



54-2022 ADDENDUM 2

KILDONAN-REDWOOD FEEDER MAIN CROSSING REHABILITATION

URGENT

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE
BID/PROPOSAL**

ISSUED: February 15, 2022
BY: N. Kehler
TELEPHONE NO. 204-928-7436

**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID/PROPOSAL AND SHALL FORM
A PART OF THE CONTRACT DOCUMENTS**

Template Version: Add 2021-03-05

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid/Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid/Proposal may render your Bid/Proposal non-responsive.

FORM B: PRICES

Replace: 54-2022 Form B: Prices with 54-2022 Addendum 2 - Form B: Prices. The following is a summary of changes incorporated in the replacement Bid/Proposal Submission:

Form B(R1): Add Item No.7(k).

PART E – SPECIFICATIONS

Revise: E11.4.12(d) to read: Interior pipe linings shall be high solids or 100% solids liquid epoxy product. Where high solids products are used, adequate curing time must be permitted to meet NSF 61 and manufacturers recommended time for immersion. Approved Products: Enviroline 230, Carboline SP-7888, Tnemec Series N140 Pota-Pox Plus, International Paints Interseal 670HS, Amercoat 133, or approved equal in accordance with B7.

Add: E11.4.19 Rehabilitation of Miscellaneous Metals – West Tunnel Shaft
(a) Rehabilitation coating for existing ladders, railings and other galvanized components shall consist of zinc-rich paint as per SSPC Paint Specification 20

Add: E11.5.10 Rehabilitation of Miscellaneous Metals – West Tunnel Shaft
(a) Coat bare and damages areas, scratches, and corroded portions of access ladders, railings, and tangent tee thrust restraint with zinc-rich coating in accordance with E11.4.19.
(b) Spot prepare areas to receive coating by approved mechanical means to SSPC SP10 or SSPC SP11.
(c) Ladders to be rehabilitated consist of three sections extending from opening at surface to upper intermediate landing, upper landing to second intermediate landing, and second landing to bottom of shaft. See historical record drawings for details.
(d) Alternatively, Contractor may opt to replace existing ladders and railings with new assemblies. New ladders shall be provided in accordance with E20.

Add: E11.7.10 Rehabilitate or Replace Ladders and Railings
(a) Rehabilitation or replacement of existing west tunnel shaft ladders and railings shall be measured and paid on a lump sum basis at the Contract Lump Sum price for “Rehabilitate or Replace Ladders and Railings” as listed in Form B: Prices.

- (b) Payment for “Rehabilitate or Replace Ladders and Railings” will include payment for all labour and materials to complete the work as specified.

Add: E20

Aluminum Ladders

E20.1 Standards

- (a) Conform to CAN3-S157 -M83 Strength Design in Aluminum.
- (b) Conform to CSA W59.2 -M191 Welded Aluminum Construction and CSA W47.2-M1987 Certification of Companies for Fusion Welding of Aluminum.
- (c) Ladder Systems shall be MSU Mississauga Type 1105 as manufactured by MSU Mississauga Ltd., or Approved Equal in accordance with B7.

E20.2 Quality Assurance

- (a) Welding shall only be undertaken by a company Certified by the Canadian Welding Bureau to the requirements of CSA Standard W47.2-M1987, Certification of Companies for Fusion Welding of Aluminum.

E20.3 Shop Drawings

- (a) Submit shop drawings in accordance with E3.

E20.4 Products

E20.4.1 Materials

- (a) Aluminum Extruded Shapes to CSA HA.5-M1980, Alloy 6351-T6
- (b) Cast Aluminum to CSA HA.5-M1980 Alloy 6290
- (c) Polyethylene – Sclair 2107
- (d) Fasteners and Rivets shall be Grade 304 Stainless Steel.
- (e) Glass Filled Nylon

E20.4.2 Fabrication

- (a) Fabricate square, true and accurate to required size, with joints closely fitted. Remove all burrs and sharp edges.
- (b) Rungs of ladder shall be joined to the ladder side rail using the patented MSU conical bracing system.
- (c) Rung spacing shall be 300 mm centre to centre.
- (d) Attachment brackets shall be spaced at 1500 mm maximum centre to centre.
- (e) Aluminum shall be isolated from contact with concrete using polyethylene anchors or isolation pads.
- (f) Ladders longer than 6.4 meters shall be joined with the MSU internal splice system.

E20.4.3 Aluminum Ladders

- (a) Provide the appropriate ladders complete with all necessary attachment brackets and accessories to replace exiting ladder assemblies in-kind. Ensure all ladders are:
 - (i) Assembled using the conical bracing method,
 - (ii) Provided with polyethylene end caps top and bottom,
 - (iii) Equipped with vertical and horizontally adjustable flanged brackets equipped complete with ½ x 3-3/4” Hilti wedge anchors sockethead capscrews and allen keys, or approved equal,
 - (iv) Supplied with 30 mm diameter internally reinforced side rails,
 - (v) Supplied with 20 mm diameter ribbed – slip resistant rungs,

E20.4.4 Execution

- (a) Remove and replace existing ladders and handrails in-kind with new fabricated assemblies.
- (b) New ladder assemblies shall be installed plumb and true.

E20.5 Measurement and Payment

- (a) Measurement and payment for replacement of ladders and handrails shall be in accordance with E11.7.10.

DRAWINGS

Replace: 54-2022_Drawing_1-0798E-C0008-001-R0 with 4-2022_Drawing_1-0798E-C0008-001-R1.