

AGENDA



Design Update Training

1. Rewrite of the Structures Manual for Design-Build and Status of PPM Rewrite
2. New Design Bulletin - Direction To All Design-Build Project Phase Reviewers
3. Design-Build Frequently Asked Questions
4. Design-Build Strategies - Writing a Flexible RFP

Design Update Training

Tom Andres P.E.
Assist. State Structures
Design Engineer

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Structures Design Rewrite of Structures Manual for D/B

Goal of rewrite is to address three distinct audiences

- EOR of conventional project
 - ✓ Existing Structures Manual Language
- Author for D/B RFP prior to award
 - ✓ D/B Boilerplate and Pre-scoping Questions
- EOR of D/B project
 - ✓ Expanded Structures Manual Language

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Assist. State Structures Design Engineer

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Assist. State Structures Design Engineer

Goal of rewrite is to address three distinct audiences

- EOR of conventional project
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Special requirements for Non-Conventional Projects, e.g. Design-Build Projects and Public-Private-Partnership Projects, are shown in a "Modification for Non-Conventional Projects" box as seen below:

- B. For new construction of "Short Bridges", the minimum thickness of bridge decks cast-in-place (CIP) on beams or girders is 8-inches.
- C. For "Major Widening," (see criteria in [SDG Chapter 7](#)) the thickness of CIP bridge decks on beams or girders is 8-inches. However, whenever a Major Widening is selected by the Department to meet profilograph requirements, a minimum deck thickness of 8½-inches to meet the requirements and design methodology for new construction of the preceding paragraph, must be used.

Modification for Non-Conventional Projects:

Delete **SDG** 4.2.2.C and insert the following:

- C. For "Major Widening," (see criteria in [SDG Chapter 7](#)) the thickness of CIP bridge decks on beams or girders is 8-inches unless otherwise indicated in RFP.

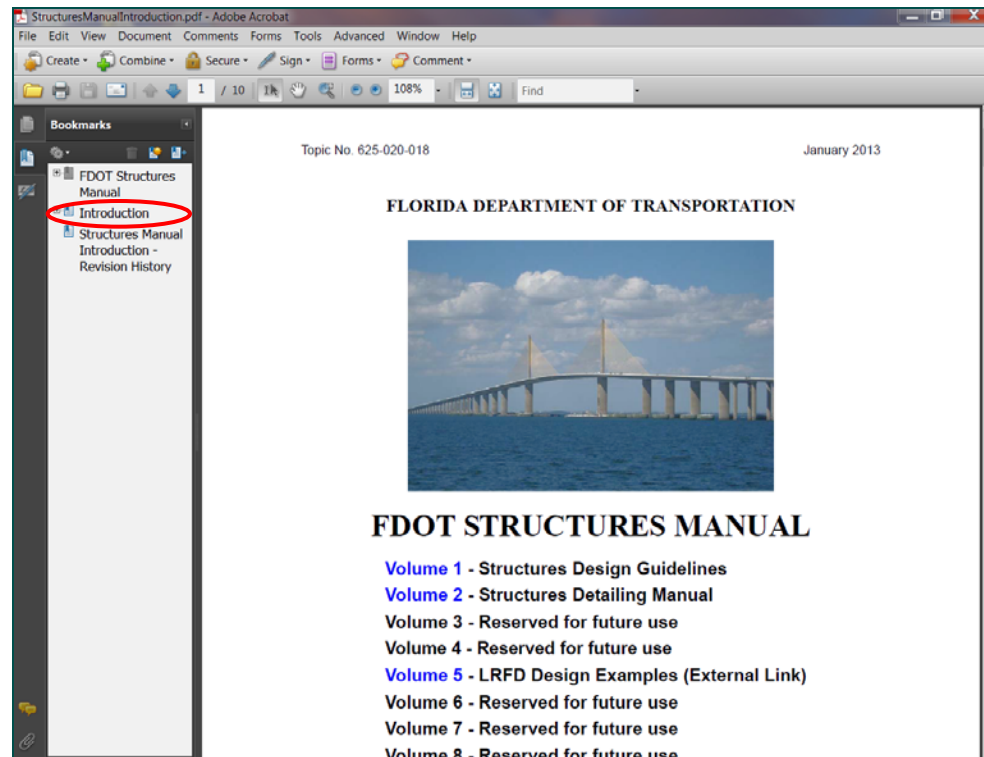
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Specific Information on how to use the "Modification for Non-Conventional Project" boxes see introduction to Structures Manual.

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Sort of Structures Manual Language Exempted Out

- Design Requirements based on assumed material properties or the availability of materials
- Design Requirements based on assumed equipment capabilities
- Design Requirements based on efficient fabrication/construction processes/practices

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Sort of Structures Manual Language Exempted Out (cont.)

- Pay Item or Bidability Requirements
- Language that requires EOR to contact FDOT for guidance during final design
 - ✓ This information should already be in RFP - make sure pre-scoping questions are included

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Design Requirements based on assumed material properties or the availability of materials

2. Detail wall components such as caps and tie-backs to work with both the hot-rolled and cold-rolled sections where possible.

Modification for Non-Conventional Projects:

Delete **SDG 3.5.3.A.2.**

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3. Assure that standard shapes meeting the required properties are readily available from domestic suppliers.

