

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:

Drawing Title	Drawing No.	File Name	Size
Cover Sheet	CV01	371-2004_Drawing_CV01-R0.pdf	A1
Plan-Profile – Bishop Grandin Blvd. To Sta. 2+90	CT01	371-2004_Drawing_CT01-R0.pdf	A1
Plan-Profile – Sta. 2+90 to Sta. 5+40	CT02	371-2004_Drawing_CT02-R0.pdf	A1
Plan-Profile – Sta. 5+40 to Sta. 8+10	CT03	371-2004_Drawing_CT03-R0.pdf	A1
Plan-Profile – Sta. 8+10 to Sta. 10+80	CT04	371-2004_Drawing_CT04-R0.pdf	A1
Plan-Profile – Sta. 10+80 to Sta. 13+50	CT05	371-2004_Drawing_CT05-R0.pdf	A1
Plan-Profile – Sta. 13+50 to Clarence Avenue	CT06	371-2004_Drawing_CT06-R0.pdf	A1

E2. OFFICE FACILITIES

- E2.1 The Contractor shall supply office facilities meeting the following requirements:
- The field office shall be for the exclusive use of the Contract Administrator.
 - The building shall be conveniently located near the site of the Work.
 - The building shall have a minimum floor area of 20 square metres, height of 2.4 metres with two windows for cross ventilation and an entrance door with suitable lock.
 - 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 16-18 C. and 24-25 C.
 - The building shall be adequately lit with fluorescent light fixtures and have a minimum of three wall outlets.
 - The building shall be furnished with two desks, one drafting table, one table 3 m x 1.2 m, one stool, one four drawer legal size filing cabinet and a minimum of twelve (12) chairs.
 - 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 Contract Administrator may request additional cleaning when he deems 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 completion of the Contract.

E3. PROTECTION OF EXISTING TREES

- E3.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:
- (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
 - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
 - (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- E3.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his designate.
- E3.3 No separate measurement or payment will be made for the protection of trees.
- E3.4 Elm trees cannot be trimmed between April 1 and July 31, inclusive.

E4. TRAFFIC CONTROL

- E4.1 Further to clauses 3.6 and 3.7 of CW 1130-R1:
- (a) Where directed, the Contractor shall construct and maintain temporary asphalt ramps to alleviate vertical pavement obstructions such as manholes and planing drop-offs to the satisfaction of the Contract Administrator. No measurement for payment will be made for this work.
 - (b) In accordance with the Manual of Temporary Traffic Control, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Section of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Section of the City of Winnipeg in connection with the works undertaken by the Contractor.

E5. TRAFFIC MANAGEMENT

E5.1 Further to clause 3.7 of CW 1130-R1:

E5.1.1 During Parts A and B, Stage 1, the Contractor shall maintain one lane per direction on Waverley Street at all times throughout the project limits.

E5.1.2 During Parts A and B, Stage 2, the Contractor shall maintain one lane per direction on Waverley Street at all times throughout the project limits.

E5.1.3 The Contractor shall maintain left turns at all times at the Chevrier Boulevard, Scurfield Boulevard and Automall intersections.

E5.1.4 The Contractor shall maintain right turns at all times at the Chevrier Boulevard, Scurfield Boulevard and Automall intersections.

E5.1.5 The Contractor shall maintain access to all sidestreets and businesses at all times. Should an interruption of access be required, the Contractor shall discuss the interruption with the owner prior to the interruption occurring.

E5.1.6 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

E6. WATER USED BY CONTRACTOR

E6.1 Further to clause 3.7 of CW 1120-R1, the Contractor shall pay for all costs associated with obtaining water in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.

E7. SURFACE RESTORATIONS

E7.1 Further to clause 3.3 of CW 1130-R1, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E8. SUPPLY AND INSTALLATION OF PAVEMENT REPAIR FABRIC

DESCRIPTION

E8.1 General

E8.1.1 This specification covers the supply and installation of pavement repair fabric.

E8.1.2 Referenced Standard Construction

(a) CW 3130 – Supply and Installation of Geotextile Fabrics.

MATERIALS

E8.2 Storage and Handling

E8.2.1 Store and handle material in accordance with Section 2 of CW 3130.

E8.3 Pavement Repair Fabric

E8.3.1 Pavement repair fabric will be Glass Grid Road Reinforcement Mesh - Style 8501 or approved equal.

CONSTRUCTION METHODS

E8.4 General

- E8.4.1 Install pavement repair fabric at random locations as directed by the Contract Administrator.
- E8.4.2 The extent of the placement limits and quantities required will be determined by the Contract Administrator and provided 48 hours prior to the placement of asphalt.
- E8.4.3 Proceed with installation upon completion and acceptance of the asphalt levelling course.
- E8.4.4 Install fabric in accordance with the manufacturer's specifications and recommendations.
- E8.4.5 Only construction equipment required to place the final asphalt surface course will be allowed to travel on the exposed fabric.
- E8.4.6 Replace damaged or improperly placed fabric.
- E8.4.7 Ensure temperature of the asphalt material does not exceed the melting point of the fabric.

MEASUREMENT AND PAYMENT

E8.5 Pavement Repair Fabric

- E8.5.1 The supply and installation of the pavement repair fabric will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Pavement Repair Fabric". The area to be paid for will be the total number of square metres of pavement repair fabric supplied and installed in accordance with this specification, accepted and measured by the Contract Administrator.

E9. SAWCUTTING

- E9.1 Further to CW 3240-R4, the Contractor will be required to sawcut the existing concrete pavement full depth as follows:
 - (a) 150 mm from the face of the existing barrier curb in the northbound median lane of Waverley Street to allow for construction of the new left turn lane opposite Clarence Avenue.
 - (b) 150 mm from the face of the existing barrier curb to be removed on the south side of Clarence Avenue at Waverley Street for the proposed radius improvement.
- E9.2 All costs in connection with the above sawcutting are incidental and shall be included in the Contract Unit Price for "Pavement Removal, i) Concrete Pavement".