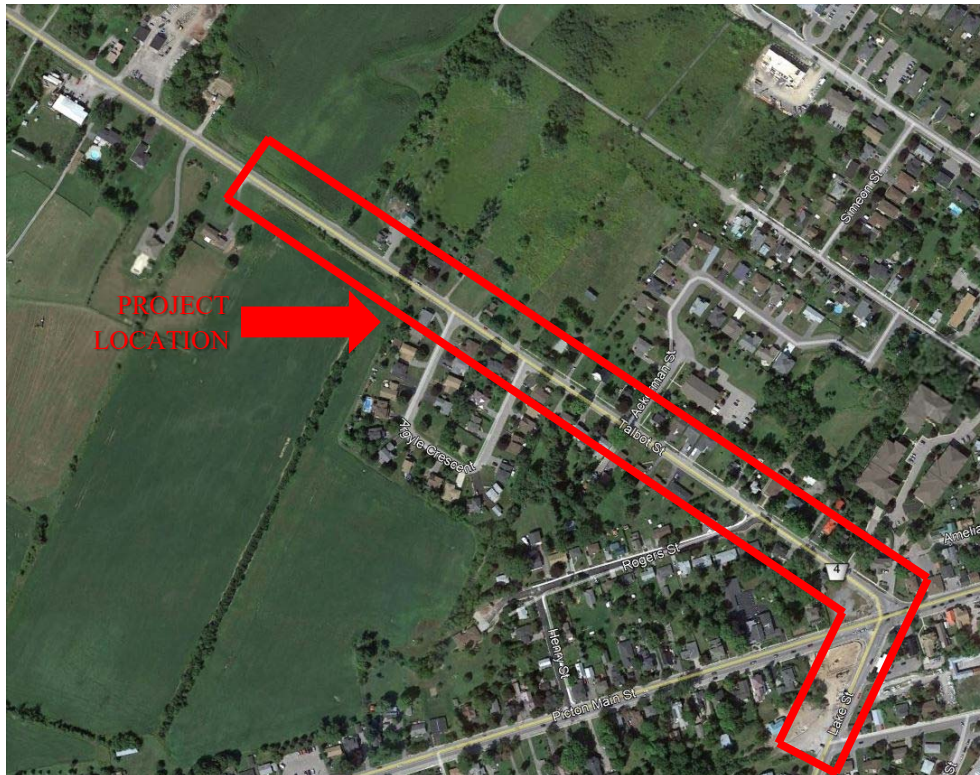




TheCounty
PRINCE EDWARD COUNTY • ONTARIO

Corporation of the County of Prince Edward **Reconstruction of Talbot Street and Lake Street**

Contract No.: 2019-EDW-09



Tender Close: 2:00p.m. Friday, March 8th, 2019

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INFORMATION FOR TENDERERS

1. DEFINITIONS AND INTERPRETATION

Definitions:

Wherever a term set out below appears in the text of this TENDER in capital letters, the term shall have the meaning set out for it in this Section. Wherever a term below appears in the text of this TENDER in lower case, it shall be deemed to have the meaning ordinarily attributed to it in the English language.

- a) **ALTERNATIVE** means a choice of things, each being fully compliant.
- b) **BIDDER'S LIST** means a list maintained by the MUNICIPALITY containing the names of firms or individuals who have expressed an interest in receiving notice of opportunities to supply goods or services to the MUNICIPALITY from time to time.
- c) **MUNICIPALITY** means THE CORPORATION OF THE COUNTY OF PRINCE EDWARD and includes its successors and assigns.
- d) **CONTRACT** means the agreement to be entered into between the CONTRACTOR and the MUNICIPALITY with respect to the supply of the EQUIPMENT, MATERIAL and SERVICES. It shall be based upon this TENDER, with any agreed upon amendments and shall also include any plans and terms of reference and will be held to cover the supply of any and all work, labour, implements and MATERIAL that could be reasonably required to properly and satisfactorily supply the EQUIPMENT, MATERIAL AND/OR SERVICES.
- e) **SUPPLIER and/or SUPPLIES** means the BIDDER(s) whose TENDER(s) is/are accepted and who has/have agreed to supply the EQUIPMENT, MATERIAL AND SERVICES as described in the CONTRACT. In either case, the term extends to its legal representatives, successors and permitted assigns, agents, employees, SUPPLIERS and supplies.
- f) **EQUIPMENT, MATERIAL** means all goods, MATERIAL, articles, EQUIPMENT, as described in the Terms of Reference attached to this TENDER and acquired through the inclusion of such EQUIPMENT, MATERIAL in a schedule to the CONTRACT from time to time throughout the term of the CONTRACT.
- g) **IMPROPER** means a TENDER that is not in conformity in some manner with the requirements of this TENDER but will be reviewed by the MUNICIPALITY to determine whether it may be considered in the evaluation process, in the sole and unfettered discretion of the MUNICIPALITY.
- h) **BIDDER(S)** means all persons, partnerships or corporations who respond to this TENDER, and includes their heirs, successors, and permitted assigns.
- i) **TENDER(S)** means the BIDDER'S submission in response to this TENDER, including the terms of reference, directions, specifications, schedules and requirements, together with all documents of any description and agreements made or to be made pertaining to

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- the method of supplying the EQUIPMENT, MATERIAL AND/OR SERVICES or to the quantities as shown to be furnished under the CONTRACT.
- j) **TENDER** means this Request for TENDER document, including all schedules, parts and attachments, as issued by the MUNICIPALITY, including any addenda or amendments made to it after initial use.
- k) **SERVICES** means the services as required and described, Terms of Reference, Specifications/Deliverables of this TENDER and EQUIPMENT, MATERIAL as described in the Terms of Reference of this TENDER and the Schedule of Prices of this TENDER.
- l) **TOTAL ACQUISITION COST** means the sum of all costs, including purchase price, all taxes, warranty, life cycle cost, operating and disposal costs.

Interpretation: The following rules of interpretation apply:

- a) The term ‘best value’ means the most cost efficient and effective manner of supplying the EQUIPMENT, MATERIAL AND/OR SERVICES in the sole and unfettered opinion of the MUNICIPALITY.
- b) Where any mention is made to the masculine gender in any part of this TENDER or the CONTRACT, it shall be interpreted as, and deemed to mean, the masculine or feminine gender. Words in the singular can be interpreted in the plural, and vice versa, as the context allows.
- c) Each reference to Provincial legislation in this TENDER, unless otherwise specified, is a reference to the Revised Statutes of Ontario, 1990 edition, and, in every case, includes all applicable amendments to the legislation, including successor legislation.
- d) The words “shall”, “will”, and “must” used in this TENDER denote imperative.
- e) The word “may” used in this TENDER denotes permissive.
- f) The word “and” is an inclusive conjunction, the use of which indicates that all items or phrases in the subsection, article, or list in which it appears are permitted or required, as the case may be. The word “or” is an alternate conjunction, the use of which indicates that alternate or optional items or phrases in the subsection, article or list in which it appears are permitted or required, as the case may be; however, notwithstanding the foregoing, where the context permits, the word “or” may also be an inclusive conjunction having the same meaning as the word “and”.

2. TENDERERS TO INVESTIGATE

Tenderers must satisfy themselves by personal examination of the site and by such other means as they may prefer, as to the actual conditions and requirements of the work.

The Tenderers shall carefully examine all plans so that the unit prices tendered are commensurate with the nature of the work.

3. AWARD OF THE CONTRACT

The award of this Contract is expected to be such that construction can be completed by the specified completion date and is subject to the approval of The Corporation of the County of Prince Edward. The County reserves the right to reject the tender of any bidder who does not furnish evidence of sufficient capital, plant, and experience to successfully execute the work in the specified time should such evidence be requested. The lowest or any tender may not be accepted.

4. UTILITIES

The attention of the Tenderer is drawn to the presence of underground utilities, utility pole lines and overhead wires adjacent to and/or on this contract. Information on the location, and/or protection thereof of the pole lines and/or the underground utilities, may be obtained from the Utility Companies concerned.

5. FEDERAL AND PROVINCIAL TAXES

Unit and/or lump sum prices shall not include the Harmonized Sales Tax.

6. GENERAL CONDITIONS

The General Conditions for this CONTRACT shall be the current Ontario Provincial Standards – General Conditions of Contract. Each Contractor shall be responsible for obtaining a current set of these General Conditions at his own cost. Any amendments thereto shall be contained in the Contract Special Provisions.

7. CONTRACT / INTENT

The intent of this TENDER is to secure a qualified Contractor to undertake the construction and/or replacement of road, drainage, water and sewer services, and associated works for the Corporation of the County of Prince Edward in accordance with the terms, conditions, terms of reference, and attachments of this TENDER. The MUNICIPALITY may or may not enter into a CONTRACT as a result of the issuance of this TENDER.

8. TENDER DELIVERY & OPENING

- a) TENDERS made on the forms provided must be submitted in a sealed package, clearly marked and must be submitted to the following address to the attention of the following individual **prior to 2:00 p.m., Local Time, Friday, March 8th, 2019** (the “deadline for submission”). TENDERS must be time-stamped at the location below to be considered. Late submissions will not be accepted and will be returned unopened without exception. The time stated on the time stamp located in the following office shall be the only recognized timepiece for the purpose of this submission.

Clerk’s Department – Shire Hall
THE CORPORATION OF THE COUNTY OF PRINCE EDWARD
332 Main Street,
2nd Floor
Picton, ON
K0K 2T0

All bidders must register with the Purchasing Clerk by fax 613-476-7622 or email pwhite@pecounty.on.ca or they will be rejected

- b) **BIDDERS shall submit one document marked “original” and one (1) additional copy**
- c) Any TENDERS received after the deadline for submission will be considered as non-compliant and will be returned unopened. In the event that the TENDER is too large for an envelope, the TENDER shall be **sealed** in a carton clearly marked with the CONTRACT number and description.
- d) The use of the mail or courier services for delivery of a TENDER will be at the risk of the BIDDER. The TENDER must come into the possession of the above-mentioned representative of the MUNICIPALITY before the deadline for submission or the TENDER will be returned to the BIDDER unopened.

In the event that the TENDER is hand delivered and is received past the deadline for submission, the TENDER envelope will be time stamped and returned unopened to the deliverer immediately.

In the event that the TENDER is received by a means other than ‘in person’ and is received past the submission deadline, it will be time stamped and returned unopened by courier.

- e) **Note: Since TENDERS must be submitted in a sealed envelope, submissions by facsimile or electronic delivery, secure site or otherwise, are not acceptable.**
- f) The onus unequivocally remains with the BIDDER to ensure that TENDERS are delivered to the specified location, by the deadline for submission, in accordance with the submission instructions. Misdirected TENDERS received after the deadline for submission will not be accepted and will be returned unopened. Requests for adjustments to submitted TENDERS by telephone, fax or electronically will not be considered.

- g) The MUNICIPALITY shall not be liable for any cost of preparation or presentation of TENDERS, and all TENDERS and accompanying documents submitted by the BIDDER become the property of the MUNICIPALITY and will not be returned. There will be no payment to BIDDERS for work related to and MATERIAL supplied in the preparation, presentation and evaluation of any TENDER, not for the CONTRACT negotiations whether they are successful or unsuccessful.
- h) TENDERS will be opened at a public TENDER opening meeting 15 minutes following the deadline for submission in the Committee Room, The Corporation of the County of Prince Edward, 332 Main Street, 2nd Floor, Picton, Ontario and BIDDERS are invited to attend.
- i) The MUNICIPALITY, its elected officials, employees and agents shall not be responsible for any liabilities, costs, expenses, loss or damage incurred, sustained or suffered by any BIDDER, prior or subsequent to, or by reason of the acceptance, or non-acceptance by the MUNICIPALITY of any TENDER, or by reason of any delay in the acceptance of any TENDER.

9. TENDER SUBMISSION

- a) Submission of a TENDER will constitute acceptance of all provisions contained in this TENDER on the part of all BIDDERS.
- b) When submitting a TENDER, BIDDERS must ensure that all areas of this TENDER that require information are completed and submitted in accordance with the instructions, including but not limited to a completed original Schedule of Items & Prices. Failure to do so may result in the incomplete TENDER being rejected.
- c) If a TENDER does not conform in every detail with the requirements included in this TENDER the BIDDER is required to explain the deviation in the TENDER.
- d) All TENDERS must be made upon the Form of TENDER attached to this TENDER
- e) The TENDER must bear an original signature of an authorized signing officer of the BIDDER or the TENDER may be rejected. If a joint TENDER is submitted it must be signed by signing officers of each of the joint BIDDERS.
- f) TENDERS which are incomplete, conditional, illegible, or obscure or which contain reservations, erasures, alterations, or irregularities will be declared IMPROPER and may be rejected. TENDERS must be legible, written in ink, or by typewriter. TENDERS written in pencil will not be considered. In the case of an error in extending the unit prices, the unit price shall determine the quoted price.
- g) None of the conditions contained on the BIDDER'S standard or general conditions or sale shall be of any effect unless explicitly agreed to by the MUNICIPALITY and specifically referred to on the Contract.
- h) Any erasures or corrections to a TENDER must be initialed or noted by the BIDDER or the TENDER may be deemed as IMPROPER and may not be considered.

- i) If after reading the TENDER, your organization does not wish to submit a TENDER, **do not forward the TENDER document to another organization.**

10. INQUIRY

- a) **The Tenderer is advised that inquiries regarding the interpretation of the Contract Plans, Specifications or Documents shall be directed to:**

Jewell Engineering Inc.
1-71 Millennium Parkway
Belleville, ON
K8N 4Z5
Attn: Pat Schick, A.Sc.T.
Tel: 613-969-1111
Email: pat@jewelleng.ca

- b) If during the period prior to submission of TENDERS, the MUNICIPALITY determined, in its sole and unfettered discretion, that part of the TENDER requires formal amendment or clarification, written addenda to this TENDER will be produced and made available to all-BIDDERS through the County website. . In that case, the TENDERS shall identify the addenda and indicate how they respond to them.
- c) BIDDERS attempting to contact MUNICIPALITY staff or elected officials other than the contact indicated in this TENDER in subsection a) above, for whatever reason, during the TENDER or evaluation process, are advised that such action may result in their disqualification from the process and removal of their name from the BIDDER'S LIST. If consultation is deemed to be necessary by the MUNICIPALITY, a pre-TENDER meeting of all BIDDERS and MUNICIPALITY staff will be arranged at a location of the MUNICIPALITIES choosing. The MUNICIPALITY reserves the right to change the deadline for submission, if necessary, to accommodate such a meeting.
- d) No officer, agent or employee of the MUNICIPALITY is authorized to verbally alter any portion of this TENDER. During the period prior to submission of TENDERS, any clarification will be issued in the form of written addenda. **The BIDDER shall list and attach any addenda that were considered when the TENDER was prepared.** Failure to execute and return any and all addenda issued by the MUNICIPALITY will result in the TENDER being deemed as IMPROPER.
- e) While the County will post addenda on their website, it is the BIDDER'S ultimate responsibility to ensure all addenda have been received.

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- f) All references to BIDDER include all staff from the proposing organization as well as all SUB-CONTRACTORS that the proposing organization may hire to supply EQUIPMENT, MATERIAL AND/OR SERVICES.

11. TENDER CONTENT

TENDERS will be deemed complete if they include:

- a) A completed **Memorandum of Agreement**;
- b) A completed and executed **Form of Tender**;
- c) A completed **Schedule of Items & Prices** form;
- d) A completed **Reference Information** form;
- e) A completed **Contractor's Acknowledgement of Traffic Control** form;
- f) A completed **Contractor's Acknowledgement of Health and Safety Requirements** form;
- g) A completed **Accessible Customer Service Training** form;
- h) A completed **Contractor's Undertaking For Provision Of Insurance** form;
- i) A completed **List of Sub-Contractors** form;
- j) Sufficient **Bid Deposit**;
- k) **Agreement to Bond/Letter of Credit**;
- l) Signed copies of any **Addenda** that have been issued.

If any of the above information is missing or deficient, the MUNICIPALITY reserves the right, in its sole and unfettered discretion, to request written clarification, or, if substantively remiss, to reject the TENDER in its entirety.

12. TENDER EVALUATION

TENDERS will be evaluated on the basis of information provided by the BIDDER at the time of the submission as well as the previous experience of the BIDDER in this marketplace.

- a) TENDER quality: including organization, clarity, completeness, content and presentation;
- b) BIDDER experience in similar or related projects as well as their experience with government bodies.

13. ACCEPTANCE OF TERMS

Each BIDDER, by submitting a TENDER, represents that the BIDDER has read, completely understands, and accepts the terms, conditions, and terms of reference of the TENDER in full.

14. REQUIREMENTS AT TIME OF EXECUTION

Subject to an award of the TENDER by The Corporation of the County of Prince Edward, the Bidder is required to submit the following documentation in a form satisfactory to The Corporation of the County of Prince Edward for execution within ten (10) days after being notified in writing to do so by The Corporation of the County of Prince Edward:

- a) Certificate of Clearance from Workers Compensation Board;
- b) 100% Performance Bond and 100% Labour and Materials Bond or alternate security as provided by the County's Standard Terms and Conditions of this Contract.
- c) Evidence of General Liability, Automobile, Equipment, Public Liability and Damage insurance.

If any of the TENDER and deposit requirements have not been met, the TENDER will be rejected.
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The Corporation of the County of Prince Edward has the right to accept a TENDER and waive what it considers to be minor deviances from the mandatory requirements and acceptable format.

STANDARD TERMS AND CONDITIONS

1. ACCEPTANCE

- a) As soon as practicable after opening the TENDERS, the MUNICIPALITY will endeavor to act upon them. The acceptance of a TENDER will be notice in writing signed by a duly authorized representative of the MUNICIPALITY, and no other act of the MUNICIPALITY shall constitute the acceptance of a TENDER. Acceptance of a TENDER by the MUNICIPALITY shall bind the Contractor to execute the CONTRACT.
- b) The CONTRACT shall consist of and have priority in the following order:
 - i) **The Purchase Order and/or Supply Contract;**
 - ii) **The TENDER;**
 - iii) **And the SUPPLIER'S TENDER.**
- c) The above mentioned documents will be interpreted in precedential order as they are named above regardless of the chronological order in which they are issued or executed. This means, in effect, that if there is a discrepancy between a term in the MUNICIPALITY'S Contract for Services and a term in the chosen TENDER, the term in the Contract for Services prevail to the extent of the discrepancy.
- d) The MUNICIPALITY may accept a TENDER in whole or in part, whether the TOTAL ACQUISITION COST be the lowest or not, and may reject any or all TENDERS. There shall be no requirement of this TENDER, implied or otherwise, THAT THE tender REPRESENTING THE LOWEST total acquisition cost WILL BE SELECTED OR PREFERRED. The TENDER process is used as a means of evaluating a number of criteria (one of which is TOTAL ACQUISITION COST). BIDDERS must submit their TENDERS in accordance with all items identified in this TENDER.
- e) The MUNICIPALITY reserves the right to award by items, groups of items, parts of items or parts of groups of items, or all items of the TENDER, and to award CONTRACTS to one or more BIDDERS; to accept or reject any TENDER in whole or in part; to waive irregularities and omissions in the MUNICIPALITIES sole and unfettered discretion, if in so doing, the best interest of the MUNICIPALITY will be served. No liability shall accrue to the MUNICIPALITY for its decision in this regard.
- f) Should the MUNICIPALITY receive only one (1) TENDER on commodities/services that have a known multiple source potential, the right is reserved to recall or cancel the competition.
- g) All TENDERS shall be irrevocable for seventy (70) days following the deadline for submission to allow sufficient time for evaluation of the TENDERS and for the investigation of the BIDDERS. The tender award will be subject to receipt of all necessary approvals by the County.

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- h) Upon acceptance of a TENDER, (or any part of it), by the MUNICIPALITY, the successful BIDDER shall, if requested by the MUNICIPALITY to do so, execute and enter into an additional formal contract that is satisfactory to the MUNICIPALITY, to properly secure the CONTRACT resulting from the acceptance of a TENDER (or any part of it) and to embody indemnity and related provisions that in the opinion of the MUNICIPALITY are required to protect the MUNICIPALITY. If at any time the MUNICIPALITY, in its sole and unfettered discretion, decides that satisfactory terms and conditions cannot be realized with a successful BIDDER, the MUNICIPALITY reserves the right to enter into negotiations and finalize a CONTRACT with an alternative BIDDER or revise and reissue this TENDER or cancel this TENDER. If the MUNICIPALITY exercises such right, the successful BIDDER has no legal claim or recourse against the MUNICIPALITY, its elected officials, employees and agents for any expenses, costs, loss or damages incurred or suffered.
- i) Any notice that the MUNICIPALITY may be required or desire to give to the BIDDER shall for all purposes be deemed to have been sufficiently and properly given if forwarded by registered mail or courier and addressed to the BIDDER at the address shown for the BIDDER on its TENDER. It shall be presumed to have been received by the BIDDER on the third day following the registration or the day following registration with the courier.
- j) No TENDER shall be accepted from any person or BIDDER who, has a claim or has instituted a legal proceeding against the MUNICIPALITY or against whom the MUNICIPALITY has a claim or has instituted a legal proceeding, without the prior approval of the MUNICIPAL Council. This applies whether the legal proceeding is related or unrelated to the subject matter of this TENDER.
- k) The MUNICIPALITY reserves the right to reject all TENDERS or to select a TENDER other than the TENDER having the lowest price. In making a decision as to which TENDERS to accept, the MUNICIPALITY reserves the right to consider, some or all of the following factors:
1. the general reputation of the Contractor;
 2. any prior experience the County has had with the Contractor;
 3. the financial status and strength of the Contractor;
 4. the previous experience of the Contractor in this area;
 5. any previous experience between the Contractor and other municipalities;
 6. the proposed schedule of the Contractor;
 7. the Owner's determination of the ability of the Contractor to deliver the work to quality and standards required and within the time frames and in the quantities; and
 8. any other factors that the Owner believes reasonably impact on the Contract and the ability to complete the Contract to the full satisfaction of the Owner.
- l) The Owner reserves the right to consider each of the factors, and to assign different weights to each of the factors based on the information received by it from each and every Contractor, from its own staff, and from outside sources, as these factors may impact on the benefit the Owner receives from this Contract.

