

#### THE CORPORATION OF TAY VALLEY TOWNSHIP REPLACEMENT OF THE BOLINGBROKE BRIDGE CONTRACT #2020-PW-011

#### ADDENDUM NO. 2

#### THIS ADDENDUM SHALL BE INCORPORATED INTO THE TENDER PACKAGE AND SHALL FORM PART OF THE CONTRACT DOCUMENTS

Date Issued: June 2, 2020 Issued By: Amanda Mabo, Clerk

Please note the following changes, corrections, additions, deletions, information and/or instructions in connection with the Tender Package. Failure to acknowledge receipt of this Addendum as per Part "A" – Information to Bidders may render your submission non-responsive.

This addendum is to address the following questions and/or clarification:

#### **Clarifications:**

The Tender Closing date has been extended to **Tuesday June 9<sup>th</sup>**, **2020 at 1:00 p.m.** Questions will be accepted until **Thursday June 4<sup>th</sup>**, **2020 at 4:00 p.m**. and the last addendum will be issued on **Friday**, **June 5<sup>th</sup> at 12:00 p.m**.

Tender submissions shall be delivered to the mailbox at the municipal office or brought to the public opening. The public opening will be held outside the Municipal Office to allow for social distancing measures to occur.

#### **Questions & Answers:**

**Q1:** The modular bridge specification requests Class C fatigue.

To complete this design requirement, can you confirm the design life? (i.e. 50 years, 75 years etc.)

A1: The design life shall be 75 years.

**Q2:** The "without Sidewalk" section on drawing 15 shows a curb at the edge of the approach slab. Is this required?

**A2:** The "Without Sidewalk" section on drawing 15 should be crossed out as it does not apply to this project. Barrier curbs shall be installed as per drawing 5.

**Q3:** Should there be a pricing item in Part B for Road excavation? **A3:** Yes, this is reflected in attached specification and revised bid form.

**Q4:** For Item B4 & B5 are the quantities correct? The road has 150mm of granular A and 300mm of granular B. We would expect the quantity of granular B to be about double the quantity of Granular A

A4: The corrected quantities are reflected in the attached revised bid form.



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**Q5:** Are drawing of the existing bridge available? Are there studs on the top of the existing bridge girders and beams?

**A5:** There are no drawings available for the existing bridge. It is unknown if there are studs on top of the existing bridge girders and beams.

**Q6:** The SP for item C7 and C8 states that the Concrete in Substructure includes Supply and Install of sub drain. Is the subdrain shown on the drawing? Should we assume 150mm perforated drain pipe at the abutments?

**A6:** Yes, please assume that the subdrain is 150mm perforated subdrain with sock wrapping behind each abutment.

Q7: Would the Township consider an SP 12.5mm Cat B PG58-34 Warm Mix similar to the one used by Lanark County due to the distances to any asphalt plant?A7: Yes, Warm Mix asphalt shall be used for this contract as per the attached specifications.

**Q8:** Presumably, the conditions for waterproofing and asphalt paving will be outside of the specified temperature limits. Is the Township expecting a full warranty on these scopes of work?

A8: Yes.

**Q9:** We would like to request a 1-week extension to the tender closing date **A9:** The Tender closing date has been extended until June 9<sup>th</sup> 2020.

**Q10:** There are two item numbers listed as C6 **A10:** This has been addressed within the revised bid form – see attached.

End of Addendum No. 2

Amanda Mabo, Clerk <u>clerk@tayvalleytwp.ca</u>

#### ITEM B8

Hot Mix HL-3 has been deleted from the contract and replaced with Warm Mix SP 12.5

For the Contract Unit Price, the Contractor shall supply, weigh and place compacted Warm Mix Superpave 12.5.

Asphalt ticket summaries shall be submitted to the Township on a daily basis, preferably in excel format. Should there be more than a 10% variance between the Tender amount and actual amount based on the weigh tickets, an audit may be conducted to explain the variance.

Prior to placing asphalt on a granular grade, the road shall be fine graded and compacted ahead of the paver to ensure a compacted, smooth and float-free surface and the cross fall shall be deemed acceptable by the Township. Written permission to proceed with paving shall provide by the Township each day prior to paving.

Prior to placing asphalt on existing granular shoulders, the shoulders shall be compacted to the satisfaction of the Contract Administrator and shall be included in this Item.

