Section 33 4800 - Subsurface Retention/Detention Systems

**PART 1: GENERAL**

1.01 RELATED WORK

Review Contract Documents for requirements that affect work of this section. Specification sections that directly relate to work of this section include, but are not limited to:

 Section **31 2300 - Excavation and Fill**

 Section 32 1820 - Athletic & Sports Surfaces

 Section 32 1826 - Artificial Grass Surfacing

 Section 33 0550 - Piping

Section 33 4000 - Storm Drainage Utilities

Section 33 4300 - Rain Water Harvesting Systems

Section 33 4460 - Surface Drains

SYSTEM DESCRIPTION

SportsEdge® Permavoid® Pre-formed Geocellular Sub-Base replacement storm drainage attenuation/infiltration system, assembly number SEPV150-EIS.

**PART 2: PRODUCTS**

2.01 PRE-FABRICATED GEOCELLULAR UNIT

ACCEPTABLE MANUFACTURERS

BASE: As supplied by: SportsEdge®

259 Murdock Rd. Troutman, NC 28166

Phone: 800-334-6057

info@sportsedge.com or www.sportsedge.com

## B. COMPONENTS

1. Geocellular Unit: Model # SEPV150-EIS manufactured of high strength polypropylene interlocking modules, with the following attributes as the minimum standard:

 a. Dimensions

 1) Length: 27.88” (708mm)

 2) Width: 13.94” (354mm)

 3) Depth: 5.91” (150mm)

 b. Material: Polypropylene

 c. Void Ratio: 95%

 d. Weight: 6.61 lbs.

 e. Compressive Yield Strength

 1) Vertical: 103.7 psi

 2) Lateral: 22.6 psi

 f. Deflection Strength

 1) Vertical: 58.0 psi

 2) Lateral: 6.9 psi

2. Accessories:

 a. Perma-Tie

 b. Permavoid Shear Connector

3. Hydraulic Performance (GPM / SF²)

 a. 0.0% Slope: 74.0 GPM / SF²

 b. 1.0% Slope: 119.3 GPM / SF²

 c. 2.0% Slope: 138.8 GPM / SF²

 d. 3.0% Slope: 157.2 GPM / SF²

 e. 4.0% Slope: 175.8 GPM / SF²

 f. 5.0% Slope: 194.2 GPM / SF²

## **PART 3: EXECUTION**

3.03 INSTALLATION / QUALITY ASSURANCE

1. Install per the manufacturer’s instructions and as indicated on the plans; or by a factory trained and authorized installer.

 END OF SECTION