2. PURCHASING BY-LAW

- a) TENDERS will be called, received, evaluated, accepted, and processed in accordance with the MUNICIPALITIES Purchasing By-Law and Procedures (copy available upon request). By submitting a TENDER each BIDDER agrees to be bound by the terms and conditions of that By-law and those Procedures and any amendments to them, as fully as if it were reproduced and attached to this TENDER. A copy of The Corporation of the County of Prince Edward's Purchasing By-law can be retrieved from the County's web-site: www.pecounty.on.ca.
- b) No verbal arrangement or agreement, relating to the SERVICES specified or called for under this TENDER, will be considered binding, and every notice, advise or other communication, pertaining to it, must be in writing and signed by a duly authorized person.

3. BIDDER ELIGIBILITY

- a) BIDDERS must meet the MUNICIPALITY'S requirements for experience. The MUNICIPALITY will disqualify any BIDDER who cannot provide the following, when requested by the MUNICIPALITY.
 - i) proof that they have previously held and satisfactorily completed a contract of the size and type being proposed; or
 - ii) proof of employment in the type of service being proposed and written references as to their satisfactory performance; or
 - iii) adequately demonstrate that they have the ability to provide the necessary expertise and resources to satisfactorily complete the CONTRACT;
 - iv) evidence of sufficient general liability and up-to-date clearance issued by the W.S.I.B. (Workers Safety Insurance Board).
- b) The MUNICIPALITY reserves the right to investigate and evaluate the experience, capability, registration and financial position of any BIDDER prior to an award of a CONTRACT. The MUNICIPALITY reserves the right to reject any BIDDER OR TENDER based on the information obtained.
- c) This TENDER is made by the BIDDER without any connection, knowledge, comparison of figures or arrangement with any other person or persons making a TENDER for the same SERVICES, and is in all respects fair and without collusion or fraud.

4. ASSIGNMENT

- a) The Contractor shall not assign the CONTRACT (or any portion of it) without the proper written consent of the MUNICIPALITY.
- b) It is understood and agreed that the BIDDER will be an independent Contractor and that all services will be performed by the employees or agents of the Contractor. Sub-contracting agreements made by the Contractor will not release the Contractor from any obligation to the MUNICIPALITY with respect to the performance of the

CONTRACT. Joint or consortium TENDERS must have one prime Contractor who will be responsible for overall project success, provide one point of contact and a single billing point. The MUNICIPALITY shall not be responsible for payment to the Contractor's partners, SUB-CONTRACTOR or suppliers in the event the prime Contractor defaults on its responsibilities. The prime Contractor must communicate such to its partners, SUB-CONTRACTORS and suppliers. The prime Contractor must also provide the MUNICIPALITY with a written statement outlining function components that the sub-Contractor(s) will be offering. The MUNICIPALITY must grant prior written approval, in its sole and unfettered discretion, for any assignment and all SUB-CONTRACTORS.

5. INDEMNIFICATION

- a) The Contractor agrees that it will continuously save, keep harmless and fully indemnify the MUNICIPALITY, its elected officials, employees and agents and its successors and assigns, from and against all actions, claims, and demands whatsoever which may be brought against or made upon the MUNICIPALITY and the Contractor also agrees that it will continuously save, keep harmless and fully indemnify the MUNICIPALITY, its elected officials, employees and agents and its successors and assigns, against all types of losses, liabilities, claims, costs or expenses which the MUNICIPALITY may incur resulting from or arising out of the Contractor's failure to exercise reasonable care, skill or diligence in their performance or rendering of any EQUIPMENT, MATERIAL AND/OR SERVICES to be performed or rendered by the Contractor, pursuant to the CONTRACT.
- b) The Contractor shall indemnify the MUNICIPALITY from all claims arising out of unpaid accounts relating to the CONTRACT. The MUNICIPALITY shall have the right at any time to require satisfactory evidence that the equipment, material (or any part of it) in respect of which any payment has been made or is to be made by the MUNICIPALITY is free of and clear of construction or other liens, attachments, claims, and demands, charges or other encumbrances.

6. CHARACTER OF WORKERS

- a) The reference to "workers" refers to workers of the Contractor and its SUB-CONTRACTORS (if any), and includes Corporate Officers.
- b) The Contractor agrees to employ only orderly, competent, and skillful workers. Whenever the MUNICIPALITY informs the Contractor in writing that any worker is, in its sole and unfettered opinion, incompetent, unfaithful or disorderly, the Contractor will ensure that the worker in question is removed from the work and shall not be further employed on the CONTRACT without the MUNICIPALITY'S written consent.

7. PROJECT SITE WORKING CONDITIONS

It is the BIDDER'S responsibility to investigate the sites and the nature of the work and inform itself, before bidding, of all the physical and working conditions and administrative practices applicable.

8. PATENTS AND COPYRIGHTS

- a) The Contractor shall, at its sole expense, defend all claims, actions or proceedings against the MUNICIPALITY based on any allegations that the EQUIPMENT, MATERIAL (or any part of it) constitutes an infringement of any patent, copyright or other proprietary right, and shall pay the MUNICIPALITY all costs, damages, charges and expenses, including its lawyers' fees on a solicitor and his own client basis occasioned to the MUNICIPALITY in this regard.
- b) The Contractor shall pay all royalties and patent license fees required for the EQUIPMENT, MATERIAL.

9. ERRORS AND OMISSIONS OF THE CONTRACTOR

Errors, mistakes, or omissions made by the Contractor, its agents, employees, or workmen shall be rectified by the Contractor at its sole expense.

10. QUANTITIES

- a) Unless otherwise specified in this TENDER, quantities shown are approximate and furnished without liability on behalf of the MUNICIPALITY. They are supplied as a basis for comparison only.
- b) Unless otherwise stated, payment will be by the unit complete at the TENDER price on the actual quantities deemed acceptable by the MUNICIPALITY.

11. DISCLOSURE

- a) Submissions of TENDERS as a result of this TENDER are in accordance with the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA).
- b) Release of information contained in the TENDER may be requested by anyone under the MFIPPA unless they contain either a trade secret or information that if disclosed would result in harm to the BIDDER. This would include scientific, technical, financial or labour relations information.
- c) All requests for information must be made in writing and submitted to the MUNICIPALITY'S Clerk.

- d) To prevent the release of information the BIDDER must state that the TENDER is submitted in confidence and indicate the nature of the confidential information and what harm would result from the release.

12. WITHDRAWAL OR QUALIFYING OF TENDERS

- a) If, after submission of a TENDER, a BIDDER receives an addenda issued by the MUNICIPALITY, AND the addenda content does NOT alter the original submission of that TENDER, the BIDDER shall sign the addenda and deliver it to the CLERK'S DEPARTMENT. The addenda shall be in a sealed envelope, which clearly identifies the contents of it.
- b) The envelope shall include the following information: BIDDER'S name (or company name under which the original TENDER was submitted), the appropriate competition document reference and the addenda number.
- c) If after submission of a TENDER, a BIDDER receives an addenda issued by the MUNICIPALITY, and the information contained in the addenda DOES alter the original submission of the BIDDER, the BIDDER shall 'withdraw' its previous submission in accordance with the withdrawal procedures outlined below.
- d) A BIDDER who has already submitted a TENDER may submit a further TENDER at any time up to the deadline for submission. The last TENDER received shall supersede and invalidate all TENDERS previously submitted by that BIDDER for this TENDER.
- e) A BIDDER who has submitted a TENDER may request that its TENDER be withdrawn. (Adjustments or corrections to a TENDER submitted will not be allowed). The withdrawal shall be allowed if the request is made before the deadline for submission. Withdrawal requests must be directed to the MUNICIPALITY'S CLERK'S DEPARTMENT by letter, fax, e-mail or in person. Telephone requests will not be considered. Withdrawals will be handled in accordance with the MUNICIPALITY'S Purchasing By-law.

13. CONTRACT CANCELLATION

- a) The MUNICIPALITY shall have the right to cancel any uncompleted or unperformed portion of the EQUIPMENT, MATERIAL AND/OR SERVICES or part of them. In the event of such cancellation, the MUNICIPALITY and the SUPPLIER shall negotiate a settlement.
- b) The MUNICIPALITY shall not be liable to the Contractor for loss of anticipated profit on the cancelled portion or portions of the CONTRACT. In the event that the Contractor fails or neglects to comply with any condition outlined in the CONTRACT, the CONTRACT may be unconditionally cancelled by the MUNICIPALITY without notice.

14. LAWS AND REGULATIONS

The Contractor shall comply with relevant federal, provincial and municipal statutes, regulations and by-laws pertaining to the CONTRACT and its performance. The Contractor shall be responsible for ensuring similar compliance by its suppliers and SUB-CONTRACTORS. The CONTRACT shall be governed and interpreted in accordance with the laws of the Province of Ontario.

15. DEFAULT BY CONTRACTOR

- a) If the Contractor commits any act of bankruptcy, or if a receiver is appointed on account of its insolvency or in respect of any of its property, or if the Contractor makes a general assignment for the benefit of its creditors; then, in any such case, the MUNICIPALITY may, without notice, terminate the CONTRACT.
- b) If the Contractor fails to comply with any request, instruction or order of the MUNICIPALITY; or fails to pay its account; or fails to comply with or persistently disregard statutes, regulations, by-laws or directives or relevant authorities related to the EQUIPMENT, MATERIAL AND/OR SERVICES; or fails to prosecute the EQUIPMENT, MATERIAL AND/OR SERVICES with skill and diligence; or purports to assign or sublet the CONTRACT or a portion of it without the MUNICIPALITY'S written consent; or refuses to correct defective EQUIPMENT, MATERIAL AND/OR SERVICES; or is otherwise in default in carrying out its part of any of the terms, conditions and obligations of the CONTRACT; then, in any such case, the MUNICIPALITY may, upon expiration of ten days from the date of written notice to the Contractor, terminate the CONTRACT.
- c) Any termination of the CONTRACT by the MUNICIPALITY, as mentioned in b) above, shall be without prejudice to any other rights or remedies the MUNICIPALITY may have.
- d) If the MUNICIPALITY terminates the CONTRACT, it is entitled to:
 - i) withhold any further payment to the Contractor until the completion of the MATERIAL OR SERVICES and the expiry of all obligations under the CONTRACT; and
 - ii) recover from the Contractor any loss, damage and expense incurred by the MUNICIPALITY by reason of the SUPPLIER'S default (which may be deducted from any monies due or becoming due to the Contractor).

16. SAMPLES

Samples when required must be submitted strictly in accordance with the instructions. If samples are requested after opening of TENDERS, they shall be delivered within three (3) working days following request, unless additional time is granted. Samples must be submitted free of charge and will be returned at the BIDDER'S expense, if so requested, provided they have not been destroyed by tests, or provided they are not required for comparison purposes.

The acceptance of samples by the MUNICIPALITY shall be at its sole discretion and any such acceptance shall in no way be construed to imply relief of the Contractor from its obligations under the CONTRACT.

17. ERRORS, OMISSIONS IN THE MUNICIPALITY DOCUMENTS

The MUNICIPALITY shall not be held liable for any errors or omissions in any part of this TENDER. While the MUNICIPALITY has used considerable effort to ensure an accurate representation of information in this TENDER, the information contained in the TENDER is supplied solely as a guideline for BIDDERS. The information is not guaranteed or warranted to be accurate by the MUNICIPALITY, nor is it necessarily comprehensive or exhaustive.

18. AT TIME OF CONTRACT EXECUTION

i) Workplace Safety & Insurance Board

Before the execution of the Contract, and before receiving payments, the BIDDER shall submit a declaration stating that the Contractor has paid all assessments or compensations payable and has otherwise complied with all the requirements of the Workplace Safety and Insurance Board. Prior to commencement of work the Contractor must provide: proof of a WSIB Clearance Certificate (any default in coverage will automatically terminate the working relationship between the Contractor and the County), a complete breakdown of TENDER prices for individual sub-trades and/or major portions of the work, and a schedule of work with expected completion date.

ii) General Liability Insurance

Prior to commencement of work the Contractor must provide proof of \$5,000,000.00 General Commercial General Liability Insurance including coverage for public liability, property damage, all his trucks, vehicles and machines; also, any vehicles or equipment hired by him, and used in connection with this work. The policy shall include a cross-liability provision in favour of The Corporation of the County of Prince Edward. The Corporation of the County of Prince Edward and Jewell Engineering Inc. must be shown as additional insured on the policy.

iii) Automobile/Equipment Insurance

The Contractor will effect at his/her own expense (including the cost of deductibles) and maintain and keep in force during the term of this agreement, automobile/equipment insurance coverage naming The Corporation of the County of Prince Edward and Jewell Engineering Inc. as an insured, including a cross-liability provision in favour of The Corporation of the County of Prince Edward, against claims for personal injury, death, property damage or loss, arising from an accident or occurrence relating to this agreement, in an amount of not less than Five Million Dollars (\$5,000,000.00) in respect of each claim or occurrence. The insurance policy as required herein shall be in force during the terms of the Contract.

Note: The Contractor shall forward with the executed contract documents a certified copy of the policy or certificate thereof to the Engineer for approval before the Contract is executed by the Municipality. The Certificate of Insurance shall provide for 30 days written notice to the Municipality of any intent to cancel the Insurance Policy.

Should the Contractor fail to take out satisfactory policies and to maintain them until the final completion and taking over of the work by the Owner, then the Owner itself may take out the proper policies at the expense of the Contractor.

19. BID DEPOSIT

Contractors shall submit with the Tender a Bid Deposit in the form of Cash, a Certified Cheque, Bank Draft, Money Order or Bid Bond made payable to The Corporation of the County of Prince Edward. The Corporation of the County of Prince Edward reserves the right to retain the number of Bid Deposits it deems necessary until the Contract award is made. The Bid Deposit of the winning tender will be kept until delivery, satisfaction and final acceptance has been met to the approval of The Corporation of the County of Prince Edward. The proceeds of this Bid Deposit shall, upon acceptance of the Tender, constitute a deposit, which shall be forfeited to the Corporation of the County of Prince Edward if the Contractor fails to file, with the Corporation of the County of Prince Edward.

The Tender must be accompanied by Cash ,a Certified Cheque, Bank Draft, Money Order or Bid Bond to be used as a Bid Deposit in accordance with the following:

<u>Total Amount of Bid</u>	<u>Minimum Deposit Required</u>
\$ 50,000.00 or less	\$ 1,000.00
\$ 50,000.01 to \$99,999.99	\$ 5,000.00
\$100,000.00 to \$249,999.99	\$ 10,000.00
\$250,000.00 to \$499,999.99	\$ 25,000.00
\$500,000.00 to \$999,999.99	\$ 50,000.00
\$1,000,000.00 and over	\$ 100,000.00

20. AGREEMENT TO BOND AND PERFORMANCE BONDING

The tender documents must include one of the following three options:

OPTION A. An Agreement to Bond **OR** a completed Performance Bond and Labour and Material Bond each in the amount of 100% of the total Contract Tender amount. If an Agreement to Bond is provided then the completed Performance Bond and Labour and Materials Bond shall be provided within ten (10) days from the date of Acceptance of the Tender from the successful Contractor. The Contractor must obtain and submit a Performance Bond and Labour and Materials Bond signed by a Surety Company, satisfactory to the Corporation of the County of Prince Edward upon execution of the Contract.

OPTION B. A letter from an accredited bank confirming that an irrevocable Letter of Credit in the amount of One Hundred and Fifty Percent (150%) of the Contract Tender amount and prepared in accordance with the requirements of the Municipality shall be

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provided to the Municipality within ten (10) days from the date of Acceptance of the Tender from the successful Contractor. Alternatively the Contractor may provide a Letter of Credit in the amount of One Hundred and Fifty Percent (150%) of the Contract Tender amount at the time of submitting the Tender Documents.

The Letter of Credit shall be for a minimum term of one (1) year and shall provide that the Letter of Credit shall be automatically renewed or extended without the need for written notice from the Municipality requesting such extension.

The Letter of Credit shall be maintained in the full amount until issuance of a Final Acceptance Certificate for the Contract by the Municipality at which time the Contractor shall provide a reduced Letter of Credit in the amount of Twenty-Five Percent (25%) of the Contract Tender amount for the duration of the Warranty Period specified in the Contract. If the reduced Letter of Credit as so noted is not produced by the Contractor within 10 working days from the issuance of the Final Acceptance Certificate, the Contractor will be considered to be in default and the original Letter of Credit will be cashed to provide for the Twenty-Five Percent (25%) Warranty Period requirement

OPTION C. A Certified Cheque **OR** Cash in the amount of One Hundred and Fifty Percent (150%) of the Contract Tender amount. The Certified Cheque or Cash shall be maintained in the full amount until issuance of a Final Acceptance Certificate for the Contract by the Municipality. If Cash is held by the Municipality, Twenty-Five Percent (25%) of the Contract Tender amount shall be retained for the Warranty Period and the balance returned to the Contractor. If a Certified Cheque is held by the Municipality the Contractor shall provide a Certified Cheque in the amount of Twenty-Five Percent (25%) of the Contract Tender amount for the duration of the Warranty Period specified in the Contract. If the reduced Certified Cheque as so noted is not produced by the Contractor within 10 working days from the issuance of the Final Acceptance Certificate, the Contractor will be considered to be in default and the original Certified Cheque will be cashed to provide for the Twenty-Five Percent (25%) Warranty Period requirement.

21. HEALTH AND SAFETY REQUIREMENTS

The Contractor will be required to comply with the following Health and Safety requirements prior to the Preconstruction Meeting with the County:

a) The Contractor is to provide signed copies of the following:

1. "CONTRACTORS ACKNOWLEDGEMENT OF HEALTH AND SAFETY POLICY REQUIREMENTS", (form in the Tender documents)
2. The Contractor's Health and Safety Policy
3. "CONTRACTORS ACKNOWLEDGEMENT OF TRAFFIC CONTROL", (form is in the Tender documents)
4. WSIB Clearance Certificate (no more than 60 days old)
5. M of L "Notice of Project"
6. M of L "Registration of Constructors and Employees Engaged in Construction"
7. Up to date liability insurance certificate (Company listed as certificate holder with a minimum 5 million coverage and coinsure PEC with 30 day written cancellation notice)

8. MSDS for any WHMIS controlled products

b) The Contractor is advised of the following:

1. All occupational injuries that occur on County property must be reported immediately to the County Project Coordinator.
2. Contractor to notify Emergency Services that may be affected ie. Police, Fire, Ambulance, School Board
3. It is the Contractor's responsibility to ensure that their employees possess and use all the required PPE for their work.
4. The County will forward a copy of their Equipment Lockout Policy/Procedure to the Contractor (if applicable).

22. ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT

In accordance with Ontario Regulation 429/07, Accessibility Standards for Customer Service every provider of goods and services shall ensure that every person who deals with a member of the public or participates in the developing of the County's policies, practices and procedures governing the provision of goods and services to members of the public, shall be trained as follows:

1. How to interact and communicate with persons with various types of disability
2. How to interact with persons with disabilities who use assistive devices or require the assistance of a guide animal, or a support person
3. How to use equipment that is available on the premises that may help in the provision of goods or services.
4. What to do if a person with a particular type of disability is having difficulty accessing the provider's goods or services
5. Information on the policies, practices and procedures governing the provision of goods and services to people with disabilities

Contract employees, third party employees, agents and others who deal with members of the public on behalf of the County of Prince Edward must meet the requirements of Ontario Regulation 429/07 with regard to training. If a training policy is not yet in place, please go the following link, complete the training module and provide a copy of the Certificate to the County of Prince Edward.

<http://www.mcsc.gov.on.ca/mcsc/serve-ability/splash.html>

AGREEMENT

THIS AGREEMENT made in triplicate this _____ day of _____, 2019.

BETWEEN: _____

hereinafter called the “Contractor”

THE PARTY OF THE FIRST PART

- AND -

THE CORPORATION OF THE COUNTY OF PRINCE EDWARD

Hereinafter called the “Owner”

THE PARTY OF THE SECOND PART

WITNESSETH, that the party of the first part, for and in consideration of the payment or payments specified in the Tender for this work, hereby agrees to furnish all necessary machinery, tools, equipment, supplies, labour and other means of construction and, to the satisfaction of the Engineer, to do all the work as described hereafter, furnish all the materials except as herein otherwise specified, and to complete such works in strict accordance with the plans, specifications and Tender heretofore, which are identified and acknowledged in the Schedule of Provisions, Plans, Specifications and Conditions attached to the Tender and all of which are to be read herewith and form part of this present Agreement as fully and completely to all intents and purposes as though all the stipulations hereof have been embodied herein.

DESCRIPTION OF THE WORK:

This Contract is called for the Reconstruction of portions of Talbot Street and Lake Street, having an approximate job length of 860m. The project limits shall commence approximately 280m south of the Millennium Trail and progress southerly to West Mary Street. Typical works shall involve full depth asphalt removals, concrete curb removals / replacements, concrete sidewalk removals / replacements, underground sanitary sewer main removal / replacement, underground storm sewer main removal / replacement, underground watermain removal / replacement, concrete structures associated with underground infrastructure removal / replacements, roadway excavations (earth and rock), granular roadbase construction, hot mix paving, intersection traffic signalization removal / replacement, and roadway pavement markings.

The Contractor further agrees that he will deliver the whole of the works completed in accordance with this Agreement and within the time stipulated being from May 1, 2019 to October 31, 2019.

The Contractor agrees that any monies due to the Owner as a result of non-completion of the works within the time stipulated may be deducted from any monies due the Contractor on any account whatsoever.

IN CONSIDERATION WHEREOF, said party of the second part agrees to pay the Contractor for all work done at the unit prices on the Tender.

This agreement shall inure to the benefit of and be binding upon the heirs, executors, administrators and assigns of the parties hereto.

IN WITNESS THEREOF, the Contractor and the Owner have hereunto signed their names and set their seals on the day first above written, or caused their corporate seals to be affixed, attested by the signature of their proper officers, as the case may be.

(
(
SIGNED and SEALED by the Contractor (_____

(
(
In the presence of (_____
(

(
(
SIGNED and SEALED by the Purchaser (_____
(Mayor, Steve Ferguson

(
(
In the presence of (_____
(Clerk, Kim White

MEMORANDUM OF AGREEMENT

I, We, _____, the undersigned hereby acknowledge and agree

to meet or exceed health and safety requirements included in all Legislative Acts and Regulations (including, but not limited to, The Occupational Health and Safety Act, The Pesticides Act, The Explosives Act of Canada, The Workers' Compensation Act and Workplace Hazardous Materials Information System), as amended, and that failure to abide by these acts and regulations may result in the Corporation's issuance of a stop work order, and, in the case of a repetitive infraction, dismissal and cancellation of the contract or purchase order.

