



**Request for Tender
RFT-SM-010-2024
Glencoe Wastewater System Upgrades – New
Forcemain**

Tender submissions must be received by the Manager of Public Works in a sealed envelope or package clearly marked with the Name and Address of the Proponent, Title of File and File Number. Submissions should be received not later than:

2:00:00 p.m. LOCAL TIME, Wednesday, December 18, 2024

Submissions received after the closing time will not be accepted. Proponents are solely responsible for ensuring Tender submissions are received prior to the closing date and time in the proper location. Complete submissions of Tenders, Quotations and Proposals are to be dropped off at:

**MUNICIPALITY OF SOUTHWEST MIDDLESEX
153 McKELLAR STREET
GLENCOE, ONTARIO, CANADA, N0L 1M0**

Tenders will be publicly opened in the Municipality of Southwest Middlesex, following tender close on the day of closing.

Lowest or Any Tender Not Necessarily Accepted.

Optional pre-tender site visit will be held on Monday, December 9, 2024 at 10:00am at the Victoria Sewage Pump Station at 153 Victoria Street.

**Tenders, Quotations and Proposals can now be viewed and/or downloaded from:
<http://www.biddingo.com>**

Tender Checklist

Make sure your tender submission is complete. The Tender Submission Package must be legible, neat and filled out in ink. Your bid is to include the following where applicable, but not limited to:

Items that must be submitted on Tender Closing	Completed
Form of Tender and Privilege Clause with Summary Sheet(s)	
List of References and List of Subcontractors	
Statement A – Experience	
Statement B – Supervisory Personnel	
Preliminary Construction Schedule	
Agreement to Bond	
Signed Addendum/Addenda	
Bid Bond (10%)	

This Tender Checklist is provided for the convenience of Bidders.
Bidders are advised to read and understand the entire tender document package.

RETURN LABEL

Please firmly affix this address label to the envelope or package containing your submission.

Cut Here

Firm Name: _____

Address: _____

RFT-SM-101-2024: Glencoe Wastewater System Upgrades – New Forcemain
Closing Date and Time: Wednesday, December 18, 2024 at 2:00:00 p.m., LOCAL TIME

**Manager of Public Works
Municipality of Southwest Middlesex
153 McKellar Street
Glencoe, Ontario, N0L 1M0
Canada**



**Request for Tender
RFT-SM-010-2024
Glencoe Wastewater System Upgrades – New Forcemain**

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SECTION A – INFORMATION TO BIDDERS

1. Definitions

Throughout this Request for Tender, unless inconsistent with the subject matter or context, the following definitions shall apply:

- a. **"Addenda"** or **"Addendum"** - means a document containing additional information or changes to the Request for Tender issued by the Municipality prior to the closing date;
- b. **"Bid"** or **"Tender"** means an offer submitted by a Bidder or Tenderer in response to a Request for Tender, which includes all the documentation necessary to satisfy the submission requirements of the Request for Tender and "Bids" shall have a corresponding meaning;
- c. **"Bidder"** or **"tenderer"** means a legal entity, being a person, partnership or firm that submits a Bid in response to a formal Request for Tender and "Bidders" or "Tenderers" shall have a corresponding meaning;
- d. **"Closing date"** means the specified deadline for Bids to be submitted to the Municipality as indicated on the Request for Tender cover page and any subsequent addenda;
- e. **"Contract"** - means the agreement covering the performance of the work, including the supply of any and all work, labour, implements, and materials that could reasonably be required properly and satisfactorily to complete the work to be performed and includes the plans, specifications, contract bond and any written supplementary agreements that may be made in order to ensure the completion and maintenance of the work in an acceptable manner;
- f. **"Contract Administrator"** means the main contact person for all matters relating to the project. The reference to "Project manager" means the same;
- g. **"Contractor"** - means the person, partnership or corporation undertaking the execution of the work under the terms of the Contract;
- h. **"Council"** means the Municipality of Southwest Middlesex Council;
- i. **"Owner"** or "Corporation" - means the Municipality of Southwest Middlesex entering into the Contract with the Contractor;
- j. **"Inspector"** - means any person, partnership or corporation that the Municipality or Engineer/Consultant may appoint for the purpose of assisting in the supervision and inspection of the work and the materials to be used in the work;
- k. **"Municipality"** - means the Municipality of Southwest Middlesex;
- l. **"Plans"** - means any drawing or reproduction of drawing pertaining to the work;
- m. **"Request for Tender"** means this Request for Tender package in its entirety, inclusive of all appendices and Addenda/Addendum that maybe issue by the Municipality;
- n. **"Specification"** - means all written descriptions or instructions pertaining to the method and manner of performing the work, or to the quantities and qualities of the materials to be furnished under the Contract, and includes the Tender, General Conditions, Standard Specifications, Supplemental Specifications and Special

Provisions, together with all written agreements, made or to be made pertaining to the method or manner of performing the work, or to the quantities or qualities of materials to be furnished under the Contract;

- o. **"Standard Specifications"** - means the requirements and stipulations of standard practice by the Municipality for the control of work;
- p. **"Supplemental Specifications"** - means the specifications, supplemental to the standard specifications and containing requirements peculiar to the work;
- q. **"Special Provisions"** - means special directions containing requirements peculiar to the work not adequately provided for by the standard or supplemental specifications;
- r. **"Sub-Contractor"** - means a person, partnership or corporation undertaking the execution of a part of the work by virtue of an agreement between himself and the Contractor, and who has independent control over the work to be done under such agreement;
- s. **"Work" or "Works"** (unless the context requires a different meaning) - means the whole of the works, materials, matters and things required to be done or supplied, mentioned or referred to in the tender, specifications, plans, profiles, and drawings including all extra or additional work or materials, matters or things which may be ordered by the Engineer/Consultant; and
- t. The words **"Approval"**, **"Directed"**, **"Required"**, **"Considered Necessary"**, **"Authorized"**, **"Acceptable"**, **"Satisfactory"**, **"Provide"**, or words of like import, shall mean approval of, directed, required, considered necessary or authorized by and acceptable or satisfactory to the Contract Administrator.

2. Job Description

The general objective of the project is to construct a new sanitary sewer forcemain from the existing Victoria Street Sewage Pump Station (SPS) to the incoming flow chamber at the Glencoe WWTP located prior to discharge to the lagoon cells. This project includes, but is not limited to the following:

- New 350mm diameter sanitary forcemain;
- New 200mm diameter sanitary forcemain stub, valve, and cap for future connection to Industrial Road SPS;
- Capping of new forcemain at the Victoria SPS to allow for future connection;
- All required appurtenances, site grading, restoration and all other features as noted in the specifications and drawings.
- Connection to existing 200mm diameter forcemain upstream of the flow chamber including additional isolation valving and wye connection as detailed;
- All required yard piping, maintenance chambers, site grading and all other features.

3. Delivery of Tenders

Completed tender form packages shall be submitted in sealed envelope/package marked:

“Tender RFT-SM-101-2024: Glencoe Wastewater System Upgrades – New Forcemain”

Tenders will be received until 2:00 p.m., local time, on **Wednesday, December 18, 2024**, at:

153 McKellar Street, Glencoe, ON, Canada, N0L 1M0

The lowest or any bid may not necessarily be accepted.

4. Disqualification of Tenders

Tenders that are not received prior to the advertised closing time, or are conditional in any part, will be deemed incomplete. The bidding system will not allow incomplete tenders to be submitted.

5. Omissions, Discrepancies, Questions and Conflicts of Interest

Should a bidder find discrepancies in, or omissions from, the drawings or contract documents or should he be in doubt as to their meaning, they should notify the Manager of Public Works of the Municipality. All questions concerning this Request for Tender should be directed in writing to the Manager of Public Works.

No other Municipality representative, whether an official, agent or employee, is authorized to speak for the Municipality with respect to this Request for Tender, and any bidder who uses any information, clarification or interpretation from any other representative does so entirely at the Bidder's own risk.

Not only shall the Municipality not be bound by any representation made by an unauthorized person, but any attempt by a Bidder to bypass the Request for Tender Process may be grounds for rejection of its Bid.

In the event of any discrepancies whatever or ambiguity of any symbol, note, abbreviation, etc. used in the Specifications or on the Contract Drawings, the Contractor shall obtain clarification from the Manager of Public Works prior to submitting his tender.

Written requests will be considered, following which, the Manager of Public Works or Contract Administrator may issue an addendum. All questions must be received by the Municipality by Wednesday, December 11, 2024 no later than 2:00 pm.

6. Withdrawal or Qualifying of Tenders

A tenderer, who has already submitted a tender, may submit a further tender at any time up to the closing time. The last tender received shall supersede and invalidate all tenders previously submitted by that bidder for this contract.

A tenderer may withdraw or qualify his tender at any time up to the closing time by submitting a letter bearing their signature and seal showing his name and the project and contract numbers on the envelope containing such letter. No other forms of communication will be considered.

7. Method of Measurement and Payment

The quantities shown for the items in the itemized statement of prices and quantities are estimated only and are for the sole purpose of indicating to bidders, the general magnitude of the work. For 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 quoted.

Measurement of finished work and method of payment shall be as outlined in the Form of Tender and in the Specifications.

8. Harmonized Sales Tax (HST)

The contractor will indicate the Harmonized Sales Tax (HST) as are applicable.

Any change in the tax structure that exists at the time of signing will be paid or deducted, as the changes become law.

The contractor must provide the H.S.T. registration number.

9. Informal or Unbalanced Tenders, Informalities

Informalities or irregularities noted during the tender opening, or during the review of tenders, will be forwarded to the Municipality of Southwest Middlesex Manager of Public Works, or designate for a ruling on whether the informality compromises the tendering process. This ruling will not necessarily happen at the tender opening. The Manager of Public Works will decide whether to accept or reject any tender for such informalities after completion of the tender openings. **See Item 10 below for cases where tenders will be automatically rejected during the tender opening.**

Tenders that contain prices which appear to be so unbalanced as likely to adversely affect the interests of the owner may be rejected.

If a tenderer has omitted to enter a price for an item of work set out in the Form of Tender, they shall be deemed to have allowed elsewhere in the tender for the cost of carrying out the said item of work.

10. Acceptance of Tenders

The tender for this project will be submitted to the Municipality of Southwest Middlesex.

The Municipality reserves the right to reject any or all tenders or to accept any tender should it be deemed in the interest of the Municipality to do so.

The following will be cause for the rejection of tenders:

1. Invalid / No agreement to bond documentation.
2. Invalid / No tender deposit attached or enclosed.
3. Invalid/ No supporting information (supervisory personnel, experience, proposed suppliers, construction plant) included.
4. Signed Addenda not attached to Form of Tender
5. The privilege clause not signed.
6. Form of Tender not signed and sealed.

If any of the above are noted to be missing or incorrect, the tender price will not be unsealed.

The deposit of the bidder whose tender is accepted will be forfeited by him to the Owners as liquidated damages should the tenderer fail to execute a contract within 14 days after being notified in writing by the Contract Administrator of the acceptance of his tender, or to supply a satisfactory bond as stipulated in the General Conditions.

The deposits of the unsuccessful tenderers, except for the two (2) low bids, will be returned without interest within three (3) working days after tender opening.

All deposits will be returned without interest upon execution of a contract with the successful tenderer or should a contract not be executed within sixty (60) days of the date of closing of this tender.

