

# 246-2020 ADDENDUM 1

## 2020 SEWER INSPECTIONS

### **URGENT**

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

ISSUED: April 14, 2020  
BY: Chris Mitchell  
TELEPHONE NO. 204 928-9259

**THIS ADDENDUM SHALL BE INCORPORATED  
INTO THE TENDER AND SHALL FORM A PART  
OF THE CONTRACT DOCUMENTS**

Template Version: A20190115

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**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.**

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### **PART A – BID SUBMISSION**

Replace: 246-2020\_Form\_B-Prices with 246-2020\_Addendum\_1-Form\_B-Prices. The following is a summary of changes incorporated in the replacement Form B:

- Form B(R1): Revise Item L1.
- Form B(R1): Delete Item L2. Item numbering for L3 Replacement Manholes has changed to L2 as a result.

### **PART B – BIDDING PROCEDURES**

Revise: B2.1 to read: The Submission Deadline is 12:00 noon Winnipeg time, April 17, 2020.

Delete: B13.3 (e)

### **PART D – SUPPLEMENTAL CONDITIONS**

Revise: D2.2 to read:

D2.2 The major components of the Work are as follows:

- (a) Interceptor Sewer Inspection Work Program
  - (i) CCTV Inspection of all Interceptor sewers
  - (ii) Provisional CCTV Inspection of all siphon sewers.
  - (iii) Inspection of all manholes and control structures.
  - (iv) Cleaning of all combined sewers smaller than 900mm.
  - (v) Cleaning of all wastewater sewers smaller than 450mm.
  - (vi) Cleaning of all manhole and structures where the host pipe has been cleaned.
- (b) Land Drainage Sewer Inspection Work Program
  - (i) CCTV Inspection of all sewers.
  - (ii) Inspection of all manholes and structures.
  - (iii) Cleaning of all Land Drainage sewers smaller than 900mm.
  - (iv) Cleaning of all manholes and structures where the host pipe has been cleaned.

- (c) Re-Inspection Work Program
  - (i) CCTV Inspection of all sewers.
  - (ii) Inspection of all manholes and control structures.
  - (iii) Cleaning of all combined sewers smaller than 900mm.
  - (iv) Cleaning of all wastewater sewers smaller than 450mm.
  - (v) Cleaning of all manhole and structures where the host pipe has been cleaned.
- (d) Storm Relief Sewer Inspection Work Program
  - (i) CCTV Inspection of all sewers.
  - (ii) Inspection of all manholes and control structures.
  - (iii) Cleaning of all Storm Relief sewers smaller than 900mm.
  - (iv) Cleaning of all manhole and structures where the host pipe has been cleaned.
- (e) Wastewater Inspection Work Program
  - (i) CCTV Inspection of all sewers.
  - (ii) Inspection of all manholes and control structures.
  - (iii) Cleaning of all wastewater sewers smaller than 450mm.
  - (iv) Cleaning of all manhole and structures where the host pipe has been cleaned.

Revise: D14.3 to read:

D14.3 Further to D14.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path:

- (a) Reinspection CCTV Inspections
- (b) Critical Stage 1 Milestone
- (c) Interceptor CCTV Inspections
- (d) LDS CCTV Inspections
- (e) SRS CCTV Inspections
- (f) WWS CCTV Inspections
- (g) Substantial Performance Milestone
- (h) Total Performance Milestone.

Revise: D18.1 to read:

D18.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

- (a) Critical Stage 1 – CCTV video inspections for the Re-Inspection sewers and all corresponding Panoramo Manhole inspections shall be completed within Fifty (50) consecutive Working Days of the commencement of the Work as specified in D15 having all post processed data and corresponding sewer and manhole defect coding completed and submitted to the Contract Administrator within Fifty-Five (55) Working Days of the commencement of the Work as specified in D15.

## **PART E – SPECIFICATIONS**

Delete: E4.3

Revise: E8.2 to read:

## E8.2 Existing Conditions

### E8.2.1 Interceptor Inspections – West Branch to the Main Interceptor and Associated Secondary Interceptor Sewers:

- (a) Inspection of approximately 8,380 m of the west branch to the main interceptor and associated secondary interceptors from the combined sewer districts.
- (b) Hydraulic analysis has not been undertaken for these sewers at this time, but it is expected that in-line inspections are feasible under dry weather flow conditions. The Contractor shall carry out inspections, however, at times that facilitate obtaining the maximum visible image above the flow surface which are typically at the diurnal low flow periods each day or night.
- (c) The Interceptor sewers shall require CCTV inspection required as identified within Appendix A.
- (d) Three (3) steel pipe Siphons having diameters of 300, 450 and 500mm are located at the underpass of Portage Avenue and Century Street, accessible from one upstream and one downstream inspection chamber will require CCTV Inspection as a provisional item.
- (e) 45% of the Interceptor inventory is located on Regional streets where inspection operations shall be governed by the time restrictions imposed by E11.2.
- (f) Approximately 470m of cleaning shall only be undertaken on the Interceptor sewers.
- (g) The sewers are mostly located within City of Winnipeg right-of-ways, although some are located on private property.

