultant will be required to assume responsibility for all services outlined in the RFQ, whether the consultant or a subconsultant produces them.

APPENDIX 3 – SAMPLE QUALIFICATIONS EVALUATION FORM (UNWEIGHTED) AND SAMPLE QUALIFICATIONS FORM (WEIGHTED)

Evaluation for Short-Listed Firms Form

Name of Project: _____

Name of Evaluator: _____

The interviewer should determine the number of possible points to be awarded in each category.

	Possible Points	Points Awarded
1. Grasp of Project Requirements Firm’s analysis, preparation and level of interest.	20	
2. Design Approach/Methodology Technical alternatives, creativity, problem solving ability.	15	
3. Project Management Proposed project schedule, cost controls.	15	
4. Key Project Personnel Qualifications and experience of project manager, other key personnel.	15	
5. Approach to Quality Methods used to obtain quality.	10	
6. Project Design Team Sub-consultants who would be made part of project design.	10	
7. Firm Responsiveness Plan for progress reports, general attitude and ability to communicate.	5	
8. Geographic Considerations Familiarity with locale and local governmental and regulatory agencies.	5	
9. Compensation Method of determining compensation, billing procedures.	5	

Total: _____

QUALIFICATIONS EVALUATION FORM (WEIGHTED)

Qualifications Evaluation Form

Owner: _____

Contact Person: _____

Project Description: _____

Design Firm: _____

Address: _____

City: _____ State _____ Zip _____

Telephone: _____

Contact: _____

To the following model, you should add or delete questions as appropriate for your specific situation. It is suggested that the weights and values assigned be on the same scale as those used for interviewing short-listed firms, which you will do later. Highest number: most value/Rating column: 1-5 points/ Weight column: 1-10, depending on the importance of the project. A form on the following page is provided for the person in charge of the Selection Committee to use, to summarize the results of the process, to narrow the number of firms that submitted qualifications down to the number desired for a shortlist (firms to be interviewed).

	Rating (1-5)	X	Weight (1-10)	=	Total
1. Firm's history and resource capability to perform required services		x		=	
2. Evaluation of assigned personnel		x		=	
3. Related experience (as appropriate)		x		=	
a. Design services		x		=	
b. Demolition		x		=	
c. Construction observation		x		=	

QUALIFICATIONS EVALUATION FORM (WEIGHTED)

	Rating (1-5)	X	Weight (1-10)	=	Total
d. Studies		x		=	
e. Other		x		=	
4. a. Meeting Schedule		x		=	
b. Meeting project budget		x		=	
c. Approach to quality		x		=	
5. Familiarity with local area geography and facilities		x		=	
6. Ability to relate to project requirements		x		=	
7. Analysis of subjective requirements (one page) applicable to the project as required on the RFQ		x		=	
8. Reference check (evaluation transfer from reference form)		x		=	

Grand Total: _____

Name of Reviewer: _____

APPENDIX 4 – SAMPLE QUALIFICATIONS EVALUATIONS SUMMARY FORM

Sample Qualifications Evaluations Summary Form

(To be used by the Selection Committee Chairman to compile the evaluation results of all Statements of Qualifications. Note: Enter the Grand Total for each firm’s qualifications [from the respective evaluation sheets for comparative purposes] to select three to five most qualified firms to be interviewed.)

Firms	1	2	3	4	5	6	7	8
Reviewer 1								
Reviewer 2								
Reviewer 3								
Reviewer 4								
Reviewer 5								
Reviewer _____								
Reviewer _____								
Grand Totals								

List the top-ranked firms as the short-listed firms to be interviewed.

APPENDIX 5 – SAMPLE NOTIFICATION TO HIGHEST RANKED FIRM (SELECTED FIRM)**Sample Notification to Highest Ranked Firm
(Selected Firm)**

TO: *[Name of firm not selected for further consideration]*

FROM: *[Representative of Owner/Agency]*

RE: *[Project Name]*

Congratulations! Based on your firm's qualifications and experience, *[the agency's]* consultant selection committee feels that your firm is best qualified to provide professional services to *[the agency]* for the above-referenced project. An agency representative will be contacting you soon about meeting to discuss a draft scope of work for this project. This will be followed by fee negotiations based upon the agreed upon scope of work. We look forward to working with your firm on this project.

