QBS: Qualifications Based Selection for Acquiring Architectural and Engineering (Professional) Services

ACEC Massachusetts
Without the right people & expertise, you will have problems

Let’s begin with a few examples of award winning construction???
Low-bid does not guarantee the right person/expertise

And the winner is... the lowest bidder???
Presentation Agenda

- What is QBS?
- The QBS Process
- Current Legislative Update
What is QBS?

- QBS is a *competitive procurement process* in which engineering (professional services) firms submit qualifications to the procuring agency (the owner);
- the owner assesses the expertise of the competing firms; and
- the most qualified firm is selected to negotiate the scope, schedule, and associated fee with the owner.
QBS achieves the following:

- Better overall construction costs on large projects with fewer change orders
- Lower risks for complex projects
- Greater innovation and project sustainability
- Higher degree of project/owner satisfaction
- Minimizes long-term operation and maintenance costs.
- Lower overall project (life-cycle) costs
Common questions regarding the use of QBS:

1. How do I maximize my tax payer value?
2. How do I know if I have negotiated a reasonable fee for services?
3. Are all engineering firms the same?
4. Why doesn’t low-bid work for engineering services?
5. Will QBS procurement be more costly or difficult to implement?
6. How is this different from the 2 envelope system?
1) How do I maximize my tax payer value?

- All Projects have three components that are interrelated and cannot be separated:
  - Design
  - Construction
  - Operations & Maintenance

- Upfront design decisions dramatically impact construction and operations and maintenance costs
1) How do I maximize my tax payer value?

- The fee for high-quality engineering services amounts to approximately 1% of the total life-cycle cost of the project.
- Yet these professional services are critical to determining the other 99% of the projects life-cycle costs, as well as the quality of the completed project.

Having the ability to choose the right engineering firm is smart business.
2) How do I know if I have negotiated a reasonable fee for services?

- With QBS, the owner and the engineer discuss project scope and cost parameters (you don’t get this with low-bid) and arrive at a mutual understanding of scope, schedule, roles and responsibilities before the work starts.

- Similarly qualified professional firms have comparable labor costs, overhead, and profit structures — in low-bid what gets cut is scope, experience and level of effort.

“The right people with the right experience is the right cost.”
2) How do I know if I have negotiated a reasonable fee for services?

- QBS allows development of a tailored scope and schedule to meet the owner’s budget.
- Ability to confirm estimates with other owners, agencies or similar projects.
3) Are all engineering firms the same?

- Professional services are not a commodity.
- Each firm has their own expertise, qualifications and make-up.
- Specific experience is as equal as it is diverse.
4) Why doesn’t low-bid work for engineering services?

- Low-bid works for commodities
- Low-bid doesn’t work when
  - a project cannot be precisely defined
  - there are too many unknown risks
  - Creativity and innovation are desired
5) Will QBS be more costly or difficult to implement?

If not sole-source, most communities go through some kind of procurement:

<table>
<thead>
<tr>
<th>Steps &amp; Timeline</th>
<th>Low Bid</th>
<th>QBS</th>
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</thead>
<tbody>
<tr>
<td>Develop statement of work</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Develop procurement document (RFQ/RFP)</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Evaluate submissions</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Interview</td>
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<td>option</td>
</tr>
<tr>
<td>Select</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Negotiate scope, schedule and budget</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Award</td>
<td>✓ ✓</td>
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QBS allows for a mutually agreed upon scope of work, schedule and budget.
6.) How is this different than the two envelope system?

- Brief Explanation of the Two Envelop System
  - The two envelope system requires a fee to be submitted in a separate envelope concurrent with the submittal of the proposal.
  - After the proposals are evaluated and a frontrunner is identified based on qualifications, then the fee envelope is opened.
  - A predetermined combination of qualifications ranking and fee ranking are then used as a basis to make the final selection.
6.) How is this different than the two envelope system? (cont)

- While this moves partially away from low bid it does not allow the two parties to review/negotiate the project needs in detail to develop a tailored scope and the corresponding fee.

- If the scope in the rfp is incomplete or flawed then the fee in the second envelope is not the true cost of the project.

