WBC – Power Lunch

Introduction Design-Build Tanvi Pandya, P.E. DBIA Executive Director, Design Build (Bridges) NYCDOT

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Agenda

- What is Design Build?
- Definitions and Roles
- Procurement/Selection Process
- Field Conditions (QA, QC, QO)
- Resources

Design-Build Philosophy

What is Design Build?

 "Design-build is a method of project delivery in which one entity
 the design-build team - works under a single contract with the project owner to provide design and construction services.

One entity, one contract, one unified flow of work from initial concept through completion.

Design-build is an alternative to design-bid-build. Under the latter approach, design and construction are split - separate entities, separate contracts, separate work."

- DBIA

What Are The Benefits?

Owner/Agency Benefits

- **Faster Delivery** collaborative project management means work is completed faster with fewer problems
- **Cost Savings** an integrated team is geared toward efficiency and innovation.
- **Better Quality** design-builders meet performance needs, not minimum design requirements, often developing innovations to deliver a better project than initially imagined.
- **Singular Responsibility** one entity is held accountable for cost, schedule and performance.
- **Decreased Administrative Burden** owners can focus on the project rather than managing disparate contracts.
- **Reduced Risk** the design-build team assumes additional risk, since risk is negotiated and shared
- **Reduced Litigation Claims** by closing warranty gaps owners virtually eliminate litigation claims.

Contractor/Designer Benefits

- Higher Profit Margin an integrated team is fully and equally committed to controlling costs.
- **Decreased Administrative Burden** design-build streamlines communication between designers and builders.
- **Reduced Litigation** a Victor O. Schinnerer benchmarking and claims study shows that from 1995-2004, only 1.3% of claims against A/E firms were made by design-build contractors.
- Increased Market Share more and more owners choose design-build.

Definitions and Roles

Design-Bid-Build: Three separate contracts

TD/CSS team is EOR	Resident Engineer	Contractor
Environmental Approval Preliminary Design Final Design Bid Documents Construction support Public Outreach during Design	QA/QC of Construction Review of Contractor Payments Change Order Negotiations Site Safety Field Conditions Outreach during Construction M/WBE, DBE Goals Monitoring Outside Agency Coordination	Construct to Plans

In all cases, the Agency retains the responsibility of Quality Verification/ Acceptance

Design Build: Two Separate Contracts

"Owner's Rep"	Design-Build Team	
Act as extension of Agency staff. Assists with:	Design (Designer becomes the EOR)	
Managing DB Contract	Construction	
Quality Oversight/Acceptance	CSS	
Environmental Approval	Field Conditions, Site Safety	
Concept Design/Performance Criteria	QA/QC	
Public Outreach	Outside Agency Coordination	
Contract Documents	Permit	
RFQ/RFP Evaluations		

There may be a preliminary design team in case of infrastructure projects, Owner's Rep may fulfill that role in some cases.

In all cases, the Agency retains the responsibility of Quality Verification/ Acceptance

Procurement/Selection Process

What's Different?

- Bidding vs. Proposing
- Low Bid vs. Best Value
- Prescriptive vs. Performance Requirements
- Traditional vs. Shared Risk

Procurement Steps

"A successful procurement plan for Design-Build enhances collaboration and partnership right up front." - GCA

Design-Bid- Build	Design-Build
Design	Requests for Letters of Interest (LOI)
	Industry Outreach
Bid (low bid drives decision)	 Request for Qualifications (RFQ) Determine qualified firms (Shortlist) Allows only the most qualified to compete for contract
Build	 Request for Proposals (RFP) Evaluate proposals Determine Preferred Proposer Stipend for remaining short listed teams

Request for Qualifications (RFQ)

The primary purpose of the RFQ is to develop the shortlist, a list of typically 3 – 5 proposers best qualified to complete the project.

Contents of the RFQ

- Statement of project goals and objectives
- Information on project scope (enough to help contractors and designers form competent teams)
- Identification of key Project roles and descriptions
- General information on schedule, environmental process, project status, rules of contact, governing law, and bonding/insurance
- Explanation of the procurement process
- Explanation of the evaluation process, including the evaluation factors
- Protest procedures
- MBE/DBE Requirements
- PLA Status
- Department rights and disclaimers
- Explanation of Stipends

RFQ Process



Request for Proposals (RFP)

The primary purpose of the RFP is to choose the Proposal that provides the best combination of **Quality and Price** to complete the Design and Construction of the Project.

