

Maintain the slope drains and diversion dikes in such a manner as to be free from debris and open to the flow of water. Remove slope drains or leave them in place as determined by the Engineer and the permanent controls are completed and functioning.

#### **221.05. METHOD OF MEASUREMENT.**

Measure *temporary slope drains* by the linear foot (meter) in place. Measurements may be taken on each section of cut or fill slope when slope drains are installed.

*NOTE: Inlets, outlets, and diversion dikes will be considered as an integral part of the drain.*

#### **221.06. BASIS OF PAYMENT**

Accepted slope drains, measured as provided above, will be paid for at the contract unit price bid for as follows:

TEMPORARY SLOPE DRAINS.....LINEAR FOOT (METER)

Such payment shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

## **SECTION 222 TEMPORARY SEDIMENT CONTROL BALE BARRIERS**

#### **222.01. DESCRIPTION.**

This work shall consist of the construction, maintenance, and removal of temporary bale barriers at locations shown on the Plans or determined by the Engineer. Use bale barriers to trap sediment at the toes of slopes, or across ditches and defined waterways.

#### **222.02. MATERIAL.**

For vegetative material, use standard-sized rectangular bales of straw or hay—approximately 18x20x36 inches (450 x 500 x 900 mm) in size; securely bind them with wire or plastic twine. Anchor the bales with stakes of hardwood lumber, timber, or metal approximately 3 feet (0.9 m) long, and of sufficient strength to be driven firmly in the ground.

#### **222.04. CONSTRUCTION METHODS.**

As slope barriers, place the bales end to end and stake them down—a maximum distance of 4 feet (1.2 m) out from the toe of the slope. At locations determined on the site, leave out a bale and place a pile of loose rock or other acceptable filtering material in the opening—approximately 2/3 of the height of the bale—to act as a spillway type outlet.

As ditch checks, the bales shall be placed in a staggered position across the defined waterways and staked in place. The bales shall be placed up the slope on either side of the flow line, higher than the elevation of the bale in the center of the waterway.

All bale barriers shall be trenched 6 inches (150mm) into the soil.

Keep the barrier in good condition by replacing broken or damaged bales immediately after damage occurs. Removal of silt when specified by the Engineer shall be measured and paid for in accordance with Section 226. If at the direction of the Engineer the barriers are placed prior to final grade, the

contractor will be paid for each additional placement as “remove and reset temporary bale barrier.” This will involve using the existing barrier if possible.

Bale barriers may be removed or left in place at the discretion of the Engineer. All bale barriers replaced, due to natural causes and not the fault of the contractor, will be measured for payment at the direction of the Engineer.

**222.05. METHOD OF MEASUREMENT.**

Measure *temporary bale barriers* in place—along the length of the bale—by the linear foot ( meter). Include the areas of the spillways, but the spillway material will not be measured as a separate item for payment.

**222.06. BASIS OF PAYMENT.**

Accepted bale barriers, measured as provided above, will be paid for at the contract unit price bid for as follows:

- (A) TEMPORARY BALE BARRIER ..... LINEAR FOOT ( METER)
- (B) REMOVED AND RESET TEMPORARY BALE BARRIER ..... LINEAR FOOT (METER)

Such payment shall be full compensation for furnishing all materials, labor, equipment, and incidentals to complete the work as specified.

**SECTION 223  
TEMPORARY SILT FENCE**

**223.01. DESCRIPTION.**

This work shall consist of the furnishing, installation, maintenance, and removal of geotextile barrier fence designed to remove suspended soil particles from water passing through the fence. It shall be installed as soon as practical around the toe of fill slopes to prevent siltation off right-of-way. The locations for temporary silt fence shown on the Plans are approximate and may be changed by the Engineer.

**223.02. MATERIALS.**

For a temporary silt fence, use a woven, polypropylene, polyester, or polyamide material that is resistant to ultraviolet degradation, mildew, and rot. Seal or selvege the edges of woven fabrics shall be sealed to prevent raveling. Use fabric at least 3 feet (0.9 m) wide.

*NOTE: The material shall meet the requirements specified in subsection 712.06*

**223.04. CONSTRUCTION METHODS.**

Install a temporary silt fence as shown on the plans and/or as directed by the Engineer. Construct it adequately to handle the stress from hydraulic and sediment loading. Six inches (150mm) of the fabric width shall be buried in a trench to prevent undercutting. Backfill the trench and the soil compacted over the geotextile. Splice fabric ends together with hog rings, locking plastic ties, or other approved methods.