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 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 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:

Drawing No.	Drawing	
	Cover Sheet	
D-8567	Antrim Road	Louelda Street to Avaco Drive
D-8568	Avaco Drive (West Leg)	Antrim Road to South Leg Avaco Drive
D-8569	Avaco Drive (South Leg)	West leg Avaco Drive to Treger Bay
D-8570	Gateway Road	Simpson Avenue to 120 metres north of Simpson Avenue
D-8571	Gateway Road	120 metres north of Simpson Avenue to Bronx Avenue
D-8572	Gilmore Avenue	Rothesay Street to 100 metres east of Rothesay Street
D-8573	Gilmore Avenue	100 metres east of Rothesay Street to Autumnlea Path
D-8574	McLeod Avenue	Roch Street to 100 metres east of Roch Street
D-8575	McLeod Avenue	100 m east of Roch Street to 200 m east of Roch Street
D-8576	Moncton Avenue	Gray Street to 100 metres east of Gray Street
D-8577	Moncton Avenue	100 m east of Gray Street to 200 m east of Gray Street

E2. OFFICE FACILITIES

- E2.1 The Contractor shall supply office facilities meeting the following requirements:
 - (a) The field office shall be for exclusive use of the Contract Administrator.
 - (b) The building shall be conveniently located near the site of work.
 - (c) The building shall have a minimum floor area of 15 square metres, with 2 windows for cross ventilation, and a door entrance with a suitable lock.
 - (d) The building shall be suitable for all-weather use. It shall be equipped with an electric heater and air conditioner so that the room temperature can be maintained between 16 degrees Celsius and 24 degree Celsius.
 - (e) The building shall be adequately lighted with florescent fixtures and have a minimum of three electrical wall outlets.
 - (f) The building shall be furnished with one desk, one drafting table 3.0 x1.2 metre in surface area, one stool, one four drawer legal size filing cabinet, and six chairs.
 - (g) A portable toilet shall be located near the field office building. The toilet shall have a locking door and be for the exclusive use of the Contract Administrator and other personnel from the City. The field office building and the portable toilet shall be cleaned

on a weekly basis immediately prior to each site meeting. The Contact Administrator may request additional cleaning when he deems it necessary.

- E2.2 The Contractor shall be responsible for all installation and removal costs, all operating costs, and the general maintenance of the office facilities.
- E2.3 The office facilities will be provided from the date of the commencement of the work to the date of Substantial performance.
- E2.4 On a one time basis, where directed by the Contract Administrator, the Contractor shall relocate the office facilities to a location more convenient for the remaining Work.

E3. PROVISIONAL ITEMS

- E3.1 The Provisional Items listed in the Schedule of Prices and described by the City of Winnipeg Standard Construction specifications, are a part of the contract.
- E3.2 The Contractor will perform no work listed under their provisions without prior notification from the Contract Administrator. All work carried out will be within the construction areas listed in the Specifications.
- E3.3 The City reserves the right to diminish all or any portion of the work listed as Provisional Items and no claim shall be made for damages on ground of loss of anticipated profit or any other ground.

E4. SURFACE RESTORATION

E4.1 Further to Secton 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 renewed watermain is placed back into service with all private water services reconnected.

E5. PROTECTION OF EXISTING TREES

- E5.1 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.
 - (a) Do not stockpile materials and soil or park vehicles and equipment on boulevards within two (2) metres of trees.
 - (b) Strap mature tree trunks with 25 x 150 x 2400 wood planks. Smaller trees shall be similarly protected using appropriately sized wood planks.
 - (c) 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.
 - (d) 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.
 - (e) 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.

- E5.2 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, Forestry Services Branch.
- E5.3 No separate measurement or payment will be made for protection of trees.

E6. STREET LIGHT CABLE

- E6.1 Construction Methods
 - (a) At locations where street light 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 installation of 50mm HDPE conduit by coring methods. The HDPE conduit will be supplied by the street lighting utility at no cost to the contractor.
 - (b) 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 trenches shall be between 600mm and 750mm below the top of curb and shall be no more than 150mm in width. The invert of cored pipe shall be 600mm and 750mm below the top of curb.
 - (c) The Contactor 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.
 - (d) 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-R5.

E6.2 Method of Measurement and Payment

- E6.2.1 Street Light Cable
 - (b) Trenching

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 tot e Work included in this specification

(c) Coring

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 a 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.

E7. CHANGE IN BACKFILL MATERIAL

E7.1 Change in backfill material

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.

E7.2 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.