Furthermore, I accept that I or any worker in my employ found to be in violation of the Occupational Health and Safety Act in respect of failure to wear protective clothing such as protective headwear, protective footwear, or approved safety vest may be dismissed without prior notification. In such an event, I concur that the Corporation shall not be liable for any costs incurred by me as a direct result of such dismissal.

Dated this ____ day of _____, 2019.

(Signature of Contractor)

(Witness)

(Authorized Corporation of the County of Prince Edward Representative)

(THIS FORM SHALL BE COMPLETED AND SUBMITTED WITH THE TENDER)

FORM OF TENDER

Company Name/Address: _____

_____ Phone No. _____ Fax No.

TO: The Corporation of the County of Prince Edward

- 1. I/WE declare that no person, firm or corporation other than the one whose signature or the signature of whose proper officers seal is or are attached below, has any interest in this tender or in the Contract Proposed to be taken.**

- 2. I/WE further declare that this tender is made without any connection, knowledge, comparison of figures or arrangement with any other company, firm or person making a tender for the same work and is in all respects fair and without collusion or fraud.**

- 3. I/WE further declare that no member or employee of the Corporation of the County of Prince Edward or of the Contract Administrator is, or will become interested directly or indirectly as a contractor in the supplies, work or business to which is relates or in any portion of the profits thereof, or of any such supplies to be used therein or in any of the monies to be derived therefrom.**

- 4. I/WE further declare that the several matters stated in the said tender are in all respects true.**

- 5. I/WE further declare that I/WE have carefully examined the locality and site of the proposed works, as well as all the Drawings, Form of Tender, Information for Tenderers, Specifications, Special Provisions, General Conditions, Agreement and Bond relating to the said Contract, and hereby acknowledge the same to be part and parcel of any contract to be let for all work therein described or defined and do hereby tender and offer to enter into a contract to do all of the work and to provide all of the labour and to provide, furnish, deliver, place and erect all materials mentioned and described or implied therein including in every case freight, duty, exchange and Federal and Provincial Sales Tax and other charge son the terms and conditions and under the provisions therein set forth and to accept in full payment therefore, the sums calculated in accordance with the actual measured quantities and unit prices set forth in the tender herein as follows.**

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- 6. I/WE agree that this offer is to continue open to acceptance until the formal contract is executed by the successful Tenderer for the said work or until 40 days after the said opening, whichever event first occurs; and that the Owner may at any time within that period, without notice, accept this tender whether any other tender had been previously accepted or not.
- 7. Attached to this Tender is a certified cheque or Bid Bond in the amount specified in the "Bid Deposit" section made payable to the Owner, the proceeds of which shall be forfeited to the Owner if I/WE fail to file with the Owner the completed Performance and Labour and Material Bond specified in the "Bid Deposit" section and an executed form of Agreement for the performance of the work within ten (10) days from the date of notification of the acceptance of this tender by the Corporation.
- 8. I/WE hereby agree that the Owner may reject any or all Tenders without explanation and the lowest Tender will not necessarily be accepted.
- 9. I/WE hereby agree that if this Tender is withdrawn by the undersigned before the Contract is executed by the successful tenderer or before a period of Seventy (70) days commencing on the Date of Closing of Tenders, whichever event first occurs, the amount of deposit accompanying this Tender shall be forfeited to the Owner.
- 10. I/WE hereby agree that notification of acceptance of this tender shall be in writing, and may be sent by prepaid post, and if sent by prepaid post, acceptance shall be deemed to have been made on the date of mailing of such notification.
- 11. I/WE hereby agree that the work specified in the contract will be performed in strict accordance with the Special Provisions, Plans, Standard Specifications and General Conditions.

Name of Firm

Witness

Signature of Contractor

Contact Person – Please Print

Dated at _____ this _____ day of _____,
2019.

(THIS FORM SHALL BE COMPLETED AND SUBMITTED WITH THE TENDER)

SCHEDULE OF ITEMS & PRICES

The Contractor hereby offers to complete the work specified for Contract No. 2019-EDW-09 for the following unit prices.

The Owner reserves the right to delete any part without cost to the Owner when it is deemed in the best interest of the Owner to do so. The Owner reserves the right to select the lowest Total Cost after deletion of parts when the Owner's budget does not allow completion of all work tendered. Lowest or any tender not necessarily accepted.

RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'A' – ROADWAY WORKS					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
A1	SP #1	Mobilization / Demobilization	Lump Sum		
A2	805 SP#2	Environmental Protection	Lump Sum		
A3	706 SP#3	Traffic Control Devices	Lump Sum		
A4	206, 180, 510 SP#4	Earth Excavation and Grading (Roadway)	7,425 cu.m.		
A5	206, 180, 510 SP#5	Earth Excavation and Grading (Boulevards)	Lump Sum		
A6	180, 206, 510 SP#6	Removal and Disposal of Excess Surplus Material	9,610 cu.m.		
A7	180, 510 SP#7	Removal of Asphalt Pavement (Full Depth)	10,965 sq.m.		
A8	180, 510 SP#8	Removal of Existing Concrete Sidewalks	1,055 sq.m.		
A9	180, 510 SP#9	Removal of Existing Concrete Curb and Gutter	1,640 m		
A10	405 SP#10	150mm Perforated Subdrains	2,070 m		
A11	314, 1010 SP#11	Granular 'B' – Type II	13,100 tonne		

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RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'A' – ROADWAY WORKS (continued)					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
A12	314, 1010 SP#12	Granular 'A' – (Quarried)	8,400 tonne		
A13	314, 1010 SP#13	Selected Subgrade Material (Imported)	1,000 cu.m.		
A14	310, 311, SP#14	Hot Mix Asphalt – HL8 Base Course Including PG Asphalt Cement	1,510 tonnes		
A15	310, 311, SP#15	Hot Mix Asphalt – HL3 Surface Course Including PG Asphalt Cement	1,325 tonnes		
A16	310, 311 SP#16	Miscellaneous Hot Mix Placement	810 sq.m.		
A17	904 SP#17	Concrete Retaining Wall OPSD 3120.100	45 m		
A18	353 SP#18	Concrete Curb and Gutters (All Types)	2,070 m		
A19	353 SP#18	Concrete Curb and Gutter – Termination and Outlets	8 each		
A20	351 SP#19	Concrete Sidewalks OPSD 310.010	1,935 sq.m.		
A21	351 SP#19	Concrete Sidewalks OPSD 310.010 (Station 0+470 to 0+580, Rt of CL)	165 sq.m.		
A22	351 SP#19	Concrete Sidewalks OPSD 310.010 (Station 0+305 to 0+500, Lt of CL)	293 sq.m.		
A23	351 SP#19	Concrete Sidewalk Ramps Complete With Tactile Walking Indicators	24 each		
A24	180, 206, 510 SP#20	Removal of Existing Trees	5 each		

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RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'A' – ROADWAY WORKS (continued)					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
A25	802, 803 SP#21	Imported Topsoil and Nursery Sod	2,700 sq.m.		
A26	710 SP#22	Pavement Markings	Lump Sum		
A27	310 SP#23	Asphalt Indexing	Lump Sum	\$15,000.00	\$15,000.00
A28	1359 SP#24	Supply and Placement of Unshrinkable Backfill – 0.4 Mpa	20 cu.m.		
A29	506 SP#25	Dust Supressants	Lump Sum		
A30	SP#26	Pre / Post Construction Property Inspections	Lump Sum		
A31	180, 510 SP#51	Removal and Disposal of Excavated Hazardous Materials	500 cu.m.		
SUB-TOTAL – PART 'A' Carry forward to page 35)					

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RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'B' – STORM SEWERS					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
B1	180, 510 SP#27	Removal of Existing Storm Sewers (All Sizes)	695 m		
B2	180, 510 SP#28	Removal of Existing Storm Sewer Structures (All Sizes)	20 each		
B3	401, 410 SP#29	300mm PVC SDR35 Storm Sewer Pipe	275 m		
B4	401, 410 SP#29	375mm PVC SDR35 Storm Sewer Pipe	255 m		
B5	401, 410 SP#29	450mm PVC SDR35 Storm Sewer Pipe	170 m		
B6	401, 410 SP#29	600mm PVC SDR35 Storm Sewer Pipe	31 m		
B7	402, 407 SP#30	Precast Concrete Single Inlet Catch Basin as per OPSD 705.010 c/w Frame and Grate as per OPSD 400.010	15 each		
B8	402, 407 SP#30	Precast Concrete Ditch Inlet Catch Basin as per OPSD 705.030 c/w Frame and Grate as per OPSD 403.010 (Flat)	3 each		
B9	402, 407 SP#31	Precast Concrete Maintenance Hole (1200mm) as per OPSD 701.010 c/w Frame and Grate as per OPSD 401.010	12 each		
B10	402, 407 SP#31	Precast Concrete Maintenance Hole (1500mm) as per OPSD 701.011 c/w Frame and Grate as per OPSD 401.010	2 each		
B11	180, 510 403 SP#32	Rock Excavation Storm Sewer Trench Installations	100 cu.m.		

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RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'B' – STORM SEWERS (continued)					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
B12	410 SP#33	Connect to Existing Storm Sewer System	6 each		
B13	401, 410 SP#50	750mm RCP, Class 65-D Storm Sewer Pipe	24 m		
SUBTOTAL – PART 'B' (Carry forward to page 35)					

Contract No.: 2019-EDW-09

RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'C' – SANITARY SEWERS					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
C1	180, 510 SP#34	Removal of Existing Sanitary Sewers (All Sizes)	545 m		
C2	180, 510 SP#35	Removal and Disposal of Existing Sanitary Sewers – Asbestos Cement Pipe	50 m		
C3	180, 510 SP#36	Removal of Existing Sanitary Sewer Structures (All Sizes)	10 each		
C4	401, 410 SP#37	200mm PVC SDR35 Sanitary Sewer Pipe	20 m		
C5	401, 410 SP#37	250mm PVC SDR35 Sanitary Sewer Pipe	790 m		
C6	401, 410 SP#37	250mm PVC SDR35 Sanitary Sewer Pipe (Station 0+295 to 0+530)	235 m		
C7	401, 410 SP#38	125mm PVC SDR28 Sanitary Service Lateral c/w cleanout	400 m		
C8	402, 407 SP#31	Precast Concrete Maintenance Hole (1200mm) as per OPSD 701.010 c/w Frame and Grate as per OPSD 401.010	14 each		
C9	410 SP#33	Connect to Existing Sanitary Sewer System	8 each		
C10	180, 510 403 SP#32	Rock Excavation Sanitary Sewer Trench Installations	645 cu.m.		
C11	SP#39	By-Pass Sanitary Sewer Pumping	Lump Sum		
SUBTOTAL – PART 'C' (Carry forward to page 35)					

Contract No.: 2019-EDW-09

RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'D' – WATERMAINS					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
D1	180, 510 SP#40	Removal of Existing Watermains (All Sizes)	200 m		
D2	180, 510 SP#41	Abandon Existing Watermain	650 m		
D3	180, 510 SP#42	Removal of Existing Fire Hydrants	5 each		
D4	401, 441 SP#43	200mm PVC SDR18 Watermain	405 m		
D5	401, 441 SP#43	200mm PVC SDR18 Watermain (Station 0+280 to 0+530)	235 m		
D6	401, 441 SP#43	250mm PVC SDR18 Watermains	430 m		
D7	401, 441 SP#44	200mm Gate Valve	13 each		
D8	401, 441 SP#44	250mm Gate Valve	11 each		
D9	401, 441 SP#45	Fire Hydrant Assembly as per OPSD 1105.010	7 each		
D10	401, 441 SP#46	Sampling Station	1 each		
D11	401, 441 SP#47	19mm Polyethelene / Copper Water Services	400 m		
D12	401, 441 SP#47	19mm Curb Stops	35 each		
D13	401, 441 SP#47	19mm Main Stops	35 each		
D14	493 SP#48	Temporary Water Supply	Lump Sum		

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RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'D' – WATERMAINS (continued)					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
D15	401, 441 SP#49	Connect to Existing Watermain	11 each		
D16	180, 510 403 SP#32	Rock Excavation Watermain Trench Installations	175 cu.m.		
SUBTOTAL – PART 'D' (Carry forward to page 35)					



CORPORATION OF THE COUNTY OF PRINCE EDWARD
CONTRACT No. 2019-EDW-09
RECONSTRUCTION OF TALBOT STREET
AND LAKE STREET

Bidders are advised that Part 'E' under this Tender is currently being finalized.

All design drawings and bidding information pertaining to this section will be issued under Addendum No. 1 of this Contract.

Contract No.: 2019-EDW-09

RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'E' – ELECTRICAL WORKS					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
E1					
E2					
E3					
E4					
E5					
E6					
E7					
E8					
E9					
E10					
E11					
E12					
E13					

Contract No.: 2019-EDW-09

RECONSTRUCTION OF TALBOT STREET AND LAKE STREET SECTION 'E' – ELECTRICAL WORKS (continued)					
ITEM NO.	OPSS SPEC. NO.	DESCRIPTION	ESTIMATED QUANTITY (UNIT)	UNIT PRICE	AMOUNT
E14					
E15					
SUBTOTAL – PART 'E' (Carry forward to page 35)					

BID SUMMARY

SUB-TOTAL – PART ‘A’	
HST	
TOTAL – PART ‘A’	
SUB-TOTAL – PART ‘B’	
HST	
TOTAL – PART ‘B’	
SUB-TOTAL – PART ‘C’	
HST	
TOTAL – PART ‘C’	
SUB-TOTAL – PART ‘D’	
HST	
TOTAL – PART ‘D’	
SUB-TOTAL – PART ‘E’	
HST	
TOTAL – PART ‘E’	
TOTAL – ALL PARTS	

(THIS FORM SHALL BE COMPLETED AND SUBMITTED WITH THE TENDER)

REFERENCE INFORMATION

BIDDERS are required to provide three (3) references listing contracts similar to the project described in this TENDER and undertaken within the past three (3) years.

- 1) NAME (Company/Government Agency) _____
 Contract Description _____
 Contact Person _____
 Phone Number () _____ Fax Number: () _____
 E-Mail Address (if available): _____
 Number of Years at Location: ___ Value of Contract: \$ _____

- 2) NAME (Company/Government Agency) _____
 Contract Description _____
 Contact Person _____
 Phone Number () _____ Fax Number: () _____
 E-Mail Address (if available): _____
 Number of Years at Location: _____ Value of Contract: \$ _____

- 3) NAME (Company/Government Agency) _____
 Contract Description _____
 Contact Person _____
 Phone Number () _____ Fax Number: () _____
 E-Mail Address (if available): _____
 Number of Years at Location: _____ Value of Contract: \$ _____

The MUNICIPALITY reserves the right to check additional references and sources to those supplied by the BIDDER.

Company/BIDDER

Authorized Signature

(THIS FORM SHALL BE COMPLETED AND SUBMITTED WITH THE TENDER)

CONTRACTOR'S ACKNOWLEDGEMENT OF TRAFFIC CONTROL

As required herein I/We, the undersigned agree to provide all traffic control as required in accordance with the Ontario Traffic Manual, Temporary Conditions, Book 7 and related safety acts for all work on all roads as required in this Contract.

CONTRACTOR'S NAME (PLEASE PRINT)

SIGNATURE

DATE

(THIS FORM SHALL BE COMPLETED AND SUBMITTED WITH THE TENDER)

**CONTRACTOR'S ACKNOWLEDGEMENT OF HEALTH AND
SAFETY POLICY REQUIREMENTS**

As required herein I/We, the undersigned agree to provide all health and safety as required in accordance with MOL and related safety acts for all work on all roads as required in this Contract.

CONTRACTOR'S NAME (PLEASE PRINT)

SIGNATURE

DATE

(THIS FORM SHALL BE COMPLETED AND SUBMITTED WITH THE TENDER)

CONTRACTOR'S ACKNOWLEDGEMENT OF
Accessibility for Ontarians with Disabilities Act (AODA)
Accessible Customer Service Training

Company Name : _____

I acknowledge that all staff employed by _____ who may undertake any duties and interact with any persons with disabilities, in the course of this company's contractual obligations with The County of Prince Edward, have reviewed a Service Ontario video/ on-line training course outlining the Accessibility for Ontarians with Disabilities Act (AODA) regulations.

As a principle of the contractor employed by The County of Prince Edward, I understand the municipality's requirements to comply with the Customer Service Standard. I will ensure that all future staff hired to assist with this company's contractual obligations will receive similar training as soon as they are hired, to meet these ongoing requirements.

Name: _____

Signature: _____

Date: _____

(THIS FORM SHALL BE COMPLETED AND SUBMITTED WITH THE TENDER)

**CONTRACTOR'S UNDERTAKING FOR PROVISION OF
INSURANCE**

As required herein I/We, the undersigned agree and covenant to forthwith provide the Municipality with written notice of any lapse, alteration or cancellation, or receipt of any notice of pending lapse, alternation or cancellation thereof, of any policy of insurance provided to the Municipality as required in this contract.

CONTRACTOR'S NAME (PLEASE PRINT)

SIGNATURE

DATE

(THIS FORM SHALL BE COMPLETED AND SUBMITTED WITH THE TENDER)

AGREEMENT TO BOND

OBLIGEE: THE CORPORATION OF THE COUNTY OF PRINCE EDWARD

We, the undersigned, hereby agree to become bound as Surety for

in a bonding totaling One Hundred Percent (100%) of the Contract amount and conforming to the Instruments of the Contract attached hereto for the full and due performance of the works shown as described herein if the Tender for CONTRACT NO. 2018-EDW-24 for The Corporation of the County of Prince Edward is accepted by the above named obligee.

It is a condition of this Agreement that if the above-mentioned Tender is accepted, application for a Performance and Labour and Material Bond must be completed with the undersigned within ten (10) days of acceptance of the tender related thereto, otherwise this Agreement shall be null and void.

Dated at _____ this _____ day of _____,
_____.
Year

Name of Bonding Company

**Signature of Authorized Person
Signing for Bonding Agency**

Position

(Company Seal)

(THIS FORM OR EQUIVALENT SHALL BE COMPLETED AND SUBMITTED WITH THE TENDER)

SAMPLE PERFORMANCE AND LABOUR AND MATERIAL BOND

Bond No. _____ Amount _____

KNOW ALL MEN BY THESE PRESENTS, that we _____

hereinafter called the “Principal” and

hereinafter called the “Surety”, are

jointly and severally held and firmly bound unto _____

hereinafter called the “Obligee”, each

in the sum of _____ Dollars (\$ _____).

of lawful money of Canada, to be paid to the said Obligee or to its successors or assigns, for which payment will and truly be made, we jointly and severally bind ourselves, and each of our several and respected heirs, executors, administrators and successors, and every one of them forever, firmly by these presents.

SEALED with our several and respective seals.

DATED this _____ day of _____

in the year of our Lord, two thousand and ten.

WHEREAS by a certain Agreement dated the _____ day of _____, _____, the Principal has contracted and agreed with the said Obligee to in the said Agreement and in the Tender, Articles of Agreement, Plans, Profiles and Specifications annexed to or forming part of the said Agreement, more particularly mentioned and described, all of which are herein called the Contract, at the price and upon the terms and conditions as in the Contract more fully set forth having been required to furnish good and sufficient security for the due and proper fulfillment of the contract, the Surety has consented to become such security, and to execute these Presents.

NOW THE CONDITION of the above obligation is such that if the Principal shall well, truly and faithfully, in all respects, perform, execute and carry out the Contract, and all the terms and conditions thereof to the satisfaction of the said Obligee and shall maintain and keep in good working order and complete repair the whole of the work performed under the Contract, including any extra work which may be ordered pursuant thereto, for the period in the contract mentioned, and shall then forthwith hand over the same to the Obligee completed and in perfect order and repair, as in the Contract provided, and shall at all times indemnify and

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keep indemnified the Obligee and all the Officers, servants and agents thereof from all loss, damage, expense, suits, claims, liens and demands arising out of the Contract or incurred by reason of the execution of the said work, or the supply of material therefore, according to the terms of the Contract, then this obligation shall be null and void, but otherwise shall be and remain in full force and virtue.

AND it is hereby declared and agreed that the above-bonded Surety shall be liable as Principal and nothing of any kind or matter whatsoever, that will not discharge the said Principal, shall operate as a discharge or release of liability of Surety to the contrary notwithstanding, and that this obligation may be signed before or after the signing of the contract and shall be all binding by all signing this obligation whether separately, singly or jointly, and whether or not all mentioned herein sign or do not sign, and notwithstanding that the work herein mentioned shall have been begun or been completed, and whether the said Contract or this obligation shall have been legally or properly signed by any other party hereto.

SIGNED, SEALED AND DELIVERED
In the presence of

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)_____
)

SPECIAL PROVISIONS

1. SCOPE OF WORK

This Contract is called for the Reconstruction of portions of Talbot Street and Lake Street, having an approximate job length of 950m. The project limits shall commence approximately 280m south of the Millennium Trail and progress southerly to West Mary Street. Typical works shall involve full depth asphalt removals, concrete curb removals / replacements, concrete sidewalk removals / replacements, underground sanitary sewer main removal / replacement, underground storm sewer main removal / replacement, underground watermain removal / replacement, concrete structures associated with underground infrastructure removal / replacements, roadway excavations (earth and rock), granular roadbase construction, hot mix paving, intersection traffic signalization removal / replacement, and roadway pavement markings.

The Engineer shall have the right, at any time before or during the prosecution of work, or before or after the execution of the Contract, to make, or order in writing, any alterations or changes deleting, extending, increasing, decreasing, varying or otherwise altering any lines, grades, forms, dimensions, methods, plans or materials, omissions of any portion or portions of the work, variations in any other way the works contracted for, or to order any additional or extra work to be done or extra material to be furnished. The Contractor shall proceed with and carry out the work as directed and/or supply such materials as directed, and shall do so without being entitled to any additional payment on account of any changes in work or materials except as otherwise provided. The Contractor shall proceed with work without delay and, if he is of the opinion he is entitled to additional compensation, shall make a written claim for additional compensation. If, in the opinion of the Engineer, such order or change materially increases or decreases the cost of the work or material from that on which the Contractor based his bid, other than estimated quantities, the Engineer, in his sole discretion, may increase or decrease the Contract price by an amount or amounts he, in his sole discretion, considers appropriate. The Engineers decision shall be final.

