



Township of Muskoka Lakes

Request for Tender

Contract # T-2025-42

Burgess 1 Dam Rehabilitation

TOWNSHIP OF MUSKOKA LAKES

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TOWNSHIP OF MUSKOKA LAKES

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TOWNSHIP OF MUSKOKA LAKES

TENDER

PART I TENDER CALL

The Corporation of the Township of Muskoka Lakes (after this called the “Owner”) invites Tenders for:

Contract Number: Contract # T-2025-42

Described as Burgess 1 Dam Rehabilitation Project

Tenders shall be addressed and delivered to: **Township of Muskoka Lakes
P.O. Box 129
1 Bailey Street
Port Carling, Ontario
P0B 1J0**

Tenders shall be received until: **Wednesday, October 29, 2025, 2:00 PM**

Tenders received by the time and date specified above shall be opened and read in public as soon as possible after that time. Public reading of a Tender does not imply any decision by the Owner as to whether a Tender is or is not irregular.

PART II TENDER CONDITIONS

TC-1 Completion and Submissions of Tenders

- 1.1 The Tenderer shall complete all documents pertaining to this Contract in ink or in type.
- 1.2 If the Tenderer is a corporation, an authorized officer of the corporation shall sign and seal the Form of Tender.
- 1.3 If the Tenderer is a partnership, a minimum of two partners shall sign the Form of Tender, and signatures shall be witnessed.
- 1.4 If the Tenderer is a sole proprietorship, the sole proprietor shall sign the Form of Tender, and the signature(s) shall be witnessed.
- 1.5 The Tenderer shall submit its Tender by the date and time specified in Part I of the Tender.
- 1.6 The Tenderer shall submit to the Owner:
 - a) Part III – Form of Tender;
 - b) The Tender Deposit;
- 1.7 The Tenderer shall submit the Tender in a sealed and opaque envelope properly identified with the contract number, contract description, name of Tenderer, due date and time.
- 1.8 Tender irregularities will be dealt with in accordance with the Township of Muskoka Lakes Purchasing By-Law 2004-161, as amended.
- 1.9 All inquiries/questions regarding this Tender are to be sent via email to Tim Sopkowe, Manager of Public Works at tsopkowe@muskokalakelakes.ca. Inquiries must be received no later than five (5) Business Days prior to the tender submission deadline specified in Part I of the Tender or as amended by addendum. Unless otherwise addressed through an addendum, all responses to bid inquiries shall not be incorporated as part of the Contract or in any way change the Contract.

TC-2 Tender Deposit

- 2.1 At the time of tendering, the Tenderer shall submit a tender deposit with its Tender, in the form any one of the following:
 - a) Bid bond signed and sealed by the Tenderer's Surety
 - b) Irrevocable letter of credit
 - c) Certified cheque
- 2.2 The tender deposit must be an original and shall equal at least ten percent (10%) of the Total Tender Price.
- 2.3 Tender Deposits shall be made to the order of or in favour of "The Corporation of the Township of Muskoka Lakes".

- 2.4 The Owner shall not pay interest on Tender deposits.
- 2.5 The Owner shall retain the Tender deposit of the Tenderers with the first and second lowest acceptable bid until:
- a) the successful Tenderer has executed the Form of Agreement in accordance with Section TC-21 and TC-25 of the Tender; and
 - b) the successful Tenderer has provided all securities and other documents in accordance with Sections TC-17 and TC-25 of the Tender.
- 2.6 The Owner shall return the deposits of all other Tenderers within five (5) Business Days of tender opening.
- 2.7 If bid bonds are used as a Tender deposit, bonds must be from a Surety Company authorized by law to carry on business in the Province of Ontario.

TC-3 Basis of Award

- 3.1 The Township intends to award a contract to the Tenderer who submits the lowest acceptable bid (in accordance with the Township Procurement Policy By-law 2004-161, as amended) by Total Tender Price. Upon formal notification of award, the Tenderer shall thereafter be known as the Contractor.

TC-4 Addenda

- 4.1 Addenda will be posted on the Township website (www.muskokalakelakes.ca) for viewing and shall be located in the same area of the webpage that the Tender documents are downloaded from.
- 4.2 The Township will not notify Tenderers of addenda, and it is the responsibility of the Tenderer to monitor the webpage and retrieve posted addenda prior to submitting their bid.
- 4.3 The Tenderer shall ensure that all addenda that are issued are acknowledged and listed under Section FT-1 of the Tender.
- 4.4 The deadline for the posting of addenda is no later than five (5) Business Days prior to tender submission deadline as specified in Part I of the Tender or as amended by addendum.

TC-5 Irregular Tenders

- 5.1 The Owner shall be the sole judge of whether or not a Tender is irregular.

TC-6 Unbalanced Tenders

- 6.1 The Tenderer shall not submit an unbalanced Tender.

- 6.2 The Owner shall have the right to:
- a) deem a Tender to be unbalanced; and
 - b) reject a Tender which it deems to be unbalanced.

TC-7 Collusion

- 7.1 The Tenderer shall not engage in collusion of any sort and, in particular, shall:
- a) ensure that no person or other legal entity, other than the Tenderer, has any undisclosed interest in the Tenderer's Tender; and
 - b) prepare its Tender without any knowledge of, comparison of figures with or arrangement with any other person or firm preparing a Tender for the same work.

TC-8 Right to Accept or Reject Tenders

- 8.1 Notwithstanding any other provision in this Contract, the Owner shall have the right to:
- a) accept any Tender;
 - b) reject any Tender; and
 - c) reject all Tenders.
- 8.2 Without limiting the generality of Section TC-8.1, the Owner shall have the right to:
- a) accept an irregular Tender;
 - b) accept a Tender which is not the lowest Tender; and
 - c) reject a Tender even if it is the only Tender received by the Owner.
- 8.3 Acceptance of the Tender shall occur at the time the Owner awards the Tender and not necessarily at the time the award is communicated to the successful Tenderer.

TC-9 Contract Documents

- 9.1 The Tenderer shall obtain and review all Contract Documents as listed in the Form of Tender, including all Addenda issued by the Owner pertaining to this Contract. The Tender Documents shall include the following materials at this time.
- Tender Document including Special Provisions
 - Appendix A – Contract Drawings
 - Appendix B – Project Permits
 - Appendix C – Environmental Impact Assessment
 - Appendix D – THSA 1986 Condition Drawings
 - Appendix E – Grounding Grid Letter
 - Appendix F – Geotechnical Report
 - Appendix G – Dam Safety Review Report
 - Appendix H – Environmental Assessment Project File Report

TC-10 Errors, Omissions and Discrepancies in the Contract Documents

- 10.1 If the Tenderer finds any errors or omissions in or discrepancies among the Contract Documents, it shall immediately notify the Owner at the address specified in Part I of the

Tender. If the Owner considers that a correction, explanation or interpretation is necessary or desirable, the Owner will issue an addendum to all registered plantakers.

10.2 No oral explanation or interpretation by any person shall modify any of the Contract Documents.

10.3 The Tenderer also declares that in tendering for the Work and in entering into the Contract they did not and do not rely upon information furnished by the Owner or any of its servants or agents respecting the nature or conformation of the ground at the site of the Work, or the location, character, quality or quantity of the materials to be removed, or to be employed in the construction of the Work, or the character of the equipment or facilities needed to perform the Work, or the general and local conditions and all other matters which could in any way affect the performance of the Work under the Contract other than information furnished in writing for or in connection with the tender or the Contract by the Owner, except information specifically excluded from this sub-section.

TC-11 Irrevocability of Offer

11.1 The Tenderer shall not revoke its offer until after the expiration of sixty (60) days after the opening of Tenders by the Owner.

11.2 If the Tenderer revokes its offer prior to the expiration of sixty (60) days after the Tender opening, the Tenderer shall forfeit its Tender deposit, but this shall not prohibit the Owner from pursuing any other legal remedy which it may have.

TC-12 Examination of Site

12.1 As-Built drawings of the dam do not exist, an existing conditions drawing performed by THSA in 1986 are provided as part of the tender package to familiarize the Tenderer with the site.

12.2 Each Tenderer must satisfy themselves by personal examination as to the local conditions to be met with during the construction and conduct of the Work. The Tenderer shall make their own estimate of the facilities and difficulties to be encountered, including the nature of the subsurface materials and conditions. Tenderers shall not claim at any time after submission of their tender that there was any misunderstanding of the terms and conditions of the Contract relating to site conditions.

12.3 An Optional Site meeting will be held for bidders on Tuesday, October 14th at 1:00 PM. A representative from the Owner and the Engineer will be on the site to allow for examination of the existing facilities and discuss the proposed rehabilitation design.

TC-13 Estimated Quantities

13.1 The quantities shown for Unit Price Items in the Tender Form are estimates only and are for the sole purpose of establishing a dollar amount based on the Unit Price. For any work done or materials supplied on a Unit Price basis, the Contractor will be paid for the actual

measured quantities at the respective Unit Prices tendered.

TC-14 Proof of Ability

14.1 In order to aid the Owner in determining the ability of each Tenderer, the Tenderer shall complete the following statement sheets, which are bound herein:

- Statement 'A' Stating the Tenderer's experience in similar work which he has successfully completed within the five preceding years.
- Statement 'B' Giving a list of the Tenderer's senior supervisory staff with a summary of the experience of each.
- Statement 'C' Giving the description of the construction equipment which the Tenderer proposes to use, the equipment he has available or under his control, the equipment to be rented, and the equipment to be purchased.

TC-15 List of Sub-Contractors

15.1 The Contractor agrees to submit a list of any sub-Contractors (Statement "D") who will be carrying out any part of this Contract.

15.2 This list shall show the names of the proposed sub-Contractors and for what work each sub-Contractor will be responsible. The Owner has the right to reject any of the sub-Contractors so named. In this event, the Contractor shall arrange to have the proposed work done by such other sub-Contractor as may be approved by the Owner. Only one name shall be shown for each sub-trade.

15.3 The Tenderer or the Contractor shall not be allowed to substitute the other Sub-Contractors in place of those named in the tender without written approval from the Owner.

TC-16 Reviewed Equal

16.1 Tenderers shall base their Prices on materials, methods, firms and equipment as named in the Contract documents. It is emphasized that no deviation from the specified materials, methods, firms or equipment will be allowed without written addendum approval of the Owner.

16.2 Should the Tenderer wish to include in their tendered Price, a manufacturer, material or method other than as specified, the Tenderer shall make a request in writing to the Owner at least ten (10) working days prior to tender close, requesting that the proposed substitution be deemed a "Reviewed Equal". The requests shall be accompanied by complete descriptive and technical data on the substitution proposed. The Owner is not obliged to review any such request. "Reviewed Equal" status, if granted, will be issued to all Tenderers by written addendum. Claims of verbal approval will not be a valid argument for substitutions and/or increases in the tendered Price.

- 16.3 Under no circumstances shall the successful Tenderer be entitled to extra payment on the grounds that their tender is based on an alternate proposal or reviewed equal.

TC-17 Successful Tenderer - Securities

- 17.1 The successful Tenderer shall provide each in the amount of at least one hundred percent (100%) of the Total Tender price:
- a) a performance security or bond signed and sealed by the Tenderer's Surety; and
 - b) a labour and material payment bond signed and sealed by the Tenderer's Surety.
- 17.2 The Surety of the successful Tenderer and the bonds referred to in Section TC-17.1(a) and TC-17.1(b) must be originals and shall be to the satisfaction of the Owner if this option is exercised.

TC-18 Successful Tenderer – Agreement to Bond

- 18.1 The Tenderer shall include with their tender an Agreement to Bond on the form enclosed herein, or on a form provided by the Surety Company with similar wording. PHOTOCOPIES, FACSIMILE COPIES AND OTHER REPRODUCTIONS OF ORIGINAL DOCUMENTS ARE NOT ACCEPTABLE. The Agreement to Bond must be executed under the corporate seal of the surety company and shall be from a recognized surety company doing business in the Province of Ontario.

TC-19 Successful Tenderer - WSIB Certificate of Clearance

- 19.1 The successful Tenderer shall provide the Owner with a valid Workplace Safety & Insurance Board Certificate of Clearance to the satisfaction of the Owner and in accordance with GC6.05 OPS General Conditions.

TC-20 Successful Tenderer – Occupational Health and Safety

- 20.1 For the purposes of the Occupational Health and Safety Act, the successful Tenderer is considered to be the "Constructor" as defined in the Act. It is specifically drawn to the attention of the Tenderer that the Occupational Health and Safety Act provides, in addition to other things, that:

"A Constructor shall ensure, on a project undertaken by the constructor, that:

- (a) the measures and procedures prescribed by this Act and the regulations are carried out on the project.
- (b) every employer and every worker performing work on the project complies with this Act and the regulations; and
- (c) the health and safety of workers on the project is protected."

TC-21 Successful Tenderer - Execution of Form of Agreement

- 21.1 The successful Tenderer shall execute in accordance with TC-1, in triplicate, the Form of Agreement provided in the Contract Documents.
- 21.2 The successful Tenderer shall forward the executed Form of Agreement to the Owner.

TC-22 Successful Tenderer - Insurance

- 22.1 The successful Tenderer shall provide the Owner with an original Certificate of Insurance for each type of insurance coverage required by Section GC6.03 of the OPS General Conditions.
- 22.2 The successful Tenderer shall carry insurance, pursuant to Section GC6.03.02 of the OPS General Conditions, in the amount of at least TEN MILLION DOLLARS (\$10,000,000.00).
- 22.3 The successful Tenderer shall carry insurance, pursuant to Sections GC6.03 of the OPS General Conditions, which names the following as additional insured:

The Corporation of the Township of Muskoka Lakes
P.O. Box 129, 1 Bailey Street
Port Carling, ON, P0B 1J0

- 22.4 Proof of insurance shall be submitted to the owner within seven (7) days of notice of award of the contract and prior to work commencement.

TC-23 Successful Tenderer - Contractor's Responsibilities Sign-Off Form

- 23.1 The successful Tenderer shall provide the Owner a completed and signed *Contractor's Responsibilities Sign-Off Form* as per the Township of Muskoka Lakes Health and Safety Policy HS-007-PRO-B. A copy of the policy is available during bidding upon request to the Township contact identified in TC-1. The policy shall be provided to the successful Tenderer upon notification of award.

TC-24 Successful Tenderer - Time for Completion

- 24.1 The successful Tenderer shall complete the Work as defined in GC1.06 by December 31, 2026, and this shall be the date used for the calculation of Liquidated Damages as per Section C 1.11 Modified OPS General Conditions of Contract in this Tender.
- 24.2 The successful Tenderer acknowledges that time shall be deemed to be of the essence of the Contract. For the Tenderer's purpose of establishing a schedule for the Work, it is anticipated that contract award will be complete within 30 calendar days after the opening of tenders by the Owner. Upon notice of award, the successful Tenderer will be required to complete submissions to the Owner as per TC-25.1. Upon receipt of all required submissions from the successful Tenderer, the Owner will return an executed Form of Agreement and a Purchase Order to the Tenderer within ten (10) Business Days.

Authorization to commence work shall be provided by the Owner as detailed in the Special Provisions of this contract.

- 24.3 Milestone dates associated with the Contract will be adjusted, when possible, due to any delays to the anticipated award schedule caused by the Owner during the contract award and/or issuance of the authorization to commence work.

TC-25 Successful Tenderer - Submission of Documentation

- 25.1 The successful Tenderer shall submit the documentation required by Sections TC-17, TC-18, TC-19, TC-21, TC-22, TC-23 within seven (7) calendar days of the day the Owner notifies the successful Tenderer that the documentation should be sent to the Owner.
- 25.2 If the successful Tenderer fails to comply with Section TC-25.1, the Owner may, in its sole discretion, withdraw its acceptance of the Tender, and the Tenderer shall have no recourse whatsoever against the Owner.

TC-26 Successful Tenderer - Commencement of the Work

- 26.1 The successful Tenderer shall not commence the Work until it has received authority to proceed with the work from the Owner, as well as the fully executed Form of Agreement signed by both parties (Tenderer and Owner) and a Purchase Order issued by the Owner. No work shall begin until the Owner or the Owner's Engineering Representative (Engineer) has issued a Start Work Order.
- 26.2 A Start Work Order will be issued once the Contractor has provided all forms, permits, plans, construction schedules, insurance certificates, etc., to the satisfaction of the Owner or the Owner's Engineering Representative (Engineer) as required elsewhere in the Contract document and once all permits and approvals required for the Work are in place.

TC-27 Successful Tenderer – Site Supervision

- 27.1 The Contractor is required to assign a full-time site supervisor who is suitably qualified and with appropriate experience for the Work being performed.

TC-28 Successful Tenderer - Vendor Performance Management Notice

- 28.1 The contract resulting from this Tender may be subject to performance evaluation conducted by the Owner. The Owner reserves the right to consider the results of this performance evaluation in the award of future contracts and/or in the selection of vendors for future work. Performance evaluation will be managed in accordance with Township policy HS-007-POL, "Contractor Activities and Control Policy," and Township Procurement Policy By-law 2004-161, as amended.

TOWNSHIP OF MUSKOKA LAKES

PART III - FORM OF TENDER

Tender by:

NAME OF TENDERER

ADDRESS OF TENDERER

TELEPHONE NUMBER

FAX NUMBER

E-MAIL

After this called the “Tenderer”.

FT-1 Contract Documents

1.1 The Contract Documents for Contract Number T-2025-42 are:

- a) Tender
 - i) Part I - Tender Call
 - ii) Part II - Tender Conditions
 - iii) Part III - Form of Tender
- b) Form of Agreement
- c) OPS General Conditions
- d) OPS Standard Specifications and Standard Drawings
- e) Special Provisions – General and Item Specific
- f) All Addenda issued pertaining to the Contract as acknowledged below:
 - Addendum No. ___ dated ___, 20 ___, No. of Pages ___
 - Addendum No. ___ dated ___, 20 ___, No. of Pages ___
 - Addendum No. ___ dated ___, 20 ___, No. of Pages ___
 - Addendum No. ___ dated ___, 20 ___, No. of Pages ___
 - Addendum No. ___ dated ___, 20 ___, No. of Pages ___
 - Addendum No. ___ dated ___, 20 ___, No. of Pages ___
 - Addendum No. ___ dated ___, 20 ___, No. of Pages ___

FT-2 Tenderer’s Declarations

2.1 The Tenderer declares that it has obtained and read the Contract Documents.

2.2 The Tenderer declares that it understands and agrees to be bound by the Contract Documents.

2.3 Without limiting the generality of Section FT-2.2, the Tenderer declares that it has, at the time of tendering, fulfilled all of those obligations under the Contract which are required to be fulfilled by the time of tendering.

2.4 The Tenderer declares that all information which it has provided or will provide to the Owner is true.

FT-3 Statement “A” Tenderer’s Experience

3.1 As an integral part of this tender, the Tenderer shall list here his experience in work of a similar nature to that being tendered, which has successfully been completed.

<u>Year</u>	<u>Description of Contract</u>	<u>Owner</u>	<u>Value</u>	<u>Reference</u>	<u>Telephone No. / Email</u>

FT-4 Statement “B” – Tenderer’s Senior Staff

4.1 As an integral part of this tender, the Tenderer shall list senior supervisory staff with a summary of the experience of each.

<u>Name</u>	<u>Position</u>	<u>Qualifications and Experience</u>

FT-5 Statement “C” Proposed Construction Plant

- 5.1 As an integral part of this tender, the Tenderer shall provide below, a statement giving the description of the construction plant he proposes to use, the plant he has available or under his control, the plant to be rented, and the plant to be purchased.

