

# The Corporation of the Township of Billings Council Meeting Agenda Tuesday January 31<sup>st</sup>, 2023 @ 7pm Park Centre – 39 Henry Drive, Kagawong

Council

Bryan Barker, Mayor David Hillyard, Deputy Mayor Jim Cahill, Councillor Vince Grogan, Councillor Michael Hunt, Councillor

Staff

Emily Dance, CAO/Clerk
Tiana Mills, Deputy Clerk
Todd Gordon, Municipal Project Manager

#### 1. Call to Order

Deputy Mayor Hillyard to call the meeting to order.

#### 2. Approval of Agenda

Confirm approval of the agenda.

- 3. Disclosure of Pecuniary Interest
- 4. Item for which the Special Meeting was Called -Kagawong River Pedestrian Bridge
  - 4.1. MPM2023-01-03 Lake Kagawong Pedestrian Bridge Tender Results
  - 4.2. Kagawong River Pedestrian Bridge Tender Documents *Information only.*

#### 5. Confirmatory By-Law

5.1. By-Law No. 2023-06 being the January 31st, 2023 Confirmatory By-Law

#### 6. Adjournment

6.1. Motion to Adjourn

#### **Document Accessibility**

The Township of Billings is committed to providing information in the format that meets your needs. We have made every attempt to make documents for this meeting accessible but there may still be difficulty in recognizing all of the information. Please contact us if you require assistance and we will make every attempt to provide this information in an alternative format.

Please note that third party documents received and found within this document will not be converted to an accessible format by the Township of Billings. However, upon request, we will attempt to obtain these documents in an appropriate accessible format from the third party.

For assistance or to make a request please call (705) 282-2611 or email tmills@billingstwp.ca



#### **COUNCIL REPORT**

**Department:** Project Management

**Date:** January 31, 2023

**Report Number:** MPM-2023-01-03 **File:** Kagawong River Pedestrian Bridge

**Attachment:** Water's Edge Letter of Review and Recommendation

#### **Recommendation:**

THAT the Township of Billings Council hereby approves Report No. MPM-2023-01-03 AND awards the Kagawong River Pedestrian Bridge project to Ferguson Aggregate in the amount of \$325,870.31 (includes HST) AND FURTHER authorizes the appropriate By-Law coming forward to the February 7, 2023 Council meeting.

#### **Background:**

A tender for the construction of the Kagawong River Pedestrian Bridge was issued on January 3, 2023, and closed on January 18<sup>th</sup>, 2023. This was a re-tender process as approved by Council at the December 6<sup>th</sup>, 2023 regular meeting. The original tender process, which had occurred between July 21<sup>st</sup> and August 4<sup>th</sup>, 2022, had result in receipt of only 1 bid, which was not accepted by Council.

#### **Discussion:**

The tender and drawings were hosted on the municipal proposals page, and a "bid notice only" was posted on Biddingo (an online bid hosting site) directing interested parties to the municipal website. Potential bidders were directed to make technical enquires to the project engineering firm, Water's Edge. Potential bidders were strongly encouraged to visit the site prior to bidding. Bidders had the opportunity to arrange a guided site visit with the Municipal Project Manager.

A total of eight (8) bid packages were received by the tender close date/time (2:00 pm, January 18<sup>th</sup>, 2023). As per municipal procedure the bid packages were opened publicly at the Park Centre in Kagawong, with the CAO/Clerk, Treasurer, and MPM present. Bidder information and total bid amounts were recorded. The bid packages were reviewed by engineer for accuracy and completeness.

The project engineer's recommendation is to award the contract to the lowest bidder being to Ferguson Aggregate in the amount of \$325,870.31 (includes HST). Additional information and supporting comments are included in their letter of review attached to this report. The project engineer, CAO/Clerk, Deputy Clerk, and MPM met virtually on January 23rd to discuss the bids and staff are of the same opinion to award the project to the lowest bidder.



Due to the timing sensitivity with the project, Staff is recommending that the tender be awarded at tonight's meeting to ensure project and funding continuity with the Ontario Trillium Foundation, and maintain momentum to ensure completion of this important project in 2023.

#### **Financial Impacts:**

#### Project Revenue

Ontario Trillium Fund (Community Building Fund – Capital) \$500,000.00

#### Anticipated Project Costs (January 31, 2023)

Figures include HST

Construction (with recommended bid)	\$325,870.21
Project Engineering Costs, as contracted	\$46,431.70
Total	\$372,301.91

#### Costs To-Date

Figures include HST

Engineering Costs to-date (2022) \$19,000.95

#### **Respectfully Submitted By:**

Todd Gordon, MPM

#### **Reviewed By:**

Emily Dance, CAO/Clerk



January 25, 2023 WE 22021

Mr. Todd Gordon Township of Billings 15 Old Mill Rd., P.O. Box 34 Kagawong, ON P0P 1J0

Dear Mr. Gordon:

RE: Township of Billings

Kagawong River Pedestrian Bridge Tender Review and Recommendation

The Township of Billings issued a Request for Quotations for the above noted project on January 3, 2023 with a closing date of January 18, 2023 at 2:00 PM. A total of eight (8) bids were received by the deadline and publicly opened at 2:30 PM with the results as follows:

Rank*	Company	Amount	
1	Ferguson Aggregate	\$	325,870.31
2	MCA Contracting	\$	514,892.24
3	A2Z Civil Contracting	\$	563,525.35
4	Deep Construction	\$	580,241.16
5	Denis Gratton Construction	\$	647,225.58
6	Sheppard Custom Building	\$	654,270.00
7	Greater City Concrete Works	\$	790,344.42
8	R.M. Belanger Limited	\$	841,261.74

At the time of the Public Opening, Ferguson Aggregate had the lowest submitted cost at \$325,870.31.

Water's Edge has examined the submitted pricing for accuracy and consistency. All except Greater City Concrete Works were accurate with the number presented. Greater City Concrete Works had a transcription error for Item 9 (Unit Price was \$134,177 but Amount was \$137,771). Even with this correction, the quoted price is off by \$77.83. We do not recommend that they be asked to correct it (as a perfection) as they will still be second highest.

Water's Edge also looked at highest and lowest unit prices. Ferguson Aggregate had 6 out of 17 of the lowest Unit Prices. So while Ferguson Aggregate was the lowest, he was not lowest on most items. A2Z Civil Contracting also had 6 out of 17 of the lowest Unit Prices but they also had the highest Unit Cost for the Bridge, resulting in placing third. On the other hand, R.M. Belanger Limited had 5 out of 17 of the maximum Unit Prices, placing them as the highest bidder.

From a Unit Prices perspective, Bridge costs ranged from \$108,301 to \$235,000, a fairly tight range. The remaining items had greater variation with certain items (1, 7, 8 and 10) ranging more than an order of magnitude (> 10 times) while the remaining items were more in the range of 4-8 times. We can conclude that there was nothing unreasonable about the Unit Prices that have been submitted by the tenderers.

Sheppard Custom Building was the sole bidder on the previous tender. Their unit prices went up for Items 1, 2, 5, 7, and 16 while their bridge price dropped from \$325,000 to \$230,000.In addition, the bridge removals cost dropped from \$30,000 to \$10,000 and the abutments dropped from \$100,000 to \$80,000. Assuming that their unit costs for the two (2) items added to this tender (Items 11 and 12) were carried backwards to their old tender, their old tender pricing would still have placed them out of contention.

