## **ORIGINATION FORM**

## **Proposed Revisions to the Specifications**

(Please provide all information - incomplete forms will be returned)

Date:	Office:				
Originator:	Specification Section:				
Telephone:	Article/Subarticle:				
email:					
**Will the proposed revision require changes to	o:				
Publication	Yes	No		Staff Contacted date contacted	
Standard Plans Index					
Traffic Engineering Manual					
FDOT Design Manual					
Construction Project Administration Manual					
Basis of Estimate/Pay Items					
Structures Design Guidelines					
Approved Product List					
Materials Manual					
**This section must be completed prior to pro Will this revision necessitate any of the followir		oposed revis	ions.		
Design Bulletin Construction Bulletin	E	stimates Bull	etin	<b>Materials Bulletin</b>	
Are all references to external publications curre	ent?	Yes	No		
If not, what references need to be updated? (PI	lease inclu	ide changes i	in the redline o	document.)	
Why does the existing language need to be cha	nged?				
Are these changes applicable to all Department	: jobs?	Yes	No		



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## MEMORANDUM

**DATE:** November 27, 2019

**TO:** Specification Review Distribution List

**FROM:** Daniel Strickland, P.E., State Specifications Engineer

**SUBJECT:** Proposed Specification: 9930202 Object Markers and Delineators.

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Paul Gentry from the Program Management Office to update the language for High Performance delineators, impact testing requirements and to remove references to ASTM D1925.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or online at <a href="http://fdotewp1.dot.state.fl.us/programmanagement/development/industryreview.aspx">http://fdotewp1.dot.state.fl.us/programmanagement/development/industryreview.aspx</a>. Comments received after **December 25, 2019,** may not be considered. Your input is encouraged.

DS/VC Attachment

## OBJECT MARKERS AND DELINEATORS (REV 11-13-2019)

SUBARTICLE 993-2.2.2 is deleted and the following substituted:

**993-2.2.2 Color:** The post shall be opaque white. The yellowness index shall not exceed 12 when tested in accordance with ASTM D1925 or ASTM E313. The daylight 45 degree, 0 degree luminous directional reflectance shall be a minimum of 70 when tested in accordance with ASTM E1347.

SUBARTICLE 993-2.4.3 is deleted and the following substituted:

**993-2.4.3 Color:** The plastic post shall be opaque white. The yellowness index shall not exceed 12 when tested in accordance with ASTM D1925 or ASTM E313. The daylight 45 degree, 0 degree luminous directional reflectance shall be a minimum of 70 when tested in accordance with ASTM E1347 or ASTM E1164.

SUBARTICLE 993-2.5.1 is deleted and the following substituted:

993-2.5.1 Dimensions: The delineator shall have a minimum height of-36 48 inches above the pavement surface and have a minimum dimension of 2 inches.

SUBARTICLE 993-2.5.2 is deleted and the following substituted:

993-2.5.2 Post Base: The base shall be manufactured to accommodate the replacement of the post. The base shall be mechanically anchored to the pavement and be capable of withstanding fifty vehicle impacts without damage.

SUBARTICLE 993-2.5.3 is deleted and the following substituted:

**993-2.5.3 Color:** The plastic post shall be opaque white. The yellowness index shall not exceed 12 when tested in accordance with ASTM D1925 or ASTM E313. The daylight 45 degree, 0 degree luminous directional reflectance shall be a minimum of 70 when tested in accordance with ASTM E1347 or ASTM E1164.

SUBARTICLE 993-2.5.5 is deleted and the following substituted:

993-2.5.5 Impact Performance: The post, installed according to manufacturer's recommendations, shall be capable of returning to a vertical position plus or minus 5 degrees with no delaminating after receiving fifty vehicle impacts when tested according to National testing Product Evaluation Program (NTPEP). The NTPEP requirement of one-half of the hits at 32°F is waived. All hits shall be at 65°F or greater. NTPEP data or independent test lab data shall be submitted for product approval. For acceptance purposes there should be no post failures and no more than two posts may list between 5° and 10° after receiving fifty vehicle impacts. To resist an impact of a test vehicle, the post must restore to within 10 -degrees of vertical in any direction, and not have a crack or tear through more than 50% of its cross section. List/Lean

must be measured from the point the post protrudes from the base to the top edge of the post. For acceptance purposes, there should be no post failures and no more than two posts may list between 5 -degrees and 10 -degrees after receiving fifty vehicle impacts.

Impact testing must be performed in accordance with NTPEP Evaluation of Temporary Traffic Control Devices: Flexible Delineators, for the category of High Speed Applications. Testing must be performed by a facility that is listed on the Laboratories Accredited to Crash Test Roadside Safety Hardware which can be found at the following URL: <a href="http://tf13.org/Subcommittee">http://tf13.org/Subcommittee</a> 7 Test Facilities.php