



Part 1 General

1.1 DESCRIPTION OF WORK

- .1 The work shall consist of the supply and placement of drainage pipes, (perforated and non-perforated), required fittings and couplers, filter and filter fabric materials, and any required incidental material and work, in accordance with the dimensions and locations shown on the plans and as specified in Section 01001 of the Special Provisions in the Contract.

1.2 INSPECTION

- .1 Inspection shall be performed by the Engineer during the installation of the pipe and during the covering of the pipe with filter and filter fabric materials (where required). Pipe shall not be covered without the approval of the Engineer.

Part 2 Products

2.1 MATERIALS

- .1 All pipes, fittings and couplers shall be polyethylene or PVC in accordance with CSA B182.1 and B182.2. Perforated pipe shall consist of 15 mm diameter holes with a hole area of 1993 mm² per metre for 150 mm nominal inside diameter pipe.
- .2 Filter fabric, where specified, shall be non-woven synthetic fibre fabric or knitted polyester continuous seamless sleeve.
- .3 Filter bedding and pipe envelope material shall be a coarse filter aggregate of size 12 - 40 mm uniformly graded and washed clean.

Part 3 Execution

3.1 INSTALLATION

- .1 The Contractor shall prepare the subgrade to the required shape, grade and drainage pattern and as shown on the Plans. The filter fabric shall be installed on the prepared subgrade with sufficient fabric width to wrap filter bedding aggregate



and 300 mm of end overlap. The coarse filter aggregate bedding shall be installed providing a uniform bearing surface for the pipe. Transverse depressions shall be shaped to suit joints. The perforated pipe shall be placed on the filter aggregate providing a uniform support to the pipe. All fittings, tees and joints shall be as recommended by the pipe manufacturer. The pipe shall be surrounded and covered with the filter aggregate material in layers uniformly and simultaneously placed on each side of the pipe. The filter fabric shall be lapped over the filter aggregate to prevent infiltration of fine materials into coarse material. The lap ends and top shall be 300 mm minimum.

- .2 Where drainage pipe is to pass through concrete, it shall be placed prior to concrete placement and shall be properly secured to prevent displacement during concrete placement operations.