

 October 28-29, 2025  
 Orlando, FL

**TRANSPORTATION  
SYMPOSIUM**

# Specifications 101

Daniel Strickland, PE  
State Specifications Engineer

Transportation Symposium  
Website

  
SCAN ME

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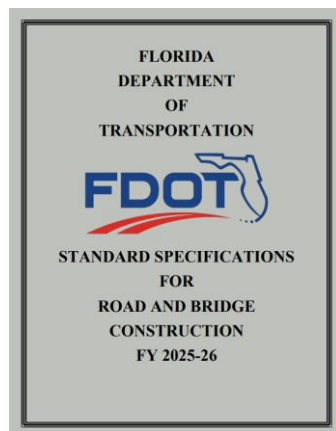
## Today's Topics

Publications  
 Terminology  
 AASHTO Format  
 Voice and Mood  
 Contract Authority  
 End Result  
 Biddability  
 Training  
 AI Research

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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

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# The “Workbook”

[Home](#) / [Program Management](#) / [Implemented](#) / [SpecBooks](#)

## Standard Specifications Library

The Standard Specifications for Road and Bridge Construction contain requirements setting out or relating to the method or manner of performing work or to the quantities and qualities of materials and labor for all FDOT contracts. Here you will find links to the standard specifications documents for current and recent past FDOT projects. For more information on FDOT and other Specifications, visit the [Standard Specifications web page](#).

**Revisions to the published Standard Specifications for Road and Bridge Construction may be implemented to enhance safety; reduce costs; comply with new laws, rules or policies; incorporate new technology; update industry standards or practices; and other critical**

If interested in locating all Workbook History files, they have been moved to The Florida Department of Transportation [FTP site](#). When prompted, simply type "guest" as the username. NO PASSWORD IS NEEDED. For more information, please see this [guide](#).

[FY 2025-26 Standard Specifications eBook](#)

[Signed and Sealed Copy](#)

[FY 2025-26 Standard Specifications](#)

[FY 2025-26 Standard Specifications eBook](#)

**FY 2025 Workbook**

Mandatory Revisions


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SUPERPAVE ASPHALT CONCRETE - CORING DATA. (REV 5-4-21) (FA 7-14-21) (FY 2025-26)	<a href="#">SP3340203</a>	Use on projects with available coring data.
CEMENT CONCRETE PAVEMENT (COLORED CONCRETE). (REV 5-11-16) (FA 5-12-16) (FY 2025-26)	<a href="#">SP2500200</a>	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)	<a href="#">SP5800000</a>	Non-Federal Aid Jobs with Landscaping. Use when requested by the DDE.
LANDSCAPING. (REV 5-11-21) (FA 7-14-21) (FY 2025-26)	<a href="#">SP5800000FA</a>	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)	<a href="#">SP5810000</a>	Jobs with Tree and Palm Relocation.
ELECTRICAL POWER SERVICE ASSEMBLIES - DESCRIPTION (Contribution-in-Aid-of Construction). (REV 6-12-18) (FA 7-2-18) (FY 2025-26)	<a href="#">SP6390100CIAC</a>	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)	<a href="#">SP6870000</a>	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.

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**SPECS ON THE WEB**

SPECIFICATIONS PACKAGE  
FLORIDA DEPARTMENT OF TRANSPORTATION

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[User Guide](#)

By logging on to a FDOT system, you acknowledge and consent to the following: It is your responsibility to comply with all laws, rules, directives, policies and procedures related to the use and security of Information Technology resources. All communications and data transiting, traveling to or from, or stored on this system will be monitored. You consent to the unrestricted monitoring, interception, recording, and searching of all communications and data transiting, traveling to or from, or stored on this system at any time and for any purpose by Florida Department of Transportation and by any person or entity, including government entities, authorized by Florida Department of Transportation. You also consent to the unrestricted disclosure of all communications and data transiting, traveling to or from, or stored on this system at any time and for any purpose to any person or entity, including government entities, authorized by the Florida Department of Transportation. You are acknowledging that you have no reasonable expectation of privacy regarding your use of this system. All data is potentially subject to Florida's public records laws. These acknowledgments and consents cover all use of the system, including work-related use and personal use without exception.