- Consequences include;
  - Choosing the Wrong Professional
  - Potential Change orders
  - Miscommunication and Mis trust
  - A Deliverable that misses the mark
“Winning this low-bid project will require us to only use middle level junior staff to meet the capped salary rate and low over head.”

- Low Bid Firm Representative
“If community ABC is going to continue to select strictly on low price then we are not going to submit.”

- *Highly Qualified Firm Representative*
“We understand the value of getting the right professional engineering staff involved on our projects. Experience and qualified staff does not have to mean higher cost. Construction and O&M are where the real cost savings occur.”

- Owner using QBS Procurement
How an engineering firm is selected using QBS
QBS: The Process

- Typical QBS Process
  - Develop statement of work
  - Develop Request for Qualifications
  - Evaluate Submissions
  - Interview (optional)
  - Select most qualified firm
  - Negotiate scope, schedule and budget
  - Award
QBS: Alternative Processes

- Consultant pre-selection processes
  1. On-call services contracts
  2. General engineering consultant contracts
- Sole sourcing is allowed and recommended under special circumstances
QBS Steps

- Identify need for an engineer
- Develop selection criteria (qualifications) /process (no price references)
- Advertise
- Request for qualifications (RFQ)
- Request for proposals (RFP) - optional
- Interview - optional
- Selection of most qualified firm
- Negotiate scope/schedule/fee and other terms
Selection Criteria

- Criteria should be based on qualifications relevant to the project
- Criteria may be supplemented with agency goals such as local or M/WBE participation
- The criteria should also describe an objective weighted scoring process for evaluation of the qualification statements
  - Most advantageous
  - Advantageous
  - Not advantageous
  - Unacceptable
Advertise

- Legal Requirements – advance notice in a professional service bulletin or an official State Agency Website.
- Number of firms responding should match the value and complexity of the project
Advertisement Level

- Complex
- Simple
- Low
- High
- Widespread Public Announcement
- Local Public Announcement
- Sole Source

ACEC
American Council of Engineering Companies
Level of effort should be consistent with value of project
Not all projects will merit an RFP and/or an interview
Level of detail should be consistent with level of available information
RFQ/RFP/Interview
# Evaluating Qualifications

<table>
<thead>
<tr>
<th>Qualifications</th>
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<tbody>
<tr>
<td>Experience/ firm</td>
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</tr>
<tr>
<td>Expertise/ staff</td>
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</tr>
<tr>
<td>Availability</td>
<td>✓</td>
</tr>
<tr>
<td>References</td>
<td>✓</td>
</tr>
<tr>
<td>Training</td>
<td>✓</td>
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Selection

- After selection is made, all firms should be notified in writing if they were selected or not.
- Many owners grant debriefing interviews to unsuccessful consultants.
Negotiation

- Scope, schedule, fee and other terms are inter-related
  - List duties of the engineer and owner
  - Identify deliverables and milestones
  - Describe approval process
  - Identify insurance and liability requirements
  - Describe conflict resolution process
  - List points of contact and level of their authority
  - Select an appropriate fee structure
QBS Legislative Update
Chapter 25 of the Acts of 2009: An Act Modernizing the Transportation Systems of the Commonwealth (Transportation Reform)
- Signed into law by Governor on 6/26/09
- In October 2009 the Legislature passed a Deficiency Budget that also revised Chapter 25 by changing the “Agency” definition to only be MassDOT (Highway Division), Massport and MBTA (section 39-41)
A Technical Corrections Bill clarification is pending.

Land Surveyors are included in the new law, however, Chapter 81 is still in force. House Bill 3200 and/or the proposed Technical Corrections Bill will resolve conflict to allow QBS for survey services on MassDOT Highway work.
Summary - Why Choose QBS?

- The fee for high-quality engineering services amounts to approximately 1% of the total life-cycle cost of the project.
- Yet these services are critical to determining the other 99% of the projects life-cycle costs, as well as the quality of the completed project.
QBS creates a relationship that allows the owner and professional services engineering firm to work together to develop the project scope and evaluate alternative materials and designs that will reduce long-term operations and maintenance costs.