



# *City of Estevan*

## Construction Specifications

SECTION 2010  
PERFORATED SUBDRAINS

**1.0 GENERAL**

This section governs the requirements for the construction of perforated subdrains.

**2.0 MATERIALS**

2.1 Pipe and Fittings

Perforated corrugated high density polyethylene plastic pipe and fittings shall conform to CAN/CSA-B182-1 of nominal diameter of 100mm. The pipe shall be enclosed in a woven polyester geotextile envelope, as manufactured by Big 'O' Inc or approved equal.

2.2 Granular Fill

Shall conform to the provisions for granular fill in Section 1090 - Granular Materials and Aggregates.

**3.0 INSTALLATION**

3.1 Trench 150mm or 200mm wide trench excavation with vertical sides to the depths below road subgrade shown on the drawings, nominally 600mm. Follow grade sheets to provide positive slopes to catch basins.

3.2 Install subdrain pipe in granular surround. Ensure that all tears in geotextile envelope are repaired. Enclose couplings in geotextile envelope. Plug upstream ends of pipe with end caps.

3.3 Backfill subdrain with compacted granular fill (95% of Standard Proctor Density) up to road subgrade level.

3.4 Connect drain pipe to catch basins. Ensure that pipe does not protrude more than 50mm into catch basin barrel. Securely mortar into place and backfill catch basin.

3.5 Load, haul and dispose excess trench common excavation to locations designated by the Engineering Services Division.

3.6 Ensure that trench excavation does not damage existing utilities or does not encroach under curb and gutter or sidewalk.

**4.0 MEASUREMENT AND PAYMENT**

4.1 The following work items in this section shall be paid in accordance with the Contract Unit Prices, which shall be deemed full compensation for all labour, materials, equipment, supplies, superintendence, overhead and profit for all work incidental to the supply and installation, completion and maintenance during warranty period.

.1 Subdrain pipe, 100mm diameter, shall be paid on the basis of lineal meters of pipe measured in place to the outer wall surface of catch basins. The Contract Unit Price shall be deemed to include trench excavation and backfill, granular surround, perforated subdrain pipe with geotextile envelope, couplings, compacted granular backfill, removal and disposal of excess common excavation, catch basin connections and all other work described in this section incidental to a complete installation.