

## **Specifications Package Refresher CBT Script**

Welcome to Specifications Package Preparation Re-Certification CBT.

This course is designed for Consultants who have attended the Specifications Package Preparation Training. We want to refresh your memory on the different types of specifications that make up the Specifications Package. We will go over the procedure and process for developing the specifications package, and we will have a discussion on Plan Notes. Finally, we will take a look at Specs on the Web – the web-based application used to create the final specifications package.

Remember the Governing Order of Documents located in 5-2? The Special Provisions are changes to the Standard Specs that provide direction specific to the project. Special Provisions are approved for statewide use.

Technical Special Provisions (Tech Specs or TSPs) contain technical information specific to the project but not found in the Standard Specs. TSPs must be signed and sealed by a Professional Engineer. Plans are specific to the project and are based on the Design Standards - soon to be Standard Plans.

Developmental Specifications provide criteria and direction for using specific products or processes that the Department wants to evaluate. These are signed and sealed by a PE within the Department and monitored for possible implementation in the Standard Specifications.

Supplemental Specifications are changes to the Standard Specifications that will be incorporated into the next Specifications e-Book, implemented bi-annually. The Governing Order of Documents helps us create a specifications package which is unique and specific for each project. There should not be any conflict, or duplication within these documents.

Modified Special Provisions, or MSPs, are changes to the Standard Specifications developed, signed and sealed specific to the project. MSPs are used to modify all statewide specifications and differ from TSPs in that they are based on the Standard Specs. For example, Section 530 Riprap contains criteria for rock to be used in shore protection.

However, if larger boulders are needed for extra protection in shoreline areas, changes are made to the Section 530 of the Standard Specifications and submitted to the State Specifications Office with an MSP request containing cost impacts, project background information, and justification for the changes. Note: Professional or personal preference is not a valid justification.

The request is forwarded to Central Office business area experts and Legal for review and comment. The State Specifications Engineer will approve or deny the request. If approved, the proposed MSP will be returned to the District to be signed and sealed by a Professional Engineer registered in the State of Florida.

Here is an example of the MSP request form.

**MODIFIED SPECIAL PROVISION APPROVAL REQUEST**  
(REV 8-26-09)

**Date:** 12/29/2009

**District:** 3

**Type:** Project Specific

**Letting Month:** 07/2010

**FPID Number:** 42428915201

**Requested by:** Bessie Dickens

**Office/Phone:** D3/SPECS 850-415-9564

**Specification being modified:** RIPRAP – RUBBLE,BANK AND SHORE-LARGE BOLDERS

**Affected Pay Items:** 530-3-5

**Expected Cost Impact to the project:**

The cost per TN of the standard Bank and Shore is ~\$75/TN. The anticipated cost of the Large Boulders is ~\$120/TN. The added cost for this project should be ~\$58000, based on a quantity of 1286 TN.

**Project Description:** This project involves adding large riprap to the approaches of SR 30 (US 98) over Ochlocknee Bay (BN 490034). The large riprap is designed to protect the approached during hurricane events.

**Background Data:** This project is one of the Coastal Bridge Protection projects. The goal of the projects is to protect the bridge approaches during hurricane events. The large boulders needed are much larger than the standard Bank and Shore. Therefore, the specifications must be modified to account for the larger boulders.

**Name and PE Number of PE signing and sealing the Modified Special Provision:**

**PE Name:** Charles F. Craycraft

**PE Number:** 32131

This is the redline version of the specification revision. The clean version of the MSP will be inserted into the Specifications Package as a Special Provision.

**RIPRAP – RUBBLE, BANK AND SHORE – LARGE BOULDERS**  
**(REV ~~12-21-09~~ 1-7-10)**

SUBARTICLE 530-2.2.1 is deleted and the following substituted:

**530-2.2.1 Rubble:**

**530-2.2.1.1 Bank and Shore Protection:** Provide sound, hard, durable rubble, free of open or incipient cracks, soft seams, or other structural defects, consisting of broken stone with a bulk specific gravity of at least 2.30. Ensure that stones are rough and angular.