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☒ **When Choosing a new Password...**

**Sign Up**

If you have never been here before and not a FDOT Employee, please [Register](#) to use Specs on the Web.



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## NEW and IMPROVED Underway!

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**UNDER CONSTRUCTION**

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## 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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FDOT SPECIFICATION eBook

Signatory

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▶ CLEARING CONSTRUCTION SITE

▶ EARTHWORK AND RELATED OPERATIONS

▶ BASE COURSES

▶ BITUMINOUS TREATMENTS, SURFACE COURSES, AND CONCRETE PAVEMENT

▶ STRUCTURES

▶ INCIDENTAL CONSTRUCTION

▶ TRAFFIC CONTROL SIGNALS AND DEVICES

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▶ DIVISION III Materials

▶ FLEXIBLE-PAVEMENT MATERIALS

▶ MATERIALS FOR PORTLAND CEMENT CONCRETE (STRUCTURAL PAVEMENT, AND MISCELLANEOUS)

▶ ACCESSORY MATERIALS FOR CONCRETE PAVEMENT AND CONCRETE STRUCTURES

▶ DRAINAGE MATERIALS

▶ TIMBER PRODUCTS AND MATERIALS

▶ METAL MATERIALS AND FABRICATION DETAILS FOR METAL ITEMS

FDOT

DIVISION III

Materials

AGGREGATES

SECTION 901

COARSE AGGREGATE

**901-1 General.**

**901-1.1 Composition:** Coarse aggregate shall consist of naturally occurring materials such as gravel, or resulting from the crushing of parent rock, to include natural rock, slags, expanded clays and shales (lightweight aggregates) and other approved inert materials with similar characteristics, having hard, strong, durable particles, conforming to the specific requirements of this Section.

Materials substantially retained on the No. 4 sieve, shall be classified as coarse aggregate.

Approval of mineral aggregate sources shall be in accordance with 6-2.3.

**901-1.2 Deleterious Substances:** All coarse aggregates shall be reasonably free of clay lumps, soft and friable particles, salt, alkali, organic matter, adherent coatings, and other substances not defined which may possess undesirable characteristics. The weight of deleterious substances shall not exceed the following percentages:

Coal and lignite (AASHTO T 113).....	1.00
Soft and friable particles (AASHTO T 112)*.....	2.00
Clay lumps (AASHTO T 112)*.....	2.00
Plant root matter (visual inspection in AASHTO T 27)****.....	0.005
Wood and wood matter (visual inspection in AASHTO T 27)****.....	0.005
Cinders and clinkers.....	0.50
Free shell**.....	1.00
Total Material passing the No. 200 sieve (FM 1-T011) At Source with Los Angeles Abrasion less than or equal to 30 .....	2.50
At Source with Los Angeles Abrasion greater than 30.....	1.75
At Point of Use.....	3.75
Fine-Grained Organic Matter (AASHTO 194).....	0.03
Chert (less than 2.40 specific gravity SSD) (AASHTO T 113)****.....	3.00

\* The maximum percent by weight of soft and friable particles and clay lumps together shall not exceed 3.00.

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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

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## 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**

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## 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

