Florida Department of Transportation



Specifications Handbook

May 2024

Contents

SECT	ION 1 – INTRODUCTION	1		
1-1	GENERAL	1		
1-2		1		
SECT	ION 2 – SPECIFICATIONS PACKAGE	1		
2-1	GENERAL	1		
2-2	2 SPECIFICATIONS PACKAGE FILE	1		
2-3	B PRE-CHECK	1		
2-4	INITIAL REVIEW	2		
2-5	5 INTERMEDIATE REVIEW	3		
2-6				
2-7	()	3		
2-8				
2-9				
2-1	10 SUPPLEMENTAL SPECIFICATIONS PACKAGE	4		
SECT	ION 3 – MODIFIED SPECIAL PROVISIONS	4		
3-1	GENERAL	4		
3-2				
3-3	B PROCESS REVIEW	5		
3-4	BLANKET MODIFIED SPECIAL PROVISIONS	5		
SECT	ION 4 – TECHNICAL SPECIAL PROVISIONS	5		
4-1	GENERAL	5		
4-2				
4-3	3 UTILITY WORK	8		
4-4	DISTRICT OFFICE RESPONSIBILITIES	9		
4-5	5 CENTRAL OFFICE RESPONSIBILITIES	9		
SECT	ION 5 – DESIGN-BUILD PROJECTS	9		
SECT	ION 6 – LOCAL AGENCY PROGRAM (LAP)	9		
SECT	ION 7 – TRAINING 10	0		
7-1	GENERAL	0		
7-2				
7-3				
SECT	ION 81	1		
APPENDIX A12				
APPENDIX B				

SECTION 1 – INTRODUCTION

1-1 GENERAL

This Handbook provides guidance to the District Specifications Office, District Maintenance Office, and design team(Department and consultant Engineers of Record) in the preparation of a Specifications Package and describes their various components. Some of the guidance in this Handbook is written specifically for construction contracts with design phase submittals and therefore may not apply to the maintenance specification package preparation. This Handbook shall be used in conjunction with Specifications Package Preparation Procedure Topic Number 630-010-005.

1-2 QUALITY CONTROL PLAN

Each District shall have a written set of procedures designed to ensure that all Specifications Packages and Supplemental Specifications Packages are produced to the highest level of quality.

Consultants preparing Specifications Packages for the Department shall prepare a Quality Control Plan meeting the requirements of this Handbook.

SECTION 2 – SPECIFICATIONS PACKAGE

2-1 GENERAL

The process for preparing a Specifications Package is a progression of identifying, comparing, resolving, and compiling. Two individuals, an initial reviewer and final reviewer, independently review the project plans and files and identify the applicable Supplemental Specifications and Special Provisions in the Workbook and the need for a Developmental Specification, Technical Special Provision (TSP), or Modified Special Provision (MSP). These two individuals then compare the results of their review and resolve any differences. Once all issues have been resolved, the Specifications Package is compiled, reviewed, and signed and sealed by the Engineer of Record (EOR). TSPs are individually signed and sealed by the design Engineer responsible for the technical content and made part of the Contract as an attachment to the Contract Documents. Titles for each TSP will need to be listed on the TSP cover page after the specifications package is merged.

2-2 SPECIFICATIONS PACKAGE FILE

Create a file to maintain the individual documents and correspondence that will be used to prepare the Specifications Package, Supplemental Specifications Packages, and individually signed and sealed TSPs.

2-3 PRE-CHECK

The designer/EOR should coordinate with the District Specifications Office or District Maintenance Office to review the project's plans and files, along with the applicable implemented Specifications early in the design development process. This is necessary for determining if the FDOT Standard Specifications, Special Provisions, and Supplemental Specifications address the needs of the project, or if a Modified Special Provision, Developmental Specification, or Technical Special Provision is needed.

Use an MSP if an implemented Specification does not adequately address the

needs of the project. Coordinate with the District Specifications Office or District Maintenance Office to edit the Specification, Submit the proposed modification to the District Specifications Office or District Maintenance Office for their review and approval. Do not use plan notes to modify an implemented Specification.