For this application, use broken stone meeting the following gradation and thickness requirements:

Weight Maximum Pounds	Weight 50% Pounds	Weight Minimum Pounds	Minimum Blanket Thickness in Feet
700	300	60	2.5
Ensure that at least 97% of the material by weight is smaller than Weight Maximum pounds]. Ensure that at least 50% of the material by weight is greater than Weight 50% pounds]. Ensure that at least 85% of the material by weight is greater than Weight Minimum pounds.			

530-2.2.1.2 Coastal Shore Protection: Provide sound, hard, durable rubble, free of open or incipient cracks, soft seams, or other structural defects, consisting of broken stone with a bulk specific gravity of at least 2.65. Ensure that stones are rough and angular.

For this application, use broken stone meeting the following gradation and thickness requirements:

<u>Weight Maximum Pounds</u>	<u>Weight 50% Pounds (W<sub>50</sub>)</u>	<u>Weight Minimum Pounds</u>	<u>Minimum Blanket Thickness in Feet</u>
<u>4400</u>	<u>1100</u>	<u>440</u>	<u>See plans.</u>
<u>Ensure that at least 97% of the material by weight is smaller than Weight Maximum pounds].            Ensure that at least 50% of the material by weight is greater than Weight 50% pounds].            Ensure that at least 85% of the material by weight is greater than Weight Minimum pounds.</u>			

SUBARTICLE 530-5.5 (Page 665) is expanded by the following:

Item No. 530- 3- 5 Rubble, Coastal Shore- Large Boulders - per ton.

Mandatory Revisions are specification changes required by FHWA or DOT in order to be consistent with design standards, Florida Statutes or Rules that must be implemented at some point between the normal six month Workbook implementations. The revisions are critical in nature, usually involving an item of legal or contractual significance in terms of financial risk. The changes will be incorporated into the next Workbook.

The Special Provisions, Supplemental Specifications, Developmental and TSPs, as required for the project, are compiled, reviewed and signed and sealed. If changes are required after the specifications package has been accepted by the District or Central Office Contracts, a Supplemental Specifications Package is prepared and submitted through the revision process.

Remember it still takes 2!! The process for preparing the specifications package is still the same. Once you have a set of Final Plans, combine all the necessary support information and perform an Initial Review. The Initial Review is then

handed to another person for a Final Review. Assemble the package, proof-read and perform a final review (a second Final Review!). Be sure any Modified Special Provisions and Technical Special Provisions have a Legal review.

When all updates and corrections are made, the Engineer of Record will review and sign and seal the package. Then the entire package, including all submittal documentation is sent to the appropriate District personnel for transmittal to Tallahassee or District Contracts.

To merge the specs together for the package, we use the web based application Specs on the Web. To sign up, select Register at the bottom of the log-in screen. Your first password will be sent to you. Use your email address and the password to log-in and set your own password (make sure it is 8 alpha-numeric characters).

If you do not remember your password, contact the FDOT Service Desk and ask to have your Specs on the Web password reset. If you have changed your email address, register your new email address and follow the process for creating a new account. Remember the User Guide is available in the menu without logging into Specs on the Web.

The Home page in Specs on the Web contains the link "Preview a Workbook". By entering the letting date for the project, District and Contract Type - whether Construction, Maintenance, or LAP - you can view the list of Special Provisions, Blanket MSPs, and Supplemental Specifications available.

Select the "Create a Package" button to begin a new specifications package. The Specification Details are used to create the cover page and to provide the right specs for the project letting.

There must be at least two persons (typed names, not initials) in the "Prepared By" field showing the Initial Reviewer and the Final Reviewer. If there were three persons on the team creating the specs package, you should enter all three names – Initial Review, Final Review and EOR. If the EOR is either the Initial or Final reviewer, you may only have two names.

Enter the 11 digit financial project number. From the drop-down for Contract Type, you may enter Construction, Maintenance or LAP. Construction is the default for this field. The Spec Book Month will be either January or July, depending on the Specifications eBook the workbook specs are based on.