APPENDIX 6 – SAMPLE NOTIFICATION TO FIRMS NOT SELECTED**Sample Notification to Firms Not Selected**

TO: *[Name of firm not selected for further consideration]*

FROM: *[Representative of Owner/Agency]*

RE: *[Project Name]*

On behalf of *[the agency]*, this is to express our appreciation for your project team's time and effort in responding to *[the agency's]* solicitation for professional services on the above-referenced project. Your team did an outstanding job in the interview, and the selection decision by *[the agency]* for this project was a difficult one. However, after careful consideration, *[the agency]* staff feels that the firm of _____ is the "best fit" for this particular project.

Although your firm was not selected for this project, we look forward to the opportunity of working with you on a future project for *[the agency]*. Again, thank you for your interest in this project.

APPENDIX 7 – SAMPLE INVITATION TO HIGHLY RANKED FIRMS FOR INTERVIEW**Sample Invitation to Highly Ranked Firms for Interview**

TO: *[Name of firm selected for further consideration]*

FROM: *[Representative of Owner/Agency]*

RE: *[Project Name]*

The *[agency name]* staff has completed its review of the consultant proposals for providing design services on the above-referenced project. Based on your firm's response to the *[agency's solicitation]*, staff would like to meet with representatives from your project team on *[date]* to discuss your firm's proposal and qualifications for this project. Consultant interviews will be held at the following times:

[Time] [Firm Name]

[Time] [Firm Name]

[Time] [Firm Name]

[Time] [Firm Name]

The interviews will be conducted at *[location]*. The interview panel will include representatives from *[list departments]*. A maximum of 45 minutes will be allowed for each interview, including 15 minutes for set up/removal of presentation materials. Each consulting firm will be allowed up to 20 minutes for their presentation, followed by up to 25 minutes for questions from the interview panel.

In the interest of time, firms do not need to provide lengthy information on their size, background or availability. (These conditions are general presumed to have been met.) Rather, each firm should specifically address the following topics in their presentation:

- Demonstrate a clear understanding of the agency's purpose and need for this project.
- Discuss the recent, relevant experience of the project team members on projects of a similar nature.
- Demonstrate the expertise/experience of the project team members in addressing the *[key issues]* that are relevant to this project. Following the interviews, the *[agency]* panel will decide which firm is best qualified for this project. That firm will then be notified and asked to prepare a preliminary scope of work and fee proposal for review by the agency, the terms of which will be negotiated at follow-up meetings with the firm. Upon the successful completion of the scope of fee negotiations, and executive of *[agency]* consultant contract, a purchase order and notice to proceed will be issued by *[the agency]*.

If you have any questions regarding the interview process, or logistics, feel free to contact me.

APPENDIX 8 – SAMPLE INTERVIEW ISSUES AND SCORE SHEET

The Interview: Issues and Score Sheet Sample

Owner: _____

Project: _____

(Firms invited to interview for the captioned project should be prepared to speak to the following issues during the course of their interview. Questions can be expanded as appropriate.) The interviewer should determine the number of possible points to be awarded in each category.

Categories	Possible Points	Points Awarded
1. Grasp of Project Requirements (Owner may evaluate firm's analysis, preparation and level of interest.)		
2. Design Approach/Methodology (Owner may evaluate firm or individual's creativity and problem solving ability.)		
3. Key Personnel and Roles (Owner may evaluate personal qualifications and professional skills of key individuals.)		
4. Pertinent Experience, Firm (Owner may evaluate related projects presented as previous work of the firm.)		
5. Pertinent Experience, Individual (Owner may evaluate related projects as previous work of the key personnel.)		
6. Consultant/In-House Resources (Owner may evaluate firm's abilities and importance of consultant or in-house support services.)		

