

**SPECIFICATIONS:
WHAT – WHEN – HOW
(MSPs & TSPs)**



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MSPs and TSPs

◆ What is a MSP?

- ✓ Modified Special Provision

◆ When do I need one?

◆ How do I write one?

- ✓ Where do I get help?

◆ What is a TSP

- ✓ Technical Special Provision

◆ When do I need one?

◆ How do I write one?

- ✓ Where do I get help?

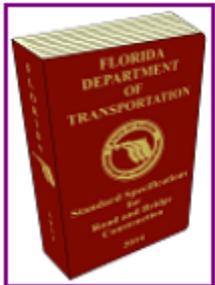
Governing Order of Documents

Article 5-2 Coordination of Contract Documents

- ◆ Special Provisions
 - ✓ (MSPs included here)
- ◆ Technical Special Provisions
- ◆ Plans
- ◆ Design Standards
- ◆ Developmental Specifications
- ◆ Supplemental Specifications
- ◆ Standard Specifications

Specification Definitions

- ◆ *Standard Specifications* – “Standard Specifications for Road and Bridge Construction”, applicable to all Department Contracts containing adopted requirements, setting out or relating to the method or manner of performing work, or to the quantities and qualities of materials and labor.



This document contains the most recent published version of FDOT's Standard Specifications for Road and Bridge Construction, effective for project lettings beginning January 2014. Please view and read the Distribution memo for more information.

January 2014 Distribution Memo

Download the **2014 Standard Specifications eBook** in .pdf (file size = < 8 MB).

Specification Definitions

- ◆ *Supplemental Specifications* – Approved additions and revisions to the Standard Specifications, applicable to all Department Contracts or implemented on a widespread basis.
- ◆ *Special Provisions* – Specific clauses adopted by FDOT that add to or revise Standard or Supplemental Specs, setting forth varying conditions applicable to a specific project or a specific set of conditions.

Specification Definitions

- ◆ *Developmental Specifications* – Specifications developed around a new process, procedure or material, approved for limited use.
- ◆ *Technical Special Provisions* – Specifications of a technical nature, prepared, signed and sealed by an Engineer registered in the State of Florida, other than the State Specifications Engineer or his designee, that are made part of the Contract as an attachment to the Contract Documents.

Simple Rules on MSPs and TSPs

- ✓ We have Flexibility to Modify Statewide Specs to Accommodate Documented Individual Project Needs
- ✓ BUT, Personal, Professional and even District Preferences are not Valid Justifications
- ✓ Requests must be Processed through the District Specs Office – No Workarounds.
This INCLUDES Plan Notes
- ✓ If Done Correctly, It Doesn't Take Much Time

Active Voice

- ◆ 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.

•Passive Voice (old style):
“The concrete shall be placed by the contractor in accordance with the plans and drawings.”

•Active Voice:
“The contractor is to place the concrete.”

•Active Voice Imperative Mood:
“Place the concrete.”

Depicts a **Straight-forward** communication!

End Result Specifications

- ◆ FDOT prefers to use End Result Specifications instead of Means and Methods
 - ✓ Don't tell the Contractor "How" to perform the Work
 - ✓ Designers' Strengths are in specifying **what** is to be built
 - ✓ Contractors' Strengths are in using their knowledge, experience and resources to decide **how** to build it
 - ✓ Effective in Claims Avoidance

Modified Special Provisions (MSP)

- ◆ Used to modify all Statewide Specs, in Spec Book or a Workbook
- ◆ May be initiated as early as 60% Plans phase in the Design process
- ◆ Draft in Redline/Strikethrough format
- ◆ Submit justification for change; must document the project need
- ◆ Include cost impacts
- ◆ Professional/Personal preference is NOT a valid justification.

MSP Review Process

- ◆ Submit to District Specs Office
- ◆ Reviewed in District
- ◆ Submitted to State Specs Office for Central Office Review
- ◆ Review Justification for Deviation from Statewide Implementation (Similar to Design Exception)
- ◆ Reviewed by Technical Expert
- ◆ Reviewed by General Counsel
- ◆ Response back to District

MODIFIED SPECIAL PROVISION APPROVAL REQUEST

(REV. 8-26-09)

Date: 2/14/2013

District: 3

Type: Project Specific

Letting Month: 4/2013

FPID Number: 42929715201

Requested by: Bessie Dickens

Office/Phone: D3/SPECS 850-330-1381

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

Affected Pay Items: 530-3-5

Expected Cost Impact to this project:

The cost per TN of the standard Bank and Shore is ~\$75/TN. The anticipated cost of the Large Boulders is ~\$90/TN. The added cost for this project should be ~\$45,630, based on a quantity of 3,042 TN.