#### Penalty Clause

As per OPSS 310, the paver shall operate continuously at a uniform speed. If continuous operations are interrupted for more than 20 minutes, the Contractor shall be charged a penalty of \$50/ minute for every minute of interruption. If operations are interrupted for more than 40 minutes, paving shall cease, and the \$50/ minute penalty will be applied.

A Pre-Pave Meeting shall be conducted between the Contractor and the Township, prior to paving to review the Township's expectations.

Any debris resulting from cold milling, asphalt spills, cleaning of truck boxes or any other mess shall be cleaned up and disposed of by the Contractor to the satisfaction of the Township.

Trucks shall have a designated area for cleaning their boxes, in a location that will not interfere with paving, and is approved by the Contract Administrator.

The Contractor shall take three samples, using the Quarter Master method: one Quality Assurance (QA), one Referee, and one Quality Control (QC), per 1000 tonnes of any one type of mix produced at a minimum of once per day, per lane. The Contractor shall conduct the necessary QC testing required for that type of mix such as, but not limited to, Gradation, AC Content, and Air Voids. A copy of all QC test results will be forwarded to the Township, immediately after the results are known. All QA samples for the Township shall be delivered within four hours of sampling and will be tested at the discretion of the Township. QC compaction testing shall be conducted randomly at a

minimum frequency of every 100 m per lane or 150 m<sup>2</sup> area, and the results submitted to the Township on a daily basis.

The Contractor shall be responsible for the designing of asphalt mixes, which shall conform to the requirements for the type of asphalt mix as specified in the below Table. The warm mix additive is to be approved by the Township prior to the mix design being completed.

# The Contractor shall provide a full 4-point mix design that includes the approved warm mix additive.

The temperature-viscosity chart for the PGAC shall incorporate the warm mix additive.

OPSS 310, Appendix 310-C, Supplementary Requirements for Using Warm Mix Asphalt in Municipal Contracts, shall apply to this Contract.

НМА Туре	Location in Contract	Traffic Category	PGAC Grade	AC %	Max. RAP %
Superpave 12.5	Surface Course	В	58S-34	5.0	15

MTO PGAC price index for payment adjustment shall apply to this Contract as per OPSS 310, Appendix 310-B.

Asphalt Cement shall be according to OPSS MUNI 1101, dated November 2016 and Appendix 1101-B shall apply (PGAC shall be graded for traffic loading using the Multiple Stress Creep Recovery Testing).

PGAC QC test results from the asphalt cement supplier shall be submitted to the Township prior to the commencement of asphalt production to verify that the PGAC meets the requirements of the contract and OPSS MUNI 1101 as amended herein.

The Contractor shall obtain asphalt cement samples for each grade of PGAC at the discretion of the Contract Administrator for QA testing as per OPSS MUNI 1101. The Township will be conducting the following QA Testing by a qualified laboratory:

	1	2	3	4
Test Number	LS-227	T350-14	LS-299	LS-308
Description	ASH Test	MSCR Test	DENT Test	ExBBR

#### OPSS.MUNI 100 OPS GENERAL CONDITIONS OF CONTRACT

As per GC 7.16.02 (d), the warranty period for Warm Mix SP 12.5 Asphalt shall be 24 months.

#### OPSS 310.08 (Quality Assurance)

Subsection 310.08.04 of OPSS 310 is amended by deleting the second paragraph in its entirety and replacing it with the following:

If the WMA is deemed borderline for aggregate gradation or asphalt cement content according to Table 7, 5% of the payment for the affected Warm Mix Asphalt Item will be withheld for the two year warranty period. If any Warm Mix Asphalt deficiencies are identified during the warranty, the Contractor will be notified, in writing, by the Township and the Contractor will conduct the necessary repairs. A total of three borderline test results, for the same attributes, representing up to 5,000 tonnes of HMA production, shall result in the work being deemed rejectable.

Subsection 310.08.05 of OPSS 310 is amended by deleting the second paragraph in its entirety and replacing it with the following:

If the WMA is deemed borderline for air voids as specified in Table 9, 5% of the payment for the affected Warm Mix Asphalt Item will be withheld for the two year warranty period. If any Warm Mix Asphalt deficiencies are identified during the warranty, the Contractor will be notified, in writing, by the Township and the Contractor will conduct the necessary repairs. A total of three borderline test results, for the same attributes, representing up to 5,000 tonnes of HMA production, shall result in the work being deemed rejectable.

