

#### 507-2021 ADDENDUM 2

# PIPELINE ACCESS MODIFICATIONS, CLEANING & SUPPORT FOR RIVER CROSSING INSPECTIONS

ISSUED: July 11, 2022 BY: Tanner Beavis TELEPHONE NO. 204-928-9200

## <u>URGENT</u>

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

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

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.

#### PART B - BIDDING PROCEDURES

Revise: B2.1 to read: The Submission Deadline is 12:00 noon Winnipeg Time, July 19, 2022.

#### PART E - SPECIFICATIONS

Revise: E13.4.1 to read: Site 5: West Perimeter Force Main

- (a) Shutdown of the West Perimeter Pumping Station is required to facilitate the installation of flow bypass piping:
  - (i) A maximum of two (2) pump station shutdowns, if required, will be permitted for set-up and removal of flow bypass pumps and piping. Pump station will remain out of service while temporary bypass is in place.
  - (ii) The shutdown may only occur during dry weather flows.
  - (iii) The shutdown may only occur between the hours of 12:00 A.M. and 6:00 A.M.
  - (iv) Maximum 6 hr pump station shut down duration.
  - (v) Inflatable plug shall be used to supplement overflow sluice gate and prevent overflow to environment.
  - (vi) If there is a schedule delay between pipe modifications and pipeline inspection period, the pump station can be returned to service on request. Contractor shall be responsible to configure force main modifications to accept flow, including opening main line valve, installing blind flanges and closing temporary bypass valves.
- (b) Bypass System Design
  - (i) Contractor shall provide submersible pumps and piping to suit to accommodate 20 l/s by pass. Provide redundant standby pump. Provide power source for pumps. Power in the existing pumps station is not available.
  - (ii) Contractor shall submit pump and system curve demonstrating Contractor's system can achieve the design capacity
  - (iii) The Contractor's by-pass shall connect from the West Perimeter Lift Station wet well to the 100 mm tapping sleeve in the south Air Release Chamber
  - (iv) The discharge will be conveyed approximately 2,670 m south via the existing 400 PVC force main into the gravity system

- (v) For the purposes of design, the Contractor shall assume and account for the following in the development of their system curve:
  - ♦ All bypass piping form pumping station to force main connection
  - ♦ Contraction and tee losses at the by-pass connection into the 100 mm tapping sleeve south of the river
  - ♦ Friction loss in the 2,670 m of 400 PVC force main at design flow
  - ♦ Minor losses in the 2,670 m of 400 PVC force main as follows:

1 x Exit Loss

3 x 11.25 Degree Bends

5 x 22.5 Degree Bends

2 x 45 Degree Bend

2 Gate Valves (Open)

2 x 400x400x200 tee (Flow Through)

♦ Static Lift

Downstream hydraulic grade line elevation: 235.02 m

Wet well level: 228.5 m

Contractor to confirm wet well elevations prior to implementing by pass system

- (c) Bypass Piping
  - (i) Bypass piping shall be capable of conveying specified flows and pressures.
  - (ii) Bypass piping over the existing bridge crossing Assiniboine River shall be HDPE with a Dimension Ratio (DR) of 17.
  - (iii) Install tapping sleeve and valve on existing pipe to facilitate controlled dewatering of the existing force main and to facilitate connection of bypass pumping.
  - (iv) Provide hydrovactor or septage truck to dewater sewage from pipeline. Dispose of sewage at an approved location.
  - (v) Provide standby hydrovactor or septage truck of minimum capacity of 7500 litres to dewater lift station wet well as required during the station shutdown, and while bypass is commissioned. Dispose of sewage at approved location. For purpose of dewatering, assume hydrovactor or septage truck for a minimum of the specified shutdown duration.
- (d) A technical memorandum summarizing AECOM's review of flow control requirements for Site 5 and a guideline of general shutdown procedures is included in Appendix E.

Add: E14.4.12 (d) Approved Products: AWWA C509 valve, generally conforming to City of Winnipeg Specification CW2110-R11 except valves shall have flanged ends.

Add: E18.3.1 (e) Leakage test duration shall be 1 hour per pipeline.

Add: E18.3.2 West Perimeter Force Main (Site 5)

- (a) Leakage testing requires the following operations to undertake the leakage test:
  - Provide temporary closure of 400 mm gate valve in downstream (south) manhole.
  - (ii) Installation of blind flange in upstream (north) manhole.
  - (iii) Complete low head pressure test.
  - (iv) Removal of blind flange from upstream (north) manhole.
  - (v) Opening of 400 mm gate valve in downstream (south) manhole.
- (b) Upstream blind flange to be equipped with a port suitable to allow for leakage testing.
  - (i) Testing to be completed at static head elevation of 255.0 m.
- (c) Leakage test duration shall be 1 hour.

Tender No. 507-2021 Addendum 2 Page 3 of 3

# **APPENDICES**

Replace: 507-2021\_Appendix\_A with 507-2021\_Addendum\_2-Appendix\_A.

### **DRAWINGS**

Replace: 507-2021\_Drawing\_1-0798E-C0005-001-R0 with 507-2021\_Addendum\_2-Drawing\_1-0798E-C0005-001-R1.

Replace: 507-2021\_Drawing\_13021-R0 with 507-2021\_Addendum\_2-Drawing\_13021-R1.

# **QUESTIONS AND ANSWERS**

Q1: Can you provide more information regarding the containment berm required for the non-solid wall pipe?

A1: The containment berm has been deleted. Refer to revised drawing 507-2021\_Drawing\_13021-R1 in this Addendum.