SWPPP Binder Insert – Perimeter Protection ERTEC Perimeter Guard[™] (Perimeter Sediment Control)

Definition

A temporary sediment barrier with a hinged flap at the bottom made of high density polyethylene (HDPE) containing an integrated filter. During construction, the barrier is placed along the perimeter and curb of lots where soil is disturbed. (Installation guidelines are available at www.ertecsystems.com.)

<u>Purpose</u>

Perimeter Guard is used to intercept sediment laden water and reduce the load of sediment and associated pollutants that can enter the storm water system. The system reduces the velocity of water and allows it to flow-through, discouraging end-around flows, under and overflow. The system filters certain sized smaller particles in suspension, captures a high percentage of total solids and prevents them from flowing through the barrier and into the street. The filter develops a filter cake which in turn filters smaller and smaller particles over time.

Conditions Where the Practice Applies

PG is recommended for use in areas with higher vehicular traffic and smaller drainage areas such as housing lots where low sheet flow and light concentrated flow exists rather than heavy concentrated flow. Unlike silt fence, advantages to this device are that it has an extended life. Vehicles can drive over the barrier without permanent damage and has a lower total cost. It can be reshaped, repaired and may also be re-used under certain conditions. The product is recyclable at the end of life as HDPE. The product should be trenched at least 1.0" and the flap should be covered with backfill. In high flow areas, it may be necessary to install multiple rows, or use in combination with ERTEC S-Fence 14" and/or it may also be necessary to install stakes behind the product for support. Do not use Perimeter Guard on slopes (see ERTEC ProWattle).

Design Criteria

- Filter Material or outer Jacket: Uses ERTEC's HDPE Product. For detailed product characteristics contact ERTEC Environmental Systems, LLC. @ (866) 521-0724 or <u>www.ertecsystems.com</u>. The unit weight of the system is 0.25 lbs per foot. Each interlocking module is 7 feet in length. The freeboard height of the filter is 6.5 +/- 0.5".
- For installation procedures, follow the instructions on the attached two drawings. The last in-line PG should be bent and dog-legged upslope to ensure sediment containment. Slit the flap to bend. When placed on soil surfaces, insure that no gaps exist between the soil and the bottom of PG. When installing curbside in high vehicle traffic areas, it is necessary to trench the flap a minimum of 1" deep by 2.5" wide, place against curb with PG flap directed upstream, anchor with 5" or 6" nails (40D or 60D Bright Common), then backfill with soil. Washers are not required with the nails. Detailed installation guidelines are available at www.ertecsystems.com).

Maintenance

If flattened by multiple equipment drive-overs, reshape to vertical immediately. Repair or replace split or torn PG. Inspect PG when rain is forecast. Perform maintenance as needed or as required. Inspect PG following rainfall events and at least daily during prolonged rainfall. Maintain PG to provide an adequate sediment holding capacity. Sediment shall be removed when the sediment accumulation reaches 50% of the above-ground barrier height (or 2 to 2.5 inches from top of PG). Removed sediment shall be incorporated in the project at designated locations or disposed of outside the project or the road right-of-way in conformance with requirements. Remove the PG after the site has been stabilized. Vegetate or stabilize the disturbed PG area.

Source: ERTEC Environmental Systems (866) 521-0724 www.ertecsystems.com

SWPPP Binder Insert – Perimeter Protection Installation Details - ERTEC Perimeter Guard[™]

