

PART E
SPECIFICATIONS

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

- E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.1 *The City of Winnipeg Standard Construction Specifications* is available in Adobe Acrobat (.pdf) format on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.
- E1.1.2 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing</u>
D-8488	Ashburn Street –100 m S of CL Riddle Avenue to 25 m N of CL Riddle Avenue
D-8489	Ashburn Street –25 m N of CL Riddle Avenue to 115 m N of CL Riddle Avenue
D-8490	Bernadine Crescent – 60 m S of Olson Way to Olson Way
D-8491	Betsworth Avenue – Dale Boulevard to Evenwood Crescent
D-8492	Betsworth Avenue – Evenwood Crescent to 120 m E of Evenwood Crescent
D-8493	Buchanan Boulevard – 87 m S of Peltier Avenue to Peltier Avenue
D-8494	Charleswood Road – 421 m S of S PL Roblin Boulevard to 212 m S of S PL Roblin Boulevard
D-8495	Charleswood Road – 212 m S of S PL Roblin Boulevard to 184 m S of S PL Roblin Boulevard
D-8496	Cree Cres (E Leg) Easement – Strauss Dr to 112.5 m N of Strauss Dr
D-8497	Cree Cres (E Leg) Easement – 112.5 m N of Strauss Dr to Cree Cr and Abandonment of WWS & WM
D-8498	David Street – Portage Avenue to 100 m N of Portage Avenue
D-8499	David Street – Portage Avenue to Livinia Avenue
D-8500	Roseberry Street – Ness Avenue to 150 m N of Ness Avenue

E2. PROVISIONAL ITEMS

- E2.1 The Provisional Items listed in the Schedule of Prices are a part of the Contract.
- E2.2 Notwithstanding GC:7, the Contractor shall not perform Work included in the Provisional Items without prior authorization from the Contract Administrator. All Work included in the Provisional Items will be carried out within the construction areas shown on the Drawings.
- E2.3 The City reserves the right to diminish all or any portion of the Items of Work listed in the Provisional Items and no claim shall be made for damages on grounds of loss of anticipated profit or for any other reason.

E3. CHANGE IN BACKFILL MATERIAL

- E3.1 Where directed by the Contract Administrator, the Contractor will be required to change the proposed class of backfill for the trenchless installation to either Class 3 or Class 1.
- E3.2 Change in backfill material will be measured and paid for in accordance with Clause 4.8 of CW 2030 and will include the disposal of excavated material.

E4. HYDRANT APPROACH

E4.1 Description

E4.1.1 The contractor shall construct a gravel approach complete with Corrugated Steel Pipe (CSP) to provide access across the existing ditch to the proposed hydrant.

E4.2 Construction Methods

E4.2.1 The gravel approach shall be constructed from 19 millimetre crushed limestone to the dimensions shown on the drawings

E4.2.2 The CSP shall be installed in accordance with CW 3610 and be of the size and type shown on the drawings.

E4.3 Method of Measurement and Payment

E4.3.1 Construction of hydrant approaches will be measured for payment on a unit basis and paid for at the Contract Unit Price for "Construction of Hydrant Approach". Number of units to be paid for will be the total number of hydrant approaches acceptably constructed in accordance with this specification, accepted and measured by the Contract Administrator.

E5. CSP CULVERT INSTALLATION

E5.1 Further to CW 3610 clause 13.1, installation of CSP will include removal and disposal of existing culvert.

E6. ABANDONMENT OF EXISTING 250 AC WM BETWEEN CREE CR AND MORAY ST

E6.1 Description

E6.1.1 This Specification shall cover the abandonment of the existing 250mm Asbestos Concrete (AC) watermain between Cree Cr and Moray St.

E6.2 Construction Methods

E6.2.1 The Contractor shall plug and abandon the 250 watermain and remove or abandon all hydrants and valves at the locations shown on Drawing No. D-8497 in accordance with CW2110 and this specification.

E6.2.2 The Contractor shall remove the existing 250 flanged valve from the valve pit at Moray St as shown on Drawing No. D-8497 and install a blind flange complete with rubber gasket suitable for potable water on the existing flanged tee. Cut the existing 250 watermain pipe flush with the inside wall of the chamber and plug with non-shrink grout and bolt a blind flange to the chamber wall over the opening.

