



**THE CORPORATION OF THE  
MUNICIPALITY OF CHATHAM-KENT  
REQUEST FOR PROPOSALS**

**FOR**

**CONSULTING ENGINEERING SERVICES FOR THE  
REHABILITATION OF VASIK LINE BRIDGE OVER  
ENOS SMITH DRAIN  
TMS 4696893N17416577E  
COMMUNITY OF HARWICH**

**RFP # R14-177**

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## 1.0 GENERAL

### 1.1 Purpose

The Municipality of Chatham-Kent is inviting proposals for the services of a qualified and competent consulting engineering firm to provide accurate, timely and financially responsible consulting engineering services associated with the noted structure.

The Municipality would appreciate a response from your firm in the form of a proposal identifying expression of interest, qualifications, relevant related experience, company methodology, corporate philosophy and cost to successfully complete works associated with this project.

### 1.2 The Municipality of Chatham-Kent

The Corporation of the Municipality of Chatham-Kent is a single tier municipality with a population of 108,000 located in the heart of Southwestern Ontario. The Municipality is one of the largest municipalities by geographic boundaries in Ontario with an area of 2,543 square kilometres and has a mix of urban and rural communities.

### 1.3 Definitions

Wherever a word is used in this Request for Proposal with its first letter capitalized, the term is being used as it is defined as follows:

- (a) “**Agreement**” means the contract negotiated between the Municipality and the Successful Respondent;
- (b) “**Council**” means the Mayor and Council of the Municipality of Chatham-Kent;
- (c) “**Municipality**” means The Corporation of the Municipality of Chatham-Kent;
- (d) “**Proposal**” means the submitted documents of an entity responding to this Request for Proposal;
- (e) “**Proposal Review Committee**” means the people selected by the Municipality to evaluate the Proposals;
- (f) “**RFP**” means this Request for Proposals and all schedules referred to in and attached to this Request for Proposals and any amendments or addendum thereto;
- (g) “**RFP Coordinator**” means the person selected by the Municipality to manage the RFP process in conjunction with the Purchasing Officer of the Municipality;

- (h) **“Respondents”** means those entities that submit a proposal in response to this Request for Proposals;
- (i) **“Submission Deadline”** means the date set out in section 3.2;
- (j) **“Successful Respondent”** means the entity that is selected to enter into negotiations with the Municipality;

Where any word appears in ordinary case, its regularly applied meaning in the English language is intended.

## **2.0 ADDITIONAL INFORMATION, QUALIFICATIONS, SCOPE OF WORK AND CONTENTS OF PROPOSAL**

Any additional information relating to this RFP, the required qualifications of Respondents, the Scope of Work and the required contents of Proposals are set out in Schedule “A” to this RFP. Any changes to the standard form wording of this RFP are set out in Schedule “B” to this RFP.

## **3.0 PROPOSAL SUBMISSION, WITHDRAWAL AND MODIFICATION**

### **3.1 Respondent Registration**

All Proponents are required to register at <http://www.chatham-kent.ca/Purchasing/Pages/Purchasing.aspx> to be eligible to bid

**Failure to register your company before the closing date and time may result in your bid being rejected**

### **3.2 Proponents List**

A list of all registered Proponents will be available on-line at <http://www.chatham-kent.ca/Purchasing/Pages/Purchasing.aspx>

### **3.3 Submission Deadline**

The Respondent’s Proposal must be received on or before **Wednesday April 23, 2014 before 1:30:00 p.m.** Any Proposals received after the Submission Deadline will be rejected and returned to the Respondent unopened.

### **3.3 Submission of Proposals**

- 3.3.1 Each Respondent shall submit one original and five copies of its Proposal before the Submission Deadline.
- 3.3.2 Respondents shall submit their Proposals by sending them by pre-paid courier or hand-delivery to:

**Jennifer Scherle, Purchasing Officer**

Corporation of the Municipality of Chatham-Kent  
315 King Street West, P.O. Box 640  
Chatham, ON N7M 5K8  
Tel: 519-360-1998 Ext. 3150 Fax: 519-360-1601

The Municipality accepts no responsibility or liability for any delays in internal handling or processing of proposals not hand delivered to the Purchasing Officer. To reduce the risk, where the proposal envelope is contained in some other form of wrapping or packaging (i.e. a courier envelope) Respondents shall clearly mark the most external wrapping or packaging with the RFP Number and Name to assist in identifying it for internal handling purposes. Proposals sent by facsimile or email are not acceptable.

- 3.3.3 Respondents shall also provide copy of its Technical Proposal in .pdf format at the same time and in the same envelope or package as the hard copies of their Proposal. Submission must be on USB “thumb drive”. Cd’s/DVD’s are not acceptable. The electronic copy is solely for the convenience of the Municipality. If there is any difference whatsoever between the electronic copy of the Proposal and the hard copy, the hard copy of the Proposal, as submitted, shall govern.

**3.4 Proposal Submission Format**

- 3.4.1 In addition to the details of its proposal, the Respondent shall include in its Proposal the following:

- (a) A cover page which states the Proposal Name and Proposal Number;
- (b) A letter of introduction identifying the Respondent and relevant information related to its application;
- (c) The Respondent’s name, address, telephone and fax number, e-mail address, and primary contact person;
- (d) The date of submission;
- (e) References; and,
- (f) An executed declaration in the form set out in Proposal Form “A”.

- 3.4.2 Respondents shall execute Proposal Form “A” as follows:

- (a) in the case of a sole proprietorship, the sole proprietor shall sign Proposal Form “A” and have the signature witnessed;
- (b) in the case of a limited company, an authorized signing officer shall sign Proposal Form “A”;

- (c) in the case of a partnership, all partners shall sign the Proposal Form “A” and have their signatures witnessed; and,
- (d) in the case of a joint venture, each entity of the joint venture comprising the Joint Venture Respondent shall sign Proposal Form “A” and each joint venture participant shall sign in accordance with the requirements above, as applicable.

3.4.3 The Municipality will use a “two envelope” process for evaluating the Proposals, unless otherwise stated in Schedule “A”. The Respondent’s Proposal, excluding its price or fee schedule, and all of the documents set out in section 3.4.1 shall be included in one envelope marked “Proposal” and the Respondent’s price or fee schedule shall be included in a separate envelope marked “Price”. Both envelopes should be included in one larger envelope labeled with the RFP Number and Name and addressed as described in section 3.3.2.

### **3.5 Withdrawal of Proposals**

A Respondent may withdraw its Proposal only by giving written notice before the Submission Deadline to the Purchasing Officer of an intention to withdraw. The Municipality shall return, unopened, a Proposal that has been withdrawn.

### **3.6 Amendment of Proposals**

Respondents may amend their Proposals after submission but only if the Proposal is amended and resubmitted before the Submission Deadline in accordance with the following:

- (a) the Respondent shall withdraw its original Proposal by notifying the Purchasing Officer in writing; and
- (b) the Respondent shall submit a revised replacement Proposal in accordance with the RFP Documents and no later than the Submission Deadline.

### **3.7 Proposal Irrevocability**

Subject to the Respondent’s right to withdraw before the Submission Deadline, the Respondent’s Proposal shall be irrevocable and shall remain in effect and open for acceptance for a period of ninety days following the Submission Deadline or until an Agreement is executed by the Successful Respondent and the Municipality, whichever occurs first.

### **3.8 One Proposal per Person or Entity**

3.8.1 A person or entity shall submit or participate in only one Proposal either individually or as a participant in a joint venture.

- 3.8.2 No person or entity shall be a subcontractor of a Respondent while submitting a Proposal individually or as a participant in a joint venture in the same RFP Process.
- 3.8.3 If a person or entity submits or participates in more than one Proposal in contravention of this section, the Municipality may, in its sole discretion, disqualify all of the Proposals submitted by that person or entity or in which that person or entity is a participant.

### **3.9 Addenda/Changes to the RFP Documents**

- 3.9.1 The Municipality will issue changes to the RFP Documents, which may include amendments to the Submission Deadline or changes in the Scope of Work or Qualifications of Respondents, by addendum only. No other statement, whether oral or written, made by the Municipality, including the RFP Coordinator, will amend the RFP Documents.
- 3.9.2 The Respondent shall not rely on any information or instructions from the Municipality or a Municipal Representative except the RFP Documents and any addenda issued pursuant to this Section.
- 3.9.3 Where a request results in a change or a clarification to the proposal, the Municipality will prepare and issue an Addendum to this proposal. The Municipality will make every effort to not issue an addendum within the forty-eight (48) hours prior to closing - not including Saturdays, Sundays and Statutory Holidays observed by the Municipality for regular business hours.

All Proponents are solely responsible to monitor the Municipality's website for all Addenda and are therefore also solely responsible for submitting complete new bids acknowledging any said Addendum prior to the closing date and time of the bid solicitation.

**FAILURE TO ACKNOWLEDGE ALL ISSUED ADDENDA SHALL RESULT IN THE TENDER BEING REJECTED.**

- 3.9.4 The Respondent shall acknowledge receipt of all addenda in the Proposal Form A. Failure to complete the acknowledgement may result in rejection of the Proposal.
- 3.9.5 The Municipality will make every effort to issue all addenda not later than two (2) days prior to the Submission Date.

### **3.10 Respondents' Meeting**

- 3.10.1 The Municipality may conduct an information meeting to assist Respondents in understanding the RFP and the RFP Process. The Additional Information section in Schedule "A" will set out the time and location of the meeting, if any, and if the meeting is mandatory for all prospective Respondents who will be submitting a



Proposal. If attendance at the meeting is not mandatory, Respondents are strongly encouraged to attend.

3.10.2 If the Municipality gives oral answers to questions at the Respondents' meeting, these answers will not be considered final unless a written response in the form of an addendum is provided by the Municipality to the prospective Respondents following the meeting.

### **3.11 Clarifications/ RFP Coordinator**

All questions related to this RFP shall be directed to the RFP Coordinator:

**Mr. Stephen Jahns, P.Eng.  
Manager - Infrastructure and Transportation  
Municipality of Chatham-Kent  
telephone: (519) 360-1998 ext. 3342  
email: stephen.jahns@chatham-kent.ca**

### **3.12 Contact Person/Prohibited Contacts**

3.12.1 A Respondent shall not contact or make any attempt to contact:

- (a) any member of Council or local board or committee, director, officer, employee, subcontractor, agent, representative, consultant, contractor, service provider or volunteer of the Municipality other than the RFP Coordinator; or
- (b) any other prospective Respondent or other Respondent, except for the purpose of discussing the possibility of submitting a Proposal as a Joint Venture;

with respect to the Respondent's Proposal, the RFP documents, or the RFP process until the Proposal Review Committee has made their recommendation regarding the award of the contract pursuant to section 4.7.1.

3.12.2 Without limiting the generality of the above, a Respondent shall not contact or attempt to contact:

- (a) any member of the Proposal Review Committee; or
- (b) any expert or advisor assisting the Proposal Review Committee,

on matters related to their Proposal, the RFP documents, or the RFP process until the Proposal Review Committee has made their recommendation regarding the award of the contract pursuant to section 4.7.1.