In conclusion and as per our analysis, Ferguson Aggregate is the lowest bid, similar to the results of the opening. Ferguson Aggregate had requested various clarifications during the tender process and is well aware of project requirements. Ferguson Aggregate is familiar with the Study area having completed the Kagawong River restoration for Manitoulin Streams during Summer 2018. Ferguson Aggregate has also completed many other competitively-bidded projects for Manitoulin Streams and have capably completed the work in each case.

As such, it is our professional opinion that Ferguson Aggregate is fully capable of undertaking the Kagawong River Pedestrian Bridge project for the Township of Billings. Water's Edge recommends that Ferguson Aggregates be awarded the contract to undertake the Kagawong River Pedestrian Project at the stated price of \$325,870.31 (lowest price).

Should you have any comments or questions, do not hesitate to contact me.

Respectfully submitted,

Ed Gazendam, Ph.D., P.Eng., President, Sr. Geomorphologist Water's Edge

/eg





Tender: RFT 2023-01

## Kagawong River Pedestrian Bridge Billings Township, ON

Prepared for: Township of Billings 15 Old Mill Rd., P.O. Box 34 Kagawong, ON P0P 1J0

Prepared By:
Water's Edge Environmental Solutions Team Ltd
25 Water Street South
Cambridge, Ontario
N1R 3C7

January 3, 2023

#### Kagawong River Pedestrian Bridge

Section	Title
00100	<b>Instructions for Tenderers</b>
00300	Contract Tender
00350	Form of Tender
00400	Contract Agreement
00700	General Conditions
00900	List of Drawings
01100	General Instructions
02100	Special Provisions



#### **Instructions for Tenderers**

#### Section 00100

1. General Information

.1 Owner Township of Billings

15 Old Mill Rd., P.O. Box 34

Kagawong, ON

P0P 1J0

Ph: (705) 282-2611 ext 224 Attention: Todd Gordon

.2 Consultant Water's Edge E.S.T. Ltd

25 Water Street South Cambridge, Ontario

N1R 3C7

Ph: 519-651-2390

Attention: Ed Gazendam, P.Eng.

2. Project Site

.1 The project site is located on the Kagawong River on Manitoulin Island adjacent to Henry Drive.

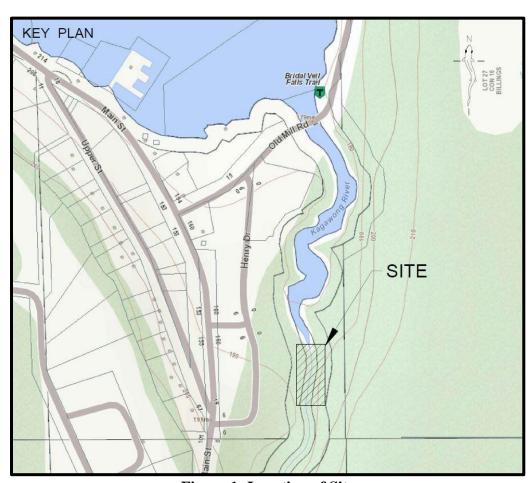


Figure 1: Location of Site



- 3. Project Description
- .1 The project involves the construction of a +/-20 metre pedestrian bridge crossing the Kagawong River in Kagawong, Ontario and the (provisional) removal of an existing failed bridge. Access to the site will be off Henry Drive.
- .2 The project involves the supply and installation of the following general works at the site:
- 19 m pedestrian bridge
- 2 abutments (including geotechnical confirmation of site soil conditions)
- Trail connection to existing trail on west side of the **Kagawong River**
- New Trail Construction with a connection from the new bridge to the existing trail on east side of the Kagawong River (provisional)
- .3 All materials required to provide a finished product will need to be supplied by the successful contractor.
- 4. Tender Documents
- .1 Tender documents include the following:
  - .1 All specifications and drawings as indexed in section 00900
  - .2 Instructions for Tenderers, section 00100
  - .3 Contract Tender, section 00300
  - .4 Form of Tender, section 00350
  - .5 Contract Agreement, section 00400
  - .6 General Conditions, section 00700
  - .7 General Instructions, section 01100
  - .8 Special Provisions, section 02100
- 5. Delivery and Opening of Tenders .1 Address Tenders to:

Township of Billings

15 Old Mill Rd., P.O. Box 34

Kagawong, ON

P0P 1J0

Ph: (705) 282-2611 ext 224

Attention: Todd Gordon

.2 Sealed tenders will be received **no later than 2** p.m. local time on Wednesday January 18, 2023 at the Township of Billings office in Kagawong,



Tender for Kagawong River Pedestrian Bridge, Billings Township, ON Township of Billings

- **ON.** Any tender received after that time will be returned unopened.
- .3 Submit tender on Contract Tender, sections 00300 and 00350 in sealed envelope with project title clearly marked on outside of envelope.
- .4 Tenders or adjustments to tenders will not be accepted by telephone, telegraph or fax.
- .5 Tender opening will be in public at the Kagawong Park Centre, at 18 Henry Drive, Kagawong, as soon as conveniently possible following tender closure.

6. Bid Security

.1 Tenders shall remain in force for 30 days from the closing.

7. Addenda

- .1 Tenderers shall direct all technical questions to Ed Gazendam, P.Eng., Water's Edge EST Ltd by phone (519-651-2390) or email (ed@watersedge-est.ca).
- 8. Acceptance/Rejection of Tenders .1 The Township of Billings will not be responsible for any liabilities, costs, expenses, loss or damage incurred by any tenderer.
  - .2 The Township of Billings reserves the right to reject any or all tenders.
  - .3 Lowest or any tender will not necessarily be accepted.

9. Tender

- .1 Stipulated Price quoted in Contract Tender to include furnishing of all materials, supplies and equipment and providing of all labour, construction tools and equipment, utility and transportation services necessary to complete all work required under this contract, whether it is specifically identified in the contract documents or not. It is the intention of the contract drawings and specifications to provide finished work.
- 10. Examination of Documents/Site .1 Each tenderer must examine drawings, specifications and visit the site before submitting a tender. Each tenderer is to make their own estimates of facilities and difficulties to be



encountered in completing the work under this contract.

- .2 The site may be seen at any time as it is a public area. The tenderer may also arrange to view the site with the Municipal Project Manager by contacting Todd Gordon, Township of Billings, at (705) 282-2611 (ext. 224). Providing adequate lead time to arrange and accompanied site visit is the responsibility of the tenderer. Site inspection activity is at the tenderer's own risk whether accompanied by Township staff or not.
- 11. Informal Tenders
- .1 Tender forms which are incomplete, conditional or obscure, or which contain additions not called for, erasures, alterations or irregularities of any kind, may be rejected as informal.

12. Contract Award

.1 It is Township of Billings' intention to award a contract without delay.

13. Taxes

.1 This project will be subject to HST. **Tenders to specify the subtotal and total price HST** as directed on the Form of Tender (Section 00350 of this document).

14. Errors in Tender

.1 In case of any discrepancy between words and figures in the total tender price, figures will govern.

