

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
TURBIDITY CURTAIN

January 14, 2008

I. DESCRIPTION

This work consists of installation, maintenance and removal of a turbidity curtain, including all necessary cables, weights and floats in accordance with this provision and in conformity with the lines, grades and details shown on the plans or established by the Engineer. The curtain shall be provided as a temporary measure to minimize the drift of suspended material during construction of the project.

II. MATERIALS

The curtain shall be synthetic fabric coated with suitable elastomeric or polymeric compound; having high resistance to weathering, hydrocarbons, fresh and salt water, and temperature extremes. The fabric shall be impervious or pervious as shown in the contract. Pervious is defined as 20 percent of the fabric material allowing the passage of water. The fabric shall have a tensile strength of not less than 200 pounds per square inch (*14 megapascals*) when measured lengthwise or crosswise. The curtain shall form a continuous vertical and horizontal barrier for the entire width and length of each section. Seams, if required, shall be either vulcanized welded or sewn and shall develop the full strength of the fabric.

Floatation shall be flexible, buoyant units contained in a floatation sleeve or collar attached to the curtain. Buoyancy provided by the floatation units shall be sufficient to support the required width of the curtain and maintain a freeboard of at least 3 inches (*75 millimeters*) above the water surface level, to a minimum of one foot (*300 millimeters*) above the bottom or a maximum ten foot (*3 meters*) depth at all stages of water levels.

Load lines shall be fabricated into the top and bottom of the curtain. The top load line shall consist of woven webbing or vinyl sheathed steel cable and shall have a break strength in excess of 10,000 pounds (*44 kilonewtons*). The bottom loadline shall consist of a chain incorporated into the bottom hem of the curtain of sufficient weight to serve as ballast to hold the curtain in a vertical position. Additional anchorage shall be provided if necessary. The load lines shall have suitable devices, which develop the full breaking strength for connecting to load lines in adjacent sections.

The Contractor shall submit working drawings to the Engineer for review in accordance with Section 105.10 of the Specifications.

III. INSTALLATION

The curtain shall be placed at the locations shown on the plans and in accordance with the approved working drawings. The Contractor shall maintain the turbidity curtain in order to insure the continuous protection of the waterway.

The depth of the curtain shall be such that it shall extend from the water surface to no less than one foot (*300 millimeters*) above the bottom, or no more than ten feet (*3 meters*) depth for the entire length of curtain at all stages of water level.

When the curtain is no longer required as determined by the Engineer, the curtain and related components shall be removed in such a manner as to minimize turbidity. The curtain and related components shall become the property of the Contractor and shall be removed from the project.

IV. MEASUREMENT AND PAYMENT

Turbidity curtain will be measured in linear feet (*meters*) from edge of the curtain along the support cable. Turbidity curtain will be paid for at the contract unit price per linear foot (*meter*), which price shall be full compensation for furnishing, installing, maintaining and removal of all materials necessary to complete the work.

Payment will be made under:

Pay Item

Pay Unit

Turbidity Curtain (Type)

Linear Foot (*Meter*)