3.12.3 Contravention of the above by a Respondent may result in the rejection of the Respondent's Proposal.

### **3.13 Confidentiality and Disclosure Issues – Respondent Information**

3.13.1 Except as provided otherwise in this RFP or as required by the Governing Law, the Municipality shall treat the Respondent's Proposal and information gathered in any interview carried out as part of this RFP process as confidential.

3.13.2 The Respondent shall not require the Municipality or any of its representatives to sign a confidentiality agreement in respect of any step taken or information provided by the Respondent as part of this RFP process.

3.13.3 The Respondent, by submitting its Proposal, agrees that, the Municipality may disclose:

(a) the name and address of the Respondent;

(b) the price or rates of the Successful Respondent; and

(c) the name and address of the Successful Respondent,

to other Respondents and the public.

3.13.4 The Municipality may provide the Proposals to any person involved in the review and evaluation of the Proposals on behalf of the Municipality and the Municipality may make copies of the Proposal and retain the Proposal.

3.13.5 The Municipality may disclose any information with respect to the Respondents' Proposals and the RFP Process to any person or entity as required by the Governing Law.

3.13.6 The Municipality shall make every effort to maintain the confidentiality of each Proposal. The Municipality will disclose only such information as is required by law. All Proposals are subject to the provisions of the Municipal *Freedom of Information and Privacy Protection Act*, R.S.O. 1990, c. M.56, as amended ("MFIPPA"). In addition, certain contractual information must be disclosed to the Council of the Municipality, and accordingly will become part of the public record. In particular, the names of all Respondents and the terms of the successful Proposal will be made public. To safeguard the right to confidentiality, if the Respondent is of the opinion that its Proposal reveals trade secrets, technical, commercial, financial or labour relations information and disclosure of such information could reasonably be expected to result in harm as specified in Section 10 of MFIPPA, the Respondent shall mark each part of its proposal that it wishes to be kept confidential with a stamp or watermark or some other identification.

- 3.13.7 The Municipality shall not be liable for any damages if a Respondent's confidential information becomes public or is disclosed.
- 3.13.8 The Respondent acknowledges that if the Services being provided are regarding a program of the Provincial or Federal government, the applicable provincial and federal legislation regarding freedom of information and privacy will apply to the release of the Respondent's information.

### **3.14 Municipality Confidentiality Issues**

The prospective Respondents and Respondents acknowledge and agree that all material, data, information, or any item in any form, whether it is in electronic or hard copy format, supplied by or obtained from the Municipality during the RFP Process,

- (a) shall remain the sole property of the Municipality and the prospective Respondents and the Respondents shall treat it as confidential;
- (b) shall not be used by the prospective Respondent or Respondents for any other purpose other than submitting a Proposal in response to this RFP;
- (c) shall not be disclosed by the prospective Respondent or Respondents to any person who is not involved in the Respondent's preparation of its Proposal without prior written authorization from the Municipality; and
- (d) if requested by the Municipality, shall be returned to the RFP Coordinator within ten calendar days following the request being made.

### **3.15 Governing Law, Attornment and Limit on Liability**

- 3.15.1 This RFP and the Agreement entered into by the Successful Respondents shall be governed by and construed in accordance with the laws of Ontario and the applicable laws of Canada. The Respondent agrees that any action or proceeding relating to this RFP Process shall be brought in any court of competent jurisdiction in the Province of Ontario and for that purpose each Party irrevocably and unconditionally attorns and submits to the jurisdiction of that Ontario court.
- 3.15.2 If a Respondent is required by the Governing Law to hold or obtain a licence, permit, consent or authorization to carry on an activity contemplated in its Proposal, neither acceptance of the Proposal nor execution of the Agreement shall be considered to be approval by the Municipality of carrying on such activity without the requisite licence, permit, consent or authorization.
- 3.15.3 The Respondent agrees that in the event the Municipality is required to pay damages for any matter relating to or arising from a material breach of this RFP, whether based upon an action or claim in contract, warranty, equity, negligence, intended conduct or otherwise, including any action or claim arising from the acts or

omissions, negligent or otherwise of the Municipality, the aggregate amount of damages recoverable against the Municipality shall be no greater than the proposal preparation costs that the Respondent seeking damages from the Municipality can demonstrate it incurred.

### **3.16 Respondents' Costs**

The Respondent shall bear all costs and expenses incurred by the Respondent relating to any aspect of its participation in this RFP Process, including all costs and expenses related to the Respondent's involvement in,

- (a) the preparation, presentation and submission of its Proposal;
- (b) the Respondent's attendance at the Respondents' Meeting;
- (c) due diligence and information gathering processes;
- (d) site visits and interviews;
- (e) preparation of responses to questions or requests for clarification from the Municipality;
- (f) preparation of the Respondent's own questions during the clarification process; and ,
- (g) Agreement discussions.

The Municipality is not liable to pay such costs and expenses or to reimburse or compensate a Respondent under any circumstances, regardless of the conduct or outcome of the RFP Process, including the rejection of all Proposals or the cancellation of the RFP, and including any negligence of the Municipality in the conduct of the RFP Process.

### **3.17 Delays and Costs of Delay**

The Municipality shall not be liable, in any way, to the Respondents for any delays, or costs associated with delays, in the RFP Process.

### **3.18 Supplementary Information, Clarification and Verification of Respondent's Proposal**

#### **3.18.1 Supplementary Information**

The Municipality may, in its sole discretion, request any supplementary information whatsoever from a Respondent after the Submission Deadline including information that the Respondent could or should have submitted in its Proposal prior to the Submission Deadline. The Municipality is not obliged to request supplementary information from a Respondent.

#### **3.18.2 Clarification**

The Municipality may,

- (a) require the Respondent to clarify the contents of its Proposal, including by the submission of supplementary documentation; or
- (b) seek a Respondent's acknowledgement of the Municipality's interpretation of the Respondent's Proposal.

The Municipality is not obliged to seek clarification of any aspect of a Proposal.

### **3.18.3 Use of Information**

Any written information received by the Municipality from a Respondent as part of the RFP Process, including information received pursuant to sections 3.18.1 and 3.18.2, may, in the Municipality's discretion, be considered an integral part of the Proposal.

The Municipality has no obligation to notify other Respondents of any negotiations or discussions with a Respondent or of any information provided to or received from a Respondent.

### **3.18.4 Verification**

The Municipality may, in its sole discretion, verify any statement or claim contained in any Proposal or made subsequently in any interview or discussion. That verification may be made by whatever means the Municipality deems appropriate and may include contacting the names of persons identified in the contract, information provided by the Respondent and, in addition, contacting persons or entities other than those identified by any Respondent.

In submitting a Proposal, the Respondent is deemed to consent to the Municipality verifying any information from third parties and receiving additional information regarding the Respondent, its directors, officers, shareholders or owners and any other person associated with the Respondent as the Municipality may require.

## **3.19 Notification of Changes of Respondent's Structure**

During the RFP Process, a Respondent shall notify the RFP Coordinator, in writing, of any proposed changes to its ownership structure from the ownership structure set out in the Proposal. The Municipality may approve the changes in the joint venture arrangements or ownership structure of a Respondent, such approval not to be unreasonably withheld; or reject the Respondent's or Successful Respondent's Proposal as a result of these changes.

## **4.0 EVALUATION OF PROPOSALS**

### **4.1 Proposal Review Committee**

- 4.1.1 The Municipality will establish a Proposal Review Committee to evaluate the proposals. The composition of the Committee shall be at the discretion of the Municipality. The Proposal Review Committee may include persons who are not employees of the Municipality at the Municipality's discretion.
- 4.1.2 Proposals are likely to be for a diverse range of approaches and, therefore, may not be readily comparable to one another. As a result, notwithstanding the general evaluation criteria set out below, and the specific evaluation criteria in Schedule "A", the Municipality intends to exercise a broad range of discretion in evaluating and short-listing Respondents. The Municipality's evaluation will be based on both subjective and objective criteria. The Proposal Review Committee will evaluate Proposals based generally on:
- a) the extent to which the Proposal demonstrates consistency with the goals of the Municipality;
  - b) the short and long-term financial benefits of the Proposal to the Municipality;
  - c) the related experience of the Respondent and, if applicable, the joint venture participants;
  - d) if a prequalification process has not preceded the RFP, the quality of the Respondent's experience and Key Personnel;
  - e) the comprehensiveness and credibility of the Respondent's proposed work plan and methodologies for completing the project;
  - f) the consistency of the Proposal with the long-term strategic and business plans of the Municipality and with the general business interests of the Municipality;
  - g) which Proposal, irrespective of the price submitted by the Respondents, represents, in the Municipality's sole discretion, the best value to the Municipality;
  - h) the extent to which certain special criteria which may be applicable to only one or a few Proposals because of the unique or specific nature of those Proposals; and,
  - i) poor performance of the Respondent in past assignments with the Municipality.

## **4.2 The Evaluation Process**

### **4.2.1 Compliance of Proposals with the RFP**

The Proposal Review Committee will conduct an initial review of the contents of the Proposal Envelope only, to assess whether the Proposal is in compliance with the

terms and conditions of the RFP, including whether all documents to be submitted with the Proposal have been appropriately submitted.

- 4.2.2 If, in the sole discretion of the Municipality, a Proposal does not comply with the requirements set out in the RFP, the Municipality shall, without liability, cost or penalty, eliminate the Proposal and the Proposal shall not be given any further consideration. The Municipality may waive failures to comply that in the Municipality's sole discretion are not material or which may be resolved through a request for supplementary information pursuant to section 3.18.
- 4.2.3 The Respondent's submission of a poor quality, but compliant, Proposal shall not be considered a failure to comply but may affect the Respondent's Proposal Score.
- 4.2.4 As a preliminary step after opening the Price Envelope pursuant to Section 4.5, the Proposal Review Committee will review the contents of the Price Envelope to assess whether the Price Section is in compliance with the terms and conditions of the RFP. The Municipality may, in its sole discretion, correct arithmetical errors in a Proposal.

#### **4.3 Review of the Proposal**

- 4.3.1 All Proposals which have not been disqualified will be reviewed by the Proposal Review Committee in accordance with the general criteria in section 4.1.2 and the specific evaluation criteria set out in Schedule "A". The Proposal Review Committee may in their absolute discretion establish a minimum score for Proposals to proceed to further evaluation.
- 4.3.2 The Proposal Review Committee will meet to review and discuss their individual evaluations of the Proposals and will agree on a composite score for each Respondent (the "Proposal Score").

#### **4.4 Optional Short-List and Interviews**

- 4.4.1 The Proposal Review Committee may, in its sole discretion, establish a short-list of Respondents based on the Proposal Scores of the Respondents (the "Short-listed Respondents") for the purpose of conducting interviews and/or to have the Respondents prepare a presentation. If the Municipality short-lists the Respondents, it will short-list the Respondents with the highest scores.