2. DEFINITION OF OWNER AND ENGINEER

Wherever the word "Owner", "Corporation", "Municipality", or "Township" appears in this Contract, it shall be interpreted as meaning the Corporation of the County of Prince Edward.

Wherever the word "Engineer" or "Contract Administrator" appears it shall be deemed to mean Jewell Engineering Inc., as their interests may apply.

3. GOVERNMENTAL REQUIREMENTS

The Contractor shall obey all Federal, Provincial and Municipal Laws, Acts, Ordinances, Regulations, Orders-in-Council and By-laws, which could in any way pertain to the work outlined in the Contract or to the Employees of the Contractor.

4. NOTICE TO CONTRACTORS - EMPLOYMENT

The Contractor and any Sub-Contractor of the Contractor will, respective of the construction to be carried out under this contract,

1. In employing persons, refrain from discriminating against any person by reason of his/her race, religious views or political affiliations.

5. PAYMENT OF WORKERS

The Contractor shall pay all non-skilled workers employed by him/her at the site of the work a wage that shall be the Ministry of Labor's current Fair Wage Scale for Roads and Structures.

In the event the Contractor assigns the performance of any of his/her obligations at the site of the work to a sub-contractor, then any such assignment of work to a sub-contractor shall contain a provision obligating the sub-contractor to abide by the provisions of the preceding paragraph with respect to non-skilled workers employed by him/her at the site of the work.

6. GUARANTEED MAINTENANCE

Section GC7.15.02 of the General Conditions is amended as follows:

The Contractor shall maintain the works and every part thereof in such condition as will meet the approval of the Engineer for a period of twelve (12) months from the date of substantial completion for each stage thereof, ordinary wear and tear excepted.

The Contractor shall make good, at his own expense in a permanent manner, satisfactory to the Engineer, any imperfections that may appear or defects that may be discovered in the works due to materials and/or workmanship during the said period as determined by the Engineer. The Contractor shall commence repairs on any work identified as defective under this clause within 48 hours of receipt of notice from the Owner.

7. ENVIRONMENTAL CONSIDERATIONS

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

The Contractor shall confine his operations within the limits of the project. All activities shall be confined to the areas requiring actual construction as per the project plans. If additional areas are required by the Contractor for storage, or for other construction purposes, the Contractor may obtain such additional area by agreement with the proprietor of the property, without additional cost to the Owner. The Contractor shall provide, to the Engineer, a certified copy of all agreements for the use of private property. The contractor shall pay for all rentals and costs of repairs, where necessary, in connection with the use of private property.

The entire site shall be restored to a state equal to or better than original conditions.

8. RESTORATION OF WORK AREAS

Unless construction or restoration of all work areas are included in the contract under specific tender items, the Contractor shall restore all work areas to their previous condition to the satisfaction of the Engineer (i.e. Grass areas will be sodded, paved areas will be asphalted, etc.). No additional compensation will be allowed for this restoration.

9. PROPERTY BARS

The Contractor shall protect all property bars during construction. Prior to the acceptance of the work by the Owner, the Contractor, at his/her own expense, shall have an Ontario Land Surveyor replace any bars that were destroyed or disturbed during construction.

10. CO-ORDINATION OF MEETINGS

The Contractor shall attend such meetings with Municipal and Utility Company Authorities as may be required by the Engineer to co-ordinate services affected by the Contract.

11. INSURANCE, PROTECTION AND DAMAGE

Paragraph .01 of Subsection GC 6.03.02 - General Liability Insurance is deleted and replaced by the following;

.01 The Contractor shall take out and keep in force, until the date of acceptance of the entire work by the Owner, a comprehensive policy of public liability and property damage insurance, acceptable to the Owner, providing insurance coverage, in respect of any one accident to the limit of at least \$5,000,000.00 exclusive of interest and cost, against loss or damage resulting from bodily injury to, or death of, one or more persons and loss of or damage to property. The policy shall name Prince Edward County and Jewell Engineering Inc. as additional insured there under and shall indemnify them and their representatives from and against all claims, demands, loss, costs, damage or injury including death to any person or persons and for damage to any property of the Municipality or any other public or private property resulting from or arising out of any act or omission on the part of the Contractor or any of his servants or agents during the execution of the contract. The Contractor shall forward with the executed contract documents a certified copy of the policy or certificate thereof to the Owner before the work is started.

12. MANAGEMENT AND DISPOSAL OF EXCESS MATERIALS

All excess material not required to complete the work will be disposed of by the Contractor at the Contractor's sole expense.

The Contractor must make appropriate provisions (be it cost, scheduling or otherwise) for the management and disposal of excess material. The Contractor shall make themselves aware of all expectations and requirements in this regard.

The Province of Ontario's Management of Excess Soil – A guide for Best Management Practices (appended); local Ministry of Environment office; or otherwise shall be consulted as necessary to ensure their requirements are satisfied as part of this work.

If the receiver is a licenced landfill, prior to the start of construction, the County is to be provided written confirmation of where the material will be disposed, that they are able to receive the amount of material anticipated and that they are suitably licenced to receive the type of material anticipated.

If the receiver is not a licenced landfill, prior to the start of construction, the Contractor shall provide the County with a Ministry approved Fill Management Plan, completed by a Qualified Person which will be followed by the contractor for the duration of the contract. All costs associated with the execution of the Fill Management Plan will be the responsibility of the Contractor.

As part of its pre-engineering geotechnical study, the County has arranged for environmental analytical laboratory testing on certain soil samples taken from this proposed project. The testing was completed to assist the Contractor with determining the disposal requirements for excess material. The results of the testing are included in the report included as part of this tender document. The Contractor shall, at its own cost, undertake any additional sampling and laboratory testing it believes is necessary to ensure that the transportation, disposal and management of excess materials from this project is carried out in accordance with current Provincial regulations and guidelines.

13. PREVENTION OF DAMAGE

The failure of the Engineer to order necessary precautionary measures, protective work or any other requirements shall not relieve the Contractor of the responsibility for the prevention of damage to the project, buildings, or other surface or sub-surface structures, or for accidents to persons, whether employed on the project or not, which might result from such failure to install, place or use such precautionary measures, protective work or other requirements. Furthermore, the fact that the Engineer does or does not order precautionary measures, protective work or other requirements shall not relieve the Contractor from any of his/her responsibilities under this contract.

14. PROTECTION OF EXISTING ELEMENTS AND PRIVATE PROPERTY

The Contractor shall be responsible for the protection of all utilities, fences, mailboxes, signs, and other elements not designated for removal and the protection of private property at the job site during the time of construction. Storage of excavated materials shall be such that deposition onto private property will not take place without the necessary approvals.

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

15. PROTECTION OF ADJACENT STRUCTURES

The Contractor shall in the manner specified, sustain in their places and protect from injury any and all water or gas mains, public or private sewers or drains, conduits, service pipes, sidewalks, fences, retaining

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walls, curbs and all other structures or property in the vicinity of his work, whether over or underground, or which appear in the excavation and he shall assume all costs and expenses for damage which may be occasioned by injury to any of them. The support of any water mains shall be to the satisfaction of the Contract Administrator.

Before excavation commences, the Contractor shall have the location of all underground utilities staked out by the appropriate Utility Company. The location of utilities shown on the Contract Drawings (if any) is in accordance with the best information available but the Owner does not guarantee the accuracy or the completeness. It is the Contractor's responsibility to contact the various Utilities for further information.

16. DUST SUPPRESSION – AMMENDMENT TO OPSS 506

OPSS 506, May 1994 - Construction Specification for Dust Suppressants is amended as follows;

506.07 Construction

Subsection 506.07.01 of OPSS 506 is amended by the addition of the following;

The Contractor shall take such steps as may be necessary to prevent dust nuisance resulting from his operation either within the right-of-way or elsewhere or by public traffic where it is the Contractor's responsibility to maintain a road through the work.

Where the work requires the sawing of asphalt or the sawing or grinding of concrete, blades and grinders of the wet type shall be used together with sufficient water to prevent the incidence of dust wherever dust would affect traffic or wherever dust would be a nuisance to residents of the area where the work is being carried out.

The cost of all such preventative measures shall be borne by the Contractor including the application of water and calcium chloride, to the satisfaction of the Contract Administrator. No additional payment outside of bid pricing shall be made for dust suppression requirements.

17. HAUL ROADS

The maintenance and restoration of all haul roads required for this contract shall be the responsibility of the Contractor and no additional payment will be made.

18. TRAFFIC CONTROL - GENERAL

Construction operations shall be carried out in such a manner as to maximize safety and minimize disruption to traffic flow and operation.

Prior to construction, the Contractor shall submit a Construction Staging and Traffic Control Plan for work within the Contract to the Contract Administrator for review and approval.

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Temporary concrete barriers, flashing beacons, and temporary traffic control devices shall be installed and maintained to the satisfaction of the Contract Administrator during all shutdown times including evenings and weekends where an excavation is left open.

The Contractor shall follow the Ontario Traffic Manual (OTM) and shall be responsible for temporary lane closures.

The Contractor shall provide all construction and traffic control signage (as per the OTM) and flagmen to protect workmen and the public to the satisfaction of the Contract Administrator. Flagmen shall be at the Contractor's expense and shall be on duty continuously unless otherwise directed by the Contract Administrator.

At no time during the course of construction will the Contractor be permitted to close the road to access unless authorized in writing by the Contract Administrator. A minimum of one lane shall be kept open at all times unless authorization in writing, signed by the Contract Administrator, has been received by the Contractor. Access to all properties must be maintained throughout construction.

19. TRAFFIC CONTROL - FLAGGING

Flagging for traffic control on this Contract shall be in conformance with the procedure outlined in the Ontario Traffic Manual (OTM) Book 7 – Temporary Conditions.

Prior to construction, the Contractor shall submit to the Contract Administrator C.S.A. Ontario certificates for each flag person to be employed throughout the project duration.

20. PROTECTION OF PUBLIC TRAFFIC

Construction Staging and Traffic Control / Protection Plan

Prior to construction, the Contractor shall supply the Contract Administrator for review a Construction Staging Plan and Traffic Control/Protection Plan for work within the Contract.

Traffic Control General

Construction operations shall be carried out in such a manner as to maximize safety and minimize disruption to traffic flow and operation.

Temporary concrete barriers, flashing beacons, and temporary traffic control devices shall be installed and maintained to the satisfaction of the Contact Administrator during all shutdown times including evening and weekends where an excavation is left open.

The contractor shall follow the Ontario Traffic Manual (OTM) and shall be responsible for temporary lane closures.

The Contractor shall provide all construction and traffic control signage (as per the OTM) and flagmen to protect workmen and the public to the satisfaction of the Contract Administrator. Flagmen shall be at the

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Contractor's expense and shall be on duty continuously unless otherwise directed by the Contract Administrator.

At no time during the course of construction will the Contractor be permitted to close the road to access unless authorize in writing by the Contract Administrator. A minimum of **one lane shall be kept open at all times** unless authorization in writing, signed by the Contract Administrator, has been received by the Contractor. Access to all properties must be maintained throughout construction.

Restriction on the Use of Construction Equipment and Unlicensed Vehicles

Unlicensed vehicles and construction equipment, with the exception of rock trucks, shall not travel, work or stop within 4 m of a lane carrying traffic except where construction operations necessitate the working area be less than 4 m from the traffic in which case, the Contractor shall erect delineators along the edge of the travelled lane, in accordance with paragraph 01 of subsection GC7.06, Maintaining Roadways and Detours, of the OPS General Conditions of Contract. In no case shall the distance between traffic and working area be less than 1.5 m.

Granular Grade

Granular road base shall be graded and treated with dust suppressant as directed by the contract administrator and maintained as necessary to provide safe driving conditions during the weekend and holidays.

Open Excavations

The Contractor shall schedule the Work so that there will be no open excavation adjacent to a lane carrying traffic overnight and on non working days except where a traffic barrier designed to restrain errant vehicles is located between the traffic and the excavation. Excavations within 4 m of lanes carrying traffic shall be backfilled with the specified material up to profile grade and compacted prior to closing down operations each day.

Location and Storage of Materials and Equipment

Materials shall not be stored within 4 m of the traveled portion of any roadway except in the medians (if any) where the minimum clearance required is 2.5 m. Equipment shall not be stored within 4 m of the traveled portion of any roadway or parked on private property unless prior written approval has been submitted to the Contract Administrator.

Notwithstanding the foregoing, the Contractor shall, at the Contractor's expense, remove any equipment or material, which, in the opinion of the Contract Administrator, constitutes a traffic hazard.

Delivery and Trucking

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

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

21. METRIC AND IMPERIAL SYSTEMS OF MEASUREMENT

Quantities and dimensions referenced in the Special Provisions, Specifications and General Conditions shall be converted from one system of measurement to the other as required in order to complete the work.

Where a conflict occurs between imperial and metric quantities or dimensions, the Contract Administrator shall determine the appropriate system of measurement to be used.

In the event that a weigh scale is not available in the required metric or imperial units as designated for material to be weighed on this Contract, then the quantities so weighed on the scale supplied, shall be converted to the designated units by the Contract Administrator, for payment purposes. One conversion only shall be made at the end of each day; on the basis that one metric tonne is equivalent to 1.102 imperial tons.

Where conversion from one system of measurement to the other is required the Metric Practice Guide, standard CSA Z234.1-00 shall apply.

22. EROSION AND SEDIMENTATION CONTROL - GENERAL

A 100m stand-by supply of prefabricated silt fence, in addition to silt fence, which may be specified elsewhere in the Contract, shall be maintained at the Contract site prior to commencement of grading operations and throughout the duration of the Contract.

In all areas, the Contractor shall, as a means of controlling erosion and runoff, so schedule his/her operations as to limit the areas of slope and ditches exposed and the time that such areas are exposed prior to final treatment.

Where cut or fill slopes have been rough graded, the Contractor shall within 15 calendar days of this operation, trim these slopes. Within a further 15 calendar days from the completion of trimming, the Contractor shall apply the specified vegetative cover material as required, and when so permitted, elsewhere in the contract.

In areas where excavated materials are stored temporarily the Contractor shall prevent erosion of any material into watercourses, sewer systems or onto private property.

Prior to commencing any operations on the contract, the Contractor shall submit his proposed methods for controlling erosion and runoff to the Contract Administrator, if requested.

Run-off from construction materials and any stockpiles shall be contained and discharged so as to prevent entry of sediment to watercourses.

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Where dewatering is required, dewatering effluent shall be discharged so as to prevent entry of sediment to watercourses.

The Contractor shall clean out all storm catch basin maintenance hole sumps upon completion of the construction works.

Erosion and sedimentation control measures shall not be placed in watercourses unless otherwise specified in the Contract, or directed by the Contract Administrator.

23. LINES, LEVELS, AND GRADES

Layout for the work on this contract shall be provided by the Contractor, in accordance with GC 3.05, GC 7.01, and the following:

The Contractor shall carefully lay out his work so that during its progress and at its completion, it shall conform to the lines and levels as shown on the plans and profiles and established by him in the field. The work shall be built in accordance with the contract drawings and directions given from time to time by the Engineer.

The Contractor shall provide a copy of grade sheets to the Engineer on a weekly basis for all work related to this contract.

The cost of layout performed by the Engineer because of errors in the Contractor's layout or because of the Contractor's inability to correctly perform the layout shall be charged to the Contractor at rates normally charged for such work by the Engineer. Charges incurred under this provision shall be withheld by the Owner from payments made to the Contractor, or otherwise collected by the Owner from the Contractor.

The Contractor shall provide to the Engineer, two copies of all calculated grade sheets, and grade set records for all phases of the work.

24. UTILITY INSTALLATION AND RELOCATIONS

It is the Contractor's responsibility as "Constructor" under the provisions of the Occupational Health and Safety Act to co-ordinate the activities of all employers and workers operating within the contract limits to ensure that the requirements of the Occupational Health and Safety Act are satisfied. The Contractor shall ensure that each utility company operating within the contract limits is included in this process.

During the time of the utility work, the Contractor must vacate an area within a 30m radius of the actual work location for the duration of the utility work.

The Contractor must comply with the requirements of the utility companies with respect to protection of their facilities, in particular with regard to underground cables.

25. DEWATERING - GENERAL

Work under this contract shall include any dewatering required for construction of the works, performed in accordance with OPSS 517 and OPSS 518. Associated costs shall be included under related items in the Contract. No additional compensation will be made for dewatering activities.

It is the contractor responsibility to reference any reports, local knowledge, or other sources to determine what if any dewatering might be required as part of their construction plan.

Where dewatering is required, dewatering effluent shall be discharged so as to prevent entry of sediment to watercourses. If the dewatering plan intends to make use of an existing storm sewer or ditch system for discharge, the Contractor shall ensure sediment does not collect in that system. The system shall be cleaned of such debris to the satisfaction of the Contract Administrator.

Dewatering in excess of 50,000 L/day requires a permit to take water.

Where dewatering is discharged to a municipal storm or ditch approval is required in writing form the Municipality prior to commencing dewatering operations.

All discharged water must fall within the allowable limits for the municipal stormwater treatment capacity both in volume and parameter concentrations. The Contractor shall provide a dewatering plan at the preconstruction meeting, if requested.

26. SPILLS REPORTING

Spills or discharges of pollutants or contaminants under the control of the Contractor, and spills or discharges of pollutants or contaminants that are a result of the Contractor's operations that cause or are likely to cause adverse effects shall forthwith be reported to the MOE Spills Action Centre at 1-800-268-6060 and the Contract Administrator.

Such spills or discharges and their adverse effects shall be as defined in the Environmental Protection Act R.S.O. 1980.

All spills or discharges of liquid, other than accumulated rainwater from luminaries, internally illuminated signs, lamps, and liquid type transformers under the control of the Contractor, and all spills or discharges from this equipment that are a result of the Contractor's operations shall, unless otherwise indicated in the contract, be assumed to contain PCBs and shall forthwith be reported to the MOE Spills Action Centre at 1-800-268-6060 and the Contract Administrator.

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

27. SCHEDULE OF WORK

Upon award of this Contract, the Contractor shall prepare a "Contractor's Schedule of Work". The "Contractor's Schedule of Work" will be itemized, outlining the items to be scheduled by the Contractor.

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The Contractor shall complete and remit this Schedule to the Owner with the Contractor's signed Contract Documents for execution by the Owner.

The schedule of work shall:

- Include provision for delays associated with weather or other elements likely to affect the schedule;
- Be reasonable and attainable based on the resources the contractor is able to dedicate to completing the work;
- Not be used as a basis for determining the amounts of or validity of claims for extra fees associated with schedule overruns.

28. LIQUIDATED DAMAGES

Fixed Completion Date and Charges

1. Time

Time shall be the essence of this Contract.

2. Progress of the Work and Time for Completion

The Contractor shall establish and provide a schedule of work to the Contract Administrator at the pre-construction meeting.

Work on this Contract may commence after signing of the Contract agreement by the Municipality. The Contractor shall diligently prosecute his work on this Contract to ensure that all works are completed in a timely fashion.

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

No weekend work, or work on statutory holidays will be permitted unless otherwise stipulated in the contract and approved by the County. Extension of time allowed as per GC3.07, Extension of Contract Time, of OPS General Conditions of Contract, August 1990. Hours of work shall be from one hour after dawn until one hour before dusk unless prior written approval is received from the Contract Administrator.

3. Liquidated Damages

It is agreed by the parties to the Contract that in the case that all the work called for under the Contract is not completed within the dates included, a loss or damage will be sustained by the Owner. Since it is, and will be impracticable and extremely difficult to ascertain and determine the actual loss or damage which the Owner will suffer in the event of and by any reason of such

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delay, the parties hereto agree that the Contractor will pay to the Owner the sum of **\$1,500** as liquidated damages for each and every calendar day's delay in finishing the work in excess of the required completion dates prescribed herein. It is agreed that this amount is an estimate of the actual loss or damage to the Owner, which will accrue during the period in excess of the prescribed completion dates.

The Owner may deduct any amount under the above paragraph from any monies that may be due or payable to the contractor on any account whatsoever. The liquidated damages payable under this paragraph are in addition to, and without prejudice to, any other remedy, action or other alternative that may be available to the owner.

An application by the Contractor for an extension of time as herein provided shall be made to the Contract Administrator, in writing, at least fifteen days prior to the date of completion fixed by the contract. All bonds or other surety furnished to the Owner by the Contractor shall be amended where necessary at the expense of the Contractor to provide coverage beyond the date of any extension of time granted, and the Contractor shall furnish the Owner with evidence of such amendment of the bonds or other surety.

Any extension of time that may be granted to the Contractor shall be so granted and accepted without prejudice to any rights of the Owner whatsoever under this contract. All such rights shall continue in full force and effect after the time limited in this contract for the completion of the work and whenever, in this contract, power and authority is given to the Owner or the Contract Administrator or any person to take any action consequent upon the act, default, neglect, delay, non-observance or non-performance by the Contractor in respect of the work or contract, or any portion thereof. Such powers or authorities may be exercised from time to time, not only in the event of the happening of such contingencies before the time limited in this contract for the completion of the work, but also in the event of the same happening after the time so limited, in the cause of the Contractor being permitted to proceed with the execution of other work under an extension of time granted by the Contract Administrator.

29. EXTRA WORK

The Contractor shall notify and receive approval from the Contract Administrator in writing before the commencement of any work that he considers extra work so that records may be kept. If notice is not given, it will be deemed that payment is included in the contract prices and no additional payment for extra work will be made.

Except in the most exceptional of circumstances, sufficient time is to be allowed for the notice to be received, considered and direction given by the Contract Administrator prior to proceeding with any work that might be claimed as extra. It is of the utmost importance that conditions that may result in claim for additional payment be brought to the attention of the Contract Administrator as soon as they are known.

Invoices for extra work shall be submitted as soon as possible after the completion of such work and in no case later than 30 days after the completion of the work in question.

