

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

DATE: January 11, 2013



FROM: Brent A. Story, P.E., State Design Policy Engineer

TO: Divisions of Engineering, Operations, Field Districts, Construction, Program Control, Program Delivery, Innovative Program Delivery, Engineering Services, and Environmental Services

SUBJECT: Channel Protection in Roadway Ditches

The Georgia Institute of Technology has completed a research project on the properties and the application of materials to be used for channel protection in roadway ditches. As a result, the following changes are effective on January 18th 2013.

1. A new Shelf Special Provision (SP) Section 711 “Turf Reinforcement Matting” (TRM) has been written to replace Supplemental Specification Section 710 “Permanent Soil Reinforcing Mat”. SP 711 provides criteria on the proper selection of TRM on the basis of six shear strength ranges. Under SP 711, contractors will be required to use the TRM that the designer specifies. The “first-use-date” available for SP 711 is with the January 18, 2013 letting. Geosynthetic channel protection for projects let to bid before July 1, 2013, may continue to be designed according to Supplemental Specification Section 710. After July 1, 2013, all designs involving geosynthetic material must comply with the new SP 711, published on [The Source](#).
2. A computer program titled [Channel Lining Design](#) has been developed to aid designers in the proper selection of channel protection. It contains the full range of channel protection measures and will replace the Department’s current HEC-15 program on July 1, 2013.
3. The Georgia Institute of Technology has provided a document explaining the theory of channel protection design and the logic of the Channel Lining Design program. This document is available indefinitely at [The Categorization of Erosion Control Matting](#), for the interested designer to read.
4. A series of symbols “Trm-1” through “Trm-6”, each corresponding to an applicable shear stress range, have been added to the ESPCP Legend. These symbols will replace the symbol “Ps” on July 1, 2013.
5. The following are the six new pay item numbers and descriptions for TRM:

Pay Item	Description	Shear Stress Range	ESPCP Symbol
711-0100	Turf Reinforcing Mat, TP 1; (SY) (M2)	0-2 psf	Trm-1
711-0200	Turf Reinforcing Mat, TP 2; (SY) (M2)	0-4 psf	Trm-2
711-0300	Turf Reinforcing Mat, TP 3; (SY) (M2)	0-6 psf	Trm-3
711-0400	Turf Reinforcing Mat, TP 4; (SY) (M2)	0-8 psf	Trm-4
711-0500	Turf Reinforcing Mat, TP 5; (SY) (M2)	0-10 psf	Trm-5
711-0600	Turf Reinforcing Mat, TP 6; (SY) (M2)	0-12 psf	Trm-6

This letter will be archived on the Department’s R.O.A.D.S. webpage under [Policy Announcements](#). Should you have any questions, please contact the Office of Design Policy and Support, Brad McManus at (404) 631-1630, or Jon Griffith at (404) 631-1547.

RRM:BAS:jdg