Upon District approval, the MSP will be submitted to the State Specifications Office. Further coordination with the State Construction Office (SCO), State Office of Maintenance (OOM), Office of General Counsel, and the appropriate Central Office technical experts is necessary for additional review and comment. The State Specifications Engineer is the final approver for all project specific MSPs.

A Developmental Specification may be available when the Department wants to try a new process, procedure, or material on a construction or maintenance project or permit. The District Specifications Office or District Maintenance Office will submit a request to use a Developmental Specification on a project or permit to the State Specifications Office using SharePoint: <u>https://forms.office.com/g/nhx9FzSjM2</u>.

For Construction Push Button and Maintenance Work Document contracts, submit a preliminary request to use a Developmental Specification on the project for inclusion in the bid documents.

Use a TSP if an implemented Division II or III Specification is not applicable to the type of work. Coordinate with the District Specifications Office or District Maintenance Office to determine if a TSP is needed. If a TSP is needed, prepare in accordance with Section 4 of this handbook and submit to the District Specifications Office or District Maintenance Office for review. Avoid plan notes that duplicate or conflict with the specifications. Do not use a TSP to override an implemented Standard Specification, Supplemental Specification, Special Provision or Developmental Specification; see MSP requirements in Section 3to modify existing specifications. As an exception, a TSP may be used to modify a Developmental Specification only after the TSP has been verified for Build America, Buy America (BABA) compliance and approved by the Monitor.

2-4 INITIAL REVIEW

The initial and final reviewers are typically part of the District PS&E, design team or Maintenance EOR preparing the Plans and Specification package. The initial reviewer will check the plans and specifications package files to ensure all information necessary to prepare a complete Specifications Package is included. Information/tasks typically include:

- Permit notices from the District Office responsible for permit coordination,
- Utility/Railroad Agreements or memos from the District Utility and Rail Offices,
- Contract time from the District Construction Office,
- Special limitations of operation from the District Construction Office,
- Identify the need for Modified Special Provisions,
- Identify the need for Developmental Specifications,
- Identify the need for Technical Special Provisions,
- Complete Sole-Source Approvals, as required. Provide the Sole-Source Justification with the MSP request, when necessary.

Review the Plans and/or other contract documents, specifications package file, and Workbook to determine that all proposed work is covered by an approved Specification, to ensure all issues have been addressed, and to verify the Plans do not conflict with the Specifications.

Identify the Specifications to be compiled into the Specifications Package based on the project needs and Usage Notes. Provide insert information in Specs on the Web for Special Provisions as required.

Identify any non-standard or sole source materials in the materials articles of a TSP or MSP. Coordinate with the Product Evaluation Office to ensure that products are available on the Approved Products List (APL).

2-5 INTERMEDIATE REVIEW

For construction contracts, initiate the review process for all MSPs, TSPs, and Developmental Specifications, as needed. This review usually begins by phase III or 90%, but there may be some cases such as TSPs related to Utility Work by Highway Contractor (UWHC) Agreements that are identified later in the project development.

2-6 FINAL REVIEW

The final reviewer will independently perform the tasks of the Initial Review. The initial reviewer and final reviewer will compare results, resolve any conflicts and outstanding issues, and ensure all information is accurate. The initial reviewer, final reviewer, or EOR will compile the Specifications Package using the Specs on the Web application. The EOR is responsible for the completed Specifications Package.

2-7 QUALITY CONTROL (QC) REVIEW

The District Specifications Office or District Maintenance Office will review the Specifications Package in accordance with the QC Plan to verify all applicable Specifications are included, insert information is properly entered, and the package is complete. Individual Supplemental Specifications or Special Provisions in the Specifications Package compiled from the implemented Workbook that have not been modified do not require a review by the State Specifications Office.

2-8 SIGNING AND SEALING

The EOR will review the Specifications Package, sign and seal, and submit to the appropriate Department office. Rule 61G15-23.004, Florida Administrative Code (F.A.C.) provides two options for the digital sealing of electronically transmitted engineering documents. Specs on the Web, and the sample TSP cover sheet included in this handbook have been formatted using the option to use a digitally created seal. If the EOR does not wish to use a digitally created seal, the language accompanying the signature must be revised by the EOR to comply with the Rule.