SAMPLE INTERVIEW ISSUES AND SCORE SHEET

Categories	Possible Points	Points Awarded
<p>7. Technical Project Management (Owner may evaluate firm's abilities related to technical functions such as project cost controls, construction observation, time scheduled, etc.)</p>		
<p>8. Responsiveness to Owner's Concerns (Owner may evaluate firm's ability to form successful working relationships and communications with the owner.)</p>		
<p>9. Approach to Quality (Owner may evaluate firm's methods of developing a quality project.)</p>		
<p>10. Method of Compensation (Owner may evaluate firm's method of determining compensation. Compensation statements of qualification are NOT required.)</p>		
<p>11. Other Relevant Issues (Owner may evaluate importance of other relevant issues presented by the firm.)</p>		

12. Reference Check

APPENDIX 9 – SAMPLE OPTIONAL FORM/INTERVIEW SCORE SHEET**Sample Optional Form/Interview Score Sheet**TO: _____ (*interviewing group*) _____

OWNER: _____

The interviewer should determine the number of possible points to be awarded in each category.

Issue	Possible Points	Points Awarded
1. Similar project experience.		
2. Discussion of the firm's capacity to perform the work.		
3. Discussion of the firm's understanding of the project needs.		
4. Discussion of the methodology the firm proposes to use in providing the required services and its approach to quality.		
5. Discussion of consultants who may be working with the firm on the project.		
6. Discussion of how the firm will handle the planning, design and construction phase of the project. Discuss design approach, construction cost controls and involvement in the design and implementation phases of the work.		
7. Discussion of the time schedule the firm proposes to complete the necessary preliminary work as well as a time schedule for the entire project.		

Notes:

APPENDIX 10 – SAMPLE GROUP INTERVIEW EVALUATION FORM

Sample Group Interview Evaluation Form

(For use by the person in charge of the interviews to compile all scores of engineering firms participating in the interview process.)

NOTE: Enter the grand total for each firm as recorded by each interviewer on the interview score sheet. After all entries are made and totaled, divided the combined group total for each firm by 500, the maximum possible score.

Combined Group Totals

	Firm A	Firm B	Firm C	Firm D	Firm E
Interviewer 1					
Interviewer 2					
Interviewer 3					
Interviewer 4					
Interviewer 5					
Grand Totals					
<i>Divide by number of interviewers</i>					
Average Score					

APPENDIX 11 – SAMPLE NOTIFICATION TO FIRMS NOT SELECTED AFTER INTERVIEW**Sample Notification to Firms Not Selected After Interview**

TO: *[Name of firm not selected for further consideration]*

FROM: *[Representative of Owner/Agency]*

RE: *[Project Name]*

Thank you for your interest in the above-referenced project. The interview selection team has reviewed the proposals submitted for this project and, after careful consideration of all interviewed firms, has selected the firm of _____ for this project.

Although your firm was not selected for this project, we appreciate your interest in working with *[agency]*, and we look forward to working with you on a future project in our jurisdiction.

APPENDIX 12 – ACEC MATRIX OF STATE QBS LAWS

ACEC Qualifications Based Selection – Survey of State QBS Laws and Registration Boards - 2009

State	QBS Law	Statute #	QBS Law: Applies to State Contracts	QBS Law: Applies to Local Units	Registration Board: Prohibits Response to Price Proposal	Registration Board: Enforced?	Comments
AL	Y*	AL-ST 41-16-21	Y	N	Y	N	*Not true QBS, prohibits low-bid
AK	Y	AK ST § 36.30.270	Y	Y			Certain Exemptions
AZ	Y	AZ ST § 34-603	Y	Y		N	
AR	Y	AR ST § 19-11-802	Y	Y	N		
CA	Y	GOV. CODE § 4525	Y	Y	N		
CO	Y	CO ST § 24-30 Sec. 1401-1408	Y	Y	N		
CT	Y	CGS § 4B-58 and 13B-20	Y	N	N		Applies only to Dept. of Public Works and Dept. of Transportation
DE	Y	DE ST 29 § 6962	Y	Y			
FL	Y	FL ST § 287.055	Y	Y	N	N	
GA	Y	OCGA 50-22	Y	N	N		

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ACEC Qualifications Based Selection – Survey of State QBS Laws and Registration Boards - 2009

