Addendum 3

April 3, 2020

Tender T20-11 Greenwood Trunk Sewers – Addendum No. 3

This addendum forms part of the Tender document and shall be read, interpreted, and coordinated with all other parts. The costs of all work contained herein shall be included in the submission. The following revisions supersede the information contained in the original documents to the extent referenced and shall become part thereof.

Item No. 1 – Tender Submission Procedure Change

1. Due to the COVID19 virus pandemic, the City of Courtenay's Tender Submission Procedure has changed as follows.
   a) Tender submissions will be received at City Hall 830 Cliffe Ave. Courtenay via a mail slot at the front door main entrance. If the package is too large for the mail slot, knock on main entrance front door and a staff person will open the door and provide guidance for delivery of the submission package.
   b) Tender submissions will not be opened in public. All packages and mail received by the City remain in a secure location for 24 hours prior to opening to minimize COVID19 virus exposure.
   c) Tenderers will be notified of the unofficial tender submission results within 48 hours of the tender closing date and time.

Item No. 2 – Additions and Revisions

1) Form of Tender

Delete Appendix #1 of the existing Form of Tender and replace with the attached Form of Tender Appendix #1 – R1. Form of Tender Appendix #1 – R1 contains the addition of an option item to replace unsuitable trench subgrade and shall be submitted with all bids for the project.

2) Section 31 24 13 – Roadway Excavation, Embankment and Compaction

Add clause 1.8.14

.14 Payment for removal and replacement of areas of unsuitable trench subgrade will be based on field measurements by the Contract Administrator of the volume excavated prior to subgrade replacement. Payment to include all remedial work, compaction, materials, disposal and requirements, to complete the excavation and removal an additional 300mm of soft/wet material and replace with clean crushed gravel or drain rock topped with a layer of non-woven geotextile fabric, as noted in the geotechnical report.

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Item No. 3 – Questions/Clarifications

1. Drawing E-03 – Detail A – Provide a specific model and manufacturer for the 135W LED area light fixture?

   Basis of Design: American Electric ATB2 60BLEDE85 R4

2. Drawing E-04 – Detail 1 – Provide a specified model and manufacturer for the wet well explosion proof hazardous LED luminaire?

   Basis of Design: Eaton Crouse Hinds Champ MLL LED Luminaire MLL4/UNV1S903 Wall mount

3. The additional clarifications in addendum #1 specify "*3. All excess trench excavation material is required to stay on the property. A location on the property will be made available by the landowner for disposal of excess trench excavation*"
   a. Does this apply to al trench spoil? Or only material that is suitable for agricultural use?
   b. The ALC has implemented some strict restrictions for the placement of fill on ALC land are we required to secure a permit from the ALC in order to place the spoil on farmland?
   c. Some of the trench spoil is expected to be clay, is this to be placed on the landowners property and left? Are there requirements for how it is stored/stockpiled?
   d. Does this apply to the removal of unsuitable subgrade as well?

   This applies to all fill material currently present within the ALR lands, including all trench spoil and unsuitable subgrades. A permit has been obtained from the ALC which notes that the completion of the works is contingent that "Soil material is not authorized to be removed from the Property." Not further permitting is required by the contactor for this work.

   It should be expected that the land owner will provide different areas on the property where materials can be placed based on the amount and type of material. It should also be expected that the materials will need to be placed, spread or formed into reasonable piles on the sites.

4. The geotech report states "If soft / wet conditions are encountered at the base of the trench excavations, then the excavation should be taken down an additional 300 mm and backfilled with clean crushed gravel or drain rock topped with a layer of non-woven geotextile fabric (ie. Nilex 4545 or equivalent.)" Will there be a separate payment for trench over-excavation and placement of drain rock and geotextiles, if necessary?

   See Form of Tender above. Optional item for removal and replacement of unsuitable trench subgrade added to the Schedule of Quantities.

5. The geotech report states that "*locally excavated granular soils can be used as backfill. If this material is dry, water may need to be added to achieve compaction. Excavated silt and clay should not be used as backfill material and should be wasted.*" Can you confirm that the City will accept native material as trench backfill?

For the purposes of the tender the piping pricing notes that import backfill is required. This should be the expectation.