#### OPSS.MUNI 1101 MATERIAL SPECIFICATION FOR PERFORMANCE GRADED ASPHALT CEMENT

Section 1101.05 is amended by deleting the fifth paragraph in its entirety and replacing it with the following:

The asphalt cement shall not contain any of the following additives added for PGAC modification: atactic polypropylene; carbon black; polyisobutylene; polyisoprene; natural rubber; alkaline bases; insoluble particulates or fibres; salts of iron, copper, manganese and/or cobalt; silicates; styrene-butadiene rubber (random copolymer latex); synthetic waxes (paraffin waxes, naphthenic waxes); synthetic and saturated oils (including but not limited to the following: vegetable oils or modified vegetable oils; (paraffin oils, polyalphaolefins (PAO), lube oils, and re-refined lube oils.); waste oils (including but not limited to the following: cracked residues, re-refined high vacuum distillate oils; tall oils, vacuum tower asphalt extenders; waste cooking oils, waste engine oils, waste engine oil residues). The asphalt cement supplier shall declare in writing that none of the PGAC additives listed above are contained within the asphalt cement.

Subsection 1101.08.04 is amended with the addition of the following:

The owner may also elect to complete QA testing on recovered AC.

Subsection 1101.08.05 is amended by deleting the second paragraph in its entirety and replacing it with the following:

If the PGAC is deemed borderline, 5% of the payment for the affected Warm Mix Asphalt Item may be subject to holdback, for the two year warranty period, at the

discretion of the Township, for the purposes of repairing any deficiencies that may be identified during the warranty. The Contractor will be notified, in writing, by the Township and the Contractor will conduct the necessary repairs.

Appendix B, Table 1 of OPSS 1101 is amended by deleting the acceptance and rejectable criteria for the Low Temperature Limiting Grade (LTLG) (°C) requirement (Test Method LS-308) and replacing it with the following:

Appendix B Table - 1

Additional Asphalt Cement Testing Requirements and Acceptance Criteria for All PG Grades

	Property and Attributes (Unit)	Test Method	Results Reported Rounded to the Nearest	Acceptance Criteria	Rejectable
All PGAC Grades Excluding PG 58S- 28 and PG 52S- 34	Low temperature limiting grade (LTLG) (°C)	LS-308	0.5	≤ -YY	> -YY

#### OPSS 1150 MATERIAL SPECIFICATION FOR HOT MIX ASPHALT

Subsection 1150.07.01 is amended with the addition of the following:

The Contractor shall purge their AC tanks prior to use of the specified AC on this Contract. The Contactor shall also submit to the Township their Standard Operating Procedure for purging their AC tanks.

#### ITEM B4 EARTH EXCAVATION, GRADING

#### Amendments to OPSS.MUNI 206, April 2019

# 206.09SCOPE206.09.01Actual Measurement206.09.01.01 Earth Excavation, Grading

Clause 206.09.01.01 of OPSS.MUNI 206 is deleted in its entirety and replaced by the following:

No measurement for payment will be made for the item "Earth Excavation, Grading". The item shall be paid as lump sum.

# 206.10 BASIS OF PAYMENT

# 206.10.01 Earth Excavation, Grading – Item

Subsection206.10.01 of OPSS.MUNI 206 is amended by the addition of the following:

Payment at the tendered lump sum price shall be full compensation for all work under this item.

The Contract Administrator may check the accuracy of the completed subgrade. When requested, the Contractor shall provide a person to assist the Contract Administrator in checking grades and lines.

The Contractor shall also be responsible for locating, identifying and protection of all underground utilities within the limits of construction. No additional payment will be made for the repair or replacement of such utilities.

## 902.10.05 Over Excavation

Subsection 902.10.05 is amended by the addition of the following:

No payments shall be made for unauthorized over excavation or backfill of such. Unauthorized over excavation shall be corrected as follows at the expense of the Contractor:

- Supply and place Granular "B", Type I, including compaction as directed by the Contract Administrator.
- If excavation is carried out beyond the design limits, without the approval of the Contract Administrator, no payment will be made for the additional excavation.