15. Schedule

- .1 Tender packages are to be sent out on **January 3**, **2023**, bids close at 2 p.m., **January 18**, **2023**, and award is to be on or about **February 3**, **2023**.
- .2 Work on this contract can begin by **February 6**, **2023**.
- .3 No in-water works are expected other than the physical crossing of the river. However, if the contactor needs to be in-water, any in water work is to be **completed by September 2, 2023**
- .4 Work on this contract must be completed by **September 29, 2023.**
- 16. Environmental Controls
- .1 The contractor shall submit an erosion and sediment control plan for the review and approval



by the Project Engineer (on behalf of the Township of Billings) prior to any work on the site. This plan will be reviewed against the requirements outlined in Section 01100 General Instructions and Section 02100 Special Provisions. The plan submitted by the contractor must meet or exceed those requirements in order to be accepted by Township of Billings.

- .2 All materials used for this project shall be free from any fine soil or other contaminants.
- .3 Any existing vegetation disturbed during the work shall be re-established prior to the contractor leaving the site.
- 4. The contractor shall make every reasonable attempt to keep disturbed soil particles from entering the river during the work and shall ensure that the completed project has been stabilized against erosion in both the short and long term.
- .1 Applicable legislation from the Ministry of Natural Resources and the Department of Fisheries and Oceans will apply to the project. The contractor must ensure that they comply with all legislation and regulations that may be applicable to this tender.

17. Legislation



Contract Tender Section 00300

### Tender for the Kagawong River Pedestrian Bridge, Billings Township, ON

Township of Billings 15 Old Mill Rd., P.O. Box 34 Kagawong, ON P0P 1J0 Ph: (705) 282-2611 ext 224 Attention: Todd Gordon

Tender Closing Date: Wednesday January 18, 2023

Tender Closing Time: 2:00 p.m.

- 1. Company Name
  - 1.1 Tender By:

(Tenderer to insert company name and address)

#### 2. Tender Prices

2.1	I/we the undersigned, hereby submit the following tender and, if accepted, agrees to
	supply all labour, materials, plant, equipment and services necessary for the execution
	and completion to the Owner's satisfaction, the work as shown on the drawings or
	herein specified and further agree to complete all the work by the completion date and
	for the amount stated below.

(\$.....) (quoted price to include 13% HST, and HST is to be added to each invoice on submission by the contractor after consultation with the Township of Billings

**Project Manager**)

.....dollars



Tender for Kagawong River Pedestrian Bridge, Billings Township, ON Township of Billings

- 2.2 The undersigned has examined the contract documents and the site of the work and has ascertained all necessary particulars with regard to the work and upon acceptance of its tender shall enter into an agreement, substantially in the same form as the Agreement bound to this tender, for the performance of the work at the tendered price indicated above.
- 2.3 The above price shall apply and shall be considered compensation in full for all work described in the contract documents, subject to the provisions and conditions of the contract.
- 3. Contract Schedule
- 3.1 I/we agree to meet the following completion dates
  - February 6, 2023 can begin work on the project
  - September 2, 2023 complete in-water works
  - September 29, 2023 complete all work
- 4. Additional Items (not necessarily required)

Unit Price

-Not required



Township of Billings
Signatures and Seal
(company seal)
Authorized Signature
Company Name and Address
Dated
Witness

Tender for Kagawong River Pedestrian Bridge, Billings Township, ON



## Form of Tender (to be included in Contractor's Submission)

#### Section 00350

ITEM	DESCRIPTION	UNIT	EST.	UNIT	AMOUNT
NO.			QTY.	PRICE	
SECTI	ON A - Site Access (See SP 11, SP 21, etc)				
1.0	Create temporary access to site and staging area	L.S.	1.00		
2.0	Remove and replace safety barriers to limit access to site	L.S.	1.00		
3.0	Supply, place and remove temporary bridge crossing including any piers	L.S.	1.00		
4.0	Repair access to existing conditions or better	L.S.	1.00		
SECTI	ON B – Grading (See SP 26)				
5.0	Grade trail connections to new bridge including disposal of material on-site	Cu.m	125.00		
6.0	Supply and place Granular 'B' trail	Cu.m	110.00		
SECTI	ON C - Pedestrian Bridge (See SP 23 and SP 2	4)			
7.0	Complete and submit geotechnical investigations in support of abutment design	L.S.	1.00		
8.0	Construct two (2) abutments	L.S.	1.00		
9.0	Supply, place and fasten 19 m x 2.1 m prefabricated pedestrian bridge	L.S.	1.00		
SECTI	ON D - Provisional Items (See SP 22 and SP 36	0 and S	P 31)		
10.0	Remove and dispose of existing pedestrian bridge	L.S.	1.00		
11.0	Grade trail connection from east end of new bridge to existing end of trail along east bank of river including disposal of material on-site	LS	1.00		
12.0	Limestone Screenings for the new east side trail	LS	1.00		
SECTI	ON E - Restoration and Erosion & Sediment Co	ontrol (S	See SP 13	s, SP 27 and SP 28	s, etc)
13.0	Supply and place seed on disturbed areas	Sq.m	375.00		
14.0	Supply and place Coir 400	Sq.m	375.00		
15.0	Supply and plant shrubs	Unit	62.00		
16.0	Supply and plant trees	Unit	12.00		
17.0	Supply, place and maintain coir logs	m	94.00		
SECTI	ON F - Contingency (See SP 4 and SP 32)				
18.0	Contingency	L.S.	0.00	0.00	0.00
		Sub	total:		
		13%	HST:		
		To	otal:		



Contract Agreement (sample only) Section 00400
Agreement made in triplicate this day of, 2023, between:
Township of Billings 15 Old Mill Rd., P.O. Box 34 Kagawong, ON POP 1J0
and
The contractor.
The parties mutually agree as follows:
The contractor shall employ or engage competent staff to perform any layout of the proposed works.
The contractor shall supply all labour, materials, plant, equipment and services necessary for the execution of the work as described in the contract documents.
The contractor shall adhere to the schedule outlined in the contract documents.
Township of Billings shall pay to the contractor for the performance of the work, the sum of \$
Signed, Sealed and Delivered



#### **CONTRACTOR**

(company seal)
Authorized Signature
Company Name and Address
Dated
Witness
Township of Billings 15 Old Mill Rd., P.O. Box 34 Kagawong, ON POP 1J0
Authorized Signature
Dated
Witness
End of Agreement



General Conditions Section 00700

#### 1. Liability Insurance

The contractor shall take out and keep in force for the entire project a comprehensive policy of public liability and property damage insurance coverage of at least \$2,000,000. Proof of insurance must be provided prior to any work being undertaken on the site. The Township of Billings is to be added as an additional insured.

#### 2. Workplace Safety and Insurance Board (WSIB)

The contractor must provide proof of good standing with the WSIB prior to any work being undertaken on site.

#### 3. Occupational Health and Safety Act

The contractor must abide by all requirements of the Occupational Health and Safety Act.

#### 4. Construction Lien Act

Township of Billings will hold back ten percent (10%) of the value of the work for 45 days after the project has been completed, as required under this act.