<u>Plant Available</u>	<u>Plant to be Rented</u>	<u>Plant to be Purchased</u>

FT-6 Statement “D” List of Proposed Sub-Contractors

- 6.1 As an integral part of this tender, the Tenderer shall provide below, the name of each sub-Contractor nominated to perform work under this tender. No sub-Contractor may be substituted without written consent of the owner. Only one name shall be shown for each Sub-Trade. If the Tenderer proposes to carry out such work themselves, it shall be so entered. In no case shall the total of work sub-Contracted exceed the maximum allowed in the Contract, if so specified.

<u>Sub-Trade</u>	<u>Proposed Sub-Contractor</u>	<u>Percentage of Contract</u>

FT-7 Tenderer's Offer

- 7.1 The Tenderer offers to do the work in accordance with the Contract Documents.
- 7.2 The Tenderer offers to do the work and to accept payment at the unit prices specified in the Schedule of Prices in Section FT-8 of the Tender, in accordance with the Contract Documents.
- 7.3 The Total Tender Price, based on the estimated quantities in the Schedule of Prices, is:

_____ DOLLARS
(\$ _____)

FT-8 Schedule of Prices

- 8.1 The Schedule of Prices attached is Section FT-8.2 of the Tender.

This offer is made this _____ day of _____, 20____

Signature of Witness
(only if required by TC-1)

Signature of Tenderer
(Corporate Seal if required by TC-1)

Signature of Tenderer
(Second Signature if required by TC-1)

Print Name of Tenderer(s)

FT-8.2 SCHEDULE OF PRICES

Spec. Code.: The numbers in this column refer to the applicable issue of the Ontario Provincial Standard Specifications and SP Refers to the Supplementary Specifications/Special Provisions section, as found in Section F.

CONTRACT NUMBER Contract # T-2025-42 Burgess 1 Dam Rehabilitation Project						
Item	Spec. Code	Item Description	Unit	Quantity	Unit Price	Total
1A – General						
1A.1	SP-1.1A	100% Performance Bond and 100% Labour and Material Payment Bonds and Insurance	L.S.			
1A.2	SP-1.2A	Mobilization/Demobilization	L.S.	1	\$	\$
1A – General SUBTOTAL						\$
1B – Pre-Construction Work						
1B.1	182,801, 805, SP-1.1B	Environmental Controls (Including Silt Fence, Turbidity Curtain and Cofferdams)	L.S.	1	\$	\$
1B.2	706,SS, MTO Book 7, SP-1.2B	Traffic Control, Detour Signage and Project Signage	L.S.	1	\$	\$
1B.3	SP-1.3B	Site Water Management (De watering, Pumping Cofferdamming, etc.)	L.S.	1	\$	\$
1B.4	SP-1.4B	Construction Laydown Area	L.S.	1	\$	\$
1B.5	SP-1.5B	Temporary Access for equipment and reinstatement	L.S.	1	\$	\$
Part 1B – Pre-Construction Work General SUBTOTAL						\$
2 -Spillway and Laneway Area						
2.1	180, 201, SP-2.1	Tree and Vegetation removal (to be Disposed off-site)	L.S.	1	\$	\$
2.2	201, SP-2.2	Earth Excavation (to be Disposed Off-site)	m ³	250	\$	\$
2.3	1010, 314, SP-2.3	Granular A (Laneway)	t	230	\$	\$
2.4	904,905, 919, SP-2.4	Supply and Install Reinforced Concrete Spillway Wall	m ³	50	\$	\$
2.5	405, SP-2.5	150mm Pipe Subdrain through access laneway	m	16	\$	\$
2.6	1004, 511, 1860, SP-2.6	Spillway Rip-Rap over Non-woven Geotextile	m ²	250	\$	\$
2.7	SP-2.7	Grounding grid protection	L.S.	1	\$	\$

CONTRACT NUMBER Contract # T-2025-42
Burgess 1 Dam Rehabilitation Project

Item	Spec. Code	Item Description	Unit	Quantity	Unit Price	Total
2.8	1210, 772, SP-2.8	Install Proposed Chain link fence and Gate	m	45	\$	\$
2.9	1004, 511, SP-2.9	Spillway Rip Rap c/w Geotextile on stream bank	m ²	45	\$	\$
2.10	SP-2.10	Dust Suppression	L.S.	1	\$	\$
Part 2 – Spillway and Laneway SUBTOTAL						\$
3 – Dam Extension and Dam Raising						
3.1	510, SP-3.1	Remove existing Wood Stair, Deck and Dock	L.S.	1	\$	\$
3.2	510, SP-3.2	Remove Existing Fence and Gates	m	95	\$	\$
3.3	904, 905, 919, 930, SP-3.3	Concrete Dam Raising c/w rebar and bentonite strip	m ³	20	\$	\$
3.4	902, 904, 905, SP-3.4	Concrete Dam Extension c/w Rebar	m ³	14	\$	\$
3.5	930, 932, SP-3.5	Epoxy Injection Crack Repair	Ea.	8	\$	\$
3.6	908, SP-3.6	Install Pedestrian Railing on top of Dam	m	20	\$	\$
3.7	510, SP-3.7	Remove Trees, Strip Topsoil, Regrade, Remove and Replace Planters	m ²	55	\$	\$
3.8	904, SP-3.8	Rebuild Wooden Stairs and Deck	L.S.	1	\$	\$
3.9	802, 804 SP-3.9	Topsoil (100mm)	m ³	40	\$	\$
3.10	802,804, SP-3.10	Hydroseed	m ²	250	\$	\$
3.11	SP-3.11	Dust Suppression	L.S.	1	\$	\$
Part 3 – Dam Extension and Raising SUBTOTAL						\$
4 – North Embankment Wall (Upstream of Dam)						
4.1	902, 904, 905, SP-4.1	Concrete Embankment wall c/w steel rebar	m ³	14	\$	\$
4.2	206, SP-4.2	Grading around wall	L.S.	1	\$	\$
4.3	405,SP-4.3	150 mm Pipe Subdrain	m	12	\$	\$
4.4	1210, 772, SP-4.4	Install Chain Link Fence and Gates	m	45	\$	\$
4.5	1004, 511, SP-4.5	Rip-Rap c/w Non-woven Geotextile l	m ²	10	\$	\$
4.6	SP-4.6	Dust Suppression	L.S.	1	\$	\$
Part 4 – North Embankment Wall (Upstream of Dam) SUBTOTAL						\$

CONTRACT NUMBER Contract # T-2025-42
Burgess 1 Dam Rehabilitation Project

Item	Spec. Code	Item Description	Unit	Quantity	Unit Price	Total
5 – River Street Reconstruction (148 m)						
5.1	180, 510, SP-5.1	Removal of Existing Asphalt	m ²	1065	\$	\$
5.2	SP-5.2	Asphalt Saw Cut	m	30	\$	\$
5.3	180, 510, SP-5.3	Remove Exist Guardrail	m	106	\$	\$
5.4	180,206, SP-5.4	Earth Excavation (to be Disposed Off-site)	m ³	200	\$	\$
5.5	310, 1150, SP-5.5	Hot Mix Asphalt - HL4 (50mm)	t	140	\$	\$
5.6	314, 1010, SP-5.6	Granular A (Roadway and Shoulder)	t	600	\$	\$
5.7	314, 1010 SP-5.7	Granular B Type II (Roadway and Shoulder)	t	400	\$	\$
5.8	310, SP-5.8	Asphalt Slope Protection (50mm HL-4 Hand Placed)	m ²	65	\$	\$
5.9	312, SP-5.9	Asphalt Gutter (All Types)	m	92	\$	\$
5.10	353, SP-5.10	Concrete Curb and Gutter (All Types)	m	100	\$	\$
5.11	405, SP-5.11	150mm Pipe Subdrain	m	300	\$	\$
5.12	314, SP-5.12	Driveway Restoration (Gravel)	each	2	\$	\$
5.13	310, SP-5.13	Driveway Restoration (Asphalt)	each	1	\$	\$
5.14	732 , 734, SP-5.14	Install Steel Beam Energy Attenuating Terminal System	Ea.	2	\$	\$
5.15	721, 732, SP-5.15	Install Steel Beam Guardrail c/w Steel posts	m	79	\$	\$
5.16	408, SP-5.16	Adjust Water Valve Heights	Ea.	4	\$	\$
5.17	408, SP-5.17	Adjust Sanitary MH Rim Height	Ea.	2	\$	\$
5.18	408, SP-5.18	Adjust Storm CB Rim Height	Ea.	1	\$	\$
5.19	802, 804 SP-5.19-	Topsoil (100mm)	m ³	30	\$	\$
5.20	802,804, SP-5.20	Hydroseed	m ²	180	\$	\$
5.21	802,803, SP-5.21	Sod (For Drainage Swale	m ²	10	\$	\$
5.22	410, SP-5.24	Remove Exist Storm Sewer	m	11	\$	\$
5.23	402, 407, SP-5.25	Remove Exist. Catchasin	Ea.	1	\$	\$
5.24	1004, 511, SP-5.26	Storm Sewer (300mm Dia.)	m	20	\$	\$

CONTRACT NUMBER Contract # T-2025-42
Burgess 1 Dam Rehabilitation Project

Item	Spec. Code	Item Description	Unit	Quantity	Unit Price	Total
5.25	SP-5.27	Storm Catch Basin (600mm x 600mm)	Ea.	2	\$	\$
5.26	180, 510, SP-5.1	Rip-Rap for swale C/W Non-woven Geotextile	m ²	30	\$	\$
5.27	SP-5.2	Dust Suppression	L.S.	1	\$	\$
Part 5 – River Street Raising SUBTOTAL						\$
Part 6 - Downstream Retaining Walls						
6.1	180, 206, SP-6.1	Earth Excavation	m ³	700	\$	\$
6.2	314, 1010 SP-6.2	Supply and Place Granular 'A'	t	1350	\$	\$
6.3	492, SP-6.3	Site Restoration	L.S.	1	\$	\$
6.4	904,905, SP-6.4	Supply and Place Reinforced Concrete - Footings	m ³	41	\$	\$
6.5	904, 805, SP-6.5	Supply and Place Reinforced Concrete - Wall	m ³	129	\$	\$
6.6	405,SP-6.6	100 mm Pipe Subdrain	m	30	\$	\$
6.7	1004, 511, SP-6.7	Scour Protection (Rip Rap)	m ³	25	\$	\$
6.8	802,804, SP-6.8	Topsoil (100mm)	m ³	40	\$	\$
6.9	802,804, SP-6.9	Hydroseed	m ²	330	\$	\$
6.10	SP-6.10	Dust Suppression	L.S.	1	\$	\$
Part 6 – Downstream Retaining Walls SUBTOTAL						\$
7 – Powerhouse - Removals						
7.1	510, SP-7.1	Removals	L.S.	1	\$	\$
7.2	SP-7.2	Existing Equipment Storage and Reinstatement	L.S.	1	\$	\$
Part 7 - Powerhouse Removals SUBTOTAL						\$
8 – Powerhouse – Roof Replacement						
8.1	907, OBC, SP-8.1	Roof Framing	L.S.	1	\$	\$
8.2	CSA S16, OBC, SP-8.2	Supply and Install Steel Framing	L.S.	1	\$	\$
8.3	907, CSA S16, OBC, SP-8.3	Supply and Install Roof Assembly	L.S.	1	\$	\$
Part 8 – Powerhouse – Roof Replacement						\$

CONTRACT NUMBER Contract # T-2025-42 Burgess 1 Dam Rehabilitation Project						
Item	Spec. Code	Item Description	Unit	Quantity	Unit Price	Total
9 – Powerhouse – Structural Upgrades						
9.1	S16, OBC, SP-9.1	Supply and Install Steel Framing	L.S.	1	\$	\$
9.2	904,902,919, SP-9.2	Supply and Place Reinforced Concrete - Strip Footing	L.S.	1	\$	\$
9.3	932, SP-9.3	Grout of Power House Bays and Cracks	L.S.	1	\$	\$
9.4	SP-9.4	Supply and Install Galvanized Rock Dowel	Ea.	9	\$	\$
9.5	SP-9.5	Painting of Building	L.S.	1	\$	\$
Part 9 – Powerhouse – Structural Upgrades SUBTOTAL						\$
10 - Provisional Items						
10.1	404, 410, 491, SP-10.1	Support Existing Sanitary Sewer	m	20	\$	\$
10.2	404, 441, 491, SP-10.2	Support Existing Watermain	m	20	\$	\$
10.3	404, 510, 410, SP-10.3	Replace damaged existing Sanitary Sewer	m	20	\$	\$
10.4	180, 206, 202, 403, SP-10.4	Rock Excavation for Storm Sewer Installation	m ³	12	\$	\$
10.5	1605, SP-10.5	Rigid Insulation	m ²	25	\$	\$
10.6	710, SP-10.6	Painted Stop Block	Ea.	1	\$	\$
10.7	180, SP-10.7	Excess Soils Management Plan	L.S.	1	\$	\$
10.8	180, SP-10.8	Extra/Over for Disposal of Material unsuitable for disposal at a Table 1.2/2.1 RPI site but Suitable for Disposal at a Table 2.1 ICC or Table 3.1 ICC RPI Site	t	TBD	\$	\$
10.9	180, SP-10.9	Extra/Over for Disposal of Material unsuitable for disposal at a Table 2.1 ICC, 3.1 RPI or 3.1 ICC Site Disposal	t	TBD	\$	\$
Part 10 – Provisional Items SUBTOTAL						\$
Total Tender Price (Including Provisional Items) (Transfer Amount to FT-7.3 of the Tender)						\$
Tenderer's HST Registration Number:						

- All prices and unit rates to be shown excluding HST.
- It is understood that the estimated quantities in the foregoing schedule are solely for the purpose

of facilitating the comparison of bids, and the Tenderer's compensation will be computed upon the basis of the actual quantities in the completed work, whether they be more or less shown herein.

- The quantities shown in this Tender are an estimate only and are not a guarantee of amount of material to be supplied under this contract. The Township of Muskoka Lakes reserves the right to adjust quantities without a change in the tendered unit price.
- The unit price shall govern whenever the total amount bid for an item does not agree with the extension of the quantity and the unit price, and the total item amount from Section FT-8.2 and the Total Tender Price in Section FT-7.3 and FT-8.2 shall be corrected accordingly.

SECTION B

FORM OF AGREEMENT

TOWNSHIP OF MUSKOKA LAKES

FORM OF AGREEMENT

This Form of Agreement witnesses that a Contract was made as of the _____ day of _____, 20____.

BETWEEN:

(after this called the “Contractor”)

AND:

THE CORPORATION OF THE TOWNSHIP OF MUSKOKA LAKES

(after this called the “Owner”)

AND WITNESSES that the Contractor and the Owner agree as follows:

FA-1

The Contractor shall perform the following work:

Contract Number T-2025-42

Described as Burgess 1 Dam Rehabilitation

FA-2 The Contractor shall perform the work in accordance with the Contract Documents listed in the Tender.

FA-3 The Owner shall pay the Contractor in accordance with the unit prices in the Schedule of Prices in the Tender pursuant to the Contract Documents.

FA-4 The provisions of the Contract Documents shall endure to the benefit of and be binding upon the Contractor and the Owner and their respective heirs, legal representatives, successors and assigns.

IN WITNESS WHEREOF, the Contractor and the Owner have executed, in the manner required by law, this Form of Agreement.

Date

Director of Operational Services
The Township of Muskoka Lakes

Contractor
(Second Signature if required by TC-1)

Witness
(Only if required by TC-1)

SECTION C

MODIFIED OPS GENERAL CONDITIONS OF CONTRACT

ONTARIO PROVINCIAL STANDARDS

MODIFIED OPS GENERAL CONDITIONS OF CONTRACT

The Contractor acknowledges that the general conditions of this contract are the Modified OPS General Conditions of Contract contained in this section and the OPS General Conditions of Contract.

For the purposes of this document, modification made to the OPS General Conditions of Contract shall be (i), Supplemental General Conditions, in the order of precedence. Original OPS General Conditions of Contract text shall be (j) in the order of precedence.

For this contract, the following version of the OPS General Conditions of Contract shall apply:

OPS General Conditions November 2024 (OPSS.MUNI 100) – Modified by Modified OPS General Conditions of Contract in this section.

The following general supplementary general conditions are listed below for the Work.

1.0 SUPPLEMENTARY GENERAL CONDITIONS

1.1 CONTRACTOR'S INSURANCE

Comprehensive General Liability and Automobile Insurance specified in Section GC6.03 of the General Conditions of Contract shall be provided by the Contractor.

1.2 USE AND OCCUPANCY OF THE WORK BY THE CONTRACTOR

Without restricting the intent of GC7.01.03, the Contractor may not use any part of the Work or the Working Area for storage, or office space without the written permission of the Owner.

1.3 TRAFFIC PROTECTION PLAN (TPP)

GC7.01 is amended by the addition of the following:

The Contractor shall prepare detailed procedures for addressing the traffic protection requirements of the Occupational Health and Safety Act and Ontario Regulations for Construction Projects, and they shall be provided on a regular basis to the Contractor's workers, the Owner and the Engineer.

The procedures must include protection for the Engineer's and/or Owner's personnel involved in surveying or inspection capacities and the safe and efficient movement of traffic. The Contractor shall have competent workers trained in

erection and removal procedures.

1.4 MAINTAINING ROADS AND DETOURS

The General Conditions of Contract GC7.06 is amended by the addition of the following:

Notwithstanding the foregoing the Contractor shall bear the costs of all labour, equipment and materials to sign and mark any and all detours in accordance with the OTM.

1.5 TRACKING OF DEBRIS ONTO THE ROADWAY

Subsection GC 7.06 Maintaining Roadways and Detours, of the OPS General Conditions of Contract, is amended by the addition of the following:

The Contractor shall ensure that earth, mud, aggregate and other construction debris is not tracked onto the roadway by construction vehicles.

1.6 Underground Utilities

Contract Section GC2.01.01 (a) is deleted and replaced by the following:

The location of all main line underground, including but not limited to gas, electrical lines, watermains, sewers, forcemains and culverts which will affect the work will be shown to a tolerance of:

1 m horizontal and
0.3 m vertical

The location of all other underground utilities is the best information available at the time of quoting, as shown on the Contract Drawings, but the Owner does not warrant the accuracy. The Contractor must satisfy himself of the nature and location of all utilities by his own investigation and determine the extent of impact on the works.

1.7 Preparation and Posting of Requirements for Work in Confined Spaces

GC7.01 is amended by the addition of the following:

The Contractor shall prepare detailed written procedures addressing the confined space requirements of the Occupational Health and Safety Act and Ontario Regulations for Construction Projects, and they shall be clearly posted at the project site and available to all personnel, including the Contractor's workers, the Owner and Contract Administrator and Ministry of Labour inspectors.

The procedures must include the rescue procedures to be followed during a rescue or evacuation of all personnel from an unsafe condition or in the event of personal

injury.

The Contractor shall have personnel trained in rescue procedures readily available on site.

1.8 Layout

GC7.02 is replaced with:

The Contractor will be responsible for the layout of all lines and grades from plans. The benchmark to be utilized on this project is identified on the Contract Drawings. All elevations indicated on Contract Drawings are referred to datum of Geodetic Survey of Canada and to the benchmark established at or near site of work. The Owner will be responsible only for the correctness of the information so supplied. From these benchmarks and points of reference, the Contractor will do his own setting out.

The Contractor shall also be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works, and for the provision of all necessary instruments and labour in connection therewith. The Contractor shall not be responsible for the correctness of the information supplied by the Owner as herein provided for. If at any time during the progress of the Works any error shall appear or arise in the position, levels, dimensions, or alignment of any part of the Works, the Contractor shall, at his own expense, rectify such error to the satisfaction of the Engineer, unless such error is based on incorrect data supplied in writing by the Engineer. The checking of the setting out of any line or level by the Engineer shall not in any way relieve the Contractor of his responsibility for the correctness thereof, and the Contractor shall carefully protect and preserve all benchmarks, stakes and other things used in setting out the Works.

