

PART E
SPECIFICATIONS

PART E - SPECIFICATIONS**GENERAL****E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS**

E1.1 *The City of Winnipeg Works and Operations Division Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.

E1.1.1 Division 2 - Standard Provisions, Provision CW 1100 of *The City of Winnipeg Works and Operations Division Standard Construction Specifications* shall apply to the Work.

E1.1.2 Further to GC:2.4(d), Specifications included in the Tender Package shall govern over *The City of Winnipeg Works and Operations Division Standard Construction Specifications*.

E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing</u>
LD-2982	Stormwater Retention Basin Lake 4-10 Lakeshore Revetment Maintenance Works

E2. PROJECT DESCRIPTION

E2.1 The Work to be done under this Contract shall consist of the preparation of sub-grade and placement of new lakeshore revetment to an area above and below the normal water level. Placement with new revetment shall also include the placement of a fabric blanket. This Work will be performed on stormwater retention basin Lake 4-10. Areas bounded by Lake 4-10 are Bonner Avenue, Mitchelson Way and Ragsdill Road.

E3. APPLICABLE SPECIFICATIONS AND STANDARD DETAILS

E3.1 The following Specifications and Standard Details, which are included in the current Standard Construction Specifications of the City of Winnipeg, are applicable to this Work:

(a) <u>Specification</u>	<u>No. of Pages</u>
CW 3510-R7 Sodding	7
CW 3540-R2 Topsoil and Finish Grading	3
CW 3615-R2 Rip Rap	5

The Contractor is advised that all Specifications contained in the Standard Construction Specifications shall apply to the Work on this project, whether specifically listed hereinbefore or not.

(b) <u>Standard Details</u>
SD-026 Storm Water Retention Basin Shoreline Revetment.

E4. MATERIALS AND SAMPLES

E4.1 After the Contract is awarded, the Contractor may be required to furnish a complete statement of origin, composition, manufacture and supplier of any or all materials to be used in the Work, together with samples, which samples shall be subjected to the tests provided for in these Specifications, to determine their quality and fitness for the Work.

E4.2 All materials supplied under this specification shall be of a type approved by the Contract Administrator. Any material or equipment ordered or installed without prior approval shall, if so

directed by the Contract Administrator, be removed and replaced with approved material or equipment at no additional cost to the City.

E5. LIMITS OF WORK

- E5.1 The Contractor's movement shall be restricted to City of Winnipeg property within an area bounded as specified in Specification E2.
- E5.2 The Contractor shall take special care to ensure property (fences, trees, manholes, well casings, etc.) are not damaged as a result of his operation.
- E5.3 The Contractor shall restore any damaged property to original or better than original condition at his cost and to the satisfaction of the Contract Administrator.

E6. ACCESS TO THE SITE

Access to the site for Lake 4-10 shall be from Mitchelson Way.

E7. WATER LEVEL

- E7.1 The normal water level of lake 4-10 is 227.84 metres.
- E7.2 The lake ice thickness is approximately 0.4 – 0.45 metres. The City will not be responsible for the amount of, or duration of fluctuations in ice or water levels in the event of surface run-off, watermain breaks etc.

E8. INSTALLATION OF REVETMENT SURFACE COARSE FOR LAKE 4-10

- E8.1 Due to the amount of vegetation at Storm Retention Basin 4-10 the entire lake revetment surface course as shown on drawing LD-2982 shall be removed and replaced. The Work to be done shall consist of the preparation of sub-grade and placement of new lakeshore revetment to an area above and below the normal water level. Placement with new revetment shall also include the placement of a fabric blanket Geotextile.
- E8.2 Further to Specification CW 3110-R6, "Preparation of Sub-grade", removal and disposal of snow, ice and existing revetment shall be included in "Preparation of Sub-grade" and no separate payment will be made. This Work shall be considered incidental to "Preparation of Sub-grade".

Load and haul snow, ice and existing revetment material from the site to the Summit Landfill site located by the Perimeter and Saskatchewan Avenue and unload the material in a manner satisfactory to the Contract Administrator. Any materials dropped or spilled during the hauling/disposal operation shall be promptly cleaned by and at the expense of the Contractor, to the satisfaction of the Contract Administrator.

Further to Specification CW 3110-R6, "Preparation of Sub-grade", delete "Preparation of Sub-grade will be measured on an area basis. The area to be paid for shall be the total number of square metres of sub-grade prepared in accordance with this Specification and accepted by the Contract Administrator", and insert "Preparation of Sub-grade" will be measured on a volume basis. The volume to be paid for shall be the total number of cubic metres of material removed in accordance with this Specification and accepted by the Contract Administrator.

"Volumes will be determined by average end area calculations. Further to Specification CW 3110-R6 "Preparation of Sub-grade", delete "Preparation of Sub-grade" will be paid for at the Contract Unit Price per Square metre for "Preparation of Sub-grade", and insert "Preparation of Sub-grade" will be paid for at the Contract Unit Price per cubic metre for "Preparation of Sub-

grade”, measured as specified herein, which price shall be payment in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work included in this Specification.

E9. PLACEMENT OF NEW REVETMENT SURFACE COURSE

- E9.1 The new revetment shall be installed in the area where the existing revetment was removed and graded to provide a finished product that is in accordance with Specification CW 3615-R2, Drawing Nos. LD-2982 and Standard Detail SD-026.
- E9.2 Further to specification CW 3615-R2, measurement and payment for “Revetment Surface Course Placement” shall be based upon tonnes (1.66 tones/cubic metre) of revetment material placed in accordance with this Specification as accepted by the Contract Administrator. Payment shall be payment in full for supplying all supplying all materials and for performing all operation herein described and all other items incidental to the Work included in these Specifications.

E10. INSTALLATION OF NEW REVETMENT SURFACE COURSE

- E10.1 The new revetment shall be installed in accordance with Specification CW 3615-R2. Drawing Nos. LD-2982 and Standard Detail SD-026.

Further to Specification CW 3615-R2, Clause 5.3.1 “Revetment Surface Course”, the aggregate for the revetment surface course shall conform to the following gradation requirements:

Canadian Metric Sieve Size	Percent of Dry Weight Passing
50 000	100%
25 000	40-60%
20 000	0-10%
12 500	0-1%

E11. FABRIC BLANKET GEOTEXTILE

- E11.1 Further to Specification CW 3710-R4, and table CW 3710.5.4, fabrics approved for use in this project are:
- (i) Layfield L 315 Woven Geotextile
 - (ii) Dupont Company, Tyvar Style 3607

E12. SURFACE RESTORATION

- E12.1 The areas immediately above the top edge of the revetment as identified on Drawing No. LD-2982, shall be repaired by sodding using imported topsoil in accordance with CW 3510-R7.