11. Document Required Before Tender Closing

Tenderers must submit the following information before tender closing:

- i) The bidder must fill in and submit the unbound section of the Form of Tender. This includes Contractor's experience and supervisory personnel, subcontractor's experience and supervisory personnel (if applicable), a listing of all proposed suppliers and a listing of all construction equipment to be used.
- ii) **Tender Deposit:** The Tender shall be accompanied by a Bid Deposit by way of a bid bond, certified cheque, bank draft, irrevocable letter of credit or money order,

in its original form, in the amount of 10% of the total bid price including all taxes, made payable to the Municipality of Southwest Middlesex.

- iii) Proposed schedule of construction showing completion of the work in accordance with the working days specified.
- iv) Acknowledgement of Addendum/Addenda

12. Documents Required at Contract Signing

Prior to signing of the Contract, the Municipality shall require submission by the contractor of the following documents:

- a) Executed Contract
- b) Compliance with Section 7 and 80.49 of Ontario Regulation 191/11 [Accessibility for Ontarians with Disabilities Act (AODA)]
- c) Insurance documents in compliance with the Bid Request
 - i. Commercial General Liability \$5,000,000;
 - ii. Automobile \$2,000,000;
 - iii. Environmental Liability/Contractor's Pollution Liability \$5,000,000
- d) Workplace Safety and Insurance Board (WSIB) Certificate
- e) Executed Bonds
 - i. 100% Performance Bond
 - ii. 50% Labour and Materials Payment Bond
- f) A copy of the Successful Bidder's Health and Safety Policy
- g) Copy of Notification of Contract as transmitted to Ministry of Labour
- h) Construction Schedule
- i) Confined Space Entry Policies and Procedures
- j) Hot Work Policies and Procedures
- k) Contractor Health and Safety Policy

13. Standard Specifications and Drawings

The purpose of this Request for Tender ("RFT") is to obtain bid submissions ("Bids") for the forcemain upgrades to the Glencoe Wastewater System for The Municipality of Southwest Middlesex ("the Municipality") in accordance with OPSD, OPSS, Municipal Design Standards, Special Provisions, and Specifications provided as part of this tender package. Other standard specifications and drawings may also be referenced in this contract.

14. Addendum and Addenda

Proponents shall acknowledge receipt of any addenda when submitting their Proposal.

Addendum/Addenda will be issued through the Bidding System, up to three (3) days prior to Closing Time and Date. However, the municipality may still issue an addendum for

administrative corrections or clarifications within three (3) business days prior to closing date.

In the event an addendum is issued within three (3) days prior to Closing Time and Date, it may include an extension of the Closing Time and Date. It is the responsibility of the Proponent to have received all Addendum/Addenda that have been issued.

The municipality encourages Proponents **not** to submit their Bid prior to three (3) days before the Proposal closing time and date, in the event that an addendum is issued. If a Proponent submits their bid prior to this or at any time prior to the bid closing and an addendum/addenda is issued, the municipality may, at its sole discretion, disqualify the bid based on incomplete submission. The Proponent is solely responsible to:

- i) make any required adjustments to their Bid; and
- ii) acknowledge the addendum/addenda; and
- iii) Ensure the re-submitted Bid is received by the municipality no later than 2:00:00pm (local time), on the Bid Closing Date.

15. Provision for Traffic

Traffic control plans must be submitted to the Contract Administrator for approval prior to construction and any subsequent changes must be approved in writing.

Signage and traffic control to be in accordance with the Ontario Traffic Manual – Book 7.

16. Pre-tender Site Visits

An optional pre-tender site visit will be held on Monday, December 9, 2024 at 10:00 am at the Victoria SPS located at 153 Victoria Street in Glencoe, ON.

17. Environmental Protection

All environmental protection measures will be governed by the requirements of the Ontario Ministry of the Environment, Conservation and Parks (MECP) and the local Conservation Authority.

18. Geotechnical Investigation

For soils information, bidders are to refer to the Geotechnical Report included in this tender package.

SECTION B – SUPPLEMENTARY CONDITIONS

The latest version of the Ontario Provincial General Conditions (GC) shall form part of this contract. Amendments to the GC are noted herein.

1. Testing of Material

Section GC5.02 of the General Conditions of Contract is hereby amended and/or extended.

The Contract Administrator may require documentary evidence to the effect that materials supplied by the Contractor comply with the specifications, in the form of a certified copy of a laboratory report from a testing company acceptable to the Contract Administrator. No costs in connection with these tests shall be borne by Municipality of Southwest Middlesex.

2. Insurance

Section GC6.03 of the General Conditions is hereby amended/extended.

The face value of the general liability insurance shall be five million dollars (\$5,000,000).

The insurance shall be maintained continuously from the commencement of the work until twelve months following the date of final acceptance.

The Contractor shall submit to the owner, proof of insurance for the guarantee period. This proof shall be submitted prior to the release of final holdback.

The following shall be named as Additional Insured:

- Municipality of Southwest Middlesex
- Adjacent Greenhouse development and farmland owner

The adjacent landowners have been added to the insurance requirements as work by the Contractor will be within the easement limits but proximate to these lands.

3. Definition of a Working Day

Notwithstanding section GC1.04 of the General Conditions (GC) of the contract, a working day is any weekday from 7:00 a.m. to 7:00 p.m. All work must be completed within this timeframe.

4. Progress of the Work and Time for Completion

Section GC7.01 of the General Conditions is hereby amended/extended.

The work under the contract must commence on the date stated in the Schedule of Construction, and must be diligently prosecuted in general accordance therewith, so that the work is completed within the specified times.

The Contractor will work additional and/or augmented daylight shifts as may be required to ensure that the work will be completed within the time limit specified, and no additional compensation will be allowed therefor.

5. Liquidated Damages

In the event that this contract is not completed within the time as set forth in the Special Provisions, or as extended in accordance with the General Conditions, the Contractor will pay Municipality of Southwest Middlesex Centre the sum of **\$1,500.00 as liquidated damages** for each and every calendar day's delay in finishing the work in excess of the time prescribed.

6. Progress Payments and Holdbacks

Section GC8.02 of the General Conditions (GC) is amended by the following:

- i) All payments, holdbacks and releases of holdbacks shall be subject to the Construction Act and the conditions set out in Section 8 of the general conditions and the additional conditions listed below.
- ii) The Municipality will issue one copy of a progress payment certificate, which the Contractor has, signified approval, for payment every month. These progress payment certificates will be subject to a Lien holdback in the amount of 10% of the total estimated value of work completed to date and 2.5% Maintenance Holdback.
- iii) Forty-five (45) calendar days after publication of the Substantial Performance Certificate, provided that no claims have been filed in accordance with the Construction Act and a copy of the Certificate of Publication of the Substantial Performance Certificate is submitted to the Municipality, the Municipality will issue an up-to-date payment certificate and release the 10% Lien holdback but 2.5% Maintenance Holdback of the total estimated value of the work will be retained for the duration of the maintenance period.
- iv) A second substantial performance certificate will be issued for publication if the amount of work completed at that time was revised to issue the first substantial performance certificate. Except for the 2.5% maintenance holdback and provided no lien has been filed, the balance of the lien amount will be release after an additional 45 calendar days after publication of the Second Substantial Performance Certificate.
- v) Final payment, including release of all holdback, will be made by the Municipality to the Contractor within thirty days after the Contractor has submitted the following documents:

- i) one copy of the final payment certificate on which the Contractor has signified approval of the quantities and values contained therein.
- ii) the Contractor's statutory declaration that all sub-Contractors and suppliers have been paid.
- iii) signed releases from owners of all private property used by the Contractor during construction of the work.
- iv) a Workplace Safety and Insurance Board Certificate.
- v) a Standby Irrevocable Letter of Credit (LC), in favour of the Municipality for 2.5% of the contract amount, from a Canadian Chartered Bank, in lieu of the 2.5% Maintenance holdback.
- vi) proof of Insurance for the term of the maintenance period.

7. Guarantee Maintenance

The guarantee maintenance period for the contract shall commence on the date of acceptance of the completed work and shall continue for a period as follows:

- Twelve (12) month for the entire project, with an extended twelve (12) months for a total of twenty-four (24) months for Mr. Reycrafts lands (field west of Parkhouse Drive).

The Municipality will conduct an inspection with the Contractor before the expiry of the twelve (12) month and twenty-four (24) month maintenance warranty period. Any deficiencies found during this inspection, or at any time during the warranty period, shall be corrected by the Contractor at his/her expense within thirty (30) days after being notified by the Municipality.

Should the Contractor fail to repair any deficiency within the prescribed time, or should the Municipality deem a deficiency to need emergency repair during the warranty period, the Municipality will pay for the repair by drawing from the Letter of Credit or from the maintenance holdback, after giving the Contractor 24 hours notice.

8. Specifications and Drawings

Ontario Provincial Standard Specifications and Ontario Provincial Standard Drawings are to be read with and form part of this contract. Other specifications and drawings are also referenced to in this contract.

9. Disposal of Materials

All unsuitable materials or excess materials to the contract shall be disposed of by the Contractor at his/her risk and expense. The Contractor shall submit copies of the signed releases from Owners of all disposal sites.

10. Contractor's Meetings

The Contractor will attend and cause his sub-contractors, if any, to attend any meetings called by the Contract Administrator or the Municipality to discuss the progress of the work under this contract at no extra cost to the Municipality.

11. Utilities

Section GC 2.01 of the General Conditions of the contract is hereby amended:

The location of the utilities shown on the plans is approximate only. The Contractor will obtain the necessary locates prior to proceeding with the work.

12. Subcontractors

Section GC3.09 of the General Conditions of the contract is hereby extended:

The Contractor may not subcontract more than 50% of the dollar value of the contract.

13. Order of Precedence

Section GC2.02 of the General Conditions is hereby extended and/or amended.

- a) Agreement
- b) Addenda
- c) Supplementary specifications
- d) Special provisions
- e) Contract drawings
- f) Standard specifications
- g) Tender
- h) Supplemental general conditions
- i) General conditions

14. Variations in Tender Quantities

Section GC8.01.02 of the General Conditions is hereby deleted.

No Unit Price adjustments will be made for any quantities differing from those shown in the itemized statement of quantities and prices.

15. Construction Document Sets (Specifications and Drawings)

The Municipality will only issue digital drawings of Construction Drawings and Specifications to the successful Contractor(s). Contractors shall make additional copies of the Construction Drawings and Tender Specifications.

Refer to Division 13 for a suggested construction staging plan that may be followed to ensure the functionality of the facility is not impeded during construction. However, it is the Contractor's responsibility to develop the final construction staging plan meeting the required objective of uninterrupted and undisturbed operation. The Contractor must submit a copy of this plan to the Contract Administrator for review, a minimum of two (2) weeks prior to beginning construction.