- 4.4.2 Only the Short-listed Respondents will be interviewed or provided with the opportunity to present. The number of Respondents short-listed for an interview or presentation is in the sole discretion of the Municipality.
- 4.4.3 Interviews of or presentations by Short-listed Respondents will be carried out by the Proposal Review Committee or a sub-group of the Proposal Review Committee. The Committee will score each Short-listed Respondent based on the quality of the Respondent's interview or presentation (the "Interview Score").

#### **4.5 Review of the Price Submission Section**

Following the review of the Proposals and any interviews or presentations, the Proposal Review Committee will open the Price Envelopes of Proposals or, if interviews have been held, of only those Proposals of the Short-listed Respondents, or if a minimum score has been established, only those of Respondents whose Proposals scored above the minimum score and will review the Price Section for compliance and establish a score for the Price Section (the "Price Score").

#### **4.6 Establishing a Final Proposal Score**

The weightings that the Municipality will apply to establish the final score for the Proposal with respect to the Respondent's Proposal, Interview and Price Scores are set out in Schedule "A", as applicable.

#### **4.7 Successful Respondent**

- 4.7.1 The Proposal Review Committee shall provide to the General Manager (or delegate) an evaluation summary of the procurement, as well as the committee's recommendation for award of contract to the Respondent meeting all mandatory requirements and providing Best Value. The Proposal Review Committee is responsible for documenting the determination of Best Value. The criteria and analysis to determine Best Value will be included (if applicable) in the report to Council.
- 4.7.2 In the event the approval authority for the award of the contract is Council, Respondents acknowledge that Council may accept or reject the recommendation of the Committee regarding the Successful Respondent and may award the contract to a Respondent not recommended by the Committee.
- 4.7.3 Once approved by the appropriate authority, the Successful Respondent will be contacted by the Municipality to initiate negotiations regarding the Agreement. In the event the Municipality and the Successful Respondent are unable to negotiate an Agreement within a reasonable time, the Proposal Review



Committee shall recommend to the approval authority that the contract be awarded to the next highest ranked Respondent.

4.7.4 The Successful Respondent and the Municipality must execute an Agreement prior to the commencement of any work by the Successful Respondent.

#### **4.8 Debriefing**

Unsuccessful Respondents may, upon their request, attend a debriefing session with a member of the Proposal Review Committee to review their Proposal. Any discussions relating to any submissions other than that of the Respondent present will be strictly prohibited. This debriefing session is intended to provide general feedback regarding the Respondent's rating on various criteria in order to allow the Respondent to understand where future improvements might be available.

### **5.0 MUNICIPALITY'S DISCRETION IN EVALUATIONS**

#### **5.1 Municipality's Discretion**

5.1.1 The Municipality shall determine, in its sole discretion,

- (a) the membership of the Proposal Review Committee;
- (b) which Respondents and how many Respondents, based on the evaluation process, will be short-listed;
- (c) if applicable, the Interview Score of a Respondent;
- (d) the Price Score of a Respondent;
- (e) the rankings of the Respondent; and
- (f) whether a Proposal or a Respondent,
  - i) is disqualified; or
  - ii) will cease to be considered in the evaluation process.

5.1.2 The Municipality reserves the right to reject any or all Proposals or to accept any Proposal should it be deemed in the interest of the Municipality to do so. If only one Proposal is received, the Municipality reserves the right to reject it.

5.1.3 The Respondent shall have no claim against or entitlement to damages, from the Municipality by reason of the Municipality's rejection of its Proposal or all Proposals.

#### **5.2 Disqualification**

The Municipality may, in its sole discretion, disqualify a Proposal or cancel its decision to make an award under this RFP, at any time prior to the execution of the Agreement by the Municipality, if,

- (a) the Respondent fails to cooperate in any attempt by the Municipality to verify any information provided by the Respondent in its Proposal;
- (b) the Respondent contravenes Section 3.12 – Contact Person/Prohibited Contact or Section 3.8 – One Proposal per Person or Entity;
- (c) the Respondent fails to comply with the laws of the Province of Ontario or of Canada, as applicable;
- (d) the Proposal contains false or misleading information;
- (e) the Proposal, in the opinion of the Municipality, reveals a material conflict of interest as described in Section 6.9;
- (f) the Respondent misrepresents any information contained in its Proposal; or,
- (g) there is evidence that the Respondent, its employees, agents, consultants/contractors/service providers or representatives colluded with one or more other Respondents or any of its or their respective employees, agents, consultants/contractors/service providers or representatives in the preparation or submission of Proposals;

### **5.3 Record and Reputation**

Without limiting or restricting any other right or privilege of the Municipality and regardless of whether or not a Proposal or a Respondent otherwise satisfies the requirements of this RFP, the Municipality may disqualify any Proposal from any Respondent, where:

- (a) In the opinion of the Municipal Solicitor or the Purchasing Officer for the Municipality, the commercial relationship between the Municipality and the Respondent has been impaired by the prior and/or current act(s) or omission(s) of such Respondent, including but not limited to:
  - 1) Litigation or potential litigation with the Municipality or related corporations or any public entity;
  - 2) The failure of the Respondent to pay, in full, all outstanding accounts due to the Municipality by the Respondent after the Municipality has made demand for payment;
  - 3) The refusal to follow reasonable directions of the Municipality or to cure a default under an contract with the Municipality as and when required by the Municipality or the Municipality's representatives;
  - 4) The Respondent has previously refused to enter into an Agreement with the Municipality after the Respondent's Proposal was accepted by the Municipality;
  - 5) The Respondent has previously refused to perform or to complete performance of contracted work with the Municipality after the Respondent was awarded the contract;
  - 6) Act(s) or omission(s) of the Respondent has resulted in a claim by the Municipality under a bid bond, a performance bond, a warranty bond or

any other security required to be submitted by the Respondent on a RFP or a Tender within the previous five years.

- (b) In the opinion of the Council of the Municipality or the Chief Administrative Officer or the Purchasing Officer, or their designate, there are reasonable grounds to believe that it would not be in the best interests of the Municipality to enter into an Agreement with the Respondent, for reasons including but not limited to the conviction or finding of liability of or against the Respondent or its officers or directors and any associated entities under any taxation legislation in Canada, any criminal or civil law relating to fraud, theft, extortion, threatening, influence peddling and fraudulent misrepresentation, the Environmental Protection Act or corresponding legislation in other jurisdictions, any law regarding occupational health or safety or the Securities Act or related legislation.

## **6.0 CONDITIONS - OTHER**

- 6.1** The Municipality will not accept responsibility for any delays or costs associated with any reviews or approval processes or with the implementation of any mitigating measures.
- 6.2** Respondents are responsible for obtaining their own independent financial, legal, accounting, engineering, technical and other expert advice.
- 6.3** Submissions that are incomplete or illegible or contain reservations or irregularities of any kind may be rejected.
- 6.4** The data, information and assumptions provided herein have been compiled from sources believed to be reliable and accurate. The Municipality, however, specifically disclaims any responsibility or liability for the accuracy or completeness of such data, information or assumptions or any data or information that the Municipality may provide in the future. A Respondent, prior to submitting its response, shall be solely responsible for making any enquiries necessary to satisfy itself and verify all information upon which reliance shall be made.
- 6.5** The Municipality, in its sole and absolute discretion, may discuss or negotiate with any Respondent, the terms and conditions of its Proposal without any obligation to other Respondents and without giving rise to any rights of other Respondents to amend or negotiate their response.
- 6.6** The Municipality shall not have any obligation to notify any of the Respondents of discussions or negotiations with any other Respondent, to invite amended responses from any other Respondents, to disseminate other information disclosed to any one Respondent, or to approve a further submission made as a result of such information.

**6.7** In the event of any differences of opinion, misunderstanding or dispute arising between the Respondent and the Municipality respecting the intent or meaning of this RFP, or accompanying documents, or as to any omission there from or misstatements therein, the decision and interpretation of the Municipality shall be final and binding upon all parties. There shall be no review or appeal of such decision. Respondents are encouraged to seek clarification of the RFP from the RFP Coordinator prior to submission of their Proposal.

**6.8** By submitting a Proposal, the Respondent is representing that the Respondent has read, understands and accepts the terms and conditions of the Request for Proposal in full.

### **6.9 Conflict of Interest Statement**

6.9.1 In its Proposal, the Respondent must disclose to the Municipality any potential conflict of interest that might compromise the performance of the work. If such a conflict of interest does exist, the Municipality may, at its discretion, refuse to consider the Proposal. The Respondent must also disclose whether it is aware of any Municipal employee, Council member or member of a Municipal agency, Corporate or commission or employee thereof having a financial interest in the Respondent and the nature of that interest. If such an interest exists or arises during the evaluation process or the negotiation of the Agreement, the Municipality may, at its discretion, refuse to consider the Proposal or withhold the awarding of any Agreement to the Respondent until the matter is resolved to the Municipality's sole satisfaction.

6.9.2 If during the Proposal evaluation process or the negotiation of the Agreement, the Respondent is retained by another client giving rise to a potential conflict of interest, then the Respondent will so inform the Municipality. If the Municipality requests, then the Respondent will refuse the new assignment or will take such steps as are necessary to remove the conflict of interest concerned.

6.9.3 It is the policy of the Municipality that entities that are in a non-arm's length relationship with a Successful Respondent, as defined in the *Income Tax Act*, are not permitted to submit quotes, tenders or RFPs where the Successful Respondent participates in the preparation or evaluation of those quotes, tenders or RFPs.

### **6.10 Non-Collusion**

A Respondent shall not discuss or communicate, directly or indirectly, with any other Respondent or their agent or representative of the Proposals. Each Respondent shall attest that its participation in the RFP process is conducted without any collusion or fraud. If the Municipality discovers there has been a breach of this requirement at any time, the Municipality reserves the right to disqualify the Proposal or terminate any ensuing Agreement.

### **6.11 Value Added**

Respondents are encouraged to be innovative and creative with their Proposals. The Municipality will review and assess any value added features/programs that are proposed. Respondents are requested to clearly demonstrate to the Municipality, the advantages of any value added feature.

### **6.12 Bankruptcy**

In the event that, during the duration of the Agreement, the Successful Respondent makes an assignment for the benefit of creditors, or becomes bankrupt or insolvent, or makes a proposal to its creditors, the Agreement shall immediately be terminated, and the Municipality shall be entitled to enter into an Agreement with another party without the consent of the Successful Respondent.

### **6.13 Assignment**

The Successful Respondent shall not assign the Agreement, or any of the rights thereunder, without the prior written approval of the Municipality, which approval may be withheld by the Municipality at its sole discretion or may be given subject to such terms and conditions as the Municipality may propose.

### **6.14 W.S.I.B.**

The Successful Respondent shall be required to provide a certificate of good standing from the Workplace Safety and Insurance Board prior to commencing work under the Agreement. If the Successful Respondent is unable to submit this certificate because it is claiming an independent operator status, with no insurable workers, the successful Respondent must submit a written confirmation from the Workplace Safety and Insurance Board of its status as an independent operator for the contract.