Modification for Non-Conventional Projects:

Delete **SDG 3.5.3.B.3.**

Design Requirements based on assumed equipment capabilities

Audience - EOR of D/B project after award

Table 3.5.12-1 Maximum Pile Driving Resistance

Pile Size	Resistance (tons)
14 inch ¹	200
18 inch	300
20 inch	360
24 inch	450
30 inch	600
54 inch concrete cylinder	1550
60 inch concrete cylinder	2000

1. 14 inch square piles can only be used in pedestrian bridge applications.

Modification for Non-Conventional Projects:

Delete **SDG** Table 3.5.12-1 and insert the following:

14 inch square piles can only be used in pedestrian bridge applications.

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Based on Upper Bound Resistance of Typical Driving Equipment

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Design Requirements based on efficient fabrication/construction processes

- A. For tall piers or columns, detail construction joints to limit concrete lifts to 25 feet. When approved by the Department, a maximum lift of 30 feet may be allowed to avoid successive small lifts (less than approximately 16 feet) which could result in vertical bar splice conflicts or unnecessary splice length penalties. Coordinate the lift heights and construction joint locations with the concrete placement requirements of the specifications.
- B. Detail splices for vertical reinforcing at every horizontal construction joint; except that the splice requirement may be disregarded for any lift of 10 feet or less.

Modification for Non-Conventional Projects:

Delete **SDG 3.11.3.A** and **B**.

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Language that requires EOR to
contact FDOT for guidance during
final design

C. It is not necessary to consider the scour effects on temporary structures unless otherwise directed by the Department.

Modification for Non-Conventional Projects:

Delete **SDG 3.3.C** and see the RFP for requirements.

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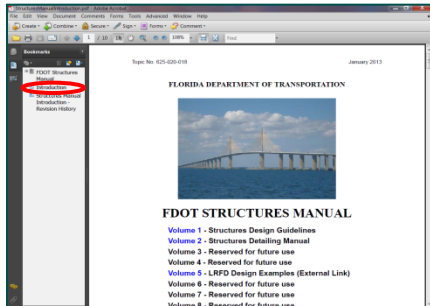
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This information should already be in
RFP - make sure pre-scoping questions
are included

Scour on Temporary Structures

Pre-scoping Questions

RFP Boiler Plate Link



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Note to developer of the RFP: An electronic copy of the RFP, with changes clearly identified, shall be submitted to the State Construction Office for review and approval prior to submittal to Design-Build Firms. All RFP's which govern Projects where Category 1 structures are anticipated shall be reviewed and approved by the District Structures Engineer. All RFP's which govern Projects where Category 2 structures are anticipated shall be reviewed and approved by the State Structures Engineer. All Design-Build Finance RFP's shall be reviewed and approved by the Comptroller's Office. In addition, any major revisions to the RFP, innovative concepts used or RFP's for unique Projects shall be reviewed by Central Office Legal. The Office of General Counsel's Design-Build Legal Team shall review RFP's for all Projects which involve utility relocation. RFP requirements which have been modified in this document since the publishing of version 2011-03a (dated 12/16/2011) are highlighted herein.

To aid in the development of Project specific RFP requirements a series of pre-scoping questions has been developed. The pre-scoping questions cover many common issues that frequently arise on FDOT Projects and can be down loaded from the following website:
<http://www.dot.state.fl.us/construction/DesignBuild/DBRules/DBRulesMain.shtm>

NOTE: When submitting a RFP for review, edits to this boilerplate document shall be clearly identifiable. Deletions shall be stricken through (*delete*) and inserted language shall be underlined in color (*underline*). Submitted RFP's with the changes made as indicated above will help shorten the review time for everyone involved.



Florida Department of Transportation
District X

DESIGN-BUILD
REQUEST FOR PROPOSAL
for
<Project Description, County>

Financial Projects Number(s):
Federal Aid Project Number(s):
Contract Number:

Pre-scoping Questions

Old Format

Design-Build (D/B) Request for Proposal (RFP) Pre-scoping Questions	
<i>Structural Related Questions</i>	<p>2. For bridges near airports, will construction be affected by temporary glide path ceiling restrictions? Will any permanent structures such as high mast lighting be prohibited due to permanent glide path ceiling restrictions? Define restrictions and include all airport, local government and FAA coordination requirements in the RFP.</p>
	<p>3. Does bridge cross a navigational waterway? Based on pass point survey data, develop ship impact load, versus distance from navigable channel in RFP. Or set input parameters for site: i.e. importance factor, water velocities, etc. and allow each D/B Team to modify pier spacing to determine pier strength requirements within these fixed parameters. See SDG 2.11.</p>
	<p>4. Does bridge cross a large body of water near the coast? Set low member elevation or strength requirements based wave vulnerability analysis performed by a Coastal Engineer prior to finalizing the RFP. Also address wall and shore protection requirements. (SDG 2.5)</p>
	<p>5. Does project include replacing or rehabilitating an existing bascule bridge where traffic is to be maintained on existing structure during construction? Include all bascule bridge maintenance and operation requirements in the RFP.</p>

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Pre-scoping Questions Proposed New Format

