ITEM 767.9 JUTE MESH SQUARE YARD

GENERAL

The work under this item shall conform to the relevant provisions of Section 700 of the MassDOT Standard Specifications and the following.

The work under this item shall consist of furnishing and installing jute mesh fabric to prevent soil erosion. Jute mesh shall be placed over all areas of exposed soil in locations shown on the Plans or as required by the Engineer.

MATERIALS

Jute netting or similar material shall be new, unused, undyed, and unbleached 100% biodegradable yarn (no polypropylene) and of uniform plain weave. The materials should weigh approximately 1.0 (+/- 5%) pounds per linear yard (assuming a 4-foot width).

Shall meet the following minimum requirements:

Open Area: 70-75%

Mesh Size: approximately 1/2 inch with an open area of 60-65%.

Roll Weight: approximately 1.0 (+/- 5%) pounds per linear yard

Warp Ends: 78 per linear yard

Weft Ends: 41 per linear yard

Recommended flow: 6 fps (1.8 m/s)

Functional Longevity: 6-9 months

Anchoring devices shall be 11-gauge steel staples 6-inch minimum length. In loose soils the length of the staples shall be 9-inches.

For areas that will be routinely mowed anchoring devices shall consist of minimum 8” wooden stakes. Longer stakes shall be used where loose soils or other conditions obligate, as required by the Engineer.

CONSTRUCTION METHODS

Area shall be seeded prior to installation of jute netting.

Installation shall be such as to ensure continuous contact with soil without folds or wrinkles. Jute netting shall be laid such that upslope fabric is placed over lower slope fabric by a minimum of 3 feet. Adjoining rolls shall be overlapped a minimum 6 inches. The netting shall extend beyond at least 1 foot beyond the edge of the seeded area.

The Contractor shall bury the ends of the jute netting 6-8 inches in anchor trenches at top and bottom of slopes.

Jute netting shall be anchored in place with vertically driven metal staples. The staples shall be driven in until their tops are flush with the soil. Staples shall be placed at 12-inch intervals along the top of a slope and in staggered courses along the face of the slope to achieve a minimum of 3 staples per square yard, or at manufacturer’s recommendations for the given site conditions.

Contractor shall reseed all trenched and otherwise disturbed areas with specified seed mix. The Contractor shall maintain the jute netting and make satisfactory repairs of any areas damaged until acceptance of seed establishment.

METHOD OF MEASUREMENT

Jute Mesh will be measured for payment by the square yard, complete in place, as measured across the surface of the grade and does not include buried or overlapped portions.

BASIS OF PAYMENT

Jute Mesh will be paid for at the Contract unit price per square yard, which price shall include all labor, materials, equipment, and incidental costs required to complete the work. No separate payment will be made for trenching, placing and stapling of jute mesh, repairs to just mesh that becomes loose or is not otherwise functioning to stabilize the soil, new or additional jute matting required for repairs, repairs to soil erosion, and reseeding of trenched and disturbed areas, but all costs in connection therewith shall be included in the Contract unit price bid.