



# **Specifications 101**

Daniel Strickland, PE State Specifications Engineer (and an all-around nice guy)

Transportation Symposium Website



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### **Today's Topics**

**Publications** 

Terminology

**AASHTO Format** 

Voice and Mood

**Contract Authority** 

**End Result** 

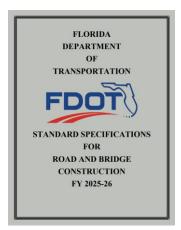
Biddability

**Governing Order of Documents** 

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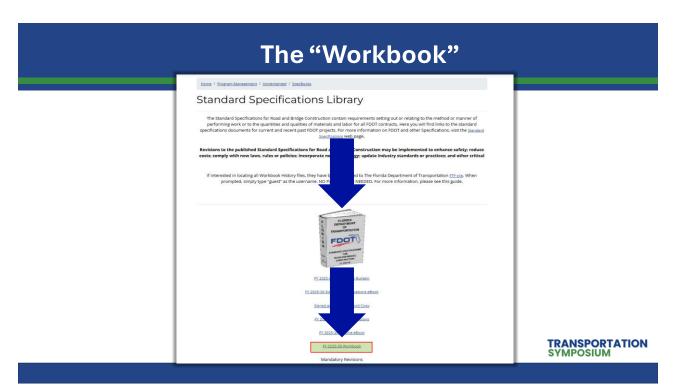
# Standard Specifications for Road and Bridge Construction (eBook)



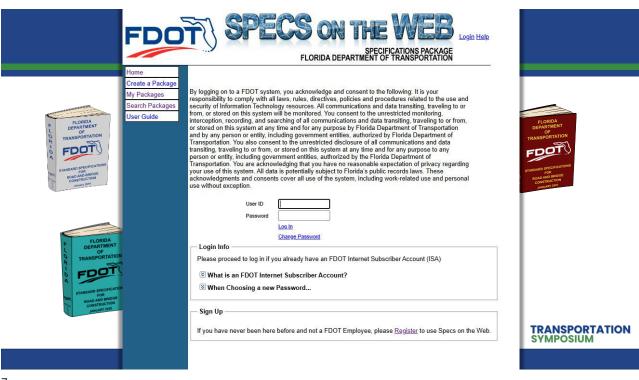
Annual Publication:

FY 2025-26

Effective July 1, 2025 through June 30, 2026



SUPERPAVE ASPHALT CONCRETE - CORING DATA. (REV 5-4-21) (FA 7-14-21) (FY 2025-26)	SP3340203	Use on projects with available coring data.	
CEMENT CONCRETE PAVEMENT (COLORED CONCRETE). (REV 5-11-16) (FA 5-12-16) (FY 2025-26)	\$P3500200	Use when the Plan pay Item 350-30 is included or colored structural concrete is included.	
LANDSCAPING. (REV 10-30-19) (FA 1-7-20) (FY 2025-26)	SP5800000	Non-Federal Aid Jobs with Landscaping. Use when requested by the DDE.	
LANDSCAPING. (REV 5-11-21) (FA 7-14-21) (FY 2025-26)	SP5800000FA	All Federal Aid Jobs with Landscaping. Use when requested by the DDE.	
TREE AND PALM RELOCATION - CONSTRUCTION. (REV 7-13-21) (FA 7-14-21) (FY 2025-26)	SP5810000	Jobs with Tree and Palm Relocation.	
ELECTRICAL POWER SERVICE ASSEMBLIES - DESCRIPTION (Contribution-in-Ald-of Construction). (REV 6-12-18) (FA 7-2-18) (FY 2025-26)	<u>\$P6390100CIAC</u>	Use with approval of the District Utility Administrator. (Insert Information Required)	
HIGHWAY ADVISORY RADIO. (REV 10-16-15) (FA 12-31-15) (FY 2025-26)	SP6870000	Use with the approval of the Chief Engineer.	
Supplemental Specifications	Supplemental Spec Name	Usage Note	
TECHNICAL SPECIAL PROVISIONS	TSP Name	Usage Note	
The following Technical Special Provisions are individually signed and sealed and made part of the Contract as part of the Contract Documents.	XTSPs	Jobs with Technical Special Provisions.	TRANSPORTATION SYMPOSIUM



**NEW and IMPROVED Underway!** E N use and Sei ng to or ition egarding personal 

### **Specification DNA**



There is a standardized organization and classification for every specification.