### **6.15 Insurance**

6.15.1 The Successful Respondent shall maintain during the term of the Agreement, comprehensive general liability insurance which shall include the Municipality as an additional insured and shall:

a) have a limit of liability of not less than the amount specified in Schedule "A" inclusive per occurrence for bodily injury, death and damage to property including loss of use thereof;

b) cover:

- Premises and Operations liability
- Products and Completed Operations liability
- Blanket Contractual liability
- Broad Form Property Damage
- Contingent Employer's Liability
- Cross Liability
- Severability of Interests

Owners and Service Providers Protective  
Personal Injury liability, including liability arising out of false arrest,  
detention or imprisonment or malicious prosecution  
Libel, Slander or defamation of character  
Invasion of privacy  
Wrongful eviction or wrongful entry  
Employer's Liability  
Employees as additional insureds  
Non-owned Automobile liability including OEF #96  
Hostile Fire

6.15.2 The Successful Respondent, if applicable, shall maintain during the term of the Agreement, Professional liability insurance and/or Errors and Omissions (E&O) coverage of not less than the amount specified in Schedule "A". The policy is to be renewed for 3 years following contract termination. A Certificate of Insurance evidencing renewal is to be provided each and every year. If the policy is to be cancelled or non-renewed for any reason, 90 days notice of said cancellation or non-renewal must be provided to the Municipality. The Municipality has the right to request that an Extended Reporting Endorsement be purchased by the Successful Respondent at the Successful Respondent's sole cost.

6.15.3 The Successful Respondent, if applicable, shall maintain automobile liability insurance with a limit of liability not less than the amount specified in Schedule "A" per occurrence during the term of the contract.

6.15.4 The policies shall be endorsed to provide that the policy or policies will not be altered, cancelled or allowed to lapse without thirty (30) days prior written notice to the Municipality. This notice shall refer to this contract and be filed with The Municipality of Chatham-Kent, Legal Services, 315 King Street, PO Box 640, Chatham, ON., N7M 5K8, Fax: 519-436-3250.

## **6.16 Indemnification**

The Respondent agrees to be responsible for, and to protect, save harmless, and indemnify the Municipality and its employees from and against all loss, damage, cost and expense (including attorney's fees) suffered or sustained by the Municipality or for which the Municipality may be held or become liable by reason of injury (including death) to persons or property or other causes whatsoever, in connection with the operations of the Respondent or any subcontractor under this Agreement.

## **6.17 Compliance**

6.17.1 **Accessibility for Ontarians with Disabilities Act, 2005**

The Municipality is required to comply with the *Accessibility for Ontarians with Disabilities Act, 2005*, S.O. 2005, c.11, as amended, and the associated regulations. Pursuant to the Act, the Municipality is required to ensure that every person who deals with members of the public or other third parties on behalf of the Municipality or who participates in developing the Municipality's policies, practices and procedures governing the provision of goods and services to members of the public or other third parties receives training about the provision of goods or services to persons with disabilities. The Respondent shall ensure that the persons in their organizations who are required to receive training as required by the Act, have received such training or will receive such training prior to the commencement of work under this Agreement. The Municipality may require such persons to successfully complete an assessment of their knowledge of provision of goods and services to persons with disabilities prior to commencement of work for the Municipality. The Municipality will make available to the Respondent an online training program for such persons if requested.

#### **6.17.2 Human Rights, Harassment and Occupational Health and Safety**

The Respondent shall be required to comply with the Municipality's policies regarding Human Rights, harassment in the workplace and Occupational Health and Safety.

### **7.0 LEGAL MATTERS AND RIGHTS OF THE MUNICIPALITY**

- 7.1** This RFP is not an offer to enter into either a bidding contract (often referred to as "Contract A") or a contract to carry out the project (often referred to as "Contract B"). Neither this RFP nor the submission of a Proposal by a Respondent shall create any contractual rights or obligations whatsoever on either the Respondent or the Municipality.
- 7.2** The Municipality may, in its sole discretion, change or discontinue this RFP Process at any time whatsoever. The Municipality may, in its sole discretion, enter into negotiations with any person, whether or not that person is a Respondent or a Short-Listed Respondent, with respect to the work that is the subject of this RFP.
- 7.3** The Municipality may, in its sole discretion, decline to evaluate any Proposal that, in the Municipality's opinion, is incomplete, obscure or does not contain sufficient information to carry out a reasonable evaluation.
- 7.4** Without limiting the generality of RFP Section 5, the Municipality may, in its sole discretion and at any time during the RFP Process,
- (a) reject any or all of the Proposals;
  - (b) accept any Proposal;
  - (c) if only one Proposal is received, elect to accept or reject it;
  - (d) elect not to proceed with the RFP;

- (e) alter the Timetable, the RFP Process or any other aspect of this RFP; and
- (f) cancel this RFP and subsequently advertise or call for new Proposals for the subject matter of this RFP.

**7.5** In addition to and notwithstanding any other term of this RFP, the Municipality shall not be liable for any damages resulting from any claim or cause of action, whether based upon an action or claim in contract, warranty, equity, negligence, intended conduct or otherwise, including any action or claim arising from the acts or omissions, negligent or otherwise of the Municipality, and including any claim for direct, indirect or consequential damages, including but not limited to damages for loss of profit, loss of reputation, injury to property and bodily injury that results from the Respondents' participation in the RFP process, including but not limited to:

- (a) the disclosure of a Respondent's confidential information;
- (b) the costs of preparation of a Respondent's Proposal, whether it is accepted, disqualified or rejected;
- (c) any delays, or any costs associated with such delays, in the RFP Process;
- (d) any errors in any information supplied by the Municipality to the Respondents;
- (e) the cancellation of the RFP; and,
- (f) the award of the contract to a Respondent other than the Respondent recommended by the Proposal Review Committee;



**Schedule "A" – ADDITIONAL INFORMATION FOR RESPONDENTS**

**1. Respondents' Meeting (Section 3.10)**

Respondents' meeting to be held  Yes  No

If yes: Date:   
 Time:   
 Location:

Mandatory:  Yes  No

**2. Evaluation Criteria (Section 4.2)**

The Proposal Evaluation Committee will use the following weighted criteria to evaluate the Proposals:

Qualification Category	Qualification Criteria	Weighting
<i>Experience and Qualifications of the Project Team</i>	Project Manager and Senior Designers	18
	Technical Support Staff Design	5
	Contract Administration & Tech Support	5
	Sub Consultants	3
	Experience on Similar Projects	15
<i>Management Qualifications</i>	Availability of Key Staff	5
	Quality Assurance/Multi-Disciplinary	5
	Local Office	3
<i>Project Implementation</i>	Approach and Methodology	15
	Scheduling/Understanding Key Activities	12
	Project Quality Assurance	12
<i>Price</i>	Consulting Fee	42
	<b>Total</b>	<b>140</b>

**3. Insurance (Section 6.15)**

The Successful Respondent will be required to have the following insurance policies and coverages,

		Coverage Amount
<input checked="" type="checkbox"/>	General Liability	\$2,000,000
<input checked="" type="checkbox"/>	Errors and Omissions	\$2,000,000
<input checked="" type="checkbox"/>	Automobile	\$2,000,000
<input type="checkbox"/>	Other	<input type="text"/>
Description: <input type="text"/>		

#### **4. SCOPE OF PROJECT**

Please find attached the latest OSIM compliant inspection for the noted structure. This Request for Proposal focuses strictly on the procurement of consulting engineering services associated with the renewal (rehabilitation or replacement based on the Respondent's proposal) of the structure. This structure shall form part of the 2014 construction season.

Engineering and Transportation Division of Infrastructure and Engineering Services shall serve as the initial point of contact for all inquires guidance and assistance during the course of this project. The Successful Respondent will be required to enter into a standard Engineering Agreement to which this proposal shall be appended.

All proposals must include:

- An overview of the submitting firm, including descriptions of overall organization, staff and services offered.
- Identification of relevant projects of similar scope and magnitude completed as the prime consultant by the submitting firm complete with cost reports and budget variances etc.
- Identification of specific personnel to be charged with the scope of the project, including their relevant qualifications, experiences and anticipated roles.
- Clear and distinct identification of the engineering processes and procedures to be implemented by the consultant to achieve a successful project.
- Identification of any innovative techniques or value added to services which will maximize the efficient and responsible use of construction dollars.
- Identification and description of support systems and resources which will be used to generate deliverables.
- Itemization of all fees associated with all tasks and sub-tasks.
- Itemization of all fees associated with sub-consultants, assistance, advisors, disbursement, mileage etc.
- Identification of fees associated with applicable staff (fee schedule) for all aspects of the project (from project assignment through to completion of all construction and maintenance period).

- Any other services required to successfully complete the project.

The Respondent must have available the computer hardware, software and relevant staffing capable of generating all necessary deliverables in the same format as utilized by the Municipality of Chatham-Kent.

Design manuals and other relevant reference materials and resources remain the responsibility of the Respondent. It is assumed that the Respondent has a full complement of the necessary current documents, manuals and guidelines available and is familiar in their proper application and implementation.

All fees must be clearly stipulated. All tasks, meetings etc. envisioned by the Respondent must be identified. A separate schedule of fees and disbursements must be included within your proposal. The Respondent shall clearly indicate in the proposal any exceptions or qualifications and additional costs / credits thereof.

By submitting a formal written proposal for this project, the Respondent acknowledges that the submitting firm has reviewed the available materials and personally attended the site to visually inspect the existing structure in a manner sufficient to allow for the formation of a sound professional assessment and corresponding work program.

The fee schedule proposed by the submitting firm shall include but not be limited to the following:

- Advise on any interim load limit requirements / restrictions / closure of the structure as deemed appropriate by the consultant.
- Advise on any immediate safety requirements.
- Review all hydraulic reports where available and if applicable to the specific location or watercourse.
- Identify and initiate works if required under the Drainage Act.
- Identify any property acquisition or easement dedication requirements necessary to facilitate the proposed scope of work.
- Investigate, develop and present to the Municipality of Chatham-Kent all possible alternatives (i.e. repair, rehabilitation type and construction of alternatives, innovation and economic efficiencies etc.) complete with associated cost of work and associated fees.

- Conduct Class EA or any other consultation / review processes as warranted for work of this nature.
- Schedule and lead public meetings to allow consultation with adjoining property owners as to the proposed works (Public Information Centre).
- Consult and coordinate as required with all Utility Companies.
- Insure the project is completed in accordance with current Provincial and Federal Environmental Assessment requirements.
- Consult with and obtain all necessary agency approvals including but not limited to:
  - Department of Fisheries and Oceans
  - Transport Canada Navigable Waters Protection Act
  - Lower Thames Valley Conservation Authority
  - Ministry of Transportation
  - Ministry of Natural Resources
  - Ministry of the Environment
- Engage services and carry fees associated with Geotechnical / Material Consultant as required to successfully complete all aspects of the project.
- Engage services and carry fees associated with Ontario Land Surveyors as required to successfully complete the project.
- Comply with all requirements of the Canadian Highway Bridge Design Code and any other applicable code, guideline or design manual.
- Prepare complete tender documents including specifications for the project.
- Prepare complete engineering drawings in AutoCAD “dwg” format.
- Consideration of construction phasing in conjunction with the Traffic Plan.
- Preparation of Traffic Plan considering impacts on surrounding commerce and recreation.
- Provide engineering drawings certified by (2) Licensed Professional Engineers in the Province of Ontario.

