

## **Turnpike Shop Drawing Review Process for Design Build (Non-Conventional) Projects**

### ***General:***

The following pertains to the Turnpike's Shop Drawing Review Processes requirements. For more detailed information, please reference the following:

Turnpike's Design Handbook (TDH), Part 2, 267  
FDOT Design Manual (FDM), Part 2, 267

### ***Pre-Qualified and Approved Product List (APL) "Submittals":***

Material certifications, welding procedures, paint procedures and concrete mix designs are typically submitted by the Design Build Contractor to the Engineer (CEI), who forwards the certifications to the State Materials Engineers in Gainesville. These items do not need to be submitted to the Department's Shop Drawing Review Office for review and approval by the Design Build Architect of Record (AOR) or Engineer of Record (EOR) regarding applicability.

Material certifications for items on the Approved Product List (APL) are typically submitted by the Design Build Contractor to the Engineer (CEI) thru ProjectSolve<sup>SP</sup>. These items are cataloged in the Shop Drawing/Submittal Item List as "Pre-Qualified ***Submittals***", which are routed directly to the Engineer (CEI) for review.

### ***Shop Drawing Item List:***

The Contractor is required to submit a Shop Drawing/Submittal Item List to the Engineer (CEI) **within 60 days** of the **start of construction operations**, and prior to the submission of any shop drawings.

The list is to be submitted utilizing the required excel spreadsheet format, which is provided by the Engineer (CEI) to the Contractor.

**For each planned shop drawing submission and the shop drawing/submittal item list, define the following; description of item, structure identification number, bridge number, location, specification number and/or roadway division number.**

**If the project contains Express Lane Tolling components, identify these components by each site location, (i.e., building, gantry identification number, etc.) along with the respective specification section numbers and/or roadway divisions.** Combining shop drawings for multiple sites is not acceptable.

8/26/20

For ITS, Roadway Lighting and Traffic components, which all share the same roadway division number, indicate specifically what the component applies to in the Shop Drawing-Submittal Item List, for example: 635 ITS Pull Box, 635 Roadway Lighting Pull Box or 635 Traffic Signal Pull Box. This will ensure shop drawings are distributed to the proper Discipline Reviewer for the Engineer of Record and the Turnpike Reviewers, since different disciplines review these components.

Reference the attached flow chart which depicts the review coordination of the shop drawing item list. Note to Contractor: ensure that submission of the item list is provided in ample time as outlined in Standard Specifications to accommodate this flow.

*If the description of the shop drawing you receive from your subcontractor is different from what you provided on your shop drawing list, please contact the Assistant Shop Drawing Coordinator to make the corresponding changes to the Shop Drawing list in ProjectSolve. We want to ensure to have accurate information in the title of the shop drawing.*

### ***Scheduling of Shop Drawings:***

Once the shop drawings have been reviewed and approved by the Design Build Firms, schedule submissions such that the review period given in the RFP is accommodated. Allowance must be made for potential resubmittals and the Contractor normally is advised by the Department to consider a 75 to 90 calendar day's total lead-time for submittals prior to the need for fabrication or construction work.

Adherence to the Shop Drawing Item List (Schedule) is intended to allow for the planning of resources and reduce the possibility of large amounts of submissions being forwarded for review. **When voluminous shop drawings are submitted at one time, such that the Turnpike Shop Drawing Review Office review period described in the RFP will likely not be met, notify the Engineer (CEI).**

The Contractor must make submissions for approval with such promptness as to cause no delay in his fabrication and construction schedules. Only in emergency cases should special considerations be requested.

***Shop drawings cannot be submitted, processed, reviewed or approved until the component plan set for the particular item is stamped "Released for Construction".***

### ***Obtaining Access to ProjectSolve<sup>SP</sup>: (NOTE: Section only needed if no site with Team Directory)***

In order to obtain access to ProjectSolve<sup>SP</sup>, users need to acquire a log-in access. This is administered by Robert Laurence, Turnpike Network Systems Manager, via email, robert.laurence@dot.state.fl.us, or Joe Panella, Turnpike Network Systems Specialist, via email, joe.panella@dot.state.fl.us.

When submitting a request, indicate full name, title, email address and your association with the specific project. Also, indicate if you will be involved in the shop drawing submission process or if you require viewing access only. Upon issuance of your account, you will be provided instructions on how to log into the system from the Network Systems Manager and/or Specialist.