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### **Hierarchy of Specifications**



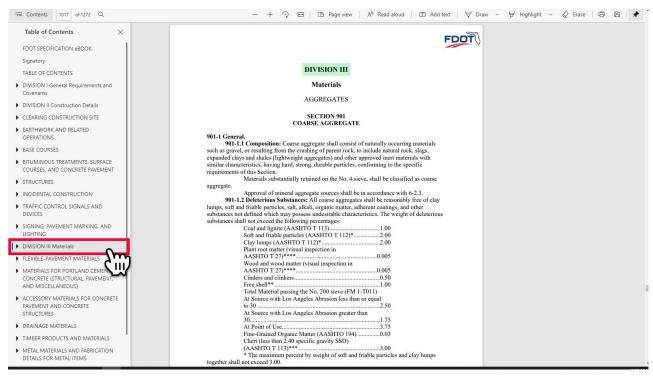
**SECTION** 

3 Divisions

**ARTICLE** 

**SUBARTICLE** 

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#### **WAIT!!! There's More!**



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### **But There's All Kinds of Specifications!**





Remember This Guy?

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### **But There's All Kinds of Specifications!**



- Standard Specifications
- Special Provisions categorized into 3 types of Contracts
- · Developmental Specifications
- Supplemental Specifications aka Mandatory Specifications
- Technical Special Provisions
- Modified Special Provisions
- Blanket Special Provisions 8 Districts represented in Construction and Maintenance Contracts, all different

### **Special Provisions**



Approved additions and revisions to the Standard Specifications applicable to individual projects based on a set of conditions.



Does not require prior approval process

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#### **Developmental Specifications**

Specifications developed around a new process and/or material approved for limited use by the State Specifications Office, signed and sealed by the Professional Engineer responsible for authorizing their use. Field performance is monitored.

Requires approval

### **Supplemental Specifications**



Additions or revisions to the current Standard Specifications (eBook).



AKA MANDATORY SPECIFICATIONS

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### **Technical Specifications**

Written by the Design Engineer

**Coordinates with the District Specs Office** 

**Must have Department approval** 

Design Engineer (or Florida licensed PE under his charge) Signs and Seals

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### **Modified Special Provisions**

Submitted to District Specifications Office

Reviewed in District by appropriate parties

Submitted to Central Office Specs Team for review

State Specs Engineer reviews why the MSP is needed (similar to Design Exception)

Specs Office checks formatting and routes to General Counsel and the appropriate Technical Expert(s)

Response goes back to District

EOR Signs and Seals

Inserts Word version into the Specs Package

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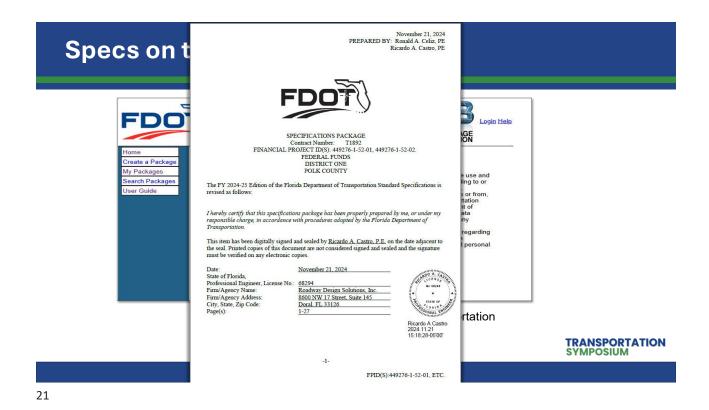
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### **Blanket Special Provisions**



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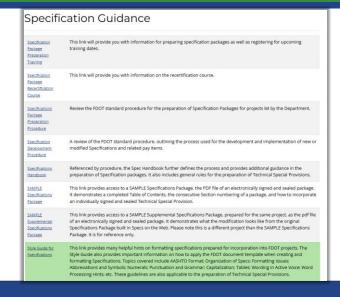


### **Specs on the Web Rewrite**

- · Brand new application
- · More Intuitive
- More User Friendly
- Modern Replacement
- Reduce Security and Technology Risks for the Department
- Process Improvements
- · Streamlines Workflow
- Estimated Completion 2027 if you take training now, you will be notified. We will reach out to all in the training database when new application will launch.