Document Reference	Pre-scoping Question	FDOT Contact
<p>PD&E Manual Part 1, Chapter 12 (old Chapter 10) PD&E Manual Part 2, Chapter 11 PD&E Manual Part 2, Chapter 18, Environmental Document, Wetland Evaluation Report, Biological Assessment, Essential Fish Habitat Assessment</p>	<p><u>Seagrass Avoidance and Minimization:</u> Are there sea grasses within or in the vicinity of the project limits (for water projects)? Are there turbidity/jetting restrictions? Are temporary work platforms required to facilitate crane access in shallow water? Have the permits been acquired? Will they be acquired prior to or during the Design build phase? Is the project federally funded? What are the specific permit requirements to be conveyed in the RFP?</p>	<p>District Environmental Engineer, Environmental Administrator, Environmental Permits Coordinator</p>
<p>PD&E Manual Part 2, Chapter 18, PD&E Manual Part 1 Chapter 12 (old Chapter 10) PD&E Manual Part 2, Chapter 27 Environmental Document, Wetland Evaluation Report, Biological Assessment, Essential Fish Habitat Assessment</p>	<p><u>Wetland Avoidance and Minimization:</u> Are there jurisdictional wetlands within the project limits? Are there areas within the R/W limits that the Contractor can not disturb? How will impacts be minimized? Have the permits been acquired? Will they be acquired prior to or during the Design build phase? Is the project federally funded? What are the specific permit requirements to be conveyed in RFP?</p>	<p>District Environmental Engineer, Environmental Administrator, Environmental Permits Coordinator</p>
<p>PD&E Manual Part 2, Chapter 22 Environmental Document, Contamination Screening Evaluation Report</p>	<p><u>Contamination Impacts:</u> Are there contaminated sites or contaminated materials within the project limits? Will location and type of contamination dictate roadway alignments, retention pond placement, or structure versus retaining walls? Address items such as special handling and disposal requirements of drilled shaft or other excavated materials. Clearly indicate the presence of lead based paint, asbestos, creosote or other hazardous materials and include requirements in the RFP.</p>	<p>District Environmental Engineer, District Contamination Impact Coordinators</p>
<p>PPM Vol. 1, Chapter 27</p>	<p><u>Bridge Permit – USCG:</u> For bridges crossing navigable waterways, has the minimum vertical</p>	<p>District Environmental</p>

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Structures Design	Direction To All Design-Build & P3 Project Phase Reviewers
New Design Bulletin	NEW REQUIREMENTS
Component Plan Phase Reviews	Separate component plan review comments to comments that do and comments that do not refer to direct violations of the Contract as follows.
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Assist. State Structures
Design Engineer

New Design
Bulletin

Component Plan
Phase Reviews

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Assist. State Structures
Design Engineer

NEW REQUIREMENTS

Separate component plan review comments to comments that **do** and comments that **do not** refer to direct violations of the Contract as follows.

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Comments that do refer to direct violations of the Contract require a written response by the Design-Build Firm or Concessionaire.
Where possible, the reviewer is expected to include the specific contract reference or requirement that is being violated.

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Comments that do not refer to direct violations of the Contract do not require a written response by the Design-Build Firm or Concessionaire. At the end of each comment state that a written response is not required and that the comment is included for “information only”.

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Assist. State Structures
Design Engineer

Here is an example of a comment that is a direct violation of the Contract where a written response by the Design-Build Firm or Concessionaire is required.

Example Comment: The vertical curve length does not meet the minimum requirements of PPM, Volume 1, Table 2.8.5.

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Here is an example of a comment that is not a direct violation of the Contract and which do not require a written response by the Design-Build Firm or Concessionaire.

The plans as submitted depict the 4-span steel unit to be constructed from the outer spans inward; the last field splice over I-95 may be very difficult to fit-up within the 30 minute window depicted in the Traffic Control Plans and required in the RFP. Recommend constructing the steel unit from the center outward or from end-to-end. This comment is for information only and a written response is not required.

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This new policy provides the following significant benefits:

- better clarifies the deficiency that needs to be corrected,
- avoids arbitrary comments and comments related to reviewer preferences which have to be responded to and are typically difficult to resolve,
- results in a more concise, focused review,
- also this new policy should result in improved RFP language and Governing Regulation, e.g. *PPM*, *SDG*, language over time.

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Assist. State Structures
Design Engineer

Structures Design | Design-Build Frequently Asked Questions

General

QUESTION 1: WHAT BENEFITS DOES THE DESIGN-BUILD PROCUREMENT METHOD OFFER TO THE DEPARTMENT?

ANSWER: There are numerous benefits that the Design-Build procurement method offers for a wide range of transportation projects. These benefits include:

- Early contractor involvement in the design process enables construction engineering considerations to be incorporated into the design and enhances the constructability of the plans,

- Acceleration of the project schedule due to overlapping (concurrency) of design and construction activities for different segments of the project,

Plans Review
Workshop

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Assist. State Structures
Design Engineer

General

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- Early contractor involvement in the design process enables construction engineering considerations to be incorporated into the design and enhances the constructability of the plans,
- Acceleration of the project schedule due to overlapping (concurrency) of design and construction activities for different segments of the project and due to FHWA Authorization Process,

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General

QUESTION 1: WHAT BENEFITS DOES THE DESIGN-BUILD PROCUREMENT METHOD OFFER TO THE DEPARTMENT (CONT.)?