#### 5. Documentation

Prior to commencing work, the following documentation must be submitted:

Proof of Insurance Coverage

**WSIB** Clearance

**Erosion and Sediment Control Plan** 

With submission of final payment, provide the following:

**WSIB** Clearance



List of Drawings Section 00900

22021 Township of Billings Kagawong River Pedestrian Bridge – Staging and Access Plan (Sheet 1 of 6), Dated: July 19, 2022

22021 Township of Billings Kagawong River Pedestrian Bridge – Erosion and Sediment Control Plan (Sheet 2 of 6), Dated: July 19, 2022

22021 Township of Billings Kagawong River Pedestrian Bridge – Grading Plan (Sheet 3 of 6), Dated: July 19, 2022

22021 Township of Billings Kagawong River Pedestrian Bridge – Restoration Plan (Sheet 4 of 6), Dated: July 19, 2022

22021 Township of Billings Kagawong River Pedestrian Bridge – Existing Bridge Removals (Sheet 5 of 6), Dated: July 19, 2022

22021 Township of Billings Kagawong River Pedestrian Bridge – Structural Plans and Details (Sheet S1, 6 of 6), Dated: July 19, 2022



General Instructions Section 01100

#### 1.0 PROTECTION

All existing and new work is to be protected until the project is completed.

All existing infrastructure on the property and along the access route to the project site is to be protected during all work and any damages to the existing infrastructure are to be made by the contractor at no extra cost. This will include any damages to the access way and the re-establishment of vegetation disturbed when accessing the site.

All existing trees to be protected during all work unless otherwise authorized by the Contract Administrator.

#### 2.0 CLEAN UP

All areas to be cleaned up to pre-construction condition or better at the end of the project.

Any gravel areas disturbed during the work to be re-graded and additional gravel is to be added as required to re-establish the access way.

Any plant material is to remain undisturbed or replaced as required and maintained until plants have re-established.

Any grass areas disturbed during the work to be re-planted and maintained until grass has been re-established.

#### 3.0 TEMPORARY TOILETS

The contractor shall be responsible for providing all required facilities.

#### 4.0 SITE SUPERVISION

The contractor to employ an experienced, competent superintendent that is acceptable to the Township of Billings, to supervise and co-ordinate all aspects of the project. The contractor to provide backup office and field personnel as necessary to ensure accurate, timely execution of work.

The site superintendent shall be on site at all times during normal working hours for the duration of the project.

The contractor shall be responsible for all necessary co-ordination of all materials and labour.

The contractor is only allowed to work during normal daylight hours. No nighttime work is allowed.



Special Provisions Section 02100

#### SP 1. CONTRACT AWARD

Bidders shall note that the award of this contract is subject to the Township of Billings receiving the necessary Government and/or agency approvals (including Ministry of Natural Resources and Department of Fisheries and Oceans). Also, the funding must be in place for the complete limits of the tendered project to be awarded in whole. In addition, to meet the budget, sections, items or portions may be deleted, or quantities in the items may be reduced.

#### SP2. SCHEDULE OF WORK

Upon award of this Contract, the Contractor shall prepare a "Contractor's Schedule of Work" and remit to the Engineer within 10 days of Contract award. The schedule shall be updated by the Contractor as required by the Engineer during the course of construction. Work must be completed in an orderly fashion.

#### SP 3. COMPLETION DATE

- The scheduled construction start date is **February 6, 2023** (to be approved by the Township of Billings' Contact Administrator by **February 3, 2023**).
- All work for this contract is to be completed by September 29, 2023.

#### SP 4. CONTINGENCY ALLOWANCE

Bidders are NOT to include a contingency allowance in the tender.

#### SP 5. DELETION AND REDUCTION OF QUANTITIES

It should be noted that portions of this contract may be deleted or quantities reduced to meet budget restraints.

#### SP 6. MATERIAL ALTERNATIVES

- Materials, as per Specifications and Drawings.
- All materials necessary for the proper completion of the work shall be supplied by the Contractor, and the payment provided in the Contract shall be deemed to include full compensation for the supply of such materials.
- This contract permits alternative materials and construction procedures. The Contractor is to ensure that all requests for prices are completed in the Form of Tender provided. This information will permit the Township of Billings to evaluate the tenders and then to consider the alternatives. Technical data shall be submitted to the Township of Billings if requested.

#### SP 7. CONSTRUCTION LAYOUT

- The Contractor is responsible for all layout work and utility locates. While a legal surveyor is not required to layout the design works, the contractor must utilize staff or employ competent personnel to undertake the layout work.
- Locate, confirm and protect control points prior to starting site work. Preserve permanent reference points during construction.



- Establish two permanent benchmarks on site, referenced to established benchmarks by survey control points. Record locations, with horizontal and vertical data in Project Record Documents.
- Establish lines and levels, located and lay out, by instrumentation.
- Property bars which must be unavoidably disturbed within the working area must be brought to the Engineer's attention prior to their disturbance.
- Maintain a complete, accurate log of control and survey work as it progresses.
- No extra compensation shall be paid to the Contractor under this Contract for performing this work.
- The Project Engineer will inspect the layout for general conformance and will provide input as required. However, the contractor remains responsible for the layout.

#### SP 8. WATERCOURSE/FISHERIES PROTECTION

- For information purposes only, it is noted that in-stream works are prohibited from September 1<sup>st</sup> to June 15<sup>th</sup> of the following year.
- The contractor is to remain out of the water except for the placement of bridge footings under the direction of the Project Engineer.
- The Contractor shall work "in the dry" as per the plans (isolate the work area) or approved alternative.
- At all times, operations shall be controlled so as to prevent the entry of deleterious materials to the watercourse.
- Watercourses shall not be diverted, or blocked, and temporary watercourse crossings shall not be constructed or utilized, unless otherwise specified in the Contract.
- Construction material, excess material, construction debris, and empty containers shall be stored away from watercourses and watercourse banks.
- All equipment maintenance and refuelling shall be controlled so as to prevent any discharge of petroleum products. Vehicular maintenance and refuelling shall be conducted away from watercourses and watercourse banks.
- The Contractor shall bear all costs in connection with the dewatering of excavations, the removal of accumulations of water from the finished structures prior to their being taken over for use, and any other pumping and drainage necessary at the Site for the proper construction and inspection of the Works.
- Dispose of all groundwater drained or pumped as above in a manner approved by the Township of Billings (as required).
- The contractor shall seed and subsequently install coir matting on all exposed soils to limit erosion and sediment delivery to the stream. Coir matting to be installed as per manufacturer's specifications.
- The Contractor is to be aware and implement appropriate erosion and sediment controls as per the current standards (Erosion and Sediment Control Guidelines for Urban Construction, 2005 or most recent version/standard).

#### SP 9. UTILITIES, FENCES AND PRIVATE PROPERTIES

• The Contractor will not be responsible for any necessary permanent relocations of hydro, telephone, watermain or gas services along the line of construction.



However, the Contractor will be held responsible for the protection of fences, private properties, and all services whether aerial or underground, including telephone cables, hydro cables, traffic detector loops, watermains, sanitary sewers, gas mains, etc., during the time of construction and will be held liable for any damage to same.

- Prior to commencing any excavation operations, the Contractor shall obtain the necessary stake-outs and clearances from all utilities concerned and arrange for, at his own expense, any temporary relocations and/or protection that may be required. Proof of stakeout is to be retained at the work location.
- In the event that all utilities requiring relocation have not been relocated prior to the time when the Contractor commences work, the Contractor will be required to co-operate with the utility companies and work around them such that the existing services are protected until such time as they can be removed from the line of construction. No claims for extra payment or extension of time will be allowed for this requirement.

#### SP 10. PROTECTION OF EXISTING TREES

Caution must be exercised around existing trees in order to minimize disturbance. For this reason, the following shall be incorporated into the construction practices and the general contractor and all trades on this project shall be aware of the tree concerns.