SECTION C – FORM OF TENDER

Checklist of Items Required with Bid Submissions:

- Form of Tender – completed, signed and initialed where indicated
- Tender Document Privilege Clause
- List of references and list of subcontractors
- Statement A, relative to my/our experience
- Statement B, relative to supervisory personnel I/we propose to assign to the project, (including subcontractors).
- Proposed preliminary schedule of construction
- Agreement to Bond
- Bid Bond (10%)
- Addendum/Addenda

Checklist of Items Required Prior to Commencement of Work:

- Executed copies of the Agreement
- Insurance certificates in compliance with Tender documents
- Copy of notification of Contract as sent to Ministry of Labour
- Copy of Contractor's Health and Safety Policy
- All required bonding as listed in the Tender Documents



**Form of Tender
RFT-SM-010-2024
Glencoe Wastewater System Upgrades – New Forcemain**

From: _____
(Contractor)

To: Mayor and Members of the Council of the Municipality of Southwest Middlesex

I (We), the undersigned, have carefully examined the locality and site of the proposed construction described above, and all documents relating thereto including Addendum/Addenda, and I/we hereby, if successful, intend to enter into a contract with the Municipality of Southwest Middlesex to construct the said works, in strict accordance with the Contract Documents, for the estimated total contract price of:

_____ Canadian dollars (\$ _____)
inclusive of all taxes.

The aforesaid sum is made up as shown in the schedule of items and prices which has been completed and attached hereto, and which shall form the basis of payment for the contract.

***The Tenderer will insert here (* _____) the numbers of addenda received by him during the tender period and taken into account by him in preparing this tender.**

The tenderer agrees that the prices provided may be released to the public in accordance with the Municipal Freedom of Information and Protection of Privacy Act.

I/we hereby acknowledge my/our agreement to the terms and conditions contained in the Information to Bidders.

Dated this _____ day of _____, **2024.**

(Contractor)

(Signature)

(Name)

(I / We have the authority to bind the Corporation / Firm)

(Address)

(City and Province)

(Postal Code)

(HST Reg. #)

(Telephone)

(Fax)

List of References

Please provide the information requested below. Reference checks will be completed and the decision to award the tender will be based on the Municipality of Southwest Middlesex's assessment of overall qualified low bidder. Experience listed below must be relevant to the current project in scope and value. If there is additional information you wish to provide with regard to references, please do so on the reverse of this sheet.

Project Name	
Company for whom the work was complete:	
On the project did your firm act as	General Contractor <input type="checkbox"/> Subcontractor <input type="checkbox"/>
What was the value of the project or your portion of the project?	\$
Contact Name at the owner's facility	
Telephone Number with area code	
Date of Completion of this project	

Project Name	
Company for whom the work was complete:	
On the project did your firm act as	General Contractor <input type="checkbox"/> Subcontractor <input type="checkbox"/>
What was the value of the project or your portion of the project?	\$
Contact Name at the owner's facility	
Telephone Number with area code	
Date of Completion of this project	

Project Name	
Company for whom the work was complete:	
On the project did your firm act as	General Contractor <input type="checkbox"/> Subcontractor <input type="checkbox"/>
What was the value of the project or your portion of the project?	\$
Contact Name at the owner's facility	
Telephone Number with area code	
Date of Completion of this project	

General Contractor:

List of Subcontractors to be Employed

Bidders must provide a complete list of subcontractors who will be employed on the project.

Specify “**Own Forces**” if no Sub-Contractor(s) will be used.

Subcontractor	Trade

Subcontractor(s) are subject to the approval by Municipality of Southwest Middlesex, and once approved by Contract Award, may not be changed without the Municipality’s written consent.

The successful contractor shall submit release letter(s) from the listed/named subcontractor(s) advising of withdrawal from the project.

General Contractor:

Statement “A” – Contractor’s Experience

Year	Description of Contract	Owner	Value	Contact

Subcontractor’s Experience

Year	Description of Contract	Owner	Value	Contact

General Contractor:

Statement “B” – Supervisory Personnel to be Employed

Bidders must provide listing of key supervisory personnel who will be employed on the project. **(An attachment is acceptable)**

(a) Prime Contractor

Name	Position	Qualification and Experience

(b) Subcontractors – (An attachment is acceptable)

Name	Position	Qualification and Experience

This list is subject to the approval by Municipality of Southwest Middlesex, and once approved by Contract Award, may not be changed without the Municipality's written consent. The successful Contractor shall make the above request in writing to the Contract Administrator and the Municipality of Southwest Middlesex.

**Proposed Schedule of Construction
(An attachment is acceptable)**

The Contractor must submit a realistic schedule of construction prior to signing the contract documents.

The Contractor is requested to submit a tentative schedule with this Tender submission.

Note: Time restrictions as described in the Special Provisions.

Schedule of Items and Prices

The tendered prices shall allow for all work required by the Contract whether specifically covered or not by the items of this Schedule. **Both the Summary Form and Schedule of Items and Prices is to be completed and submitted at time of tender close.**

If, in the opinion of the Engineer, the breakdown contains prices, which are unbalanced, the tenderer will be required to submit data to substantiate his/her prices. In any event, the Engineer reserves the right to adjust the breakdown to correct any unbalanced prices. Prices include supply, installation, testing, commissioning, training, etc., to complete final products, as specified.

Item	Spec. No.	Description	Unit	Estimated Quantity	Unit Price	Total
PART 1 - SITE PREPARATION / EARTHWORKS						
1.01	SP100 201	Supply, place, and remove temporary 1.2m high tree protection / construction fence around tree drip line.	m	100		\$ -
1.02	SP102 805	Supply, install, maintain and remove silt sacs in existing CB's and CICB's	ea	2		\$ -
1.03	SP102 805	Supply, install and maintain 200mm silt soxx or approved equal	m	100		\$ -
1.04	SP102 805	Supply and install light duty silt fence	m	3400		\$ -
1.05	SP101 201	Clear and grub low lying vegetation in roadside ditches and dispose off site.	LS	1		\$ -
1.07	SP103	Supply, install, maintain and relocate mud mats.	LS	4		\$ -
1.08	510	Remove and dispose existing asphalt a) Roadway (variable depth up to 250mm) including full depth saw cutting	m ²	125		\$ -
1.09		Remove, salvage and reinstall chain link fence from PS compound	LS	1		\$ -
1.10	SP104 510	Strip and windrow topsoil for reuse.	m ²	26500		\$ -
1.11	SP104 510	Strip and windrow subsoil for reuse.	m ²	20000		\$ -
1.12	SP105 180 206	Earth Excavation	LS	1		\$ -
1.13	SP106 206	Subexcavate material native or otherwise from the design grade down as directed by the Geotechnical Engineer.	m ³	100		\$ -
1.14	SP107 206 501	Supply, place and compact Granular 'C' for road cut trench backfill including disposal of native material.	tn	500		\$ -
1.15	SP108 314 501	Granular 'B' Select	tn	100		\$ -
1.16	SP108 314 501	Granular 'A'	tn	800		\$ -
1.17		Supply and install 150mm Hickenbottom drain complete with riser pipe, clear stone, filter cloth, fittings and 150mm Big O connection to existing field tile.	ea	2		\$ -
1.18	SP	Repair field tile crossings including connections to existing, fittings, 150mm Big O, etc., complete.	each	20		\$ -
1.19	SP109 310	Supply and place asphalt on road patches. a) 50mm Base Course	tn	20		\$ -
1.20	SP109 310	Supply and place asphalt on road patches. b) 40mm Surface Course	tn	15		\$ -
1.21	310	Asphalt surface prep including power sweeping and tack coat.	m ²	125		\$ -
1.22	510	Remove asphalt by milling (500mm wide x 50mm depth).	m	80		\$ -
1.23	SP104 570	Spread / fine grade windrowed topsoil	m ²	26500		\$ -
1.24	SP104 570	Spread / windrowed subsoil	m ²	20000		\$ -
1.25	804	Supply and hydraulically apply Standard Roadside Mix OPSS 804 Table 1 complete with fall rye and winter nurse crop at blended with Flexterra HP-FGM or approved equal at a rate of 22kg/10,000m ²	m ²	15000		\$ -
1.26	532	Supply and place permanent pavement markings a) solid yellow 100mm	m	20		\$ -
						\$ -

Item	Spec. No.	Description	Unit	Estimated Quantity	Unit Price	Total
PART 2 - SANITARY FORCEMAINS AND APPURTENANCES						
2.01	SP200 412	Supply and install 350mm diameter forcemain and fittings including excavation, bedding, thrust restraint, corrosion protection, backfill, compaction, tracer wire, etc., complete.	m	1660		\$ -
2.02	SP200 412	Supply and install 200mm diameter forcemain and fittings including excavation, bedding, thrust restraint, corrosion protection, backfill, compaction, tracer wire, etc., complete.	m	35		\$ -
2.03	SP200 412	Supply and install 350mm gate valve including connection to pipes, mechanical restraints, valve box, tracer wire, valve rod, etc. complete.	ea	2		\$ -
2.04	SP200 412	Supply and install 200mm gate valve including connection to pipes, mechanical restraints, valve box, tracer wire, valve rod, etc. complete.	ea	2		\$ -
2.05		Supply and install tracer wire locate stations along forcemain. Copperhead Cobra T3-GRN01 or approved equal.	ea	3		\$ -
2.06	SP201	Supply and install direct bury air release valve including offset piping and manhole riser and frame and cover.	ea	2		\$ -
2.07	SP202 412 441 701	Flush and swab new forcemain.	LS	1		\$ -
2.08	SP202 412 441 701	Hydrostatic testing of new forcemain to 150 psi, complete.	LS	1		\$ -
2.09	SP200 412	Connection to existing 200 FM pipe at Chamber T-310 including excavation, bedding, wye, thrust restraint, corrosion protection, backfill, compaction, tracer wire, etc., complete.	LS	1		\$ -
2.10		Supply and install Hyload100 rigid insulation	m2	25		\$ -
						\$ -

Item	Spec. No.	Description	Unit	Estimated Quantity	Unit Price	Total
PART 3 - MISCELLANEOUS						
3.01	SP301 543	Mobilization and demobilization	LS	1		\$ -
3.02	SP302 543	Traffic Control	LS	1		\$ -
3.03	SP302	Premium to supply and place clear stone as bedding in lieu of Granular A bedding including filter cloth wrap.	m	450		\$ -
3.04	506	Calcium chloride flake (40 kg bag) for dust control.	ea	150		\$ -
3.05	SP304	Street sweeping / cleaning.	hours	20		\$ -
3.06	SP303	Daylight Utilities	hours	15		\$ -
3.07	SP306	Costs associated with O.Reg 406/19	LS	1		\$ -
3.08	SP305	Contract Administrator's field office.	LS	1		\$ -
3.09		50% Performance Bond.	LS	1		\$ -
3.10		50% Labour and Material Payment Bond.	LS	1		\$ -
3.11	SP307	Insurance	LS	1		\$ -
						\$ -

**Municipality of Southwest Middlesex
Glencoe Wastewater System Upgrades – New Forcemain**

RFT SM-010-2024

Summary Form

(To be submitted by all bidders at Tender Closing)

Sub-Total of Part 1 (Site Preparation/Earthworks)	\$
Sub-Total of Part 2 (Sanitary Forcemains & Appurtenances)	\$
Sub-Total of Part 3 (Miscellaneous)	\$
Contingency	\$150,000.00
Sub-Total Contract Price	\$
HST	\$
Total Contract Price*	
Canadian Funds (including all applicable taxes)	\$

*The Total Contract Price is to be entered on Page 2 of Form of Tender Section C.

TENDERER'S SIGNATURE: _____

SECTION D – FORM OF AGREEMENT

Agreement

This Agreement made in duplicate this _____ day of _____, 2024

Between:

hereinafter called the "Contractor"
Of the First Part

And

The Municipality of Southwest Middlesex

hereinafter called the "Municipality"
OF THE SECOND PART

WITNESSETH that the contractor hereby agrees to furnish all necessary machinery, tools, equipment, materials, supplies, labour and other means of construction, except as herein otherwise specified, to complete, in strict accordance with the plans and specifications, the work known as:

**Glencoe Wastewater System Upgrades – New Forcemain
SM-010-2024**

and as described in the Contract Documents.

