

Florida Department of Transportation



Specifications Handbook

July 14, 2020

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SECTION 1 – INTRODUCTION

1-1 GENERAL

This Handbook provides guidance to the District Specifications Office, District Maintenance Office, and designers (Department and consultant EOR's) 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 h.

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.

2-2 SPECIFICATIONS PACKAGE FILE

Create a file to maintain the individual documents and correspondence that will be used to prepare the Specifications Packages and Supplemental Specifications Packages.

2-3 PRE-CHECK

The designer/Engineer of Record (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 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 project. The District Specifications Office may submit a request to use a Developmental Specification on a project to the State Specifications Office using SharePoint:

<http://cosp.dot.state.fl.us/sites/stateengineer/ProgMgmt/SpecDevel/Lists/Developmentals/AllItemsView.aspx>.

Use a TSP if an implemented Division II or III Specification is not available. 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 information above to modify existing specifications. All TSPs must be reviewed by the Office of General Counsel. The District Specifications Office will coordinate these reviews. Once approved, Districts shall upload all TSPs using SharePoint:

<http://cosp.dot.state.fl.us/sites/stateengineer/ProgMgmt/FinalPlans/Technical%20Special%20Provisions/Forms/TSP.aspx>.

2-4 INITIAL REVIEW

The initial and final reviewers are typically part of the 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 typically includes:

- 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.

2-5 INTERMEDIATE REVIEW

For construction contracts, initiate the review process for all MSPs, TSPs, and Developmental Specifications, as needed. Ensure specifications work with the APL, IPL, or Sole Source items. This review should normally begin 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 complete. The EOR is responsible for the Specifications Package and is not always considered the final reviewer. The initial reviewer, final reviewer, or Engineer of Record (EOR) will compile the Specifications Package using the web application Specs on the Web.

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 Engineer of Record 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 Engineer of Record 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 Program Management Office or the District Contracts Office. For maintenance contracts, only those that are federally funded, are required to provide the PS&E submittal.

2-10 REISSUED SPECIFICATIONS PACKAGE

Prepare a Reissued Specifications Package when a project is being re-advertised. Update the Reissued Specifications Package to the current Workbook, if applicable. Prepare the Reissued Specifications Package in accordance with the requirements of this handbook except use the word "REISSUED" preceding the Specifications Package date.

2-11 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 Program Management 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 a Modified Special Provision (MSP) 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. The process of developing an MSP should parallel the process of developing the Plans.

For maintenance specifications packages, identify the need for a Modified Special Provision during the Initial Review.

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 sign 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 Program Management Office website at the following URL: <https://www.dot.state.fl.us/programmanagement/PackagePreparation/WritingAids/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.

3-3 PROCESS REVIEW

Request to modify a Standard Specification or Special Provision

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. Central 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.
6. 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 Section title to the Table of Contents and number all pages sequentially.

3-4 BLANKET MODIFIED SPECIAL PROVISIONS

A Blanket Modified Special Provision (MSP) is a modification to a Standard Specification or Special Provision that is pre-approved for specific district use. All Blanket MSPs must be submitted to the State Specifications Engineer for approval two weeks before the Workbook is published, which is typically the last Friday of August and the last Friday of February. Blanket MSPs for maintenance must be submitted before the last Friday of September and the last Friday of March.

SECTION 4 – TECHNICAL SPECIAL PROVISIONS

4-1 GENERAL

Identify the need for a Technical Special Provision (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.

4-2 DEVELOPMENT AND FORMAT

A TSP must complement the Plans, Specifications, and other Contract Documents and not create any conflicts. A 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 below list of Dos and Don'ts:

- Do 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
- Do use TSP's to address aspects of the work not covered by existing Specifications
- Don't use TSP's to override or modify implemented Specifications
- Don't use TSP's to alter or circumvent Developmental Specifications
- Don't use sketches, pictures or drawings in a TSP
- Don't reference the Approved Products List.
- Don't specify a Contractor's warranty or increase the time period of a standard manufacturer's warranty.
- Do 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."
- Do provide District Design Engineer - approval if a sole source patented or proprietary product or process is required. Refer to the Florida Design Manual Chapter 110 "Initial Engineering Design Process", website at the following URL:
<https://www.fdot.gov/roadway/FDM>

TSP's 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 Program Management Office website at the following URL:

<https://www.fdot.gov/programmanagement/PackagePreparation/WritingAids/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.