- a) Prior to construction start up, the Contractor is to arrange and attend a site visit with the Township of Billings to review the existing conditions of trees and which may be affected by the construction. It will be the responsibility of the Contractor to report to Township of Billings, in writing, any conditions encountered before or during work that will adversely affect the performance of the work or which may result in damage to the trees.
- b) Existing trees, as directed by Township of Billings Contract Administrator and/or Construction Drawings, shall be protected with a snow fence to the drip line during construction and the cost of this work is to be included in the tendered item specified.
- c) In order to minimize damage during construction the following practices are to be followed:
  - (i) Roots (over 25mm in caliper) when necessary are to be cut clean and treated with an approved tree dressing.
  - (ii) Trees, shrubs and hedges 200mm and under diameter, breast height will be trenched by machine until drip lines, and from here on boring or trenching must be done by hand with no roots over 25mm in diameter to be cut.
  - (iii) All fertilizing, pruning, and lifting will be done in accordance with generally accepted specifications and be performed by a qualified tree specialist as approved by Township of Billings.
  - (iv) Trees requiring pre-pruning, for clearance of construction equipment, will be termed as lifting.
  - (v) Care must be taken while working around trees to prevent exhaust burn on the foliage and breakage of limbs.



- (vi) Tunneling and boring will be required under the tree drip line as per generally approved standards. The cost shall be included in the cost of services.
- d) Loss of any tree or shrub within one year of the date of total completion as established by the Contract Administrator proven to be directly caused by over fertilization or faulty materials or poor construction practice is the responsibility of the Contractor. The Contractor is responsible for compensating the Township of Billings for any such damage caused by him/herself, his/her work persons, or his/her subcontractors. Under such circumstances, the Contractor shall remunerate Township of Billings of a value set by Township of Billings' Engineer or a mutually acceptable arbitrator using the Ontario Shade Tree Council evaluation formula as published in "Evaluating Trees in our Environment in the Province of Ontario"
- e) The final release of the Maintenance Security will be subject to Township of Billings Engineer's inspection and acceptance.
- f) Minimize stripping of topsoil and vegetation.

#### SP 11. SITE ACCESS

Access shall be off Henry Drive as shown on **Figure 1.** The staging area shall be adjacent to the work site (on the trail or access road) and out of the floodplain.

To access the east side of the river, the contractor shall provide a bridge sufficient to allow the necessary vehicles and equipment to cross the river and complete the proposed works. The bridge crossing shall not touch the river and span from bank to bank. The contractor is permitted to place a temporary support (concrete block or armourstone) in the river to permit this bridge crossing. This temporary support is to be completely removed once the bridge is no longer required.

The contractor shall also:

- Maintain proper access to and within the Site for all persons and vehicles entitled to such access, and maintain existing roads and paths in reasonable condition or provide suitable detours.
- Erect protective fencing as required by Township of Billings to limit public access to construction site. All associated costs to be included in tender item.
- Keep site at all times as clean and tidy as possible and, as soon as practicable, clear all surplus construction equipment and surplus material and leave clean and in good order to the satisfaction of Township of Billings.
- Maintain trucks used in the process of the Site Works in a condition so that they are tight and that spillages will not occur.
- Trim loads before trucks leave the site.

Site movement of equipment within site adjacent to play areas must be minimized.

Should the Contractor be negligent of his duties in maintaining proper street cleanliness, Township of Billings will take such steps as are necessary to perform such cleaning and shall charge all the costs to the Contractor.



Any costs associated with the maintenance or restoration of construction access roads, or areas affected or damaged by construction traffic including existing roadways, shall be included in the contract unit prices and no additional payment will be made for this work.

#### SP 12. TRAFFIC CONTROL AND SIGNAGE

- The Contractor is fully responsible for traffic control and its costs.
- Minimize interruption to traffic.
- Notify the Police Authorities should it be found necessary to interrupt the normal flow of traffic. Submit details to the Police Authorities and obtain their approval as to the method intended to divert traffic and to the placing of signs, barricades, and flagmen.
- In a similar manner, inform the Fire Department of the area of the Municipality concerned in advance of his program of street blockage and detour so that the Fire Department can set up plans for servicing the area in case of emergency.
- Any traffic or street signs that have been removed due to proposed construction
  work must be reinstalled immediately to ensure the safety of pedestrian and
  vehicle traffic at times. If the signs are not reinstalled or replaced by the end of
  the day or sooner, then Township of Billings will do this work at the Contractor's
  expense. All traffic and street signs are to be placed in locations approved by the
  Township of Billings' Contact Administrator.

#### SP 13. MUD AND DUST CONTROL

- The Contractor shall throughout the duration of the Contract, control dust nuisance resulting directly or indirectly from his operations associated with this Contract. If excessively dusty conditions occur, the Contractor shall cause same to be immediately corrected. Should the Contractor fail to comply with this provision, within 3 hours of verbal notice by Township of Billings to the Contractor or his authorized representative, Township of Billings may, without further notice, cause the conditions to be corrected by others, and the cost of such correction to be deducted from monies owing to the Contractor at a minimum rate of \$100.00 per hour for a minimum of three (3) hours plus the cost of calcium chloride and/or water used.
- The contractor shall also clean and maintain the cleanliness of adjacent streets and the property occupied by him from waste materials or refuse resulting from his operations to the satisfaction of Township of Billings.
- Trucks hauling excavation material, construction materials or other loose
  materials from or to the site shall have their loads trimmed before leaving the
  site and their bodies shall be tight in order that no spillage of their loads will
  occur.
- The Contractor's truck and equipment operations on all streets shall be governed by all local traffic by-laws and regulations of the local Fire, Police and Public Works and Building Departments.



• The Contractor is to be aware and implement appropriate erosion and sediment controls as per the current standards (Erosion and Sediment Control Guidelines for Urban Construction, 2005 or most recent version/standard).

#### SP 14. CLEAN-UP REINSTATEMENT

- The Contractor is advised that the work site must be maintained in as clean a condition as possible during the period of the Contract.
- Upon completion of the major works, the Contractor shall proceed with all expediency to carry out any necessary reinstatement to the satisfaction of Township of Billings.
- In case of undue delay, Township of Billings will carry out these operations
  with other forces, and deduct all cost incurred from monies due to the
  Contractor.

#### SP 15. DISPOSAL OF MATERIALS

- Do not bury rubbish and waste materials on site unless approved by the Contract Administrator.
- Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.
- Excess and/or unsuitable excavated material, asphalt, concrete and all other disposable materials shall be disposed of to a dump site arranged for by the Contractor. If a private dump site is used the Contractor shall, prior to its use, provide the Township of Billings with a letter of release.

#### SP 16. FIRES

Fires and burning of rubbish are not permitted on site.

#### SP 17. CONDUCT OF WORKERS

- No worker shall enter onto neighbouring sites without prior authorization of the site owner.
- Foul language and behaviour are unacceptable. Any worker under the employ of the contractor will be asked to leave the site should unwanted verbal or physical contact be made with any person on adjacent sites or public in general.

#### SP 18 SITE OFFICE

A site office will not be required for this project.

#### SP 19. GEOTECHNICAL

A Geotechnical Investigation shall be completed in support of the abutment design. The Geotechnical Engineer shall review existing site conditions and determine the appropriate soil specifications for the design of the abutments by the Contract Administrator's Structural Engineer.