6. Question regarding panelboard A:

   3 of the breakers are listed as LSI, and this would require a different and very expensive panelboard that is not plug or in/bolt on. Would a standard bolt on breaker work for the application? In the specifications document only standard bolt on breakers with 10ka trip are mentioned as a requirement.

   A standard bolt on breaker will not work for the application. Refer to Technical Specification 26 28 16 02 , 2.3 for Solid State Electronic Trip Breaker requirements. Basis of Design: Eaton PRL3a

7. Specification section SS 40 05 62, 2.0 references that the plug valve body should be "fully encapsulated with resilient facing per ASTM D2000-BG", as well as having "interior and exterior fusion bonded epoxy coating". Both can not be applied to the valve. Are the plug valves required to be rubber lined? Or, are the plug valves required to have an interior and exterior fusion bond epoxy coating?

   Plug valves do not require an encapsulated body. Interior and exterior fusion bonded epoxy coating is sufficient.

8. The 10" cross in the valve chamber listed as item 8 a sch 10 cross is not available as a pre formed product. If we fabricate it out of sch 10 pipe it would distort very badly. Can you please confirm if a ductile iron tee would be accepted or a sch 40 fabricated cross?

   Ductile fitting will not be accepted for the stainless-steel sections. A schedule 40 stainless-steel cross would be acceptable.

9. Can you please confirm how the quantities for the Topsoil, Stripping Stockpiling and Replacement will be calculated? What depth is being assumed? What is the extent to be stripped? Are we stripping the entire area within the embankment fill zone or is it confined to the area within the road prism?

   Topsoil Stripping, Stockpiling and Replacement will be calculated based on actual volume of material removed and replaced. For the purpose of the tender, quantity estimates were made based off an average 300 mm depth of topsoil over the footprint of the access road and piping alignment. It is expected that 300 mm of topsoil will be replaced in areas noted.

   Stripping and replacement of topsoil above the pipe outside of the access road is considered incidental to the pipe installation.

10. There is no detail provided for the access road prism – can you confirm that we will be paid for stripping/replace unsuitable sub-grade/import embankment fill for the full width of the road prism based on a 1:1 slope for the embankment fill zone? Not just the excavation/fill within the 4.0m road width?

The quantities provided for the access road works, including stripping, replacement and embankment fill are based on the full road prism footprint, based off a 3:1 embankment side slope.

11. How are you breaking up the quantities for the Topsoil Stripping/Replace Unsuitable Subgrade/Import embankment fill? How do we differentiate between Topsoil Stripping and removal and replacement of unsuitable sub-grade. Given that the majority of the road is a fill couldn't the stripping in these areas of fill be considered replacing unsuitable sub-grade?

    Topsoil stripping quantities includes stripping of 300 mm over the anticipated road alignment. This is the volume expected to be stockpiled as topsoil.

    Materials below the 300 mm initial depth deemed unsuitable will be paid as removal and replacement of unsuitable fill. Embankment fill will be paid as the volume required be placed to build up the area from the top of the unsuitable fill replacement material to the final design grades.

12. SS 31 23 01 Excavating Trench and Backfilling 3.6 Surface Restoration indicates that sod is to be used in all areas where pavement is not used, however the trench profile on the drawings show hydraulic seeding, in addition to there being a hydraulic seeding pay item in the bid schedule. Can you clarify the intent here.

    The intent of surface restoration for areas outside of existing or proposed road structures is to be minimum 150mm topsoil and seed, or as otherwise noted on the Contract Drawings.

13. Addendum #1 says that all excess trench excavation material is to be left on site. The pay items for pipe state "import backfill". Are we to assume 100% imported backfill for trenches and that all the displaced material by the bedding sand and imported backfill back up to existing ground level will be trucked to a location on site for dumping?

    See responses to questions 3 and 5 above.

14. The tender documents make note of a meltric decontactor with a lockable secured box to be installed in the wet well. But the drawings do not show this. Can you address this in an addendum, whether or not this item is needed.

    Reference to a meltric decontactor is incorrect – all wet well cabling will terminate inside the electrical kiosk terminations compartment.

15. Please confirm there is only 1 Fixture in the Wet Well. Please confirm there is only 1 Fixture in the Valve Chamber.

    One fixture in wet well and one fixture in valve chamber.