1.9 CONTRACTOR'S DISCHARGE OF LIABILITIES

The Contractor shall discharge and cause each sub-Contractor to discharge all liabilities incurred, for labour, materials or services, used or reasonably required for use in the performance of this Contract on the date upon which each becomes due. At the request of the Owner, the Contractor shall furnish the Owner with evidence satisfactory to it that his liabilities and those of the sub-Contractors, as aforesaid, have been discharged and this shall include a certificate or certificates from the Workplace Safety & Insurance Board that they have complied with the requirements of the Workplace Safety & Insurance Board and are in good standing on the books of the Board.

No payment to which the Contractor is otherwise entitled under this Contract shall at the discretion of the Owner be due and payable to them so long as he or any sub-

Contractors are in default under this section, and upon such default occurring, the Owner may in respect of claims submitted by creditors having a Contractual relationship with the Contractor, after notice in writing to the Contractor, withhold payment on the whole or any part of any such liability of the Contractor. Interest will not be paid on any such funds withheld.

GC8.02.04.01 is amended by the addition of the following:

05) Payment will be released after receipt of a Statutory Declaration in a form satisfactory to the Engineer that all liabilities incurred by the Contractor and the Contractor's Sub-Contractors in carrying out the Contract have been discharged except for statutory holdbacks properly retained.

1.10 SUB CONTRACT HOLDBACKS

GC8.02.04.02, Certification of Sub-Contract Completion and GC8.02.04.03, Sub-Contract Statutory Holdback Release Certificate and Payment, are deleted in their entirety.

1.11 LIQUIDATED DAMAGES, COMPLETION DATE

Time

Time shall be the essence of this Contract.

Progress of the Work and Time for Completion

The Contractor shall diligently prosecute the Work on this Contract to completion on or before the completion date specified in the Tender Form.

If this time limit above specified is not sufficient to permit completion of the Work by the Contractor working a normal number of hours each day or week on a single daylight shift basis, it is expected that additional and/or augmented daylight shifts will be required throughout the life of the Contract to the extent deemed necessary by the Contractor to ensure that the Work will be completed within the time limit specified. Any additional costs occasioned by compliance with these provisions will be considered to be included in the Prices Bid for the various Items of work, and no additional compensation will be allowed therefore.

Liquidated Damages

It is agreed by the parties to the Contract that in case all the Work called for under the Contract is not finished or completed within the date of completion specified aforementioned, or as revised in accordance with the General Conditions of

Contract, a loss or damage will be sustained by the Owner. Since it is and will be impracticable and extremely difficult to ascertain and determine the actual loss or damage which the Owner will sustain in the event of and by reason of such delay, the parties hereto agree that the Contractor will pay to the Owner the sum one thousand, five hundred dollars (\$1,500.00) as liquidated damages for each and every calendar days delay in finishing the Work beyond the date of completion prescribed. It is agreed that this amount is an estimate of actual damage to the Owner which will accrue during the period in excess of the prescribed date of completion. The Owner may deduct any amount under this paragraph from any monies that may be due or payable to the Contractor on any account whatsoever.

1.12 OWNER'S SET OFF

In addition to any rights the Owner may have at common law for set off, the Owner may, at any time, set off against amounts due and owing the Contractor under the Contract any and all such amounts as the Owner may claim is owed to it by the Contractor. Without limiting the generality of the foregoing, the Owner may set off:

- (i) liquidated damages;
- (ii) amounts to remedy deficient or incomplete work;
- (iii) costs to correct damage to the Owner's property;
- (iv) all costs to complete the Work; and,
- (v) costs related to claims by third parties related to the actions or inaction of the Contractor that the Owner may have to defend or incur expenses to resolve.

1.13 MAINTENANCE SECURITY

The Contractor shall provide to the Owner for the duration of the Contract and of the period of maintenance, a maintenance security the value of which shall be derived from the following table:

<u>CONTRACT PRICE</u>	<u>VALUE OF MAINTENANCE SECURITY</u>
Less Than 0.1M	4% of Final Contract Price
0.1M - 0.5M	3% of Final Contract Price
Greater Than 0.5M	2.5% of Final Contract Price

The maintenance security shall be retained by the Owner from monies that would otherwise be payable to the Contractor monthly, according to the preceding table.

Except as otherwise provided hereunder, the maintenance security, less any deductions made there from as provided for in the Contract, shall be paid to the Contractor following the issuance of the Final Acceptance Certificate at the end of the period of maintenance.

The Contractor may apply in writing to the Owner at the time of substantial performance to substitute for the monies retained as the maintenance security an alternative maintenance security of equivalent or greater value comprising:

- (a) one or more irrevocable letters of credit, or
- (b) another readily negotiable security.

Acceptance of any such alternative shall be at the discretion of the Owner.

Following receipt and acceptance of any such alternative, the Owner shall release to the Contractor the monies previously retained for maintenance security purposes.

The Owner may, in his discretion, allow the total maintenance security to be made up in part of monies retained under the Contract and in part of an alternative maintenance security as indicated in (a) and (b) above provided that the total value of such parts, as determined by the Owner, shall be not less than the required value as derived from the table set out above.

Such alternative maintenance security or the monies derived there from, less any deductions made as provided for in the Contract, shall be released to the Contractor following the issuance of the Final Certificate at the end of the period of maintenance.

The Contractor may apply in writing to the Owner to substitute for the maintenance security referred to in the preceding paragraph an irrevocable letter of credit in the name of the Contractor.

Following the substantial performance of the Contract, the Owner may require the Contractor to consolidate all letters of credit provided pursuant to the foregoing into one or two letters of credit covering the Contract as a whole.

The Contractor shall allow his sub-Contractors to provide letters of credit to the Contractor in conformity with the foregoing procedures. The Contractor shall provide the Owner with copies of any or all such letters of credit on request.

1.14 ACCOUNTS RECEIVABLE

The Contractor will be charged interest after 30 days on overdue accounts receivable(s). The Rate of Interest shall be identical to that which is determined by the Minister of Finance of Ontario for late payment by the Owner.

1.15 ABBREVIATIONS

Where General Conditions, Supplementary General Conditions, Specifications or

Special Provisions refer to the "Manual of Uniform Traffic Control Devices" (M.U.T.C.D.), "Traffic Control Manual for Roadway Works Operations" (T.C.M.R.W.O.) or the "Manual", it shall be deemed to mean the "Ontario Traffic Manual" (O.T.M.).

1.16 INTERPRETATION

Section GC 1.04 of the General Conditions of Contract is amended by the

addition of the following. "Authority" - means the Owner.

"Engineer" - means the Consulting Engineer (TULLOCH).

"Grade Point or Transition Point" - means the point where the grade line passes from cut to fill.

"Haul Road" - means any public road excluding the road under Contract, which forms part of a materials haul route.

"Minister" - means the Minister of Transportation of Ontario, and where the word appears in M.T.O. Specifications, which are included in this Contract shall mean the Owner as defined elsewhere unless specified otherwise.

"Ministry" - means the Ministry of Transportation of Ontario, and where the word appears in M.T.O. Specifications, which are included in this Contract shall mean the Owner as defined elsewhere unless specified otherwise.

The definition "Contract Time" is deleted and replaced by the following:

"Contract Time" - means the time stipulated in the Contract Documents for the Substantial Completion of the Work, including any extension of Contract Time made pursuant to the Contract Documents.

SECTION D

OPS STANDARD SPECIFICATIONS AND STANDARD DRAWINGS

ONTARIO PROVINCIAL STANDARDS

STANDARD SPECIFICATIONS AND STANDARD DRAWINGS

SS-1 OPS Standard Drawings and Specifications

- 1.1 The Contractor acknowledges that certain standard drawings and specifications, which are provisions of this Contract, have *not* been reproduced for inclusion in the Contract Documents.
- 1.2 The Contractor acknowledges that the standard drawings and specifications referred to in the Contract Documents are the Ontario Provincial Standard Drawings (OPSD) and Ontario Provincial Standard Specifications (OPSS) as produced and amended by the government of the Province of Ontario.

The Contractor shall obtain its own copy of the standard drawings and specifications.

Only the municipal and provincial common standards on OPS Volumes 1 to 4 and the municipal-oriented specifications in OPS volumes 7 and 8 apply to this Contract, unless specified otherwise in the Contract Documents.

- 1.3 The Ontario Provincial Standard Drawings (OPSD), which are provisions of this Contract, include, but are not limited to:

OPSD	Rev No	OPSD	Rev No	OPSD	Rev No
205.030	NOV.16	514.020	NOV.18	802.033	NOV.15
205.060	NOV.19	600.110	NOV.12	912.130	NOV.16
216.021	NOV.17	600.030	NOV.13	922.165	NOV.22
219.130	NOV.21	600.060	NOV.12	972.102	NOV.12
219.180	NOV.21	601.010	NOV.12	972.131	NOV.12
219.260	NOV.22	605.030	NOV.12		
219.261	NOV.22	705.010	NOV.19		
351.010	NOV.18	802.010	NOV.14		
400.020	NOV.18	802.013	NOV.14		
514.010	NOV.18	802.031	NOV.15		

- 1.4 The Ontario Provincial Standard Specifications (OPSS), which are provisions of this Contract, include, but are not limited to:

OPSS	Rev. Date	Description
MUNI.102	NOV.18	Weighing of Material
PROV.127	JUL.25	Schedule of Rental Rates for Construction Equipment

OPSS	Rev. Date	Description
MUNI.180	NOV.21	Management of Excess Materials
MUNI.182	NOV.21	Environmental Protection for Construction in Waterbodies and on Waterbody Banks
MUNI.201	NOV.19	Clearing, close Cut Clearing, Grubbing and Removal of Surface and Piled Boulders
MUNI.206	NOV.19	Grading
MUNI.310	NOV.17	Hot Mix Asphalt
MUNI.312	NOV.18	Asphalt Curb and Gutter Systems
MUNI.314	NOV.23	Untreated Granular Subbase, base, Surface, Shoulder and Stockpiling
MUNI.353	NOV.21	Concrete Curb and Gutter Systems
MUNI.401	NOV.21	Trenching, Backfilling and Compacting
MUNI.402	NOV.24	Excavating, Backfilling and Compacting for Maintenance Holes, Catch Basins, Ditch Inlets and Valve Chambers
MUNI.403	NOV.23	Rock Excavation for Pipelines, Utilities, and Associated Structures in Open Cut
MUNI.404	NOV.27	Support Systems
MUNI.405	NOV.17	Pipe Subdrains
MUNI.407	NOV.21	Maintenance Hole, Catch Basin, Ditch Inlet, and Valve Chamber Installation
MUNI.408	NOV.21	Adjusting or Rebuilding Maintenance Holes, Catch Basins, Ditch Inlets, and Valve Chambers
MUNI.410	NOV.18	Pipe Sewer Installation in Open Cut
MUNI.441	NOV.21	Watermain Installation in Open Cut
MUNI.491	NOV.17	Preservation, Protection and Reconstruction of Existing Facilities
MUNI.501	NOV.17	Compacting
MUNI.506	NOV.17	Dust Suppressants
MUNI.510	NOV.18	Removal
MUNI.511	NOV.19	Rip-Rap, Rock Protection, and Granular Sheeting
MUNI.517	NOV.21	Dewatering
MUNI.539	NOV.21	Temporary Protection Systems
MUNI.706	APR.18	Temporary Traffic Control Devices
MUNI.710	NOV.21	Pavement Marking

OPSS	Rev. Date	Description
MUNI.721	APR.24	Steel Beam Guide Rail Systems
MUNI.732	APR.19	Guide Rail End Treatment, Steel Beam Energy Attenuating Terminal (SBEAT) Systems
MUNI.772	APR.19	Chain Link Fence
MUNI.801	NOV.19	Protection of Trees
MUNI.802	NOV.19	Topsoil
MUNI.803	APR.18	Sodding
MUNI.804	NOV.14	Seed and Cover
MUNI.805	NOV.21	Temporary Erosion and Sediment Control Measures
MUNI.902	NOV.21	Excavating and Backfilling Structures
MUNI.904	NOV.23	Concrete Structures
MUNI.905	NOV.17	Steel Reinforcement for Concrete
MUNI.907	NOV.21	Structural Wood Systems
MUNI.908	NOV.22	Metal Railings for Structures
MUNI.919	NOV.21	Formwork and Falsework
MUNI.930	NOV.14	Structure Rehabilitation – Concrete Patches and Overlays
MUNI.932	NOV.20	Crack Repair- Concrete
MUNI.1001	Nov.2021	Aggregates- General
MUNI.1002	NOV.13	Aggregates – Concrete
MUNI.1003	NOV.13	Aggregates-Hot Mix Asphalt
MUNI.1004	NOV.21	Aggregates Miscellaneous
MUNI.1010	APR.25	Aggregates - Base, Subbase, Select Subgrade, Granular Surface, Shouldering, Bedding, and Backfill Material
MUNI.1101	NOV.16	Performance Graded Asphalt Cement (PGAC)
MUNI.1150	NOV.20	Hot Mix Asphalt (MHA)
MUNI.1301	NOV.18	Cementing Materials
MUNI.1302	NOV.19	Water
MUNI.1303	APR.19	Admixtures for Concrete
MUNI.1350	NOV.23	Concrete – Materials and Production

OPSS	Rev. Date	Description
MUNI.1440	NOV.16	Steel Reinforcement for Concrete
MUNI.1504	NOV.22	Steel Beam Guide Rail (SGBR_
MUNI.1541	APR.19	Chain-Link Fence Components
MUNI.1605	NOV.18	Extruded Expanded Polystyrene (EPS Pavement Insulation
MUNI.1820	NOV.20	Circular and Elliptical Concrete Pipe
MUNI.1842	NOV.20	Pressure Polyethylene (PE) Pipe Products
OPSS.1850	NOV.20	Frames, Grates, Covers, and Gratings
OPSS.1860	NOV.18	Geotextiles

SECTION E

SPECIAL PROVISIONS -

GENERAL

TOWNSHIP OF MUSKOKA LAKES

SPECIAL PROVISIONS - GENERAL

Special Provisions - General are non-technical specifications, which can amend or extend the OPS General Conditions contained in Section C of the Tender documents. Special Provisions - General do not relate to any one specific tender item, but apply to either a number of tender items or the contract as a whole.

Special Provisions - General rank third (c) in the order of precedence, GC2.02. If a conflict exists between the Special Provisions - General and the Special Provisions - Item Specific, the Special Provisions - General shall take precedence.

The Contractor acknowledges that the Special Provisions - General as produced by the Township of Muskoka Lakes and listed herein, are provisions of this Contract.

Clause No.	Special Provisions - General	Pages
SP-E-1	Special Provisions - General	E-1 to E-09

TOWNSHIP OF MUSKOKA LAKES

SPECIAL PROVISIONS – GENERAL

No. SP-E-1

1.0 PERMITTING

The contractor shall supply and or engage a competent professional to provide the necessary documentation, including but not limited to de-watering plans, temporary works design, fish removal plan, Erosion sediment and control plans to ensure the Work is in compliance with regulatory permits and permitting conditions for successful completion of the Work.

The contractor will work in compliance with all provided permits and permitting requirements of the appropriate regulatory bodies at all times.

Provided permitting packages from the Department of Fisheries and Oceans and Ministry of Natural Resources are attached to this tender package.

2.0 WORK ON SITE

No work shall not be initiated without the Engineer in attendance unless previously arranged and approved by the Engineer, The Contractor, Engineer and Owner will establish hold points upon review of schedule for critical inspections in advance of starting the work. .

3.0 DUST SUPPRESSION

The Contractor shall take such steps as may be necessary to control dust resulting from the Contractor's operations, or by public traffic, where it is the Contractor's responsibility to maintain a road through the Work, such that it does not:

- a) affect traffic;
- b) enter surface waters; or
- c) escape beyond the right-of-way to cause a nuisance to residents, businesses or utilities.

The cost of all such preventative measures shall be borne by the Contractor. The cost of water, calcium chloride, enclosures, etc., authorized by the Engineer to reduce the dust, is the Contractor's responsibility to provide and maintain.

4.0 ROAD CLOSURE CALL LIST

The following agencies/offices must be contacted by the Contractor prior to closing roads

(as approved by the Engineer).

Mandatory
Ontario Provincial Police
Ambulance Service
Public School Board
Catholic School Board
Fire Department
Township of Muskoka Lakes

5.0 CONSTRUCTION LIENS

Notwithstanding of the provisions herein, in the event a claim for lien is registered against the Project lands, or the Owner receives any written notice of lien, the Owner shall be entitled to withhold any payment otherwise due to the Contractor until such time as such claims have been dealt with as provided herein.

In the event that a written notice of a lien is received by the Owner, the Contractor shall, within 10 calendar days, at its sole expense, arrange for the withdrawal or other disposal of the written notice of a lien pursuant to the Construction Act.

If a construction lien is registered against the Project lands, the Contractor shall, within 10 calendar days, at its expense, vacate or discharge the lien from title to the Project lands. If the lien is merely vacated, the Contractor shall, if requested, undertake the Owner's defence of any subsequent action commenced in respect of the lien at the Contractor's expense.

If the Contractor fails or refuses to vacate or discharge a construction lien or written notice of lien within the time prescribed above, the Owner shall, at its option, be entitled to take all steps necessary to vacate and/or discharge the lien, and all costs incurred by the Owner in doing so (including, without limitation, legal fees on a solicitor and his own client basis and any payment which may ultimately be made out of or pursuant to security posted to vacate the lien) shall be to the account of the Contractor, and the Owner may deduct such amounts from the amounts otherwise due or owing to the Contractor.

Without limiting any of the foregoing, the Contractor shall satisfy all judgements and pay all costs resulting from any construction liens or any actions brought in connection with any liens, or in connection with any other claim or lawsuit brought against the Owner by any person that provided services or materials to the Project lands which constitute part of the Work and the Contractor shall indemnify the Owner from and against any and all costs (including, without limitation, legal fees on a solicitor and client basis) the Owner may incur in connection with such claims or actions.

This section does not apply to construction liens claimed by the Contractor for non-payment

by the Owner.

6.0 COORDINATION MEETINGS

The Contractor is responsible to coordinate directly with all Utility Company Authorities which may be affected by the Work.

The Contractor shall attend such meetings with the Owner and Utility Company Authorities as may be required by the Contract Administrator in the execution of the contract.

7.0 CONSTRUCTION STAGING

The Work shall proceed according to the construction staging shown in the Contract documents unless otherwise approved by the Engineer.

The numerical listings of work to be performed in each stage, as shown on the Contract Drawings, do not necessarily represent the sequence of the Contractor's operation. The Contractor shall submit a proposed sequence of construction and anticipated detailed schedule, in writing, to the Engineer for approval before the commencement of each stage of work.

8.0 AFTER HOURS TELEPHONE CONTACT

The Contractor shall ensure that an authorized representative is available which can be contacted 24 hours a day, 7 days a week.

9.0 TRAFFIC CONTROL

Traffic control devices shall be in accordance with the latest version of the Ontario Traffic Manual (OTM), as amended and updated.

9.1 DEFINITIONS

Construction signs means all traffic control devices and signs identified in the OTM, including vehicles and sign trailers provided to support signs and equipment to supply sign lighting, but excluding the Contract identification sign and highway number markers.

9.2 CONSTRUCTION

Signing

Construction signs shall be supplied, located, relocated, erected, operated and maintained at all times by the Contractor in conformance with the OTM. The Contract identification signs, if any, will be supplied by the Owner and erected and maintained by the Contractor.

Signs shall be in place before work affecting traffic begins, shall be well maintained to be effective at all times, shall remain operational throughout the duration of the operation requiring signs, including the shutdown period, and shall be removed upon completion of the operation.

Only ramps or streets identified elsewhere for complete closure shall be signed for closure.