State	QBS Law	Statute #	QBS Law: Applies to State Contracts	QBS Law: Applies to Local Units	Registration Board: Prohibits Response to Price Proposal	Registration Board: Enforced?	Comments
HI	Y	HRS § 103D-304	Y	Y	N		
ID	Y	ID Code § 67-2320	Y	Y	N		
IL	Y	30 ILCS 535	Y	Y*	N		Public Works cited as: 50 ILCS 510
IN	Y*	IN ST 5-16-11.1	Y	Y	N		*Price may be considered
IA	N	N/A		N/A			Agencies generally follow QBS
KS	Y	KSA 75-5801	Y	N	N		
KY	Y	KRS § 45A	Y	N*	N		*Local units “may” use QBS
LA	Y	LA R.S. 38:2181-2316	Y	Y	N		Strengthened in 2006
ME	Y	ME St. T. 5 § 1742	Y	N	N		
MD	Y	§ 13-308	Y	N	N		Under \$100,000 price is 40% of selection criteria
MA	Y		Y	N	N		QBS applies to vertical construction, not horizontal

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ACEC Qualifications Based Selection – Survey of State QBS Laws and Registration Boards - 2009

State	QBS Law	Statute #	QBS Law: Applies to State Contracts	QBS Law: Applies to Local Units	Registration Board: Prohibits Response to Price Proposal	Registration Board: Enforced?	Comments
MI	Y	PA 504		Y*			For State Dept. of Management & Budget use QBS
MN	Y*	§ 16C	Y	N	N		QBS applies only to state vertical construction. *Allows some price consideration.
MS	Y*	No. 17.056	N	N			*Administrative registration rule law
MO	Y	RS Mo. § 8.285	Y	Y	N		
MT	Y	18-8-201, MCA	Y	Y	N		
NE	Y	81-1701 thru 81-1721	Y	Y	Y		Projects over \$40,000
NV	Y	NV ST § 625.530	Y	Y	Y	Y	Projects over \$35,000
NH	Y	NH ST § 21-1:1	Y	N			
NJ	Y*	.L. 1997, CH. 399	Y	N	N		Local governments strongly encouraged to use QBS. *Allows price proposal from top top 3 firms.

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ACEC Qualifications Based Selection – Survey of State QBS Laws and Registration Boards - 2009

State	QBS Law	Statute #	QBS Law: Applies to State Contracts	QBS Law: Applies to Local Units	Registration Board: Prohibits Response to Price Proposal	Registration Board: Enforced?	Comments
NM	Y	NM ST § 13-1-117.2 thru 13-1-124	Y	Y	N		Universities exempt. QBS for contracts over \$25,000
NY	Y	§ 136A	Y	N			
NC	Y	G.S. 143-64.31	Y	Y	Y		
ND	Y	54-45.7	Y	N			
OH	Y	153.65.71	Y	Y*	N		*Except home rule municipalities
OK	Y	O.S. 61, 60-65	Y	Y	Y	N	Updated in 2000 to include all political subdivisions
OR	Y	Ch. 948	Y	Y	N		Applies to local units when state funds are involved
PA	Y	PA ST 62 PA C.S.A. § 905	Y	N	N		
RI	Y	RI ST § 45-55-8.1	Y	Y			

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ACEC Qualifications Based Selection – Survey of State QBS Laws and Registration Boards - 2009

State	QBS Law	Statute #	QBS Law: Applies to State Contracts	QBS Law: Applies to Local Units	Registration Board: Prohibits Response to Price Proposal	Registration Board: Enforced?	Comments
SC	Y	SC ST 11-35-3220	Y	N	N		
SD	N		N/A	N/A	N		
TN	Y*	TCA § 12-4-106	N	Y	N		*Requires qualifications, allows price
TX	Y	TX GOVT § 2254.004	Y	Y	Y	Y	
UT	Y	UT ST § 63-56-42	Y	N	N	N	
VT	N		N/A	N/A			Requires qualifications plus price
VA	Y	VA ST § 202-4301	Y	Y	N		
WA	Y	RCW 39.80	Y	Y	Y	N	
WV	Y	WV ST § 5G-1-1	Y	Y			
WI	N		N/A	N/A	N		Not required, but most state agencies use QBS
WY	Y*	WY ST § 9-2-1031	Y	N			* Allows discussion of fee after qualified firms are selected