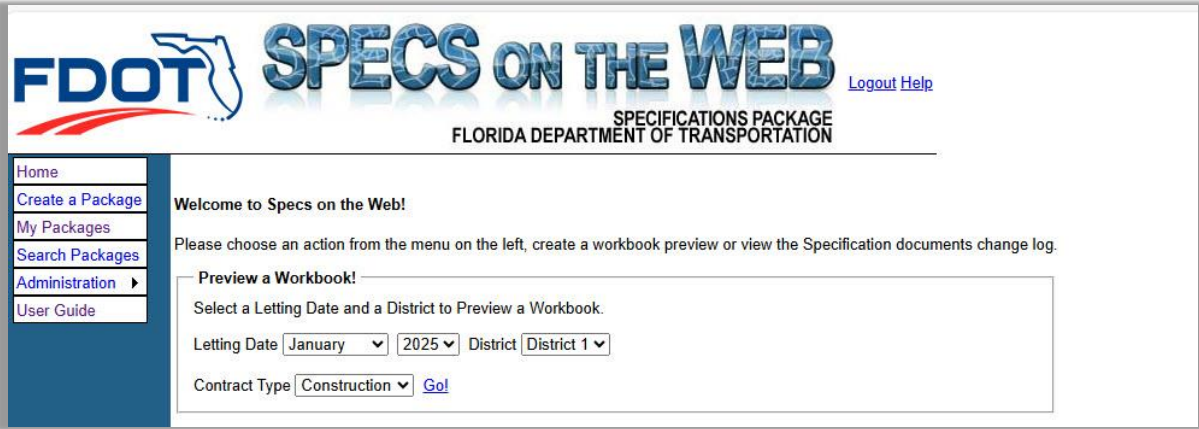
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# Modified Special Provisions

- 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


# Blanket Special Provisions



## Specs on t



November 21, 2024  
PREPARED BY: Ronald A. Celiz, PE  
Ricardo A. Castro, PE




SPECIFICATIONS PACKAGE  
Contract Number: T1892  
FINANCIAL PROJECT ID(S): 449276-1-52-01, 449276-1-52-02.  
FEDERAL FUNDS  
DISTRICT ONE  
POLK COUNTY

The FY 2024-25 Edition of the Florida Department of Transportation Standard Specifications is revised as follows:

*I hereby certify that this specifications package has been properly prepared by me, or under my responsible charge, in accordance with procedures adopted by the Florida Department of Transportation.*

This item has been digitally signed and sealed by Ricardo A. Castro, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

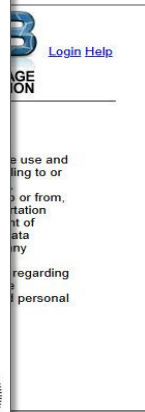
Date:	<u>November 21, 2024</u>
State of Florida,	
Professional Engineer, License No.:	<u>68294</u>
Firm/Agency Name:	<u>Roadway Design Solutions, Inc.</u>
Firm/Agency Address:	<u>8600 NW 17 Street, Suite 145</u>
City, State, Zip Code:	<u>Doral, FL 33126</u>
Page(s):	<u>1-27</u>



Ricardo A. Castro  
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FPID(S):449276-1-52-01, ETC.



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## Specs on the Web Rewrite

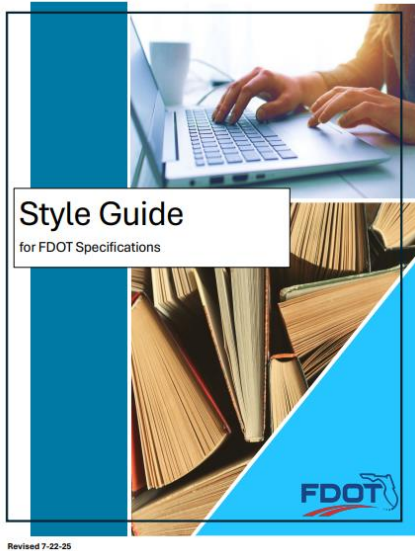
- Brand new application
- More Intuitive
- More User Friendly
- Modern Replacement
- Reduce Security and Technology Risks for the Department
- Process Improvements
- Streamlines Workflow
- Estimated Completion 2027 – if you take training now, you will be notified. We will reach out to all in the training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

	<b>SECTION 435 STRUCTURAL PLATE PIPE AND PIPE ARCH CULVERTS</b>
→	<b>435-1 Description.</b> Construct structural plate pipe and pipe arch culverts.
→	<b>435-2 Materials.</b> Meet the requirements of Section 944 for steel and Section 945 for aluminum. When the Plans call for bituminous 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.
→	<b>435-3 Trench, Foundation, Laying, and Backfill.</b> Perform this work as specified in Section 430, and as follows. Provide a foundation for the bottom plates that is 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.
→	<b>435-4 Assembly.</b> Assemble the plates to form the pipe or pipe arch structure in accordance with the diagram furnished by the manufacturer. Connect the plates by bolting tightly in all bolt holes provided.
→	<b>435-5 Method of Measurement.</b> 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.
→	<b>435-6 Basis of Payment.</b> Prices and payments will be full compensation for all work specified in this Section, including all materials, backfilling, and disposal of surplus 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.

