



Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

515.239.1566

October 06, 2008

Ref: 500

OCT 10 2008

Lisa Rold
Federal Highway Administration
105 6th Street
Ames, IA 50010

Dear Ms. Rold:

Attached to this letter is a statewide public interest finding to specify the use of ScourStop Transition Mats on the National Highway System. ScourStop Transition Mats have been used in various locations within Iowa for several years now on a project-by-project basis. ScourStop Transition Mats are designed to replace rip-rap revetment as a permanent scour and erosion protection system at drainage outlets and allowing the growth of aesthetically pleasing mowable grass surface.

As new systems are developed that meet our requirements, we will review the public interest finding and modify it accordingly. I am requesting FHWA concurrence to proceed in this manner.

Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Thomas L. Reis".

Thomas L. Reis, P.E.
Specifications Engineer

The FWHA concurs with this public interest finding.

Signed Date 10/7/08
Lisa Rold, Federal Highway Administration

attachments

cc: Mike Kennerly, Design
Mark Mastellar, Design
Phil Barnes, FHWA
Becky Hiatt, FHWA
Max Grogg, FHWA

Public Interest Finding

Feature: ScourStop is a proprietary transition mat system that is a biotechnical alternative for revetment. ScourStop is a mechanically-anchored 4 ft. X 4 ft. X .5 inch (1.22 m X 1.22 m X 12.5 mm) semi-rigid, polymer mat designed with voids throughout the structure which enable vegetative growth. It is a part of an engineered system, providing synergy of mechanical protection and vegetation enabling scour and erosion resistance to much higher shear stress and flow velocities than vegetation alone or revetment.

Location: Statewide

Application: The Iowa DOT and various municipalities have installed ScourStop at numerous locations along the Interstate and Primary highways, and local roads over the past several years using project specific PIFs. The performance has been positive thus far. We would like to expand the use of this project as a best management practice. It is not felt that there are alternatives to this product at this time.

The Iowa DOT would like to specify ScourStop at this time, with FHWA concurrence, either as a standalone product or as an alternative to revetment as called for by individual project designers.

Justification: ScourStop is a bio-technical replacement for rock revetment utilizing vegetation and mechanical soil protection. The vegetation creates an aesthetically pleasing and healthy environment while the product provides immediate scour and soil protection.

ScourStop normally requires no maintenance, especially important for highway authorities as the end owners of storm water conveyances. ScourStop complies with and promotes NDPEs Phase II minimum requirements. Rock revetment typically creates expensive, continuous maintenance costs for storm water outlet owners.

ScourStop increases infiltration and groundwater recharge by promoting vegetation in storm water conveyances.

ScourStop has a longer functional life than riprap revetment. In many instances, revetment erodes away and disintegrates, thus requiring periodic monitoring and maintenance.

ScourStop increases the safety for children in residential settings. ScourStop also helps to eliminate debris and weeds in riprap revetment.

For these reasons, it is felt that ScourStop is the only system on the market that exceeds the requirements for the use of riprap revetment. When new systems are developed that meet these requirements, we will review this PIF with the FHWA.