#### SP 20. STRUCTURAL

The abutment design is currently in draft form and will be finalized by the Design Structural Engineer upon receipt of the geotechnical Report from the Contractor.



The Final Abutment Design will be provided within 2 full business days of receipt of the Geotechnical Report. The Structural Engineer shall review the geotechnical investigation, understand and apply the soil specifications for the design of the abutment, and provide signed and sealed drawings of the abutment design for approval by the Contract Administrator within this 2-day timeframe.

#### SP 21. CLEARING, GRUBBING AND SITE PREPARATION

Under these items for the unit price, the contractor shall supply all equipment, labour and materials to complete the clearing, grubbing and site preparation in accordance with the contract documents.

The contractor shall grub, clear and remove the existing vegetation and dispose of the material off-site. The contractor shall rough grade the proposed channel to the approximate dimensions on the contract documents and to the satisfaction of the Contract Administrator. All material is to be disposed of off-site and in an approved site outside of any regulated areas. The contractor shall work "in the dry" (i.e., isolated from the general flow of water in the creek).

The contractor shall limit the extent of the activity to the general area shown on the plans.

Measurement for payment shall be as per plan quantity. No measurement for payment shall be made on site unless the site has been changed based on instruction of the Contract Administrator.

#### SP 22. EXISTING BRIDGE REMOVAL (PROVISIONAL)

Depending on funding and the cost of removal, this item may be considered provisional. The contractor is to assume that this work will be completed for the purposes of this bid.

Under these items for the unit price, the contractor shall supply all equipment, labour and materials to remove and dispose of the failed pedestrian bridge in accordance with the contract documents.

The contractor shall remove all footings (steel, concrete and wood), bridge components, rails, and supports as found on site, including any failed bridge components within the vicinity of the existing bridge.

The contractor shall dispose of all non-metal debris at the local landfill located at 9490 Hwy 540. All metal components are to be brought to the public works storage yard located at 45 Carter Crescent for recycling by the Township.

Upon removal of the east side concrete abutment, the contractor shall adjust the existing stone present on the site and with the valley to protect the exposed banks and limit future bank erosion under direction of the Project Engineer.



The contractor shall inspect the site prior to tendering to ensure that the complete removal of all materials is fully understood.

The contractor shall limit the extent of the activity to the general area shown on the plans.

Measurement for payment shall be as per plan quantity (one (1) complete pedestrian bridge removal). No measurement for payment shall be made on site unless the site has been changed based on instruction of the Contract Administrator.

#### SP 23. PEDESTRIAN BRIDGE ABUTMENTS

The work to be done under this clause to consist of the supply of all labour, material and Contractor's equipment, and the performance of all work necessary for the detailing, supply, fabrication and placement of the abutments and abutment approaches, as shown on the drawing, as directed by Project Administrator and as specified herein.

The abutments works are to be constructed as per OPSD 3010.150 and as per the approved plans revised to suit site conditions pertaining at the time by Contract Administrator.

Supervision of work under this Section to be under continuous direction of qualified superintendent experienced and competent in this type of work.

Payment to be made for each item at the unit rate stated in the Schedule of Tender Items (including any structure, backfill, grading, stone, water proofing, filter fabric, and shaping).

#### SP 23A CAST-IN-PLACE CONCRETE

All concrete work shall conform to the requirements of CAN/CSA A23.1, ACI 308, OPSS.MUNI 904, OPSS 919, OPSS.MUNI 920, and OPSS.MUNI 1350. All concrete shall be supplied by an approved ready-mix supplier conforming to OPSS MUNI 1350.

#### General

All concrete shall be of the exposure class, and with the minimum 28-day compressive strength, as noted on the Contract Drawings unless otherwise detailed. Refer to CSA A23.1 Table 2 for further details. Submit mix designs to the Consultant for review.

The Contractor may substitute alternative proprietary concrete mixes and proprietary patching compounds (e.g.: Agilia, etc. or approved equal) only upon receipt of written acceptance of the material by the Contract Administrator.

#### Formwork & Falsework



All formwork and falsework, including installation and removal, shall comply with OPSS 919, notwithstanding the requirements of this section.

The Contractor shall design, supply, install, and operate any formwork and falsework and support systems (including any cofferdams and dewatering if necessary) required to perform the work, and any permits that may be required. Such methods and plans shall be submitted to the Contract Administrator for review and approval prior to commencement of the work.

#### **Installation**

Working of the concrete surface shall take place while it is sufficiently plastic to achieve the desired grades, elevations, and texture. Concrete shall not be prematurely worked or overworked to cause excessive fines and water to be forced to the surface. The application of water, cement, cement paste or similar mixtures to the concrete surface to aid in the finishing of the concrete is prohibited.

In accordance with material testing requirements, and in consideration of coordination of resources and scheduling, all concrete pours shall be a minimum of 3m<sup>3</sup>. Contractors shall not be permitted to pour quantities less than 3m<sup>3</sup> unless explicitly approved in writing by the Contract Administrator a minimum of 5 working days prior to the scheduled pour.

#### Curing

The period of curing shall be a minimum of 7 days prior to the placement of the bridge structure.

Curing shall be done with clean burlap (to prevent staining) and water and white opaque polyethylene film in accordance with OPSS.MUNI 904. The burlap required for curing shall be pre-soaked in water in accordance with OPSS.MUNI.904 on site for a period of not less than 24 hours prior to the scheduled concrete pour. Concrete pours will not be permitted if properly pre-soaked burlap is not on-site.

The burlap shall be maintained in place and kept thoroughly wet for a minimum of four (4) days unless otherwise explicitly instructed in writing by the Contract Administrator to do otherwise. During hot weather, formed surfaces shall be cured by leaving formwork in place and keeping formwork continuously wet.

The Contractor shall not be permitted to remove curing materials or formwork/falsework without the explicit written direction of the Contract Administrator.

Concrete that is not cured in accordance with this specification shall be removed and replaced at the sole cost and expense of the Contractor.

#### **Finishing**



The concrete shall have a Class "B" Finish. This type of finish involves the removal of all corrodible metal within 20 mm of the surface and repairing the cavities so formed. Fins and other projections shall be removed leaving a smooth surface. The appearance of the concrete when viewed from a distance of 15 m shall be uniform in appearance as to colour, pattern, and texture. Rubbing with a carborundum stone may be necessary to produce the required surface appearance. Class "B" finishes shall be used on all exposed concrete surfaces.

All exposed concrete corners and edges and construction joints between structure elements shall be chamfered (19mm) unless shown or noted otherwise on the contract drawings.

The finished surface of concrete placed for the approach slabs shall conform accurately to grades and elevations shown on the contract documents.

The surface is to be such that when tested with a 3-metre-long straight edge (provided by the Contractor) placed anywhere in any direction on the surface, there shall not be a gap greater than 6mm between the bottom of the straight edge and the surface of the concrete anywhere below the straight edge. The surface shall be free from open texturing, plucked aggregates and local projections.

#### Miscellaneous

The work of this section also includes the supply and placement of Dow Corning or Sika Canada sealants (or approved equal), Wabo seals (or approved equal), EVA Foam, Ceramar, asphalt impregnated fibreboard, and other materials required for bond break, to seal concrete deck ends, control joints, or base plates, etc.

All other work of this section shall be done explicitly in accordance with OPSS Division 9.

#### **Payment**

Payment for cast-in-place concrete work shall be at the contract prices as stated in the Form of Tender for all labour, materials, and equipment required to perform the Work.

