

## IMPROVING STANDARD SPECIFICATIONS FOR HIGHWAY PROJECTS

### SOUTH CAROLINA OFFICIALS EVALUATED AND MODIFIED DETAILS BASED ON SIX CATEGORIES

The South Carolina Department of Transportation (SCDOT) implemented several new erosion prevention and sediment control-oriented supplemental specifications in 2004. After three years of application, the SCDOT determined that these, along with other existing specifications, should be evaluated, modified and improved where necessary.

The types of standard specifications evaluated were:

- *Erosion prevention,*
- *Sediment control,*
- *Storm water runoff control, and*
- *Postconstruction water quality control.*

The following standard specifications were evaluated in detail: temporary stabilization; permanent seeding; sediment tubes; silt fence; compost; bonded fiber matrix; flexible growth matrix; rolled erosion control products; and structural postconstruction water quality best management practices.

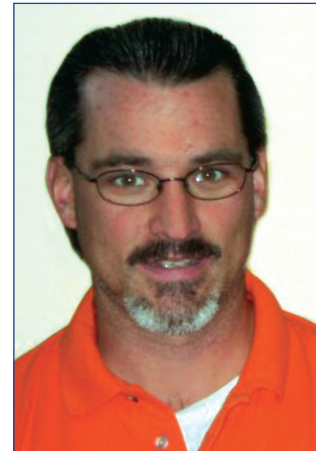
Areas of emphasis were incorporated not having just physical material specifications but also performance specifications, such as requiring silt fence material to trap 80 percent of total suspended solids.

Each standard specification was evaluated for the following categories:

- *Description,* including unit of measurement for payment and an explanation of where the practice is applicable;
- *Materials,* including quality assurance and quality control;
- *Construction requirements,* including site preparation, general installation, delivery/storage/handling, inspection and acceptance criteria;
- *Method of measurement;*
- *Method of maintenance;* and
- *Method of payment.*

The evaluation included interviews with SCDOT engineers, construction staff, construction inspectors and maintenance personnel, in addition to various other users of the standard specifications. The purpose of these interviews was to identify specific inadequacies of the existing standard specifications and interviewees' expectations for improvements and modifications. The evaluation of the standard specifications also included correspondence with industry leaders and manufacturers to ensure that the standard specifications adequately reflected products and measures that were readily available for distribution.

The improved SCDOT standard specifications will be presented in a technical paper at the International Erosion Control Association EC08 conference in February 2008. **SWS**



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