In Consideration, the Municipality of Southwest Middlesex agrees to pay the contractor for all work done, in the manner provided by the specifications of this contract, the unit prices submitted by the contractor in the Form of Tender and accepted by the Municipality of Southwest Middlesex.

In Witness Whereof the Contractor and the Municipality of Southwest Middlesex have signed below.

Municipality of Southwest Middlesex

(I / We have the authority to bind the Corporation / Firm)

SECTION D – ACCESSIBILITY ACT

Accessibility for Ontarians With Disabilities Act (AODA)

In accordance with Ontario Regulation 191/11, Integrated Accessibility Standards Regulation, as amended, the Municipality is required to ensure all third parties or persons who provide goods, services or facilities on its behalf receive training. Contracted employees, third party employees, agents, and others who deal with members of the public on behalf of the Municipality must meet requirements of Ontario Regulation 191/11, as amended, with regard to training.

Prior to the commencement of any work under this contract the Contractor shall furnish evidence of compliance with the requirements of Section 6 of Ontario Regulation 429/07, Accessibility Standards for Customer Service, under the *Accessibility for Ontarians with Disabilities Act, 2005*.

SECTION E – SPECIAL PROVISIONS AND SPECIFICATIONS



Special Provisions



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GENERAL REQUIREMENTS (NON-TENDER ITEMS)

1 Scope of Work

The work of the contract generally involves the following:

- The supply and installation of new sanitary forcemain along a Municipal Easement northwest of Victoria Street in Glencoe from the existing sanitary pump station to the existing sanitary settling ponds located on Newbiggen Road.
- The associated swabbing and hydrostatic testing of the new forcemain and appurtenances.
- All associated restoration along the municipal easement, road right of ways, municipal drains and within the pumping station site.
- The protection of the natural environment throughout the Contract Limits.

The contractor shall be responsible for complete restoration of all areas disturbed during construction.

The contractor shall supply a one-year warranty for the entire project, with an extended 2-year warranty for Mr. Reycrafts lands (field west of Parkhouse Drive) beginning once substantial performance has been issued. Warranty items include but are not limited to pipe material, final grading including settlements, and field tile connections.

2 Intent of the Specifications and Contract Drawings

It is the intent of the Specification and the Contract Drawings to detail and provide for a completely functional and operating system. These specifications should be read in conjunction with the complete contract documents.

Any items required for operation or installation of any component, the cooperation of any multiple components, and the system as a whole, even if not explicitly detailed in the aforementioned documents, shall be considered to form part of the Work. The Contractor should account for any associated costs within the line items.

The Contractor shall be responsible for providing items detailed in the Non – Tendered Items Section at no additional cost to the Owner except as allowed at the sole discretion of the Contract Administrator.

Where a Contract Item, work task, material specification, etc. is described more than once, the most stringent of the individual requirements within all descriptions shall be the standard to which the Contractor must undertake work.

3 Construction Schedule and Project Completion

The Contractor shall submit two (2) copies of the proposed construction schedule and a digital copy for approval five (5) working days prior to the preconstruction meeting. The schedule shall be created in MS Project format, and show clearly, in weekly stages, the proposed progress of the project elements and outline the critical path activities. The **Contractor shall update the schedule for submission at each bi-weekly site meeting, and within 5 days as requested by the Contract Administrator.** The upkeep of the construction schedule is considered important to the success of this project. Failure to provide the updated schedule by the required date shall incur a penalty of **\$200.00 per calendar day** (or portion thereof) until such time as an updated schedule is provided. Any penalty incurred will be applied through a change order.

The provision of a construction schedule is to ensure that sufficient coordination of work is being undertaken by the Contractor to complete the work by the specified substantial completion deadline. Receipt of the schedule by the Owner and Contract Administration is for information purposes only and shall not be interpreted as acceptance of any efforts by the Contractor to complete the work prior to the **Substantial Performance date of August 29, 2025.** The Contractor shall tentatively **start the work on May 12, 2025,** and complete surface asphalt, successfully commission the new forcemain and complete all associated restoration works by **August 29, 2025.**

Should any delays occur outside of the control of the Owner that does not impact the Contractors ability to complete the work by the above dates of completion, no consideration will be given to delay or other related costs to the Contractor.

Unabsorbed overhead costs will not apply to additional work undertaken by the Contractor. The Contractor will be compensated for additional work using OPS rates or agreed lump sum costs.

The definition of Substantial Performance shall be in accordance with the Construction Lien Act.

4 Construction Phasing and Work Plan

Within one week following the pre-construction meeting, the Contractor will prepare and submit a Work Plan that describes the proposed methods or procedures for each construction operation. The Work Plan must be reviewed by the Contract Administrator prior to construction being undertaken. Formal notification of this review will be provided to the Contractor. Pre-consultation with the Contract Administrator is suggested prior to submitting the construction schedule.

The Work Plan to be provided by the Contractor shall include but is not limited to the following items:

- Construction staging to allow access for pedestrians, residents, farmers (full time at Victoria and Roe St), service and emergency vehicle access.
- Staging of the project is critical, to assist the Contractor with scheduling and preparing a work plan the following is provided as a guide:
 1. Install traffic control, tree fencing and sediment protection as required throughout the project limits.
 2. Supply and install new forcemain and appurtenances including hydrostatic testing.
 3. Restoration of fields, roads and ditches.
- Parkhouse Drive is to be detoured for one day during the crossing. Asphalt shall be reinstated immediately following the crossing.
- Crews and equipment.
- Traffic Control in accordance with Book 7 and all traffic speeds in place including pedestrian control.
- Site preparation and access/haul routes.
- Handling of excavated materials as per O.Reg 406/19.
- Pipe and material delivery and handling.
- Confined space entry.
- Pipe installation including backfilling, compaction and trench support systems.
- Control of drainage and sewage/storm-water flows.
- Maintenance of existing forcemain flows.
- Forcemain shutdown requirements, plans.

- Disposal of surplus excavated material.
- Preservation and protection of existing facilities and landscaping (trees, etc.).
- Requirements/requests for work afterhours or on weekends.
- Environmental controls including erosion and sediment control including submission of plans for review.
- Restoration.

Work plans shall include all text descriptions and drawings required to demonstrate the Contractor's proposed operation or as otherwise necessary for the proper execution of the work. Do not make any changes to Work Plans after final review without written permission from the Contract Administrator.

Review of Work Plans and Product Data shall not relieve the Contractor from responsibility for results arising from any error or omission. The Contractor should be prepared to change/modify work plans as required as conditions change in the field. These changes will be coordinated with the Contractor Administrator.

5 Owner as Constructor

Under this contract, the Contractor is to assume the role of the "Constructor" as it is defined under the Occupational Health and Safety Act.

The Contractor shall separate his work by time and space from other Contractor's, Utility's or Owner's maintenance, operations or construction activities at all times.

6 Approvals and Permits

GC 4.02 Approvals and Permits are to be amended to include the following:

The Works are subject to the following approvals and permits:

- MECP – Amended ECA

The Contractor will not be responsible to obtain the above noted Approvals and Permits but is responsible for all other permits required including written evidence of compliance with the Conservation Authorities Act respecting disposal of excess material.

7 Contract Documents

All work to be completed under this contract shall conform to the latest Ontario Provincial Standards for Roads and Municipal Services as listed in the Information for Tenderers except as amended herein.

Where the specifications refer to “Measurement for Payment” and “Basis of Payment” and no corresponding item is included in the Form of Tender, payment for that portion of the work shall be deemed to be included in the “Total Contract Price.”

8 Public Relations

The contractor shall appoint a competent representative to receive and deal with any complaints from the general public in regard to safety and nuisances directly related to the work. The contractor shall respond to and deal promptly with all complaints received and carry out remedial actions to prevent further complaints.

The contractor shall notify the Contract Administrator immediately of any complaints of damage to property or personal injury and action taken in respect to any complaints as well as the outcome of such actions. The contractor shall maintain complete records of contact with the general public.

The contractor shall give adequate notice of schedule, timing and location, movement of materials, construction activities, maintenance and repairs to affected landowners and occupants of properties; those who live within, and adjacent to the working area.

The Contractor shall comply with reasonable landowner requests regarding access to and from the property (in the opinion of the Contract Administrator), including but not limited to driveway grading, installation of temporary fencing, etc.

9 Temporary and Permanent Utility Support

The Contractor shall temporarily and/or permanently support utilities as required by the governing authorities. Where utilities cross or are adjacent to the excavation and at a size not covered by OPSD-1007.01, the Contractor shall submit shop drawings to the Contract Administrator and governing authority for review and approval 15 working days prior to crossing the utility.

Temporary and permanent utility support shall be included in the unit prices tendered for the installation of the trench excavation that the utility crosses or is adjacent to.

10 Trench Width and Trench Condition

Where required to accommodate the contractor's operations and staging, the Contractor shall include in his contract unit prices the provision of a trench liner of the appropriate dimensions and/or such other methods as might be necessary to comply with the requirements of the Occupational Health and Safety Act.

No additional easements will be obtained. The contractor shall keep his operation completely within the easement as indicated on the contract drawings

11 Maintenance of Flows

The Contractor shall maintain storm-water runoff, existing forcemain and sewer flows during construction at all times and prepare a flow control and maintenance plan as part of the construction work plan.

12 Environmental Protection

General

The Contractor shall conduct his operations so as to limit any detrimental effects upon the environment. The Contractor shall maintain control of the operations at all times in order to avoid the occurrence of machinery oil spills, excessive sediment-laden runoff from the work site or damage to any environmentally sensitive system.

Should the Contract Administrator determine that the Contractor is not maintaining appropriate control of his operations, and damage or detrimental effects are occurring or are imminent, the Contract Administrator has the authority to stop all work until such time as steps are taken to rectify the conditions.

Refueling Areas

- Review in detail the proposed route of construction to plan access route and fuelling areas.
- Do not fuel equipment within 30 metres of any watercourses unless non-spill facilities are used.

Spills

- Submit procedures for interception, rapid cleanup and disposal of spillages that may occur, for Contract Administrator’s review, prior to commencing work.
- Be prepared at all times to intercept, cleanup and dispose of any spillage that may occur whether on land or water. The contractor is required to have oil spill kit on-site as a mitigation measure for potential oil spill.
- Keep materials required for cleanup of spillages readily accessible.
- Report immediately any spill causing damage to the environment to the local MECP office and the Spills Action Centre.
- The Contractor shall provide training to all employees involved with the work regarding spill control and shall inform all employees of reporting requirements.

Use of Pesticides

- Coordinate the use of herbicides and pesticides with the regional Pesticides Control Officer of Ministry of Environmental.

Sensitive Areas

- Inform the Contract Administrator in writing of schedule for work in or near environmentally sensitive areas.
- Avoid encroachments into natural areas outside of the working area as shown on the Contract Drawings.
- Do not disturb wildlife habitats.
- Protect wetland sites used as feeding or breeding areas by migratory fowls or as habitats for other animals.
- Schedule construction in environmentally sensitive areas so that there will be minimal interference with water uses including fish migration or spawning, or incubation period of eggs.

