

SPECIFICATIONS FOR SUPPLY AND PLACE SILT FENCE BARRIER

## 1296. 1. Scope

The Contractor shall supply, install and maintain silt fence barriers in accordance with the guidelines outlined below in areas as indicated on the Engineer's drawings prior to commencing excavation operations in those areas.

## 2. Supply Requirements

The silt fence fabric shall be approved as identified on the Department's Product Standards List or be approved for use by the Department to qualify for purchase.

The stakes shall be of sufficient strength to satisfy silt fence barrier performance and maintenance requirements. The stakes shall be a minimum of 1.2 metres in length with a maximum spacing of 2.5 metres between stakes.

3. Installation

The Contractor shall install silt fences as indicated on the Engineer's Drawings, **or as directed by the Engineer** prior to **commencing excavation operations** or placement of embankment. **If silt fences are to be installed in designed ditch excavation areas they shall be installed immediately after excavation is complete.** The silt fence shall be installed to prevent sediment from passing from one side of the barrier to the other.

Posts shall be spaced a maximum of 2.5 m apart, and shall be driven vertically into the ground to a minimum depth of 600 mm.

A trench measuring approximately 200 mm wide by 200 mm deep shall be excavated along the entire line of stakes. The trench shall be on the side of the stakes where grading work is to be conducted.

The geotextile from the silt fence shall extend into the trench a minimum of 300 mm. The prefabricated silt fence shall be installed without sags and have an overlap of 450 mm wherever its length is extended.

The trench shall be backfilled and tamped to existing grade so as to hold the base of the geotextile firmly in place. The completed silt fence barrier shall have a minimum height of 600 mm above the ground surface.

4. Maintenance

All silt fences shall be inspected immediately after runoff event and at least daily during prolonged rainfall. Any required repairs shall be made immediately. The silt fence barriers shall be maintained in place, without gaps, and without undermining, so as to prevent sediment passage through or under the barrier. Silt fence barriers shall be maintained vertical without tears and without sagging and maintain a 450 mm overlap on seams.

Accumulated sediment shall be removed at the direction of the Engineer in a manner that avoids escape to the downstream side of the barriers. Sediment shall be removed to the level of the grade existing at the time of barrier installation and shall conform to the following:

- a) accumulated sediment shall be removed when it reaches a depth of one-half the height of the silt fence barrier;

1296. 4. Maintenance (Cont'd)

- b) accumulated sediment shall be removed as necessary to perform maintenance repairs;
- c) accumulated sediment shall be removed immediately prior to the removal of the silt fence.

5. Removal

Silt fence barriers shall be removed when, in the opinion of the Engineer, the measure is no longer required. In the event that the silt fence barrier is required after the Contractor has left the project, the Department will remove the silt fence.

Silt fence barriers shall be removed in a manner that:

- a) avoids entry of equipment, other than hand held equipment, to any water course; and
- b) prevents release of sediment and debris to any water course.
- c) areas disturbed by the installation and removal shall be restored to the original grade or to the satisfaction of the Engineer and seeded.

6. Method of Measurement

The length of silt fence barrier installed will be determined by lineal measurement once the silt fence barrier is installed.

7. Basis of Payment

The unit price for "Silt Fence Barrier" will be payment in full for supplying, installing, and maintaining the pre-fabricated silt fence barrier with the following exceptions:

- a) Sediment removal will be paid for hourly in accordance with the unit price for the equipment used.
- b) Where, in the opinion of the Engineer, damage to the silt fence barrier has not resulted from the Contractor's operation or from failure to provide maintenance and sediment removal as specified, repair of damage to silt fence barriers will be paid for on a basis of Extra Work.
- c) If the removal of the silt fence is required, removal will be paid for on the basis of Extra Work.

The Department will make two payments. Fifty percent of the unit price for "Silt Fence Barrier" will be paid when the barrier has been installed and fifty percent when either the barrier has been removed or the Contract is complete.