Acquisition Process for the Design-Build of the Garage

NREL Parking Garage
(Ingress/Egress Project)
Workshop
Karen Leitner
March 28, 2013
NREL Parking Garage Subcontract

Parking Garage Subcontract consisted of three separate work elements in the Scope of Work:

- Parking Garage Structure valued at ~$33.3M
- Security Entrance Building valued at ~$1.3M
- Moss Street Extension valued at ~$9.4M

Total Subcontract Value: $44M
Types of Design-Build Acquisition Strategies

• Bridging Documents

  • A preliminary design is developed as the basis for a offeror to develop a proposal.

  • Spearin Doctrine: Owner is responsible for the sufficiency of documents given to offerors.

  • Bridging places liability on accuracy and completeness of documents on owners

  • Some overlap of A/E costs
Types of Design-Build Acquisition Strategies

• Performance Specifications
  • What something must do not what it must be
  • Subcontractor must substantiate their design meets requirements
  • Owner must not give the subcontractor technical direction
Criteria Consultant/Owner’s Representative

Use of Criteria Consultants

• Aid owner with the creation of performance specifications
• Provide owners representative services
• Is not to act as a referee between owner and design-builder
• Serves as “eyes and ears” of owners during construction
• Fixed-Price type subcontract highly recommended
Design-Build Institute of America (DBIA) Best Practices

Use of Seven DBIA Best Practices:
• Best Value Procurement
• Two-Phase Solicitation
• Short-List To No More Than Three Qualified Teams
• Conduct Interim Interviews During Competition
• Payment of Stipends to Unsuccessful Offerors
• Offer an Award Fee Program with Incentives
• Use of Performance Specifications versus Technical Specifications
Best Value Procurement

Use of a Project Objectives Checklist to Communicate the Mission Critical, Highly Desirable, and If Possible scope items in the RFP document. Items within each category are prioritized by the Owner.

Use of Weighted Technical Evaluation Criteria which is significantly more important than cost.

NREL had more scope than funding for the RSF which resulted in competitions being focused on amount of scope that can be provided for the money available.
Mission Critical Objectives

• 1,500 net additional parking spaces for automobiles
• Comply with NREL Requirements
• Site Entrance Building – Achieve LEED™ Gold
• Parking Structure(s) – Maximize LEED™ Points
• Meet the Budget
• Promote Ease of Mobility and Campus Circulation
• Integrate Campus Security
• Substantial Completion No Later Than November 2011
Highly Desirable Objectives

• Minimize Existing Community Impact
• 1,800 maximum parking spaces
• Substantial Completion—Sept 2011
• Achieve energy goals for parking structure(s) and site entrance building
• Minimize structure height
• Maximize PV capacity capability
• Life cycle cost efficiency (maximize)
• Shuttle “stop” is weather protected
• Minimize O&M for snow/ice removal

• Promote car pooling & preferential, dedicated, HOV parking for a minimum of 5% of spaces
• Incorporate “recycling” drop-off collection point
• Security Structure – Achieve LEED™ Platinum
• Provide covered bicycle parking
• Provide industry supported Electric Vehicle Supply Equipment for 2% of spaces immediately available on opening day
If Possible Objectives

• Substantial Completion August 2011
• Provide infrastructure support to expand the industry supported Electric Vehicle Equipment to accommodate up to 20% of the spaces without the need to upgrade or modify the electrical distribution system
• Parking management technology
• Net Zero Energy for the Security Structure
• Motorcycle parking
• Design, furnish and install PV system on the parking structure utilizing SunPower 315 or 318W high efficiency modules (or solar panels of equivalent or higher efficiency). Indicate system included in kWdc
Two Phase Solicitation Process

Request for Qualifications:

- General Evaluation Criteria
  - Resumes of Key Personnel
  - Experience of Design-Build Team
  - Past Performance
  - Safety

Request for Proposals:

- Project Specific Weighted Technical Criteria
  - Demonstrated experience for all Mission Critical Items
  - Demonstrated experience in Performance Based Design-Build
  - Demonstrated experience in Energy Efficient Building Designs
Short-List to No More Than Three Teams

- Cost of Preparing Technical Proposals
- Gives Firms a 1 in 3 Chance of Winning
- Firms More Willing to Participate in Competition
- Keeps Owner’s Cost Reasonable if Paying Stipends
- Source Evaluation Team’s Review is Manageable
Conduct Interim Interviews

Interim Interviews during the competition were not held for the Ingress/Egress Project.

- When Interviews are held, they are conducted a couple of weeks after issuance of RFP documents.
- Interview discussions limited to clarification on the requirements of the RFP.
- Owner lead and control the interviews.
- Owner video-tapes the interviews.
Payment of Stipends

Stipends were not paid to unsuccessful offerors on the Ingress/Egress project.

Stipends are sometimes paid to offset the high cost of providing conceptual design documents as part of the technical proposal.

Stipends are never paid to cover bid and proposal preparation costs.

When NREL has paid a stipend on other design-build projects, the Owner (NREL) gained rights to use of conceptual design ideas obtained in the unsuccessful proposals by payment of stipends.
Award Fee Program

Award Fee must be large enough to motivate the design-build team. Normally 2 – 3% of total subcontract value.

- Motivates/modifies subcontractor behavior
- Guarantees the Owner to have a “voice” during the design/construction
- Owner determines the amount of award fee earned by the subcontractor
- Award Fee Program is at Owner’s sole discretion
- Award Fee Evaluation Criteria is established by Owner
Two Phased-Subcontract

• NREL issued the subcontract in two phases
  • Preliminary Design
  • Design Development and Construction

• Phased Approach used to Management Risk for both Owner and Subcontractor
Partnering is a very important aspect of Design-Build

- Builds trust between Design-Build Team/Owner/Owner’s Rep.
- Should be collaborative and not adversarial.
- Integrated Project Team (IPT) is crucial to develop solutions during the design-build project
  - Members of IPT must include all members of the design-build team and all stakeholders in the project
- Ensures the IPT continues to work as a team
- Partnering Sessions should be a safe environment for all parties to be completely transparent
SUMMARY
Benefits of Fixed-Price Design-Build

• Reduction in Schedule by approximately 33%*
• Reduction in Cost by approximately 6%*
• Reduction in Change Orders
• Encourages Innovative Design
• Shift in Risk from the Owner
• Subcontractor has control of the schedule

*Experience throughout Design-Build Industry