

Design-Build Overview

Project Goals

- Issue NTP early 2007
- Bridge Available to Traffic no later than September 30, 2010
- Maintainable, Easily Inspectable, Long-Lasting Bridge
- High Quality, Aesthetic Bridge
- Safe Construction
- Project that is Sensitive to Community , Environment, and Park
- Evaluate Design-Build Deliver Method
- Project within Budget

Design-Build Overview

- Scope
- Schedule
- Budget



Design-Build Scope

Design-Builder's Primary Responsibilities

- Design Component
- Construction Component
- Quality Control and Inspection

Design-Build Scope

Design Constraints

- Geometrics

- Maintain Horizontal Baseline Alignment
- Maintain Vertical Profile
- Typical Section (Number and width of lanes, shoulders, sidewalks)
- Vertical Underclearance over Inlet (45' above M.H.W. of 0.82')
- Minimum 1000-foot Main Span Length
- Minimum Length of Project (1300 feet +/-) – Primary Limits
- Maximum Length of Project (3900 feet +/-) – Secondary Limits
- Maintain Existing/Proposed Right-of-Way

Design-Build Scope

Other Design Issues

- Utilities
 - Sand By-Pass Provisions
 - DelDOT ITMS
- Permits
 - Coast Guard Coordination
 - Federal Aviation Administration (FAA)
 - Requests for Extensions by DelDOT
 - Modifications or New Permits by Design-Builder
- Public Outreach
 - Primarily Informative
 - Solicitation of Public Comments will be Voluntary

Design-Build Scope

Design Expertise Required

- Hydraulics/Coastal Engineering/Scour Analysis
- Geotechnical Engineering
- Structural/Bridge Engineering
- Mechanical/Electrical Engineering
- Concrete Specialist (Mass Concrete and Grouting)
- Wind Engineering and Testing
- Roadway Engineering
- Environmental Coordinator
- Public Outreach Specialist

Design-Build Scope

Construction Requirements

- Construction Manager
- CPM Scheduler
- Safety Manager
- Traffic Control Supervisor (Minimal involvement)
- Construction Engineering/Survey
- Record/As-Built Drawings
- Design-Appropriate Specialty Personnel

Design-Build Scope

Quality Control and Inspection

- Quality Control Manager
- Design QC Manager
 - Appropriate Support Personnel
- Construction QC Manager
 - Adequate Inspection Staff
 - Materials Testing

Design-Build Schedule

Schedule Constraints

- Anticipated NTP early Spring 2007
- Substantial Completion (Bridge Available for Traffic) by September 30, 2010
- Design Units and Schedule Milestones to be Proposed by Design-Builder
- Additional Intermediate Milestones Possible
- Contract Duration Approximately 3 ½ years

Design-Build Budget

Budgetary Goals

- Current Budget Goal of \$135 Million for Design-Build Contract
- D-B Budget to include a \$5 Million Contingency
- The Budget will be used as the benchmark for Scoring of Proposals
- Stipend of \$270k to Unsuccessful Responsive Proposers