- Flexibility in project financing methods,
- Promotion of innovative project solutions that are uniquely fashioned by project needs and contractor capabilities and equipment,
- Reduction in potential claims and litigation after project completion as issues are resolved by the members of the Design-Build firm delivering the project,
- Reduction in project costs by optimizing the design/construction solution.

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General

QUESTION 2: WHAT IS THE DEPARTMENT'S DESIGN-BUILD PHILOSOPHY?

ANSWER: Our D/B philosophy is based on the following core principles:

- There are multiple acceptable solutions to most complex transportation problems,
- A well written RFP establishes critical project requirements and constraints and at the same time allows maximum flexibility to encourage innovative solutions that will result in substantial cost savings,

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QUESTION 2: WHAT IS THE DEPARTMENT'S DESIGN-BUILD PHILOSOPHY (CONT.)?

- Although there will be less Department control in directing project solutions than exists on conventional projects, WE TRUST that the enforcement of an effectively written RFP along with a rigorous Design-Build procurement process will result in a superior final product at a reduced cost,
- A fair and competitive procurement process allows Design-Build teams to compete for projects on a level playing field resulting in the most cost effective transportation solution,

General

**QUESTION 2: WHAT IS THE
DEPARTMENT'S DESIGN-BUILD
PHILOSOPHY (CONT.)?**

- Design-Build is not about cutting corners to save a penny, it is about developing superior comprehensive transportation solutions that save millions of dollars.

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Assist. State Structures
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QUESTION 3: I HAVE BEEN ASKED TO WRITE A DESIGN-BUILD RFP. WHERE DO I START?

ANSWER: Standardized Design-Build contract documents, rules, procedures and guidelines are located at the FDOT Construction Office website. See URL link below. The FDOT has developed standard boilerplate language to be used as a starting point in developing RFPs on all Department Design-Build projects. Included in the boilerplate are notes to the RFP developer regarding project specific content that should be inserted as well as requirements related to State Construction, Structures, Comptroller, and Legal Office reviews.

<http://www.dot.state.fl.us/construction/DesignBuild/Design-Build.shtm>

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QUESTION 4: WHAT IS A PROJECT CONSTRAINT?

ANSWER: A project constraint is a requirement conveyed in the RFP that defines the limitations or functional requirements that must be satisfied in the delivered project.

A project constraint is not a description of a specific solution to an engineering problem as depicted in the Concept Plans.

In other words constraints define the underlying framework from which project solutions are developed.

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QUESTION 4: WHAT IS A PROJECT CONSTRAINT (CONT.)?

In general, projects constraints can be classified into five (5) different categories:

- Requirements dictated by project stakeholders,
- Requirements dictated as a result of site conditions/surveys,
- Requirements defining project objectives and defining the scope of the work,
- Governing documents referenced in the RFP including FDOT design reference documents and/or AASHTO design codes,
- Project specific requirements not covered in existing FDOT design reference documents and/or AASHTO design codes.

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QUESTION 5: WHAT ARE PRE-SCOPING QUESTIONS?

ANSWER: Pre-scoping questions are a tool to aid in establishing project constraints to be included in the RFP. See link below.

http://www.dot.state.fl.us/construction/designbuild/DBRules/DB_PRESCOPING_QUESTIONS.docx

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QUESTION 6: WHAT ARE SOME USEFUL STRATEGIES FOR WRITING AN EFFECTIVE RFP?

ANSWER: Effective RFPs are written such that all project requirements and constraints are clearly presented in a way that promotes design/construction flexibility. They also specify objective analysis techniques to be used in evaluating traffic operational differences between technical proposals.

Establishing evaluation criteria and weighting the evaluation criteria to reflect the relative importance of the various project solutions is also an important for consideration in FDOT staffing during procurement especially on large complex projects.

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QUESTION 7: WHAT ARE SOME POSSIBLE PITFALLS IN WRITING AN RFP?

ANSWER: Possible pitfalls include:

- Not giving the RFP document the attention it deserves.
- Not properly defining the project ultimate build-out requirements.
- Being overly restrictive.
- Not properly defining all of the project constraints.
- Not remembering why you did what you did when you developed the concept plans.
- Don't fall in love with the Concept Plans.

Writing the
Request for
Proposal (RFP)

QUESTION 8: WHAT ARE SOME EFFECTIVE STRATEGIES FOR REVIEWING DRAFT RFPs?

ANSWER: The following is a useful reverse-engineering exercise for reviewing draft RFPs.

THE PROCESS:

- Review the draft RFP, attachments and concept plans.
- Brainstorm possible cost saving changes from what is depicted in the concept plans but allowed by the RFP.
- Determine whether the modification would be acceptable?
- If not include RFP language to prohibit the change while maximizing flexibility.

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QUESTION 9: WHAT IF SEVERAL PROPOSERS HAVE “NONCONFORMING ITEMS” OR “MINOR IRREGULARITIES” IN THEIR TECHNICAL PROPOSAL?

ANSWER: The procurement Process allows for Evaluators and Technical Advisors to ask clarifying questions of all Technical Proposers during the Q&A Meeting. As part of the Q&A Meeting, the Department can issue a written list of Minor-Irregularities and Non-conforming Items to each Team to be addressed in writing prior to bid:

- List specific non-conforming items
- Ask how item will be corrected
- Ask D/B Firm to clearly indicate that the correction would be included in their bid.