Revision to OPSS 706:

Section 706.04.01 is amended by the addition of the following:

Each time traffic control signing is erected, a layout shall be submitted to the Engineer. The Engineer shall review the layout for conformity with the minimum standards set out in the Manual of Uniform Traffic Control Devices (MUTCD) or the Ontario Traffic Manual (OTM), and if these standards are met or exceeded, authorization will be given to erect the signing.

Upon completion of the signing, the Contractor and Engineer shall review the signing for conformity with the approved layout. If any changes are required, or the minimum requirements are not met or exceeded, the Contractor shall make such changes, and the Engineer shall give approval to use the traffic control measure.

The layouts, amendments thereto, and authorizations shall be kept on-site, and all measures shall be inspected by the Contractor daily.

Existing Signing

It shall be the Contractor's responsibility to remove and keep in good condition all signs within the limits of the project. If so directed by the Engineer, any existing sign removed by the Contractor to accommodate construction shall be kept operational by placement on a temporary support. Stop signs, road name signs, municipal address signs (911), and address ranges signs (911) **must** be kept operational at all times.

Temporarily located existing signs shall be kept at approximately the same height, offset and basic location from traffic of the dam as before removal.

All signs shall be reinstalled by the Contractor in accordance with the OTM after the Work operation is complete.

Basis of Payment

The Contractor shall assume any costs compensation for all labour, equipment and material necessary to do the construction outlined above, unless payment is provided elsewhere, excluding any labour, equipment and material supplied by the Owner.

10.0 SUBSURFACE CONDITIONS

A Geotechnical Investigation and Report that pertains to this project, is included as part of the tender documents.

The Contractor shall review the provided Geotechnical report in Appendix E and make his or her own determination as to construction procedures and considerations, health and safety considerations and construction sequences and methodology.

The successful Tenderer shall not be entitled on any basis whatsoever to extra payment in the event that their tender was based upon some misunderstanding as to the nature or extent of the subsurface conditions.

Tenderers are advised that the Owner does not in any way, shape or form whatsoever warrant the accuracy of any information relating to subsurface conditions existing at the site of the Work that is stated or may be implied in the Tender Documents.

Any such information was compiled for the Owner for estimating purposes only and is only being made available as a courtesy.

11.0 PROTECTION OF PUBLIC TRAFFIC

Restriction on the Use of Construction Equipment and Unlicensed Vehicles

Unlicensed vehicles and construction equipment, with the exception of rock trucks, shall not travel, work or stop within 4 m of a lane carrying traffic except where construction operations necessitates the Working area be less than 4 m from the traffic, in which case, the Contractor shall erect delineators along the edge of the travelled lane, in accordance with OTM. In no case shall the distance between traffic and working area be less than 1.5 m.

Restrictions on Construction Operations

The Contractor shall not close the road or reduce the width or number of traffic lanes available for traffic except as specified in the Contract documents or unless he has received the approval of the Engineer. Without limiting the responsibility of the Contractor to properly notify the public of and protect it from traffic hazards, the Engineer may require the Contractor to provide additional notification or protection for the public.

The Engineer may, in writing, require the Contractor to cease or limit his operations under the Contract, on any day or days if the operations are of such a nature or if the Work is so located or if the traffic is of such a volume that the Engineer deems it necessary or expedient so to do.

The Contractor shall make every effort to facilitate the movement of mail delivery, school, garbage collection and recyclable collection vehicles. If the Work prohibits the ability of these vehicles to provide service, the Contractor, at no extra expense to the Owner, shall coordinate with the affected service to undertake this work.

Construction operations shall conform to any noise, time or other local, provincial and federal restrictions. Nothing in this section reduces or limits the operation of statutes or by-laws.

Construction operations shall be carried out during the following periods:

Monday to Friday 6 AM to 9PM

Weekend work shall not be permitted unless a written request is provided and approved by the Owner. Weekend work authorized shall be permitted from

Saturday from 6 AM to 9 PM

Sunday from 9 AM to 9 PM

Work outside of the above mentioned hours shall only be permitted by the Owner in writing.

For the purposes of this Contract, the following is a list of holidays and shall be observed on the day as set by statute unless permission is granted in writing by the Owner. No work shall occur on these days without written permission from the owner

New Year's Day

Family Day

Good Friday

Victoria Day

Canada Day

Civic Holiday

Labour Day

Thanksgiving Day

Christmas Day

Boxing Day

Work shall not be permitted during the Bala Cranberry Festival which will occur October 15 – 18 2026 inclusive.

Location and Storage of Materials and Equipment

Materials shall not be stored within 4 m of the travelled portion of any roadway except in the medians where the minimum clearance required is 2.5 m. Equipment shall not be stored within 4 m of the travelled portion of any roadway.

Notwithstanding the foregoing, the Contractor shall, at his own expense, remove any equipment or material which in the Engineer's opinion, constitutes a traffic hazard.

Delivery and Trucking

The Contractor shall plan and schedule the routes of vehicles transporting all materials to, from or within the job, so that vehicular movements are accomplished with minimum interference and interruptions to traffic. This will necessitate vehicles to "slip-off" or "slip-on" in the direction of traffic, in order to merge with and thereby avoid crossing traffic lanes.

The Contractor shall obtain the Engineer's prior approval for the location of any "slip-off" or "slip-ons". The Engineer reserves the right to alter, reject or close same as considered necessary. The Contractor shall notify suppliers of materials and equipment of the above requirements.

12.0 TEMPORARY SUSPENSION OF WORK

The Contractor shall continually prosecute the Work under this Contract until complete.

In the event of extraordinary circumstances, or the onset of weather prohibiting the Work, the Contractor shall make a request in writing to the Engineer for a temporary suspension of work.

The request shall contain the date for shutdown, reasons therefore and the anticipated date of the resumption of work.

The Engineer shall render a decision in a reasonable amount of time.

If operations are suspended the Contractor must submit notification of his intent to resume work to the Engineer 72 hours in advance.

13.0 PROPERTY OWNER'S RELEASE OF PRIVATELY OWNED LAND USED BY THE CONTRACTOR

Upon completion of the Contract, the Contractor shall provide the Owner with two (2) copies of a form of release signed by each property owner upon whose land he has entered for any purpose in conjunction with the Contract, on the form approved by the Owner.

Final payment will not be paid to the Contractor until all the applicable forms of release have been signed by property owners, received by the Owner, and checked.

14.0 DEPOSITS ON VEHICLES AND PRIVATE PROPERTY

The Contractor shall be responsible for removing and cleaning any materials, which become deposited on vehicles or private property as a result of the Contractor's operations.

15.0 UTILITIES, FENCES AND PRIVATE PROPERTY

The Contractor shall be responsible for the location and protection of all utilities, fences and private property at the job site during the time of construction. Utility locations shown on the Contract Drawings are estimated approximations and are included for general information purposes only.

The Owner will be responsible for the permanent relocation of utilities where required. However, no claims will be considered which are based on delays or inconvenience resulting from the relocation not being completed before the start of this Contract. The Contractor is responsible to coordinate its activities with each potentially affected utility company or agency as required. Temporary disconnection, relocation and reinstatement of any utility is the responsibility of the Contractor and the costs for such shall be included in the Unit Prices Bid in the Form of Tender.

It is the Contractor's responsibility to contact the Municipal Authorities or Utility Companies for information in regard to the exact location of all utilities, to exercise the necessary care in construction operations and to take such other precautions as are necessary to safeguard the utilities from damage.

16.0 CONDITION OF SITE

The Contractor, during the progress of the Work, shall keep the site and work in as tidy a condition as practicable. He shall not deposit any material on any portion of street, sidewalk, boulevard, or other Corporation or public property, without permission of the Engineer, and shall remove same without delay when and as directed by the Engineer.

Unless all surplus material, or plant, rubbish, false work, etc., is removed from time to time, when and as directed, the Engineer will proceed to do whatever is necessary to restore the site, street, sidewalk, boulevard or other Corporation or public property, to a tidy condition, and charge the cost thereof against the Contractor. Whenever and wherever any work is closed, suspended or stopped for the winter, all material of every description must be gathered up from off the streets, foot-walks, and boulevards, and removed there from, provided always there shall be no stoppage of work without the approval in writing of the Engineer.

17.0 TREES AND SHRUBS

Except as otherwise provided for in the Contract, the Contractor shall protect from injury all trees and shrubs on or near the line of the Work and on private property. Where the line of a trench passes close to trees, the Contractor shall construct timber barricades around each tree or group of trees, or tunnel below the trees. Excavated material shall not be placed in contact with any tree, and the cutting of branches will not be allowed except with the written approval of the Engineer and the owners of the trees. No extra payment will be allowed the Contractor on account of any expense he may incur in protecting existing trees, and the Contractor shall be responsible for any damage done to the trees by his workmen, trucks or equipment.

18.0 SPILLS REPORTING

Spills or discharges of pollutants or contaminants under the control of the Contractor, and spills or discharges of pollutants or contaminants, which includes silt and sediment into any waters or on any shore or bank which may impair water quality, that are a result of the Contractor's operations that cause or are likely to cause adverse effects shall forthwith be reported to the Engineer and the appropriate Provincial Ministries. All spills or discharges of liquid, other than accumulated rain water, from luminaries, internally illuminated signs, lamps, and liquid type transformers under the control of the Contractor, and all spills or discharges from this equipment that are a result of the Contractor's operations shall, unless otherwise indicated in the Contract, be assumed to contain PCBs and shall forthwith be reported to the Engineer.

This reporting will not relieve the Contractor of his legislated responsibilities regarding such spills or discharges.

MECP - SPILLS ACTION CENTRE (24 HOURS) - 1-800-268-6060

19.0 WEIGHING OF MATERIALS – MEASUREMENT FOR PAYMENT

OPSS 102, November 2018, is amended by the addition of the following:

102.09 Measurement for Payment

102.09.01 Weighed Materials

The measurement for payment will be by net weight shown on the weigh ticket of material received and signed for on site. Weigh tickets will be summarized daily, and a running total of weighed material to date will be kept for each material. No payment will be made for tickets which are not marked received by the Contract Administrator.

20.0 BUILDING PERMITS AND INSPECTIONS

The Contractor shall be responsible for applying for all building permits and scheduling all building inspections associated with the work as part of the Work outlined in this Tender. The Contractor is also responsible for all applications and fees paid to the Township of Muskoka Lakes as part of completing the Work outlined within this Tender. Costs associated with permitting and applications shall be included in the unit rates provided in FT8.2

21.0 PROVISIONAL ITEMS

The Tenderer agrees that he is not entitled to payment of the Provisional Items except for additional work carried out by them in accordance with the Contract and as directed by the Engineer in writing, and only to the extent of such additional work.

SECTION F

SPECIAL PROVISIONS – ITEM SPECIFIC

TOWNSHIP OF MUSKOKA LAKES

SPECIAL PROVISIONS – ITEM SPECIFIC

Special Provisions – Item Specific are usually technical in nature and relate to specific tender items. Special Provisions – Item Specific can either amend or extend the OPS Standard Specifications contained in Section D of the Tender documents, or they can be used to provide nonstandard, item-specific special provisions.

Special Provisions – Item Specific rank third (c) in the order of precedence, GC2.02. If a conflict exists between the Special Provisions - General and the Special Provisions - Item Specific, the Special Provisions - General shall take precedence.

The Contractor acknowledges that the Special Provisions – Item Specific, as produced by the Township of Muskoka Lakes and listed herein, are provisions of this Contract.

Clause No.	Special Provisions – Item Specific	Pages
SP-F-1	Special Provisions – Item Specific	F-1 to F-48

TOWNSHIP OF MUSKOKA LAKES

SPECIAL PROVISIONS – ITEM SPECIFIC

No. SP-F-1

The following special provisions provide supplemental specifications and additional information regarding the line items in the Tender for the Work. The contractor is also responsible for review of the provided Contract Document package, including all annotations and notes associated with the design drawing package.

Part 1.0 A GENERAL

1.1 Performance bonding

The lump sum price bid for this item shall be full compensation for the provision of required insurance as indicated in the Contractual Requirements and the following bonding:

1. Performance Bond in the amount of 100% of the Tenderer's Total Bid; and,
2. Labour and Material Payment Bond in the amount of 100% of the Tenderer's Total Bid.

The Performance Bond shall be maintained in force for a period of one (1) year from the date of Substantial Performance of the work and shall be from a recognized surety company doing business in the Province of Ontario.

To ensure that Contract performance security will be available when requested by the Owner, each tenderer shall include with their tender, an Agreement to Bond on a form provided by the surety company.

Payment for this item will be 100% on the first payment draw after the bonds have been provided and accepted.

1.2 Mobilization/Demobilization

Under this Item and for the Contract Price, the Contractor shall supply all labour, equipment and materials required to complete the following works not specified under other Items, all in accordance with the Contract Drawings and to the satisfaction of the Engineer:

1. Submission of a work schedule and phasing plan for the planned Work Areas in advance of mobilization for Engineer/Owner approval and submission for final permitting with the Ministry of Natural Resources. Current permitting documents and packages for the project are provided attached to this Document in Appendix B. The Environmental Impact Assessment for Burgess Dam is Attached in Appendix C.
2. All preparatory work within and outside the Work Areas;

3. Supply, installation and maintenance of temporary facilities including safety signs, lighting, crossings, site and roadway grading and maintenance, dust control, roadway barricades and signs;
4. All costs related to establishing construction offices for the Consultant, Contractor and all sub-Contractors;
5. Communication and other temporary utilities which may be required;
6. Security on site to guard the materials, tools, equipment, offices, vehicles, and fencing, as necessary.
7. Supply and transportation to the site of construction equipment, cranes, and workforce as required for the performance of the Work;
8. Upon completion of the Work, restoration of the site to its original condition, all to the approval of the Engineer;
9. Payment for permits not obtained by the Owner;
10. All costs associated with management of the Work; and,
11. All other costs, including administrative costs, which are not directly associated with the execution of Items specified in the Form of Tender.

Liaise with the Engineer and all other applicable stakeholders in a timely manner to ensure that a safe, quality product is delivered within the timeframe specified herein.

The Contractor will be paid 60% of the Lump Sum Bid Price for this Item upon completion of the mobilization operation. The remainder of the Lump Sum Bid Price for this Item will be paid when the Contractor demobilizes from the site and restores the site to a condition acceptable to the Engineer.

Part 1.0 B – PRE-CONSTRUCTION WORK

1.1 Environmental Controls

This Item is for the additional work required to maintain an environmentally safe and hydraulically isolated workplace, that is not specifically covered under any other Item.

It is intended that the Works proposed be executed in such a manner which, to the fullest possible extent, minimizes any adverse effect on the cultural and natural environment of the project area. The environmental conditions of the Contract stated herein must be complied with in all respects. It is a responsibility of the Contractor that all his personnel be sufficiently instructed so that the Work is carried out in a manner consistent with minimizing environmental impact.

In particular, the following work will be required:

1. Drafting and submission of an Erosion and Sediment Control Plan to the Engineer and Owner to submit to the Ministry of Natural Resources for final permitting approval, including response to any commentary or request for revisions.
2. Species-At-Risk protection, including but not limited to fish salvage prior to works commencing within the in-water work zones, such as the upstream and downstream areas of the Dam.
3. Adherence to permitting requirements, including fish timing windows.
4. Any part of a vehicle and/or equipment shall be free of fluid leaks and externally cleaned /

degreased to prevent any deleterious substance from entering any drainage system.

5. All sediment and erosion control measures shall be inspected daily to ensure that they are functioning properly and are maintained and/or upgraded as required.
6. If the sediment and erosion control measures are not functioning properly, no further work shall occur until the sediment and/or erosion control problem is addressed.
7. Sediment and erosion control measures shall be left in place until all areas of the Work site have been stabilized.
8. Design, Permitting and Construction of coffer dams necessary to isolate in-water work from the environment area of the site. (Dewatering is described in Special Provision Item 1.5 below).

This Item shall include the following, as shown on the Contract Drawings and as may be otherwise required:

1. Heavy Duty Silt Fence
2. Turbidity Curtain
3. Straw Bales
4. Rock Check Dams
5. Cofferdams
6. Tree protection

References:

1. OPSS MUNI 182 - General Specification for Environmental Protection of Waterbodies and Waterbody Banks
2. OPSS 805 – Construction Specification for Temporary Erosion and Sediment Control Measures

The Contractor shall undertake a detailed review of his proposed route of construction to plan access routes and fuelling areas. Refuelling and maintenance of equipment shall not be undertaken in or adjacent to a watercourse. Suitable fuelling and maintenance areas shall be established, and all maintenance and fuelling conducted in these areas. The locations of such areas are subject to review by the Engineer. Procedures for the interception and rapid cleanup and disposal of spillages that do occur shall be submitted to the Engineer for review prior to starting work. All materials required for cleanup of fuel spillages shall be maintained readily accessible on site.

The exception of these fuelling locations requirements shall be generators, cranes, backhoes or shovels which may be fuelled at other than the designated fuelling areas. However, no fuelling of backhoes shall be carried out within thirty metres of any watercourse. This requirement may be relaxed at the discretion of the Engineer if non-spill fuelling facilities are used.

Any spills apt to cause impairment to the natural environment must be immediately reported by the Contractor to the Engineer and to the Ministry of Environment, Conservation and Parks.

The Contractor shall take such steps as may be required to accomplish the following in relation to the environmental protection of the local drainage system during construction:

1. All loose materials excavated or brought on site should be stockpiled away from the drainage

- system and protected against erosion; and,
2. Prevent debris during structure removals and concreting operations from falling into the watercourse. If any debris or material falls onto the watercourse, the Contractor shall ensure that such material be promptly removed.

Walleye spawning has been observed downstream of the dam, and fish habitat has been identified upstream of the dam within the Work Area, prior to work start, a fish salvage permit and fish salvage will need to be completed. In-water work windows as established by the Ministry of Natural Resources for the project must also be followed for completed the work. No in-water work shall be permitted between April 1st and May 31st.

The contractor will be responsible for maintaining ESC and coffer damming measures throughout the duration of the Works to the satisfaction of the Owner/Engineer. Deficiencies, if noted, shall be remedied as soon as possible at no additional cost.

The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on each Payment Certificate based on the value of the Work completed to date as a percentage of the total Contract amount.

1.2 Traffic Control, Detour Signage and Project Signage

Under this Item and for the Contract Price, the Contractor shall supply all labour, equipment and materials required to complete the following works in accordance with the Contract Drawings and to the satisfaction of the Engineer.

Generally, this Item is for road closure during construction, for erection and maintenance of road closure and detour signage, for the maintenance of the road in the working area (including but not limited to River Street) and for carrying out other activities as specified and as required in connection with this Specification.

The Contractor shall:

1. Erect, maintain, relocate as required and remove temporary signs, concrete barriers and temporary pavement markings, including stop bars, to accommodate all of the Work as shown on the Design Drawings.
2. Prepare Traffic Control Plans, Traffic Protection Plans, etc., as required in the Ontario Traffic Manual, Book 7 - Temporary Conditions. All plans, etc., shall be submitted to the Engineer for review prior to commencement of work. The Contractor shall carry out a site inspection during installation or modification of the traffic control system and provide written certification of conformance.
3. Supply, install, program, relocate, maintain and remove temporary traffic controls as required. The Contractor shall coordinate any required changes of the traffic controls with the Engineer and the Township during construction.