Payment will be made on the next payment certificate after the approval of the Contractor's invoice. If extra work invoices and all required substantiation and support are not received within 30 days, it is deemed that the Contractor does not intend to charge for the work and no payment will be made.

30. OCCUPATIONAL HEALTH AND SAFETY- CONFINED SPACES

The Contractor's attention is specifically directed to Section 119 of the OH&S Regulations for Construction Projects regarding requirements for working in confined spaces. All maintenance holes, catch basins and structures must be checked for the presence of gases prior to removal of covers and/or entering them.

Should the Contractor not have the proper equipment for this procedure he/she may make arrangements, at his/her own expense, to have the testing performed by the County.

31. ONTARIO PROVINCIAL STANDARDS

The Ontario Provincial Standard Specifications (OPSS) form part of this contract, but are not reproduced herein. The contractor is responsible for obtaining and having on site, a current issue of the OPSS. The OPSS is the standard specification for this contract. The Special Provisions and Tender Items will take precedence over the OPSS where a conflict arises. Applicable OPSS are identified for each Tender Item under the OPSS No. column of the Tender Item List. All Contractors proposing to bid on this contract will be required to obtain their own copies of the applicable OPSS Specifications and Standard Drawings, which will be in effect for this contract.

Ontario Provincial Standard Specifications (OPSS) and Ontario Provincial Standard Drawings (OPSD) as well as MTO Standard Specifications and Standard Drawings, form part of this contract.

32. REGULATIONS OF PITS AND QUARRIES

Bill 120, An Act to Regulate Pits and Quarries and to Provide for their Reconstruction is now in effect and shall be applicable in such parts of Ontario, as the Lieutenant Governor shall from time to time designate by Regulation. All costs related to work required under this specification will be deemed to have been included in the appropriate tender items and no additional payment will be made.

33. FIELD LAYOUT

The contractor is responsible for all field layout including setting all existing horizontal and vertical alignment control prior to the start work.

Prior to construction, the contractor is to review the details of how the layout is to be completed with the Contract Administrator to ensure that it is appropriate and consistent with the required work.

34. NOTIFICATION OF BUSINESSES AND RESIDENTS

Prior to construction the contractor will be responsible for contacting the affected businesses and residents by written communication to advise the owners of the proposed construction work. The Contractor shall also include notification to affected area property owners as to when a disruption to their property access will occur and for how long. The Contractor shall proceed in such a manner as to minimize interruption to local residences. A copy of such notice must be approved by the Municipality prior to distribution.

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35. PAYMENT ADJUSTMENT FOR CHANGES IN THE MINISTRY OF TRANSPORTATION'S PERFORMANCE GRADED ASPHALT CEMENT PRICE INDEX

The Owner will adjust the payment to the Contractor based on changes to the Ministry of Transportation's (MTO) performance graded asphalt cement price index unless the Contractor opts out by notifying the County in writing within 5 business days of receiving permission to start work. Once the Contractor has opted out of payment adjustments based on the index, the Contractor will not be permitted to opt back in. The price index will be published monthly by the MTO. The MTO price index will be used to calculate the amount of the payment adjustment per tonne of new asphalt cement accepted into the Work.

The price index will be based on the price, excluding taxes, FOB the depots in the Toronto area, of asphalt cement grade PG 58-34 or equivalent. One index will be used to establish and calculate the payment adjustment for all grades.

A payment adjustment per tonne of new asphalt cement will be established for each month in which paving occurs when the price index for the month differs by more than 10% from the price index for the month in which tenders were opened for the Contract. When the price index differential is less than 10%, there will be no payment adjustment established for that month. Payment adjustments due to changes in the price index are independent of any other payment adjustments made to the hot mix tender items.

The payment adjustment per tonne will apply to the quantity of new asphalt cement in the hot mix accepted into the Work during the month for which it is established. However, a payment adjustment will not apply to paving work done after the approved time for completion of the Contract has expired, including the expiration of any extensions of time that have been granted.

The payment adjustment for the month will be calculated from the following formulae:

1. When I_p is greater than 1.10 ITO, the payment adjustment per tonne of asphalt cement is $(I_p - 1.10 \text{ ITO})$ and the Contractor receives additional compensation of:

$$PA = (I_p - 1.10 \text{ ITO}) \times \text{quantity of new asphalt cement in tonnes}$$

2. When I_p is less than 0.90 ITO, the payment adjustment per tonne of asphalt cement is $(0.90 \text{ ITO} - I_p)$ and the Owner receives a rebate of:

$$PA = (0.90 \text{ ITO} - I_p) \times \text{quantity of new asphalt cement in tonnes}$$

Where:

PA = payment adjustment for new asphalt cement, in dollars

ITO = performance graded asphalt cement price index for the month in which tenders were opened for the Contract

I_p = performance graded asphalt cement price index for the month in which paving occurs

The quantity of new asphalt cement includes all grades of asphalt cement supplied by the Contractor with and without polymer modifiers. For each month in which a payment adjustment has been established, the

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quantity will be calculated using the hot mix quantity accepted into the Work and its corresponding asphalt cement content as required by the job mix formula except for mixes which contain reclaimed asphalt pavement.

For mixes which contain reclaimed asphalt pavement, the quantity of new asphalt cement will be determined from the difference between the asphalt cement content required by the job mix formula and the asphalt cement content of the reclaimed asphalt pavement incorporated into the hot mix, as calculated by the Contract Administrator.

For mix containing a liquid anti-stripping additive, the quantity of anti-stripping additive will be deducted from the quantity of new asphalt cement. No other deductions will be made for any other additives.

For progress payment purposes, payment adjustments will be made on the monthly progress payment certificates for the months in which hot mix paving occurs.

36. PAYMENTS

Except as herein provided, payments under this Contract will be made in accordance with Section GC8.02.03 of the General Conditions.

Notwithstanding the provisions of the General Conditions respecting certification and payment, the Owner may withhold 2 ½ percent of the total value of work performed beyond the expiration of 45 days from the date of publication of the Certification of Substantial Performance, to enable to Contract Administrator to produce the final detailed statement of the value of all work done and material furnished under the Contract. As a condition of holdback reduction from 10% to 2 ½ %, the Contractor shall supply a Statutory Declaration as defined in GC8.02.03.04(03).

The Completion Payment Certificates to include statutory holdback release, will be issued within 120 days after the date of completion as specified under GC1.06. The date for interest due to late payment shall commence following 180 days after the date of completion of the work.

As a condition of the final holdback payments, the Contractor shall provide the required Property Owner's Releases as specified elsewhere, as appropriate.

The Contractor is advised that the Owner may withhold payment on Interim and Holdback Release Certificates up to 30 calendar days from the date of receipt of the executed Payment Certificates.

In order to obtain a Certificate of Substantial Performance, the Contractor shall submit the following documentation:

- a) A release by the Contractor in a form satisfactory to the Owner releasing the Owner from all further claims to the Contract, qualified by stated exceptions where appropriate;
- b) A Statutory Declaration in a form satisfactory to the Owner that all liabilities incurred by the Contractor and the Contractor's sub-contractors in carrying out the Contract have been discharged, qualified by stated exceptions where appropriate.
- c) A satisfactory Certificate of Clearance from the Worker's Safety and Insurance Board.

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The Contractor shall include in the Total Tender Price the publication cost of the Certificate of Substantial Performance. Publication is mandatory whether the Contractor requests Substantial Performance or not.

37. APPROVALS

The Contractor is hereby advised that this project is currently pending MOECC approval, however it is anticipated that final approvals will be obtained prior to commencement of construction. Should approvals not be in place following award of the Contract, the Contractor shall not be entitled to any claims made against the Contract / Owner / Engineer relating to such approvals.

ITEM SPECIFIC SPECIAL PROVISIONS

Special Provision No. 1	
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ITEM A1 **MOBILIZATION / DEMOBILIZATION**

Payment at the Contract Price for the above tender item shall be full compensation for all labour, equipment, and material required to do the following work:

- Mobilization including set up of appropriate sanitary facilities and secure work areas, transportation of equipment;
- Provision of bonds and insurance;
- Providing an initial construction schedule and updating it on a bi-weekly basis and/or as requested by the Contract Administrator
- Site security;
- Stakeout of existing utilities and services;
- Communications with property owners;
- Attendance at preconstruction and all site meetings;
- Demobilization removal of equipment, materials etc.

Partial payments will be made on the following basis:

- 60% of the tender amount will be paid upon providing satisfactory proof of bonds and insurance, mobilization and providing an initial construction schedule.

The remaining 40% will be paid at the completion of the project.

Special Provision No. 2	
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ITEM A2 **ENVIRONMENTAL PROTECTION**

This specification covers the requirements for environmental protection. The provisions of OPSS 805 shall apply except as amended hereafter.

The work of environmental protection shall include all work required to complete the protection of, but not limited to;

- Any watercourse, its water quality and fish habitat;
- Existing Storm Sewer Systems;
- Existing or constructed slopes and/or drainage ditches;

Installation, maintenance and removal of any and all necessary mitigation measures are required including, but not limited to, the following;

- Light-Duty Silt Fence Barriers as per OPSD 219.110;

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- Straw Bale Barriers in all ditches within the construction limits as per OPSD 219.100;
- Sediment Traps as per OPSD 219.240;
- Diversion ditches;
- Silt Fence/geotextile in all existing storm sewer structures;
- Any other measure necessary to protect any existing watercourse / water body and the existing storm sewer

Any discharge of water from de-watering activity is to be done away from any water course using filter bags, settling ponds, check dams, etc. to prevent silt and sediment from entering watercourses, etc. Discharge locations shall be placed a minimum of 30m from any watercourse.

No refuelling of vehicles, equipment, etc. or storage of fuel is to take place within 30m of any watercourse.

Stationary equipment operating within 30m of any watercourse shall have hydrocarbon spill containment measures in place.

All sediment and erosion control measures shall be installed prior to the Contractor commencing any work on site and shall be maintained until such time as the Contractor has completed all work required under the Contract.

Disturbed areas at the construction site are to be stabilized and re-vegetated after completion of the project, using native plant species as much as possible, and the site is to be restored to a pre-construction state or better. Removal of sediment and erosion control measures and remediation of the associated excavations shall be the last item undertaken by the Contractor.

All slopes greater than 5% or as directed by the Contract Administrator are to receive light-duty sediment barriers at 50m maximum spacing.

Doubles rows of straw bales shall not be required.

Heavy-duty sediment barriers shall not be required.

Flow check dams shall not be required.

Slope drains are not required.

MEASUREMENT FOR PAYMENT

Measurement of Environmental Protection shall be by Lump Sum.

All sedimentation and erosion control measures shall be reviewed by the Contract Administrator to ensure the item unit price is reflective of the labour, material and equipment required for the completion of the item. If, in the opinion of the Contract Administrator, the unit price is determined to be unbalanced in relation to the measures that have been installed, an appropriate percentage of the unit price shall be paid. The percentage of the unit price to be paid shall be at the sole discretion of the Contract Administrator.

BASIS OF PAYMENT

Payment at the contract price for the above tender item shall be full compensation for all labour, equipment, and material required to do the work:

Any sediment removal shall be included in the Environmental Protection Item.

Payment for this item shall be made as follows:

- a. 50% for installation of measures outlined above;

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- b. 30% for maintenance prorated over construction period;
- c. 20% for removal of all protection measures and restoration of site to pre-construction state or better

This Special Provision applies to all components of the Contract.

Special Provision No. 3	
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ITEM A3**TRAFFIC CONTROL DEVICES**

This specification covers the requirements for traffic control signing. The provisions of OPSS.MUNI 706 shall apply except as amended hereafter.

REFERENCES

This specification shall reference the Ontario Traffic Manual (OTM) published by the Ministry of Transportation Ontario, and the Guidelines for Training Traffic Control Persons published by Infrastructure Health & Safety Association.

MATERIALS

Traffic control signing shall include the work of supplying, locating, relocating, erecting, operating and maintaining construction signs, and shall conform to the Manual unless otherwise specified. If required, the contract identification signs will be provided by the Owner and shall be erected and maintained by the Contractor.

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

Ramps or roadways identified in the Contract for complete closure shall be signed conforming to the OTM.

CONSTRUCTION

Prior to implementation of traffic control measures, the Contractor shall supply a Traffic Control Plan to the Contract Administrator conforming to OTM Book 7. The Traffic Control Plan shall be reviewed by the Contract Administrator prior to implementation of traffic control measures.

Any existing signs removed by the Contractor to accommodate construction shall be kept operational by placement on a temporary support and shall be reinstalled, conforming to the OTM, after the work operation is complete. Temporarily relocated existing signs shall be kept at the same height, and basic location from traffic as before removal, as per the direction of the Engineer.

Upon completion of construction all roadway signage shall be reinstated conforming to current OTM specifications, and placed to facilitate the new roadway platform construction.

MEASUREMENT FOR PAYMENT

Measurement of Traffic Control Signing will be by Lump Sum.

BASIS OF PAYMENT

Payment at the contract price for the above tender item shall be full compensation for all labour, equipment, and material required to do the work:

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Payment for this item shall be made as follows:

- a. 25% for implementation of measures outlined above;
- b. The remaining 75% for maintaining traffic control will be prorated over the duration of the construction period

Special Provision No. 4	
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ITEM A4 **EARTH EXCAVATION / GRADING (Roadways)**

Under this item the Contractor will be required to complete all excavation/grading within the limits of the roadway being back of asphalt boulevard to back of asphalt boulevard, as required to achieve the required depth to accommodate the new roadway structure platform as identified within the design cross section, and as to allow for the new Hot Mix asphalt and new granular roadbase placement.

Surplus or unacceptable materials shall be disposed of off-site at an approved location provided by the Contractor at his expense. All excess materials shall be disposed of in accordance with OPSS 180, and amended to the guidelines as set forth under Special Provisions Clause 12, Management of Excess Materials.

The Contractor is advised that this item shall include all work up to but does not include the disposal of excess materials. The costs associated with the hauling and disposal of such surplus materials off site under this item shall be compensated under item #A6.

Also deemed included under this item shall be the preparation of the roadway subgrade, which shall be shaped, graded, and compacted to a minimum 98% SPMDD prior to placement of any granular roadbase materials.

All labour, equipment and materials required to complete this item shall be provided by the Contractor at his expense.

Measurement for payment of this item shall be by the cubic metre.

Special Provision No. 5	
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ITEM A5 **EARTH EXCAVATION / GRADING (Boulevards and Driveways)**

Under this item the Contractor will be required to complete all excavation/grading within the limits of the Contract, being areas outside of the roadway as identified under Special Provisions #4.

Included under this item shall be all excavation and grading required for boulevard construction and property restoration due to construction, as identified on the Contract drawings and construction details, as well as the grading requirements to blend existing property frontages and driveways into the new

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construction. All restoration grading shall be done in a manner as to achieve positive drainage and as directed by the Engineer.

Surplus or unacceptable materials shall be disposed of off-site at an approved location provided by the Contractor at his expense. All excess materials shall be disposed of in accordance with OPSS 180, and amended to the guidelines as set forth under Special Provisions Clause 12, Management of Excess Materials.

The Contractor is advised that this item shall include all work up to but does not include the disposal of excess materials. The costs associated with the hauling and disposal of such surplus materials off site under this item shall be compensated under item #A6.

All labour, equipment and materials required to complete this item shall be provided by the Contractor at his expense.

Measurement for payment of this item shall be by the Lump Sum.

Special Provision No. 6	
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ITEM A6 **REMOVAL AND DISPOSAL OF EXCESS SURPLUS MATERIAL**

Under this item the Contractor shall supply all labour, equipment, and materials necessary and as required to remove, load, haul, and transport of all excavated surplus materials. All materials shall be disposed of off site an approved facility in accordance with OPSS 180 specifications along with the requirements as set by the MOECC guidelines for Management of Excess Materials.

If the receiver is a licenced landfill, prior to the start of construction, the County is to be provided written confirmation of where the material will be disposed, that they are able to receive the amount of material anticipated, and that they are suitably licenced to receive the type of material anticipated.

If the receiver is not a licenced landfill, prior to the start of construction, the Contractor shall provide the County with a Ministry approved Fill Management Plan, completed by a Qualified Person which will be followed by the contractor for the duration of the contract. All costs associated with the execution of the Fill Management Plan will be the responsibility of the Contractor.

Pre screening of the environmental analytical laboratory testing on certain soil samples taken from this proposed project were completed of which have been summarized within the geotechnical report. The testing was completed to assist the Contractor with determining the disposal requirements for excess material. The results of the testing are included in the report included as part of this tender document. The Contractor shall, at its own cost, undertake any additional sampling and laboratory testing it believes is necessary, inclusive of TCLP testing, to ensure that the transportation, disposal and management of excess materials from this project is carried out in accordance with current Provincial regulations and guidelines.

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The Contractor is advised that they shall satisfy the requirements of such testing, inclusive of appropriate allowances associated with construction schedule and sequence of works to ensure that the as specified completion date within the Contract is achieved.

Measurement for payment of this item shall be by the unit cubic metre. Payment to the Contractor will be made upon the Contractor providing weigh scale tickets to the Contract Administrator.

Special Provision No. 7	
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ITEM A7 **REMOVAL OF ASPHALT PAVEMENT (FULL DEPTH)**

Under this Item the Contractor shall remove and dispose of all existing asphalt in the roadway, entranceways, walkways, and boulevards as required to complete all installations and restoration under this Contract.

All materials removed under this Item shall be disposed of off-site at an MOE approved location provided by the Contractor at his expense.

All sawcutting of edges shall be deemed included, of which shall be done in a manner as to form a straight line and square edge. Temporary ramping shall be an asphalt ramp with a minimum dimension of 1.0m across the width of the asphalt removal. The Contractor shall maintain the temporary asphalt ramp, to the satisfaction of the Contract Administrator until surface course asphalt work has been completed.

The Geotechnical Report (Appendix A) indicates the depth of asphalt ranges from 75mm to 125mm. Additional payment for full depth asphalt removal will only be made for asphalt depths greater than 150mm. Additional payment will be a percentage of the excess asphalt depth.

Payment at the contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

Measurement for payment under this Item shall be by the Square Metre.

Special Provision No. 8	
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ITEM A8 **REMOVAL OF EXISTING CONCRETE SDEWALKS**

Under this item the Contractor will be required to remove and dispose of off-site all existing roadway concrete sidewalk and private walkways and steps as designated by the Engineer, as required for construction installations, and as noted on Contract drawings and specifications.

All saw cutting of existing sidewalks, walkways and steps shall be included under this item. Sawcutting shall be done in a manner whereby only full panels are removed, or approved otherwise by the Contract Administrator.

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 Measurement for payment of this item shall be by the Square Metre.

Special Provision No. 9	
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ITEM A9 **REMOVAL OF EXISTING CONCRETE CURB AND GUTTER**

Under this item the Contractor will be required to remove and dispose of off-site all existing roadway and residential concrete curb and gutter within the limits of the Contract as designated for removal by the Engineer, and as required for the installation of servicing.

Removal shall be performed in such a manner and with such equipment as to leave undisturbed and undamaged any portion not designated for removal or salvage. All damaged or disturbed portions shall be corrected expeditiously and repaired to the satisfaction of the Contract Administrator. The broken edges of portions to be left in place that are visible after construction shall be squared and neatly trimmed.

All saw cutting of the existing curb shall be deemed to be included under this item.

Measurement for payment of this Item shall be by the Linear Metre.

Special Provision No. 10	
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ITEM A10 **150mm PERFORATED SUBDRAINS**

Under this item the Contractor shall supply and install the new sub-drain system in accordance with the Contract Drawings and as directed by the Engineer.

Also included under this item shall be the connection of the sub-drain into the storm sewer system being new or existing structures as per OPSD 216.021 and/or outlets to the ditch. When outlet is provided to the roadside ditch, the outlet shall be equipped with a rodent proof end grate.

All material shall be supplied and installed by the Contractor, which shall include 150 mm perforated sub-drain pipe in filter cloth and 19mm ϕ clearstone. Polyethylene pipe shall be manufactured from high density polyethylene resin which shall meet or exceed the requirements of ASTM D3350 Cell Class 424420C.

Polyethylene pipe shall have a minimum stiffness of 210 kPa at 5% deflection. Tests shall be conducted in accordance with ASTM D2412.

All excavation and preparation of the installation trench shall be included in this unit price. The Contractor shall remove and dispose of all surplus material generated under this item off-site at an approved location provided by the Contractor at his expense. Surplus or unacceptable materials shall be disposed of off-site at an approved location provided by the Contractor at his expense. All excess materials shall be disposed of in accordance with OPSS 180, and amended to the guidelines as set forth under Special Provisions Clause 12, Management of Excess Materials.

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All costs associated with connection of the sub-drain systems into the drainage structures shall be included under this item, inclusive of all final parging.

Payment at the Contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

Measurement for payment under this item shall be by the Linear Metre.

Special Provision No. 11	
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ITEM A11 **GRANULAR ‘B’ – TYPE II**

Under this item the Contractor will be required to supply, place, shape and compact the material which shall form base material for the entranceways, parking areas, boulevards, concrete curb and gutter, and roadway which shall be installed to the grade and depths specified on the drawings and as detailed by the Engineer.

Granular Compaction shall be to 100% SPMDD.

Prior to the placement of the first layer of granulars, the existing subgrade surface shall be proof rolled, and subject to visual inspection to identify any areas of rutting and/or deflection. All granular materials utilized shall be approved by the Contract Administrator, of which shall conform to OPSS specifications as confirmed by appropriate certified materials testing laboratory, at the expense of the Contractor.

Measurement for payment under this item shall be by the Tonne.

Special Provision No. 12	
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ITEM A12 **GRANULAR ‘A’ – (QUARRIED)**

Under this item the Contractor will be required to supply, place, shape and compact the material which shall form base material for the entranceways, parking areas, boulevards, concrete curb and gutter, sidewalks, and roadway which shall be installed to the grade and depths specified on the drawings and as detailed by the Engineer.

Granular Compaction shall be to 100% SPMDD.

Prior to the placement of the first layer of granulars, the existing subgrade surface shall be proof rolled, and subject to visual inspection to identify any areas of rutting and/or deflection. All granular materials utilized shall be approved by the Contract Administrator, of which shall conform to OPSS specifications as confirmed by appropriate certified materials testing laboratory, at the expense of the Contractor.

Measurement for payment under this item shall be by the Tonne.