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QUESTION 10: CAN THE COMMITMENTS MADE IN THE TECHNICAL PROPOSAL BE CHANGED AFTER AWARD?

ANSWER: Commitments made in the Technical Proposal are legally binding. The best way to think about the Technical Proposal is that it forms project commitments that makes up the best value score for that Design Build Firm therefore it should not be changed after contract award. Any changes after award shall be considered as a CSI.

What is design refinement versus a change constituting a CSI?

After Award

QUESTION 11: WHAT ARE SOME POSSIBLE PITFALLS AFTER AWARD?

ANSWER: Possible pitfalls include:

- Not giving up control during component plan reviews.
- Not holding the Design-Build Firm to the commitments shown in the technical proposal.

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Assist. State Structures
Design Engineer

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**QUESTION 12: AS FDOT
COMPONENT PLAN PHASE
REVIEWER, WHAT ARE FDOT'S
EXPECTATIONS REGARDING THE
DEPTH OF REVIEW TO BE
PERFORMED ON D/B PROJECTS?**

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**QUESTION 12A: LEVEL OF D/B
COMPONENT PLAN REVIEW?**

ANSWER:

The level of review for D/B is similar of the level of review for conventional projects. In both cases, beyond the minimum review that we perform on all project submittals, the level of review above the minimum varies greatly depending on the red flags that we see which can indicate potential underlying design problems necessitating a more in depth review.

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QUESTION 12B: RED FLAGS INDICATING A MORE IN-DEPTH REVIEW IS REQUIRED?

ANSWER:

Examples include:

- When the Engineers assigned to the job are not the engineers that qualified the firm for the specific work type.
- When the structure being proposed is more complex than necessary.
- When the structure being proposed is new and unproven or unusual.
- When general plan quality appears poor (apparent poor attention to QC indicates possible bigger issues).
- When the proposed structure looks light based on experience; when the design does not compare well with other similar previous designs; or when typical design rules of thumb are violated.
- When the designer or firm has a poor track record regarding quality.

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**QUESTION 12B: RED FLAGS INDICATING
A MORE IN-DEPTH REVIEW IS
REQUIRED?**

ANSWER:

Bottom Line: Beyond the minimum depth of review that is performed on all projects, the depth of the review should be exactly proportional to the quality of the submittal.

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Structures Design Strategies for Writing a Flexible RFP

Writing the Request for Proposal (RFP)

PROMOTE DESIGN/ CONSTRUCTION FLEXIBILITY

Effective RFPs are written such that all project requirements and constraints are clearly presented in a way that promotes design/construction flexibility while still allowing for an acceptable solution.

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Asst. State Structures Design Engineer

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Writing the
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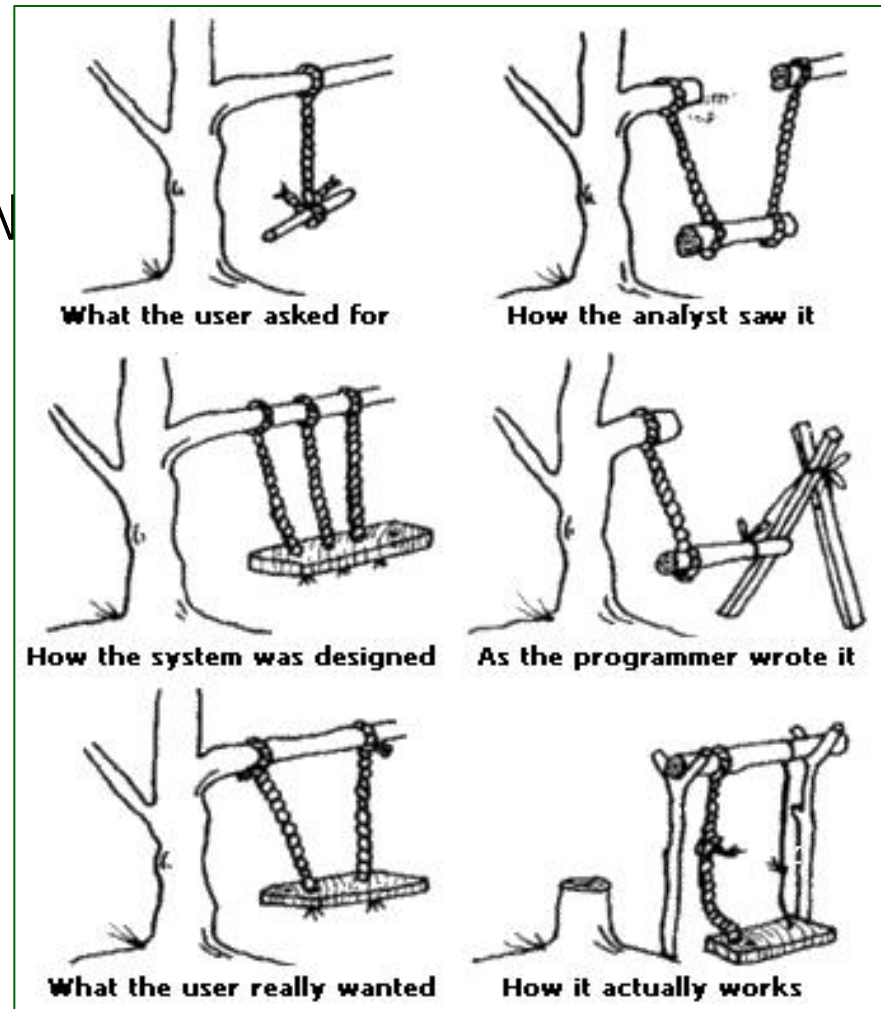
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THE RFP MUST BE WRITTEN CLEARLY

.... SO THERE IS NO
MISINTERPRETATION
OF THE
REQUIREMENTS.