2-9 DISTRICT QUALITY CONTROL CHECK

The District Specifications Office or District Maintenance Office will check the Specifications Package for completeness and accuracy in accordance with the District QC Plan prior to the Plans, Specifications, and Estimates (PS&E) submittal to the State Specifications Office or the District Contracts Office. Only maintenance contracts that are federally funded (Class 7) are required to provide the PS&E submittal.

2-10 SUPPLEMENTAL SPECIFICATIONS PACKAGE

Prepare a Supplemental Specifications Package when it becomes necessary to revise either the Specifications Package or a previous Supplemental Specifications Package once it has been submitted to and accepted by the State Specifications Office or the District Contracts Office. Prepare the Supplemental Specifications Package in accordance with the requirements of this Handbook and the following:

- Insert the Digital Signature date, of the Specifications Package being supplemented, in the first paragraph of the Supplemental Specifications Cover Page.
- Ensure the last page of the Supplemental Specifications Package is included and states "This Completes This Supplemental Specifications Package."

SECTION 3 – MODIFIED SPECIAL PROVISIONS

3-1 GENERAL

Identify the need for an MSP as early as possible in the development of the project and coordinate with the District Specifications Office (or District Maintenance Office, as appropriate), as outlined in Section 2-3 of this Handbook. Coordinate with the District Specifications Office which standard specification sections(s) need modifications. Use the applicable Word file for the Fiscal Year in which the project's letting is to occur. The process of developing an MSP should parallel the process of developing the Plans.

3-2 DEVELOPMENT AND FORMAT

In some cases, the Standard Specifications must be modified to meet the needs of a given project. All MSPs are project specific and must be justified with a valid reason.

The following guidelines for development of a Modified Special Provision are a compilation of issues frequently observed during review.

- 1. Provide additional information when requesting an MSP using the Modified Special Provision Approval Form.
- 2. Provide the header of the Section, Revision Date, and Lead in Sentence.
- 3. Use Track Changes when modifying or adding a new Standard Specification or Special Provision in accordance with Style Guide.
- 4. Upon approval, ensure all Track Changes are accepted when placing the final, accepted, version into the Specifications Package.
- 5. MSPs must be signed and sealed by an Engineer of Record, after the approval of the State Specification Engineer.

A Style Guide for Specifications and Specifications Format Template are available on the State Specifications Office website at the following URL: https://www.fdot.gov/programmanagement/packagepreparation/default.shtm

The format and style of an MSP should resemble as much as possible the format and style of the implemented Specifications. An MSP should be prepared using AASHTO format in accordance with Procedure Topic No. 630-010-001 Specification Development.

If material requirements are modified by an MSP, existing APL products are not automatically approved for the new specification content. Contact Product Evaluation for assistance.

3-3 PROCESS REVIEW

Request to modify a Standard Specification or Special Provision using the following steps:

- 1. Provide a Modified Special Provision Approval Request and redline proposed Specification revision.
- 2. Submit to District Specification Engineer or District Maintenance Engineer for review.
- 3. The District Specifications Office or District Maintenance Office will submit to the State Specifications Engineer for Central Office Review.
- 4. The State Specifications Office will forward to the State Construction Office (SCO) or Office of Maintenance (OOM), Office of General Counsel and the appropriate Central Office technical experts for review.
- 5. When comments are provided, MSPs will be returned to District Specification Office for response.

The State Specifications Engineer will approve or deny the use of a project specific MSP.

Modified Special Provision in a Specification Package.

Using the following guidelines when formatting an MSP in a Specification Package:

- Manually implement the MSPs in numerical order, including Section Header, Revision Date, and Lead in Sentence.
- Update the Table of Contents.
- When required, specify the product name in the Materials Article of the MSP for products with approved Sole Source documentation, per the FDOT Design Manual (FDM) 110.4.1. These products must be listed on the APL.

3-4 BLANKET MODIFIED SPECIAL PROVISIONS

A Blanket MSP is a modification to a Standard Specification or Special Provision that is pre-approved for specific district use. All new Blanket MSPs or changes to existing Blanket MSPs must be submitted to the State Specifications Engineer for approval two weeks after the eBook is published on November 1st. Blanket MSPs for maintenance must be submitted before the second Friday of December.