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APPENDIX 13 – EJCDC DOCUMENT TITLES**EJCDC Document Titles****Owner Engineer Documents**

- EJCDC E-500: Standard Form of Agreement Between Owner & Engineer for Professional Services
- EJCDC E-505: Agreement Between Owner and Engineer for Professional Services, Task Order Edition
- EJCDC E-520: Short Form of Agreement Between Owner & Engineer for Professional Services
- EJCDC E-525: Agreement Between Owner and Engineer for Study and Report Professional Services
- EJCDC E-530: Standard Form of Agreement Between Owner & Geotechnical Engineer
- EJCDC E-582: Model Form of Agreement Between Owner and Program Manager
- EJCDC E-990: Owner Engineer, Full Set

Engineer Subconsultant Documents

- EJCDC E-560: Standard Form of Agreement Between Engineer & Land Surveyor for Professional Services
- EJCDC E-564: Standard Form of Agreement Between Engineer & Geotechnical Engineer for Professional
- EJCDC E-568: Standard Form of Agreement Between Engineer & Architect for Professional Services
- EJCDC E-570: Standard Form of Agreement Between Engineer & Consultant for Professional Services
- EJCDC E-571: Amendment to Engineer-Consultant Agreement
- * EJCDC E-991: Engineer Subconsultant, Full Set

Construction-Related Contracts

- EJCDC C-001: Narrative Guide to the 2007 EJCDC Construction Documents
- EJCDC C-050: Owner's Instructions Regarding Bidding Procedures and Construction Contract Documents
- EJCDC C-051: Engineer's Request for Instructions on Bonds & Insurance
- EJCDC C-052: Owner's Instructions Concerning Bonds & Insurance for Construction
- EJCDC C-200: Guide to the Preparation of Instructions to Bidders

EJCDC documents are available at www.BooksforEngineers.com

EJCDC DOCUMENT TITLES

- EJCDC C-410: Suggested Bid Form for Construction Contracts
- EJCDC C-430: Bid Bond, Penal Sum Form
- EJCDC C-435: Bid Bond, Damages Form
- EJCDC C-510: Notice of Award
- EJCDC C-520: Suggested Form of Agreement Between Owner & Contractor, Stipulated Price
- EJCDC C-525: Standard Form of Agreement Between Owner and Contractor, Cost-Plus
- EJCDC C-550: Notice to Proceed
- EJCDC C-610: Construction Performance Bond
- EJCDC C-615(A): Payment Bond
- EJCDC C-620: Contractor's Application for Payment
- EJCDC C-625: Certificate of Substantial Completion
- EJCDC C-700: Standard General Conditions of the Construction Contract
- EJCDC C-800: Guide to the Preparation of Supplementary Conditions
- EJCDC C-940: Work Change Directive
- EJCDC C-941: Change Order
- EJCDC C-942: Field Order
- EJCDC C-990: Construction Related Documents, Full Set

Design-Bid-Build Documents

- EJCDC A-990: Design-Bid-Build Documents, Full Set

Design-Build Documents

- EJCDC D-001: Guide to Use of EJCDC Design/Build Documents
- EJCDC D-500: Agreement Between Owner and Owner's Consultant for Professional Services – Design/Build Project
- EJCDC D-505: Subagreement Between Design/Builder and Engineer for Professional Services
- EJCDC D-510: Agreement Between Owner and Design/Builder for Preliminary Services
- EJCDC D-520: Agreement Between Owner and Design/Builder on the Basis of a Stipulated Price