Spec Book Year defaults to the latest year in the system, so be sure you select the correct year for the letting of your project. For the next four items, the check boxes are to be checked if the answer to the question is yes, or blank if the answer is no. Select the Letting Date and Year and then Select the District and County.

The first column in the "Select Specifications" screen contains the file names of all specifications available to use in creating the specifications package. To select a file, select the box. The second column provides a link to browse the specification file.

The Description column provides the title of the Specifications, the last revision date, the date of FHWA approval and the implementation date. The implementation date is also the Workbook associated with the file. The Usage Notes in the last column give direction as to when the file is to be used and other files that may or may not be used together in the package.

When a file is selected that contains a blank for information specific to the project to be entered by the user, Edit Insert will appear in the Specification column below the file name. Select Edit Insert to open the box for entering the information. Select Save and the information will appear in the file in the specifications package. When all files are selected, select "Merge Specifications", which is located in the blue bar to the left of the screen.

Always select "Save as" to save your file to your computer as a Word document. The file name should be the 11-digit project number (see Chapter 5 of the CADD Manual). Follow the directions in the Specs on the Web User Guide for preparing the Final Package in Word and Adobe.

When a material, product, system or direction is required for a project that is technical in nature and NOT covered by the Standard Specifications, a Technical Special Provision, or TSP, is written, and signed and sealed by a Professional Engineer registered in the State of Florida.

The Proposal Summary of Pay Items contains a column to the far left titled "SPC". These codes, defined in Chapter 7 of the Basis of Estimates Manual, show when the pay item requires a TSP, plan detail, Developmental Specification or other information to support the pay item in the project. Another source of information about the writing and development of TSPs is in Section 3 of the Specifications Handbook.

TSPs should never be written for or include any administrative direction. Do not make modifications to Sections 1 through 9. These Sections must be processed as a Modified Special Provision through the District Specs Office. Do not include contractor warranties because they are almost impossible to get additional work done after Final Acceptance.

Do include manufacturer warranties. They are acceptable when they are transferable to the Department. These warranties should only be included when they are for standard industry time periods. Some FHWA restrictions may apply.

DO NOT specify a product name or manufacturer name. This may give preferential treatment to those items listed. When necessary, and with justification, the District Design Engineer may approve the use of a proprietary product in accordance with the Department's Proprietary Products Procedure No. 630-020-005.

Use of proprietary products may be approved for:

- Synchronization or System Compatibility
- Unique Need – no equal that meets the need
- Research (experimental) – where State Approval is required

Use performance criteria when possible. Personal preferences for color, size, shape, etc. should not be included. Include only applicable material properties. Don't "sole-source" by specification. In other words, do not write a TSP with such narrow parameters that only one product or one manufacturer can meet them.

Use end-result specifications. Don't tell the Contractor how to perform his job. Use Active Voice – Imperative Mood such as, "Place the Concrete." Utilize the AASHTO format including Description, Materials, Construction Method, Measurement, Basis of Payment, Section, Article, and Sub article, or Section number related to pay item number.

All TSPs should be submitted to the District Specifications Office for review and approval at the time of Phase III plans submission, or sooner. Submittal should include the associated plans and a listing of pay items, which are identified at the Phase II plans stage.

Direction on the use of Plan Notes is found in the Florida Design Manual, the Basis of Estimates Manual and the Specifications Handbook.

When preparing a Spec. Package, there are four important things to remember.

1. Spec. Packages are to be prepared using adopted and implemented FDOT specifications to the maximum extent possible
2. Modifications to standard and special specs, or MSPs, must be processed thru the District and State Specifications Offices
3. Technical Special Provisions, or TSPs, *may not* be used to trump FDOT specifications
4. Don't do things that Dan doesn't like!

To get more information, Contact the District Specifications Office for the district where you are working. Almost everything is available on the Program Management website. This link can be found on the resources. A library is available of previously used and approved technical special provisions.

This concludes the Specifications Package Preparation Re-Certification CBT. Thank you for your time and attention.