SECTION 4 – TECHNICAL SPECIAL PROVISIONS

4-1 GENERAL

Identify the need for a TSP as early as possible in the design development of the project and coordinate with the District Specifications Office as outlined in 2-3 of this handbook. In some cases, TSPs related to UWHC Agreements may not be feasible to meet this requirement. The process of developing a TSP should parallel the process of developing the Plans.

The Technical Special Provision Library is a repository of non-project specific TSP designed to provide a starting point for any Engineer of Record and are a general

guideline for designers. They may update or append as they deem necessary for project specific need and hold full responsibility for the signed and sealed TSP they furnish. The external TSP Library can be found at the following link:

 $\label{eq:https://www.fdot.gov/programmanagement/otherfdotlinks/technical-special-provision-library/tsp-library.$

4-2 DEVELOPMENT AND FORMAT

A TSP must complement the Plans, Specifications, and other Contract Documents and not create any conflicts. The TSP must describe the work to be performed, identify the material requirements, describe the construction or installation requirements, and state how the item will be measured and paid. All TSPs are project specific so any previous TSPs used as references should be reviewed in detail before incorporation.

Comply with the following list:

- Use performance criteria
- Don't use statements such as, "if a conflict exists, the more stringent requirement prevails."
- Don't direct the Contractor's means and methods
- Use TSPs to address aspects of the work not covered by existing Specifications
- Don't use TSPs to override or modify implemented Specifications
- Don't use TSPs to alter or circumvent Developmental Specifications
- Don't use sketches, pictures or drawings in a TSP
- Refer to the Approved Products List (APL) for applicable product types. Contact the Product Evaluation Office for assistance, if products referenced in the TSP are not currently listed.
- Specify the product name in the Materials Article for products with approved Sole Source documentation, per the Florida Design Manual (FDM) 110.4.1. These products must be listed on the APL.
- Verify if the materials are subject to Build America, Buy America (BABA) requirements, per Section 6 of the Standard Specifications. If applicable, ensure that any products or materials described in the TSP have products listed on the APL. Contact Product Evaluation, as needed for assistance.
- Don't specify a Contractor's warranty or increase the time period of a standard manufacturer's warranty.
- Specify standard manufacturer warranties, transferable to the Department at final acceptance.
- Don't require bidders to submit documents (such as experience requirements) or information with the bid that may imply that the bid will be rejected without them. (For maintenance contracts with experience requirements, the experience requirements will be included in the Blanket MSP, not the TSP.)
- Don't include cost estimates, summary of quantities, traffic control phasing, work schedules, or names of suppliers.
- Don't specify a patented or proprietary product or process with the term "or equal."

TSPs shall be prepared using AASHTO format in accordance with Procedure Topic No.

630-010-001 Specification Development:

- Description
- Materials
- Construction Requirements
- Method of Measurement
- Basis of Payment

A Style Guide for Specifications and Specifications Format Template are available on the State Specifications Office website at the following URL: https://www.fdot.gov/programmanagement/packagepreparation/default.shtm

Use the following guidelines for formatting TSPs:

- Use Appendix A when using a digitally signed and sealed TSP cover page and use Appendix B when using an embossed signed and sealed TSP cover page.
- Provide a "T" preceding the Section, article or subarticle.
- Use the Basis of Payment section pay item number(s) to determine the "T" number. If there are more than one, choose the main pay item being used.
- Provide a table of contents for TSPs over 15 pages. A table of contents is recommended for TSPs over 10 pages.
- Number all pages consecutively with the signed and sealed cover page as page 1 of x. Do not use page numbering such as "10 A".
- Provide definitions at the beginning of the TSP, if needed, and indicate these definitions apply only to the TSP and not to any other Contract Documents. Review the definitions in Article 1-3 of the Standard Specifications before including any definitions in the TSP.
- Provide a signed and sealed cover sheet for each TSP prepared as shown in the appendix. Do not provide company logos or headings on the cover sheet.
- Refer to the FDOT Standard Specifications, Supplemental Specifications, or Special Provisions as "the Specifications". Refer to another portion of the TSP as "this Technical Special Provision."
- Use the term "Engineer" when referring to the Department or Department's representative. Do not use references such as Geotechnical Engineer or similar.
- Provide Method of Measurement and Basis of Payment sections in each TSP, even when using lump sum pay items or on lump sum projects. Request the associated pay item in accordance with Chapter 6 of the Basis of Estimates.
- While the style and format of TSP's should follow this format as much as practical, common exceptions to this standard are TSPs prepared for architectural structures such as rest areas and traffic monitoring centers. These TSPs are typically prepared using the American Institute of Architects (AIA) MasterSpec format. Conversion of these TSPs to AASHTO format is usually impractical.
- Refer to the CADD Manual 8-4.2 for proper file naming convention.