- Removal of vegetation shall only occur within the working area shown on the Contract Drawings.
- Contain and deposit on land all aquatic plants uprooted or cut prior to or during construction.

Protection Against Migratory Birds

The Contractor is advised that the protection against migratory bird habitat is the complete and sole responsibility of the Contractor.

The Contractor shall take every and all efforts to keep excavation and stockpile side slopes in a non-vertical state to deter birds from creating habitat (tarping etc.). Close attention shall be paid in native sandy areas.

Any orders from MNRF or the owner's ecologist are to be adhered to by the Contractor at no additional cost to the Contract.

Delays and costs related to bird habitat will be the sole responsibility of the Contractor.

Disposal

- Do not empty fuel, lubricants or pesticides into sewers or watercourses.
- Dispose all construction debris in an approved location.
- Do not bury rubbish and waste materials on site.

Drainage and Water Control

- Provide temporary drainage and pumping as necessary to keep excavations and site free from water.
- Do not discharge flows into waterways, sewers, or drainage systems where there TSS (Total suspended solids), Turbidity, Q flow rate and other water quality parameters are exceeding the relevant governing regulations regarding discharge to existing systems.
- Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with governing authority requirements.

- Provide erosion and sediment control as shown on the Contract Drawings, where required or as directed by the Contract Administrator.
- Control flow rates to ensure minimum solids transportation.
- Provide straw bales, filter berms or sandbags as required to retard and filter run-off prior to discharge to storm sewers or watercourses.
- Do not direct any flow of water across or over pavements, except through approved pipes or properly constructed troughs.
- Dispose of water so as not to be injurious to public health or safety, property, or any part of work completed or under construction.

Site Clearing and Tree/Plant Protection

- Protect trees and plants on site and adjacent properties as shown on the Contract Drawings and as directed by the Contract Administrator.
- Undertake all site clearing and plant protection activities in accordance with the Contract Drawings and Specifications.
- Protect the roots of designated trees to the tree drip line during excavation and site grading to prevent disturbance or damage as directed by the Contract Administrator. Avoid all traffic, dumping, and storage of materials over root zones. Minimize stripping of topsoil and vegetation.
- Contact the Contract Administrator and governing authorities 24 hours in advance of tree removal for review and confirmation.
- Pruning of trees shall only be undertaken with the approval of the Contract Administrator and using proper pruning techniques.

Pollution Control

- Maintain all temporary erosion and sediment control devices installed for the duration of the Contract and until sufficient vegetative growth has occurred. Remove erosion and sediment control devices only with the approval of the Contract Administrator.

- Control emissions from vehicles and equipment to the requirements of local authorities.
- Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for haul roads as required.

Fires

- Fires and burning of rubbish on site are not permitted.
- Fire extinguishers should be present on site and in working condition to put out fires.

Noise Control

- Establish and maintain site procedures such that noise level from construction areas is minimized. Construction activities are permitted to take place between 7 am and 7 pm, Monday to Friday, on a regular basis. Work outside of these hours must first be approved by the Contract Administrator/Municipality a minimum of 48 hours in advance unless noted otherwise in the contract documents.
- Control noise level in accordance with local by-laws and comply with noise emissions standards for construction equipment as contained in the publications NPC-115 and NPC-118 of the MECP Model Municipal Noise Control By-Law Final Report, August 1978 or latest revision.
- Use vehicles/equipment equipped with efficient muffling devices. Provide and use devices to minimize noise level in construction area.
- Operation of equipment shall comply with The Municipal Noise by-laws.

Basis of Payment

Various specific items for environmental control are set out in the Form of Tender. Payment for general requirements including environmental protection not identified as

specific pay items shall be deemed to be included in the Contractor's unit prices for all works and shall include full compensation for all labor, equipment, and materials required to do the work for the above general requirements.

No additional payment will be made for the maintenance or replacement of sedimentation and erosion control works that might be required during the course of construction.

13 Release of Statutory Holdback

The Project Substantial Performance will be issued when forcemain commissioning is complete, along with all surface restorations. The warranty period will begin once Substantial Performance has been issued and the release of holdback will be released 60 days from advertisement in the Daily Commercial News.

14 Material Equivalents

With the exception of materials to be supplied by the Owner, where materials are referred to in these specifications or on the drawings, by a catalogue number and/or name of manufacturer, such reference is used to indicate the quality, design, type and functions of such materials to be used, although the materials first named in the specifications have been used in the design of the works.

Tenderers wishing to use named suppliers of materials other than that which is first named may do so provided all costs related to the use of such materials are included in the tender price and meets all clauses of the appropriate specifications.

Tenderers wishing to use alternate materials must submit details of the alternative with any price saving at the time of tendering. However, the total tender price shown in the tender must be based on the materials specified in these documents.

All alternatives for the use of materials not named in the specifications proposed by the Tenderer will be reviewed by the Contract Administrator and the Contract Administrators decision as to the acceptability of any item shall be final and binding.

Measurement and Payment

No separate measurement or payment will be made for the work under this subsection. The additional cost to the Contractor resulting from complying with the items

described above will be deemed to have been included in the Form of Tender under the Total Contract Price.

15 Coordinating with Utilities and Others

The Contractor shall coordinate his operations with the various utility companies and contractors who may be working in the area at the same time.

Infrastructure existing prior to the start of the Contract or which are placed during the Contract but prior to the Contractor passing under them with trenches, shall be supported and protected to the satisfaction of the utility companies involved. The span of the exposed pipe or duct bank should be kept to an absolute minimum. A trench liner, trench-less construction methods or other approved methods shall be used for sewer construction in these locations.

The Contractor shall be responsible should any settlement in the backfill of these utility trenches occur within the road allowances. Therefore, it is the Contractor's responsibility to ensure that the utility trenches have been properly backfilled and compacted before construction of sidewalks, curbs and gutters, roadways, etc. over them. It is required that the Contractor discuss this matter, prior to construction, with the involved utility companies in order to evolve the best procedure possible, to ensure satisfactory backfill and compaction.

Measurement and Payment

No separate measurement or payment will be made for the work under this subsection. Therefore, no separate measurement or payment will be made for the temporary and permanent support and/or reinstatement of any utilities such as gas and water services, hydro and telephone cables, catch basins and catch basin leads, all utilities intersecting catch basin lead or P.D.C. trenches, etc. The Contractor shall include all costs for this work under the applicable items, unless provided for elsewhere in the Special Provisions and/or the Schedule of Items and Prices. Any measures required to protect overhead utilities, such as Bell cables and power lines, and to comply with the Construction Safety Act, shall be arranged by the Contractor. Any resulting additional costs shall be borne by the Contractor.

16 Contractor's Survey Responsibilities

The Contractor shall furnish, at his own cost, all survey stakes, grade sheets, lines and levels on the Contract.

Marks and points of reference are shown on the drawings and are to be used by the Contractor in setting out the work. From the benchmarks and points of reference, the Contractor shall do his own layout.

The Contract Administrator may check the Contractor's surveys and the Contractor shall make all relevant data available and ensure that the Contract Administrator is provided convenient access to the locations where the work is to be carried out.

The Contractor shall supply and maintain station markers along both sides of the Easement at 50-meter intervals for the duration of the work. The use of GPS equipment does not negate this requirement.

When installing new sewers, the Contractor shall set the next upstream or downstream manhole on the proposed run for proper alignment of proposed stubs. If manhole locations are not given, a point 100 meters away (or as the site will allow) is to be set for use as line.

The Contractor shall 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. If at any time during the progress of the works any error shall appear or arise in the position, levels, dimensions or alignments of any part of the works, the Contractor shall, at his own expense, rectify such error to the satisfaction of the Contract Administrator, unless such error is based on incorrect data supplied in writing by the Contract Administrator.

All centerlines and grades shall be subject to checking by the Contract Administrator and the Contractor shall cooperate by making the workings available for such checking at suitable intervals as required by the Contract Administrator.

The checking of the layout of any lines or levels by the Contract Administrator shall not in any way release the Contractor of his responsibility for the correctness thereof, and the Contractor shall carefully protect and preserve all benchmarks, stakes and other items used in setting out the works.

The Contractor shall have a competent representative record lines and grades of new installations which shall be made available to the Contract Administrator as requested.

The Contractor shall give the Contract Administrator at least 24hour notice for checking of layout work.

The Contractor shall allow for supervised use of the handheld GPS equipment by the Contract Administrator.

17 Guidelines for Excavation Near Gas Lines

Please refer to the Technical Standards and Safety Authority Website, www.tssa.org for the manual “Guidelines for Excavations in the Vicinity of Gas Lines”. This manual is to be followed and included with the job site safety documentation and is to be discussed at the first weekly Contractor Health and Safety Meeting.

TENDER ITEMS

All work to be completed under this contract shall conform to the latest Ontario Provincial Standards for Roads and Municipal Services except as amended herein.

PART 1 – SITE PREPARATION / EARTHWORKS

100 Supply, Place and Remove Temporary 1.2m High Tree Protection Fence

Scope

The Contractor is responsible for the installation of all tree protection fencing as identified in the field and on the contract drawings prior to any equipment entering the site. All tree protection fencing must be maintained throughout the duration of the contract and removed as part of the site restoration.

Throughout the Contract, the Contract Administrator / Owner may request additional tree protection measures to be installed. Additional fencing will be paid at the tendered unit price.

Construction

Protective tree fencing will be a minimum of 1.2 m high snow fencing installed using T-Bar stakes every 2.4 meters, complete with three (3) wire ties for each post, in accordance with Municipal Specifications.

It should be noted that actual service locations may vary slightly from engineering drawings, and an assessment of unanticipated impacts on trees from revised construction operations should be completed in the field.

The TPZ (Tree Protection Zone) is the area around a retained tree that is to be protected. The TPZ is not to be used for any type of storage (e.g. storage of debris, construction material, surplus soils, and construction equipment). Construction equipment shall not be allowed to drive or idle on exhaust within the TPZ. Grading inside the TPZ or any other work will not be permitted within these areas unless otherwise noted on the contract drawings or approved by the project Arborist.

Trees shall not have any rigging cables or hardware of any sort attached or wrapped around them, nor shall any contaminants be dumped within the protective areas. Further, no contaminants shall be dumped or flushed where they may come into contact with the feeder roots of the trees.

When excavation within the TPZ is necessary, it must be approved by the Contract Administrator. Only hand-held tools or a displacement tool such as compressed air or hydro-vacuum systems are permitted.

When service connections must be made within the TPZ, trenchless methods should be utilized to minimize the impacts to the trees.

Tree protection fencing shall remain intact until construction is complete, soils are stabilized, and all equipment has been removed from the site: fencing to be inspected at regular intervals throughout construction by Contract Administrator. Fencing that is removed to allow for a specific operation shall be reinstated upon completion of that operation. The Contractor will not receive additional payment to temporarily remove and reinstate tree protection fencing. Such costs are to be included in the base bid.

Roots 25mm or larger that are exposed during construction should be covered with wet burlap or soil as soon as possible and watered regularly to prevent them from drying out. Watering is required until such time as topsoil and sod has been replaced satisfactorily or as otherwise directed by the Contract Administrator. Backfilling must be completed with uncontaminated topsoil.

Existing sidewalks to be replaced immediately adjacent to trees should remain in place during construction until such time as the new sidewalks are to be installed. This will provide protection to trees during construction.

