

Spec. [1]

410

Storm Sewers

OPSS

OPSS 514

Updated June 2007

All storm sewers 600mm diameter and larger shall be concrete as per OPSS 1820, unless otherwise indicated. The minimum class of pipe shall be as specified on the Contract Drawings.

Subsection 410.05 is amended in that for storm sewers less than 600mm diameter, the Contractor shall be permitted to use PVC or PE pipe of an equivalent size, with a smooth wall. PVC pipe shall be in accordance with OPSS 1841. PE shall be in accordance with OPSS 1840. The minimum pipe class for PE pipe shall be Class 210. The minimum SDR for PVC pipe shall be SDR35.

Subsection 410.05.01.03 is amended to include the following:

CSP shall be riveted or Loc-Seam Hel-Cor pipe as manufactured by Armtec Incorporated or approved equal. Hel-Cor pipe shall be provided with annular corrugated ends with a minimum of two annular rings at each end. Couplers shall be annular corrugated bands with a bolt and angle attachment.

CSP outlets discharging from the enclosed storm system shall include an Armtec Removable Safety Grate or approved equivalent.

Item prices for CSP shall include couplers, gaskets, bolts, nuts, safety grates and all parts reasonably inferred for the completion of the proposed Work.

Subsection 410.07.12.01 is amended to include the following:

At maintenance hole and catch basin connections, if concrete pipe is used, the Contractor shall use a concrete cradle as per OPSD 708.020.

Cover and backfill materials shall meet the requirements of OPSS 501.

Deflection testing per OPSS 410.07.16.05 shall be performed and is included in the Contract unit price for all plastic pipe.

All storm sewers shall be installed according to the appropriate 800 series OPSD.

Subsection 410.07.07 is amended to include the following:

Bedding material shall be Granular 'A' for rigid (concrete) pipe. Embedment material for flexible pipe shall be Granular 'B', Type I.

Bedding for rigid (concrete) pipe storm sewers shall conform to Class 'B'.

Subsection 410.07.11 is amended to include the following:

Cover material shall be Granular 'B', Type I for all pipe.

Trench backfill material shall be Granular 'B', Type I. Trenches off the roadway to within two metres of the edge of pavement shall be backfilled with selected native site material.

The following shall be added to Subsection 410.09:

If, due to unsuitable material, the Commissioner orders additional excavation beyond 150mm below the design grade, measurement will be made in cubic metres of the excavation. Payment for additional excavation and backfill will be made using the 'additional unit prices' listed in Schedule 'A'.

Subsection 514.07.13 of OPSS 514 is amended as follows:

The disposal of all surplus or unsuitable material shall be the responsibility of the Contractor.

The Contract unit price for this item shall include the requirements for restoration of trench cuts as specified under the "Maintenance of Traffic" item.

All pipes shall be cleaned and flushed just prior to inspection and acceptance. Prior to any flushing the Contractor shall submit a Methodology Summary for review and approval which shall detail the entire operation including the source of water, and the method to be employed to capture and deal with the silt, debris and deleterious materials resulting from the flushing operation.

When there is no separate item elsewhere in the Contract, asphalt pavement and concrete removal shall be considered included with the Work of this item.