- Prepare tender packages and consult with bidders during the tender period.
- Review and make recommendations to the Municipality regarding the tender award.
- Provide the Municipality with a digital spreadsheet on comparative bids received.
- Provide Contract Administration and Inspection services during the course of construction (which includes but is by no means limited to the review of all shop drawings, submittals, preparation of inspection reports, preparation of payment certificates etc.) complete with all sub-consultants etc.
- Prepare and provide final digital “As-constructed” drawings in AutoCAD “dwg” format and in “pdf” format (USB drive) with three sets of record prints 2 – 24” x 36” (minimum) and 1 - 11” x 17”.
- Allow for follow-up final inspection before expiration of maintenance period.

As indicated earlier, all proposals will be subject to evaluation by a Senior Management Review Committee. This Committee will be assembled and chaired by the Manager, Infrastructure and Transportation and will contain staff from Engineering and Transportation and Public Works. Appointment of the preferred consultant will ultimately be subject to approval of Committee by Chatham-Kent Council.

The successful firm, upon execution of the appropriate agreements and under license may gain access to the Municipality’s aerial mapping, assessment information, AM/FM data and any other information that may be relevant to this undertaking.

## **5. EXISTING DRAWINGS AND DOCUMENTS RELATED TO THIS BRIDGE SITE**

No existing drawings or documents are available for this structure.

Funds allotted to date (all project costs including construction) = \$270,000.

## **SCHEDULE "B" – AMENDMENTS TO THE RFP**

### **1. PROPOSAL SUBMISSION**

Each Respondent shall submit a copy of its Fee and Technical Proposal in .pdf format in addition to the required copies as outlined in Section 3.0 (Proposal submission, withdrawal and modification).

The assumed date of assignment is June, 2014.

# Biennial Culvert Inspection Report

Vasik Line Over Enos Smith Drain Culvert

No. 4696893N17416577E

September-25-12



Prepared By: Engineered Management Systems Inc.

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# IMPORTANT

## Limitations of a Bridge Inspection Report

Data presented in this report is essentially a snapshot of value, condition, needs and their associated cost as per the date of inspection. Replacement costs, remaining service life assessments, condition Indices and AADT projections continually change over time. Continued deterioration, inflation and, to a lesser extent, increasing traffic volumes, create a dynamic environment that must be effectively modeled before any long range planning is possible.

While the information contained herein provides a critical starting point for network analysis and prioritization, it is only useful if coupled with a comprehensive management system that continually updates these findings not only between inspection cycles but over a long term analysis period as well.

## Urgencies

Throughout this report the reader will see reference to the term "Urgencies". These are essentially time frames that the inspector must attempt to predict, on-site, on an element-by-element basis, as to how long the recommended work can wait to be addressed before it becomes critical.

It is not possible to manage an inventory based on this information. First, it would be entirely unmanageable and extremely costly to continually revisit a structure to address issues separately only as they become urgent. Secondly, waiting for an issue to become urgent before addressing it is entirely counter productive to the concept of proactive asset management. This almost ensures that the most costly ultimate solution will be applied. The summary of these urgencies in Sections 2 and 3 of this report are only intended to illustrate the mounting backlog of work that will accumulate over time if this structure is left unattended.

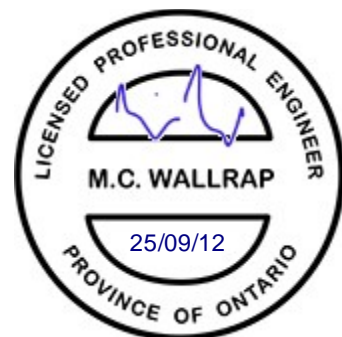
Urgencies are essentially included as a requirement of the OSIM guidelines. We apply a similar evaluation called Remaining Service Life. It is a more flexible system as it provides, in many cases, more than one time frame depending on the agency's in-house capabilities to carry out basic maintenance of their inventory. RSL's do NOT drive the management process nor do they participate in optimization except as fail safe points beyond which certain issues must be addressed during scheduling.

**Once any component's RSL has reached a value of zero, the component must have its deficiencies addressed immediately even if it must be done in isolation of other needs of the structure. The only exception would occur if total failure of the component would not result in any conceivable threat to public safety. A summary of RSL's for this structure is included in Sections 2 and 3 of this report.**

Respectfully Submitted:



engineered management systems inc.





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# 1. Narrative

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## 1.1 Introduction

The inspection summarized in this report was undertaken in compliance with the requirements of the Public Transportation and Highway Improvement Act, Ontario Regulation 104/97. The last known detailed visual inspection of this structure took place in 2005. The inspection was carried out on Tuesday, September 25, 2012 by Aruran Maheswaran under the direction of M. Wallrap P. Eng. At the time of inspection it was partly cloudy with temperatures between 10 and 15 degrees celsius. This report meets or exceeds all requirements for detailed visual surveys as set out in the Ontario Structure Inspection Manual 2000, rev. 2003, 2008.

## 1.2 General Information

The Vasik Line Over Enos Smith Drain culvert was built in 1960. The structure has a South-North orientation and is located on Vasik Line 0.01 km West of Mull Road in the Municipality of Chatham-Kent. This Culvert carries 2 lanes of predominantly vehicular traffic across the Enos Smith Drain in 1 continuous span with a crossing length of 3.85m and a maximum clearance of 2m. The deck has a travel width of 7m and an overall width of 16.3m.

With an AADT of 200 the crossing is very lightly used with truck volumes accounting for less than 10% of the total traffic. The speed limit at this location is 80 km/hr. There is no load limit posted at this site. There is no record of rehabilitation for this structure. The heritage designation is unknown. The total estimated replacement value is \$306,119.

## 1.3 Observations

Each component is presented along with a discussion of any elements within that component that exhibit notable deterioration and/or a low estimated remaining service life. Thorough documentation of every element in the structure can be found in the detailed forms in section "5.7 - Element Data". At the beginning of each section the asset value contribution for each component is stated. This is simply the percentage of overall structure replacement value that the component represents. As such it gives an indication of the components' economic value in light of any deterioration it may be undergoing.

The Vasik Line Over Enos Smith Drain culvert is comprised of the following components:

### 1.3.1 Over Burden

No significant defects were noted, however, the entire component will undergo ancillary replacement.

### 1.3.2 Barrel

The following defects were noted in the elements comprising this component: The interior barrel consists of 82.3 tonnes of cast-in-place concrete. In total, an estimated 2% exhibits medium general deterioration and replacement is warranted. The estimated remaining service life is 15 years. The interior surface consists of 21.2 square metres of cast-in-place concrete. In total, an estimated 30% exhibits severe disintegration and requires deep repair. The estimated remaining service life is 2 years. The exterior surface consists of 25.6 square metres of cast-in-place concrete. In total, an estimated 20% exhibits severe disintegration and requires deep repair. The estimated remaining service life is 2 years.

### 1.3.3 Signage

No significant defects were noted, however, the entire component will undergo ancillary replacement.

### 1.3.4 East Embankment

No significant defects were noted, however, the entire component will undergo ancillary replacement.

## 1. Narrative (cont.)

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### 1.3.5 West Embankment

No significant defects were noted, however, the entire component will undergo ancillary replacement.

### 1.3.6 Foundation

No significant defects were noted.

### 1.3.7 Watercourse

The following defects were noted in the elements comprising this component: The bottom consists of 50 square metres of soil. In total, an estimated 4% exhibits light aggradation although no rehabilitative action is required. The estimated remaining service life is 15 years.

## 1.4 Conclusions and Further Investigation

Overall the structure is in very poor condition with an aggregate condition index of 0. The major concern at the site is medium disintegration of concrete at the inlet and outlet of the barrel, which has exposed the concrete reinforcements. Replacement of the barrel is recommended.

### 1.4.1 Rehabilitative

The structure has rehabilitative needs of \$316,449:

<b>Over Burden</b>	
Ancillary Replacement	\$86,156
<b>Barrel - Interior</b>	
Replacement	\$178,207
<b>Barrel - Interior Surface</b>	
Deep Repair	\$28,739
<b>Barrel - Exterior Surface</b>	
Deep Repair	\$19,280
<b>Signage</b>	
Ancillary Replacement	\$1,205
<b>West Embankment</b>	
Ancillary Replacement	\$1,657
<b>East Embankment</b>	
Ancillary Replacement	\$1,205

## 1. Narrative (cont.)

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### 1.4.2 Pre-Emptive

No pre-emptive measures are currently recommended or required.

### 1.4.3 Maintenance

No maintenance operations are currently recommended or required

### 1.4.4 Further Investigation

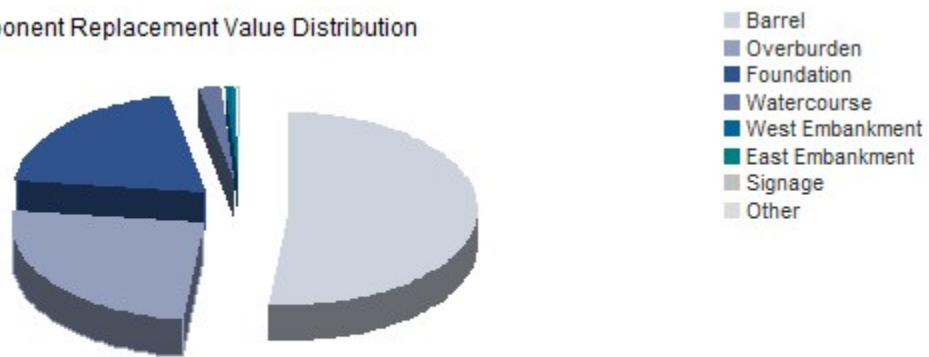
The next biennial inspection should be scheduled no later than September, 2014.

