

Comments Received From Industry Review

Bill Richards

File: 7110000 – Thermoplastic Traffic Stripes and Markings
Username: Bill Richards
UserEmail: william.richards@dot.state.fl.us
UserTel: (386) 943-5161 or SC 373-5161
Date: Wednesday, June 08, 2005
Time: 12:55:33 PM

Comments:

In 711-4.1, why place the removal of existing pavement markings in 102-5.9. 102-5.9 specifies that the removal of marking for specific reasons is covered in the Lump Sum MOT items and the BOE is also covers what is to be handled in this Lump Sum pay item. Since there is a pay item for removal of existing pavement markings (709-7), this sub article should have the last sentence of the first paragraph, concerning payment for removal, removed.

Donald Rauch

Proposed Specification revision of 7110000 – Thermoplastic Traffic Stripes and Markings

In a quick review that I have done so far, I noticed that the Florida Test Method has not been changed in this specification.

Need to change FM 5-541 to FM 5-579 in the following locations: 711-4.1 and 711-4.3

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Henri Belrose

Mr. Brautigam,

Under section 711-4.1, payment for marking removal is proposed to be in accordance with 102-5.9. The proposed changes to section 102-5.9 state that the cost for removal of conflicting pavement markings (paint or thermo) will be included in Lump Sum MOT.

The proposed changes for section 710 delete pay item no. 710-11. Will pay item no. 711-7 also be deleted? There is no strikethrough of this pay item in the proposed spec.

Can I expect these changes to be implemented for lettings beginning January 2006?

Henri V. Belrose, PE
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Mike Ruland

File: 7110000 – Thermoplastic Traffic Stripes and Markings
Username: Mike Ruland, P.E
UserEmail: michael.ruland@dot.state.fl.us
UserTel: (386)258-4445 or SUNCOM 380-4445
Date: Tuesday, June 21, 2005
Time: 11:11:27 AM

Comments:

Possibly add verbiage that any asphalt pavement that is damaged as a result of existing striping removal shall be replaced at no additional cost.

Eric Jagers

File: 7110000 – Thermoplastic Traffic Stripes and Markings
Username: Eric Jagers
UserTel: 352-315-3100
Date: Tuesday, June 21, 2005
Time: 09:26:43 AM

Comments:

1 mile to reapply due to deficiency seems excessive.

Charles Doyle

File: 7110000 – Thermoplastic Traffic Stripes and Markings
Username: charlie
UserEmail: charlie.doyle@pottersbeads.com
UserTel: 678-560-5706
UserFAX: 678-560-5716
Date: Thursday, June 23, 2005
Time: 09:29:52 AM

Comments:

My comments are as follows:

711-2.1

Need some terminology in the spec that allows for testing of the thermoplastic intermix to ensure that the 50% mix of standard beads and type 3 glass beads is respected. Without this inspection, there is no way of telling if the proper quantity and mix of beads is correct. I will e mail you a copy of a thermoplastic intermix spec to review.

711-2.1.1 and 711-2.1.2

What is the difference between recap and refurbishment? Seems like they are quite similar. Why have 2 two similar products? They could be combined requiring 60 mils of spray thermo with a single drop of type 3 beads. This would help in keeping the specs simple

711-2.1.1

Recapping shows hot spray. We know this is an old spec that provides very little bead retention, and thus very poor reflectivity. Why use a spec that does not perform well, when the State is trying to upgrade its overall pavement markings? WE suggest a 60 mil spray thermo with a single drop of type 3 bead.

Mayur Patel

File: 7110000 – Thermoplastic Traffic Stripes and Markings
Username: Mayur Patel
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UserTel: 352 955 6626
Date: Friday, June 24, 2005
Time: 05:24:13 PM

Comments:

700 series:

701-4.1, 702-4.1, 709-4.1, 711-4.1 and 713-4.1, Make the change to these sections as it is written in 710-4.1, remove "The Engineer change will conduct field testing in accordance to....." to "conduct field testing in accordance to....."

701-4.6, 702-4.3, 709-4.3, 710-4.3,711-4.3 and 713-4.3, the reference to FM 5-541 should be changed to FM 5-579 for retro-reflectivity measurements. Also, the wording should be "Measure and record test data, certify..... no later than the next working day..." Make the language same as SMO proposal for the draft Spec 713 regarding use of CQC arrangements and frequencies.

Charlie Doyle

File: 7110000 – Thermoplastic Traffic Stripes and Markings

Username: charlie

UserEmail: charlie.doyle@pottersbeads.com

UserTel: 678-560-5706

Date: Thursday, June 23, 2005

Time: 09:29:52 AM

Comments:

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Flint Trading, Inc.

Section 711-3 Equipment.