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Writing the
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**DO NOT !!
SIMPLY DESCRIBE THE SOLUTION**

**Define the specific project constraints
from which many acceptable project
solutions can be developed.**

Writing the
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DO NOT JUST DESCRIBE THE CONCEPT PLANS

The first step in writing a successful RFP is to determine the functional requirements of the transportation facility. This means you have to remember why you did what you did when you developed the concept plans.

Writing the
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PERFORMANCE BASED RFPs VERSUS A PRESCRIPTIVE RFPs

A prescriptive RFP describes a single solution, a performance based RFP focuses on setting requirements for a successful outcome.

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GLADIATOR GAME

For the next series of slides, determine whether the RFP constraint described is too prescriptive



OR

Whether it properly defines functional requirements that allows for flexibility while ensuring an acceptable solution.



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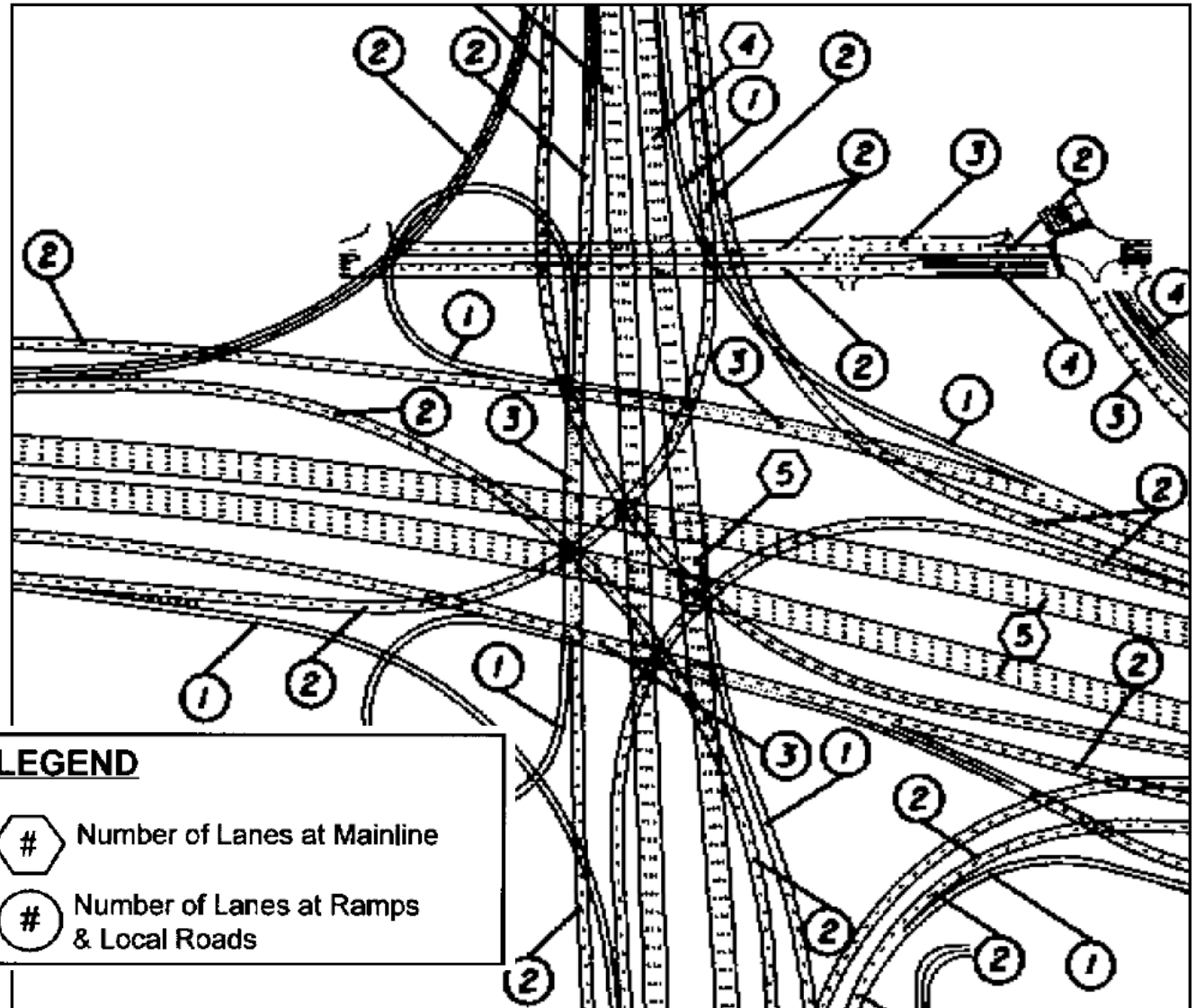
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Example #1:
Describe the
Minimum Number of Lanes at various Locations and for Various Movements within the Project.