# 1. Narrative (cont.)

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## 1.5 Statistical Summary

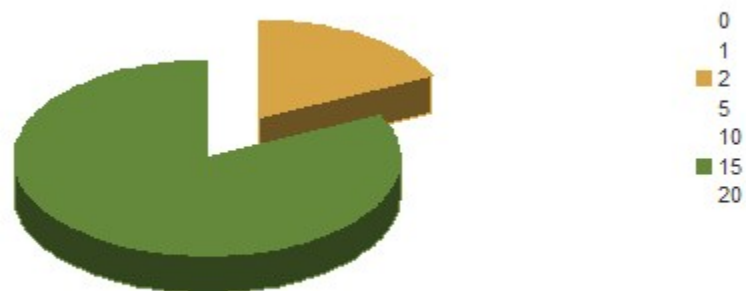
Component Replacement Value Distribution



Component Condition Index Distribution



Remaining Service Life Distribution



## 2. Component Summary

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	Replacement	RSL		Maint.	Pre-Emp	Urgent	Rehabilitation Needs			
		1	2				< 1 year	1 - 5years	6 - 10 years	None\>10 yrs
Over Burden	\$77,319	15	15							\$86,156
Barrel	\$158,026	2	2				\$226,226			
Signage	\$652	15	15							\$1,205
East Embankment	\$814	15	15							\$1,205
West Embankment	\$1,628	15	15							\$1,657
Foundation	\$61,328	15	15							
Watercourse	\$6,352	15	15							
<b>Totals and Minimums</b>	<b>\$306,119</b>	<b>2</b>	<b>2</b>	\$0	\$0	\$0	\$0	\$226,226	\$0	\$90,223
<b>Total Rehabilitative Cost:</b>										<b>\$316,449</b>

### 3. Element Summary

	Focus	RSL		Rehabilitation Needs						
		1	2	Maint.	Pre-Emp.	Urgent	< 1 year	1 - 5years	6 - 10 years	None>10 yrs
Over Burden	All	15	15							\$86,156
Barrel - Interior	All	15	15							\$178,207
Exterior Surface	All	15	15							
Interior Surface	All	15	15							
Barrel - Exterior	All	2	2							
Interior Surface	All	2	2					\$28,739		
Exterior Surface	All	2	2					\$19,280		
Signage	All	15	15							\$1,205
West Embankment	All	15	15							\$1,657
Slope Protection	All	15	15							
East Embankment	All	15	15							\$1,205
Slope Protection	All	15	15							
Foundation	All	15	15							
Watercourse	All	15	15							
Bottom	All	15	15							
Upstream Section	All	15	15							
Downstream Section	All	15	15							
<b>Totals and Minimums</b>		<b>2</b>	<b>2</b>	\$0	\$0	\$0	\$0	\$48,019	\$0	\$268,430
<b>Total Rehabilitative Cost:</b>										<b>\$316,449</b>



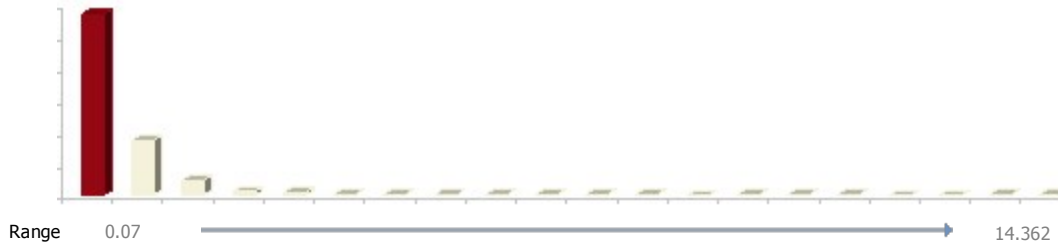
#### 4. Maintenance Summary

There are no maintenance issues at this time.

## 5. Ranking Summary

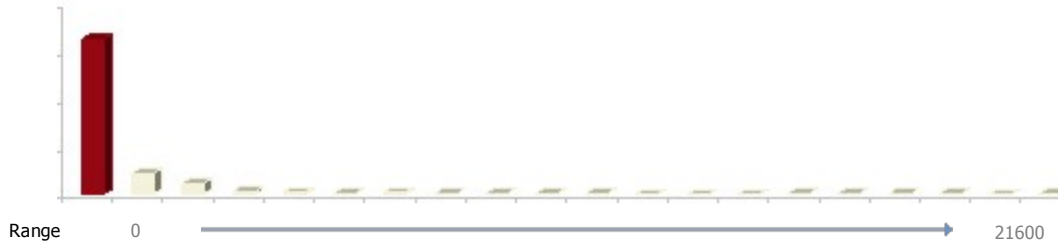
### Replacement Value (millions)

This Structure: \$306,119 Rank: 521 / 827



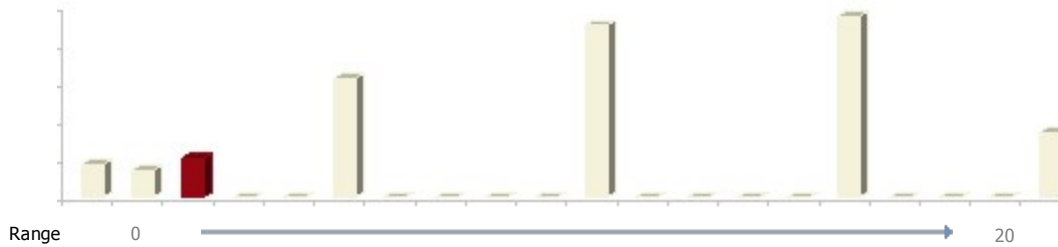
### AADT

This Structure: 200 Rank: 387 / 827



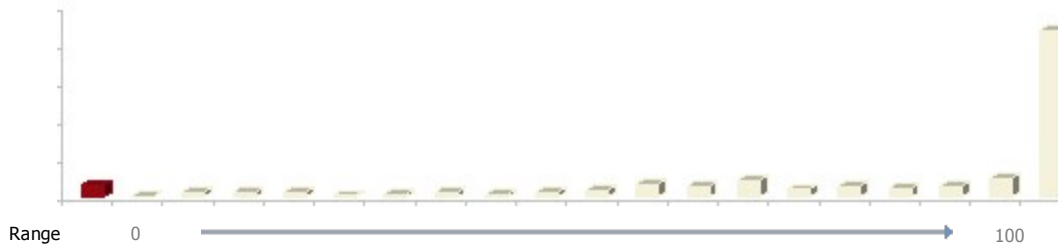
### Minimum SC Remaining Service Life

This Structure: 2 Rank: 698 / 827



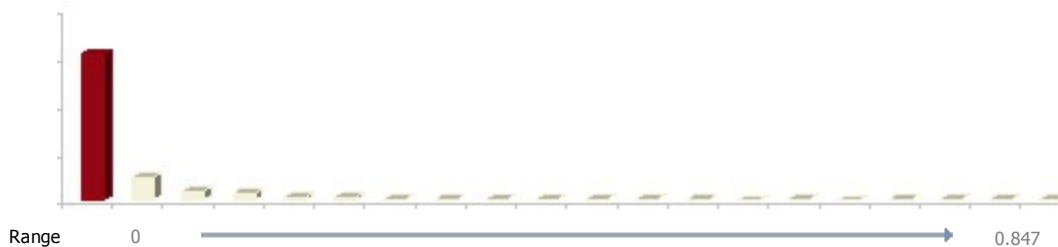
### Condition Index

This Structure: 0 Rank: 803 / 827



### 10 Year Deferral Cost (millions)

This Structure: \$0 Rank: 791 / 827



Notes:  
 Data calculated at time of inspection.  
 Rankings are highest in category.  
 Histograms illustrate distribution of all structures in inventory from the low to high ranges indicated.  
 Vertical axis = number of structures.  
 Red columns represent category in which this structure resides.

## 6. OSIM Reporting

### 6.1 Inventory Data

Structure Name	Vasik Line Over Enos Smith Drain	Site Number	4696893N1741657
Main Hwy/Road #	N/A      On <input checked="" type="checkbox"/> Under <input type="checkbox"/>	Crossing Type:	Navigable Water <input type="checkbox"/> Non-Navig. Water <input checked="" type="checkbox"/>
Hwy/Road Name	Vasik Line	Rail	<input type="checkbox"/> Road <input type="checkbox"/> Ped. <input type="checkbox"/> Other <input type="checkbox"/>
Structure Location	NA Park - NA		
Latitude	4696893	Longitude	17416577
Owner(s)	Chatham-Kent	Heritage Designation:	Not Cons. <input type="checkbox"/> Cons./Not App. <input type="checkbox"/> List/Not Desig. <input type="checkbox"/> Desig./Not List <input type="checkbox"/> Desig. & List <input type="checkbox"/>
MTO Region	Southwestern	Road Class:	Freeway <input type="checkbox"/> Arterial <input type="checkbox"/> Collector <input type="checkbox"/> Local <input checked="" type="checkbox"/>
MTO District	Unknown	Posted Speed	80      No. of Lanes      2
Old County	Unknown	AADT	200      No. of Trucks      0
Geographic Tw p.	Municipality of Chatham-Kent	Inspection Route Sequence	Unknown
Structure Type	Culvert	Interchange Number	Unknown
Total Deck Length	3.85 (m)	Interchange Structure Number	Unknown
Overall Str. Width	16.3 (m)	Minimum Vertical Clearance	1.5 (m)
Total Deck Area	62.76 (sq.m)	Special Routes:	Transit <input type="checkbox"/> Truck <input type="checkbox"/> School <input type="checkbox"/> Bicycle <input type="checkbox"/>
Roadway Width	7 (m)	Detour Length Around Bridge	10 (km)
Skew Angle	0 (Degrees)	Direction of Structure	South-North
No. of Spans	1	Fill on Structure	1 (m)
Span Lengths	3.05		(m)

### 6.2 Historical Data

Year Built	1960	Year of Last Major Rehab.	
Last OSIM Inspection	2005	Last Evaluation	Unknown
Last Enhanced OSIM Inspection	Unknown	Current Load Limit	None (tonnes)
Enhanced Access Equipment			
Last Underwater Inspection	Unknown	Load Limit By-Law #	Not Applicable/Unknown
Last Condition Survey	Unknown	By-Law Expiry Date	Not Applicable/Unknown
Rehabilitation History	None		

## 6. OSIM Reporting (cont.)

---

### 6.3 Scheduled Improvements

Regional Priority Number

Programmed Work Year

Nature of Program Work

### 6.4 Appraisal Indices

Comments

Fatigue

Seismic

Scour

Flood

Geometrics

Barrier

Curb

Load Capacity

## 6. OSIM Reporting (cont.)

### 6.5 Field Inspection Information

Date of Inspection	September-25-12	Type of Inspection	<input checked="" type="checkbox"/> OSIM	<input type="checkbox"/> Enhanced OSIM
Inspector	Aruran Mahesw aran			
Others in Party	None			
All Equipment Used	GPS, Camera, Chain			
Weather	Partly Cloudy			
Temperature	10 to 15 C			

### 6.6 Additional Investigations Required

	None	Normal	Urgent	Est. Cost
Detailed Deck Condition Survey	X			
Non-Destructive Delamination Survey of Asphalt Covered Deck	X			
Concrete Substructure Condition Survey	X			
Detailed Coating Condition Survey	X			
Detailed Timber Investigation	X			
Post-Tensioned Strand Investigation	X			
<hr/>				
Underwater Investigation	X			
Fatigue Investigation	X			
Seismic Investigation	X			
Structure Evaluation	X			
<hr/>				
Monitoring of Deformations, Settlements and Movements	X			
Other* None	X			
Next Detailed Visual Inspection	September, 2014		Total Est. Cost	

The major concern at the site is medium disintegration of concrete at the inlet and outlet of the barrel, which has exposed the concrete reinforcements. Replacement of the barrel is recommended.