Add the following: “711-3.1 General:” Use equipment...

Add the following section after 711-3.1: “711-3.2 Preformed Thermoplastic: Use equipment which is suitable for the application of preformed thermoplastic striping material on both concrete and asphalt surfaces. Use equipment which meets the following requirements:

- a) capable of producing a short fan-shaped flame without carburizing components which provides evenly distributed heat at a rate of 200,000 BTU to facilitate even glass sphere embedment at 50%-60%.
- b) U.L. Listed

If such heating equipment is not used, the preformed thermoplastic material must provide a visual cue that would attain 50%-60% glass sphere embedment.”

Section 711-4 Application.

Add the following section after 711-4.1 General: “711-4.1.2 Preformed Thermoplastic: Apply markings only to dry surfaces and when the ambient air temperature is 32 degrees F or above. For Portland Cement Concrete surfaces, use primer/sealer recommended by the manufacturer. Prior to installation, follow the manufacturer’s recommendations for either “pre-heating” or no pre-heating” of the road surface to a specific temperature.”

Section 711-4.3 Retroreflectivity: **Replace** the last sentence of the first paragraph that begins “This does not apply to bike lane symbols.... proposed bike lane” with the following sentence “All pedestrian crosswalks, bike lane symbols, and messages in a proposed bike lane shall attain initial retroreflectivity of not less than 275 mcd/lx.m².”

Add the following sentence after the last sentence in Section 711-4.5.1 Longitudinal Lines: “Preformed thermoplastic markings are factory supplied with reflective glass spheres. No glass spheres should be applied during installation.”

Section 711-4 Application cont’d:

Add the following sentence at the end of the first paragraph of Section 711-4.5.2 Transverse Stripes and Markings: “Preformed thermoplastic markings are factory supplied with reflective glass spheres. No glass spheres should be applied during installation.”

Add the following sentence at the end of the second paragraph of Section 711-4.5.2 Transverse Stripes and Markings: “Preformed thermoplastic markings for pedestrian crosswalk lines and bike symbols shall be supplied with reflective glass spheres and sharp silica sand which meets reflectivity and skid resistance requirements in 971-7.”

Tim Parker

June 24, 2005

Specifications recommendations per our ATSSA meeting on June 15th

The Florida Chapter of ATSSA is fully supportive of the department's initiative to increase the reflectivity and service life of pavement markings. This effort will make Florida's roadways much safer, and will undoubtedly reduce traffic accidents, injuries and deaths. As a group though, we are very concerned with the lack of good data in which the new reflectivity requirements are based. We think some of the requirements are attainable but we really don't know. We therefore recommend that a one year test period is enacted with the new material specifications. This would enable a years worth of data to be accumulated and evaluated prior to setting the final requirements.

Proposed specification 7110000

- 1.) Contractors and suppliers would first recommend that the department write Supplemental agreements to existing construction and maintenance striping projects . These SA's would specify the use of the new thermoplastic material specifications. This would include initial thermo installation (double drop type 1 & 4 beads) and refurbishment of existing striping(single Drop with type 3). Collect the reflectivity data for one year and then based on the data collected set the initial retroreflectivity levels and 180 day levels.
- 2.) If the department is unwilling to do a year long study then Industry recommends initial retroreflectivity for thermoplastic longitudinal lines should be white 450 and yellow 300 . Initial retroreflectivity for thermoplastic handwork should be white 250 and yellow 175
- 3.) Centerline, laneline and edgelines would be 125 mils thick. All handwork would be 100 mls thick. (arrows, messages, crosswalks, stop bars and transverse lines.)
- 4.) Delete section 971-6 (Hot Spray) use thermoplastic sprayed at 60 mls with a type 3 bead. Thermo would be a regular 40% bead intermix, alkyd material, for refurbishing existing markings. Initial Reflectivity requirements for white 300 for yellow 250. .
- 5.) There should be no night time color requirement for yellow as it now states in the current Florida Test method. The Florida test method has numerous test procedures (wet reflective, audible, nighttime, etc that don't apply to every type of product. Yet the test method reads as if all tests are performed on all products.
- 6.) Contractor to measure and certify on department approved forms, the retroreflectivity of white and yellow pavement markings. These certifications will be submitted to the engineer prior to acceptance. The department would have 3 days to check the

reflectivity numbers that the contractor turns in. The contractor does not have to turn reflectivity numbers into the department the next day.

7.) Contractors **would not** be required to take 3 reflectivity readings for each arrow, message, crosswalk, stop bar and transverse lines. This is too much a burden on the contractor. We would all have to hire people just to keep up the paperwork and to take readings. This can become a safety issue. Contractors would almost have to set up lane closures in some cases.
