ORIGINATION FORM

Proposed Revisions to the Specifications

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

te:		Office:			
Originator:	Specification Section:				
Telephone:		Article/Subarticle:			
email:					
**Will the proposed revision require chang	ges to:				
Publication			Office Staff Contacted and 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 Will this revision necessitate any of the fol		proposed rev	risions.		
Design Bulletin Construction Bullet	ulletin Estimates Bulletin		ulletin	Materials Bulletin	
all references to external publications current?		Yes	No		
If not, what references need to be updated	l? (Please in	clude change	s in the redline	document.)	
Why does the existing language need to be	e changed?				
Summary of the changes:					
Are these changes applicable to all Departi If not, what are the restrictions?	Yes	No			



RON DESANTIS GOVERNOR

KEVIN J. THIBAULT, P.E. SECRETARY

MEMORANDUM

DATE: December 10, 2020

TO: Specification Review Distribution List

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

SUBJECT: Proposed Specification: **5230200 Patterned Pavement.**

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

This change was proposed by Sarah Smith from the Program Management Office to move the material language to Division III, Section 976 Surface Treatments.

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 http://fdotewp1.dot.state.fl.us/programmanagement/development/industryreview.aspx. Comments received after January 7, 2021 may not be considered. Your input is encouraged.

DS/rf

Attachment

PATTERNED PAVEMENT (REV 10-28-20)

ARTICLE 523-2 is deleted:

523-2 Materials.
523-2.1 General: Use only patterned pavement products approved for use in vehicular
and non-vehicular areas, as appropriate, and listed on the APL. Meet manufacturer's
specifications for all patterns, textures, templates, sealers, coatings and coloring materials.
Material coatings used to achieve the pattern and color shall produce an adherent
weather resistant, skid resistant, wear resistant surface under service conditions. Color shall be
integral and consistent throughout the installation. The composition of materials is intended to be
left to the discretion of the manufacturer.
Materials shall be characterized as non-hazardous as defined by Resource
Conservation and Recovery Act (RCRA), Subpart C, Table 1 of 40 CFR 261.24 "Toxicity
Characteristic". Materials shall not exude fumes which are hazardous, toxic or detrimental to
persons or property.
523-2.2 Approved Product List (APL): Manufacturers seeking evaluation of their
product shall submit an application in accordance with Section 6 along with the following
documentation:
1. Manufacturer's recommendations for applicability of use on concrete or
asphalt surfaces.
2. Manufacturer's recommendation for applicability of use in vehicular or
non vehicular travel areas.
3. Manufacturer's specifications and procedures for materials and
installation for each use above.
4. For products proposed for use in vehicular traffic areas, independent
test data verifying the material meets the requirements of this Section including verification that
the product, installed in accordance with the manufacturer's specifications and procedures, has
been tested in accordance with either:
a. ASTM E-274, Skid Resistance of Paved Surfaces using a
standard ribbed full scale tire at a speed of 40 mph (FN40R), and has a minimum FN40R value
of 35, or
b. ASTM E-1911, Measuring Paved Surface Frictional Properties
Using the Dynamic Friction Tester (DFT), at a speed of 40 mph (DFT40), and has a minimum
DFT40 value of 40.
5. For products proposed for use in non-vehicular traffic areas,
independent test data verifying the material meets the requirements of this Section including
verification that the product, installed in accordance with the manufacturer's specifications and
procedures, has been tested in accordance with ASTM E 303 using the British Pendulum Tester
and has a British Pendulum Number (BPN) of at least 40.
523-2.3 Performance Requirements for Products in Vehicular Travel Areas: In
addition to the submittal requirements of 523-2.2, APL approval will be contingent on a field
service test demonstrating that the patterned pavement product meets the following performance
measures at the end of three years from opening to traffic:
1. The average thickness shall be a minimum of 50% of the original thickness.

- 2. Wearing of the material coating shall not expose more than 15% of the underlying surface area as measured within the traveled way.
- 3. Friction performance of patterned/textured pavement materials shall meet or exceed one of the following test method values:
 - a. FN40R value of 35 in accordance with ASTM E-274; or,
 - b. DFT40 value of 40 in accordance with ASTM E-1911

Manufacturers shall provide a field service test installation of each product within a marked crosswalk on a roadway with an ADT of 6,000 to 12,000 vehicles per day per lane, on a site approved by the Department. The test installation shall be a minimum six feet wide and extend from pavement edge to pavement edge across all traffic lanes and shoulder pavement at the crosswalk location. The test installation shall be tested by the manufacturer in accordance with FM 5-592.

ARTICLE 523-3 is deleted and the following substituted:

523-23 Construction.

- **523-23.1 Product Submittals:** Prior to installation, submit pattern and color samples to the Engineer for confirmation that the product meets the pattern and color specified in the Plans. Do not begin installation until acceptance by the Engineer.
- **523-23.2 Pavement Cuts:** Complete all utility, traffic loop detector, and other items requiring a cut and installation under the finished surface, prior to product installation.
- **523-23.3 Surface Protection:** Protect treated surfaces from traffic and environmental effects until the product is completely installed, including drying and curing according to the manufacturer's instructions.
- **523-23.4 Installation Acceptance:** For installation on new asphalt roadways, apply patterned pavement a minimum of 14 days after placement of the adjacent pavement.

Upon completion of the installation, the Engineer will check the area at random locations for geometric accuracy. If any of the chosen areas are found to be deficient, correct the entire patterned area at no additional cost to the Department.

Submit certification that the patterned pavement was installed in accordance with the manufacturer's requirements.

ARTICLE 523-4 is deleted and the following substituted:

523-34 Method of Measurement.

The quantity to be paid will be the plan quantity in square yards of patterned pavement, completed and accepted. No deduction will be made for areas occupied by landscaping, manholes, inlets, drainage structures, or by any public utility appurtenances within the area.

ARTICLE 523-5 is deleted and the following substituted:

523-45 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section. Payment will be made under:

Item No. 523- 1-

Patterned Pavement (Vehicular Areas) - per square yard. Patterned Pavement (Non-Vehicular Areas) - per square Item No. 523- 2yard.