The Contractor shall supply and erect two (2) 1200 x 1200 mm signs with the following on River Street:

TOWNSHIP OF MUSKOKA LAKES
BURGESS DAM REHABILITATION PROJECT
RIVER STREET CLOSED EXCEPT FOR LOCAL TRAFFIC
FROM NOVEMBER 2025 TO DECEMBER 2026 FOR CONSTRUCTION

The Contractor shall supply and Erect two (2) 1200 x 1200 mm signs, one at the downstream Tailrace outlet of the dam and one (1) approximately 100 m upstream of the dam, that are clearly visible from the water, indicating construction within the dam area that shall read:

TOWNSHIP OF MUSKOKA LAKES
BURGESS DAM REHABILITATION PROJECT
CONSTRUCTION AHEAD FROM NOVEMBER 2025 TO DECEMBER 2026

Access through River Street and to the powerhouse of the dam shall be maintained at all times to the Owner, regardless of weather or construction staging, to all residences having access to the road, and safe and adequate passage for pedestrians shall be maintained. Safe and adequate passage to the powerhouse and functioning portions of the dam shall also be maintained at all times, should the water level need to be adjusted, or Dam operated or inspected at any time by the Owner.

If the Contractor fails to maintain access, the Engineer may take whatever action it deems necessary and charge the costs back to the Contractor.

The Contractor shall supply and place all construction warning signs using direct buried posts as required by the 'Ontario Traffic Manual Book 7, Temporary Conditions', prior to the start of construction. The Contractor shall remove all construction signs and posts upon the completion of the Contract. The Contractor shall cover (bag) any road warning and regulatory signs as required to carry out the construction when advised by the Engineer.

The Contractor's traffic control and traffic maintenance shall be in accordance with the 'Ontario Traffic Manual - Book 7, Temporary Conditions'. Proper traffic control shall be maintained at all times during construction, including removal and application of pavement markings as necessary to maintain vehicular traffic in their designated lanes. The Contractor will be responsible for providing, maintaining and relocating, where necessary, sufficient signs, delineators, barricades, lights, flashers, etc., and providing such flagpersons and/or police officers as are required so that motorists and pedestrians are properly directed to ensure safety. Flagging procedures shall conform to the recommendations of the Construction Safety Association of Ontario.

The Contractor shall give the Engineer five (5) working days advance notice of any construction, change or removal of the temporary traffic protection, and any such construction, change or removal shall only take place upon the approval of the Engineer. During the time the temporary traffic control is being constructed, changed or removed, vehicular traffic shall be under the control and direction of flagmen.

If, in the opinion of the Engineer, proper traffic control is not maintained, the Contractor shall immediately modify the operation to the satisfaction of the Engineer. If the Contractor fails to take immediate action, the Engineer may take such action, as he considers necessary and required and deduct the cost from monies

owing the Contractor. The performance of such work under the direction of the Engineer shall in no way relieve the Contractor from any responsibility or damages which may occur during its performance or after such precautions have been carried out by the Engineer.

Unless specifically paid for under other Items, the cost of all labour, granular and asphalt materials, portable traffic control signals, temporary concrete barriers, equipment, flagpersons, signs, lights, etc., required to maintain both vehicular and pedestrian traffic, shall be included under this Item.

The Work of this Item shall include the control of dust to provide safe passage for traffic. Dust control shall be affected by the use of water or calcium chloride, or both.

The Work of this Item shall also include the removal of mud that has been tracked onto roadways as directed by the Engineer. Mud shall be removed within 24 hours' notice by the Engineer.

The Contractor will be responsible for the maintenance of the Work at all times until the Contract has been accepted, and commencing from the first day of work. This will include the maintenance of the existing roadway within the Working Area and Contract limits, even if the Contractor has not yet begun work in a particular area.

Temporary signage shall be supplied, erected and maintained in the locations shown on the approved traffic control plans, or as directed by the Engineer during the course of the Contract, by the Contractor, in accordance with the Ontario Traffic Manual, Book 7 - Temporary Conditions and the Manual of Uniform Traffic Control Devices.

The Contractor shall maintain and keep posted in a visible location all existing signage associated with the dam, this includes the temporary display of signage during the Work and replacement of the signage in its original location or an agreed-upon new location with the Engineer and Owner at the completion of the Work.

Payment for all work as shown on the Contract Drawings and as outlined in the Specifications shall be included in the Lump Sum Price tendered for 'Traffic Control, Detour Signage and Project Signage'. Payment shall be made on each payment certificate based on the value of work completed to date as a percentage of the total Contract amount. The total value of this Item shall not exceed 100% of the Lump Sum Price.

1.3 Site Water Management

Under this Item and for the Contract Price, the Contractor shall supply all labour, equipment and materials required to complete the following works in accordance with the Contract Drawings and to the satisfaction of the Engineer.

The Contractor shall plan, design, construct and maintain the necessary coffer dams and de-watering systems to the satisfaction of the Engineer, to ensure hydraulic isolation of the work site to perform the work as outlined in the Contract Drawings.

Specifically, the Contractor shall perform the following

1. Develop a coffer dam design to the satisfaction of the Engineer for submission for final permitting to the Ministry of Natural Resources.
2. Develop a De-watering plan to the satisfaction of the Engineer for submission for final permitting to the Ministry of Natural Resources.
3. Construct and maintain coffer dams where necessary to maintain hydraulic isolation for the work area.
4. Supply, operate and maintain the necessary plant and labour to enact the de-watering plan, including pumping and de-watering the work area, such that the work can be completed in the dry to the satisfaction of the Engineer.
5. Removal of de-watering equipment and cofferdams at the completion of the Work as outlined in the above-mentioned Phasing Plan.
6. Restoration of the site areas

The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on each Payment Certificate based on the value of the Work completed to date as a percentage of the total Contract amount.

1.4 Construction Laydown Area

Under this Item and for the Contract Price, the Contractor shall supply all labour, equipment and materials required to complete the following works in accordance with the Contract Drawings and to the satisfaction of the Engineer.

The Contractor shall identify an area for temporary storage of equipment and material to complete the Work as outlined in the Drawings, this area shall be approved by the Engineer prior to work start-up.

The laydown area shall be delineated and maintained under the same environmental controls as applicable in item 1.3 of the Contract.

The Laydown Area shall be reinstated at the conclusion of the contract.

The Contractor will be paid 60% of the Lump Sum Bid Price for this Item upon completion of the laydown area being completed. The remainder of the Lump Sum Bid Price for this Item will be paid when the Contractor demobilizes from the site and restores the site to a condition acceptable to the Engineer.

1.5 Temporary Access for Equipment and Reinstatement

Under this Item and for the Contract Price, the Contractor shall supply all labour, equipment and materials required to complete the following works in accordance with the Contract Drawings and to the satisfaction of the Engineer.

The Contractor will identify temporary access routes and establish suitable egress and temporary roadways to allow for access of equipment and materials to complete to work in accordance with the Contract Drawings.

The access route and methodology shall be approved by the Engineer prior to mobilization.

Upon completion of the Work, the temporary access shall be removed and reinstated in an acceptable manner as approved by the Engineer.

The Contractor will be paid 60% of the Lump Sum Bid Price for this Item upon completion of the laydown area being completed. The remainder of the Lump Sum Bid Price for this Item will be paid when the Contractor demobilizes from the site and restores the site to a condition acceptable to the Engineer.

Part 2.0 SPILLWAY AND LANEWAY AREA

2.1 Tree and Vegetation Removal

The Lump Sum Bid Price shall include all labour, equipment and material required to clear and grub to the limits specified on the Contract Drawings and to the satisfaction of the Engineer. The Lump Sum Bid Price will also include the disposal and management of all materials.

Tree clearing shall be in conformance to the Contract Drawings, discussion regarding clearing along south side of the dam shall be subject to approval prior to removals to ensure the tree clearing is approved by the Engineer/ Owner due to the proximity to local residences/residents.

There will be no measurement for payment for this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on each Payment Certificate based on the value of the Work completed to date as a percentage of the total Contract amount.

2.2 Earth Excavation

This Item shall include all labour, equipment and material required to excavate topsoil and existing material within the proposed Spillway and Laneway channel, as well as the opposite stream bank within the tailrace section of the dam, as indicated in the Contract Drawings.

The Contractor shall perform the following:

1. Excavate topsoil and surficial material upstream of the existing laneway; care shall be taken not to disturb the existing grounding grid. Spillway walls shall be placed on the bedrock with care to protect the grounding grid as indicated in the Contract Drawings and discussed in the Attached Ground Grid Letter provided in Appendix E. The topsoil shall also be stripped on the opposite bank of the tailrace for rip rap placement as indicated in the Contract Drawings and detailed in Item 2.6.
2. A minimum cover of 150 mm shall be left over the existing grounding grid, it should be noted that the exact location of the existing grounding grid is not known, and protection of the existing grounding grid is the responsibility of the contractor as outlined in Item 2.7 below.

3. Excavate to the bedrock surface or to the grounding grid plus cover under the lane way and at the downstream outlet of the spillway channel as shown in the Contract Drawings.
4. Surplus material shall be disposed offsite in accordance with OPSS 180 and O.Reg 406/19 as applicable. A disposal location shall be identified by the Contractor and submitted to the Engineer at least two (2) weeks in advance of material removal.

Measurement for payment will be quantity of in-situ excavated soil, and the unit of measurement is in cubic metres. No payment will be made for earth excavation below the theoretical design surface. Any adjustment in quantity will not result in a change in the Contract unit price. There will be no claim for extra or delay by the Contractor for changes in bedrock profiles.

This item shall include all labour, equipment and material for the placement of Granular A for the spillway laneway as shown in the Contract Drawings.

This Item includes any grading of the sub-grade prior to placing granular road base or other work as necessary to further construction. Sub-grade material shall be suitably compacted by proof rolling or other means approved by the Engineer prior to the placement of granular backfill material.

The unit price under this item shall include the provision of water for compaction purposes if required.

Compaction shall be to 100% of the material's Standard Proctor Maximum Dry Density. The compacted granular surface shall not deviate more than 20 mm from the specified grade. Overbuilds outside these tolerances, if ordered by the Contract Administrator, will be computed and added to the theoretical quantities. Underbuilds outside these tolerances, either ordered by the Contract Administrator or undertaken by the Contractor as his responsibility, will be computed and deducted from the theoretical quantities accordingly.

Measurement for payment for the above tender items shall be by the tonne based on approved weigh scale tickets. Weighing of material will conform to OPSS 102.

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

2.4 Supply and Install Reinforced Concrete Spillway Wall

This Item shall include all labour, equipment and material required to supply and install reinforced concrete for construction of the spillway training walls on either side of the spillway channel as shown in the Contract Drawings.

Concrete and reinforcing shall be as specified on the Contract Drawings, care shall be taken to ensure the existing grounding grid is adequately protected as outlined in the Contract Drawings.

Concrete placement shall conform to OPSS 904 and conform to the requirements identified on the Contract Drawings.

Reinforcing steel shall conform to the requirements identified on the Contract Drawings.

As part of the Work, the Contractor shall:

1. submit a mix design to the Engineer in accordance with OPSS 904 at least one (1) week prior to the placement of concrete;
2. provide at no additional cost to the Owner, a Field Testing Technician to perform quality performance testing per CSA-A23.1 and as specified in the Contract Drawings, testing results and associated documentation shall be provided to the Engineer;
3. provide at no additional cost to the owner, test cylinders and testing in accordance with OPSS 904 and CSA-A23.1; and,
4. provide a copy of all test cylinder compressive strength results to the Engineer.
5. All mill test reports and material certification tickets for the reinforcing bar shall be provided to the Engineer at least one (1) week in advance of placement.

Quality Assurance testing will be completed at the discretion of the Engineer. The Owner shall be responsible for the cost of QA testing as required.

Measurement for payment will be quantity and dimensions of placed concrete, and the unit of measurement is in cubic metres. The payment method will be determined by measurement performed by the Contractor and approved by the Engineer. Any adjustment in quantity will not result in a change in the Contract unit price. There will be no claim for extra or delay by the Contractor for changes in rock profiles.

2.5 150 mm Pipe Subdrain through access Laneway

This Item shall include all labour, equipment and material required to supply and install a 150 mm HDPE pipe subdrain through the spillway laneway.

The Drain shall consist of a 150 mm HDPE corrugated pipe or an approved equivalent, with the proposed product to be submitted by the Contractor for review and acceptance by the Engineer at least five (5) days prior to installation.

Measurement for payment will be per linear metre of drain pipe as established by measurement from the Contractor and approved by the Engineer. The Unit Price tendered for this Item shall be compensation in full for all work associated with this Item.

2.6 Spillway Rip-Rap over Non-Woven Geotextile

This Item shall include all labour, equipment and material required to supply and install a non-woven geotextile and Spillway rip rap protection within the proposed spillway channel as shown on the Contract Drawings.

The Contractor shall:

- Submit the proposed geotextile product specifications at least one (1) week prior to placement for review and acceptance by the Engineer. The Geotextile shall conform the specifications as outlined in the Contract Drawings or as approved by the Engineer.
- Submit/supply material quality testing results and quality control documents for the geotextile to the Engineer.
- Smooth and create a level and well grad subgrade for placement of non-woven geotextile
- Place non-woven geotextile as specified on the Contract Drawings per OPSS 1860 and the Contract Drawings guidelines, whichever is more stringent.
- Supply and place Spillway Rip Rap material as outlined in the Contract Drawings.
- The Contractor shall inform the engineer of the source and proposed material at least two (2) weeks prior to placement for review and inspection of the proposed spillway rip rap.
- The Contractor shall provide gradation verification for the proposed spillway rip rap via WipFrag analysis to be reviewed and approved by the Engineer.
- Rip Rap material shall be placed in an orderly and controlled, and stable manner via excavator placement with care as to not damage the spillway training walls. The rip rap shall extend to the anticipated water level as indicated in the Contract Drawings.
- End dumping placement and segregation of rip rap shall not be permitted.

Quality Assurance testing will be completed at the discretion of the Engineer. The Owner shall be responsible for the cost of QA testing as required.

Measurement for payment will be based on the area of rip rap and geotextile placement as one combined item, and the unit of measurement is in square metres. The payment method measurement provided by the Contractor and approved by the Engineer. Any adjustment in quantity will not result in a change in the Contract unit price.

2.7 Grounding grid protection

This item outlines that the Contractor shall take all precautions necessary to protect maintain the existing grounding grid within the site area as outlined in the Contract documents. The exact area of the grounding grid is not known, and care shall be taken during excavation within the spillway area to not cause harm to the grounding grid.

The Contractor shall take necessary precautions to avoid damage to the grid and mitigate any electrical hazards associated with the Grid.

A minimum soil cover of 150 mm will be required for the grounding grid as outlined in the Contract Drawings. And per the Attached Grounding Recommendation Letter provided to this Tender Document in Appendix E

If the grounding grid is damaged, the Contractor will report the issue immediately to the Engineer and will be responsible for reinstatement of any damaged grounding grid as soon as possible. There shall be no claim for extra or delay caused by damage and replacement of any of the existing grounding grid.

The Grounding grid shall be protected through the concrete spillway walls as noted in the Contract Drawings and attached Grounding Recommendation Letter.

There will be no measurement for payment for this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on each Payment Certificate based on the value of the Work completed to date.

2.8 Install Proposed Chain link fence and Gate

This Item shall include all labour, equipment and material required to perform the installation of chain link fence and gates at the laneway entrance to the dam. The fence shall be installed per OPSS 772 with a vehicle gate for access through the laneway.

Payment for this item shall be per linear meter of fencing installed; unit pricing will assume one (1) entrance gate. Payment will be based on actual installed length of fence as measured by the contractor and approved by the Engineer. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not results in a change in the Contract unit price.

2.9 Spillway Rip Rap c/w Geotextile on Stream Bank

This Item shall include all labour, equipment and material required to supply and install a non-woven geotextile and Spillway rip rap protection on the opposite bank of the Spillway as shown on the Contract Drawings.

Contractor shall perform the same duties as outlined above in Item 2.6, and payment for this item shall also be the same.

2.10 Dust Suppression

This Item shall include all labour, equipment and materials to provide dust suppression for all site activities associated with the Laneway and spillway construction to the satisfaction of the Engineer for the duration of the project.

The means for dust suppression shall include, but not be limited to, water, calcium chloride and other means and methods authorized by the Engineer to reduce and control dust caused by the Work.

The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on each Payment Certificate based on the value of the Work completed to date as a percentage of the total Contract amount.

PART 3.0 DAM EXTENSION AND RAISING

3.1 Remove and Replace Existing Wood Stair, Deck and Dock

This Item shall include all labour, equipment and material required to remove the existing wooden stair, deck and dock currently located on the dam.

Currently, there is a wooden access stair, and deck that leads to head gates of the dam that needs to be removed prior to raising and extending the dam. In addition to the deck and stair, there is an existing dock that is owned by an adjacent resident to the site, which shall be removed and placed in an acceptable location to the Engineer and Owner for storage during the Work.

The Contractor shall

- Remove the existing wooden deck and access stair to the dam, and safely dispose of materials.
- Safely remove the existing dock without damaging the dam, and to the extent possible, the dock.
- Remove and place the dock in an acceptable nearby location for storage during the Work.

Removals shall be done in a professional manner and avoiding damage to the dam to the maximum extend possible. Care shall be taken to avoid damage to the resident dock to the extent possible.

Access and coordination for dock removal shall be done with the Owner.

There will be no measurement for payment for this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on at 80% upon completion of removals and 20% upon inspection and relocation of the dock, and after completion of the works as accepted by the Owner.

3.2 Remove Existing Fence and Gates

This Item shall include all labour, equipment and material required to remove existing fencing and gates on the dam structure per the Contract Drawings.

The Contract unit price shall also include all disposal of materials per OPSS 510

This Item shall be paid on a per linear meter of fence and gate removal. Measurement of removals shall be provided by the Contractor and approved by the Engineer. Any adjustment of quantity shall not result in a change to the Contract Price.

3.3 Concrete Dam Raising c/w Rebar and Bentonite strip.

This Item shall include all labour, equipment and material required to raise the existing concrete dam structure per the Contract Drawings, including preparation of the existing concrete face and addition of a bentonite waterstop.

Concrete preparation shall be per OPSS 929, 930 and the Contract Drawings.

Concrete shall conform to OPSS 904 and conform to the requirements identified on the Contract Drawings.

Reinforcing steel shall conform to the requirements identified on the Contract Drawings.

Prior to placement of new concrete, a bentonite strip waterstop shall be placed per the Contract Drawings.

As part of the Work, the Contractor shall:

1. Prepare the concrete surface and install steel reinforcement per the Contract Drawings and Specifications listed therein, the existing dam surface shall be prepared as per OPSS 929, 930 and the Contract Drawings. The surface shall be inspected by the engineer prior to placement of concrete.
2. submit a concrete mix design to the Engineer in accordance with OPSS 904 at least one (1) week prior to the placement of concrete;
3. Submit a proposed bentonite product to be used as a waterstop for Engineer approval at least one (1) week prior to placement of concrete.
4. provide at no additional cost to the Owner, a Field Testing Technician to perform quality performance testing per CSA-A23.1 and as specified in the Contract Drawings, testing results and associated documentation shall be provided to the Engineer;
5. provide at no additional cost to the owner, test cylinders and testing in accordance with OPSS 904 and CSA-A23.1; and,
6. provide a copy of all test cylinder compressive strength results to the Engineer.
7. All mill test reports and material certification tickets for the reinforcing bar shall be provided to the Engineer at least one (1) week in advance of placement.

Quality Assurance testing will be completed at the discretion of the Engineer. The Owner shall be responsible for the cost of QA testing as required.

Measurement for payment will be quantity and dimensions of placed concrete, and the unit of measurement is in cubic metres. The payment method will be determined by in-field survey performed by the Contractor and approved by the Engineer. Any adjustment in quantity will not result in a change in the Contract unit price.

3.4 Concrete Dam Extension c/w Rebar

This Item shall include all labour, equipment and material required to extend the dam per the contract drawings, including excavation to and preparation of the bedrock surface, installation of dowelling and placement of reinforced concrete per the Contract drawings.

The anticipated depths to bedrock have been approximated in this area from the existing THSA drawings (attached in Appendix D) and the presence of a shallow bedrock surface.

The concrete work shall be completed as mentioned above in Item 2.4, with the following exceptions.