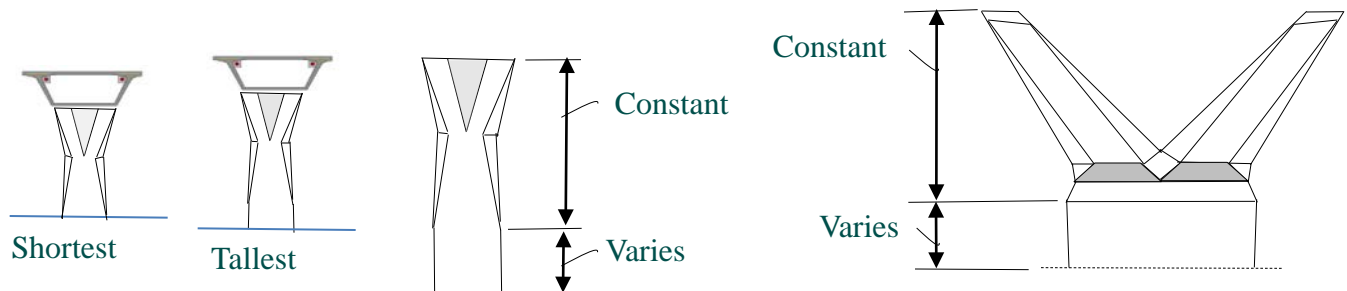
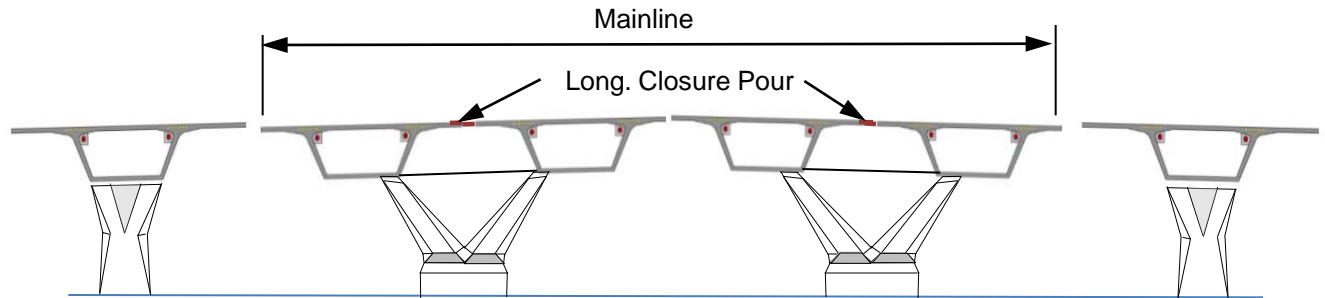
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Sample:

All of the Mainline Viaduct Bridges Shall Utilize the Pier Shapes Depicted Below.



Example #2:
Require specific
Aesthetic
Requirements for
the various Pier
Shapes.

Depends



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Example #3:
Describe the traffic connections that need to be accommodated (free-flow versus signalized).



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Sample:

All movements crossing Washington Street and Adams Avenue shall be grade separated. No signals proposed within the FDOT limited access right of way for the future connections at Adams Avenue and Washington Street will be allowed. Furthermore, the proposed design shall not require the future installation of signals at either of these locations within the limited access right of way.

Example #4:
Describe the traffic connections that need to be accommodated.



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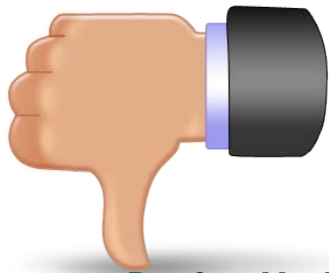
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Sample:

The following connections need to be accommodated:

- Madison Road EB to I-95 SB (Ramp A)
- Jefferson Blvd. Blvd. to I-95 SB (Ramp C)
- Jefferson Blvd. to I-95 NB (Ramp E)
- Jefferson Blvd.. to Madison Rd (Ramp F)
- Madison Road WB to I-95 SB (Ramp G)
- Madison Road EB to Jefferson Blvd. Blvd. (Ramp H)
- Reconstruction of I-95 SB to Madison Road Exit Ramp
- Removal of the I-95 NB to Madison Road WB loop ramp
- Reconstruction the I-95 NB to Madison Road EB ramp to include access to Madison Road WB
- Reconstruction of Madison Road to I-95 NB Entrance Ramp.

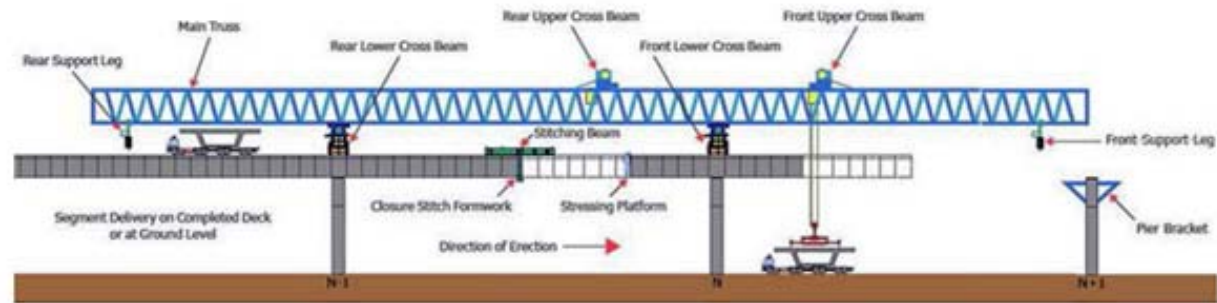
Example #5:
Require a top-down
construction
approach in order
to satisfy traffic
control
requirements.