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### Style Guide



Reference for everything regarding specifications.

The "Bible" for Specification writing, formatting, examples.

The Table of Contents is interactive and will take you to the Section you need.

Newly revised with plenty of examples.

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#### **AASHTO Format**

SECTION 435

STRUCTURAL PLATE PIPE AND PIPE ARCH CULVERIS

435-1 Description.
Construct structural plate pipe and pipe arch culverts.

435-2 Materials.

Meet the requirements of Section 944 for steel and Section 945 for aluminum. When the Plans call for bituninous coated pipe or pipe arch, meet the coating requirements of 944-4.

When other types of coating material are shown in the Plans, use a coating that consists of at least two coats of the specified material, applied at the job site. Apply the coating by brush or by spray.

435-3 Trench, Foundation, Laying, and Backfill.
Perform this work as specified in Section 430, and as follows.
Provide a foundation for the bottom plates that so of uniform density and carefully shaped to fit the lower plate of the pipe or pipe arch. Thoroughly tamp the backfill material against the remaining plates.

435-4 Assembly.

Assemble the plates to form the pipe or pipe arch structure in accordance with the diagram famished by the manufacturer. Connect the plates by bolling tightly in all bolt holes provided.

435-5. Method of Measurement.

The quantities to be paid for will be the plan quantity, in feet of pipe or pipe arch, installed in place, completed and accepted. The quantity will be measured along the centerline of the structure from end to end of metal for full section structures, from average end to end at top and bottom for beveled-end structures.

435-6 Basis of Payment.

Prices and payments will be full compensation for all work specified in this Section, including all materials, backfilling, and disposal of surphus material and all excavation except the volume included in the items for grading work and for other items specified for payment in Section 125.

Payment will be made under:

Item No. 435- Structural Plate Pipe Culvert - per foot.

### Voice and Mood

- Clear
- Correct
- Concise
- Precise
- Quality must be measurable
- Simple Words
- Short Sentences and Paragraphs

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#### **Voice and Mood**

- In Passive Voice, the subject of a sentence receives the action.
- In Active Voice, the subject of a sentence performs the action.
- In Active Voice: Imperative Mood, the subject of a sentence is implied and understood.

"The concrete shall be placed by the contractor in accordance with the plans and drawings."

"The contractor is to place the concrete."

"Place the concrete."

### **Contract Authority**

- Contract exists between the Contractor and the Department
- Upon Termination, the Contract no longer exists
- Loss of Privity
- No Contractor Warranties
- No Duty to perform remedial action

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#### **End Result**

What do you want? (Say it once)

When do you want it?

Where do you want it?

Who must do it?

How or Why? (Parish it)

- "...to pro intrus. of mortar..."
- "...use e ost car
- "...in deer to sent rosion..."
- "...use owel or tool approved by the Engineer"
- "...to ensu..." surface..."

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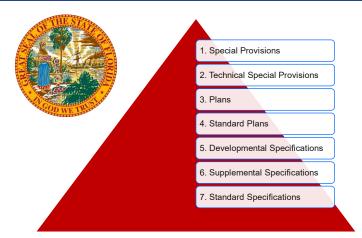
### **Biddability**

- Avoid using phrases like...
- "...or as dir e Engineer"
- "...unless wise sown in the Contract Documents"
- "...upon ection om e District Materials Office"
- "...when stirected
- "...to the sale of the Engineer"

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### **Governing Order of Documents**



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### **Training**



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### **Specifications Website**



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#### Resources



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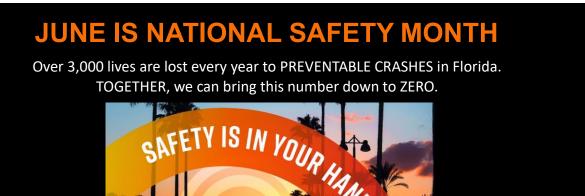
## Contact Us

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Let's Get Everyone Home



TargetZeroFL.com



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