- There is no anticipated grounding grid in this area
- Excavated material shall be properly disposed of in accordance with OPSS 180.MUNI, , material deemed unsuitable for re-use by the Engineer and/or Owner shall be transported to a designated facility as provided by the Contractor at least two (2) weeks prior to disposal.
- The competent bedrock surface shall be inspected by the Engineer prior to placement of concrete.
- Tie-in and preparation to the existing dam structure shall be per Item 3.3 and as described in the Contract Drawings.

Measurement for payment will be quantity and dimensions of earthworks, placed concrete, and the unit of measurement is in cubic metres. Measurement for payment shall be provided by the Contractor and approved by the Engineer. Any adjustment in quantity will not result in a change in the Contract unit price.

3.5 Epoxy Injection Crack Repair

This Item shall include all labour, equipment and material required to repair the existing transverse cracks noted in the existing dam structure as described in the Contract Drawings.

The Contractor shall

- Submit the proposed epoxy product for crack repair one (1) week prior to completing the work.
- Perform the preparation of the existing concrete and crack repair per OPSS 930 and 932.
- Upon completion of the task, the crack repairs shall be inspected and approved by the Engineer.

Measurement for payment of this item shall be completed on a per repair basis. Payment will be made for each crack repaired at the unit price provided in the Bidder's response to this Tender. Each repair will be paid at the unit rate upon inspection and acceptance by the Engineer. Any adjustment in quantity will not results in a change in the Contract unit price.

3.6 Install Pedestrian Railing on top of Dam

This Item shall include all labour, equipment and material required to install a pedestrian railing on the dam as indicated in the Contract Drawings.

The Contractor shall

1. Install the railing upon completion of the dam raising per OPSS 908, with the inclusion of a toe kick plate, and as noted in the Contract Drawings.
2. The railing shall be painted black or an agreed-upon alternative colour by the Owner.
3. The railing shall be installed in the middle of the crest of the raised dam and bolted into place.

Measurement for payment of this item is per linear meter of railing. Payment shall be based upon the measurement of railing provided by the Contractor and approved by the Engineer. Any adjustment in quantity will not result in a change in the Contract unit price.

3.7 Remove Trees, Strip Topsoil Regrade, Remove and Replace Planters

This Item shall include all labour, equipment and material required remove trees, strip topsoil within the project area, regrade the area after completion of the dam raise and extension, remove and replace the existing planters for the dam.

The Contractor shall

1. Remove all trees per the Contract Drawings, including any trees within 2.0 m of the dam.
2. Prior to removing trees, the Contractor shall indicate which trees are to be removed for approval from the Engineer.
3. Remove topsoil as indicated in the Contract Drawings and regrade to a maximum 2H:1V slope up to the raised dam. Care shall be taken to ensure work remains on the site property and to minimize disturbance of the residences adjacent to the Dam.
4. Consult with the Engineer for approval with respect to grading adjacent to the property prior to work start.
5. Remove and place the existing planters on the dam and store nearby in a place approved by the Engineer/Owner until the work can be completed.
6. Remove any additional miscellaneous landscaping features and store nearby in a place approved by the Owner until the Work is completed.
7. Replace all stored items in a professional and careful manner to their original location or as approved by the Owner.
8. Dispose and manage excess material associated with this Line Item.

Measurement for payment of this item shall be based upon the area of removal and grading, and the unit of measurement is in square meters. No payment shall be made below the theoretical design surface. Any adjustment in quantity will not result in a change in the Contract unit price.

3.8 Rebuild Wooden Stairs and Deck

This Item shall include all labour, equipment and material required to rebuild the wooden access stairs and deck for the dam.

Replacement of the wooden stairs and deck shall be to the latest addition of the Ontario Building Code and as described in the Contract Drawings.

The contractor shall

1. Rebuild the existing access stairwell and decking for the dam to suit access and egress to the site and head gates as required upon completion of the dam raise.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item.

3.9 Topsoil (100mm)

This Item shall include all labour, equipment and material required to place topsoil in accordance with OPSS 802, amended as follows:

The Contractor shall

1. Place topsoil to a uniform depth of 100 mm in thickness on areas specified in the Contract Drawings.
2. Grade and level the topsoil in preparation for hydroseeding.

Measurement for payment of this item shall be based on the actual area of topsoil placement and a depth of 100 mm as measured by the Contractor and approved by the Engineer. Measurement shall be in cubic meters. Payment at the contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any adjustment to the quantity will not result in a change in the Contract Unit Price.

3.10 Hydroseed

This Item shall include all labour, equipment and material required to place topsoil in accordance with OPSS 802 and 803, amended as follows:

The Contractor shall

1. Hydroseed all areas as indicated in the Contract Drawings.
2. The seed mix shall contain species local to the region, and the proposed seed mix shall be provided at least one (1) week in advance of placement.
3. Care shall be taken such that hydroseeding materials do not fall into adjacent water bodies; the Contractor shall take appropriate measures to ensure this does not happen.

Measurement for payment of this item shall be based on the actual area of hydraulic seeding as measured by the Contractor and approved by the Engineer. The unit of measurement shall be metres squared. Payment at the contract price for the above tender item shall be full compensation for all labour equipment, and material required to do the work. Any adjustment to the quantity will not results in a change to the Contract Unit Price.

3.11 Dust Suppression

This Item shall include all labour, equipment and materials to provide dust suppression for all site activities associated with the raising and extension of the dam including but not limited to concrete and bedrock preparation to the satisfaction of the Engineer for the duration of the project.

The means for dust suppression shall include, but not be limited to, water, calcium chloride and other means and methods authorized by the Engineer to reduce and control dust caused by the Work.

The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on each Payment Certificate based on the value of the Work completed to date as a percentage of the total Contract amount.

Part 4.0 North Embankment Wall (Upstream of Dam)

4.1 Concrete Embankment wall c/w steel rebar

This Item shall include all labour, equipment and material required to excavate, prepare and install the concrete embankment wall located at the north upstream portion of the dam, per the Contract Drawings.

The anticipated depths to bedrock have been approximated in this area from the existing THSA drawings (attached in Appendix D) and the presence of a shallow bedrock surface inferred from the Geotechnical Report (Attached in Appendix F).

The concrete work shall be completed as mentioned above in Item 2.4, with the following exceptions:

1. Excavated material shall be properly disposed of per OPSS 180.MUNI. Suitable excavated fills for road backfill may be reused as approved by the Engineer.
2. The work area shall be maintained in the dry via coffer damming and de-watering as indicated in the Contract Drawings.
3. Environmental controls shall be implemented and maintained per Item 1.3.
4. The competent bedrock surface shall be cleaned via compressed air and inspected/approved by the Engineer prior to placement of concrete.
5. Dowelling shall be drilled and grouted into bedrock per the Contract Drawings. The Contractor shall submit the proposed epoxy product for dowel placement approval by the Engineer at least one (1) week prior to placement.
6. Tie-in and preparation to the existing dam structure shall be per Item 3.3 and as described in the Contract Drawings.

7. Reinforcing steel and Concrete shall be placed per Item 3.3 and as described in the Contract Drawings.

Measurement for payment will be actual quantity of earthworks, placed concrete, and the unit of measurement is in cubic metres. The payment method will be determined by measurement provided by the Contractor and approved by the Engineer.

No payment shall be made below the design elevations as indicated on the Contract Drawings, until verified by the Contractor and approved by the Engineer in the event of a deeper bedrock profile.

Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

4.2 Grading around wall

This Item shall include all labour, equipment and material required to perform grading activities around the installed embankment wall to meet grades associated with the River Street Road Raising construction portion of the Tender as identified in the Contract Drawings.

The grading shall be per OPSS 206 with the following amendments.

The contractor shall

1. Grade the top surface prior to asphalt placement per the Contract Drawings.
2. The top surface shall be bladed smooth and meet the design grades as indicated on the Contract Drawings.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item.

4.3 150 mm Pipe Subdrain

This Item shall include all labour, equipment and material required to perform the installation of a 150 mm subdrain for drainage behind the constructed embankment wall.

The subdrain shall be installed per OPSS 405, the Sub-drain pipe shall be supplied to OPSS 1840 standards. Geotextile sock shall meet the requirements of OPSS 1860. Pipe shall be 150 mm diameter corrugated and perforated polyethylene pipe with filter sock, complete with fittings as required. Filter sock shall be applied over all fittings to provide a continuous wrap.

The subdrain shall be installed at the location and dimensions behind the wall as outlined in the Contract Documents.

Payment for this item shall be per linear meter of subdrain as measured by the Contractor and approved by the Engineer. Payment at the contract price for the above tender item shall be full compensation for

all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

4.4 Install Chain Link Fence and Gates

This Item shall include all labour, equipment and material required to perform the installation of chain link fence and gates at the north access of the site as shown in the Contract Documents. The fence shall be installed per OPSS 772 with a man gate located in a similar location to the current existing gate or in an otherwise approved location by the Owner.

Payment for this item shall be per linear meter of fencing installed; unit pricing will assume one (1) entrance gate. Payment will be based on actual installed length of fence as measured by the Contractor and approved by the Engineer. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not results in a change in the Contract unit price.

4.5 Rip-Rap c/w Non-woven Geotextile (water side of wall)

This Item shall include all labour, equipment and material required to supply and install a non-woven geotextile and OPSS 1004 R-10 rip rap scour protection on the water side of the north embankment retaining wall as shown on the Contract Drawings.

The Contractor shall:

1. Submit the proposed geotextile product specifications at least one (1) week prior to placement for review and acceptance by the Engineer. The Geotextile shall conform the specifications as outlined in the Contract Drawings or as approved by the Engineer.
2. Submit/supply material quality testing results and quality control documents for the geotextile to the Engineer.
3. Smooth and create a level and well grad subgrade for placement of non-woven geotextile
4. Place non-woven geotextile as specified on the Contract Drawings per OPSS 1860 and the Contract Drawings.
5. Supply and place R-10 Rip rap per OPSS 1004 as outlined in the Contract Drawings.
6. The Contractor shall inform the engineer of the source and proposed material at least two (2) weeks prior to placement for review and inspection of the proposed spillway rip rap.
7. The Contractor shall provide gradation verification for the proposed rip rap via WipFrag for conformance to OPSS 1004 analysis to be reviewed and verified by the Engineer.
8. Rip Rap material shall be placed in an orderly, controlled and stable manner via excavator placement with care as to not damage the embankment wall. The rip rap shall extend to the elevations as outlined in the Contract Drawings to the extent possible.
9. End dumping placement and segregation of rip rap shall not be permitted.

Measurement for payment will be based on the actual area of rip rap and geotextile placement as one combined item, and the unit of measurement is in square metres. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the

work, measurement for payment will be provided by the Contractor and approved by the Engineer. Any adjustment in quantity will not result in a change in the Contract unit price.

4.6 Dust Suppression

This Item shall include all labour, equipment and materials to provide dust suppression for all site activities associated construction of the upstream embankment wall as shown in the Contract Drawings to the satisfaction of the Engineer for the duration of the project.

The means for dust suppression shall include, but not be limited to, water, calcium chloride and other means and methods authorized by the Engineer to reduce and control dust caused by the Work.

The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on each Payment Certificate based on the value of the Work completed to date as a percentage of the total Contract amount.

Part 5.0 River Street Reconstruction

5.1 Removal of Existing Asphalt

This item shall include all labour, equipment and materials required for the complete removal and disposal of the existing asphalt in accordance with OPSS 510 and 180. All environmental protection measures shall be in place before any demolition or removal work is performed.

Measurement for payment of this item is in square meters, based on the extent of the existing asphalt area for removal, as shown on the Contract Drawings.

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any Adjustment in quantity will not result in a change in the Contract unit price.

5.2 Asphalt Saw-Cut

This Item shall include all labour, equipment, and material to saw cut the existing asphalt at all manholes, catch basins and other infrastructure within the asphalt removal area as indicated in the Contract Drawings.

The contractor is responsible for maintaining the condition of the existing infrastructure during asphalt removal and saw cutting. Any damaged infrastructure shall be reported to the Engineer immediately and repaired to the satisfaction of the Engineer as soon as possible at no extra cost to the Contract.

Measurement for payment of this item shall be per linear meter of asphalt sawcut as measured by the Contractor and approved by the Engineer. Payment at the Contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.3 Remove Exist Guardrail

This Item shall include all labour, equipment and material to remove and dispose of off-site the existing railing systems along River Street as shown on the Contract Drawings or deemed necessary by the Engineer. The Contractor shall ensure all materials are removed from the existing roadway to the satisfaction of the Engineer.

The Owner has first right of refusal of all materials. The tender item will also include the disposal and management of all excess materials.

Measurement for payment will be per linear meter of guard rail removal as measured by the contractor and approved by the Engineer. Payment at the Contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.4 Earth Excavation (to be transported off-site)

This Item shall include all labour, equipment and material for the excavation of existing Granular A and subgrade soils to raise and adjust the alignment of River Street as indicated in the Contract Drawings. The Contract price shall also include removal and disposal off-site for the excess materials per OPSS 510.

The contractor shall complete all work in accordance with OPSS 206, 180 and 510. Material shall be excavated to the lines and levels required to construct the adjustments to River Street as indicated on the Contract Drawings, including any temporary excavations. All environmental protection measures shall be in place before any excavation or removal work is performed.

Excavation and subgrade is subject to Engineer approval via proof rolling and inspection prior to backfill.

The Contract price for this item shall also include grading and blading smooth the subgrade surface for backfill and maintenance of site drainage.

Payment shall be in cubic meters, based on the design lines, and grades as shown on the Contract Drawings. Quantities shall be measured by the Contractor and approved by the Engineer; if more quantities are required, it shall be added to the total Item quantity; if less, the reduction shall be subtracted from theoretical quantities in a similar fashion accordingly.

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Changes to the earth excavation quantities shall not warrant adjustment of the Contract rate.

5.5 Hot Mix Asphalt - HL4 (50mm)

This item shall include all labour, equipment and material for the placement of one (1) lift, 50 mm in thickness, of HL-4 hot mix asphalt for the roadway as shown in the Contract Drawings.

The Contractor shall follow OPSS 310 and OPSS 1150 for placement procedures.

Measurement of the contract item shall be in tonnes based on approved weigh scale tickets. Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.6 Granular A (Roadway and Shoulder)

This item shall include all labour, equipment and material for the placement of 150 mm uniform depth of Granular A for the River Street Raising, as shown in the Contract Drawings.

This Item includes any grading of the sub-grade prior to placing granular road base or other work as necessary to further construction. Sub-grade material shall be suitably compacted by proof rolling or other means approved by the Engineer prior to the placement of granular backfill material.

The unit price under this item shall include the provision of water for compaction purposes if required.

Compaction shall be to 100% of the material's Standard Proctor Maximum Dry Density. The compacted granular surface shall not deviate more than 20 mm from the specified grade. Overbuilds outside these tolerances, if ordered by the Contract Administrator, will be computed and added to the theoretical quantities. Underbuilds outside these tolerances, either ordered by the Engineer or undertaken by the Contractor as his responsibility, will be computed and deducted from the theoretical quantities accordingly.

Measurement for payment for the above tender items shall be by the tonne based on approved weigh scale tickets. Weighing of material will conform to OPSS 102.

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.7 Granular B Type II (Roadway and Shoulder)

This item shall include all labour, equipment and material for the placement of Granular B Type II road sub-base material to meet the grades as specified on the Contract Drawings. The Granular B Type II shall be used for upfilling to achieve the desired grade raise of River Street as shown in the Contract Drawings.

This Item includes any grading of the sub-grade prior to placing granular road base or other work as necessary to further construction. Sub-grade material shall be suitably compacted by proof rolling or other

means approved by the Engineer prior to the placement of granular backfill material.

The unit price under this item shall include the provision of water for compaction purposes if required.

Compaction shall be to 100% of the material's Standard Proctor Maximum Dry Density, or via an approved method specification by the Engineer. The compacted granular surface shall not deviate more than 20 mm from the specified grade. Overbuilds outside these tolerances, if ordered by the Engineer, will be computed and added to the theoretical quantities. Underbuilds outside these tolerances, either ordered by the Contract Administrator or undertaken by the Contractor as his responsibility, will be computed and deducted from the theoretical quantities accordingly.

Measurement for payment for the above tender items shall be by the tonne based on approved weigh scale tickets. Weighing of material will conform to OPSS 102.

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.8 Asphalt Slope Protection (50mm HL-4 Hand Placed)

This item shall include all labour, equipment and material for the placement of minimum 50 mm uniform thickness of HL-4 hot mix asphalt slope protection at the south shoulder of River Street as shown in the Contract Drawings.

The Contractor shall follow OPSS 312 and OPSS 1150 for placement procedures.

Measurement of the contract item shall be in actual area of placement, measured in square metres as measured by the Contractor and approved by the Engineer. Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.9 Asphalt Gutter (All Types)

This item shall include all labour, equipment and material for the placement of asphalt gutters composed of HL-4 hot mix asphalt for the River Street Raising task as shown in the Contract Drawings.

The Contractor shall follow OPSS 312 and OPSS 1150 for placement procedures.

Measurement of the contract item shall be per linear meter of asphalt gutter install as measured by the Contractor and approved by the Engineer. Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.10 Concrete Curb and Gutter (All Types)

This Item shall include all labour, equipment and material for the placement of concrete curb and gutter for the River Street Raising task as shown in the Contract Drawings.

The Contractor shall perform the following:

1. Follow OPSS 353 for construction of the curb and gutter.
2. Concrete shall meet the requirements of OPSS 1301. Concrete shall be 30 MPa with 5-7% air entrainment.
3. The Contractor shall supply at no additional expense a technician for testing concrete and casting cylinders.
4. At no extra cost, cylinder breaks shall be completed and provided to the engineer per CSA 23.1
5. Concrete curb and gutter shall be installed according to the dimensions and lines shown on contract documents. Provision of drop curbs and other similar features shall be determined in the field by the Engineer. Drop curbs shall not be cut-in. Concrete curb section shall be according to the Contract Drawings. Approximate limits of each are described on the typical sections shown on the Contract Drawings.

Measurement of the contract item shall be in linear metres of curb placed as measured by the Contractor and approved by the Engineer. Payment at the contract price for the above tender items shall be full compensation for all labour, equipment, and material to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.11 150 mm Pipe Subdrain

This Item shall include all labour, equipment and material for provision of a sub-drain in wrapped trench according to the requirements of OPSS 405 as shown on the Contract Drawings.

The Contractor shall

1. Supply Sub-drain pipe shall be to OPSS 1840.
2. Geotextile sock shall meet the requirements of OPSS 1860.
3. Pipe shall be 150 mm diameter corrugated and perforated polyethylene pipe with filter sock, complete with fittings as required.
4. Apply Filter sock over all fittings to provide a continuous wrap.
5. Place geotextile for wrapped trench shall be Terrafix 270R or approved equivalent.
6. The Sub-drain shall be installed according to the dimensions and lines shown on contract documents.
7. Construction shall include all excavation, trench preparation, supply and installation of bedding granular, and clear stone and geotextile wrap, according to the requirements of contract documents.

In addition to pipe, fittings, outlets, and catch basin break-ins, payment for this item shall also include excavation of 300 mm x 300 mm trench and provision of geotextile fabric trench liner and 19 mm clear stone.

Measurement for pipe sub-drain shall be in linear metres as measured by the Contractor and approved by the Engineer. Payment at the contract price for the above tender items shall be full compensation for all labour, equipment, and material to do the work including geotextile and open graded granular surrounding the subdrain. Any adjustment in quantity will not result in a change in the Contract unit price.

5.12 Driveway Restoration (Gravel)

This Item shall include all labour, equipment and material for reinstatement of gravel driveways within the work area as shown on the Contract Drawings.