Contents of the RFP

- Instructions to Proposers establishes the rules, processes and procedures for preparing and submitting Proposals
- Contract Documents
 - Design-Build Agreement
 - DB Section 100
 - Design Requirements
 - Special Provisions
 - Performance Criteria and PLA
 - MWBE/DBE Requirements
 - Utility Requirements
 - Construction Specifications
- Reference Documents Preliminary reports, studies, models, survey

RFP Process



Stipends

Stipends allow for payment to some or all of the Proposers who submit a responsive proposal.

The use of stipends:

- Increases the quality of Proposals and level of innovation
- Encourages qualified Proposers to participate in the Procurement
- Secures Department ownership of ideas and concepts presented within the Proposals
- Encourages participation in future DB procurements

Field Conditions (QA, QC, QO)

Quality Management

It's a balancing act between risk and control.

	Design-Build	Design-Bid-Build
Quality Control	 The responsibility of the D-B team D-B Quality Control Plan becomes part of the Contract 	 The responsibility of the REI to ensure Contractor compliance
Quality Assurance	 Different schools of thought on "QA" responsibility Some Authorities retain control of certain portions of the "QA" that they do not want entrusted to the Contractor A shared QA approach has implications on risk and liability 	 The responsibility of the Owner thru REI Owner holds more risk as Contractor builds to plans/specification by others
Quality Acceptance	 The responsibility of the Owner (Authority) Owner retains authority, with minimized risk 	 The responsibility of the owner (Authority). In D-B-B, this is seen the same as QA.

Keys to Successful Project



- Preserve the Trust
- Foster Teamwork
- Be Fair and Firm
- Resolve Issues at the lowest level possible
- Don't Default to Traditional D-B-B. Keep the "Design-Build" mindset

Legislation

Current NYC D-B Legislation

New York City Public Works Investment Act, December 2019

- Project Costs: > \$10 Million for NYCDOT projects (>\$1.2 Million for improved sidewalk access)
- Contractors are selected based on responses to a publicly advertised Request for Qualification
- Selection of proposal which offers the best value based n responses to the Request for Proposals
- Types of contracts Agency is able to use:
 - Cost Plus
 - Lump Sum
- Subject to requirements of Environmental Conservation Law and NEPA, where applicable
- Report to the State by June 30, 2020, continued annually.
 - Report must describe each design-build contract, information about procurement process, total cost of each DB contract, explanation of estimated savings resulting from DB method, participation rate of MWBE firms
- Act expires in at end of 2022, efforts underway to extend Act

MBE/WBE/DBE

- The Legislation provides that certification as a minority or women owned business enterprise may be used as a qualitative factor in the evaluation of bids or offers for awarding contracts
- If the contract is City funded a M/WBE a utilization goal must be set
- If the contract is a federal aid contract a DBE goal must be set for design and construction

Setting the goal requires thoughtful process

Resources

Resources

- DBIA Resource Links
 - What is Design Build?
 - Best Practices
 - Projects Database
- NYS DB Resources
 - <u>NYS DOT Design Build Projects</u>
 - <u>NYS DOT Design Build Procedure Manual</u>
 - <u>NYS DOT Letters of Interest and RFQ</u>
 - <u>NYS DOT Design Build Contract Document</u>
 - <u>NYSDOT Design Build Evaluation Templates</u>
 - <u>NYS DOT Design Build Sample Forms</u>
- Other Resources
 - Florida Association of Public Procurement Officials: <u>Fundamentals of</u> <u>Collaborative Delivery Methods</u>
 - FHWA: <u>Sharing Work Zone Effective Practices for Design-Build Projects</u>
 - League of California Cities: Design Build for Public Works
 - Georgia DOT: <u>Design Build Manual</u>
 - Washington State: <u>Design-Build</u> Best Practices Guidelines

Questions?