#### SP 23B REINFORCING STEEL

Reinforcing steel shall be in accordance with OPSS.MUNI 905, OPSS 1440 and 1442 and shall include the supply, placement, drilling and grouting, and tying of all reinforcing steel for the project.

Reinforcing steel shall be epoxy coated, or uncoated, as specified on the contract drawings.

Shop drawings for reinforcing steel shall be provided by the supplier and shall be marked as reviewed and approved by the Contractor prior to submitting to the Contract Administrator for review. Reinforcing steel shop drawings shall be the



original work of the supplier. Facsimiles of the tendered or working drawings will not be accepted.

#### **Payment**

Payment for the work of this section shall be included with the appropriate items for placement of cast-in-place concrete as stated in the Form of Tender for all labour, materials, and equipment required to perform the Works.

#### SP 23C Backfill for Structures

The scope of this section shall refer to the placement of backfill for the proposed abutments and armourstone wall.

The Contractor shall backfill the structure in accordance with details shown on the drawings. Backfill materials shall be Granular "A," "B" Type II, Clear Stone (19mm or 3/4" crushed, clean granular), or Select Subgrade Material conforming as noted on the contract drawings.

150 mm of native material is to be placed on top of the armourstone and backfill to allow for seeding and plant growth. Native material to be sourced from site. Should there be an insufficient amount of native material, Granular A material may be used if approved by the Contract Administrator.

Payment for the work of this section shall be at the contract prices as stated in the Form of Tender for all labour, materials, and equipment required to perform the work

#### **SP 24 PEDESTRIAN BRIDGE**

The work to be done under this clause to consist of the supply of a 19 metre x 2.1 metre pedestrian bridge and all labour, material and Contractor's equipment and the performance of all work necessary for the supply, off-loading, assembly and placement of the pedestrian bridge, as shown on the Drawings, as directed by Contract Administrator, and as specified herein, including:

- Supply and erection of 2.1 m wide (inside clear width) pedestrian bridge ("Eagle" brand or equivalent).
- The Contractor is to off-load, assemble and place the bridge onto the constructed abutments
- Bridge should be capable of supporting an ATV vehicle load and to be constructed with self weathering streel truss and deck structure with 0% camber.
- The length of the bridge is according to site requirements (19.0 metre overall length of bridge)
- The design specifications should comply with CAN/CSA-S6-14.
- The pedestrian bridge works are to be completed as per drawing specifications revised to suit site conditions pertaining at the time by the Contract Administrator.



- The pedestrian bridge includes:
  - ❖ Safety railings for the protection of bridge users (127 mm spaced horizontal safety rails)
  - ❖ Toe plate to protect truss members from contact with motorized traffic.
  - ❖ Bicycle rub rail for the protection of cyclists.
  - Threshold plate to span the expansion space between bridge and pier.
  - ❖ Skid-resistant, self-weathering steel deck with 0% camber.
  - One (1) mechanical bolt splice (bridge is to be shipped to site in 2 sections)
  - **\$** Bearing assemblies with 4 bearing pads.

Detailed and sealed shop drawings will be required prior to delivery. Shop drawings to clearly indicate construction details, access ramps, and foundations. The design shall include a list of the manufacturer's recommended preventive maintenance tasks and frequencies. In addition, the Contractor is to provide a clearance letter from the bridge design engineer that the bridge has been properly assembled and placed.

The item includes procurement and fabrication, delivery and erection complete with lifting, putting in place using cranes, fixing in place with bolts set in bridge foundations complete with bearings etc. Item includes bridge bearings, fixing bolts, gusset plates complete in all respect to the satisfaction of Contract Administrator. The bridge foundations/abutments shall be paid separately.

No additional payment will be made for the use of specialized equipment work in these areas.

Supervision of work under this Section to be under continuous direction of qualified superintendent experienced and competent in this type of work

The bridge abutments are separate component of this contract. The Contractor will provide the Engineering Consultant with all data [and/or materials] required to set the bridge on the executed abutments (loading data, templates, inserts, etc.).

Payment to be made for each item (one (1) complete pedestrian bridge) at the unit rate stated in the Schedule of Tender Items.

#### SP 25. GRADING

Under these items for the unit price, the contractor shall supply all equipment, labour, and materials to complete the placement of slope grading and trail connection in accordance with the contract documents.



The contractor shall remove and place material to the specifications noted on the contract drawings. The contractor shall work "in the dry" (i.e., isolated from the general flow of water in the creek).

Measurement for payment shall be as per plan quantity. No measurement for payment shall be made on site unless the site has been changed based on instruction of the contract administrator.

#### SP 26 PATHWAY

Under these items for the unit price, the Contractor shall supply all equipment, labour and materials to complete the realignment of the existing path in accordance with the contract documents.

The Contractor shall remove fill along the pathway location noted on the contract drawings. Any excess fill is to remain on site and distributed in approved areas under direction of the Project Engineer.

The Contractor shall place and compact 150 mm of limestone screenings along the realigned portion of the pathway. The edges are to be properly restored with grass or seed.

Where grades require additional fill, the contractor shall place Granular B material as a base for the limestone screenings.

Measurement for payment shall be as per plan quantity. No measurement for payment shall be made on site unless the site has been changed based on instruction of the contract administrator.

#### SP 27 LANDSCAPING (TOPSOIL, SEED, AND SHRUB PLANTINGS)

Under these items for the unit price, the Contractor shall supply all equipment, labour and materials to complete the landscaping (plantings, sodding, seeding, and top soiling) in accordance with the contract documents.

The Contractor shall work "in the dry" (i.e., isolated from the general flow of water) and remain out of the channel during the completion of the work.

This work shall consist of the supply of all labour, materials and equipment necessary for imported topsoil, seed, and mulch of areas shown on drawings and disturbed by construction as directed by the Contract Administrator and if required for restoration. Work shall conform to OPSS 802 and OPSS 804. Special notice and reference are made to the sections of the OPSS 804.08 Quality Assurance. Areas where the seed fails to grow shall be re-seeded at no additional cost.

The grass and plantings shall have a warranty maintenance period of one (1) year after installation.



#### **Materials**

Imported topsoil shall be fertile loamy material free from roots, vegetation or other debris. Topsoil shall not contain any clods over 50mm in greatest diameter and shall be free of the seeds of noxious weeds. Grass seed shall be Ontario Native Roadside Mix for Seed Zone 37 or equivalent as approved by the local conservation authority.

#### **Installation**

Supply and place imported topsoil to cover area to be seeded and mulched. Spread imported topsoil evenly over area to be seeded. Place topsoil to a minimum depth of 100mm (150 mm over armourstone and backfill). Fine grade surface by hand raking. Remove all stones and lumps.

Apply seed at a rate of 50 kg per 10,000 m<sup>2</sup>.

Plants (shrubs) to be installed as per the density and types shown on the approved plans.

#### **Payment**

Payment for landscaping items will be 80% upon initial acceptance and 20% at the end of warranty upon final acceptance.

Payment for top soiling, seeding, plantings and mulching shall be at the unit price as shown on the Form of Tender. Re-application of material on areas that fail the performance measures listed in OPSS 804 shall be at the Bidder's expense. Initial payment shall not be made on this item until the material has passed the 60 days inspection.

Measurement for payment shall be as per plan quantity. No measurement for payment shall be made on site unless the site has been changed based on instruction of the contract administrator.