The Contractor shall:

1. Reinstall impacted driveways with Granular B Type II subbase and Granular A Surface as required.
2. The driveway restoration shall match existing conditions and grades being not less than 150 mm of Granular A thickness and 150 mm of Granular B Type II thickness.
3. Driveway grades shall be blended into existing raised grade of River Street per the Contract Drawings to allow for smooth transition between existing driveway and raised grade.

Measurement of the contract item shall be on a per gravel driveway basis. Payment at the contract price for the above tender items shall be full compensation for all labour, equipment, and materials to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.13 Driveway Restoration (Asphalt)

This Item shall include all labour, equipment and material for reinstatement of asphalt driveways within the work area as shown on the Contract Drawings.

The Contractor shall:

1. Reinstall impacted driveways with Granular B Type II subbase and Granular A road base and Hot Mix Asphalt HL-3 (driveway mix) as required.
2. The driveway restoration shall match existing conditions and grades being not less than the minimum thicknesses of 50 mm of HL-3, 150 mm of Granular A and 150 mm of Granular B Type II.
3. Construction must be complete before winter and in the same construction season as paving of the main street.
4. Driveway grades shall be blended into existing raised grade of River Street per the Contract Drawings to allow for smooth transition between existing driveway and raised grade.

Measurement of the contract item shall be on a per asphalt driveway basis. Payment at the contract price for the above tender items shall be full compensation for all labour, equipment, and materials to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.14 Install Steel Beam Energy Attenuating Terminal (SBEAT) System

The Unit Price Bid for this Item shall include all labour, equipment and materials necessary to supply and install the SBEAT terminal systems for each end of the proposed guardrail replacement on River Street in accordance with OPSS 733 and as indicated on the Contract Drawings.

Measurement for payment for SBEAT terminal systems will be on a per unit installed basis. Payment at the Contract price for the above tender items shall be full compensation for all labour, equipment, and materials to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.15 Install Steel Beam Guardrail c/w Steel Posts

This Item shall include all labour, equipment and materials necessary to supply and install the steel beam guiderail systems on River Street, per OPSS 721 and as indicated on the Contract Drawings.

Guiderail shall be comprised of steel beam guiderail with channel in accordance with the Contract Drawings and steel posts with plastic offset blocks.

The Contractor shall:

1. The Contractor shall field verify all dimensions prior to construction and shall submit to the Engineer a detailed layout plan showing actual dimensions of installation, bend radii, and post spacing for approval, a minimum of one (1) week prior to installation.
2. Supply all labour and equipment, and materials necessary to install guiderails systems as outlined in the Contract Drawings.
3. All labour, equipment and materials necessary to supply and install new steel beam guiderail to fulfill the length requirements shown on the Contract Drawings.
4. All labour, equipment and materials necessary to install steel posts with base plate on the structure for the single beam guiderail, including all nuts, bolts, washers, etc.
5. All other items shown on the Contract Drawings to make a complete guiderail and handrail system.

Forty-eight (48) hours prior to installation of the above tender items and after placement of Granular 'B' sub-base, the Contractor will layout and stake the locations of posts. The Engineer will review the location for each item and make necessary adjustments if required. The Contractor will complete the necessary adjustments.

Measurement for payment of this item shall be per linear meter of guiderail installed as measured by the

Contractor and approved by the Engineer. Payment at the contract price for the above tender items shall be full compensation for all labour, equipment, and materials to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.16 Adjust Water Valve Heights

This Item shall include all labour, equipment and material for raising the height of water valves on River Street as shown on the Contract Drawings.

The work shall be performed in accordance with OPSS 408 and the latest version of the District of Muskoka Engineering Design Criteria and Standards Manual.

The Contractor shall install valve adjustment units to ensure valve heights meet the new proposed road grade as specified on the Contract Drawings.

The District of Muskoka shall be notified a minimum of five (5) business days prior to performing the work and ensure that servicing has been shut off to the affected area.

The Contractor shall arrange a pre-construction meeting with the Owner, Engineer and District to determine schedule, approvals, and proposed raising. The Contractor shall be responsible for any and all permitting submissions and costs as part of this Item.

Measurement for payment of this Item shall be per valve adjustment. Payment at the contract price for the above tender items shall be full compensation for all labour, equipment, and materials to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.17 Adjust Sanitary Manhole Rim Height

This Item is for the supply of all labour, equipment and materials required to adjust existing sanitary manhole heights by supply and installation of new adjustment units.

Existing manhole elevations are to be reset to the proposed road grade as specified on the Contract Drawings. Any existing adjustment units, if encountered, shall be replaced with IPEX Lifesaver Adjustment System Units.

Measurement for payment of this Item shall be for each structure adjusted. Payment at the contract price shall be compensation in full to completely supply and install adjustment units to obtain design grades. Any adjustment in quantity will not result in a change in the Contract unit price.

5.18 Adjust Storm Catch Basin Rim Height

This Item is for the supply of all labour, equipment and materials required to adjust existing storm catch basin heights by supply and installation of new adjustment units.

Existing catch basin elevations are to be reset to the proposed road grade as specified on the Contract

Drawings. Any existing adjustment units, if encountered, shall be replaced with IPEX Lifesaver Adjustment System Units.

Measurement for payment of this Item shall be for each structure adjusted. Payment at the contract price shall be compensation in full to completely supply and install adjustment units to obtain design grades. Any adjustment in quantity will not result in a change in the Contract unit price.

5.19 Topsoil (100mm)

This Item shall include all labour, equipment and material required to place topsoil in accordance with OPSS 802, amended as follows.

The Contractor shall

1. Place topsoil to a uniform depth of 100 mm in thickness on areas specified in the Contract Drawings.
2. Grade and level the topsoil in preparation for hydroseeding and/or placement of Sod.

Measurement for payment of this item shall be based on the actual area of topsoil placement and a uniform depth of 100 mm as measured by the Contractor and approved by the Engineer. Measurement shall be in cubic meters. Payment at the contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any adjustment to the quantity will not result in a change in the Contract Unit Price.

5.20 Hydroseed

This Item shall include all labour, equipment and material required to place topsoil in accordance with OPSS 802 and 803, amended as follows.

The Contractor shall:

1. Hydroseed all areas as indicated in the Contract Drawings
2. The seed mix shall contain species local to the region, and the proposed seed mix shall be provided at least one (1) week in advance of placement.
3. Care shall be taken such that hydroseeding materials do not fall into adjacent water bodies; the Contractor shall take appropriate measures to ensure this does not happen.

Measurement for payment of this item shall be based on the actual area of hydraulic seeding as measured by the Contractor and approved by the Engineer. The unit of measurement shall be metres squared. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment to the quantity will not results in a change to the Contract Unit Price.

5.21 Sod (For Drainage Swale)

This Item shall include all labour, equipment and material required to place Sod as shown on the Contract Drawing in accordance with OPSS 803

The Contractor shall

1. Install grass sod as indicated in the Contract drawings in the drainage swale area in accordance with OPSS 803.
2. Where required, apply appropriate aftercare to ensure stabilization of the grass sod, such as watering.

Measurement for payment of this Item shall be based on the actual area of sod placed as measured by the Contractor and approved by the Engineer. The unit of measurement shall be metres squared. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment to the quantity will not result in a change to the Contract Unit Price.

5.22 Remove Exist Storm Sewer

This Item is for the supply of all labour, equipment and materials required to remove the existing storm sewer under River Street as shown on the Contract Drawings.

The Contractor shall remove and dispose of the existing storm sewer components in accordance with OPSS 510 as part of the Contract price.

The Contractor shall ensure temporary measures for storm runoff during removal are enacted prior to removal as per the Environmental controls and requirements as outlined in this Tender and shown on the Contract Drawings.

Measurement for payment of this Item shall be per linear meter of storm sewer removed. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment to the quantity will not results in a change to the Contract Unit Price.

5.23 Remove Exist. Catch Basin

This Item is for the supply of all labour, equipment and materials required to remove the existing storm sewer catch basins as shown on the Contract Drawings.

The Contractor shall remove and dispose of the existing catch basins in accordance with OPSS 510 as part of the Contract price.

Measurement for payment of this Item shall be per catch basin removed. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment to the quantity will not results in a change to the Contract Unit Price.

5.24 Storm Sewer (300mm Dia.)

This Item is for supply of all labour, equipment and materials required to supply and install 300 mm diameter Storm Sewer as shown on the Contract Drawings.

The Contractor shall perform the work in this item be in accordance with OPSS 410, 491 and 517 and includes the following:

1. All dewatering to maintain a dry and stable trench to allow construction of all underground works.
2. Excavation to the proposed grades, including any temporary support systems, to safely perform the work.
3. Temporary support, protection, relocation, or providing assistance to the utility companies during construction for all above and below ground utilities and infrastructure that interfere with construction shall be provided by the Contractor at no additional cost to the item.
4. Supply and place trench bedding, which shall be Granular 'A' compacted to minimum 98% of the material SPMDD.
5. Trench backfill, where not affected by road base, shall be granular 'A' compacted to minimum 98% of the material SPMDD.
6. The storm sewer shall be installed through the north embankment wall as shown on the Contract Drawings and daylight into the upstream reach of the River.
7. No additional payment will be made for sewer couplers and connection to existing maintenance holes or catch basins.

Support of existing utilities shall be the responsibility of the Contractor to identify and support them per applicable guidelines and utility owner standards. Storm sewer pipe installation within a trench box shall be at the Contractor's discretion and may influence the requirements for support of utilities.

Measurement for payment of the above tender item shall be by linear meters based on the Contract Drawings. Payment at the contract price for the above tender items shall be full compensation for all labour, equipment, and material to do the work including utility support and installation within a trench box as required and water for dust suppression. Any adjustment to the quantity will not results in a change to the Contract Unit Price.

5.25 Storm Catch Basin (600mm x 600mm)

This Item is for the supply of all labour, equipment and materials required to supply and install storm catch basins as outlined in the Contract Drawings.

The Contractor shall perform the following:

1. Install all catch basins in accordance with OPSS 407.
2. All catch basins shall have a minimum 600 mm deep sump. All structures shall be founded on a minimum of 300 mm depth of granular 'A' compacted to a minimum of 98% of the material's SPMDD. At the approval of the Contract Administrator, foundation material may be substituted with 600 mm of 19 mm clear stone completely wrapped in non-woven R270 geotextile.
3. Locate and support all existing underground utilities as required by the Contractor's means and methods.
4. Utilities shall be supported in accordance with the specifications and requirements of the Utility Owners.
5. Storm sewer pipe and catch basin installation within a trench box shall be at the Contractor's discretion and may influence the requirements for support of utilities.

Measurement for payment for this item shall be per new catch basin. Payment at the Contract Price shall be compensation in full to completely supply and install the structure, including utility support and excavation and backfill, as well as water for dust suppression.

5.26 Rip-Rap for Swale Complete With Non-woven Geotextile

This Item shall include all labour, equipment and material required to supply and install a non-woven geotextile and R-10 rip rap scour protection for the drainage swale located downstream of the dam as shown on the Contract Drawings.

The Contractor shall:

1. Submit the proposed geotextile product specifications at least one (1) week prior to placement for review and acceptance by the Engineer. The Geotextile shall conform the specifications as outlined in the Contract Drawings or as approved by the Engineer.
2. Submit/supply material quality testing results and quality control documents for the geotextile to the Engineer.
3. Grade the swale as indicated in the contract documents, create a level and well-graded surface for placement of non-woven geotextile.
4. Place non-woven geotextile as specified on the Contract Drawings per OPSS 1860.
5. Supply and place R-10 rip rap per OPSS 1004 as outlined in the Contract Drawings
6. The Contractor shall inform the Engineer of the source and proposed material at least two (2) weeks prior to placement for review and inspection of the proposed spillway rip rap.
7. The Contractor shall provide gradation verification for the proposed rip rap via WipFrag for conformance to OPSS 1004 analysis to be reviewed and approved by the Engineer.
8. Rip Rap material shall be placed in an orderly, controlled and stable manner via excavator placement with care as to not damage the downstream retaining wall. The rip rap shall extend to the elevations and be placed as indicated in the Contract Drawings.
9. End dumping placement and segregation of rip rap shall not be permitted.

Measurement for payment will be based on the actual area of rip rap and geotextile placement as one combined item, and the unit of measurement is in square metres. Payment at the contract price for the

above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

5.27 Dust Suppression

This Item shall include all labour, equipment and materials to provide dust suppression for all site activities associated with the raising of River Street as shown in the Contract Drawings to the satisfaction of the Engineer for the duration of the project.

The means for dust suppression shall include, but not be limited to, water, calcium chloride and other means and methods authorized by the Engineer to reduce and control dust caused by the Work.

The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on each Payment Certificate based on the value of the Work completed to date as a percentage of the total Contract amount.

Part 6.0 Downstream Retaining Walls

The following Tender Items are associated with construction of the downstream tailrace retaining walls for the project.

6.1 Earth Excavation

This Item is for the supply of all labour, equipment and materials required for earth excavation, removal and disposal of soil down to the competent bedrock surface to facilitate the installation of the proposed retaining walls as shown on the Contract Drawings.

The contractor shall complete all work in accordance with OPSS 206, 180 and 510. Material shall be excavated to the lines and levels required to construct the retaining wall and create stable temporary excavations. All environmental protection measures shall be in place before any excavation or removal work is performed.

Prior to installation of the Retaining walls, the slope walls shall be inspected by the Engineer.

Removal of excess soils shall be disposed of in accordance with OPSS 510.MUNI and OPSS 180.MUNI

Payment shall be in cubic meters, based on the design lines, and grades as shown on the Contract Drawings. If additional excavation is required to reach the bedrock surface, the additional quantity shall be provided by the Contractor, approved by the Engineer and added to the theoretical quantities; if less, the reduction shall be subtracted from theoretical quantities a similar fashion accordingly.

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Changes to the earth excavation quantities shall not warrant adjustment of the Contract rate.

6.2 Supply and Place Granular 'A' For Retaining Walls

This item shall include all labour, equipment and materials for the placement of Granular A for backfill behind the downstream retaining walls in successive compacted lifts as shown in the Contract Drawings.

This Item includes any grading of the sub-grade prior to placing the Granular road sub-base or other work as necessary to further construction. The bedrock shall be suitably cleaned, inspected and approved by the Engineer prior to backfilling. Backfilling into the existing excavation shall be completed by Benching per OPSD 208.010 or as approved by the Engineer.

The unit price under this item shall include the provision of water for compaction purposes if required.

Compaction shall be to 100% of the material's Standard Proctor Maximum Dry Density.

The material shall be placed to the grades as shown in the Contract Drawings.

Measurement for payment for the above tender items shall be the tonne based on approved weigh scale tickets. Weighing of material will conform to OPSS 102.

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. In the event of additional backfill requirements, the Contractor shall measure the additional amount which will be added to the theoretical quantities. Alternatively, if less material is required, it shall be measured and subtracted from the theoretical quantities. Any adjustment in quantity will not result in a change in the Contract unit price.

6.3 Site Restoration

This item shall include all labour, equipment and materials required to restore the upstream areas and slopes after construction of the downstream retaining walls per the Contract Drawings.

The Contractor shall perform this work in accordance with OPSS 201 and 206, including restoration of grades and property as indicated on the Contract Drawings.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this item shall be made upon inspection and acceptance of the restored site condition from the Owner or their Representative.

6.4 Supply and Place Reinforced Concrete – Footings

6.5 Supply and Place Reinforced Concrete – Wall

Items 6.4 and 6.5 shall include all labour, equipment and material required to supply and install reinforced concrete for construction of the downstream retaining wall footings and wall on either side of tailrace as shown in the Contract Drawings.

Concrete and reinforcing shall be as specified on the Contract Drawings.

Concrete shall conform to OPSS 904 and conform to the requirements identified on the Contract Drawings.

Reinforcing steel shall conform to the requirements identified on the Contract Drawings.

For the concrete footings, costing shall include appropriate cleaning of the bedrock surface, including installation of rock dowelling as shown on the Contract Drawings.

The work area shall be maintained in the dry and necessary coffer damming and de-watering will be included (as required).

All environmental protection measures as specified in this tender document and the Contract Drawings shall be in place prior to start of work.

As part of the Work, the Contractor shall:

1. submit a mix design to the Engineer in accordance with OPSS 904 at least one (1) week prior to the placement of concrete; provide, at no additional cost to the Owner, a Field Testing Technician to perform quality performance testing per CSA-A23.1 and as specified in the Contract Drawings; testing results and associated documentation shall be provided to the Engineer;
2. provide at no additional cost to the owner, test cylinders and testing in accordance with OPSS 904 and CSA-A23.1; and,
3. provide a copy of all test cylinder compressive strength results to the Engineer.
4. All mill test reports and material certification tickets for the reinforcing bar shall be provided to the Engineer at least one (1) week in advance of placement.

Quality Assurance testing will be completed at the discretion of the Engineer. The Owner shall be responsible for the cost of QA testing as required.

Measurement for payment will be quantity and dimensions of placed concrete, and the unit of measurement is in cubic metres. The payment method will be determined by the volume of concrete placed by the Contractor and approved by the Engineer. Any adjustment in quantity will not result in a change in the Contract unit price. There will be no claim for extra or delay by the Contractor for changes in rock profiles.

6.6 100 mm Pipe Subdrain

This Item shall include all labour, equipment and material required to perform the installation of 100 mm subdrains for drainage behind the downstream retaining wall as shown on the Contract Drawings.

The subdrain shall be installed per OPSS 405, the Sub-drain pipe shall be supplied to OPSS 1840. Geotextile sock shall meet the requirements of OPSS 1860. Pipe shall be 150 mm diameter corrugated

and perforated polyethylene pipe with filter sock, complete with fittings as required. Filter sock shall be applied over all fittings to provide a continuous wrap.

The subdrain shall be installed at the location and dimensions behind the wall as outlined in the Contract Documents.

Payment for this item shall be per linear meter of subdrain as measured by the Contractor and approved by the Engineer. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

6.7 Scour Protection (Rip Rap)

This Item shall include all labour, equipment and material required to supply and scour protection (rip rap) along the river channel adjacent to the downstream face of the Downstream retaining walls as shown on the Contract Drawings.

The Contractor shall:

1. Procure appropriate scour protection material, which shall consist of a 300 mm diameter Riverstone or an approved equivalent.
2. The Contractor shall inform the engineer of the source and proposed material at least two (2) weeks prior to placement for review and inspection of the proposed spillway rip rap.
3. The Scour Protection shall be placed in an orderly, controlled and stable manner via excavator placement with care as to not damage the retaining wall concrete. The rip rap shall extend to the elevations and be placed as indicated in the Contract Drawings.
4. End dumping placement and segregation of rip rap shall not be permitted.

Measurement for payment will be based on the actual area of scour protection placed, and the unit of measurement is in square metres. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

6.8 Topsoil (100mm)

This Item shall include all labour, equipment and material required to place topsoil in accordance with OPSS 802, amended as follows.

The Contractor shall

1. Place topsoil to a uniform depth of 100 mm in thickness on areas specified in the Contract Drawings.
2. Grade and level the topsoil in preparation for hydroseeding and/or placement of Sod.

Measurement for payment of this item shall be based on the actual area of topsoil placement and a depth of 100 mm as measured by the Contractor and approved by the Engineer. Measurement shall be in cubic meters. Payment at the contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work. Any adjustment to the quantity will not result in a change in the Contract Unit Price.

6.9 Hydroseed

This Item shall include all labour, equipment and material required to hydroseed the area outlined in the Contract Drawings in accordance with OPSS 802 and 803, amended as follows.

The Contractor shall

1. Hydroseed all areas as indicated in the Contract Drawings
2. The seed mix shall contain species local to the region, and the proposed seed mix shall be provided at least one (1) week in advance of placement.
3. Care shall be taken such that hydroseeding materials do not fall into adjacent water bodies; the Contractor shall take appropriate measures to ensure this does not happen.

