

TIP #: R-2611
Date: May 3, 2011
Revised Date:

WATER FILLED BARRIER:

3-20-07

SPI

Description

Furnish, install, secure, maintain, remove, and reset Water Filled Barrier in accordance with the contract.

Materials

- (A) **General**
Provide Water Filled Barrier that meets the requirements of NCHRP 350 Test Level II for work zones that have a posted speed limit of 45 mph or less. Provide Water Filled Barrier that acts as its own free standing, non-redirective end treatment. Use environmentally safe anti-freezing agent in the water per manufacturer specifications and recover agent when the barrier is drained. Do not drain Water Filled Barrier into or across an existing travel lane. Provide barrier units that are capable of being lifted and moved when filled if draining is not possible. Dispose of water and agent properly.

- (B) **Material Qualifications**
Use Water Filled Barrier that is on the Approved Products List or is Traffic-qualified by the Work Zone Traffic Control Unit. For more information on the Traffic-qualification process, contact the Work Zone Traffic Control Unit at 750 N. Greenfield Parkway, Garner, NC, 27529, (919) 773-2800, or see the approved product list on NCDOT web site at: www.ncdot.org/~wztc

- (C) **Historical Performance**
Historical performance of the Water Filled Barrier will be used in determining future use of the material by the Department, regardless if the Water Filled Barrier has been traffic-qualified. Poor past or poor current performance of Water Filled Barrier at any site, whether or not related to a specific contract may be grounds for non-acceptance of a product on any project under contract.

Construction Methods

Place and install Water Filled Barrier units as shown in the plans and per manufacturer specifications on roadways with posted speed limits of 45 mph or less.

Furnish delineators for Water Filled Barrier that meet the requirements of Section 1088-2 and Section 1170-3 (E) of the *Standard Specifications*.

Measurement and Payment

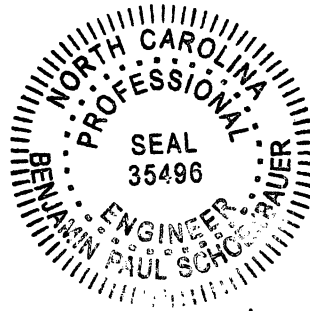
Water Filled Barrier will be measured in accordance with Section 1170-4 of the *Standard Specifications* and paid for in linear feet.

Resetting Water Filled Barrier will be measured in accordance with Section 1170-4 of the *Standard Specifications* and paid for in linear feet.

There will be no direct payment for barrier delineators as they are considered incidental to these pay items.

Payment will be made under:

Pay Item	Pay Unit
Water Filled Barrier	Linear Foot
Reset Water Filled Barrier	Linear Foot



Ben Schoenbauer
May 2, 2011

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WARNING FLAGS

General:

Use flags which are orange or fluorescent versions of orange. Each flag must be 16 inches square or larger, and attached to a staff.

Flag Material:

Use fabric type flags made of an orange or fluorescent orange flexible type of material such as vinyl or nylon.

Material Certification:

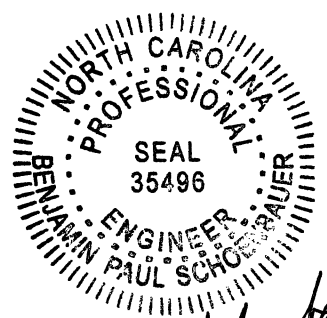
Furnish a Type 3 Certification in accordance with Article 106-3 for all warning flags prior to use.

Approval:

All materials are subject to the approval of the Engineer.

Payment will be made under:

Pay Item	Pay Unit
Warning Flags	Each



Ben Schoenbauer
May 2, 2011