- 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”. Add an additional page number when the TSP is inserted to reflect the consecutive numbering within the Specifications Package.
- 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 implemented Specifications before including any definitions in the TSP.
- Provide a signed and sealed cover sheet for each TSP prepared as shown in 3-5. Do not provide company logos or headings on the cover sheet.
- Refer to the 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 TSP's prepared for architectural structures such as rest areas and traffic monitoring centers. These TSP's are typically prepared using the American Institute of Architects (AIA) MasterSpec format. Conversion of these TSP's to AASHTO format is usually impractical.

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.
- Ensure the last page of the Supplemental TSP included, states “This Completes This Supplemental Specifications Package.”

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.

- 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. Contact the State Specifications Office prior to use.
- 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.

4-5 CENTRAL OFFICE RESPONSIBILITIES

The State Program Management Office may assist the districts with the review or coordinating the review of a TSP when requested. The State Program Management 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 Specification Package for a Design Build project is developed using the implemented Specifications applicable for the date the Cost Proposals are due (letting).

The Division I Specifications are developed using a boilerplate provided by the State Specifications Office posted on the web at the following url:

<https://www.fdot.gov/programmanagement/Implemented/DesignBuild/Default.shtm>

Certain Special Provisions that may be applicable for Design Build projects are also posted on the web site and may be inserted into the boilerplate as necessary. The completed boilerplate document is attached to the Request for Proposal (RFP) along with any Developmental Specs, TSPs or MSPs required by the Department. All required Developmental Specs, TSPs, or MSPs must follow the same processing requirements of this handbook.

The Division II and III Specifications are required to be incorporated into the Specifications Package 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:

<https://www.fdot.gov/construction/DesignBuild/Design-Build.shtm>

SECTION 6 – TRAINING

6-1 GENERAL

EOR’s shall complete training in the preparation of Specifications Packages. The course, “Consultant Specification Package Preparation Training” must be completed by consultant EOR’s 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. A link to the “Consultant Specification Package Preparation Training” is below:
<http://www.fdot.gov/programmanagement/PackagePreparation/Default.shtm>

Upon completion of the “Consultant Specification Package Preparation Training”, consultant EOR’s 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 EOR must send a copy of the Course Completion form or a screenshot of the final exam score to the appropriate District Specifications Office or to the State Specifications Office at CO-SPECDEV@dot.state.fl.us, but not both. A link to the online Recertification CBT is below:

<http://wbt.dot.state.fl.us/ois/SpecPackCBT/index.htm>

6-2 DISTRICT OFFICE RESPONSIBILITIES

District Program Management personnel shall verify that consultant EOR's are listed on the Specifications Training Consultant List, maintained on the Central Office Specifications Sharepoint Site at:

<http://cosp.dot.state.fl.us/sites/stateengineer/ProgMgmt/SpecDevel/SitePages/Specifications%20Training%20Consultant%20List.aspx>.

6-3 CENTRAL OFFICE RESPONSIBILITIES

State Program Management personnel shall prepare and conduct the "Consultant Specification Package Preparation Training" shall maintain the "Specifications Package Preparation Recertification CBT" and shall maintain the Specifications Training Consultant List. Central Office Program Management personnel shall also maintain the Specs on the Web User Guide available for download at:

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

SECTION 7

APPENDICES

APPENDIX A

TECHNICAL SPECIAL PROVISION

FOR

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.

Date: _____
Fla. License No.: _____
Firm Name: _____
Firm Address: _____
City, State, Zipcode: _____
Pages: _____

APPENDIX B

TECHNICAL SPECIAL PROVISION

FOR

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: _____

Date: _____

Fla. License No.: _____

Firm Name: _____

Firm Address: _____

City, State, Zipcode: _____

Pages: _____