Measurement for payment of this item shall be based on the actual area of hydraulic seeding as measured by the Contractor and approved by the Engineer. The unit of measurement shall be metres squared. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment to the quantity will not results in a change to the Contract Unit Price.

6.10 Dust Suppression

This Item shall include all labour, equipment and materials to provide dust suppression for all site activities associated with the construction of the downstream retaining walls including but not limited to concrete and bedrock preparation, open excavation behind the wall per the Contract Drawings to the satisfaction of the Engineer for the duration of the project.

The means for dust suppression shall include, but not be limited to, water, calcium chloride and other means and methods authorized by the Engineer to reduce and control dust caused by the Work.

The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment will be made on each Payment Certificate based on the value of the Work completed to date as a percentage of the total Contract amount.

Part 7.0 Powerhouse – Removals

7.1 Removals

This Item is for the supply of all labour, equipment and materials required for the removal of the powerhouse structural elements, including but not limited to the existing framed roof structure, the

existing timber center beam, the existing timber columns, and the steel columns along the north wall, as shown on the Contract Drawings.

The Contractor shall remove and dispose of the existing powerhouse structural elements in accordance with OPSS 510.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this item shall be made upon inspection and acceptance of the Powerhouse removals from Owner or their Representative.

7.2 Existing Equipment Storage

This Item is for the supply of all labour, equipment, and materials required for the safe removal, handling, and storage of the existing equipment within the powerhouse building, as shown on the Contract Drawings or as directed by the Owner or their Representative.

The Contractor shall carefully dismantle, transport, and store the designated equipment in a secure and protected manner to prevent damage, deterioration, or loss.

The Contractor shall provide suitable facilities on-site or at an approved off-site location. Stored equipment shall be organized, clearly identified, and remain accessible for future inspection or reinstallation. The Contractor shall be responsible for maintaining equipment in good condition for the duration of the storage period.

There will be no measurement for payment under this Item. The Lump Sum Price Tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this Item shall be made upon inspection and acceptance of the storage and protection of equipment by the Owner or their Representatives after the equipment has been reinstated or deemed unable to be reinstated.

Part 8.0 Powerhouse – Roof Replacement

8.1 Roof Framing

This Item is for the Supply of all labour, equipment, and materials required for the installation of the new timber roof framing for the powerhouse building, as shown in the Contract Drawings.

The Contractor shall construct the roof framing using Spruce-Pine-Fir (SPF) lumber, Grade No.1/No.2, in accordance with the requirements of OPSS.MUNI 907 – Structural Wood Systems and as detailed in the Contract Drawings.

All framing members shall be cut, fit, and fastened in a manner acceptable to industry standards. The Contractor shall ensure that all materials are stored and handled in a manner that prevents warping, damage, or deterioration prior to installation. Connections shall be made using hardware and fasteners approved by the Owner or their representative and installed in accordance with the manufacturer's recommendations and the Contract Drawings.

There will be no measurement for payment under this Item. The Lump Sum Price Tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this Item shall be made upon inspection and acceptance of the roof framing by the Owner or their Representative.

8.2 Supply and Install Steel Framing

This Item is for the supply of all labour, equipment, and materials required for the fabrication and erection of the structural steel elements of the powerhouse building roof replacement, as shown in the Contract Drawings.

All structural steel shall conform to the requirements of CAN/CSA-S19 and shall be new CSA G40.21 350W material, unless noted otherwise on the Contract Drawings.

Welding shall conform to the requirements of CSA W59 – Welded Steel Construction, latest edition. All fabrication shops shall be certified to CSA W47.1, Division 1 or Division 2, latest edition. All field welded connections shall be inspected by a fabrication contractor.

Bolted connection shall be bearing type, and bolts shall be tightened to a snug-tight condition as defined by CAN/CSA-S16.1. Unless noted otherwise, anchor bolts shall conform to ASTM A307.

No drilling, cutting, or alterations to fabricated structural steel members shall be permitted without prior approval from the Engineer.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this Item shall be made upon inspection and acceptance of the structural steel by the Owner or their Representative.

8.3 Supply and Install Roof Assembly

This Item is for the supply of all labour, equipment, and materials required for the installation of the roof assembly for the powerhouse building, as shown on the Contract Drawings.

The Contractor shall construct the roof assembly in accordance with the requirements of OPSS 907 – Structural Wood Systems.

The roof assembly shall consist of the following:

- ¾ inch Canadian softwood plywood roof sheathing, conforming to CSA 0151 – Canadian Softwood Plywood.
- Roof underlayment consisting of a waterproof membrane, with the selected product subject to the approval of the Owner or their Representative and installed in accordance with the manufacturer's recommendations and the Contract Drawings.

- Asphalt shingles installed complete with starter strips and accessories, in accordance with the manufacturer's recommendations and the Contract Drawings.

The roof assembly shall be completed in a manner acceptable to industry standards, ensuring a uniform, durable, and watertight system. The Contractor shall ensure that all roof materials are stored and handled to prevent damage, moisture infiltration, or deterioration prior to installation.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this Item shall be made upon inspection and acceptance of the roof assembly by the Owner or their Representative.

Part 9.0 Powerhouse – Structural Upgrades

9.1 Supply and Install Steel Framing

This Item is for the supply of all labour, equipment, and materials required for the fabrication and erection of the structural steel elements of the powerhouse building structural upgrades, as shown in the Contract Drawings.

All structural steel shall conform to the requirements of CAN/CSA-S19 and shall be new CSA G40.21 350W material, unless noted otherwise on the Contract Drawings.

Welding shall conform to the requirements of CSA W59 – Welded Steel Construction, latest edition. All fabrication shops shall be certified to CSA W47.1, Division 1 or Division 2, latest edition. All field welded connections shall be inspected by a fabrication contractor.

Bolted connection shall be bearing type, and bolts shall be tightened to a snug-tight condition as defined by CAN/CSA-S16.1. Unless noted otherwise, anchor bolts shall conform to ASTM A307.

No drilling, cutting, or alterations to fabricated structural steel members shall be permitted without prior approval from the Engineer.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this Item shall be made upon inspection and acceptance of the structural steel by the Owner or their Representative.

9.2 Supply and Place Reinforced Concrete - Strip Footing

This Item is for the supply of all labour, equipment, and materials required for the construction of the reinforced concrete strip footing for the powerhouse building, as shown on the Contract Drawings.

Concrete and reinforcing shall be as specified on the Contract Drawings.

Concrete shall conform to OPSS 904 – Concrete Structures, CSA A23.1 - Concrete Materials and Methods of Concrete Construction, and to the requirements identified on the Contract Drawings.

Reinforcing steel shall conform to the requirements identified on the Contract Drawings.

Concrete shall not be poured until the reinforcing steel has been inspected and approved by the Engineer.

As part of the Work, the Contractor shall:

- Submit a mix design to the Engineer in accordance with OPSS 904 at least two (2) week prior to the placement of concrete; provide at no additional cost to the Owner, a Field Testing Technician to perform quality performance testing (air, slump, temperature) per CSA A23.1 and as specified in the Contract Drawings, testing results and associated documentation shall be provided to the Engineer;
- Provide at no additional cost to the Owner, test cylinders and compressive testing in accordance with OPSS 904 and CSA A23.1; and provide a copy of all test cylinder compressive strength results to the Engineer.
- All mill test reports and material certification tickets for the reinforcing bar shall be provided to the Engineer at least one (1) week in advance of placement.

Quality Assurance testing will be completed at the discretion of the Engineer. The Owner shall be responsible for the cost of QA testing as required.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this Item shall be made upon inspection and acceptance of the reinforced concrete strip footing by the Owner or their Representative.

9.3 Grout of Power House Bays and Cracks

This Item is for the supply of all labour, equipment, and materials required for the installation of injected grout and placement of non-shrink grout for undermining and horizontal crack within the bays of the powerhouse as shown on the Contract Drawings.

The powerhouse shall be de-watered and non-shrink grout shall be poured into undermined cavitations along the base of the powerhouse bay where it is encountered to the satisfaction of the engineer.

A large horizontal crack is present along the bay walls of the powerhouse as shown on the attached Dam Safety Report in Appendix F of this Tender document.

The non-shrink grout for cavitations shall be a cementitious grout such as SikaGrout 212 or an approved equivalent. Cavitations shall be filled back to the existing underside of footing and create a smooth and level area.

Crack preparation for grouting shall be per OPSS 932 and to the approval of the Engineer.

Injected grout shall be installed via injection ports at intervals such that the entire crack is filled and sealed with grout. The final surface shall match into the existing powerhouse bay surface. The grout shall be installed per the manufacturer's instructions and to the Contract Drawings.

The Contractor shall submit their proposed grout product and applicable proposed mix design seven (7) days prior to installation for approval from the Engineer.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this Item shall be made upon inspection and acceptance by the Owner or their Representative

9.4 Supply and Install Galvanized Rock Dowel

This Item is for the supply of all labour, equipment, and materials required for the installation of galvanized rock dowels, as shown on the Contract Drawings.

All dowels shall conform to CSA G30.18-M92, $F_y = 400$ MPa (Grade 400) and shall be hot-dip galvanized. Drilled holes for rock dowels shall be 25 mm greater than the dowel diameter.

Rock dowels shall be installed as specified on the Contract Drawings. Spacing and minimum embedment depths into the underlying bedrock shall be constructed in accordance with the Contract Drawings.

Cementitious grout for rock dowels shall be Sika Grout 212 and shall be placed in accordance with the manufacturer's instructions and to the Contract Drawings.

Measurement for payment for galvanized rock dowels will be per rock dowel installed. Payment at the Contract Price for the above tender Item shall be full compensation for all labour, equipment, and materials required to complete the work. Any adjustment in quantity will not result in a change to the Contract Unit Price.

9.5 Painting of Building

This Item is for the supply of all labour, equipment, and materials required for the preparation and painting of the Powerhouse building, as shown on the Contract Drawings or as directed by the Owner or their Representative.

The paint utilized shall be acrylic latex paint, applied in accordance with the manufacturer's recommendations. The paint colour shall be selected by the Owner.

All surfaces to be painted shall be properly prepared to ensure adequate adhesion, including cleaning, repairing cracking, and priming where required. Application of paint shall be done in good weather, ensuring temperatures are within the manufacturer's recommended range and the surface is fully dry.

The Contractor shall protect all adjacent surfaces, fixtures, and equipment during painting. Any drips or paint spillage shall be cleaned to the satisfaction of the Owner or their Representative.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item. Payment for this Item shall be made upon inspection and acceptance by the Owner or their Representative.

Part 10.0 Provisional Items

10.1 Support Existing Sanitary Sewer

This Item is for the supply of all labour equipment and materials required for support of the existing Sanitary Sewer, should it be encountered during River Street reconstruction or construction of the Downstream retaining walls as shown on the Contract Drawings.

The Contractor shall be responsible for supporting the existing Sanitary Sewer per District of Muskoka's standards, including notification and per OPSS 491. At this time, the exact depth and size of the existing sanitary sewer is not known, but has been assumed to be 200 mm in diameter as shown in the Contract Drawings.

Payment for this item shall be per linear meter of existing sanitary sewer requiring support to be measured by the Contractor and approved by the Engineer. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

This provisional item requires written approval by the Owner prior to commencement of work.

10.2 Support Existing Watermain

This Item is for the supply of all labour equipment and materials required for support of the existing Watermain should it be encountered during River Street reconstruction or construction of the Downstream retaining walls, as shown on the Contract Drawings.

The Contractor shall be responsible for supporting the existing Sanitary Sewer per District of Muskoka's standards, including notification and per OPSS 491. At this time, the exact depth and size of the existing watermain is not known, but has been assumed to be 150 mm in diameter as shown in the Contract Drawings.

Payment for this item shall be per linear meter of existing watermain requiring support to be measured by the Contractor and approved by the Engineer. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

This provisional item requires written approval by the Owner prior to commencement of work.

10.3 Replace damaged existing Sanitary Sewer

This Item is for the supply of all labour, equipment, and materials required for replacement of damaged existing Sanitary Sewer in the event that a damaged line is encountered, or the line is found to be in state requiring repair as determined by the Owner or Engineer.

Replacement of the Sanitary Sewer shall be in a like for like fashion to the acceptable standards of the District of Muskoka and per OPSS 410.

The damaged sanitary Sewer shall be removed and disposed of in accordance with OPSS 510 and per the District of Muskoka's standards.

Any damaged Sanitary line or otherwise caused by Contractor's excavation efforts shall not be considered reimbursable under this provisional Item.

Payment for this item shall be per linear meter of sanitary sewer requiring replacement to be measured by the Contractor and approved by the Engineer. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

This provisional item requires written approval by the Owner prior to commencement of work.

10.4 Rock Excavation for Storm Sewer Installation

This Item is for the supply of all labour, equipment, and materials required for rock excavation for installation of the proposed storm sewer under River Street as indicated on the Contract Drawings.

In the event of the bedrock surface conflicting with installation grades for the proposed storm sewer, the Contractor shall remove the rock by hydraulic means per OPSS 202 and 403. Rock removal via blasting shall not be permitted due to the proximity of the dam and surrounding infrastructure.

Payment for this item shall be based on the actual volume of rock removal. Payment for this item shall be measured in cubic meters. Quantities shall be surveyed/measured by the contractor and approved by the Engineer. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work .Any adjustment in quantity will not result in a change in the Contract unit price

This provisional item requires written approval by the Owner prior to commencement of work.

10.5 Rigid Insulation

This Item is for the supply of all labour, equipment and material to install rigid insulation for the proposed sewer installation should the frost depth cover not be achieved.

Installation of the rigid foam insulation shall be per OPSS 1605 and OPSD 1109.030. The proposed insulation material and specifications shall be shared with the Engineer for approval one (1) week prior to installation, should it be required.

Payment for this item shall be based on the actual area of insulation placed. Payment for this item shall be measured in square meters. Quantities shall be surveyed/measured by the Contractor and approved by the Engineer. Payment at the contract price for the above tender item shall be full compensation for all labour equipment and material required to do the work. Any adjustment in quantity will not result in a change in the Contract unit price.

This provisional item requires written approval by the Owner prior to commencement of work.

10.6 Painted Stop Block

This item is for the supply of all labour, equipment and material to replace the painted stop block located at the eastern edge of River Street at the intersection with Muskoka Road 169.

The Stop Block shall be installed and painted per OPSS 710.

Measurement for payment of this Item shall be for each painted stop block. Payment at the contract price shall be compensation in full to completely supply and install adjustment units to obtain design grades. Any adjustment in quantity will not result in a change in the Contract unit price.

This provisional item requires written approval by the Owner prior to commencement of work.

10.7 Excess Soils Management Plan

This item is for the Contractor to retain and hire a Qualified Person (QP) as defined under O.Reg 406/19 to perform review, soil sampling and management activities for the purpose of fulfilling the requirements under the Regulation for applicable soil disposal.

Excess materials shall be managed in accordance with On-Site and Excess Soil Management, O.Reg. 406/19 and OPSS 180.MUNI, it is the Contractor's sole responsibility to ensure compliance with the above standard and laws as applicable.

The Excess Soils Management Plan shall encompass all areas of the work for the project as shown in the Contract Drawings where material disposal will be required and material is deemed unsuitable for re-use on site by the Engineer or Owner.

The Contractor shall identify a Qualified Person (QP) who will administer the sampling and management plan, the QP credentials will be submitted at least two (2) weeks prior to commencement of this portion of the scope

Reports and submittals shall include all necessary documentation as deemed necessary by the Contractor's QP may include, but not be limited to

- Assessment of Past Uses as applicable for the site
- Sampling and Analysis Plan
- Soil Characterization Report
- Proposed soil destination sites, documentation/methodology for tracking/ticketing loads and ticketing information as part of a tracking system including haul routes and sign off of material acceptance at the disposal site.
- Excess Soil Destination Assessment Report (if applicable)
- Assist the Engineer or Owner in preparation and delivery of the required documents and forms to be filed and submitted with the Excess Soil Registry as defined in OPSS 180.MUNI.
- Completed OPSF 180-1 to -6 forms as applicable

All relevant reports shall be submitted to the Owner at least two (2) weeks prior to disposal of material for review by the Engineer and continue to update and populate the required information of the Excess Soil Management Plan throughout the duration of construction.

Upon completion of the work the Contractor shall submit a final Excess Soil Management Plan including all completed forms, disposal volumes, locations and tracking of loads to the Owner. The Contractor shall provide a formal written notice of project end as part of the final submittal. This report will be signed by the QP.

The Contractor shall be solely responsible for all requirements to ensure acceptance of material by the receiving property.

The Contractor and their designated QP shall be solely responsible to ensure compliance with OPSS 180.MUNI and O.Reg 406/19 for the project.

There will be no measurement for payment under this Item. The Lump Sum Price tendered for this Item shall be compensation in full for all work associated with this Item, payment for this item will be completed on a percentage basis as the work is completed.

Cost and payment for disposal of soils is covered in items 10.8 and 10.9 and shall not be included in this Item.

This provisional item requires written approval by the Owner prior to commencement of work.

10.8 Extra/Over for Disposal of Material unsuitable for disposal at a Table 1.2/2.1 RPI site but Suitable for Disposal at a Table 2.1 ICC or Table 3.1 ICC RPI Site

This item is for supply of all labour, equipment and material for the removal of excess soils deemed unsuitable for re-use on site by the Engineer, as well as unsuitable for disposal at a Table 1.2/2.1 RPI site but suitable for Disposal at a Table 2.1 ICC or Table 3.1 ICC RPI site.

Based on the results of the Sample Characterization Report, the Contractor and their designated Qualified Person will identify the quantity of material for disposal per the requirements in Item 10.8.

The designated receiving property shall be identified at least 2 (2) weeks prior to removing any material from the site or interim storage area.

Documentation of suitability for the receiving site from the Contractor's QP shall be provided , and all documentation associated with material transport, temporary storage and disposal shall be tracked as part of the Soil Management Plan outlined in Item 10.7.

If required material may be stored at the Township Pit located at 4167 Southwood Road, Torrance, Ontario, P0C 1M0 until testing and acceptable disposal sites can be confirmed.

Measurement for payment for the above tender items shall be by the tonne based on approved weigh scale tickets. Weighing of material will conform to OPSS 102.

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to load, transfer and dispose of excess materials inclusive of any site disposal fees and other miscellaneous related costs necessary to perform the work specified herein. Any adjustment in quantity will not result in a change in the Contract unit price.

This provisional item requires written approval by the Owner prior to commencement of work.

10.9 Extra/Over for Disposal of Material unsuitable for disposal at a Table 2.1 ICC, 3.1 RPI or 3.1 ICC Site Disposal

This item is for removal of excess soils deemed unsuitable for re-use on site by the Engineer, as well as unsuitable for disposal at a Table 2.1 ICC, 3.1 RPI or 3.1 ICC site.

Based on the results of the Sample Characterization Report, the Contractor and their designated Qualified Person will identify the quantity of material for disposal per the requirements in Item 10.8.

The designated receiving property shall be identified at least 2 (2) weeks prior to removing any material from the site or interim storage area. Documentation of suitability for the receiving site from the Contractor's QP shall be provided , and all documentation associated with material transport, temporary storage and disposal shall be tracked as part of the Soil Management Plan outlined in Item 10.7.

If required material may be stored on site at the Township Pit located at 4167 Southwood Road,

Torrance, Ontario, P0C 1M0 until testing and acceptable disposal sites can be confirmed.

Measurement for payment for the above tender items shall be by the tonne based on approved weigh scale tickets. Weighing of material will conform to OPSS 102.

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and material required to load, transfer and dispose of excess materials inclusive of any site disposal fees and other miscellaneous related costs necessary to perform the work specified herein. Any adjustment in quantity will not result in a change in the Contract unit price.

This provisional item requires written approval by the Owner prior to commencement of work.