E6.3 Measurement and Payment

E6.3.1 Abandonment of the 250mm AC watermain between Cree Cr and Moray St will be measured for payment on a unit basis and paid for at the Contract Unit Price for "Abandonment of Existing 250 AC WM between Cree Cr and Moray St". Number of units to be paid for will be the total number of watermains abandoned between Cree Cr and Moray St, accepted and measured by the Contract Administrator.

E7. STREET LIGHT CABLE

E7.1 Construction Methods

E7.1.1 At locations where street lighting cable is to be replaced as directed by the Contract Administrator, the Contractor shall, after completion of backfilling and grading of watermain

trenches, construct a trench suitable for the placement of street lighting cable or install a 50 mm HDPE conduit by coring methods. The HDPE conduit will be supplied by the street lighting utility at no cost to the Contractor.

- E7.1.2 The trench or cored pipe shall be constructed on the same alignment as the street light bases or as directed by the Contract Administrator. The bottom of the trench shall be between 600 mm and 750 mm below the top of curb and shall be no more than 150 mm in width. The invert of cored pipe shall be 600 mm and 750 mm below the top of curb.
- E7.1.3 The Contractor shall provide 48 hours notice to the Contract Administrator prior to the commencement of trenching or coring operations in order to allow coordination of the cable installation by the street lighting utility.
- E7.1.4 Upon completion of cable installation by the street lighting utility the Contractor shall backfill, compact and grade the boulevard sections disturbed. Backfill shall be Class 4 Backfill in accordance with CW 2030.

E7.2 Method of Measurement and Payment

E7.2.1 Street Light Cable Trenching

- (a) Trenching for the installation of street lighting cable shall be measured on a linear metre basis based on measurements taken by the Contract Administrator. Payment shall be made at the Contract Unit Price for "Street Light Cable - Trenching", measured as specified herein which price shall be payment in full for performing all operations and supply all materials and all other items incidental to the work included in this specification.

E7.2.2 Coring of HDPE Conduit

- (a) The coring and installation of HDPE conduit shall be measured on a linear metre basis from shaft face to shaft face based on measurements taken by the Contract Administrator. Payment shall be made at the Contract Unit Price for "Street Light Cable - Coring of HDPE Conduit", measured as specified herein which price shall be payment in full for performing all operations and supplying all materials and all other items incidental to the work included in this specification.

E8. SURFACE RESTORATIONS

- E8.1 Further to Section 3.3 of CW 1130 of the General Requirements, permanent surface restorations including all sodding and pavement works for each renewal shall be completed within ten (10) working days from the date that the renewal is completed.
- E8.2 Where Excavations are to be restored with 24-hour early opening concrete. The Contractor shall make it his first priority to; backfill the excavation; pour the 24-hour concrete; where required, lay asphalt as soon as the 24 hour curing period is up and open the closed lane to traffic.

E9. PROTECTION OF EXISTING TREES

- E9.1 The Contractor shall take the following precautionary steps to avoid damage from his construction activities to existing boulevard trees within the limits of the construction area.
- E9.1.1 Do not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
- E9.1.2 Strap mature tree trunks with 25 x 150 x 2400 wood planks. Smaller trees shall be similarly protected using appropriately sized wood planks.

- E9.1.3 Excavations shall be carried out in a manner to minimize damage to existing root systems. Where roots must be cut to facilitate an excavation they shall be neatly pruned at the face of the excavation.
- E9.1.4 Work on site shall be carried out in a manner to minimize damage to existing tree branches. Where damage to tree branches does occur, the Contractor shall neatly prune the damaged branch.
- E9.1.5 American elm trees shall not be pruned between April 1st and August 1st and Siberian elm trees between April 1st and July 1st of any year under provisions of The Dutch Elm Disease Act.
- E9.2 All damage to existing trees due to the Contractor's construction activities shall be repaired to the requirements and satisfaction of the City of Winnipeg, Parks and Recreation Department, Forestry Branch.
- E9.3 No separate measurement or payment will be made for protection of trees.