Use the following guidelines when formatting a Supplemental TSP:

• Provide a lead in sentence above the TSP Section Header, including the revision date and page numbers.

• When a new Supplemental TSP is developed or if the title of the original TSP has changed, ensure the list of TSPs included in the Table of Contents and Appendix of the Specifications Package is updated accordingly.

4-3 UTILITY WORK

Define the utility work in the Plans and Specifications when the utility work is to be performed pursuant to a Utility Work by Highway Contractor (UWHC) Agreement with the Department. Specifications from the utility owner may be incorporated as TSPs to define the utility work. Only include the technical aspects of the utility work not addressed by FDOT Specifications.

Do not include any language resembling Division I General Covenants and Requirements or construction work that is covered by the Department's Specifications. Ensure the Specifications received from the utility owner mesh with the other parts of the Plans and Specifications and do not re-define terms currently defined in Article 1-3 of the Standard Specifications such as, "the Engineer". As stated above for architectural work, Utility Work by Highway Contractor TSPs are often developed using AIA Master Spec format, converting these TSPs to AASHTO format is usually impractical.

Adhere to the following when writing a TSP for utility work:

- Ensure the TSP and utility plans are consistent with the UWHC Agreement or approved Utility Permit.
- Do not refer to the UWHC Agreement or approved Utility Permit in the TSP.
- Do not use the word "abandoned" for utilities not in service. Use "out of service" instead.
- Do not replace the "Engineer" with a utility representative. The Engineer has full authority, but utility representatives may provide technical assistance to the Engineer. Alternate language may be "the Engineer, in conjunction with a utility representative," if needed.
- Do not provide a list of required or suggested utility contractors but provide reasonable objective qualifications that are required for utility contractors and their employees.
- Do not use a preferred list of vendors or products if the costs for utility work are reimbursable by the Department. The utility owner must provide justification to the Department if there is a legitimate concern for compatibility requiring specific products to be stated in the TSP. Early discussions with the utility owner are required to ensure the needs of both parties to the agreement are satisfied.
- A preferred list of vendors or products may be used if the costs for utility work are non-reimbursable.
- Verify if the utility work is subject to Build America, Buy America (BABA) requirements, per Section 6 of the Standard Specifications. If applicable, ensure that any products or materials described in the TSP have products listed on the APL. Contact Product Evaluation, as needed for assistance.
- If the TSP for utility work is prepared by an internal employee of the Utility Agency/Owner, the TSP for the utility work does not require signing and sealing.

4-4 DISTRICT OFFICE RESPONSIBILITIES

The District Specifications Office or District Maintenance Office shall review all TSPs for compliance with Department requirements for specification development and potential conflicts with the Plans and Specifications. The review shall be performed in accordance with the District Quality Control Plan. The District Specifications Office shall coordinate the legal review with the Office of General Counsel and the District's appropriate technical discipline(s), as necessary. The District Specs Office will upload all finalized TSPs using SharePoint: https://fldot.sharepoint.com/sites/FDOT-FinalPlans/Technical%20Special%20Provisions/Forms/TSP.aspx.

4-5 CENTRAL OFFICE RESPONSIBILITIES

The State Specifications Office may assist the districts with the review or coordinating the review of a TSP when requested. The State Specifications Office will maintain a list of construction contract TSPs to identify frequently used TSPs for potential development and implementation as a Standard Specification.

