Design-Build
Lessons Learned
Florida DOT

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Louisiana Transportation Engineering Conference
Topics Of Discussion

- Design-Build in Florida
- Project Selection
- Construction, Engineering, Inspection (CEI)
- Warranties
- Conflict of Interest
- Cost Increases
- Lessons Learned
- Lots of Pictures!
Typical Design-Build Process

- Project identification
- Development of Pre-Qualification requirements
- Development of RFP / design and construction criteria

- Advertisement
- Letters of Interest
- Shortlist

- Pre-bid meeting for short listed firms
- Submittal of technical proposals
- TRC evaluates proposals
- Sealed Price proposal submitted

- Scores and price proposal opened
- Award of contract by selection committee
- Contract executed
Project Selection

Design Build (D-B) contracting should be considered on the following types of projects:

- Projects that demand an expedited schedule and can be completed earlier.
- Projects that require minimum Right of Way acquisition and utility relocation.
- Projects that can have a well defined scope for all parties (Design & Construction)
- Projects that have room for innovation in the design and/or construction effort.
- Projects with low risk of unforeseen conditions.
- Projects with low possibility for significant change during all phases of work.
Lessons Learned: Project Selection

Examples of projects that may not be good DB contracting candidates are listed below.

- Major bridge rehab/repair with significant unknowns
- Rehab of movable bridges
- Urban construction/reconstruction with major utilities, major subsoil, R/W or other major unknowns
Inspection

- The inspection is the same for a D/B project as a Design-Bid-Build project.
- Contractor performs own inspection, sampling, and testing. FDOT performs inspection and verification testing.
Lessons Learned: Inspection

- CEI as part of the D/B contract
- Required an oversight CEI
- Currently do not approve this method
- Too many layers, did not work well
Lessons Learned: Warranties / Value Added

- 338 - Value Added Asphalt Pavement
- 355 - Value Added Portland Cement Concrete Pavement
- 475 - Value Added Bridge Component
- 645 - Value Added Signal Installation
- 725 - Value Added Highway Lighting System
Lessons Learned: Claims

- Average Cost Overrun = 6%
  - Compared to bid amount
- Average Cost under-run = 15%
  - Compared to DOT estimate - Pre 2004
Conflict of Interest Policy

- Any Consultant who develops the Request for Proposal cannot bid on DB work
- A Prime or Sub performing design services for a DB Firm cannot be on the CEI team, either as a Prime or Sub
- On a project, it is a conflict for a professional firm to receive compensation from both the DOT and the Contractor
Cost Increases!!
Lesson Learned: How to keep Commitments

- Projects 100M or greater will be Design-Build
- Why? Allows for scope adjustments
- Establish maximum budget amount (MBA)
- Select based on scope, qualifications, quality, schedule, cost (not exceed MBA)
- A+B/T.P. Score
- Use of Bid Options
Lessons Learned

- Your proposal is your commitment (Book of Promises). Deviations require a credit to FDOT.
- Do not put “flowery” or “non-descriptive” commitments in a proposal. FDOT should clarify such during the Q & A.
- Innovation does not include revisions to FDOT specifications or department policies.
- Innovation does not include Design Exceptions to AASHTO criteria. Innovation should be limited to the D-B firm’s means and methods, approach to project etc.
Lessons Learned

- “Project Selection Guidelines” are Important
- Designers are “Designing on the Edge”
- Independent “Peer Review” on Major Projects
- Criteria for Non-Redundant Structures
- “Conflict of Interest” Eligibility Criteria
  - can’t be on both EOR and CEI team, as prime or sub
- Deviations from Department and AASHTO criteria- how to handle?
Lessons Learned

- CEI included in D/B contract did not work
- Only get what you put into the RFP
- Share all available information
I-75 DBF
Ft. Myers-
Naples
35 Miles
of
6-Laning
Ernest F. Lyons Bridge
I-10 Emergency Repair
I-10 Emergency Repair
Hathaway Bridge
Hathaway Bridge
Pedestrian Overpass SR 20
St. George Island Bridge
St. George Island Bridge
Royal Park
Temporary Bascule
Royal Park Temporary Bascule
Ringling Causeway
Ringling Causeway
I-4 St. Johns River Bridge
Lake Okeechobee Scenic Trail
I-75 (Alligator Alley)
Safety Barrier
Thomas B. Manuel Bridge
Flagler Street – Emergency Repair
Interstate 4
US-1 – Jewfish Creek – Before
US1 – Jewfish Creek
Sound Wall
I-4 – Auxiliary Lanes
Lessons Learned

• Yesterday Ending Last Night

Life is not a snapshot. It would be wonderful if, at the pinnacle of your success, you could take a picture of it and assume nothing will ever change. But it will change, and if you don't change with it, what got you there yesterday won't keep you there in the future.

• Dr. John Maxwell
What’s Next??

- Public Private Partnerships!!!