7060000 RAISED PAVEMENT MARKERS AND BITUMINOUS ADHESIVE COMMENTS FROM INTERNAL/INDUSTRY REVIEW

Arthur Berger

Arthur.Berger@dot.state.fl.us

Comments: (10-17-18, Internal)

7060000 All Jobs

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Depart

Ensure that all final RPMs are in place prior to opening the road to traffic.

If more than 2% of the RPMs fail in adhesion or alignment within the first 45 days under traffic, replace all failed RPMs at no expense to the Department. If more than 5% of the RPMs fail in adhesion and or alignment during the initial 45 day period, the Engineer will extend the replacement period an additional 45 days from the date that all replacement RPMs have been installed. If, at the end of the additional 45 day period, more than 2% of all RPMs (initial installation and 45 day replacements combined) fail in adhesion or alignment, replace all failed RPMs at no expense to the Department.

706-5 Contractor's Responsibility for Notification.

Notify the Engineer prior to the placement of RPMs. At the time of notification, submit the APL number and the batch or Lot numbers of RPMs and bituminous adhesive to be used.

706-6 Method of Measurement.

The quantities to be paid for will be the number of RPMs, furnished and installed, completed and accepted.

 706-7 Basis of Payment.

 706-7.1 General: Price and payment will be full compensation for all work specified in this Section.

 706-7.31 Lump Sum PaymentClass B RPMs: Price and payment for Class B RPMs will not be measured or paid for separately when the item for painted pavement markings (Final Surface) is included in the proposal. Price and payment for all work and materials in this Section will be made in accordance with 710-11.2.

 706-7.2 Class E RPMs: Price and payment will be full compensation for all Class E RPMs shown in the Plans.

 706-7.3 Payment Items: Payment will be made under:

 Item No. 706-1.

Response:

Karen Byram Karen.Byram@dot.state.fl.us

Comments: (10-22-18, Internal)

- 7.06-2 Use only Class B markers unless otherwise shown in the Plans. Class A and Class E markers need to be added to this section.
- 2. 706-3 Equipment

This section addresses only equipment used for Bituminous Adhesive. This section should be renamed to 'Bituminous Adhesive Equipment and Preparation''

3. 706-3 Do not use direct flame melting units with flexible adhesives; however, this type of unit may be used with standard adhesive in accordance with manufacturer's recommendations.

This section and 970 no longer include the flexible and standard type adhesives. This sentence should be removed.

- 4. 706-4 For Class E RPMs, installation may include the removal of roadway surface material to recess a portion of the RPM housing.
- 5. 706-4 The Engineer will conduct field testing in accordance with FM 5-566.

This sentence should be removed or the FM needs to be revised. This test method does not include project field acceptance criteria for Class A, Class B, or Class E markers. At some point the project acceptance criteria was removed from this FM.

Response:

Melissa Hollis (850) 414-4182 Melissa.Hollis@dot.state.fl.us

Comments: (10-24-18, Internal)

Could we update the spec as follows (or something similar), to cover projects without Final Surface markings? We still have enough push button and non-resurfacing projects using the pay item. Proposed changes in blue highlight

No need to specify class in pay item description; one pay item "group" will cover both types.

706-7 Basis of Payment.

706-7.1 Class B RPMs: Price and payment for Class B RPMs will not be measured or paid for separately, when the item for painted pavement markings (Final Surface) is included in the proposal. Price and payment for all work and materials in this Section will be made in accordance with 710-11.2.

For projects without Final Surface Pavement Markings, payment will be full compensation for all Class B RPMs.

706-7.2 Class F RPMs: Price and payment will be full compensation for all Class F RPMs shown in the Plans.

706-7.3 Payment Items: Payment will be made under:

Item No. 706- 1- Class F Raised Pavement Marker - per each.

Response:

State Construction Office

Comments: (10-26-18, Internal)

First question concerns the sentence indicated by the green arrow in the first screen shot below. The language seems rather vague and therefore highly questionable regarding its enforceability. No reply required, but I just wanted to ask the question. If Specs Office feels it is enforceable, then I have no further comments.

