

## **Division 23: Erosion and Sediment Control**

- 23.01 SCOPE:** All vegetative and structural erosion and sediment control practices shall be implemented, maintained, and disposed of in accordance with the minimum standards and Specifications of the Virginia Erosions and Sediment Control Handbook and as shown by symbol or instructed by note on the construction plans and erosion and sediment control narrative.
- 23.02 MATERIALS:**
- A. Unless otherwise specified in these contract documents and/or the construction plans all materials provided for erosion and sediment control measures shall be in accordance with Chapter 3 of the aforementioned handbook.
  - B. Synthetic filter fabric for temporary silt fences shall be of a pervious sheet of propylene, nylon, ester or ethylene yarn and shall be certified by the manufacturer as to filtering efficiency, tensile strength, and allowable flow rate. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life.
  - C. Post for temporary silt fence shall be rough or finished 4"x4" wood, 3" (minimum) diameter, or 1.33 pounds per lineal foot (minimum) steel with a minimum length of 5 feet.
  - D. Wire fence reinforcement for temporary silt fence shall be a minimum of 36 inches in height, 14½ gauge, and mesh spacing of 6 inches or less.
- 23.03 EXECUTION:**
- A. Unless otherwise specified in these contract documents and/or shown on the construction plans all methods of installation and maintenance must be in accordance with Chapter 3 of the aforementioned handbook.
  - B. All sediment basins, perimeter dikes, straw bales, inlet protection structures, and etc. shall be installed as the first stage of excavation or grading activity with which they are associated.
  - C. All roads, parking areas and/or areas to be paved shall be stabilized with the installation of sub-base or base course as soon as grading is completed and necessary compaction has been obtained, but must not exceed 30 days after preparation of the subgrade.
  - D. Gravel outlets will be checked regularly for sediment buildup which would block drainage. If the gravel is clogged with silt it will be removed and cleaned, or replaced.
  - E. Strawbale barriers will be checked regularly for undermining or deterioration of the bales.
  - F. Construction traffic shall enter at designated construction entrances and access roads and confine their movements to their work areas only. Traffic shall not enter or disturb any drainage ways unless necessary for their construction or maintenance.
  - G. The Contractor's Construction Superintendent shall have overall responsibility for plan implementations. He shall also be responsible for seeing that appropriate construction workers and subcontractors are aware of the provisions of the plan.
  - H. Filter cloth fabric shall be a minimum of 54 inches wide and shall be secured to the post or fence by suitable staples, tie wire or hog rings in such a manner as to prevent water from flowing under the fence. Filter cloth fabric shall be spliced together only at support posts with a minimum 6 inch overlap and securely sealed. The top of the filter cloth fabric shall be installed with a 1 inch tuck or with a reinforced top end section.

- I. All disturbed areas which are not designated for paving, utility or structural uses shall be exposed for no longer than 15 days.
- J. Sediment basins will be cleaned out when the level of sediment buildup reaches 90% of basin capacity.
- K. All remaining temporary erosion and sediment control measures must be removed within 15 days after final site stabilization is achieved.

**23.04 MEASUREMENT AND PAYMENT:**

- A. Temporary silt fences will not be measured in lineal feet, complete in place. Temporary silt fences will be paid for at the lump sum price for erosion and sediment control measures. This price shall be full compensation for furnishing and installing temporary filter cloth silt fence including any wire reinforcement; for maintenance of temporary silt fence; for removing and disposing of the temporary silt fence and dressing the area in accordance with this division; and for all materials, labor, tools, equipment and incidentals necessary to complete the work.
- B. Temporary straw bale sediment traps will not be measured and paid for as such but included in the lump sum price for erosion and sediment control measures.
- C. Straw bale barriers, and other erosion and sediment control measures as indicated on the plans and as otherwise deemed necessary by the Engineer will not be measured or paid for as such but will be treated as incidental work. Its cost will be included in the lump sum price for erosion and sediment control measures.
- D. All erosion and sediment control items not included in these Specifications will not be measured and paid for as per the construction plans and/or the Unit Price Table but will be considered incidental in the lump sum price for erosion and sediment control measures where shown on the plans or as directed by the Engineer.