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Sample:



The Design-Build Firm Shall Utilize an Overhead Gantry for all Mainline Viaduct Bridges.

Sample:

NO LANE CLOSURES are allowed on the Project during the Special Events days previously listed in this RFP in order to minimize potential impacts to the events.

SR 15 (Quincy Street) is designated as a Hurricane Evacuation Route. All lanes must be open for traffic within 12 hours of a hurricane evacuation notice and shall remain open for the duration of the event as directed by the Project Administrator.

Example #6:
**Specify all traffic
control restrictions.**



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Example #7: Show in the Technical Proposal how the design will accommodate ultimate build-out requirements.



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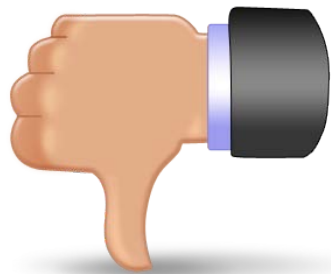
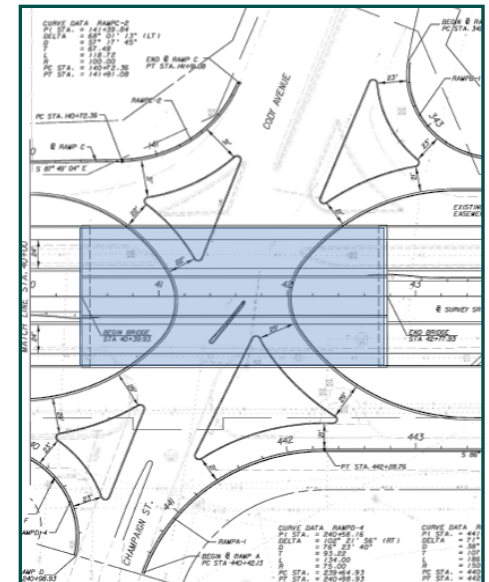
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Sample:

The Design-Build Firm shall present a design approach that does not preclude the Walton Transit (WT) alignment for the future construction of an overpass over SR-816 to accommodate the future East-West transit corridor, per the Preliminary Walton Transit Alignment in Attachment A - Scope of Services, Section 2.

Sample:

The Design Build Firm will be required to design and construct a Single Point Urban Interchange (SPUI) at the intersection to comply with the proposed action selected in the approved Environmental Assessment (EA).



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**Example #8:
Require a specific
overpass
configuration.**

Sample:

The horizontal layout must be per the geometric presented in the Concept Plans or a FDOT approved Alternative Technical Concept (ATC).

If the RFP has not been written to allow flexibility from the beginning, then the project may hit a wall when different options are proposed .



Example #9:
Attaching the
Concept Plans as
“Information
Only” and
considering them as
a starting point.



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Sample:

The capacity and/or level of service of the SR-26/SR-13 Interchange must remain as designed in the 100% Reference Plans and the ultimate Reference Interchange Master Plan, or improved. Any change to the Interchange geometry must be accompanied by a Traffic Analysis in the Technical Proposal for both the Department's Reference Interchange Master Plan, as included in the Reference Documents and for the Design-Build Firm's proposed concept comparing and confirming equal or better capacity.

Example #10:
Attaching the
Concept Plans as
“Information
Only” and
considering them as
a starting point.



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Example #11: Horizontal and Vertical Geometry



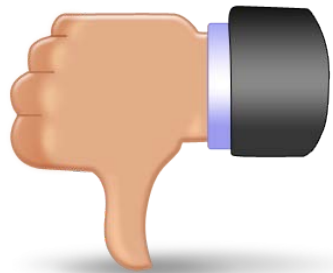
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P3 Sample:

- Geometry must be per the Indicative Preliminary Design (IPD) or a FDOT approved Alternative Technical Concept;
- The minimum movements and minimum number of lanes shall meet or exceed what is depicted in the RFP;
- All Alternative Technical Concepts related to roadway geometry shall include a traffic analysis performed by the Concessionaire for both the IPD and alternate design showing that the "operational capacity" and "level of service" of the alternate design is equal to or better than the IPD;
- Approved Alternative Technical Concepts related to roadway geometry that do not violate the RFP will not require an addendum to the RFP.

**Example #12: Fix
the horizontal
alignment.**



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Sample:

The Design/Build Firm shall use the design for the horizontal geometrics as presented in the Concept Plans. Any changes to horizontal design depicted in the Concept Plans will require Department approval.

**Example #13:
Setting minimum
bridge lengths.**

**Usually if bridge
length is tied to a
real constraint**



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Sample:

The proposed west end of the bridge (front face of back wall) shall be located at or before SR 211 survey baseline station 920+93. The proposed east end of bridge shall be located at or beyond SR 211 station 940+44.

ANY QUESTIONS?