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Special Provision No. 13	
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ITEM A13**SELECT SUBGRADE MATERIAL (IMPORTED)**

Under this item the Contractor will be required to load, haul, place, shape and compact the material of which shall be select backfill material for the storm sewer, sanitary sewer and watermain system installations, and roadway subgrades as detailed on the design typical cross sections in areas in which on-site native materials are not satisfactory for re-use. The application of such import material shall be completed only at the discretion and approval of the Contract Administrator and Geotechnical Engineer. Prior to utilization of this item the Contractor must exhaust all possible methods for the re-use of native materials, being sorting, drying, mixing, etc..

The Contractor is advised that this material will be obtained from the County owned Ridge Road pit. No charge will be made to the Contractor for the granular material from the County Pit. Approximate distance from the pit to jobsite is 10 kms.

Measurement for payment under this item shall be by the unit cubic metre. The Contractor is advised that quantities shall be completed by truck box method and load counts, with measurements of such being agreed upon by the Contract Administrator.

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ITEM A14 HOT MIX ASPHALT – HL8 BASE COURSE INCLUDING PG ASPHALT CEMENT

This item will be utilized for roadway base coarse.

Depth of installation shall be as follows:

- Roadways – 50mm base Coarse compacted thickness

Asphalt cement shall be PG 58-34. PG Asphalt Cement will conform to OPSS, SHRP Specifications. The Contractor's mix design shall have a minimum asphalt cement content of 5.0% and a minimum stability of 10,000 (n).

The Contractor will be required to perform all saw cutting and joint preparation of the asphalt as directed by the Engineer. All costs, including compaction and fine grading of granular base materials and related work prior to hot mix placement shall be included under the Tender unit price for this item.

All termination end joints shall be completed with a 3m wide lap joint to match into the existing roadway surface.

Where vertical faces are encountered (i.e. concrete curb, utility covers, centerline paving joints), they shall be tack coated prior to Hot Mix paving with SS-1 or SS-1H emulsified asphalt, diluted with an equal volume of water applied at a rate of 0.35 kg/m². Tack coat will be supplied and placed in accordance with OPSS.

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The Contractor is hereby advised that base coarse asphalt shall be completed within each staged construction zone and within fourteen (14) days of completing concrete curb and gutters within each section.

Measurement and basis for payment shall be by the Tonne at the unit price Tendered and shall include all costs of labour, equipment and materials to supply, haul, place and compact and also to prepare all construction joints and supply and place tack coat.

Removal and replacement of defective areas such as flushing, bleeding, segregation, flat spots, surface damage and surface contamination shall be at the Contractor’s expense.

Removal and replacement of rejected HMA due to aggregate gradation or non-compliance due to the asphalt cement content shall be at the Contractor’s expense.

Removal and replacement of HMA that does not meet the acceptance criteria for Marshall or Superpave HMA shall be at the Contractor’s expense.

Removal and replacement of HMA pavement that does not meet the average percent compaction shall be at the Contractor’s expense.

No additional payment shall be made for any delays or costs attributed to verification of the gross mass and tare mass of trucks requested by the Contract Administrator.

The Contractor is advised that a Load Transfer Shuttle buggy shall be required for asphalt placement of the roadway surface.

Special Provision No. 15	
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ITEM A15 HOT MIX ASPHALT – HL3 BASE COURSE INCLUDING PG ASPHALT CEMENT

This item will be utilized for roadway surface coarse, asphalt boulevards and asphalt driveway reinstatement.

Depth of installation shall be as follows:

- Roadways – 50mm surface Coarse compacted thickness
- Boulevards – 50mm compacted thickness
- Driveways – 50mm compacted thickness

Asphalt cement shall be PG 58-34. PG Asphalt Cement will conform to OPSS, SHRP Specifications. The Contractor’s mix design shall have a minimum asphalt cement content of 5.2% and a minimum stability of 11,500 (n).

The Contractor will be required to perform all saw cutting and joint preparation of the asphalt as directed by the Engineer. All costs, including compaction and fine grading of granular base materials and related work prior to hot mix placement shall be included under the Tender unit price for this item.

All termination end joints shall be completed with a 3m wide lap joint to match into the existing roadway surface.

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Where vertical faces are encountered (i.e. concrete curb, utility covers, centerline paving joints), they shall be tack coated prior to Hot Mix paving with SS-1 or SS-1H emulsified asphalt, diluted with an equal volume of water applied at a rate of 0.35 kg/m². Tack coat will be supplied and placed in accordance with OPSS.

Measurement and basis for payment shall be by the Tonne at the unit price Tendered and shall include all costs of labour, equipment and materials to supply, haul, place and compact and also to prepare all construction joints and supply and place tack coat.

Removal and replacement of defective areas such as flushing, bleeding, segregation, flat spots, surface damage and surface contamination shall be at the Contractor's expense.

Removal and replacement of rejected HMA due to aggregate gradation or non-compliance due to the asphalt cement content shall be at the Contractor's expense.

Removal and replacement of HMA that does not meet the acceptance criteria for Marshall or Superpave HMA shall be at the Contractor's expense.

Removal and replacement of HMA pavement that does not meet the average percent compaction shall be at the Contractor's expense.

No additional payment shall be made for any delays or costs attributed to verification of the gross mass and tare mass of trucks requested by the Contract Administrator.

The Contractor is advised that a Load Transfer Shuttle buggy shall be required for asphalt placement of the roadway surface.

Special Provision No. 16	
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ITEM A16 MISCELLANEOUS HOT MIX ASPHALT PLACEMENT

Under this item the Contractor will be required to saw cut the existing entranceways and boulevards to the limits specified by the Engineer in order to blend the new roadway, boulevards, sidewalks and curbs into the existing entranceways. All sawcutting shall be done in a straight line and square edge manner.

The Contractor will be required to grade, shape and compact the granular grade prior to installation of hot mix asphalt. Any surplus material generated under this item shall be removed and disposed of off-site by the Contractor at his expense.

The area of installation for this item will include both new and existing boulevards, private entranceways and parking areas.

The depth of asphalt installation under this item shall be 50 mm compacted of HL3 which shall be paid under Item A15.

Measurement for payment under this item shall be by the Square Meter.

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ITEM A17 CONCRETE RETAINING WALL – OPSD 3120.100

This specification covers the requirements for the construction of a concrete toe wall as per OPSD 3120.100 within the areas outlined on the Contract drawing. The provisions of OPSS.MUNI 904 shall apply except as modified herein.

MATERIALS

Minimum specified 28-Day compressive strength: 30 MPa

Coarse Aggregate: 19.0 mm nominal maximum size.

Water cement ratio ≤ 0.45

CONSTRUCTION

It shall be the Contractor’s responsibility to ensure the formwork is set such that water will not be permitted to lay atop the structure.

Formed and slip formed concrete shall be cured with white pigmented curing and wet burlap blankets as required compound unless cold weather concreting is in effect. All costs associated with the applicable method of curing shall be deemed included under this item.

Before placing concrete, the subgrade immediately ahead of the concrete placing shall be compacted to 100% SPMDD, of which shall be a minimum 200mm Granular ‘A’ bedding, of which

The exposed surfaces of the finished concrete shall be such that, when tested with a 3.0m long straight edge placed anywhere along the surface shall be no deviation greater than 3.0mm between the bottom of the straight edge and the surface of the concrete nor shall there be any deviation from alignment in excess of 3.0mm.

All surface finishing shall be approved by the Contract Administrator with any surface defects corrected as per OPSS 904 specifications to the satisfaction of the CA.

Upon completion of the concrete wall, a concrete sealer shall be applied being “MasterProtect H400”, as manufactured by BASF Industries. Application shall be as per manufacturers recommendations.

All excavation associated to the completion of the wall and bedding shall be included under this item, inclusive of backfilling upon completion of the wall.

Payment at the contract price for the above the tender items shall be full compensation for all labour, equipment and materials to do the work.

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ITEM A18 CONCRETE CURB AND GUTTERS (ALL TYPES)

ITEM A19 CONCRETE CURB AND GUTTERS – TERMINATIONS / OUTLETS

Under this item the Contractor shall install the concrete curb and gutter as directed by the Engineer, and as required for reinstatement of the existing, as identified on the Contract drawings. New curb

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installations shall be as per OPSD 600.040 as referenced on the Contract drawings and shall be modified as required when tying into existing curb and gutter lines, and/or curbs of alternate profile.

Concrete curb and gutter outlets / terminations shall be as per OPSD 608.010, 604.010, 605.030, and as directed by the Engineer,

The concrete shall be 30 MPA at 28 days with a minimum air content of 7% +/- 1.5%, and with a water cement ratio of not more than 0.45.

All costs associated with preparation of the Granular 'A' bedding for the installation area shall be borne by the Contractor.

It shall be the Contractor's responsibility to ensure the formwork is set such that water will flow continuously, with no ponding, to the appropriate inlet or outlet. Should the Contractor identify any areas where this is not possible, he shall notify the Contract Administrator immediately prior to pouring concrete.

Formed and slip formed concrete shall be cured with white pigmented curing compound unless cold weather concreting is in effect.

Concrete shall not be placed until the forms and or stringline have been inspected by the Contract Administrator.

Before placing concrete, the subgrade immediately ahead of the concrete placing shall be wetted by means of a uniform spray of water sufficient to wet the subgrade thoroughly without leaving standing water.

The exposed surfaces of the finished concrete shall be such that, when tested with a 3.0m long straight edge placed anywhere along the surface parallel to the edge of the curb face, there shall be no deviation greater than 3.0mm between the bottom of the straight edge and the surface of the concrete nor shall there be any deviation from alignment in excess of 3.0mm.

Unacceptable areas of curb and gutter identified by the Contract Administrator shall require sawcutting, removal and replacement by the Contractor at the Contractor's expense.

The Contractor shall provide for any hot or cold weather protection measures as required for the concrete pavement and curing protection in accordance with OPSS 904 dated January 1995, of which all costs are to be deemed included.

Measurement for payment under this item shall be by the Linear Metre.

Payment at the Contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

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ITEM A20	CONCRETE SIDEWALKS
ITEM A21	CONCRETE SIDEWALKS (Station 0+470 to 0+580)
ITEM A22	CONCRETE SIDEWALKS (Station 0+305 to 0+500)
ITEM A23	CONCRETE SIDEWALKS RAMPS c/w TACTILE WALKING INDICATORS

Included under this item the Contractor shall supply all labour, materials, and equipment required to install the new concrete sidewalk conforming to OPSD 310.010 specifications, as detailed on the Contract Drawings, and as directed by the Engineer, and required for Construction reinstatement. New concrete sidewalk ramps shall be constructed at all intersections as per OPSD 310.033 complete with tactile walking surface indicators as per OPSD 310.039.

All excavation as required to facilitate the installation of new sidewalk along with all preparation / fine grading of the granular base material shall be deemed included under this item.

The Contractor shall utilize concrete with a minimum specified 28 Day compressive strength of 30MPa and with a minimum air content of 7% +/- 1.5%, and a water cement ratio of not more than 0.45. Final installation shall be complete with a broomed finish.

The width of installation shall be 1.5m, unless otherwise identified on the Contract drawings, and modified as required when tying into existing works.

Granular base material shall Granular A Limestone. Granular base material shall be laid with a compacted depth of 150mm. The Contractor is advised that under item A20, all Granular 'A' requirements, compensation of such granulars shall be compensated under item A12. Items A21 and A22, all Granular 'A' required shall be deemed included under this item.

All utilities located within or adjacent to the sidewalk, including catch basins, shall be isolated as per OPSD 310.040.

Longitudinal and transverse joints shall be constructed as per OPSD 310.020.

Sidewalk shall be 125mm thick.

Contraction joints shall be placed at every third dummy joint and shall be sawcut or formed to a depth that is 0.25 of the sidewalk thickness.

Expansion joints shall be constructed to the full depth of the slab.

Vehicular traffic shall be restricted from crossing the sidewalk after the concrete has been placed for a minimum period of three days or until the concrete has reached 75% of the specified 28-Day compressive strength.

The surface of the concrete, after texturing, shall be within a 6 mm deviation measured at any point on a 3 m long straight edge.

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The minimum acceptable thickness of the sidewalk shall be the specified thickness minus 8 mm. If the thickness deficiency exceeds 8 mm, the sidewalk shall be removed and replaced.

Unacceptable areas of sidewalk identified by the Contract Administrator shall require sawcutting, removal and replacement of the complete sidewalk bay by the Contractor at the Contractor's expense. Formed and slip formed concrete shall be cured with white pigmented curing compound unless cold weather concreting is in effect. The Contractor shall provide for any hot or cold weather protection measures as required for the concrete pavement and curing protection in accordance with OPSS 904 dated January 1995, of which all costs are to be deemed included.

Also to be deemed included under this item shall be the reinstatement of all private concrete residential sidewalks / steps as required to be reconstructed to match into the proposed construction.

Measurement for payment of this item will be by the Square Meter.

Special Provision No. 20	
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ITEM A24

TREE REMOVALS

Included under this item the Contractor shall supply all labour, materials, and equipment required to complete the full removal of the existing trees as identified on the Contract drawings to be removed.

Removals shall be done whereby damage to existing and private property is not permitted.

The removal shall be include all above ground tree stock along with the below grade root system. Upon completion of such the Contractor shall fill and compact the void created during removal of the tress and root mass.

All materials shall be removed and disposed off site, at the expense of the Contractor.

Measurement for payment of this item will be by unit Each.

Special Provision No. 21	
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ITEM A25

IMPORTED TOPSOIL AND NURSERY SOD

Under this item the Contractor shall supply and install a minimum of 75 mm of imported screened topsoil and nursery sod in accordance with OPSS 802 AND 803. All sod shall be of the Kentucky bluegrass variety.

All water for maintenance of the sod as to ensure establishment shall be supplied daily and placed by the Contractor for a minimum period of two weeks, and for any further two weeks when directed by the Engineer. In the fall prior to the expiration of the (1) one year warranty period the Contractor shall at the

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discretion of the Engineer, replace any dead and / or dying sod of which shows no signs of rooting into the underlying soil, at no additional costs to the Contract.

Measurement for payment of this item shall be by the Square Meter.

Special Provision No. 22	
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ITEM A26

PAVEMENT MARKINGS

Under this item, the Contractor shall place all pavement markings within the construction zone in accordance with the Ontario Traffic Manual, Book 11 and as directed by the Engineer.

The Contractor shall be required to place temporary pavement markings, being lane configurations at Talbot Street / Lake Street and Main Street, and centerline centerline markings, immediately upon completion of base coarse asphalt placement and maintain such markings. Permanent pavement markings are to be placed within (30) thirty calendar days of completion of the Hot Mix Surface Course under each individual section.

Pavement markings to be placed under this item shall be permanent yellow painted centerline markings throughout, durable stop blocks at the intersections of municipal roadways and durable pedestrian cross walk lineage, durable lane designation arrow markers within the intersection of Talbot Street, Lake Street and Main Street, and permanent painted white edge lane markings throughout.

The Contractor will be required to provide two (2) working days notice prior to placement of the pavement markings to allow the Contractor Administrator adequate time to inspect the pre-marking.

Non-compliance with this requirement and or failure of the test results will result in no payment being provided until all conditions of the specifications have been met.

All paint and beads supplied under this Contract shall be listed on the “designated sources material” list and comply to all OPSS Specifications and Special Provisions contained in this document.

(Water Borne paint shall be applied at a rate which results in a uniform thickness of 305 plus or minus 25 microns dry film. Reflectorizing glass beads, conforming to OPSS 1750, shall be applied uniformly at the rate of 0.8 kg immediately after paint application, to ensure embedment of the glass beads.)

Material Sampling

Sampling of pavement marking material shall conform to Table A. Samples shall be taken by the Contractor in the presence of the Contract Administrator.

Samples of traffic paints shall not be thinned or heated. The material shall be well mixed and homogeneous. The sample containers shall be filled within 5mm of the bottom of the lid rim.

The Contractor shall supply sample containers and pre-weighted steel Q-panels that are ground one side measuring 0.8mm x 152mm x 305mm as required.

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If any material samples fail to conform to specification, the material may be removed and/or replaced at the Contractor's expense.

If any of the panels fail, the Contractor will be responsible to reapply the material to the deficient areas as per the specifications outlined in this Tender at the Contractor's expense. Test panels will be collected and tested by Jewell Eng. staff or their representative.

Table "A"**PAVEMENT MARKING MATERIAL SAMPLING**

Material	Sample Size	Container Material	Source	Frequency
Organic Solvent Based Traffic Paint	1L	Metal	Outlet Valve (not spray gun)	Upon Request of the Contract Administrator
Water Based Traffic Paint	1L	Plastic Or Plastic Lined	Outlet Valve (not spray gun)	
Field Reacted Polymeric Resin*	1L (500G)	Metal or plastic	Pail	Upon Request of the Contract Administrator
Catalyst	250ml (50g)	Metal or plastic	Pail	
Glass Beads	500ml (200g)	Metal or plastic	Bead Gun	
Preformed Tape	1 m	Container not required	Roll	
Thermoplastic Materials	10 cm x 10 cm	Steel Panel	Applicator**	

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Material type and manufacturer's mixing ratio of each unmixed material should be indicated on container. An 8cm x 8cm raw sample of the thermoplastic material can be substituted for the coated panel sample.

Equipment

Centreline (zone striper), Bead guns must have the capability of being shut off independently while painting.

Protection of Public and Traffic

The provisions of OPSS 706 shall apply except as amended or extended herein. All traffic control, procedures and devices shall be provided by the Contractor and conform to the requirements of the following references:

- The Ministry of Transportation "Ontario Traffic Manual (OTM) Book 7 and 11, latest revisions.
- Canadian General Standards Board, Standard 62-GP-11M, most current revisions – Reflective Materials and Surfaces.

Any roadway pavement marking sampling and testing performed by Jewell Engineering Inc. staff and/or Designate shall be included in the Contractor's traffic control plan.

SP DR-532.3 Line Quality

OPSS 532.08.02 is revised to include: the Contractor shall be responsible for the correction and cost of all errors of paint thickness, width or length or inadequate bead coverage, which should be saturated and full line width.

Markings applied in the wrong location must be permanently corrected All corrections must be by means of soda blasting or sandblasting. The use of a rotary grinder is not acceptable on new asphalt/concrete surfaces. Blackout paint shall not be considered as an acceptable means of a permanent line obliteration method and shall only be used as a temporary measure until permanent removal is scheduled. All debris from any form of removal must be properly removed and disposed of in accordance with OPSS 180.

Quality Assurance – Retro Reflectivity

Reflectivity

OPSS 532.08.02 is revised to include: Measurements of retro reflectivity will be gathered randomly on newly applied pavement markings. Newly applied pavement markings shall conform to ASTM Designation number D 6359-99. Should a random test area fail to meet the specifications outlined in D 6359-99 the area for testing will be expanded to determine the overall length of marking that will have to be re-applied. Markings that fail to meet retro reflectivity specifications will be required to be re-applied by the Contractor.

Visual inspections of the markings will be conducted during and immediately after application for acceptable bead coverage and embedment. If the marking appears questionable in terms of its retro reflectivity, then measurements shall be undertaken in accordance to D 6359-99 Standard Specification

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for **Minimum Retro Reflectance of newly Applied Pavement Marking Using Portable Hand-Operated Instruments.**

The zone of measurement will begin with the first stretch of suspect marking and extends to the last.

Zones measured that fail to meet the minimum requirements of a newly applied pavement marking will be re-applied.

SP DR-532.4 Application General

Clause 532.07.09.01 of OPSS 532 is amended by the addition of the following after the first paragraph:

Lane lines, continuity lines and edge lines on tangent sections of constant width shall be placed parallel to one another, maintaining their correct offset from the edge of pavement and from one another and shall be straight and true.

Markings placed to delineate changes in the number of lanes; variations in roadway width or adjustments in lane width shall be straight and true.

Markings placed on curves shall accurately follow the change in direction prescribed by the roadway. Transition from adjacent tangent sections shall occur smoothly and at a constant rate over the specified distance.

Markings shall always maintain the specified lane width.

SP DR-1716.1 Measurement and Payment

OPSS 1716.09.04 is deleted and replaced with: payment for water borne traffic paint is included in the Contract price for pavement marking by the unit Lump Sum.

SP DR-ITEM 1750.1 Water Resistance Test Waterborne Paint

OPSS 1750.09.01.04 is revised to include the following when **water borne paint** is utilized:

Properties of Coated Spheres

The spheres shall be coated with a dual coating. The coating shall have both a moisture resistance silicone coating and an adhesion promoting silane coating. The spheres shall pass the moisture resistance test and the adherence-coating test.

SP DR-1750.2 Basis of Payment

OPSS 1750.09.05 is deleted and replaced with: payment for beads is included in the Contract price for pavement marking by the unit Lump Sum.

Seasonal Use Restriction for High VOC Content TM Coatings

Only TM Coatings containing 150 g/l of VOC's or less will be allowed for use.

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ITEM A27

ASPHALT INDEXING

The Contractor is hereby advised to Clause 35 of the Contract document Special Provisions.

The base Index rate shall be the December MTO AC Price Index, as published by the OAPC, being \$809.80 / tonne.

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ITEM A28

SUPPLY AND PLACEMENT OF UNSHRINKABLE BACKFILL – 0.4 MPA

This specification covers the requirements for the use of unshrinkable fill.

Under this item, the Contractor shall utilize unshrinkable fill as cover or embedment material or as directed by the Contract Administrator, to facilitate buried infrastructure installations at locations whereby achieving satisfactory compaction, separations is unattainable.

Work completed under this item shall only be completed upon receipt of prior, written approval and/or verbal direction of the Contract Administrator.

Measurement for payment of unshrinkable fill shall be by the cubic metre.

Payment at the Contract price for the above noted tender item shall be full compensation for all labour and equipment and material to do the work.

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ITEM A29

DUST SUPPRESSANTS

Under this item the Contractor shall supply and provide dust control mitigation throughout the duration of the Contract, inclusive of as required to minimize the impacts during non-working hours (ie., holidays and weekends)

The Contractor shall provide both water and calcium flake as required and as directed by the Owner / Contract Administrator to eliminate / minimize dust nuisance associated with construction and traffic generation impacts.

Measurement for payment under this item shall be by the unit Lump Sum.