Any amendments required by the Municipality to maintain the tree protection measures on site shall be implemented to the satisfaction of the Municipality.

Failure to maintain an approved Tree Protection Plan Zone will result in a warning by the Municipality with 1 day to comply and bring the tree protection measures in line the contract drawings. A second infraction may be dealt with by the issuance of a Stop Work order and possible fines.

Site Monitoring

Site monitoring will be the responsibility of the contractor. Random checks may be done by Municipal staff at any time and without notice.

If there are any proposed changes to the TPZ, the Owner will require notification immediately and no changes may be made without prior written approval from the Municipality.

Any damage to a tree during construction must be reported to the Municipality immediately and an ISA Certified Arborist shall make recommendations on how remediation will take place. Any remediation will take place as soon as possible to protect the health of the tree.

Post Construction

An ISA certified arborist shall inspect all retained trees and their rooting area to assess if any additional remediation work is required to ensure their future health and survival.

If the inspection indicates damage to retained trees, the ISA certified arborist shall prepare a post construction remediation plan for approval to the Municipality or delegate. The remediation plan may include but is not limited to: Pruning, deep root fertilization; irrigation; aeration; tree planting; either as a single activity or as a combination.

An ISA certified arborist shall inspect the project site and certify that any and all measures specified in the tree protection plan or post construction remediation plan have been completed as per the plan. This certification is required before final acceptance and approval of the work by the Municipality.

An assessment will be done by an ISA certified arborist to confirm that all protocols were met during construction or demolition.

Where the Contractor fails to complete the tree protection or causes unauthorized damage to trees, the contractor will be responsible for any and all costs associated with the remediation and repairs as per Municipality guidelines.

Measurement for Payment

Measurement for payment shall be by linear meter of fence installed as measured in the field.

Basis of Payment

Payment at the contract price for this item shall be full compensation for all labour, Equipment and Materials to do the work. Payment for the protective tree fencing will be 60% upon installation and 40% upon the removal of fencing and restoration of the area.

101 Vegetation Removal, including Stump Extraction

Scope

The work for the applicable items covers the supply of all labour and equipment necessary to perform the works as directed by the Contract Administrator. The contractor is to comply with the general requirements of OPSS 201, OPSS 801 and additional requirements as specified herein.

The contractor shall make every reasonable effort to ensure remaining trees are not impacted during the construction.

Construction

Stump Removal

Any tree stumps to be removed shall be removed in such a way so as not to cause damage to the root zones of trees to be retained. If the stumps are to be grubbed out

instead of ground, the roots shall be pruned to a minimum depth of 1m, as close to the stump as is reasonable, and always outside the drip line/tree protection zone of trees to be retained.

Areas of stump removal are to be backfilled with topsoil unless noted otherwise.

Tree Removal

Trees deemed to be necessary for removal shall be approved by the Municipality and marked by the Contract Administrator.

All removals must be felled using proper methods to limit damage to adjacent property: removals to be completed by ISA Certified Arborist.

The additional removals are to be completed outside of the bird nesting season from April 1st to August 31st unless the trees have been reviewed and cleared as nest free by a qualified bird specialist.

Remove and dispose of all felled trees; no lumber or brush from the clearing is to be stored on the site.

Grass and topsoil on the boulevard shall remain in place throughout the project unless its removal is required for infrastructure replacement. If the removal of soil / grass is required, consideration should be given to the hydro-vacuum excavation method and it should not be removed any sooner than required and replaced as soon as possible after the infrastructure has been replaced. Hydro-vacuum excavation should be used using low water pressure to minimize damage to the tree roots. Watering may be required between the time of removal and replacement with new sod to minimize drying of the roots.

Designated travel corridors of arboriculture equipment shall be established to the satisfaction of the Municipality in order to minimize soil compaction or damage to trees.

Basis of Payment

Payment at the contract price for this item shall be full compensation for all labour, Equipment and Materials necessary, including the removal and disposal off site of shrubs and hedges, and existing tree stumps as shown on the Contract Drawings and topsoil for backfilling excavations.

102 Sediment and Erosion Control

Scope

The work for this item includes all labour, equipment and material required to supply, install, maintain and remove the sediment and erosion control measures as indicated on the contract drawings or as directed.

Material

Light and Heavy Duty Fencing

The Contractor is to install and maintain light or heavy duty fencing in locations as detailed on the drawings and as directed in the field. Acceptable fencing material is as follows:

- Woven polypropylene geotextile fencing (light duty).
- Woven polypropylene geotextile reinforced with polypropylene mesh (heavy duty).
- Welded wire fence with geotextile (heavy duty).
- Wood stakes, wood posts or T-bar posts are all acceptable.

The geotextile is to be installed with rubber tracked or balloon-tired equipment complete with trenching attachments (plough or trencher) and a continuous feed roll device. Steel tracked excavators and or bulldozers will not be permitted.

Fencing is to be installed at the onset of construction prior to any construction activity or stripping taking place.

Fencing is to be keyed into the native soil and the backfill is to be compacted on the inside edge.

Filter Tube Check Dam

The Contractor is to install and maintain filter tube check dams in locations as detailed on the drawings and as directed in the field. Acceptable product is as follows:

- Filtrexx Silt Soxx 200 mm diameter or approved equal.

Check dam tubes are to be installed as per manufacturers recommendations.

Silt Sacks

The Contractor is to install silt sacks in existing road CBs and CICBs down stream of each work area. Acceptable product is as follows:

- Siltsack by Terrafix or approved equal.

Silt sacks are to be installed as per manufacturers recommendations and removed upon completion of restoration in the area.

Maintenance

Silt fencing / filter tubes shall be maintained in good repair and free of rips and tares. Fencing is to remain upright and shall be repaired with tee bar stakes if needed.

Sediment Removal

Sediment that is accumulated shall be removed in a manner that avoids escape to the downstream side, and that avoids damage to the installation.

Sediment removal shall be to the level of the grade existing at the time of the installation and shall be in compliance with the following:

- Accumulated sediment shall be removed once it reaches a depth that equals one-half the effective height of the flow check or begins to damage fencing.
- Accumulated sediment shall be removed as necessary for maintenance.
- Accumulated sediment shall be removed immediately prior to contract completion.

Removal

Installed sediment and erosion control material shall be removed when the control measure is no longer required because the proposed forcemain installation and testing is complete and the work area restored to preconstruction conditions.

Basis of Payment

Payment at the unit price bid for sediment and erosion control measures shall be full compensation for all labour, equipment and materials required to supply, install and maintain control measures including removal of sediment as instructed by the Contract Administrator.

Measurement for Payment

Measurement for payment shall be per the unit listed in the form of tender for the individual items. Payment for sediment fencing / filter tubes will be 60% upon installation and 40% upon removal and disposal off site.

103 Supply and Install Mud Mat

The Contractor is responsible to control tracking of earth/mud nuisance from the construction site at all times, as a result from their operations. Mud mats shall be used at all construction accesses and shall be maintained for the duration of the construction process. All mud mats and appurtenances are to be removed from the site upon completion of construction.

The mud mats shall cover an area of 20m long x 4.5m wide. Prefabricated mud mats as manufactured by Terrafix, FODS, cattle grates or an approved alternative are all acceptable.

Mud Mats are to be maintained, cleaned and reinstalled on a regular basis as directed by the Consultants representative.

Contractor to determine on site the location and quantity of mud mats required to reflect site access locations and high-volume traffic areas.

Basis of Payment

Payment for this item will be made on the basis of the percentage of overall value of the works completed in accordance with the latest monthly progress certificate and shall include maintenance throughout and removal at Project completion. 60% upon install and the remaining balance as a percentage throughout the contract.

104 Easement Stripping / Restoration

Scope

The work for these items includes all labour, equipment and materials required to strip and windrow the topsoil and subsoil within the permanent and working easement as well as the replacement of the individual soils.

Construction

Upon completion of the installation of the erosion control fencing, the Contractor shall strip and windrow the surficial topsoil (0-0.2m depth) and strip and windrow the subsoil (0.2- 0.4m depth) in separate piles ensuring the two materials are not mixed.

Once the forcemain has been installed and successfully commissioned, the subsoil and topsoil are to be placed back in the easement to match the preconstruction depths and grades.

The Contractor shall take care not to compact the topsoil when placing and grading.

Grades shall match preconstruction grades in order to maintain the overland flow across the field. Finished grades shall match on each side of the sediment fencing upon completion.

Basis for Payment

The unit price bid for these items shall be considered full compensation for all works related to the stripping, stockpiling and replacement of the appropriate material including loading, hauling, pushing, grading, etc., complete.

Measurement for Payment

The measurement for payment for these items shall be by the square meter of material stripped within the working easement.

105 Earth Excavation

Scope

This specification covers all excavated material from within the horizontal and vertical limits of the easement and right of way. All excavated material shall be removed from the working area and properly transported for use on site or disposed offsite in accordance with all applicable legislation at the Contractors expense, including tipping fees.

Excavation material meeting approved specification to be reused on site shall include excavation, hauling and handling, placing, shaping, compacting of the reused material, and the disposal of surplus excavated material off site.

All excavations and subgrade are to be protected from freezing at all times.

It is anticipated that all insitu granular material will be reused on this project as backfill for the road cuts.

Basis of Payment

The unit price bid for this item is considered full compensation for all labour, equipment and material required to remove and dispose all excess soil from the site and reuse all approved native soil on site.

All requirements under O.Reg 406/19 are to be adhered to for this project. The cost for the related work to adhere to the regulation are to be included in a separate tender item.

106 Subexcavation

Scope

This item covers all excavated material from within the horizontal and vertical limits of the right of way, both native or imported after placement of the material, and any material generated for any of the following;

- Foremain trenches from underside of bedding
- Forcemain bedding
- Trench Backfill
- Road Subgrade from underside of Granular B
- Road Granulars (including curb and gutter)
- Driveway Subgrade and Granulars

Construction

Excavated material meeting approved specification to be reused on site shall include excavation, hauling and handling, placing, shaping, compacting of the reused material,

and the disposal of surplus excavated material off site. All costs associated with this work shall be included in this item.

Excavated material not approved for re-use shall be removed from the working area and properly disposed off-site in accordance with all applicable legislation as part of this item.

The Contract does not warrant that any or all the quantities of material exist for disposal offsite. Bidders are to prepare their tender with the aforementioned in mind.

Granular C shall be used to replace the sub-excavated materials at the direction of the Geotechnical Engineer and Contract Administrator.

Measurement for Payment

The excavated material shall be quantified on site by the cubic meter in a manor agreed to by the Contractor and Contract Administrator prior to completing the work.

Basis for Payment

The unit price for this item shall be for full compensation for all labour, equipment and material required to complete the work including loading, hauling, placing, compacting, tipping fees, etc.

The granular material used for replacement shall be included in the appropriate tender item.

107 Supply, Place and Compact Imported Granular “C” Fill

Scope

This item shall be used when native material is not suitable for trench backfill or road crossing fill as directed by the Contract Administrator/ Geotechnical Consultant and compacted to the required density as specified in the geotechnical report and relevant contract documents.

The native soils are not anticipated to be suitable for reuse as backfill for the road crossings and will need to be replaced with imported Granular C.

Construction

Imported Granular “C” fill may be used beneath asphalt and concrete surfaces, and in areas where the native material is not suitable for re-use.

Material shall be placed and compacted in loose lifts not exceeding 300 mm or as specified by the geotechnical consultant. Compaction requirements will be dictated based on the elevation of the material.