### ***Shop Drawing Submissions:***

1. Prior to submission of the shop drawings through ProjectSolve<sup>SP</sup>, the Design Build Contractor will consecutively number each sheet of the submittal and indicate the total number of sheets within the series (i.e., 1 of 12, 2 of 12.....12 of 12). Include on each sheet the following items as a minimum requirement: FPID, Bridge Number(s), drawing title and number, title block showing the names of the fabricator or producer and the Contractor for which the work is being done, initials of the person(s) responsible for the drawing, the date on which the drawing was prepared, the location of the item(s) within the project, the Design Build Contractor's approval stamp with date and initials, and when applicable, the ***digital signature and engineering seal of the Specialty Engineer on the first page of the shop drawing***. A resubmittal will be requested when any of the required information is not included.

**Stamp and initial each drawing, page, cut sheet, etc., of the submittal, indicating it has been reviewed for compliance with the contract plans and specifications. It is acceptable for the Design Build Contractor to stamp the cover page of the calculations only. Any comments or markings provided by the Contractor or their Subcontractor must be indicated in blue or black. In the case there is no place to incorporate stamping on the front page, and considering stamps required by others, insert a blank page and indicate the page number as back of page (i.e., back of Page 1 of 6). Do not stamp over literature, dimensions or details.**

**In addition, date stamp on shop drawing must supersede the date contract documents and plans were stamped "Released for Construction".**

2. Submit Shop Drawing/Submittals utilizing **Florida's Turnpike internet website**, ProjectSolve<sup>SP</sup>. Assign a **unique submittal number** to the Shop Drawing.
3. **Shop drawings must be submitted in .pdf, using 300 dpi resolution.** The Design Build Contractor may either, A) coordinate the shop drawing review with the Design Build Architects of Record (AOR) or Engineers of Record (EOR) prior to uploading into ProjectSolve<sup>SP</sup>, or B) they may upload their shop drawing to ProjectSolve<sup>SP</sup> and submit it to the AOR OR EOR for review. ProjectSolve<sup>SP</sup> will provide a system generated email notification to the AOR OR EOR that a shop drawing has been submitted for their review. **Note: certain file naming conventions using special characters are not allowed, (examples: + % @ : & \*, etc. and the use of underscore) and will cause the PDF file not to open nor be accessible.**

If the Design Build AOR or EOR review is completed outside of ProjectSolve<sup>SP</sup>, either the Contractor or the AOR/EOR may submit the reviewed shop drawing through the system, by first submitting to the "EOR", selecting the proper hierarchy code disposition and then directly submitting to the Turnpike for review.

**Whichever process is utilized, it is the responsibility of Design Build AOR or EOR to verify the Design Build Contractor's shop drawing submission has been submitted in complete format.**

The Design Build AOR or EOR reviews the shop drawing and electronically implements any comments and stamping in red. Stamp every sheet with a disposition ("APPROVED", "APPROVED AS NOTED", "RESUMIT" OR "NOT APPROVED"). The electronic stamp to include, firm name, reviewer full name, department and the date. The shop drawing must include one AOR or EOR disposition review stamp for each sheet. **Multiple AOR or EOR disposition stamps on the same sheet are prohibited.** Additional comments may be added where they apply, under the stamp or in an attached Memorandum.

4. Shop drawings must not be any larger than 11" x 17" (plotted in 11" x 17" format). For plotting requirements and for Drawings being submitted in 11" x 17", please refer to *FDOT CADD Manual, Topic No. 625-050-001, Sections 5.10.2 and 7.10.2.*
5. If the shop drawing consists of samples, as outlined in the shop drawing item list, it is acceptable for the samples to be submitted electronically through ProjectSolve<sup>SP</sup>. The electronic data must include the following; Manufacturer, Product Name and Product Number. The Design Build Contractor must stamp these pages. **It will be at the discretion of AOR/EOR or Department, if submissions of original samples are required.**

If original samples are required, the Design Build Contractor must provide the samples to the Design Build AOR or EOR for review, with a scanned copy, including the information provided in the previous paragraph, for review by the Department. The Design Build Contractor is required to stamp the samples, include the FPID and their Shop Drawing Submittal Number. Initiate the shop drawing review process through ProjectSolve<sup>SP</sup>, by uploading their transmittal letter and indicate in the "Comment" area on the shop drawing application page, that samples have been provided to the Design Build AOR or EOR via Overnight Courier Service. The AOR or EOR must confirm within the ProjectSolve<sup>SP</sup> "Comment" area that they are in receipt of samples. The Design Build AOR or EOR may either retain the samples or forward them to the CEI, if applicable and required.

