SECTION 313 - PERMEABLE SEPARATOR

313.01 Description. This section describes furnishing and placing geotextile as a permeable separator on a prepared surface.

313.02 Materials.

Geotextiles For Permeable Separator Applications 716.02

313.03 Construction.

(A) Site Preparation. Prepare surface in accordance with Section 305 - Aggregate Subbase Course.

(B) Installation. Unroll geotextiles smoothly on prepared surface in longitudinal direction. Do not drag geotextiles. Remove wrinkles and folds by stretching and anchoring. Overlap geotextiles a minimum of 3 feet at longitudinal and transverse joints, or sew geotextiles with 9-inch overlap at sheet intersections. When subgrade soils have California Bearing Ratio (CBR) of less than 1, use sewn seams.

(C) Sewn Seams. Comply with manufacturer's recommendations for seam, stitch type, and stitching equipment. Seam strengths for both factory-sewn and field-sewn seams shall be equal to or greater than 90 percent of grab strength as measured in accordance with ASTM D 4632. Unless otherwise indicated in the manufacturer’s recommendations, comply with the following requirements:

(1) Use seams with two parallel rows of stitching, 1/2 inch plus or minus 1/4 inch apart.

(2) Sew seams with lock stitch (Federal Stitch Type 401).

(3) When using flat or prayer seam (Type SSa-2), provide minimum distance of 1-1/2 inches between geotextile edge and stitch line nearest to that edge. For other seam types, provide minimum seam allowance of 1 inch.

(D) Geotextile Placement. Hold geotextiles in place by pins, staples, or piles of permeable material. On curves, fold or cut geotextiles to conform to curve, with appropriate overlap or seam. Install fold or overlap in direction of permeable material placement.

(E) Geotextile Exposure Following Placement. Limit time exposure of geotextiles to natural elements, between placement and cover, to a maximum of five days. Construction equipment and vehicular traffic will not be allowed directly on geotextiles.
(F) Permeable Material Placement. Deposit permeable material in accordance with Section 306 - Untreated Permeable Base Course.

(G) Damage Repair. Geotextile will be considered damaged if it is torn or punctured, if overlaps or sewn joints are disturbed, or if there is evidence of subgrade pumping, intrusion, or roadbed distortion. Repair damaged geotextile by removing permeable material around damaged or displaced area and by replacing damaged geotextile with a patch of same type of geotextile. Overlap existing geotextile a minimum of 3 feet from edge of damaged area, or repair damaged sheets by sewing. Replace and compact removed permeable material.

313.04 Measurement. The Engineer will not measure permeable separator for payment.

313.05 Payment. The Engineer will not pay for permeable separator separately and will consider the cost for permeable separator as included in the contract price for the untreated permeable base course pay item. Payment will be full compensation for the work prescribed in this section and the contract documents.

END OF SECTION 313