### E8.2.2 LDS:

- (a) The 20,340 m of identified sewers to be inspected are located in the Rivieria, Crescent, Crane (Fort Garry), Lemay Ave Area, Beaujolais Coulee (St. Norbert) areas of the City is under the influence of the Red River. A small area in the Western and Southern part of St. Norbert will be under the influence of the La Salle River (Rue Lemaire, Campeau, St. Therese/St. Pierre behind St. Norbert Collegiate). These systems are all gated.
- (b) The sewers are mostly located within City of Winnipeg right-of-ways, although some are located on private property.
- (c) The LDS sewers shall require CCTV inspection as identified within Appendix A.
- (d) 23% of the Interceptor inventory is located on Regional streets where inspection operations shall be governed by the time restrictions imposed by E11.2.
- (e) Cleaning of 84% LDS assets shall take place.
- (f) The LDS exhibit markedly different flow patterns relating directly with weather conditions and attenuated flow levels from local ditches or watercourses that will present potential water level and flow issues, but it is expected that in-line inspections are feasible under dry weather flow conditions but are under the influence of river levels and are not likely gated. The Contractor shall carry out CCTV inspections at times that facilitate obtaining the maximum visible image above the flow surface.
- (g) The LDS system services road and ditches, conveying rainfall and snow melt runoff and, as with all other pipe conveyance flow types, is subjected to infiltration and exfiltration. Operational issues will see debris runoff from the highway and other environments that will lead to inconsistent debris build up having obstructions or blockages of foreign objects that could be hard to clean or traverse. Cleaning shall however take place for 84% of the LDS inventory and for the remaining 16%, for sewers 900mm diameter and larger, will not be cleaned and shall require traversing over existing debris levels.

### E.8.2.3 Re-Inspection:

- (a) Inspections for 50,770 m of combined sewers located predominantly within the Colony, Cornish and Metcalfe districts and is the full inventory of Critical Stage 1.
- (b) The sewers are mostly located within City of Winnipeg right-of-ways, although some are located on private property.
- (c) The Re-Inspection sewers shall require CCTV inspection as identified within Appendix A.

- (d) Cleaning of 90% Re-Inspection assets shall take place.
- (e) 62% of these assets were inspected between 10 and 20 years ago.
- (f) 47% of the Re-inspection inventory is located on Regional streets where cleaning and inspection operations shall be governed by the time restrictions imposed by E11.2.
- (g) Forty-One (41) flush tank chambers have been identified to be inspected however flush tank leads locations have been identified for Inspection. Due to their inherent configuration, weirs and apparatus additional effort will be required to inspect as downstream of the chambers have limited access and are configured usually having 90° bends that may only allow push camera technologies to facilitate a complete inspection. Limited, to no access from the downstream location is available due to the tee configurations, thus presenting a challenging inspection and as such are itemised separately.

E.8.2.4 Storm Relief Sewers (SRS):

- (a) Inspection of 15,730 m SRS having no prior inspection on record, are located within the Munroe, Munroe Annex and Parkdale service areas of the City. The SRS system is deep and below typical river elevations seen during recent summers. Unlike the combined and wastewater sewer systems, most of the SRS system is not regularly dewatered and at risk of surcharged environments and may require floated platforms.
- (b) The sewers convey storm flows from the combined sewer network for storage and in turn spill diluted flows either back into the combined sewer network or to the local watercourse.
- (c) 10% of the inventory will not be cleaned due to its diameter.
- (d) The sewers are mostly located within City of Winnipeg right-of-ways, although some are located on private property.
- (e) 23% of the Re-inspection inventory is located on Regional streets where cleaning and inspection operations shall be governed by the time restrictions imposed by E11.2.
- (f) Hydraulic analysis has not been undertaken for these sewers, but it is expected that in-line inspections will have to be determined when river levels are at their lowest and under dry weather flow conditions such as after Fall draw-down of the Red River or during Winter ice level conditions. The Contractor shall carry out inspections in accordance with D16.5 at times that facilitate obtaining the maximum visible image above the flow surface.
- (g) Options to involve City Operations to pump SRS levels down may be requested though subject to crews' availability.