The excavation and disposal of native materials below subgrade is considered incidental to the installation and bedding of sewers, watermains, and appurtenances.

Frozen material shall not be placed.

Measurement for Payment

The measurement for payment for this item shall be by tonne placed and compacted, quantified by weigh computer printed weigh tickets.

Basis of Payment

Payment at the contract price for this item shall be full compensation for all labour, equipment and materials necessary, including the supply, placement, and compaction of imported Granular “C” up to the road subgrade, including loading, hauling and tipping for the disposal of the unacceptable material and all associated testing.

108 Supply and Place Granular A and Granular B

Scope

The work for this item shall include the supply, placement and compaction of imported Granular A and Granular B as per OPSS 1010. Imported materials are to be compacted to site specifications including water as required by the geotechnical engineer.

Construction

The contractor shall supply, place and compact the design thickness of the granular material as noted on the Contract drawings including fine grading of the subgrade, fine grading of the placed granular base and subbase, as well as keying in the newly placed material to the existing granular material. All granular material shall be compacted as specified to meet Municipal and OPSS requirements. Depth of granular material shall be as follows:

- Parkhouse Drive – Gran A 150 mm, Gran B 300 mm.
- Industrial Road – Gran A 150 mm, Gran B 300 mm.

This item shall also include material used to provide temporary ramps at driveway and sidewalk locations and match points on all streets to provide a smooth transition between the work area and the existing driveway, sidewalks and the roadway. The use of Recycled Asphalt Product (RAP) is acceptable for temporary restoration and is to be considered part of this item.

Frozen material shall not be placed.

Measurement for Payment

The costs associated with item shall be measured by computer printed weigh tickets for the imported material.

Basis of Payment

Payment at the contract price for this item shall be full compensation for all labour, equipment and materials necessary to do the work. The unit price shall include maintenance and removal of the temporary granular material as required.

109 Supply and Place Asphalt

Scope

The work for this item includes the supply, placement and compaction of asphalt as specified.

The provisions of OPSS 310 and OPSS 1350 for Marshall mixes shall apply except as extended or amended herein.

Winter heat charges are considered incidental to this item as the project completion date dictates the need for the heat additive.

Construction

The contractor shall place the asphalt in the required lifts to reach the compaction as specified in the contract documents. Areas at sidewalk crossings shall be ramped at the

curb. Existing manholes and valve boxes (gas & water) that are set to finished grade shall be ramped to match the lid/valve elevation.

The following mixes are deemed to be acceptable on this project:

Base course – HL8 – 60mm

Top course – HL3 – 40mm

No Recycled Asphalt Shingles shall be used as an additive in any Hot Mix Asphalt Design. The Contract Administrator may request at any time, copies of the Hot Mix Asphalt Batch Records / Reports to verify that Recycled Asphalt Shingles are not being used.

The Contractor shall arrange for mechanical sweepers and / or flushers to clean the streets where sheet asphalt is to be placed. Payment for sweeping shall be made under the appropriate tender item.

The Contractor shall protect all subgrade from freezing as required.

Full warranty for workmanship and materials is required for all product placed within temperature specifications.

Quality Assurance

Quality control testing records for PGAC liquid shall be issued at time of Mix Design submittal or at any time as requested by the Contract Administrator. The Contract Administrator may at any time, upon discussions with the asphalt Contractor, sample the asphalt plane, the PGAC liquid for QA testing.

Measurement for Payment

The measurement for this item shall be done by computer printed weigh tickets submitted daily. Tickets are to include street, date, material and weight.

Basis for Payment

Payment for this item shall be full compensation for all required labour, equipment and material to do the work.

110 Seed

Scope

The work of this item shall include, without limitation, supply, installation, in accordance with the Contract Drawings and specifications herein.

Qualifications

The work specified in this Section shall be performed by a recognized specialist contractor, who has adequate plant, equipment, and skilled tradespersons to expeditiously perform the work, and is known to have at least five (5) years of proven satisfactory experience in the field of sodding, seeding work of the type and quality specified. Confirmation of the above criteria shall be provided to the Contract Administrator prior to placement.

Construction

Scheduling of Work

Schedule placing of topsoil and finish grading to permit seeding operation within 7 days. Naturalized seed mix preferred timing windows are between spring thaw and June 15th for spring seeding or after August 15th to November 15th for fall seeding, weather permitting.

Contractor to ensure seeding completed in dry conditions prior to water entering dry ponds.

In the case of dormant seeding (late fall) sufficiently protect seeded areas from pedestrian and vehicular damage. Dormant seeding must be approved by the Contract Administrator prior to commencement.

Delivery and Storage

Deliver seed in original containers showing:

- Analysis of seed mixture
- Percentage of pure seed
- Year of production

- Net weight
- Date when tagged and location.
- Source

Materials

Seed: minimum seed mixture purity of 97%.

Water: potable.

Hydraulic mulch: Flexterra HP-FGM applied at a rate of 4,000kg/ha

Fertilizer: 8-32-16 (application rate of 200Kg/10,000m²) to be applied with Park Standard seed mix only

Execution

Preparation of Surfaces

Obtain Contract Administrator's approval of topsoil grade and depth before starting seeding.

Seeded areas will not be accepted unless Contract Administrator has provided approval in writing for prepared seedbed.

Seeding

Seed mixtures and application rates are as specified on the Contract Drawings. Seed in accordance with OPSS 804.

Ensure seed coverage and a minimum 80% seed catch.

Hydroseed during calm weather (winds less than 10 km/h) using equipment suitable for area involved to the approval of the Contract Administrator.

Provide adequate protection of seeded areas against erosion or other damage. Remove this protection after seeded areas have been accepted by Contract Administrator.

Re-seed at intervals specified by Contract Administrator where germination has failed.

Acceptance

Seeded areas will be accepted by Contract Administrator provided that:

- Soil surface has not been eroded or otherwise degraded since completion of final grading.
- Seeded areas are adequately established.
- Turf is uniform, free of bare or dead spots, and invasives weeds do not exceed 20% of the seeded area.

Areas seeded will be accepted one year after initial seed application provided that acceptance conditions are fulfilled.

Maintenance

Ensure maintenance equipment is suitable to the Contract Administrator and has been cleaned prior to each use to discourage the spread of invasive species.

Do not apply organic herbicides or other chemical controls unless specifically directed to do so by the Contract Administrator.

Fertilize as deemed necessary to maintain warranty requirements.

Contractor shall repair and reseed dead or bare spots prior to substantial completion.

Area seeded with naturalization mixtures will be cut/mowed once at a height of approximately 10-15 cm with a string trimmer during early spring (after cool season weeds have emerged, but while the native warm season species are still dormant, as determined by a qualified professional). Cuttings should be left on site to decompose.

Area seeded with Park Standard seed mix will be cut/mowed once at a height of approximately 10cm with a string trimmer or mower.

Control invasive weed growth during the one year maintenance period.

Maintenance of seeded areas includes watering.

The Contractor is responsible for maintenance until acceptance.

Measurement for Payment

Measurement for payment shall be per square meter installed and maintained.

- Payment at 50% of the tendered unit price shall be compensated following application of seed.
- Payment at 35% of the tendered unit price shall be compensated following the first cut/mow in full for all related works.
- Payment at 15% of the tendered unit price shall be compensated upon final acceptance Contractor may request early payment of this portion if 80% coverage has been achieved after 90 days.

Basis of Payment

Payment at the contract unit price shall be compensation in full for all related works.

PART 2 – SANITARY FORCEMAIN AND APPURTENANCES

200 Supply and Install Sanitary Forcemain

Scope

The Contractor shall supply and install sanitary forcemain and fittings, including excavation, dewatering, bedding, backfill, trench support, compaction, removal and off site disposal of trench spoil material, thrust restraint, cathodic protection, dewatering by sumps and pumps as needed, etc., complete.

Material

PVC / PVCO

350 mm diameter PVC CSA B137.3 C900 (DR18) or C909 (PVCO) forcemain and fittings, white in colour, pressure rated to 235 psi.

All pipe is to have custom print line to show “SEWAGE FORCEMAIN”.

All fittings to be push on PVC compatible with the pipe and pressures listed, white in colour.

Blue pipe will not be accepted.

HDPE pipe will not be accepted.

Mechanical restraints to be supplied as per the table below. Joint restraints to be compatible with the chosen pipe and be as recommended by the pipe manufacturer. All mechanical restraints to be protected from corrosion using the DENSO system or approved equal.

Joint deflection to be half (1/2) that of the manufacturers recommended joint deflection. Axial deflection of the pipe barrel is not permitted.

Ductile Iron

200 mm diameter Ductile Iron pipe and fittings to be as per OPSS 412.05.02. All ductile iron fittings shall have a 14.5kg (32lbs) high purity magnesium anode attached to the fitting with using a CADWELD and coated with mastic all as per OPSS MUNI 442.

Mechanical restraints to be supplied as per the table below. Joint restraints to be compatible with the chosen pipe and be as recommended by the pipe manufacturer. All mechanical restraints to be protected from corrosion using the DENSO system or approved equal.

Valves

200mm valves to be mechanical joint epoxy coated ductile iron resilient seat gate valve as per OPSS 412.05.07.02 and are to open counterclockwise.

350mm valves to be mechanical joint epoxy coated ductile iron resilient seat gate valve as per OPSS 412.05.07.02 and are to open counterclockwise. Valves to be buried in an upright position.

Construction

Horizontal tolerance for installation shall be +/- 0.2 m. Vertical tolerance for installation shall be +/- 0.1 m.

Bedding and cover are to be Granular A, compacted to 95% SPMDD unless otherwise specified in the Contract Drawings or directed by the Geotechnical Engineer.

Trench boxes are to be used for forcemain installation to limit area of restoration.

All thrust restraints are to be mechanical fittings and compatible with the pipe and fitting products.

Mechanical Thrust Restraint to be supplied as per the following table:

Minimum Length to be Restrained on Each Side of Fittings (m)

Diameter of Main (mm)	Minimum No. of Steel Rods	11 ¼ deg bend	22 ½ deg bend	45 deg bend	90 deg bend	Dead End
200	2	4	4	4	7	20
350	4	4	4	4	8.5	30

Note:

- Steel Rods to be a minimum of 20mm in diameter.
- If any joint is encountered in the above restrained length, it must be restrained.
- 5 degree bends with bell and spigot must be restrained at joints.
- Valves are considered dead ends and are to be restrained on each side to the above lengths.

Concrete thrust blocking will not be permitted.

Tracer wire to be Copperhead 12.30 or approved equal as per, GREEN in colour.

A watertight night cap is to be installed at the end of each days construction until the forcemain is connected.

The Contractor is notified that the installation operation will be confined to the permanent and working easement as shown on the Contract Drawings. The Owner has not made any provision to access private property other than that in the easement. The Contractor may negotiate with the private landowner at their own discretion. Restoration outside of the working easement will be the sole responsibility of the Contractor.

The Contractor may approach landowners for additional access if additional working area is preferred.

Submittals

A Letter of Compliance is to be submitted by the manufacturer as well as a summary of fittings and specials and Manufactures Shop Drawings for pipe restraints showing restrained length calculations, signed stamped by an Engineer licenced to practice in the province of Ontario for approval prior to the preconstruction meeting for review.

