



July 1, 2015

Glen Behrend, NPS Program Manager
Georgia Environmental Protection Division (EPD)
Watershed Protection Branch
2 MLK, Jr. Dr. S.W., Suite 1462
Atlanta, Georgia 30334

RE: Temporary Fabric Check Dams (Construction Detail D-24D)

Dear Mr. Behrend:

The Georgia Department of Transportation (GDOT) has utilized temporary fabric check dams as an erosion control measure since 1989. This letter summarizes recent actions taken by GDOT to improve the performance of temporary fabric check dams as an acceptable alternative BMP on appropriate GDOT projects until the Georgia Soil Water Conservation Commission (GSWCC) publishes new standards or guidance on the subject.

On May 6, 2015, GDOT began field testing different designs of fabric check dams alongside conventional check dams to evaluate effectiveness at achieving the following: (1) velocity dissipation, (2) sediment retention, (3) scour reduction at the spill-over point (center of ditch), and (4) scour reduction at the silt fence tie-in to slopes. The testing was conducted along three ditch sections on the Newnan Bypass project in Coweta County (P.I. No. 0007694). Four storm events occurred between May 6, 2015 and June 30, 2015 that were significant enough to meaningfully assess BMP performance. EPD was on site to observe the majority of the installations and performance.

On the basis of these tests, GDOT revised Construction Detail D-24D to include a 20-inch-high spill-over weir centered on the ditch bottom to direct concentrated flow away from the side slopes. Turf Reinforcement Matting (TRM) was also installed on the approach and trailing sides of the fabric check dam to control scour. In our opinion, these changes will achieve the four desirable erosion control effects stated above and also meet the American Association of State Highway and Transportation Officials (AASHTO) roadside safety criteria.

As a matter of roadside safety, temporary riprap check dams should be limited to new location construction, outfall locations, or to roadways where adjacent staged traffic is sufficiently clear of the riprap check dams. Therefore, the addition of riprap was not considered for use in combination with fabric check dams due to the proven effectiveness of TRM in the context of roadside safety.

Effective June 30, 2015, all GDOT projects let to construction requiring an Erosion Sedimentation and Pollution Control Plan (ESPCP) will include the revised Construction Detail D-24D if applicable. Projects that do not have an approved Notice of Intent (NOI) will require revision by amendment to add the detail. Projects that have an approved NOI do not require any further action. Until further notice, a copy of this letter will serve as the cover letter for the Alternative BMP Documentation sent with all future plans submitted to EPD for review. We appreciate your consideration in this matter. Should you have any questions please feel free to contact Brent Story or Brad McManus of the Office of Design Policy & Support at (404) 631-1978.

Sincerely,

A handwritten signature in blue ink that reads "Meg B. Pirkle".

Meg B. Pirkle, P.E.
Chief Engineer