16. Please specify the powder coating colour for the generator enclosure.

Please allow for a custom powder coat colour in your bid. The colour will be confirmed during the shop drawing submittal process. If your supplier requires a colour for pricing, you may assume RAL6000 Patina Green.

17. Will a factory enclosure with a 73dBA be acceptable? There is a considerable cost savings if the factory enclosure can be utilized.

    No, the enclosure shall meet the sound attenuation requirements as per Technical Specification 26 32 13 01 Power Generation Diesel. The intent is not to provide a custom enclosure, but rather a factory sound attenuated enclosure.

18. Are spring isolators required with an IBC certified skid design and vibration isolators.

    No, spring isolators are not required. Please delete 2.8.2.1 and 2.8.3 from the Technical Specification 26 32 13 01 Power Generation Diesel.

Acknowledgement of this Addendum as part of your submission is required.

End of Addendum No. 3

Bernd Guderjahn, SCMP
Manager of Purchasing
City of Courtenay

Appendix 1

SCHEDULE OF QUANTITIES AND PRICES

(See paragraph 5.3.1 of the Instructions to Tenderers - Part II)

R1 – Revised as per Addendum 3

(All prices and *Quotations* including the *Contract Price* shall include all *Taxes*, but shall not include *GST*. *GST* shall be shown separately.)

Summary Sheet

Division 1:	General Requirements	$ _____
Division 31:	Earthworks	$ _____
Division 32:	Roads and Site Improvements	$ _____
Division 33:	Utilities	$ _____
SUBTOTAL PRICE		$ _____
CONTINGENCY – 10% OF TENDER PRICE		$ _____
GST		$ _____
TENDER PRICE PLUS GST		$ _____

Item	Section	Brief Description See MMCD Master Municipal Specifications and Supplementary Specifications for Additional Details and Descriptions	Unit	Est. Qty.	Unit Price	Amount
Division 1 General Requirements						
01 53 01 – Mobilization and Demobilization						
1.01	SS 1.9.1	Mobilization and Demobilization	LS	1		
01 55 00 – Traffic Control, Vehicle Access and Parking						
1.02	SS 1.5.1	Traffic control	LS	1		
01 55 01 - Environmental Protection						
1.03	SS 1.6.1	Environmental Protection	LS	1		
					Division 1 Sub-Total	

Division 31 – Earthwork						
31 11 01 – Clearing and Grubbing						
31.01	SS 1.4.2	Clearing and Grubbing	LS	1		
31 11 41 – Shrub and Tree Preservation						
31.02	1.3.1	Protection of Existing Wildlife Tree, Approximately Station 1+340	LS	1		
31 22 01 – Site Grading						
31.03	1.4.1	Topsoil Stripping, Stockpiling and Replacement – Station 1+020 to Station 1+600	m^3	1300		
31.04	1.4.1	Topsoil Stripping, Stockpiling and Replacement – Lift Station Site and Manhole Pads	m^3	260		
31.05	1.4.7	Drainage Ditch Realignment, Excavation and Disposal of Excess Material	m^3	140		
31 24 13 – Roadway Excavation, Embankment and Compaction						
31.06	1.8.7	Import Embankment Fill (Station 1+020 to Station 1+615)	m^3	2450		
31.07	SS 1.8.10	Replace Unsuitable Access Road Subgrade	m^3	4000		
31.08	SS 1.8.14	Replace Unsuitable Trench Subgrade (Optional)	m^3	100		
31 37 10 – Riprap						
31.09	1.4.1	Riprap Aprons	m^3	60		
					Division 31 Sub-Total	

Division 32 – Roads and Site Improvements						
32 11 16.1 – Granular Sub-Base						
32.01	1.4.3	Gravel Access Road - Station 1+020 to Station 1+615 – 300mm Depth	m^2	3,500		
32 11 23 – Granular Base						
32.02	1.4.2	Gravel Access Road - Station 1+020 to Station 1+615 – 150mm Depth	m^2	3,200		
32 12 16 – Hot-Mix and Warm Mix AC Paving						
32.03	SS 1.5.8	Permanent Pavement Restoration	LS	1		
32 31 13 – Chain Link Fences and Gates						
32.04	1.5.1	1.8m High Chain Link Fence	m	67		
32.05	1.5.2	4.0m Wide Rolling Gate	ea	1		
32.06	1.5.2	Foot Gate	ea	1		
Hydraulic Seeding						
32.07	1.8.1	Hydraulic Seeding	m^2	12,650		
					Division 32 Sub-Total	