E.8.2.5 Waste Water Sewers (WWS):

- (a) CCTV only inspections for 17,300 m of the WWS located within Riverbend Park district.
- (b) 4% of the inventory will not be cleaned due to its diameter. The average age of the assets are approximately 30 years old for these previously uninspected Sanitary sewers.
- (c) 7% of the WWS inventory is located on Regional streets where inspection operations shall be governed by the time restrictions imposed by E11.2.
- (d) The sewers are mostly located within City of Winnipeg right-of-ways, although some are located on private property.

Delete: E9.3

Revise: E16.3 to read:

E16.3 Manholes labelled as having Limited Access include but not limited to the following:

**Table E1: Limited Access Manholes**

<b>MH</b>	<b>Location</b>	<b>Issue(s) associated with access</b>
MH40004847	Elmwood Park Path	Limited to no vehicular access
MH40004054	Neil Avenue	Behind fence
MH70000078	Neil Avenue	Behind fence
MH60014592	McGillivray Boulevard	Limited vehicular access

MH	Location	Issue(s) associated with access
MH70061876	McGillivray Boulevard	Limited vehicular access
MH70061877	McGillivray Boulevard	Limited vehicular access
MH60014830	Lane S of Waller Avenue	Limited vehicular access
MH60015124	Easement N of Crane Avenue	Limited to no vehicular access
MH60015231	Easement N of Crane Avenue	Limited to no vehicular access
MH60015732	Easement N of Chevrier Boulevard	Field, grassed area
MH60015717	Fort Garry Rotary Villa	Limited to no vehicular access
MH60015729	Fort Garry Rotary Villa	Limited to no vehicular access
MH70032572	Cloutier Drive	Limited to no vehicular access
MH70032573	Cloutier Drive	Limited to no vehicular access
MH60019269	Ducharme Park	Limited to no vehicular access
MH60019403	Parc La Salle	Limited to no vehicular access
MH60019006	Easement S of St. Therese Avenue	Limited to no vehicular access
MH60019007	Easement S of St. Therese Avenue	Limited to no vehicular access
MH70005193	Jae Eadie Park	Limited to no vehicular access
MH70005194	Jae Eadie Park	Limited to no vehicular access
For any questions regarding limited access manholes, please contact AECOM.		

Replace E16.4 to read:

E16.4 Any costs associated with establishing access to manholes (both limited access manholes and others), including any permits or fees associated with acquiring access, shall be the responsibility of the Contractor and shall be included in the Contractor's unit rates for sewer and manhole inspections.

Delete E16.5 to E16.67.

Delete E17.2

Delete E17.3

## **APPENDICES**

Replace: 246-2020\_Appendix\_A with 246-2020\_Addendum\_1-Appendix\_A.

## **QUESTIONS AND ANSWERS**

Q1: What is expected by the contractor to gain access to MH on private property?

A1: Please refer to E.16.2 and E.16.3 (addendum will correct the section numbering) to establish and gain access to private property where costs are incidental to the Contract.

Q2: E5.1.8 - Synergen trouble spots - how often are these locations cleaned?

A2: On a regular basis and varies from location to location.

Q3: What is the maximum acceptable water level in a pipe during inspection?

A3: Please refer to CW2145 - 3.17.3.

Q4: Does the flusher nozzle have to be present in the CCTV inspection?

A4: Please refer to CW2145 – 3.17.3.

Q5: E6.1 - Does this clause come into effect for heavy debris (Dirt & Sand)?

A5: Please refer to E5.1.1, where this cannot be met, E6.1 is used as required by the Contract Administrator.

Q6: Can a CCTV inspection be completed by a Panorama camera?

A6: If you are referring to sewer CCTV inspection, it cannot. Refer to E9.3.1(a)(ii) is adhered to producing E8.1.7.2.

Q7: How many passes by the flusher truck is required?

A7: Cleaning shall meet CW2140 - 3.5.3 and E5.1.1.

Q8: E8.1.12 "Incomplete inspections" - If the contractor is required to go back how will they be compensated? Hourly?

A8: Please refer to CW2145 – 3.19, 3.22 and 4.4.5. Incomplete inspections due to an observed failure of the sewer or manhole requiring a post rehabilitation inspection will be paid additionally with the given lineal distances or quantities that are identified in this tender.

Q9: Do all units need to be able to inspect 700m from a single access point?

A9: Please refer to E9.2.1. You need to have the capability to inspect a sewer up to 700m in length.

Q10: Do we need to submit DVD'S and HDD after critical stage 1?

A11: Please refer to E8.1.4 (b) and E8.1.4 (d).

Q11: When will the contractor be notified of deficiencies in inspections?

A11: Please refer to CW2145 - 3.20 and E5.1.5.