Perimeter Mulch and Sediment Control System Mulch and Sediment Control for small drainage areas GUIDE SPECIFICATION

PRODUCT: **Edge Guard™**

MANUFACTURER:

ERTEC®

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1.0 Description:

Perimeter Mulch and Sediment Control System for small drainage areas (such as areas undergoing landscaping or urban areas after final grading) shall conform to the details shown on the plans and these special provisions and shall be installed around the perimeter of small areas with disturbed soil. The intended function of the Perimeter Sediment Control System for small drainage areas is to disperse or spread concentrated water runoff, to reduce runoff velocities, minimize mulch overtopping and minimize the off-site flow of sediment and mulch.

2.0 Material:

Perimeter Sediment Control System for small drainage areas. Provide, sediment control device as shown on the plans.

- A. **Size.** Furnish "I" shaped sediment control device with a height of 6 inches, or as shown on the plans. Each segment shall be 5 feet long and have minimum vertical freeboard of at least 6" and is installed at the sidewalk or curbside edge and secured in place in a slot between the soil and concrete.
- B. **Apparent Opening Size.** Perimeter Sediment Control System for small drainage areas shall contain a filter fabric such that aperture size is between 300 and 400 microns. Percentage Open Area (POA) should be greater than 20%.
- C. Structure. Furnish Perimeter Sediment Control System for small drainage areas manufactured from non- biodegradable materials which is UV Stable for at least 4 years. The system shall comprise semi-rigid, overlapping layers of thermally extruded, apertured polymeric high density polyethylene (HDPE) sheets, and one or more integrated filter sheets. The system shall be durable, such that it can be used for many jobs. The Perimeter Sediment Control System shall have an integrated thermally extruded (not woven) high density polyethylene (HDPE) or nylon filter fabric. The system shall also conform to the following:

Specification	Requirements
Height (freeboard), inches, min.	6
Mass per Unit Weight, (pounds/foot) (maximum – wet or dry) (6")	0.19
Tensile Yield ASTM D-638 (lb/in2)	1800 - 2800
Ultimate Tensile Strength: ASTM D-638 (lb/in2)	2000 - 2800

Specification	Requirements
Percentage Open Area (POA) (COE 22125-86) (min %)	20
Filter Apparent Opening Size (AOS) (ASTM D 4751) microns	350
Ultraviolet stability (outer jacket & filter), percent tensile strength retained after	90
500 hours, min. ASTM Designation: D 4355	
Life in application (years - minimum)	4

^{*} or appropriate test method for specific polymer

D. A copy of the manufacturer's product sheet together with instructions for installation shall be furnished to the Engineer 5 days before installation.

3.0 Installation:

Perimeter Sediment Control System for small drainage areas shall be installed as follows:

- A. Place low profile sediment control device near the downstream perimeter of a disturbed small drainage area to intercept sediment from sheet flow.
- B. A 1 ½ inch deep slot shall be created between the soil and sidewalk or curb with an edger or shovel head. The Perimeter Sediment Control device shall be inserted into the slot to a depth of at least 1.5 inches. Backfill with soil to fill the remaining volume in the slot.
- C. Overlap adjacent segments by at least 4 inches.
- D. On perimeter installations, it is not necessary to use wooden stakes, except in areas of concentrated flows.

4.0 Maintenance:

Perform maintenance as required. Inspect following rainfall events and at least daily during prolonged rainfall. Maintain to provide an adequate sediment holding capacity. Sediment shall be removed when the sediment accumulation reaches half the vertical height. Removed sediment shall be incorporated in the project at designated locations or disposed-of outside the project or in conformance with requirements. Damage to Perimeter Sediment Control System resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the contractor's expense.

Split or torn segments shall be repaired with zip-ties, 16 gauge galvanized wire or replaced. Deformed segments shall be reshaped. Locations where rills and other evidence of concentrated runoff have occurred beneath the Perimeter Sediment Control System shall be corrected. Segments needing repair shall be repaired or replaced within 24 hours of identifying the deficiency.

5.0 Method of Measurement:

Quantities of Perimeter Sediment Control System for small drainage areas to be paid for will be determined by the linear foot measured along the centerline of the installed strip. Where Perimeter Sediment Control System segments are joined and overlapped, the overlap will be measured as a single installed strip.

6.0 Basis of payment:

The contract price paid per linear foot for Perimeter Sediment Control System for small drainage areas shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing the Perimeter Sediment Control System, complete in place, including slot excavation and backfill, and maintenance, as shown on the plans, and in these special provisions, and as directed by the Engineer.