#### SP 28 EROSION AND SEDIMENTATION CONTROL

Under these items for the lump sum price, the Contractor shall supply all equipment, labour and materials to complete the installation of the erosion control measures in accordance with the contract documents (silt fence, coir logs and coir matting).

Temporary erosion and sediment control measures shall be carried out as per the approved plans or as amended herein or as amended in the field under direction of the Contract Administrator.

The work includes the supply, installation and removal of sediment and erosion control measures as required, to prevent soil erosion and the siltation of adjacent water courses or properties. The Contractor shall control his operations in such a way as to minimize erosion and discharge of sediment-laden water. Disturbed areas



are to be stabilized as soon as possible. The operation of construction equipment and the placement of temporary material stockpiles are to be done to prevent the tracking or erosion of mud onto the adjacent roadway and properties.

As part of this item, the Contractor shall maintain the erosion and sediment control measures in proper working condition. If, in the opinion of the Contract Administrator, the function of the control measures is impaired by excess silt and debris, the Contract Administrator may request that the Contractor, at his own expense, remove all silt and debris from the erosion and sediment control measure area and return it to its proper working condition. Dumping of excess silt and debris within protected natural areas is prohibited. Should the Contractor fail to complete this work in a timely fashion, the Contract Administrator may issue a stop work order for all work on the site until the removal of excess material and the restoration of the erosion and sediment control measure is complete. The Contractor shall not begin any additional work until the Contract Administrator has provided the Contractor with a Recommence Work order.

#### a) Supply and Install Coir Logs

The Contractor shall supply and install temporary biodegradable coir logs as per manufacturer's specifications. All work shall be completed as per OPSD 219.120 and OPSD 219.191, the approved Contract Drawings or as directed by the Contractor Administrator.

Payment at the Contract Price for this item shall be; 40% after initial installation, 40% for maintaining the fence during construction and 20% after removal of the temporary fencing. The unit bid price shall include full compensation for all labour, equipment and material required to do the work including costs and fees for disposal of material off site.

#### b) Supply and Install Coir Fabric

Erosion Control Blankets (ECB) shall be biodegradable material 'Geo-Jute,' also known as 'coir fabric.' ECB shall be placed as per the design drawings or as determined by the Contract Administrator at the time of construction.

The Contractor shall apply seed as required before the installation of the ECB. The ECB shall be installed as per manufacturer's specifications including installation in the proper direction, overlapping and fastening. Fastening shall be completed with biodegradable materials (e.g., wood pegs or corn-based manufactured staples) unless otherwise approved by the Contract Administrator. Any plantings shall be undertaken after the installation of the ECB.

Payment at the Contract Price for this item shall be; 40% after initial installation, 40% for maintaining the fence during construction and 20% after removal of the temporary fencing. The unit bid price shall include full compensation for all labour, equipment and material required to do the work including costs and fees for disposal of material off site.



#### SP 29 Granular 'B'

The work to be done under this clause to consist of the supply of all labour, material and Contractor's equipment, and the performance of all work necessary for the detailing, supply, fabrication and placement of Granular B backfill material for the trails, as shown on the drawings, as directed by Contract Administrator and as specified herein.

All granular material shall be placed in 200 mm lifts and compacted to 98%SPD prior to placement of the following lift.

The work to be done under this clause also consists of the supply of all labour, material and Contractor's equipment, and the performance of all work necessary for the supply and placement of Granular B material for mixing with the riverstone, as shown on the drawings, as directed by Contract Administrator and as specified herein.

The works are to be as per OPSD 802.010 revised to suit site conditions pertaining at the time by Contract Administrator.

Payment for any granular material to be made for each item at the unit rate stated in the Schedule of Tender Items (including any stone, placement, compaction and shaping).

#### SP 30 ADDITIONAL EAST SIDE TRAIL CONNECTION (PROVISIONAL)

The Township desires to create a connection from the new bridge to the existing terminus of the east side trail along the Kagawong River. No quantities are provided for this connection and all work is to be done under the direction of the Contact Administrator. The very approximate length of this new trial is 200 metres. The contractor is to confirm the approximate length and effort prior to submitting his bid.

Under these items for the unit price, the contractor shall supply all equipment, labour, and materials to complete the required grading and trail construction in accordance with direction provided by the Contract Administrator.

The Contractor shall remove and/or place fill along the pathway location as directed by the Contract Administrator. Any excess fill is to remain on site and distributed in approved areas under direction of the Contract Administrator. The Contractor shall remove and place material to similar specifications noted on the contract drawings for other portions of the connecting trail. The contractor shall work "in the dry" (i.e., isolated from the general flow of water in the creek).

The Contractor shall place and compact 150 mm of limestone screenings along the new portion of the pathway. The edges are to be properly restored with grass or seed.



Where grades require additional fill, the contractor shall place Granular B material as a base for the limestone screenings.

Measurement for payment shall be Lump Sum. No measurement for payment shall be made on site unless the site has been changed based on instruction of the Contract Administrator.

#### SP 31 DELETION AND REDUCTION OF QUANTITIES

It should be noted that portions of this contract may be deleted or quantities reduced to meet budget restraints.

#### SP 32 CONTINGENCY ALLOWANCE

There is no contingency allowance in this tender.

If a Contingency Allowance were requested, it shall be understood and agreed by the Contractor that such contingency allowance is merely for the convenience of accounting by the Township, and the Contractor is not entitled to payment thereof except for extra or additional work carried out by him as directed by the Township in writing and in accordance with the contract documents.

#### **END OF SECTION**





#### BY-LAW NO 2023-06

## Being a By-law to Confirm the Proceedings of the Council of the Township of Billings

**WHEREAS** the Municipal Act S.O. 2001, c 25, Section 5(1), as amended, provides that the powers of a municipal corporation are to be exercised by its Council;

**AND WHEREAS** the Municipal Act S.O. 2001, c 25, Section 5(3), as amended, provides that a municipal power, including a municipality's capacity rights, powers and privileges under Section 9; shall be exercised by By-Law;

**AND WHEREAS** The Council for The Corporation of the Township of Billings deems it expedient that the proceedings of meetings of the Council be confirmed and adopted by By-Law;

**NOW THEREFORE** the Council of The Corporation of the Township of Billings enacts as follows:

- 1. That the actions of the Council of The Corporation of The Township of Billings at its Council Meeting held on January 31, 2023 in respect to each report, motion, resolution or other actions recorded and taken by Council at its meetings, except where the prior approval of the Ontario Lands Tribunal is required is hereby adopted, ratified and confirmed as if all such proceedings were expressly embodied in this By-Law.
- That the Mayor and Clerk, or such other official as deem appropriate are hereby authorized and directed to do all things necessary to give effect to the said action, of Council of the Township of Billings referred to in the proceeding section.
- 3. That the Mayor and Clerk are hereby authorized and directed to execute all documents necessary on behalf of the Council and to affix the corporate seal of The Corporation of The Township of Billings to all such documents.
- 4. This By-Law shall come into full force and effect upon final passage.
- 5. This By-Law may be cited as the "January 31st, 2023 Confirmatory By-Law".

READ a FIRST and SECOND TIME this 31st day of January, 2023			
READ a THIRD TIME and FINALLY PASSED this 31st day of January, 2023			
David Hillvard Deputy Mayor	Emily Dance, CAO/Clerk		