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ITEM A30 **PRE / POST CONSTRUCTION PROPERTY INSPECTIONS**

The Contractor shall carry out an interior and exterior inspection of all abutting properties in advance of any construction similar as required for pre-blast surveys and summarize the inspections in a report.

The inspection will be undertaken by an independent firm experienced in such work. The contractor’s insurer shall provide a written acceptance of the inspection and a copy of both the inspection and written acceptance will be provided to the County and Jewell Engineering Inc.

During and upon completion of the works, the Contractor shall review any and all damage claims as brought forward by private households due to the construction, by means of completing a follow up examination of such property and providing a summary report of the pre vs post construction condition.

Measurement for payment shall be by the unit Lump Sum.

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ITEM B1 **REMOVAL OF EXISTING STORM SEWERS (ALL SIZES)**

Under this item the Contractor will be required to remove and dispose of off-site all existing storm sewers within the limits of the contract designated for removal. All labour, equipment and materials to facilitate such works shall be deemed included under this item.

Measurement for payment of this Item shall be by the Linear Metre.

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ITEM B2 **REMOVAL OF EXISTING STORM SEWER STRUCTURES (ALL SIZES)**

Under this item the Contractor will be required to remove and dispose of off-site all existing storm sewer structures within the limits of the contract designated for removal. All labour, equipment and materials to facilitate such works shall be deemed included under this item.

Upon removal should the location of the existing structure not be utilized for placement of new infrastructure, the Contractor shall backfill the void with onsite suitable native backfill compacted to 98% SPMDD.

Measurement for payment of this Item shall be by the unit Each.

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ITEM B3	300mm PVC SDR35 STORM SEWER PIPE
ITEM B4	375mm PVC SDR35 STORM SEWER PIPE
ITEM B5	450mm PVC SDR35 STORM SEWER PIPE
ITEM B6	600mm PVC SDR35 STORM SEWER PIPE

Under this item the Contractor shall supply all labour, equipment, and materials to install PVC SDR35 Smooth Wall, Bell and Spigot, Storm Sewer pipe, conforming to CSA certification 182.2, and ASTM D3034 and ASTM F794 (as applicable) per sizing required in the Contract drawings.

Included under this item shall be the following:

- 150 mm Granular 'A' bedding (quarried material)
- 300 mm Granular 'A' pipe surround (quarried material)
- Excavations and backfilling

In areas of wet trench conditions, the Contractor shall substitute 19mm clearstone wrapped in filtercloth at no additional charge.

All excavation and preparation of the installation / restoration of the trench shall be included in this unit price. The Contractor shall remove and dispose of all surplus material generated under this item off-site at an approved location provided by the Contractor at his expense. Surplus or unacceptable materials shall be disposed of off-site at an approved location provided by the Contractor at his expense. All excess materials shall be disposed of in accordance with OPSS 180, and amended to the guidelines as set forth under Special Provisions Clause 12, Management of Excess Materials. The Contractor is advised that this item shall include all work up to but does not include the disposal of excess materials. The costs associated with the hauling and disposal of such surplus materials off site under this item shall be compensated under item #A6.

The Contractor will be required to conduct a post-installation CCTV inspection of the installation (being mains and laterals) in accordance with OPSS 409 which shall be conducted prior to placement of the asphalt surface coarse.

Payment at the Contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

Measurement for payment of this Item shall be by the Linear Metre.

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ITEM B7 PRECAST CONCRETE SINGLE INLET CATCH BASIN – OPSD 705.010**ITEM B8 PRECAST CONCRETE DITCH INLET CATCH BASIN – OPSD 705.030**

Under this item the Contractor shall be required to install the structures and frame and grates in accordance with the Contract Documents and as directed by the Engineer.

The Contractor shall complete all excavation for the installation including supply and placement of 150 mm of Granular ‘A’ bedding and 300 mm of Granular ‘A’ (quarried) surround material. Backfill shall be acceptable native material, select subgrade material, or Granular ‘B’, Type I supplied by the Contractor.

The Contractor shall remove and dispose of all surplus material generated under this item off-site at an approved location provided by the Contractor at his expense. Surplus or unacceptable materials shall be disposed of off-site at an approved location provided by the Contractor at his expense. All excess materials shall be disposed of in accordance with OPSS 180, and amended to the guidelines as set forth under Special Provisions Clause 12, Management of Excess Materials. The Contractor is advised that this item shall include all work up to but does not include the disposal of excess materials. The costs associated with the hauling and disposal of such surplus materials off site under this item shall be compensated under item #A6.

All precast components required to assemble the structures shall be included in the item.

Precast concrete adjustment units shall be according to OPSS 1351.

Inlet and outlet pipes shall be securely set into the structure’s concrete base or walls using an approved pipe connector so that the structure is watertight. A resilient connector, i.e., a flexible, watertight connector, in the structure opening for flexible and rigid pipe, shall be provided where a pipe connects to a structure.

Installation of pipe connectors shall be according to the manufacturer’s recommendations.

All pipes shall be flush with the inside walls of the structure.

The opening for the connection of the sub drain outlet shall be formed by coring. The sub drain outlet pipe shall be sealed into place using non-shrink grout. A 50mm diameter weep hole shall be cored into the same wall as the sub drain connection and at the same invert elevation.

When precast concrete adjustment units are used, frames and grates or covers shall be set in a full bed of mortar on the precast concrete adjustment units.

Ditch inlet grates shall be installed as specified in the Contract Documents.

Installation of frames with grates or covers which lie within the flow lines of a curb and gutter system shall be according to OPSS.MUNI 353 and OPSD 610.010.

All structures exceeding 5.0m in depth shall receive an aluminum safety platform as per OPSD 404.020.

Steps shall be Circular Aluminum Maintenance Hole Steps, Hollow as per OPSD 405.010 and shall be installed in all maintenance holes.

Frost straps are not required.

Storm structures shall have 0.6m sumps.

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Payment at the Contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

Measurement for payment of this Item shall be by the Unit Each.

Special Provision No. 31	
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ITEM B9, C8 PRECAST CONCRETE MAINTENANCE HOLE – 1200mm – OPSD 701.010

ITEM B10 PRECAST CONCRETE MAINTENANCE HOLE – 1500mm – OPSD 701.011

Under this item the Contractor shall be required to install the structures and frame and grates in accordance with the Contract Documents and as directed by the Engineer.

The Contractor shall complete all excavation for the installation including supply and placement of 150 mm of Granular 'A' bedding and 300 mm of Granular 'A' (quarried) surround material. Backfill shall be acceptable native material, select subgrade material, or Granular 'B', Type I supplied by the Contractor.

The Contractor shall remove and dispose of all surplus material generated under this item off-site at an approved location provided by the Contractor at his expense. Surplus or unacceptable materials shall be disposed of off-site at an approved location provided by the Contractor at his expense. All excess materials shall be disposed of in accordance with OPSS 180, and amended to the guidelines as set forth under Special Provisions Clause 12, Management of Excess Materials. The Contractor is advised that this item shall include all work up to but does not include the disposal of excess materials. The costs associated with the hauling and disposal of such surplus materials off site under this item shall be compensated under item #A6.

All precast components required to assemble the structures shall be included in the item.

Precast concrete adjustment units shall be according to OPSS 1351.

Inlet and outlet pipes shall be securely set into the structure's concrete base or walls using an approved pipe connector so that the structure is watertight. A resilient connector, i.e., a flexible, watertight connector, in the structure opening for flexible and rigid pipe, shall be provided where a pipe connects to a structure.

Installation of pipe connectors shall be according to the manufacturer's recommendations.

All pipes shall be flush with the inside walls of the structure.

The opening for the connection of the sub drain outlet shall be formed by coring. The sub drain outlet pipe shall be sealed into place using non-shrink grout. A 50mm diameter weep hole shall be cored into the same wall as the sub drain connection and at the same invert elevation.

When precast concrete adjustment units are used, frames and grates or covers shall be set in a full bed of mortar on the precast concrete adjustment units.

Ditch inlet grates shall be installed as specified in the Contract Documents.

Installation of frames with grates or covers which lie within the flow lines of a curb and gutter system shall be according to OPSS.MUNI 353 and OPSD 610.010.

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All structures exceeding 5.0m in depth shall receive an aluminum safety platform as per OPSD 404.020.

Steps shall be Circular Aluminum Maintenance Hole Steps, Hollow as per OPSD 405.010 and shall be installed in all maintenance holes.

Frost straps are not required.

Storm structures shall have 0.6m sumps.

Payment at the Contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

Measurement for payment of this Item shall be by the Unit Each.

Special Provision No. 32	
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ITEM B11 **ROCK EXCAVATION STORM SEWER TRENCH INSTALLATIONS**

ITEM C10 **ROCK EXCAVATION SANITARY SEWER TRENCH INSTALLATIONS**

ITEM D16 **ROCK EXCAVATION WATERMAIN TRENCH INSTALLATIONS**

Under this item the Contractor shall remove all rock to complete the installation of the storm sewers, sanitary sewers, watermains and appurtenances, and all other roadway items and associated items.

The Contractor is advised that payment will be calculated on theoretical trench widths (being 300mm outside of the pipe wall in each direction) and depths (150mm below pipe invert) with no payment for over break and over excavation.

Rock may be utilized as trench backfill when the material is adequately mixed with on site native materials and is of 300mm in size or smaller. No rock shall be placed within 500mm of the pipe and or structure walls.

The Contractor shall remove and dispose of all surplus material generated under this item off-site at an approved location provided by the Contractor at his expense. Surplus or unacceptable materials shall be disposed of off-site at an approved location provided by the Contractor at his expense. All excess materials shall be disposed of in accordance with OPSS 180, and amended to the guidelines as set forth under Special Provisions Clause 12, Management of Excess Materials.

Measurement for payment of this item shall be by the Cubic Meter.

Special Provision No. 33	
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ITEM B12 **CONNECT TO EXISTING STORM SEWER SYSTEM**

ITEM C9 **CONNECT TO EXISTING SANITARY SEWER SYSTEM**

Under this item the Contractor shall connect the new storm sewer system into the existing system, being a pipe connection or structure connection.

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If pipe diameters and/or types differ, connections shall include a manufactured coupler approved by the Contract Administrator and the supply and installation of a concrete collar.

All surplus materials shall be disposed of off-site by the Contractor at an approved site provided by the Contractor at his expense.

Payment at the Contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

Measurement for payment under this item shall be by the unit Each.

Special Provision No. 34	
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ITEM C1 **REMOVAL OF EXISTING SANITARY SEWERS (ALL SIZES)**

Under this item the Contractor will be required to remove and dispose of off-site all existing sanitary sewers within the limits of the contract designated for removal. All labour, equipment and materials to facilitate such works shall be deemed included under this item.

Measurement for payment of this Item shall be by the Linear Metre.

Special Provision No. 35	
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ITEM C2 **REMOVAL AND DISPOSAL OF EXISTING SANITARY SEWER**
- ASBESTOS CEMENT PIPE

Under this item the Contractor will be required to remove and dispose of off-site all existing asbestos cement sanitary sewer pipe (all sizes) within the limits of the contract designated for removal. All labour, equipment and materials to facilitate such works along with any and all costs associated with proper transportation and disposal shall be deemed included under this item.

All removals shall be done in accordance with the Occupational Health and Safety, Ministry of the Environment, Ministry of Transportation, and any other applicable laws, whereby the Contractor shall adequately bag the pipe with identification tags / markers, provide satisfactory storage (temporary) and proper haulage and permanent disposal.

Measurement for payment of this Item shall be by the Linear Metre.

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The Contractor will be required to conduct a post-installation CCTV inspection of the installation in accordance with OPSS 409 which shall be conducted prior to placement of the asphalt surface coarse.

Payment at the Contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

Measurement for payment of this Item shall be by the Linear Metre.

Special Provision No. 38	
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ITEM C7 125mm PVC SDR28 SANITARY SEWER SERVICE LATERAL c/w CLEANOUT

Under this item the Contractor shall supply all labour, equipment, and materials to install PVC SDR28 Smooth Wall, Bell and Spigot, Sanitary Sewer pipe, conforming to CSA certification 182.2, and ASTM D3034 and ASTM F794 (as applicable) per sizing required in the Contract drawings.

Included under this item shall be the following:

- 150 mm Granular ‘A’ bedding (quarried material)
- 300 mm Granular ‘A’ pipe surround (quarried material)
- Excavations and backfilling

In areas of wet trench conditions, the Contractor shall substitute 19mm clearstone wrapped in filtercloth at no additional charge.

All excavation and preparation of the installation / restoration of the trench shall be included in this unit price. The Contractor shall remove and dispose of all surplus material generated under this item off-site at an approved location provided by the Contractor at his expense. Surplus or unacceptable materials shall be disposed of off-site at an approved location provided by the Contractor at his expense. All excess materials shall be disposed of in accordance with OPSS 180, and amended to the guidelines as set forth under Special Provisions Clause 12, Management of Excess Materials. The Contractor is advised that this item shall include all work up to but does not include the disposal of excess materials. The costs associated with the hauling and disposal of such surplus materials off site under this item shall be compensated under item #A6.

The Contractor is hereby informed that he will be required to locate the existing sanitary services at the roadway property limit prior to installation of the new sanitary main. The Contractor will be required to connect new laterals into the existing service at the property limit ensuring a watertight joint. Connections shall be 90° to the main for all mains larger than 200mm.

The building services connected to 200mm mains shall be set above the spring line of the sewer main with proper “wye” (Y) fittings and with long radius bends. Other building sewers connected to larger mains may be by a tee connection with the side of the tee rotated at least 45 degrees above horizontal.

Removal of the old service shall be included in the work of the new service.

Sanitary services shall have a clean-out with a cap, approved by the Commission located at the property line or as directed by the Contract Administrator. The clean-out shall be set flush to finished grade.

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The Contractor will be required to conduct a post-installation CCTV inspection of the installation in accordance with OPSS 409 which shall be conducted prior to placement of the asphalt surface coarse.

Payment at the Contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

Measurement for payment of this Item shall be by the Linear Metre.

Special Provision No. 39	
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ITEM C11**BY-PASS SANITARY SEWER PUMPING**

Under this item the Contractor shall supply all labour, equipment and materials to provide for the design and implementation of a temporary sewer bypass system, commissioning and decommissioning, spill prevention, and cleanup, traffic protection, and roadway crossings.

The Contractor shall prepare and submit the following for approval to the Owner / Contract Administrator prior to implementation.

- Sewer bypass plan ensuring there is adequate capacity and size to handle the peak flows and surcharge flow rates at all times during the bypass operation.
- Spill response plan

The submittal; of the above shall be completed a minimum two (2) weeks prior to the start of construction to the Contract Administrator.

The sewer bypass plan shall include;

- Flow rates and any other considerations that are noted by the County.
- Size of sewer to be by-passed
- Bypass connection as proposed
- Site and equipment monitoring
- Staging areas for pumps
- Duration of works
- Sewer plugging method, type and size of plug
- Location of maintenance holes for access points and discharge points
- Sizing, materials, location of suction and discharge piping
- Characteristics of bypass pump, such as size, capacity, power requirements
- Standby power generator as available
- Methods of protecting discharge maintenance holes or structures from erosion, scour damage
- Method for controlling noise of each pump and or generator
- Details of bypass pipe crossings
- All precautions shall be done to ensure the bypass operations prevent sewage backups, overflows, and spills

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The spill response plan shall include;

- Procedures for notification to the County and MOE
- Any mandatory regulatory reporting as required
- Plan for investigating cause of the spill
- Plan for containing the spill and addressing the source of the spill
- Determination if any service connections, storm drains, watercourses, or other infrastructure that could be negatively impacted
- Plan for preventing public exposure

The plans shall be submitted in a manner that clearly describes how the bypass will be constructing and maintained with mapping as assistance.

All pumps shall be equipped with low noise, noise cancelling devices, and further equipped with appropriate start / stop controls.

All bypass pumping shall be able to withstand pressures that are deemed greater than the peak bypass pressures and traffic loadings at road crossing ramps. All piping shall be adequately monitored and at no times show evidence of visible leakage.

The bypass system shall be adequately monitored by the Contractor at all times. All staff shall be knowledgeable of the installation and capable of switching to standby equipment should the need arise.

The Contractor shall allow for and provide standby power equipment satisfactory sized to the selected equipment under the plan.

The Contractor shall place bypass piping outside of roadways when possible. When the piping is required to be within the roadway, it shall be laid by either construction roadway ramps satisfactorily to the approval of the Owner, and/or within temporary trenches.

Upon completion of the bypass, the system shall be flushed and cleaned with potable water.

Measurement for payment of this Item shall be by the unit Lump, which shall include all labour, materials, equipment, and resources required to prepare and implement the plan and pumping.

Special Provision No. 40	
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ITEM D1 **REMOVAL OF EXISTING WATERMAINS (ALL SIZES)**

Under this item the Contractor will be required to remove and dispose of off-site all existing watermains, valves, fittings, as required to facilitate the new construction, unless otherwise designated to be abandoned by the Contract Administrator.

Measurement for payment of this item shall be by the Linear Meter.

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ITEM D2 **ABANDON EXISTING WATERMAIN (ALL SIZES)**

Under this item the Contractor shall undertake the following work:

- Drain all water from existing watermain
- Excavation to expose watermain, fittings, valve boxes, etc.
- Saw cutting of the existing pipe
- Removal and disposal of existing pipe, fittings, valve boxes, etc.
- Supply and placing of 20 mpa concrete plug in the ends of existing main to be abandoned. Minimum length of plug shall be 300 mm.
- Filling of sand fill, grout, whereby it is demonstrated that the pipe is adequately filled 90% (Filling shall be completed by means of pumping the mixture into the pipe demonstrating adequate % full is achieved)
- Backfilling, compaction and restoration not covered elsewhere in the Contract.

The Contractor is advised that any portion of existing watermain required to be removed to facilitate work under this item or any other tender item that it will be deemed to be included under the applicable tender item D1.

Measurement for payment of this item shall be by the Unit Linear Metre.

Special Provision No. 42	
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ITEM D3 **REMOVAL OF EXISTING FIRE HYDRANTS**

The Contractor shall remove and dispose of all existing hydrants designated for removal, of which shall be at the Contractor’s expense. The County of Prince Edward Water Department shall have first right of refusal for all hydrants. Should the County choose not to accept the materials, the Contractor shall remove and dispose of offsite all excavated materials and hydrant assembly components.

All excavation, removal, backfill and compaction will be covered under this item.

Measurement for payment under this item shall be by the Unit Each.

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ITEM D4	200mm PVC SDR18 WATERMAIN
ITEM D5	250mm PVC SDR18 WATERMAIN
ITEM D6	250mm PVC SDR18 WATERMAIN (station 0+295 to 0+530)

This specification covers the requirements for the installation of watermains, and associated appurtenances in open cut. The provisions of OPSS.MUNI 441 shall apply except as modified herein.

Bedding materials shall be Granular A Limestone conforming to the requirements of OPSS 1010 at a minimum depth of 200 mm.

Cover Material shall be Granular A Limestone material conforming to the requirements of OPSS 1010 minimum depth of 300 mm above crown of pipe.

Backfill shall be selected native material or Granular B Type I.

Minimum installation depth shall be 1.8m with 0.5 m vertical separation between all sewer crossings.

- 1) Water mains shall conform to the following.
 - a) Ductile Iron Pipe and Fittings
 - i) Ductile Iron Pipe shall be centrifugally cast, AWWA C151-A21.51-81 in 5.5 m lengths, Pressure Class 350 for pipe up to 300mm, Pressure Class 250 from 400mm to 500mm and Pressure Class 200 for larger pipes.
 - ii) All ductile iron pipe shall be cement lined and shall be polyethylene encased as per AWWA Standard C-105.
 - iii) All ductile iron fittings shall be cement lined with mechanical joints.
 - iv) Every ductile iron pipe and special casting shall be coated outside with coal-tar pitch varnish using a hot dip method.
 - b) Plastic Pipe
 - i) Plastic pipe shall conform to AWWA C900-16 Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 100mm Through 1,500mm. With prior approval from G.N.U. larger pipe sizes and a larger SDR number may be used, however the minimum wall thickness allowed will be 26mm.
 - ii) The pipe shall be homogeneous throughout, free from voids, cracks, inclusions, and other defects.
 - iii) The colour is to be "Blue Brute".
 - iv) Service connections shall be by stainless steel saddles a minimum of 150mm wide surrounding the PVC main or by factory made PVC tees.
 - v) Extruded PVC fittings may be used with PVC pipe. Non-extruded type fittings are not permitted.

The Owner cannot guarantee all existing water valves can be completely closed. Should repairs be required on the existing water distribution network to allow the network to be completely closed, the Owner will be responsible for the required repairs. However, no claims shall be considered which are based on delays or inconveniences resulting from the repairs or work not being completed before the start of the Contract.

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Laying and Jointing of Pipes

No pipes, special fittings, valves, hydrants or other material shall be installed which are known or may be found to be defective or which may have been damaged in transit.

All pipe shall be clearly marked as to class by the supplier. Any defective, damaged, or unsound pipe shall be rejected.

The contractor shall take delivery of pipe, fittings, valves and hydrants as near to the work site as practical. Such material shall be stored so that it does not interfere with traffic and care shall be taken to prevent dirt and foreign material from accumulating in or on the pipes, fittings valves, etc.

Pipe bedding and cover shall conform to those set forth in OPSD 802 series for flexible or rigid pipe. Bedding and cover shall be Granular A Limestone.

The open end of pipe shall be plugged whenever workers are not actively engaged in jointing pipe, to prevent entrance of foreign material.

The Contractor shall keep the trenches free of water while pipes are being laid and jointed, and during inspection.

All pipe and fittings shall be carefully aligned by digging bell holes to secure a satisfactory matching of the bell and spigot ends of the pipe or fittings.

Care shall be taken so that the pipe will conform to the lines and grades indicated by the drawings or given by the Contract Administrator.

Blocking is not permitted.

Before the pipe, fittings, valves, and hydrants are installed, they shall be cleaned of all dirt, oil, grease, etc. and dried.

No joint shall be covered until it been inspected by the Contract Administrator.

All work on water mains and services must meet or exceed the AWWA Standard for Disinfecting Water Mains, ANSI/AWWA C651 – 14. The application of this standard shall include, but is not limited to, disinfection of water mains, disposal of heavily chlorinated water, disinfection procedures when cutting into or repairing existing water mains and verification.