All Jobs solvent. If any adhesive, pavement marking materials or other foreign matter adheres to the reflective-traffic face of the RPM, replace the RPM at no cost to the Department. Restore any areas impacted by the installation of Class FE RPMs to original condition. En use that all final RPMs are in place prior to opening the road to traffic. In more than 2% of the RPMs fail in adhesion or alignment within the first 45 days under traffic nee, replace all failed RPMs at no expense to the Department. If more than 5% of the RPMs hail in adhesion and or alignment during the initial 45 day period, the Engineer will extend the replacement period an additional 45 days from the date that all replacement RPMs have been installed. If, at the end of the additional 45 day period, more than 2% of all RPMs (initial installation and 45 day replacements combined) fail in adhesion or alignment, replace all failed RPMs at no expense to the Department.

Should the Class B RPM's have some language regarding "all work and materials"? (See green arrow in screenshot below.) It would appear the Class F language could be misconstrued to mean only the material cost is covered by a 706 pay item. Maybe full compensation coves it, but I just wanted to check that the different language used in each is due to paying for each differently. It very well may be the case, but I just wanted to ask the question regarding the different language. If both, Class B and Class F payment includes all work and materials, then I'd suggest it be stated for both.

	of Payment. 7.1 General: Price and payment will be full compensation for all work specified in
this Section.	
	7.21 Lump Sum PaymentClass B RPMs: Price and payment for Class B RPMs
will not be n	neasured or paid for separately, when the item for painted pavement markings (Fina
S. face) is i	ncluded in the proposal. Price and payment for all work and materials in this Section
will by hade	ncluded in the proposal. Price and payment for all work and materials in this Section
will by hade	ncluded in the proposal. Price and payment for all work and materials in this Section in accordance with 710-11.2.
will by hade 706- RPMs show	nchided in the proposal. Price and payment for all <u>work and materials in this Section</u> in accordance with 710-11.2. 7.2 Class FE RPMs: Price and payment will be full compensation for all Class FE

Response:

Dan Hurtado (850) 414-4130 Hurtado@dot.state

Dan.Hurtado@dot.state.fl.us

Comments: (10-26-18, Internal)

706-2 Materials.

- → Use only Class B markers unless otherwise shown in the Plans.¶
- → Meet the requirements of Section 970.¶
- → 706-2.1 Product Acceptance on the Project. Use only RPMs and bituminous adhesive

that are listed on the Department's Approved Product List (APL). <u>For Class F RPMs, provide a</u> warranty assigned to the Department in accordance with Section 970.

Response:

Dianne Perkins (850) 414-4784 Dianne.perkins@dot.state.fl.us

Comments: (11-1-18, Industry)

706-3: Combine two sentences. The adhesive may be reheated, however, do not exceed the manufacturer's recommendations for pot life at application temperatures. 706-4, 4th paragraph:

Strike "Prior to" replace with Before applying adhesive. 706-4: Obsolete site. Strike Fed. Spec TT-T-291. This is obsolete. Federal Specifications TT-T-291 TT-T-291F (NOTICE 1), FEDERAL SPECIFICATION: THINNER, PAINT, MINERAL SPIRITS, REGULAR AND ODORLESS (15 FEB 1996) [S/S BY A-A-2904]., Federal Specification TT-T-291 F, dated May 8, 1974, is hereby canceled. Future acquisition of Thinner, Paint, Mineral Spirits, Regular and Odorless should be made under A-A-2904 706-5: Combine two sentences. Notify the Engineer prior to the placement of RPMs and submit the APL number, the batch or Lot numbers of RPMs and bituminous adhesive to be used. 706-1 after the first sentence, insert: For projects without Final Surface Pavement Markings, payment will be full compensation for all Class B RPMs. 706-7.3 Under item no 706- 1, strike Class F. This is so maintenance can use this pay item per each, no matter what type of marker.

Response: