Make the following section a part of the Standard Specifications:

"SECTION 660 — GEOCELL SYSTEM

660.01 Description. The work covered by this section includes the furnishing of all labor, materials, equipment and incidentals for construction and installation of the Geocell Slope Protection System as shown on the Construction Drawings and described by the Contract Specifications.

660.02 Materials. The geocell system shall use Geoweb GWV20 or approved equal. Materials shall conform to requirements of section 719-Geocell System of the Special Provisions. The system shall include: Geocells, Anchors, S4C aggregate infill, Top soil.

660.05 Geocell Dimensions. The geocell sections shall be fabricated using strips of sheet polyethylene each having a length of 3.61 m (11.8 ft). Polyethylene strips shall be connected using full-depth, ultrasonic spot-welds aligned perpendicular to the longitudinal axis of the strip. The ultrasonic weld melt-pool width shall not exceed 25 mm (1.0 in).

The geocell sections shall have a cell depth of 6 inches. The number of expanded cells per unit area shall be 34.6/m² (28.9/yd²).

660.06 Anchors. Geocell sections shall be anchored with rows of anchors that bear against and hook over the cells walls. The stake materials shall conform to section 719-Geocell Systems of the Special Provisions. The stake diameter shall be 12-13 mm (1/2 in). The minimum stake length shall be 18 in.

660.07 Aggregate Infill. The infill shall consist of S4C (3/8" – 0) in accordance with Section 703-Aggregates.

Aggregate infill shall be compacted to a minimum 95% Standard Proctor Dry Density (SPDD) or as specified by the Engineer.

660.08 Imported Top Soil. The surface shall be covered with 2" imported top soil in accordance with Section 617-Planting Soil.

660.09 Construction Requirements.

(A) Preparation of Slope. Clear and grub in accordance with Section 201 - Clearing and Grubbing.

Following bulk excavation and fill placement operations, shape the subgrade soils to the grades and dimensions shown on the Construction Drawings. Depressions in the subgrade may be infilled with suitable native soils. Soils which are highly saturated, highly compressible, or unstable shall not be used as fill.

Proof roll and examine the foundation soil to ensure that it meets minimum strength requirements assumed for design. Remove unacceptable materials and

replace with approved compacted fill. If on-site fill material is deemed unsuitable by the engineer, select material shall be imported for filling and shaping the slope foundation.

(B) Geocell. Install geocell system in accordance to manufacturer's installation guidelines.

Geocell sections shall be expanded uniformly into position over the geosynthetic or foundation soil as shown on the Construction Drawings. The orientation of expanded sections shall be as indicated on the Construction Drawings. Accommodation of non-linear alignments may require non-uniform expansion of individual geocell sections in order to form tapered or curved elements. When properly expanded, the individual cells of each geocell section shall measure between 224 mm (8.8 in) long by 259 mm (10.2 in) wide (nominal ± 10%).

The edges of adjacent sections of geocell shall be inter-leafed or butt-jointed according to which side-wall profiles abut. In all cases, the upper surfaces of adjoining geocell sections shall be flush at the joint. Inter-leaf side connections between expanded geocell sections. Welded edge seams should be overlapped and aligned when stapling. Abut end connections between geocell sections. The longitudinal centerlines of abutting external cells should be aligned and stapled at the cell wall contact point.

Adjoining sections shall be stapled together using a Stanley Bostitch P50-10B pneumatic stapler using 1/2 inch SB103020 wire staples (or other approved stapler and staples).

Refer to the manufacturer's standard drawings for additional details regarding panel connections.

(C) Aggregate Infill. Overfill loose aggregate materials approximately 25 mm (1 in) and compact with plate tamper or drum roller. Remove loose surface material to ensure that the surface of the infill is flush with the top edges of the cell walls.

(D) Imported Top Soil. Apply 2" minimum of imported top soil in accordance with Section 617-Planting Soil.

659,04 Method of Measurement. Measurement for payment will not apply.

659.05 Basis of Payment The Engineer will pay for the accepted geocell system item on square foot basis. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	**Pay Unit**
Geocell System	Square Foot

The Engineer will pay for clearing and grubbing under Section 201-Clearing and Grubbing, and hydro-mulching under Section 641 -Hydro-Mulch Seeding. S4C aggregate infill and Imported Top Soil will be considered incidental to the geocell system and will be included with payment of the geocell system."

END OF SECTION 660