#### Suspected Performance Deficiencies

<b>01</b> Load carrying capacity	<b>06</b> Bearing not uniformly loaded/unstable	<b>12</b> Slippery surfaces
<b>02</b> Excessive deformations (deflections & rotations)	<b>07</b> Jammed expansion joint	<b>13</b> Flooding/channel blockage
<b>03</b> Continuing settlement	<b>08</b> Pedestrian/vehicular hazard	<b>14</b> Undermining of foundation
<b>04</b> Continuing movements	<b>09</b> Rough riding surface	<b>15</b> Unstable embankments
<b>05</b> Seized bearings	<b>10</b> Surface ponding	<b>16</b> Other
	<b>11</b> Deck drainage	

#### Maintenance Needs

<b>00</b> None	<b>06</b> Bridge Bearing Maintenance	<b>12</b> Bridge Surface Repair
<b>01</b> Lift and Swing Bridge Maintenance	<b>07</b> Repair to Structural Steel	<b>13</b> Erosion Control at Bridges
<b>02</b> Bridge Cleaning	<b>08</b> Repair of Bridge Concrete	<b>14</b> Concrete Sealing
<b>03</b> Bridge Handrail Maintenance	<b>09</b> Repair of Bridge Timber	<b>15</b> Rout and Seal
<b>04</b> Painting Steel Bridge Structures	<b>10</b> Bailey bridges - Maintenance	<b>16</b> Bridge Deck Drainage
<b>05</b> Bridge Deck Joint Repair	<b>11</b> Animal/Pest Control	<b>17</b> Other

\* eg. monitoring crack widths, trip hazards, issues impacting pedestrian or vehicular control

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data

#### 6.7.1 Overall Structure - Structure

Element Group:	Overall Structure					Length:	N/A	
Element Name:	Structure					Width:	N/A	
Location:	Single Element					Height:	N/A	
Material:	Any					Count:	N/A	
Element Type:	Culvert					Total Quantity:	1	
Environment:	Moderate					Limited Inspection	<input checked="" type="checkbox"/>	
Protection System:	See Individual Elements						Performance Deficiencies	Maintenance Needs
Condition Data:	Units	Exc.	Good	Fair	Poor			
	count	0	0.85	0.1	0.05		16	08
Comments:	Severe deterioration of outer edges of barrel needs repairs.							

Urgency :    None                       6-10 years                       1-5 years                       < 1 year                       Urgent

Recommended Work :                      [Defer to Element Level](#)



South View.

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.2 Over Burden - Over Burden

Element Group:	Over Burden					Length:	3.85	
Element Name:	Over Burden					Width:	16	
Location:	Single Element					Height:	1	
Material:	Soil					Count:	1	
Element Type:	Primary Element					Total Quantity:	1	
Environment:	Moderate					Limited Inspection	<input type="checkbox"/>	
Protection System:	None							
Condition Data:	Units	Exc.	Good	Fair	Poor	Performance Deficiencies	Maintenance Needs	
	each	0	1	0	0	00	00	
Comments:	None							

Urgency :    None                     6-10 years                     1-5 years                     < 1 year                     Urgent

Recommended Work :                    Ancillary Replacement                    Estimated Cost: \$86,156



South View.

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.3 Barrel - InteriorBarrel

Element Group:	Barrel				Length:	N/A	
Element Name:	InteriorBarrel				Width:	N/A	
Location:	Interior				Height:	N/A	
Material:	Cast-In-Place Concrete				Count:	N/A	
Element Type:	Primary Element				Total Quantity:	82.3	
Environment:	Moderate				Limited Inspection	<input checked="" type="checkbox"/>	
Protection System:	None					Performance Deficiencies	Maintenance Needs
Condition Data:	Units	Exc.	Good	Fair	Poor		
	tonnes	0	82.3	0	0	00	00
Comments:	The barrel has been separated into two parts: interior (16.3 m long), and exterior (two 1.5 m lengths).						

Urgency :    None                   6-10 years                   1-5 years                   < 1 year                   Urgent

Recommended Work :                  Replacement                  Estimated Cost: \$178,207



East Surface.



## 6. OSIM Reporting (cont.)

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### 6.7 Element Data (cont.)

#### 6.7.4 Barrel - Exterior Surface

Element Group:	Barrel			Length:	3.85		
Element Name:	Exterior Surface			Width:	13.3		
Location:	Single Element			Height:	2.35		
Material:	Cast-In-Place Concrete			Count:	1		
Element Type:	Any			Total Quantity:	113.7		
Environment:	Moderate			Limited Inspection	<input checked="" type="checkbox"/>		
Protection System:	None						
Condition Data:	Units	Exc.	Good	Fair	Poor	Performance Deficiencies	Maintenance Needs
	m2	0	113.7	0	0	00	00
Comments:	None						

Urgency :    None                       6-10 years                       1-5 years                       < 1 year                       Urgent

Recommended Work :                      [See Primary Element](#)



Underside View.

## 6. OSIM Reporting (cont.)

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### 6.7 Element Data (cont.)

#### 6.7.5 Barrel - Interior Surface

Element Group:	Barrel			Length:	3.05		
Element Name:	Interior Surface			Width:	13.3		
Location:	Single Element			Height:	2		
Material:	Cast-In-Place Concrete			Count:	1		
Element Type:	Any			Total Quantity:	93.8		
Environment:	Severe			Limited Inspection	<input checked="" type="checkbox"/>		
Protection System:	None						
Condition Data:	Units	Exc.	Good	Fair	Poor	Performance Deficiencies	Maintenance Needs
	m2	0	93.8	0	0	00	00
Comments:	None						
Urgency :	None <input checked="" type="checkbox"/>	6-10 years <input type="checkbox"/>	1-5 years <input type="checkbox"/>	< 1 year <input type="checkbox"/>	Urgent <input type="checkbox"/>		
Recommended Work :	<a href="#">See Primary Element</a>						



East Surface. Showing isolated cracking.



West Surface. Showing isolated cracking.

## 6. OSIM Reporting (cont.)

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### 6.7 Element Data (cont.)

#### 6.7.6 Barrel - ExteriorBarrel

Element Group:	Barrel					Length:	N/A	
Element Name:	ExteriorBarrel					Width:	N/A	
Location:	Exterior					Height:	N/A	
Material:	Cast-In-Place Concrete					Count:	N/A	
Element Type:	Primary Element					Total Quantity:	21.2	
Environment:	Moderate					Limited Inspection	<input type="checkbox"/>	
Protection System:	None						Performance Deficiencies	Maintenance Needs
Condition Data:	Units	Exc.	Good	Fair	Poor			
	tonnes	0	14.42	1.48	5.3		16	08
Comments:	Severe disintegration of concrete at edges needs repairs.							

Urgency :    None                     6-10 years                     1-5 years                     < 1 year                     Urgent

Recommended Work :                    [Defer to Element Level](#)



Face.

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.7 Barrel - Interior Surface

Element Group:	Barrel				Length:	3.05	
Element Name:	Interior Surface				Width:	3	
Location:	Single Element				Height:	2	
Material:	Cast-In-Place Concrete				Count:	2	
Element Type:	Any				Total Quantity:	21.2	
Environment:	Moderate				Limited Inspection	<input type="checkbox"/>	
Protection System:	None						
Condition Data:	Units	Exc.	Good	Fair	Poor	Performance Deficiencies	Maintenance Needs
	m2	0	12.72	2.12	6.36	16	08
Comments:	Severe disintegration of concrete at edges needs repairs.						

Urgency :    None                   6-10 years                   1-5 years                   < 1 year                   Urgent

Recommended Work :                  Deep Repair                  Estimated Cost: \$28,739



North Face.

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.8 Barrel - Exterior Surface

Element Group:	Barrel				Length:	3.85	
Element Name:	Exterior Surface				Width:	3	
Location:	Single Element				Height:	2.35	
Material:	Cast-In-Place Concrete				Count:	2	
Element Type:	Any				Total Quantity:	25.6	
Environment:	Moderate				Limited Inspection	<input type="checkbox"/>	
Protection System:	None						
Condition Data:	Units	Exc.	Good	Fair	Poor	Performance Deficiencies	Maintenance Needs
	m2	0	19.2	1.28	5.12	16	08
Comments:	Severe disintegration of concrete at edges needs repairs.						

Urgency :    None                   6-10 years                   1-5 years                   < 1 year                   Urgent

Recommended Work :                  Deep Repair                  Estimated Cost: \$19,280



Face.

## 6. OSIM Reporting (cont.)

### 6.7 Element Data (cont.)

#### 6.7.9 Signage - Signage

Element Group:	Signage			Length:	N/A		
Element Name:	Signage			Width:	N/A		
Location:	Single Element			Height:	N/A		
Material:	Composite			Count:	2		
Element Type:	Primary Element			Total Quantity:	2		
Environment:	Severe			Limited Inspection	<input type="checkbox"/>		
Protection System:	Galvanized Steel						
Condition Data:	Units	Exc.	Good	Fair	Poor	Performance Deficiencies	Maintenance Needs
	all	0	2	0	0	00	00
Comments:	None						

Urgency :    None                   6-10 years                   1-5 years                   < 1 year                   Urgent

Recommended Work :                  Ancillary Replacement                  Estimated Cost: \$1,205



North End.



South End.

## 6. OSIM Reporting (cont.)

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### 6.7 Element Data (cont.)

#### 6.7.10 West Embankment - Embankment

Element Group:	West Embankment			Length:	N/A		
Element Name:	Embankment			Width:	N/A		
Location:	Single Element			Height:	N/A		
Material:	Soil			Count:	1		
Element Type:	Primary Element			Total Quantity:	1		
Environment:	Moderate			Limited Inspection	<input type="checkbox"/>		
Protection System:	None						
Condition Data:	Units	Exc.	Good	Fair	Poor	Performance Deficiencies	Maintenance Needs
	all	0	1	0	0	00	00
Comments:	None						

Urgency :    None                   6-10 years                   1-5 years                   < 1 year                   Urgent

Recommended Work :                  Ancillary Replacement                  Estimated Cost: \$1,657



Northwest Surface.

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.11 West Embankment - Slope Protection

Element Group:	West Embankment			Length:	N/A		
Element Name:	Slope Protection			Width:	N/A		
Location:	Single Element			Height:	N/A		
Material:	Foliation			Count:	2		
Element Type:	Any			Total Quantity:	2		
Environment:	Moderate			Limited Inspection:	<input type="checkbox"/>		
Protection System:	None					Performance Deficiencies	Maintenance Needs
Condition Data:	Units	Exc.	Good	Fair	Poor		
	all	0	2	0	0	00	00
Comments:	None						
Urgency :	None <input checked="" type="checkbox"/>	6-10 years <input type="checkbox"/>	1-5 years <input type="checkbox"/>	< 1 year <input type="checkbox"/>	Urgent <input type="checkbox"/>		
Recommended Work :	See Primary Element						



Southwest Surface.