EJCDC DOCUMENT TITLES

- EJCDC D-521: Subagreement Between Design/Builder and Subcontractor on the Basis of a Stipulated Price
- EJCDC D-525: Agreement Between Owner and Design/Builder on the Basis of Cost-Plus
- EJCDC D-526: Suggested Form of Subagreement Between Design/Builder and Subcontractor on the Basis of Cost-Plus
- EJCDC D-610: Design/Build Contract Performance Bond
- EJCDC D-615: Design/Build Contract Payment Bond
- EJCDC D-700: Standard General Conditions of the Contract Between Owner & Design/Builder
- EJCDC D-750: Standard General Conditions of the Subcontract Between Design/Builder & Subcontractor
- EJCDC D-990: Design-Build Documents, Full Set

Environmental Remediation Documents

- EJCDC R-001: Commentary on EJCDC Environmental Remediation Documents
- EJCDC R-520: Standard Form of Agreement Between Owner & Environmental Remediator, Stipulated Price
- EJCDC R-521: Standard Form of Agreement Between Environmental Remediator & Subcontractor, Stipulated
- EJCDC R-525: Standard Form of Agreement Between Owner & Environmental Remediator & Subcontractor, Co
- EJCDC R-526: Standard Form of Construction Subagreement Between Environmental Remediator & Subcontractor, Cost-Plus
- EJCDC R-700: Standard General Conditions of the Contract Between Owner & Environmental Remediator
- EJCDC R-750: Standard General Conditions of the Subagreement Between Environmental Remediator & Subcontractor
- EJCDC R-990: Environmental Remediation Documents, Full Set

Guides, Commentaries, and References

- Commentary on the Terms and Conditions of the AOD Standard Form of Agreement between Owner and Contractor
- Comparison of COAA and EJCDC Standard Forms

EJCDC DOCUMENT TITLES

- EJCDC 1910-16: Uniform Location of Subject Matter
- EJCDC 1910-24: Contract Documents Bibliography
- EJCDC 1910-9C: Focus on Shop Drawings
- EJCDC 1910-9E: Limitation of Liability in Design Professional Contracts
- EJCDC 1910-9G: Indemnification by Engineers - A Warning
- EJCDC Instructions for Use and License Agreement
- Guidance for the Use of EJCDC Funding Agency Edition Documents on Water and Waste Projects with RUS Financial Assistance
- Highlights of the 2007 EJCDC Construction Series Joint-Venture Documents
- EJCDC E-580: Standard Form of Joint Venture Agreement Between Engineers for Professional Services

Peer Review Documents

- EJCDC E-581: Standard Form of Agreement Between Owner, Designer & Project Peer Reviewers

Procurement Documents

- EJCDC P-001: Commentary on Procurement Documents
- EJCDC P-200: Suggested Instructions to Bidders for Procurement Contracts
- EJCDC P-400: Suggested Bid Form for Procurement Contracts
- EJCDC P-520: Agreement Between Buyer and Seller for Procurement Contracts
- EJCDC P-610: Performance Bond for Procurement Contracts
- EJCDC P-615: Payment Bond for Procurement Contracts
- EJCDC P-700: Standard General Conditions for Procurement Contracts
- EJCDC P-800: Guide to the Preparation of Supplementary Conditions for Procurement Contracts
- EJCDC P-990: Procurement Agreement Documents, Full Set

APPENDIX 14 – WHERE TO GO FOR MORE INFORMATION ABOUT QBS**Where to go for more information about QBS****1. American Council of Engineering Companies www.acec.org**

QBS Resource Center in the Advocacy section

2. *An Analysis of Issues Pertaining to Qualifications-Based Selection*,

Paul S. Chinowsky, PhD & Gordon A. Kingsley, PhD

Published by the AMERICAN COUNCIL OF ENGINEERING COMPANIES
and the American Public Works Association, 2009

Available at www.BooksforEngineers.com

3. *Bidding is Not the Solution: Case Studies in Bidding*

Published by ACEC's Professional Procurement Committee

Available at www.acec.org

4. *ABA Model Procurement Code*

Published by the American Bar Association, 2006

5. *APWA Red Book on Qualifications-Based Selection* (APWA)

Published by the APWA Press, 2006

Available at www.BooksforEngineers.com

6. www.contractscentral.net

Web site with contract forms from five non-profit organizations, plus a compilation of state-by-state business practice laws



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