Project Description: This project involves adding large riprap to the approaches of SR 30 (US 98) over St. Joe Bay Inlet (BN 510014). The large riprap is designed to protect the approaches 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:

PE Number:

I hereby certify that this Specification was prepared under my responsible charge, and that it has been reviewed in accordance with procedures adopted and implemented by the Florida Department of Transportation.

**RIPRAP – RUBBLE, BANK AND SHORE – LARGE BOULDERS
(REV 2-14-13)**

SUBARTICLE 530-2.2 is deleted and the following substituted:

530-2.2.1 Rubble:

530-2.2.1 Rubble (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.			

530-2.2.2 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:

Weight Maximum Pounds	Weight 85% Pounds	Weight 50% Pounds	Weight Minimum Pounds	Minimum Blanket Thickness in Feet
2240	1200	560	225	3.0 (See plans)
Ensure that at least 97% of the material by weight is smaller than Weight Maximum pounds. Ensure that at least 15% of the material by weight is greater than Weight 85% pounds. Ensure that at least 50% of the material by weight is greater than Weight 50% and that no more than 70% of the material is greater than Weight 50% pounds. Ensure that at least 85% of the material by weight is greater than Weight Minimum pounds.				

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

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

How is a TSP written? – Best Practices

- ◆ Provide definitions at the beginning of the TSP, if needed and if they are not already included in Article 1-3 of the *Standard Specifications*.
- ◆ Follow the AASHTO Format
 - ✓ Description
 - ✓ Materials
 - ✓ Construction Requirements
 - ✓ Method of Measurement
 - ✓ Basis of Payment
- ◆ Make acceptance of materials and products clear (certification, testing, etc.)

How is a TSP written? – Top 10 Do Not's

- ◆ 1. Do not override or duplicate an implemented specification. A TSP is not a *TRUMP CARD*.
- ◆ 2. Do not modify or duplicate Sections 1 through 9 of the *FDOT Standard Specifications*.
- ◆ 3. Do not copy and paste from a previously used TSP without reviewing and reconciling the language vs. the applicable FDOT specifications.
- ◆ 4. Do not use sketches, pictures or drawings in a TSP – that's what Plans are for.
- ◆ 5. Do not require bidders to submit documents or data with the bid.

How is a TSP written? –Top 10 Do Not's

- ◆ 6. Do not use statements such as, “If a conflict exists, the more stringent requirement prevails.” NEVER rely on the governing order of documents to substitute for vaguely written specifications.
- ◆ 7. Do not reference the Qualified Products List or the Approved Product List.
- ◆ 8. Do not require a patented or proprietary product or process with the term “or equal.”
- ◆ 9. Do not inadvertently require a proprietary product by copying and pasting from a manufacturer’s specification.
- ◆ 10. Do not specify a contractor's warranty or increase the terms of a standard manufacturer’s warranty.

Warranties

- ◆ Do not specify contractor warranties.
 - ✓ Not readily enforceable.
 - ✓ Covered by FDOT Standard Specifications and Value Added specifications for Design-Build projects.
 - ✓ Often turn into maintenance – other procurement methods are available if maintenance is required.
- ◆ Do not increase the time or terms of manufacturer warranties.
 - ✓ Difficult to track and enforce after Final Acceptance.
 - ✓ Covered by FDOT Standard Specifications and standard manufacturer warranties.

Plan Notes

- ◆ Plans Preparation Manual – Volume 1, Chapter 17, 17.4.5
- ◆ Plans Preparation Manual – Volume 2, Chapter 1, 1.5
- ◆ Basis of Estimates Manual – Chapter 7, 7.1
- ◆ Specifications Handbook – Section 2, 2-2.3

***Plan notes should not change, conflict with,
or duplicate the Specifications.***