Pipe and Joint Restraint

1) General

- (a) Pipe and joint restraint shall comply with OPSD 1103.010 and 1103.020 or as set out herein.
- (b) Mechanical joint restraint may be used subject to the prior approval of the Contract Administrator.
- (c) The number of joints requiring mechanical thrust restraint shall be set by the Contract Administrator.

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2) Eye Bolts and Rods

Eyebolts shall be zinc coated ANSI/ASME B1.1 19mm ($\frac{3}{4}$ inch). Rods shall be ANSI/ASME B1.1 19mm ($\frac{3}{4}$ inch) Grade 316 stainless steel with stainless steel nuts and washers. The number of rods required will be as set out below:

Number of 19 mm Rods for Eye Bolt Restraint				
Pipe Size	Dead End, Tee, & Dead End Valve	Fitting 90° Elbow	Fitting Elbow 45°	Fitting Elbow 22.5°
150 mm	2	2	2	2
200 mm	2	2	2	2
250 mm	3	3	2	2
300 mm	4	4	2	2
400 mm	Not permitted	Not permitted	3	2

3) Ductile Iron Pipe Restraint

- (a) Mechanical restraint for standardized mechanical joints shall be incorporated in the design of the follower gland and shall impart wedging action against the pipe, increasing its resistance as the pressure increases. The assembled joint shall maintain its flexibility after burial and shall maintain its integrity by controlled and limited expansion of each joint during the wedging action. Restraining glands shall be manufactured of ductile-iron conforming to the requirements of ASTM A 536, Grade 65-45-12. Wedging mechanisms shall be manufactured of Ductile-iron to hardness of 370 BHN minimum. Dimensions of the gland shall be such that it can be used with the standardized mechanical joint bell and tee head bolts conforming to the requirements of ANSI/AWWA C111/A21.11 and ANSI/AWWA C153/A21.53 of latest version. Twist off nuts shall be incorporated in the design of the wedge activation screws to insure proper torque during installation.
- (b) The mechanical joint restraining device shall have a working pressure of 1750 kPa with a safety factor of 2:1 against separation when tested in the dead-end situation.
- (c) The Mechanical joint restraining device shall be Uni-Flange series 1400 or approved equal.

4) PVC Pipe Restraint

- (a) Mechanical joint restraint devices for PVC Pipe shall incorporate a series of machined serrations (cast serrations are not permitted) on the inside diameter to provide restraint, exact fit, and 360 degree contact and support of pipe wall. Restraint devices shall be manufactured of high strength ductile iron, ASTM A 536, Grade 65-45-12. Bolts and connecting hardware shall be of high strength low alloy material in accordance with ANSI/AWWA C111/A21.11.

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- (b) All joint restraint devices for PVC shall carry a water working pressure rating equivalent to the full rated pressure of the PVC pipe on which they will be installed, with a minimum factor of safety of 2:1 in any nominal pipe size. In addition, they shall meet or exceed the requirements of Uni-B-13-94, Recommended Performance Specification For Joint Restraint Devices For Use with Polyvinyl Chloride (PVC) Pipe.
- (c) Restraint Devices shall be Uni-Flange Series 1300, 1350, 1360, 1390 or approved equal.
- (d) Series 1300 – For restraint of PVC pipe with DI mechanical joint or DI Push-on fittings with “ear lugs”.
- (e) Series 1350 – For restraint of PVC pipe bell in spigot joints. (new installations)
- (f) Series 1360 – For restraint of PVC pipe in PVC pressure fittings joint (AWWA C907 PVC Fittings or “fabricated PVC pressure fittings)
- (g) Series 1390 - For restraint of PVC pipe bell and spigot joints. (new or existing installations)

Backflow Prevention

The Contractor will provide all connection material and fittings for connection of the contractor’s backflow prevention connection for testing, disinfection and flushing. The backflow device shall be approved by County staff/ Contract Administrator.

Marking of Mains and Services

All non-metallic mains and services shall have #12 tracer wire. The tracer wire shall be looped on the outside of each valve box. The loop shall have one lead thermo welded to the valve box and the top of the loop shall be extended to inside the valve box through an opening cut into the valve box 50 mm below the bottom of the bell. Joints in the tracer wire shall be made with brass connectors.

Corrosion Protection Of Watermains

Valves, metallic pipes, metallic fittings, tracer wire, and hydrants shall be protected as per OPSD 1109.011 and 1109.025. Other locations may be directed by the Contract Administrator.

Cathodic protection to meet Ontario Provincial Standard Drawings and Specifications refer to OPSD 1109.011 and OPSS 442.

Anodes shall be set and thermo welded and covered with rubberized mastic to the satisfaction of the Contract Administrator.

Test stations are not required.

- One 2.3kg zinc anode for every 500m of tracer wire.
- One 7.7kg magnesium anode on every valve, hydrant and fitting. All thermite weld connections shall be coated with Roybond 747 Primer and Roystan “Handy Cap” or approved equivalent.

Leakage Testing

Leakage testing of pipes shall conform to OPSS 441.07.24.03.

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Watermains Passing Under Culverts or Drainage Course

Crowns of water mains passing under culverts or drainage courses shall clear the invert of the culvert or the bottom of the water course by a minimum of 1m and provide frost protection in accordance with OBC 7.3.5.4 to achieve 1.85m of equivalent depth.

If bends are used to pass under the culvert or a water course, such bends shall have a maximum change in direction of 22 ½ degrees. Thrust restraints shall be as set out herein.

The Unit price shall include all fittings, extra pipe, extra work and anodes. If rock is encountered it shall be paid for as rock excavation.

Flushing of Mains

The disinfection procedures shall adhere to ANSI/AWWA specification C651-14 with the following changes;

- Two (2) soft foam swabs shall be sent through the water main, after the main is flooded and before chlorination.
- Disinfection/chlorination shall be by sodium hypochlorite. The concentration shall be at least 25 mg/L of free chlorine prior to the start of the disinfection period and 15 mg/L of free chlorine after twenty-four (24) hours. Depending on the drop in free chlorine, the Contract Administrator may require rechlorination.
- The initial bacteriological samples shall be taken after the main is flooded with distribution water and there is a free chlorine residual equal to the adjoining distribution system.
- All sampling shall be under the direct supervision of a person qualified to sample in O.Reg. 170/03 using chain of custody procedures as practised by the County.
- County staff representative must be present during all testing and verification.

All sampling shall be under the direct supervision of a person qualified to sample in O. Reg. 459/00 using chain of custody procedures as practiced by the County.

All mains shall be flushed thoroughly at a flow rate sufficient to maintain a minimum velocity of 0.6 m/s and preferably 1.5 m/s until such time as that the flushed water is running clear and that the chlorination levels are consistent with the levels of chlorination found on the balance of the distribution system.

The water used for testing, flushing or disinfecting watermains shall be disposed of safely and in accordance with MOE and other related guidelines. The acceptable chlorine residual of water discharged to storm sewers or watercourse is 0.5 mg/L maximum. The method and location of disposal of chlorinated water is subject to the approval of the Owner and the MOE.

Connect to Existing Watermains

The Contractor shall supply all materials and shall perform all work necessary to connect the new watermains to the existing watermains at the locations shown on the Contract Drawings or as directed by the Contract Administrator.

The Contract Administrator and the Contractor shall plan the timing and construction procedures for the required connections to existing water mains. Before any connections are commenced, The County, and or Contractor shall notify all water customers affected by the shutdown, as to the time and duration of the shutdown.

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The Contractor shall prove to the Contract Administrator that he has the proper materials on the site to make the connection in question, and that he has the manpower, and equipment, on the job to complete the connection in the time allotted. Once the work has been started on the connection, it shall be continued until the work has been completed.

The Contractor shall be prepared to work overtime hours to complete the connection, if the work cannot be done during normal working hours.

The Contractor will not receive any additional payment for the work of connections, if they are made in overtime working hours.

The Contractor will supply and install tapping sleeves and valves.

Connections to the existing mains shall be made only after the affected section of the waterworks has been isolated and the new main has been completed, including chlorination, testing and flushing. Extreme care shall be taken to prevent contamination of the existing watermain and new closure fittings shall be rinsed with chlorine solution prior to installation.

Insulation

All watermain that cannot be installed at a depth of 1.8m below grade shall include frost protection in accordance with OBC 7.3.5.4 to achieve 1.8m of equivalent depth.

No separate payment shall be made for cathodic protection.

Measurement for payment under this item shall be by the Linear Metre.

This Special Provision shall be read in conjunction with Prince Edward County Development Services document ‘PROCEDURE FOR THE CLEANING, TESTING, DISINFECTION, AND CONNECTION OF WATERMAINS’ (the ‘Procedure Document’). This document has been included in Appendix D. In the case of a conflict between this Special Provision and the Procedure Document, the Procedure Document shall govern.

REFERENCES

Prince Edward County Development Services document “Procedure for the Cleaning, Testing, Disinfection, and Connection of Watermains”

Special Provision No. 44	
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<u>ITEM D7</u>	<u>200mm GATE VALVE</u>
<u>ITEM D8</u>	<u>250mm GATE VALVE</u>

Gate Valves shall be Clow or Mueller Super-Seal Resilient Seat or approved equivalent in accordance with AWWA Standard C509-15 for gate valves with iron body, bronze mounted non-rising stem, and open left, resilient seat with a working pressure of 1035kPa.

Valve Boxes shall be cast iron three piece slide type (5SL) complete with round base, lower section, upper section and cover. The size shall be determined by the size of valve and depth of Watermain.

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The price agreed upon in the tender shall include all costs for the supply and installation of valves and associated valve boxes and necessary road levelers at the location required and to the satisfaction of the Engineer.

Valves shall be placed with the stem vertical at the points indicated by the Engineer. Valve boxes shall be set vertical, well centered over the valve with the top at grade.

Measurement for payment under this item shall be by the Unit Each.

Special Provision No. 45	
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ITEM D9 **FIRE HYDRANT ASSEMBLY – OPSD 1105.010**

Payment per item shall include all labour equipment, materials, excavation for the supply and installation of the connection to the main, up to 10 meters of 150 mm pipe, hydrant valve, hydrant, stone, thrust restraint, 10.9 kg Zinc anode, extensions as necessary and shock collar. Hydrant leads in excess of 5 meters will be paid as a pipe item for the distance beyond 5 meters.

Fire Hydrants shall be breakaway, Clow Canada M67B or Mueller Centurion (Century) with 5 ¼” main valve, to AWWA Std.C502-94 (Latest version).

Hydrants to be located 1.0m off property line and located at the projection of abutting lot lines, and/or as indicated on the Contract drawings.

Two 60mm outlets with 5 threads per 25mm, nominal 1.80m bury, open left with mechanical joint to base. The actual bury of the hydrant shall be determined by the actual depth of the main and the finished grade at the hydrant, 1.8m minimum.

All hydrants to have two 60mm and one 100mm outlet (Non Storz Coupling) Fire Hydrants shall be installed with a clear and unobstructed area of 3.0m around the hydrant.

Fire Hydrants shall meet the Ontario Standard 33B, two 63mm CSA standard threads with a pumper connection of 145mm O.D. with 4.5 threads per 25mm.

All hydrants to be installed utilizing anchor tees and secondary valves.

Thrust blocks shall be As per OPSD 1103.01, 1103.02.

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ITEM D10 **SAMPLING STATION**

Under this item the Contractor shall supply all labour, equipment and materials to install the Sampling Station in accordance with sketch “SK2”.

Sampling station to be provided shall be as manufactured by Kupferle, being Eclipse model No. 88

This shall include all items from the watermain to the Sampling Hydrant.

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Measurement for payment under this item shall be by the Unit Each.

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ITEM D11	19mm POLYETHELENE / COPPER WATER SERVICES
ITEM D12	19mm CURB STOP
ITEM D13	19mm MAIN STOP

The new water services shall be connected as directed by the Contract Administrator.

Adjustable sliding-type service box bases (Type B) are to be used on all services over a bronze stop and drain curb stop. These are to be located on the property line.

Spatial separation of the sanitary and water service connections shall be in accordance with section 7.3.5.6 of the Ontario Building Code and subsection 1.4 of the Ontario Plumbing Code. Services are not to be installed in proposed driveways.

The new water services shall be connected as directed by the Contract Administrator. The unit price other than length of pipe shall include connection to the main, main cock and connection to existing services including couplings or reducing couplings if required.

Any work requested by property Owners to replace the waterline from the property line into the premises shall be done after completion of the work in this Contract unless written approval is obtained from the County or Contract Administrator.

Metallic water services of 25mm or smaller and less than 20m in length shall include the installation of one 2.3kg zinc anode. Other metallic services of 50mm or smaller shall be protected with a 5.5kg zinc anode. The cost shall be included in the price for each service.

All the existing services that are being replaced shall be shut off at the water main, cut and capped at the main cock outlet.

The connection from the new to the existing service pipe shall be performed by the contractor.

Service connections shall have a corporation main stop and be “goose-necked” near the water main as per the appropriate OPSD.

All services shall be sized in accordance with The National Plumbing Code of Canada. The minimum size shall be 19mm unless stated otherwise.

Pipe shall be Copper soft tube type K or PE PC 160. If non-metallic water service tubing is used to replace an existing service the Contractor will, ensure that the building electric service ground remains intact.

Non-metallic service pipe shall have a #12 tracer wire thermo welded to the service box and weld covered with rubberized mastic.

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Couplings and adapters shall be compression fittings or compression by male or female iron pipe as manufactured by Mueller, Ford Meter, Cambridge Brass or Emco.

Corporation main stops shall be compression type and in accordance with AWWA standards.

Where PVC mains are installed, corporation main stops are to be set in manufactured tees or stainless steel service saddles (minimum 150mm wide) shall be used. These service saddles shall be in accordance with AWWA standards.

Curb valves (stops) shall be compression type and in accordance with AWWA standards.. Water service boxes shall be Mueller Cat. No. A-726 or equal and be complete with 900mm stainless steel rods and cotter pins and lids complete with centre brass nut. For service lines 38mm and 50mm in size oriseal service boxes shall be used and are to be complete with 1200mm stainless steel rods and cotter pins, Mueller Cat. No. A-753 or equal as manufactured by Mueller Canada, Bibby Ste Croix and Concord Daigle.

Curb valve boxes shall be located at the property line and set as per OPSD 1104.010. The top set at finished grade.

The contractor shall ensure that all service pipe shall be disinfected prior to installation by filling with 0.5% chlorine solution for 60 minutes, then flushed with potable water. Thereafter the pipe shall be capped until immediately prior to connecting.

Separate services shall be provided to each building and each unit of a semi-detached or row house residential building.

Services of 50mm or less shall have no joints between the main stop and the curb stop and no joints between the curb stop and the building interior.

Under this item the Contractor shall remove and dispose of, off-site, the existing service and appurtenances being replaced.

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ITEM D14 **TEMPORARY WATER SUPPLY**

This specification covers the Contractors requirements for the installation of temporary water mains, service connections and associated appurtenances prior to disconnecting service of an existing watermain on a temporary bases. The provisions of OPSS 493 shall apply except as modified herein.

All temporary water pipe shall be NSF 61 compliant.

Material shall be capable of having the pipe contents freeze and thaw without breaking the pipe or fittings.

The Contractor must provide temporary potable water supply to residents under the approval of the Owner. Water shall be supplied by approved temporary by-pass line and service connections complete with valves and backflow prevention devices as required. Where connection is made to the existing water

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distribution system via a hydrant permission shall be obtained from the Owner before making such a connection.

Temporary water supply shall maintain existing flows and pressures.

Temporary water shall be provided in accordance with OPSS 493 and the Prince Edward County Development Services document "Procedure for the Cleaning, Testing, Disinfection, and Connection of Watermains" which has been included in the appendices.

The Contractor shall submit a detailed plan of his proposed temporary supply scheme to the Contract Administrator for review, at least 5 business days prior to implementation.

Connections to the private plumbing system of a residential unit shall be by one of the following methods;

- To the outside hose connection, having the existing water service shut-off at the curb stop. Homeowners must be given a wye connection to allow the use of garden hoses.
- Dig the water service at the property line and connect directly to the existing service at or near the curb stop. All safety procedures must be met to protect the open trench, and the property owner must be notified of the need for a temporary shut down to allow the temporary condition.

For individual property connections, the pipe, hose and all other materials which are to be furnished by the Contractor for use in conjunction with the temporary service pipe and temporary connections to property services and branches shall be approved by the Owner, and shall be fully adequate to withstand the pressures and all other conditions of use and shall be of material which does not impart any taste or odor to the water.

The pipe and fittings shall be able to withstand the design pressure without visible leakage. Care shall be exercised throughout the installation of any temporary pipe and service fittings to avoid any possible contamination of any watermain or property service or contamination of the temporary service pipe proper.

The by-pass line and private service connections shall be chlorinated prior to their use. The temporary service connections shall be valved near the point of connection to the by-pass line and at the connection to the private plumbing system so that both the by-pass and private services may be chlorinated except for the final connection.

After the project work is completed and/or municipal water service connections restored and excavations backfilled, the main will be returned to service and the temporary water supply lines shall be removed.

The Contractor shall be responsible for all work and costs associated with supplying, maintaining, and removing the temporary water.

Temporary water shall include installation, maintenance, and removal of ramping over any overland water supply as directed by the Contract Administrator.

Measurement of Temporary Water shall be by Lump Sum.

Payment at the contract price for the above tender item shall be full compensation for all labour, equipment, and material required to do the work:

Payment for this item shall be made as follows:

- a. 50% for installation of measures outlined above;
- b. 50% for maintenance prorated over construction period

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ITEM D15 **CONNECT TO EXISTING WATERMAIN**

Under this item and for the contract price, the Contractor shall supply all materials and shall perform all work necessary to connect the new watermains to the existing watermains at the locations shown on the Contract Drawings or as directed by the Contract Administrator.

The Contract Administrator and the Contractor shall plan the timing and construction procedures for the required connections to existing water mains. Before any connections are commenced, the Contractor shall notify all water customers affected by the shutdown, as to the time and duration of the shutdown, only upon authorization and approval from the County.

The Contractor shall prove to the Contract Administrator that he has the proper materials on the site to make the connection in question, and that he has the manpower, and equipment, on the job to complete the connection in the time allotted. Once the work has been started on the connection, it shall be continued until the work has been completed. The Contractor shall be prepared to work overtime hours to complete the connection, if the work cannot be done during normal working hours. The Contractor will not receive any additional payment for the work of connections, if they are made in overtime working hours.

The contractor will supply and install tapping sleeves and valves.

Connections to the existing mains shall be made only after the affected section of the waterworks has been isolated and the new main has been completed, including chlorination, testing and flushing. Extreme care shall be taken to prevent contamination of the existing watermain and new closure fittings shall be rinsed with chlorine solution prior to installation.

Measurement for payment of this item is by the Unit Each.

Before any connections are commenced the Contractor shall notify the Contractor Administrator five (5) business days in advance to allow Prince Edward County to issue a Public Service Advisory (PSA) as to the time and duration of the shutdown.

Main valves may only be operated by persons certified in water distribution as per O.Reg. 128/04., and as authorized by County staff.

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ITEM B13 **750mm RCP, Class 65-D Storm Sewer Pipe**

Under this item the Contractor shall supply all labour, equipment, and materials to install RCP Storm Sewers, Class 65-D, conforming to CSA certification A257 Series M92 per sizing required in the Contract drawings.

Included under this item shall be the following:

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- 150 mm Granular 'A' bedding (quarried material)
- 300 mm Granular 'A' pipe surround (quarried material)
- Excavations and backfilling

In areas of wet trench conditions, the Contractor shall substitute 19mm clearstone wrapped in filtercloth at no additional charge.

All excavation and preparation of the installation / restoration of the trench shall be included in this unit price. The Contractor shall remove and dispose of all surplus material generated under this item off-site at an approved location provided by the Contractor at his expense. Surplus or unacceptable materials shall be disposed of off-site at an approved location provided by the Contractor at his expense. All excess materials shall be disposed of in accordance with OPSS 180, and amended to the guidelines as set forth under Special Provisions Clause 12, Management of Excess Materials. The Contractor is advised that this item shall include all work up to but does not include the disposal of excess materials. The costs associated with the hauling and disposal of such surplus materials off site under this item shall be compensated under item #A6.

The Contractor will be required to conduct a post-installation CCTV inspection of the installation in accordance with OPSS 409 which shall be conducted prior to placement of the asphalt surface coarse.

Payment at the Contract price for the above noted tender item shall be full compensation for all labour, equipment and material to do the work.

Measurement for payment of this Item shall be by the Linear Metre.

All parging of pipes into the new structures shall be included under this item. The Contractor shall complete all excavation for the installation including supply and placement of bedding, surround material and backfilling of the pipes.

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ITEM A31**REMOVAL AND DISPOSAL OF EXCAVATED****HAZARDOUS MATERIALS**

Under this item the Contractor shall supply all labour, equipment, and materials necessary and as required to remove, load, haul, and transport of all excavated surplus materials being suspect of and deemed hazardous material inclusive of McAdam and other designated substances.

All materials shall be disposed of off site at an approved licensed facility in accordance with OPSS 180 specifications along with the requirements as set by the MOECC guidelines.

The licenced landfill as proposed to be utilized by the Contractor under this item shall be indicated to the County and Engineer confirming that they are able to receive such material as deemed hazardous.

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Suspect materials shall be verified by the Owner / Engineer, and the Contract Geotechnical Engineer. All suspect materials shall be subject to undergo additional testing inclusive of TCLP testing, as well as any and all other testing as required to satisfy the requirements of the disposal facility, which shall be completed by the Contractor, at the expense of the Contractor.

The Contractor is advised that they shall satisfy the requirements of such testing, inclusive of appropriate allowances associated with construction schedule and sequence of works.

The Contractor is advised that this item shall be utilized for all areas within the Contract.

Measurement for payment of this item shall be by the unit cubic metre.

APPENDIX 'A'
GEOTECHNICAL REPORT

APPENDIX 'B'

**A GUIDE FOR BEST MANAGEMENT PRACTICES
OF EXCESS MATERIALS**

APPENDIX 'C'
CONTRACT DRAWINGS

APPENDIX 'D'

**PROCEDURE FOR THE CLEANING, TESTING, DISINFECTION, AND
CONNECTION OF WATERMAINS**