Division 33 – Utilities						
33 01 30.1 – CCTV Inspection of Pipelines						
33.01	1.6.2	CCTV Inspection of Sanitary Sewer Pipe	m	1,630		
33 30 01 – Sanitary Sewers						
33.02	1.6.1, 1.6.2	Sewer Pipe PVC SDR 35 – 200 mm diameter – Import Backfill	lm	255		
33.03	1.6.1, 1.6.2	Sewer Pipe PVC SDR 35 – 250 mm diameter – Import Backfill	lm	425		
33.04	1.6.1, 1.6.2	Sewer Pipe PVC SDR 35 – 300 mm diameter – Import Backfill	lm	710		
33.05	1.6.1, 1.6.2	Sewer Pipe PVC SDR 35 – 375 mm diameter – Import Backfill	lm	226		
33.06	1.6.1, 1.6.2	Sewer Pipe PVC SDR 35 – 450 mm diameter – Import Backfill	lm	12.5		
33.07	1.6.7	Sanitary Tie-In 450 mm diameter into existing 450 mm diameter sanitary sewer or existing manhole	ea	1		
SS 33 31 00 – Sanitary Lift Station, Control Vault and Meter Chamber						
33.08	SS 1.6.1	Lift Station #1 (Lift Station, Valve Chamber and Flowmeter Manhole)	LS	1		

33 34 01 – Sewage Forcemain						
33.09	1.8.1, SS 1.8.2	Forcemain PVC SAN – 350 mm diameter – Import Backfill	lm	1,695		
33.10	1.8.3	45 Degree Bend – 350 mm diameter – PVC DR 18 c/w Joint Restraints	ea	2		
33.11	1.8.3	90 Degree Bend – 350 mm diameter – PVC DR 25 c/w Joint Restraints	ea	1		
33.12	1.8.3	Vertical Deflection – 5 Degree Bend – 350 mm diameter – PVC DR 18 c/w joint restraints (Optional)	ea	10		
33.13	1.8.3	Buried Plug Valve	ea	3		
33.14	SS 1.8.11	Forcemain Pigging Chamber	ea	6		
33.15	SS 1.8.6	Air Valve Chamber	ea	2		
33 42 13 – Pipe Culvert						
33.16	1.5.1, 1.5.2	Culvert Pipe 300 mm diameter	lm	91		
33.17	1.5.1, 1.5.2	Culvert Pipe 400 mm diameter	lm	4.5		
33.18	1.5.1, 1.5.2	Culvert Pipe 450 mm diameter	lm	23		
33.19	1.5.1, 1.5.2	Culvert Pipe 600 mm diameter	lm	57		
33.20	1.5.3	Culvert Endwall 300 mm diameter	ea	16		
33.21	1.5.3	Culvert Endwall 400 mm diameter	ea	2		
33.22	1.5.3	Culvert Endwall 450 mm diameter	ea	2		
33.23	1.5.3	Culvert Endwall 600 mm diameter	ea	6		
33.24	SS 1.5.7	Culvert Tie-In 400 mm diameter into existing 400 mm diameter culvert	ea	2		
33 44 01 – Manholes and Catchbasins						
33.25	1.5.1.1	Manhole base, lid, slab, cover and frame – 1050 mm diameter	ea	14		
33.26	SS 1.5.1.2	Manhole Riser – 1050 mm diameter	vm	26		
33.27	1.5.1.1	Manhole base, lid, slab, cover and frame – 1500 mm diameter	ea	2		
33.28	SS 1.5.1.2	Manhole Riser – 1500 mm diameter	vm	2.9		
33.29	SS 1.5.7	Addition of Odour Control on Manholes	ea	2		
33.30	SS 1.5.8	Addition of Bypass Pumping Connection on Manholes	ea	1		
					Division 33 Sub-Total	