

822-2020 ADDENDUM 2

BALTIMORE FORCE MAIN PIPE CROSSING THE ST. VITAL BRIDGE

URGENT

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE
TENDER**

ISSUED: January 20, 2021
BY: Francisco Aguirre
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**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE TENDER AND SHALL FORM A PART
OF THE CONTRACT DOCUMENTS**

Template Version: A20190115

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

PART B – BIDDING PROCEDURES

Revise: B2.1 to read: The Submission Deadline is 12:00 noon Winnipeg time, **January 26, 2021**.

PART E – SPECIFICATIONS

- Add: E15.5.7(c) The inorganic primer shall be Carboline CARBOZINC 11, or equivalent as approved by the Contract Administrator in accordance with B7, "Substitutes".
- Add: E15.5.7(d) For reference, the approved finish coats specified from the 1988 bridge rehabilitation were specified to conform to CGSB Specification 1-GP-183M, "Coating, Zinc Rich, Epoxy", and included the following:
- (i) Val-Chem Hi-Build Vinyl, 83 Series, as supplied by Mobil Chemical Company, using colour code of: . Val-Chem Hi-Build Vinyl – final coat colour code #83-G-12 (Cypress Green);
 - (ii) Intervinix VM, as supplied by International Paints (Canada) Limited, using colour code of : final coat code "City of Winnipeg – Bridge Green; and
 - (iii) Polyclad 936, as supplied by Corrosion Service Company Limited.
- Add: E15.7.11(e) Where pier diaphragm openings are specified, the girder coating system identified in E15.5.7, "Girder Coating System" and E15.7.7, "Coating of Structural Steel", will be required on the final steel surface, where coating has been removed.
- Revise: E17.5.2(c) with: 500 mm HDPE force main pipe to be either DR 17 or DR 21 with material designation PE4710 to AWWA C906. The purpose of this pipe section is to allow nominal settlement or movement between structure-mounted pipe and buried pipe. Larger nominal pipe diameter for the transition pipe is used than adjoining Stainless Steel and PVC pipes to maintain same approximate pipe inside diameter to aid future swabbing operations.
- (i) Joints to other pipe materials to be flanged using HDPE Flange Adapter with epoxy coated ductile iron or stainless steel backup rings. Bolts to ASTM A193 Grade B8 (304 Stainless Steel). Joints to HDPE pipe to be thermal butt fusion or electrofusion type. Connection to Stainless Steel pipe at risers using custom 500mm to 450 mm reducing flange, fabricated from 500 mm Stainless Steel (ASTM A312 Grade TP304L) blind flange, matching standard ANSI/ASME B16.1 Class 125/150 bolt pattern.

- (ii) As an alternative to the HDPE pipe sections and reducing flanges, 450 mm double ball and socket type flexible expansion joints may be used and would provide the added benefit of allowing a slight deflection in the connection. This joint shall be epoxy coated ductile iron rated for underground installation, and the expansion section covered with a manufacturer approved polyethylene sleeve. Reference product is EBAA Iron Flex-Tend Flexible Expansion Joint for wastewater or water use (not force-balanced model). Approved equal products will be accepted, as accepted by the Contract Administrator, in accordance with B7, "Substitutes".
- (iii) Add a non-reinforced thrust block to the base elbow of each riser pipe (see Drawing 7 Detail 1), to the general requirements of SD-004. The thrust block may be poured against the undamaged remains of the existing thrust block that remains in place after removal of the existing pipe, or against undisturbed soil. Expected thrust on the elbow is anticipated to be low (90 kPa / 13 psi) at 414 kPa / 60 psi test pressure, so the minimum bearing area of the thrust block to be not less than 2.7 sq m. The thrust block may be poured against the pipe insulation, which is rated for 690 kPa (100 psi). Install a resilient sheet at the interface between the insulation and the concrete thrust block.

- Revise: E17.5.4(a) to read: 450 mm force main outlet throttling valve to be full port, eccentric plug type valve for wastewater service, with cast iron body. Valve to conform to AWWA C517 Resilient-Seated Cast Iron Eccentric Plug Valves. Coating to be Fusion Bonded Epoxy to AWWA C550 or equal, rated for direct burial, and conforming to health requirements of NSF 61. Manual geared operators rated for submerged operation to include 50 mm operating nut with valve body with spindle or valve box to ground. Manual geared operators not rated for submerged operation to be housed in precast concrete valve chamber and include valve stem between valve and chamber to be housed within valve box with cover removed. Valve stem penetration through bottom of valve chamber to include a steel or plastic escutcheon plate type stone disc. Valve to be Dezurik, Pratt, Val-Matic or equivalent as accepted by the Contract Administrator, in accordance with B7, "Substitutes".
- Add: E17.6.3(d) To provide further clarity of the pipe connection between the plug valve and outlet manhole shown on Drawing 19 Detail 1, the pipe segment between plug valve and outlet manhole specified as PVC with flanged joint is acting as a thrust ring to be cast into a ring type reinforced concrete thrust block / concrete collar connection at manhole. A substitution for this assembly would be a 2.0m long 450 mm Sch 80S Stainless Steel pipe (ASTM A312 Grade TP304L) c/w flange to Clause E16.5.3 (c) on one end (matching valve) and 50 mm high x 25 mm thick thrust ring installed 0.4m from opposite end. Install single 10.9 kg anode on the Stainless Steel pipe.
- Add: E17.6.3(e) To provide further clarity related to the orientation of the plug valve orientation shown on Drawing 19 Detail 1, the plug valve is shown conceptually. The valve shall be oriented with the shaft in horizontal position. Plug position to be consistent with wastewater or flow carrying suspended solids with plug 'seat' positioned on upstream side of valve in closed position and plug positioned upwards in open position to prevent debris or sediment from blocking plug operation. If manual geared actuator is rated for submerged operation, mount actuator on valve body with spindle and valve box to ground. If manual geared actuator is not rated for submerged operation, then install in chamber as shown on the Drawing.
- Delete: E18.7.13(n)(i)
- Add: E18.7.13(o) Acceptable panel manufacturers shall be Manco Controls, Indus Automation, or Celco, or equivalent as accepted by the Contract Administrator, in accordance with B7, "Substitutes".