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## 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."*

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## 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? (Don't do it)

“...to prevent intrusion of mortar...”

“...use the most car...”

“...in order to prevent corrosion...”

“...use a shovel or tool approved by the Engineer”

“...to ensure a smooth surface...”

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## Biddability

- Avoid using phrases like...
- “...or as directed by the Engineer”
- “...unless otherwise shown in the Contract Documents”
- “...upon direction from the District Materials Office”
- “...when so directed”
- “...to the satisfaction of the Engineer”

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## Governing Order of Documents



1. Special Provisions

2. Technical Special Provisions

3. Plans

4. Standard Plans

5. Developmental Specifications

6. Supplemental Specifications

7. Standard Specifications

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# Training

**FLORIDA LTAP CENTER**

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## Specification Package Preparation Training

The Engineer of Record (EOR) responsible for signing and sealing the Specifications Package must take the full day "Specification Package Preparation Training" and pass the assignment prior to signing and sealing any Specification Package for FDOT projects. (referenced in FDOT Procedure Specifications Package Preparation, Topic No. 630-010-005).

Best practice includes an additional two persons (2 reviewers) besides the EOR receive the training. Minimum requirement is for one additional person (reviewer) to take the training.

The training is valid for 5 years. For renewal, consultant and in-house EORs must take the online "Specifications Package Preparation Recertification CBT" every 5 years to maintain eligibility to sign and seal any Department Specification Package. If the EOR fails to renew their certification within the five year period, they must retake the full class and pass to be eligible to sign and seal Department Specification Packages.



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# Specifications - New Website

WELCOME TO STANDARD SPECIFICATIONS  
FOR ROAD AND BRIDGE CONSTRUCTION

Office Manager: Daniel Strickland, P.E. – State Specifications Engineer

The Standard Specifications for Road and Bridge Construction contain requirements setting out or relating to the method or manner of performing work or to the quantities and qualities of materials and labor for all FDOT contracts. The Standard Specifications is 1 of 4 divisions under the Office of Design, along with Roadway Design, Structures Design, and the CADD Office.

ALL
SPECIFICATIONS
REVIEWS
RESOURCES

 FDOT Specifications Office	 Standard Specifications Library	 Revision Update Page	 Topographical Database
 Downloadable Specifications	 Local Agency	 Industry Review	 Material Manual
 Interim Specifications	 Final Edition Specifications	 Track the Status of Revisions	 Specs on the Web
 Special Provisions	 Design Goals	 TSP Library	 Office of Design Division of Transportation

<https://www.fdot.gov/specifications/default.shtm>

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## Leveraging AI – Research Project

- **Layer 1** – Identifying Large Language Model Type and Training the Model
- **Layer 2** – Improve and Harmonize FDOT's Fundamental Documents and Publications
- **Layer 3** – Evaluation of Existing TSPs and Developmental Specs
- **Layer 4** – Development of Project-Based Querying and Initial Design

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## Resources



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## Contact Us

**Daniel Strickland, PE**

State Specifications Engineer

[CO-SPECDEV@dot.state.fl.us](mailto:CO-SPECDEV@dot.state.fl.us)

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**IT CAN  
WAIT**

**FOCUS ON  
DRIVING**

**LET'S GET EVERYONE HOME.**

TARGET  
**ZERO**  
FATALITIES & SERIOUS INJURIES 

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 October 28-29, 2025  
 Orlando, FL







# DEADLINE

Please be sure to **certify your attendance** before leaving this event or no later than **November 30th**, in order to receive PDH/CEC. Detailed instructions are available on the Transportation Symposium website.

Transportation Symposium Website



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