Basis of Payment

Payment at the Contract Price for the above Tender Item shall include full compensation for all labour, equipment and materials required to install the forcemain.

Measurement for Payment

The pipe installed will be measured horizontally along the lay length.

201 Supply and Install Direct Bury Air Release Valve

Scope

The work in this item shall include all labour materials and equipment to supply and install a direct buried air release valve on the forcemain in locations to be determined in the field including offset piping and manhole riser, frame and grate.

Construction

The Contractor shall supply and install an ARI air release valve model D-025 SB 32, 150psi (or approved equal) with a surface valve that can be buried below grade.

The Contractor shall provide a 350mm x 50mm saddle and tap at each of the high points along the forcemain. The piping from the forcemain to the offset location of the air release valve to enable the valve to be located inside the permanent easement. The contract form of tender does note two units and the drawings currently show only one unit. The second unit has been included in the event that some of the storm sewer crossing create an additional high point in the alignment. If the second unit is not installed it will be turned over as a spare unit to the operating authority.

The connection to the ARI valve shall be made to a 75mm blind flange on the bottom of the unit to the offset piping. Offset piping to be 50mm PEX pipe connected to a 50mm x 75mm MJ x FL 90 degree bend.

The unit shall be installed as per the manufacturer specification for an offset installation.

The air release valve shall be protected by installing a 300mm precast donut complete with a standard manhole frame and cover as detailed on the contract drawings.

Basis of Payment

Payment at the Lump Sum price shall include all labour, equipment and materials required to complete the installation including but not limited to excavation, removals, stone bedding with filter fabric wrap, select native backfill, fittings, restraints, copperhead trace wire, dewatering, disposal of excess excavation, trench liners utility support, hydro pole support complete as required.

202 Forcemain Testing

Scope

The work in this item shall include the preparation, setup, testing procedures and dismantling of the required apparatus and plans to complete the satisfactory testing of the newly installed forcemain system.

The preparation and submittal of a swabbing and testing plan is also included in this item.

Submittals

The Contractor shall prepare and submit a plan for swabbing and testing the new forcemain and appurtenances.

Plans are to be submitted to the Contract Administrator at the preconstruction meeting.

The plan should show;

- Locations and lengths of test sections;
- Water discharge location for each test section including method of dichlorination, erosion control methods and materials etc.
- Method of swabbing;
- Text description of pressure testing; and
- Any other details pertinent to the associated procedures.

Construction

The Owner will supply water for the flushing, swabbing and pressure testing of the forcemain system. The Contractor will be responsible to deliver the water from the source to the swab launcher under the appropriate tender Item.

The Municipal provided water will be at the existing fire hydrant located on the corner of Roe Street and Victoria St. The Contractor is responsible to provide a 50mm backflow device which must be tested and certified by a licenced plumber. The test results are to be turned over to OCWA and the contract administrator prior to the water source being turned on for the Contractors use. The contractor shall also provide a 50mm water meter at the source. Water required for the initial cleaning and pressure test will be provided at no cost to the contractor. If additional pressure testing or swabbing is required, the contractor may be charged for the additional water required.

The Contractor is to note that the Municipality will be restricting the water taking for commissioning to one system volume turn over per day. The contractor will need to take this into account when scheduling for commissioning.

The Contractor is to supply a minimum of 2 foam swabs for each test section as well as any additional swabs if the initial swabbing does not achieve satisfactory results. Swabs are to be 400 mm diameter foam swabs.

Water is to be introduced from the low end of the system. An appropriate collection system shall be installed at the discharge end of the forcemain as part of this item.

Test pressure is to be 150 psi measured at the high point of the system. The Contractor should review the grade change of the forcemain system and may wish to break the test section into multiple sections.

Water discharge from testing is not to be discharged into the sanitary sewer. Any discharge to a water course is to have zero chlorine residual.

Basis for Payment

The Contractor shall supply all labour, material and equipment required to swab and pressure test the main in accordance with the Specifications.

PART 3 – MISCELLANEOUS

301 Mobilization/Demobilization

Scope

The work for this item shall include all labour, equipment, and material required to bring the equipment and materials to the site, and to remove the equipment and surplus materials from the site.

This item also covers the supply, installation, maintenance and removal of a site privy, in accordance with the Occupational and Health and Safety Act.

Basis of Payment

There will be no measurement for payment for this item. Payment of the tendered lump sum price for this item shall be compensation in full for all related costs. Payment shall be made 60% upon the first Progress Certificate, and 40% with the Substantial Performance Progress Certificate.

302 Traffic Control

Scope

The Contractor will be fully responsible to comply with the requirements of the Ministry of Labour and the Ontario Traffic Manual Book 7 throughout construction. The Contractor shall provide access for traffic and pedestrians through the site at all times.

Design and Submission Requirements

The Contractor shall prepare and submit a Traffic Control Plan for all stages of the work to the Contract Administrator and the Municipality / County for review at least ten (10) days in advance of implementation for review of compliance with the Contract Documents. Traffic Control measures must be appropriate for the posted speed limit(s) and as per Ontario Manual Book 7.

The contractor shall be responsible for determining how the works are to be constructed taking into account the staging outlined in the contract documents and shall develop a Traffic Control Plan reflecting the needs of construction staging and scheduling as per the guidelines listed below.

- Construction staging to allow access for pedestrians, residents, service and emergency vehicle access.
- The Contractor will not be permitted to use field areas outside of the working easement area for staging or storage of equipment and material.
- Parkhouse Drive to be closed to through traffic for one day to install the new forcemain and reinstate the road to granular base (at minimum). A scheduled detour is to be in place and signed one week in advance of the crossing. The detour route is to be Tait Road, Newbiggen Drive and Victoria Street.

Construction

Access for area farmers is required to be maintained at all times. Access via Victoria St at Roe St as well as access for the farmer on the existing gravel road at approximate Station 0+500 is required to be maintained at all times. Access for both will be required to be coordinated with the landowners and may require temporary access allowances to suit.

Measurement of Payment

The measurement for payment shall be by lump sum. Payment will be made as a percentage of the work completed based on the expected duration of the project.

Basis of Payment

The cost of the supply, installation and maintenance of all signs (other than project and advance warning signs), use of police forces, delineators and other traffic control devices to control traffic and pedestrians within and around the construction site is to be included in the tender item for Traffic Control. Payment at the contract price for this item shall be full compensation for all necessary labour, material and equipment required.

This item shall also include all temporary fencing and concrete barriers (including relocations) and traffic protection required by the Contractor to complete work.

No additional payment will be made to comply with additional instructions given by the Ministry of Labour.

303 Daylight Utilities

Scope

The work for this item shall be to daylight to find existing utilities, sewers and laterals, etc. if supplied information is inconclusive or as directed by the Contract Administrator.

Basis of Payment

The unit price per hour is to include dump charges, water charges, on site supervision and labour by Contractor's forces and the Contractor's mark-up. The Contractor shall submit invoices to confirm time incurred.

Payment for excavating trenches, holes, pits, sumps etc., over and above standard accepted daylighting will not be considered as part of this item. Time for excavating receiving pits for trenchless water service installation is not part of this item.

Use of this item is to be authorized by the Contract Administrator prior to the work starting.

304 Power Street Sweeping / Cleaning

Scope

The Contractor will power sweep asphalt surfaces utilized for vehicular traffic movement including connecting streets to minimize the effects of wind-blown dust when deemed necessary.

Basis of Payment

The unit price per hour onsite shall include all labour, equipment and materials required for street sweeping through mechanical means as directed by the Contract Administrator.

The unit price for street sweeping is to include the Contractor's mark-up. The Contractor shall submit street sweeping invoices to confirm time incurred.

Measurement for Payment

The measurement for payment for this item will be per hour on site.

305 Contract Administrator’s Field Office

In addition to the requirements in GS.4, the Contractor shall ensure that the site office has a hard-wired power service or dedicated generator with noise attenuation for the duration of the Contract.

The Contractor shall also provide a high-speed wireless internet connection to be used by the Contract Administrator. The Contractor shall include the cost of supplying, maintaining and all monthly user charges in this item.

The office shall be capable of holding site meetings with tables and chairs for attendance of 10 people.

Site trailer to be air conditioned.

Two desks are to be provided.

The Contract Administrators Field office shall be separate from the Contractor’s.

306 Costs Associated with O.Reg 406/19

Scope

It is anticipated that construction works associated with the Project Area will generate excess soil. It is the Owner’s expectations that the management of excess soil will be conducted in accordance with Ontario Regulation (O.Reg.) 406/19 and OPSS 180 as modified in the Municipality of Middlesex Centre Standard Contract Documents for Municipal Construction Projects. The Contractor will be responsible for retaining a Qualified Person (QP) for the duration of the Project, to oversee all work associated with the excavation, storage, movement, transport, re-use, and disposal of excess soil in accordance with O.Reg. 406/19.

It is anticipated that this project will generate less than 2000m³ of excess soil. If the additional excess soils are encountered material exceeding the 2000m³ may remain onsite at the lagoon site.

The contractor should be prepared to dispose of pipe spoil off site. The contractor will not be permitted to overbuild along the easement.

Under no circumstances shall the Contractor deviate from Regulatory requirements prescribed under O.Reg. 406/19, unless otherwise agreed to by the Owner and the Owner's Contract Administrator.

If the owner or operator of a recognized receiving site(s) requires soil sampling and analysis, the Contractor shall carry out all additional sampling, analysis and reporting as required. All costs associated with this effort shall be borne by the Contractor.

If, for any purpose, the Contractor wishes to utilize private lands for temporary storage of excess soil which are outside the Project Area or outside the limits of construction indicated on the Contract drawings, the Contractor shall provide the Contract Administrator with a copy of each such Property Owner's written consent authorizing the use of their lands by the Contractor before construction begins and upon placement of excess soil, in accordance with all applicable laws and Regulations.

The Contractor shall note that some soils excavated may be fully saturated. All handling, stockpiling, processing, thickening, drying etc. of saturated soil materials to ensure their suitability for testing, hauling, and off-site re-use and/or disposal shall be the responsibility of the Contractor, will all costs included under this item, and be completed in accordance with all relevant legislations and Regulations. Similarly, the Contractor shall ensure the suitability of all equipment used to excavate, load, handle and transport saturated soils, within the site limits and off-site, with all costs included under this item. All saturated and/or liquid soils shall be managed in accordance with the relevant laws and Regulations, including O.Reg. 406/19.

Construction

It is anticipated that most insitu material will be reused on this project. As noted in the Geotechnical Report, the native silts encountered at the base of the sewer will need to be disposed off site. The material generated from pipe spoil excavation, road excavation, etc may be reused on site or removed from the site at the Contractors discretion.

Basis of Payment

Handling of material for both reuse on site and removal off site including excavation, loading, hauling etc., is to be included in the appropriate tender items for the work in which they are related.

Payment at the Contract price for this tender item shall be full compensation for all labour, Equipment and Material necessary to do the work to comply with O.Reg 406/19.

Measurement for Payment

There will be no measurement for payment for this item. Payment will be made as a percentage of the work completed, as determined solely by the Contract Administrator.

307 Insurance

The contractor shall list the following property owners as additionally insured:

T. & H. Reycraft Farms (Glencoe) Ltd.

155 Victoria Street, Glencoe

And,

Ontario Plant Propagation Limited. (Greenhouse Development)

FOR INFORMATION ONLY – GEOTECHNICAL INVESTIGATION