#### THE CORPORATION OF TAY VALLEY TOWNSHIP REPLACEMENT OF THE BOLINGBROKE BRIDGE CONTRACT #2020-PW-11 PART "D" – FORM OF TENDER

I/We hereby agree to provide section rehabilitation services in accordance with the provisions set out in Parts A, B, C and D of this Tender, for the following firm prices.

Item No.	Spec. No.	Description	Estimated Quantities	Unit	Bid Price Per Unit	Total Bid
PART A:	General					
A1	SP	Site Preparation	1	L.S.	\$	\$
A2	SP	General Sitework	1	L.S.	\$	\$
A3	182 805 SP	Environmental Protection	1	L.S.	\$	\$
A4	182 805 SP	Light-Duty Silt Fence Barrier	130	m	\$	\$
A5	182 805 SP	Straw Bale Flow Check Dam	3	m	\$	\$
A6	1860	Geotextile	125	m²	\$	\$
A7	706 SP	Traffic Control Signing	1	L.S.	\$	\$
	Total PART A (Carried to Summary)					
PART B: I	Road W	orks				
B1	510 SP	Removal of Pavement, Full Depth	500	m <sup>2</sup>	\$	\$
B2	510 SP	Removal of Steel Beam Guide Rail including End Treatments	71	m	\$	\$
B3	510 SP	Removal of Bridge Structure	1	L.S.	\$	\$
B4	206 SP	Earth Excavation, Grading	1	L.S.	\$	\$
B5	314 501 SP	Granular A	200	t.	\$	\$
B6	314 501 SP	Granular B, Type I	335	t.	\$	\$

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Item No.	Spec. No.	Description	Estimated Quantities	Unit	Bid Price Per Unit	Total Bid
B7	914 SP	Steel Bridge Deck Waterproofing	235	m²	\$	\$
B8	308 SP	Tack Coat	235	m²	\$	\$
B9	310 SP	Hot Mix HL-3	90	t.	\$	\$
B10	710 SP	Pavement Markings, Permanent	58.0	m		
B11	721 SP	Steel Beam Guide Rail incl. Channel	62.3	m	\$	\$
B12	721 SP	Steel Beam Energy Attenuating Terminal System	3	Ea.	\$	\$
B13	920 SP	Deck Joint Assemblies, Installation	1	L.S.	\$	\$
B14	305	Granular Sealing	27	m <sup>2</sup>	\$	\$
B15	353	Concrete Curb and Gutter	45.0	m	\$	\$
B16	353	Concrete Outlets	4	EA.	\$	\$
B17	SP	Concrete Sealer	22.5	m <sup>2</sup>	\$	\$
Total PART B (Carried to Summary)					\$	
PART C: \$	Structur	e				
C1	902 SP	Earth Excavation for Structure	1	L.S.	\$	\$
C2	903 SP	H-Piles	45.8	m	\$	\$
C3	903 SP	Supply Equipment for Installing Driven Piles	1	L.S.	\$	\$
C4	903 SP	Rock Points	10	EA.	\$	\$
C5	SP	35M Bedrock Anchors	6	EA.	\$	\$
C6	SP	Mechanical Connectors	246	EA.	\$	\$

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Item No.	Spec. No.	Description	Estimated Quantities	Unit	Bid Price Per Unit	Total Bid
C7	904 SP	Concrete in Substructure	1	L.S.	\$	\$
C8	904 SP	Concrete in Approach Slabs	1	L.S.	\$	\$
C9	314 902 SP	Granular B, Type I (Structure Backfill)	380	t	\$	\$
C10	511 SP	Rip-Rap	103	m²	\$	\$
C11	SP	Prefabricated Bridge	1	L.S.	\$	\$
(PROV) C12	902 SP	Rock Excavation for Structure	5	m <sup>3</sup>	\$	\$
Total PART C (Carried to Summary)					\$	

## **Tender Summary**

Sub-Total Tender (excluding H.S.T)	\$
Total PART C: Structure	\$
Total PART B: Road Works	\$
Total PART A: General	\$

# Notes:

- i) H.S.T. will be paid in addition to the tendered price.
- ii) Prices must be rounded to two decimal places only.
- iii) OPSS.MUNI specifications shall apply when applicable.