SECTION 5 – DESIGN-BUILD PROJECTS

The District Construction Office is responsible for reviewing the Specification Package prior to release for construction. The Division I Design-Build Boilerplate is developed using the current edition in effect and adopted by the Department as of the date the Bid Price Proposals are due in the district.

The Division I Specifications are developed using a boilerplate provided by the State Specifications Office posted on the web at the following url: <u>https://www.fdot.gov/programmanagement/Implemented/DesignBuild/Default.shtm</u>

Any identified Division I Special Provisions that are included in the attachments to the Request for Proposal (RFP) are already considered a contract document and do not need to be incorporated into the Specs Package. The completed boilerplate document is attached to the RFP along with any Developmental Specs, TSPs or MSPs required by the Department.

After award of the contract, the Design-Build firm will incorporate all Division II and III Specifications including Special Provisions, Developmental Specs, and MSPs into the Specifications Package using the Specs on the Web application. Once the package is completed, the Design-Build firm submits it to the District Construction Project Manager for review and approval to be stamped "Released for Construction" prior to the Contractor beginning work. Once "Released for Construction", any changes to the Specifications Package will be added by the District Construction Office via Supplemental Agreement.

More information regarding Design-Build may be found on the Construction web site: <u>https://www.fdot.gov/construction/DesignBuild/Design-Build.shtm</u>

SECTION 6 - LOCAL AGENCY PROGRAM (LAP)

For local agency projects with federal funds, please refer to the FDOT LAP Manual for guidance on the preparation of FDOT LAP specifications to be included with the local agency's bid documents and provisions. All LAP projects must use Specs on the Web to generate specification packages. For local agency projects with FDOT State funded grants, please refer to the Local Agency Agreement for plans and specification requirements.

SECTION 7 – TRAINING

7-1 GENERAL

Lead EORs responsible for preparing Specifications Packages shall complete training in the preparation of Specifications Packages. The course, "Specification Package Preparation Training" must be completed by consultant and in-house EORs prior to signing and sealing any Specification Package for FDOT projects. This course may be delivered face-to-face or via electronic format. Upon completion, this course is not required to be retaken. Use "Specification Package Preparation Training" link below: https://floridaltap.org/specification-training/.

Upon completion of the "Specification Package Preparation Training," consultant and inhouse EORs must take the online "Specifications Package Preparation Recertification CBT" every 5 years to maintain eligibility to sign and seal any Department Specification Package. Upon completion of the Recertification CBT, the consultant and in-house EOR must send a copy of the Course Completion form or a screenshot of the final exam score to the State Specifications Office at <u>CO-SPECDEV@dot.state.fl.us</u>. Use the following link to the online recertification CBT below: http://wbt.dot.state.fl.us/ois/SpecPackCBT/index.htm

7-2 DISTRICT OFFICE RESPONSIBILITIES

The District Program Management personnel shall verify that consultant and in-house EORs are listed on the Florida LTAP Center's website at: <u>https://floridaltap.org/specification-training/</u>

7-3 CENTRAL OFFICE RESPONSIBILITIES

The State Specifications personnel shall manage and maintain the "Specification Package Preparation Training", the "Specifications Package Preparation Recertification CBT", and the certification list. The State Specifications personnel shall also maintain the Specs on the Web User Guide available for download at:

http://www.fdot.gov/programmanagement/PackagePreparation/Default.shtm

SECTION 8

APPENDICES

APPENDIX A

TECHNICAL SPECIAL PROVISION

FOR

SECTION TXXX

TSP Title

FINANCIAL PROJECT ID: ______

This item has been digitally signed and sealed by ______ 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.

Fla. License No.:	
Firm Name:	
Firm Address:	
City, State, Zip code:	
Pages:	

Page 12 of X

APPENDIX B

TECHNICAL SPECIAL PROVISION

FOR

SECTION TXXX

TSP TITLE

FINANCIAL PROJECT ID: _____-___

I hereby certify that this Technical Special Provision was prepared by me, or under my responsible charge, in accordance with procedures adopted by the Florida Department of Transportation.

Prepared by:	
Fla. License No.:	
Firm Name:	
Firm Address:	
City, State, Zip code:	
Pages:	

Page 13 of X