6. **Requirements for Submission of Signed-Sealed Shop Drawings and Calculations:**

For Contractor-Originated Design or for items which require design and drawing preparation of components, systems or installation methods and equipment for specific temporary portions of the project work or for special items of the permanent work not fully detailed in the plans and required to be furnished by the

Contractor, ***a Specialty Engineer must electronically sign and seal the first page of the shop drawing, as well as the cover sheet of any design calculations.***

**Prior to Contractor submitting the shop drawings in ProjectSolve<sup>SP</sup>, confirm the Specialty Engineers' digital seal is acquired from one of the FDOT approved digital certificate authorities. If the digital seal does not comply, it will constitute the submission as incomplete. The shop drawing will be returned to the Contractor, as "Not Reviewed" and a resubmittal will be required.**

So as not to invalidate the Specialty Engineers' digital seal, when submitting the shop drawing, include the original, along with a saved copy of the original submission, which will be used for shop drawing review, with a new name, in .pdf format, as outlined under section titled, ***Shop Drawing Submissions***. The processed shop drawing will include both the Specialty Engineers' original digital signed and sealed submission and the electronic copy used for the shop drawing review.

7. Design Build Firm must not use shop drawings for obtaining clarification regarding contract plans or specification requirements.

At the time of each submission, the Design Build Contractor must give specific written notice, (as in a transmittal letter), along with an itemed list of all of variations/deviations the shop drawing may have from the requirements of the Contract Plans and Specifications. The drawings must contain a specific notation which explicitly and prominently calls out any deviations. Approval of Shop/Erection Drawing will not constitute nor be considered grounds for approval of a variation in which the project requirements are affected, unless specifically indicated as such and noted on the shop drawing, by the Design Build AOR or EOR, or the Turnpike's approval comments as returned with the shop drawing to the Design Build Contractor.

Do not use shop drawings to modify the construction contract time, the contract amount, the design intent nor in any way reduce the maintainability, structural integrity or load-carrying capacity of the structure or its components. Such modifications are administered by revised plan sheets or specifications.

8. The Turnpike will review all shop drawings. Upon completion of review, the Turnpike reviewer will indicate electronically, any comments in green, the disposition on every sheet and include full name, department and date. The approval or disapproval of shop drawings by the Turnpike is indicated by one of the following designations: "REVIEWED" (approved, no further action required), "FURNISH AS NOTED" (approved as noted, make corrections noted, no further submission is required), "FURNISH AS NOTED/SUBMIT SPECIFIC ITEM" (approved as noted, approval is contingent upon submission of additional information for review and approval), "REJECTED" (not approved, do not resubmit the concept or component as submitted), "REJECTED/SUBMIT SPECIFIC ITEM" (not approved, submit additional information for review and approval),

8/26/20

"REVISE/RESUBMIT" (resubmit with corrections), "NOT REVIEWED" (no review required), "SUBMIT SPECIFIC ITEM" (submit additional information for review and approval), "NOT REVIEWED/SUBMIT SPECIFIC ITEM" (not reviewed, submit additional information for proper review and approval).

The Turnpike Shop Drawing Review Office will route the shop drawing to the Engineer (CEI), who must electronically stamp the drawings, "Release for Construction" or "Release for Construction As Noted". Electronic stamp to include firm name, full name, and date. Shop drawings stamped "Resubmit", by the Design Build AOR or EOR will not be routed to the Engineer (CEI).

The Engineer (CEI) will route the shop drawing back to the Turnpike Shop Drawing Review Office through ProjectSolve<sup>SP</sup>. Once processed, ProjectSolve<sup>SP</sup> will generate a system email to the following: Design Build Contractor, Design Build AOR or EOR, Engineer (CEI), Construction Project Manager, and Project Manager.

8/26/20

**Turnpike Shop Drawing Review Office**

(Address for Courier Services)

**Florida's Turnpike Enterprise Headquarters**

Shop Drawing Review Office – Transportation Development, Room 3115

MP 263, Florida's Turnpike

(Building 5315 Turkey Lake Service Plaza)

Ocoee, FL 34761

(Address for U.S. Mail)

**Florida's Turnpike Enterprise Headquarters**

Shop Drawing Review Office – Transportation Development, Room 3115 (Building 5315)

P.O. Box 613069

Ocoee, FL 34761

**Attn: Karen Cree, Shop Drawing Coordinator**

Tel: 407.264.3405

Email: karen.cree@dot.state.fl.us

**Attn: Assistant Shop Drawing Coordinator**

Tel:

Email:

**ProjectSolve<sup>SP</sup> Administrator**

Robert Laurence, Network Systems Manager

Florida's Turnpike, Pompano Operations Building

Email: robert.laurence@dot.state.fl.us

Joe Panella, Network Systems Specialist

Florida's Turnpike, Pompano Operations Building

Email: joe.panella@dot.state.fl.us

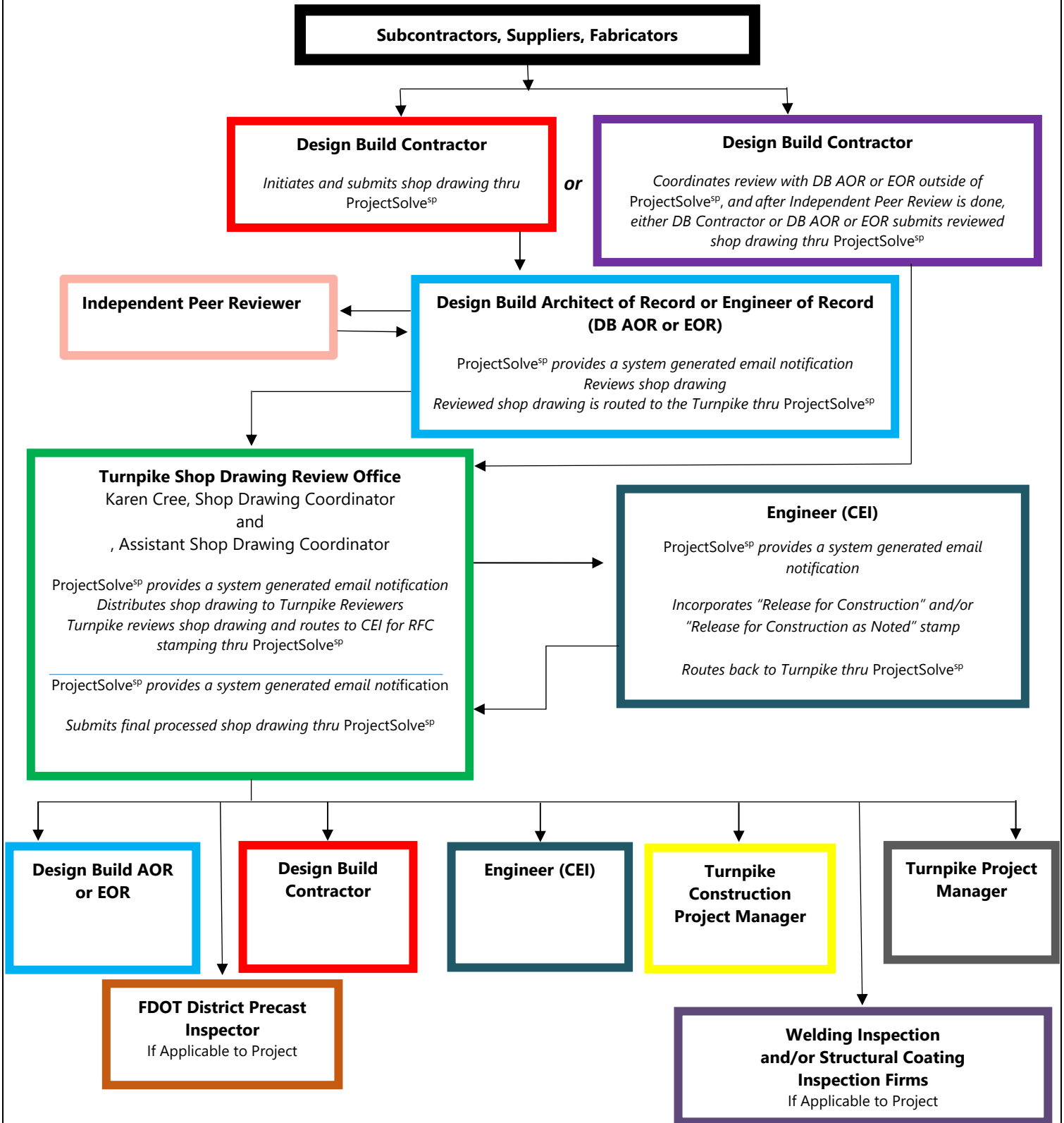
**ProjectSolve<sup>SP</sup> - Florida's Turnpike Shop Drawing Website**

Shop Drawings can be tracked daily by utilizing ProjectSolve<sup>SP</sup>. The purpose of ProjectSolve<sup>SP</sup> is to provide the Design Build Contractor, Design Build AOR or EOR, Engineer (CEI), Project Managers, Construction Managers and Florida's Turnpike Management with up-to-date information/latest status of the Construction Project, whether it be related to shop drawings, RFIs, correspondence or MOT Notifications for every ongoing/active construction contract. It serves as a tracking tool for project related documents and assist in expediting the construction process.

Visit the following webpage for Florida's Turnpike general shop drawing requirements and useful information.

<http://www.floridasturnpike.com/design.html>

**Figure 1 - Turnpike Shop Drawing Flow Chart for Design Build (Non-Conventional) Projects  
Shop Drawings Affecting Public Safety**





**Figure 2 - Turnpike Shop Drawing Flow Chart for Design Build (Non-Conventional) Projects  
Shop Drawings Not Affecting Public Safety**