## 6. OSIM Reporting (cont.)

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### 6.7 Element Data (cont.)

#### 6.7.12 East Embankment - Embankment

Element Group:	East Embankment				Length:	N/A	
Element Name:	Embankment				Width:	N/A	
Location:	Single Element				Height:	N/A	
Material:	Soil				Count:	1	
Element Type:	Primary Element				Total Quantity:	1	
Environment:	Moderate				Limited Inspection	<input type="checkbox"/>	
Protection System:	None					Performance Deficiencies	Maintenance Needs
Condition Data:	Units	Exc.	Good	Fair	Poor		
	all	0	1	0	0	00	00
Comments:	None						

Urgency :    None                     6-10 years                     1-5 years                     < 1 year                     Urgent

Recommended Work :                    Ancillary Replacement                    Estimated Cost: \$1,205



Northeast .

## 6. OSIM Reporting (cont.)

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### 6.7 Element Data (cont.)

#### 6.7.13 East Embankment - Slope Protection

Element Group: [East Embankment](#)

Element Name: [Slope Protection](#)

Location: [Single Element](#)

Material: [Foliation](#)

Element Type: [Any](#)

Environment: [Moderate](#)

Protection System: [None](#)

Length: [N/A](#)

Width: [N/A](#)

Height: [N/A](#)

Count: [1](#)

Total Quantity: [1](#)

Limited Inspection

Condition Data:	Units	Exc.	Good	Fair	Poor	Performance Deficiencies	Maintenance Needs
	<a href="#">all</a>	<a href="#">0</a>	<a href="#">1</a>	<a href="#">0</a>	<a href="#">0</a>	<a href="#">00</a>	<a href="#">00</a>

Comments: [None](#)

Urgency : [None](#)  [6-10 years](#)  [1-5 years](#)  [< 1 year](#)  [Urgent](#)

Recommended Work : [See Primary Element](#)



Southeast .

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.14 Foundation - Foundation

Element Group:	Foundation			Length:	N/A			
Element Name:	Foundation			Width:	N/A			
Location:	Single Element			Height:	N/A			
Material:	Compacted Fill			Count:	2			
Element Type:	Primary Element			Total Quantity:	2			
Environment:	Moderate			Limited Inspection:	<input checked="" type="checkbox"/>			
Protection System:	None						Performance Deficiencies	Maintenance Needs
Condition Data:	Units	Exc.	Good	Fair	Poor			
	each	0	2	0	0		00	00
Comments:	None							
Urgency :	None <input checked="" type="checkbox"/>	6-10 years <input type="checkbox"/>	1-5 years <input type="checkbox"/>	< 1 year <input type="checkbox"/>	Urgent <input type="checkbox"/>			
Recommended Work :	None							



South Edge.

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.15 Watercourse - Watercourse

Element Group:	Watercourse			Length:	N/A		
Element Name:	Watercourse			Width:	N/A		
Location:	Single Element			Height:	N/A		
Material:	Any			Count:	1		
Element Type:	Straight			Total Quantity:	1		
Environment:	Moderate			Limited Inspection	<input type="checkbox"/>		
Protection System:	None					Performance Deficiencies	Maintenance Needs
Condition Data:	Units	Exc.	Good	Fair	Poor		
	all	0	1	0	0	00	00
Comments:	None						
Urgency :	None <input checked="" type="checkbox"/>	6-10 years <input type="checkbox"/>	1-5 years <input type="checkbox"/>	< 1 year <input type="checkbox"/>	Urgent <input type="checkbox"/>		
Recommended Work :	Defer to Element Level						



South View.

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.16 Watercourse - Bottom

Element Group:	Watercourse			Length:	N/A			
Element Name:	Bottom			Width:	N/A			
Location:	Single Element			Height:	N/A			
Material:	Soil			Count:	N/A			
Element Type:	Natural			Total Quantity:	50			
Environment:	Moderate			Limited Inspection:	<input checked="" type="checkbox"/>			
Protection System:	None						Performance Deficiencies	Maintenance Needs
Condition Data:	Units	Exc.	Good	Fair	Poor			
	m2	0	50	0	0		00	00
Comments:	None							
Urgency :	None <input checked="" type="checkbox"/>	6-10 years <input type="checkbox"/>	1-5 years <input type="checkbox"/>	< 1 year <input type="checkbox"/>	Urgent <input type="checkbox"/>			
Recommended Work :	None							



Overall View.

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.17 Watercourse - Upstream Section

Element Group:	Watercourse			Length:	N/A		
Element Name:	Upstream Section			Width:	N/A		
Location:	Single Element			Height:	N/A		
Material:	Soil			Count:	N/A		
Element Type:	Uncontrolled			Total Quantity:	25		
Environment:	Moderate			Limited Inspection	<input type="checkbox"/>		
Protection System:	None					Performance Deficiencies	Maintenance Needs
Condition Data:	Units	Exc.	Good	Fair	Poor		
	m2	0	25	0	0	00	00
Comments:	None						
Urgency :	None <input checked="" type="checkbox"/>	6-10 years <input type="checkbox"/>	1-5 years <input type="checkbox"/>	< 1 year <input type="checkbox"/>	Urgent <input type="checkbox"/>		
Recommended Work :	None						



South View.

## 6. OSIM Reporting (cont.)

---

### 6.7 Element Data (cont.)

#### 6.7.18 Watercourse - Downstream Section

Element Group:	Watercourse			Length:	N/A		
Element Name:	Downstream Section			Width:	N/A		
Location:	Single Element			Height:	N/A		
Material:	Soil			Count:	N/A		
Element Type:	Uncontrolled			Total Quantity:	25		
Environment:	Moderate			Limited Inspection	<input type="checkbox"/>		
Protection System:	None						
Condition Data:	Units	Exc.	Good	Fair	Poor	Performance Deficiencies	Maintenance Needs
	m2	0	25	0	0	00	00
Comments:	None						
Urgency :	None <input checked="" type="checkbox"/>	6-10 years <input type="checkbox"/>	1-5 years <input type="checkbox"/>	< 1 year <input type="checkbox"/>	Urgent <input type="checkbox"/>		
Recommended Work :	None						



North View.

## 7. Glossary

---

### Abutment

A substructure unit which supports the end of the structure and retains the approach fill.

### Asset

A collection of Components that are most economically and/or practically replaced, rehabilitated or maintained together under a single contract or initiative. The timing of such an initiative is weighed against the timing of treating other Assets.

### Asset Value Contribution

The portion of the total replacement value attributable to a particular component.

### Auxiliary Components

Any component which does not share in the load carrying capacity of the structure.

### Benign

Not exposed. e.g. girders, pier caps (unless joints are leaking)

### Bridge

A structure which provides a roadway or walkway for the passage of vehicles across an obstruction, gap or facility and which is greater than 3 m in span.

### Chord

The upper and lower main longitudinal component in trusses or arches extending the full length of the structure.

### Coating

The generic term for paint, lacquer, enamel, sealers, galvanizing, metallizing, etc.

### Component

A major feature of an Asset that performs a particular function. Often in multiple occurrences.

### Condition Index

See Net Asset Salvage Value (NASV).

### Critical Quantity

The single quantity that defines the Element for costing purposes.

### Culvert

Any bridge that is embedded in fill and is used to convey water, pedestrians or animals through it.

### Deck Condition Survey

A detailed inspection of a concrete deck in accordance with The Structure Rehabilitation Manual.

### Defect

An identifiable, unwanted condition that was not part of the original intent of design.



## 7. Glossary (cont.)

---

### Detailed Visual Inspection

An element by element visual assessment of material defects, performance deficiencies and maintenance needs of a structure.

### Deterioration

A defect that has occurred over a period of time.

### Diagonals

Component which spans between the top and bottom chord of a truss or arch in a diagonal direction.

### Distress

A defect produced by loading.

### Element

A feature of a Component distinguished in terms of condition, material, base of measurement or unit cost of repair.

### Engineer

A member or licensee of the Professional Engineers of Ontario.

### Environment

An element's exposure to chloride contamination and freeze-thaw cycling

### Estimated Remaining Service Life

The Remaining Service Life (RSL) is an estimate, in years, over which an element may remain in service without repair or replacement. It is assumed that the conditions to which the element has been exposed will not change significantly and is based solely on visual observation.

### Estimated Remaining Service Life (ERSL)

This is an estimate, in years, as to how long an element can be expected to continue to perform satisfactorily without the predominant deficiency being addressed. In the case of a Primary Element, it is the time remaining before the element must be addressed at a Primary Element Level if nothing is done. It is based on judgment and experience and is tempered by the need to control liability of our clients. In cases where no physical testing results are available, ERSL's will tend to be more conservative. The ERSL assigned to a component represents the minimum ERSL assigned to any element comprising that component.

### Evaluation

The determination of the load carrying capacity of structures in accordance with the requirements of the Ontario Highway Bridge Design Code or the Canadian Highway Bridge Design Code, when implemented.

### Floor Beam

Transverse beams that span between trusses, arches or girders and transmit loads from the deck and stringers to the trusses, arches or girders.

## 7. Glossary (cont.)

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### Focus

At the element level, focus refers to the portion of the element in question. In most cases the focus is simply stated as "All" or, in other words, the entire element is being reported on under one designation. As elements deteriorate over time it is often desirable to differentiate between areas that are deteriorating more rapidly or differently. In other cases, elements are comprised of different materials and would be repaired differently as a result. These too should be separated and referred to by their focus. The focus of a primary element is always set to "All".

### Highway

A common and public thoroughfare including street, avenue, parkway, driveway, square, place, bridge, designed and intended for, or used by, the general public for passage of vehicles, pedestrians or animals.

### Lateral Bracing

Bracing which lies in the plane of the top or bottom chords or flanges and provides lateral stability and resistance to wind loads.

### Maintenance

Any action which is aimed at preventing the development of defects or preventing deterioration of a structure or its components.

### Masonry

Structure made up of natural stones separated by mortar joints, usually in uniform courses. Masonry in existing structures is usually in retaining walls, abutments, piers or arches.

### Masonry Ashlar

Stone worked to a square shape or cut square with uniform coursing height and vertical joints staggered. The stone has a minimum course height of 200 mm set in joints with an average thickness of 10 mm or less.

### Masonry Rubble

Stone masonry constructed with rough field stones or only roughly squared stones set in mortar joints with average thickness greater than 20 mm. Also any squared stone masonry in which the joints are greater than 20 mm, but less than 30 mm in thickness.

### Masonry Squared Stone

Stone in natural bed thicknesses or roughly squared stones with course height less than 200 mm and joints greater than 10mm but not over 20mm.

### Moderate

Exposed but element protected e.g. asphalt covered and waterproofed deck

## 7. Glossary (cont.)

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### Net Asset Salvage Value (NASV)

The current NASV of an asset is equal to its original dollar value minus the estimated cost of rehabilitating the asset back to its original condition. NASV changes continually with time, diminishing in step with the continued deterioration of the asset. It is important to recognize that whether a component such as a bridge deck is replaced or fully repaired it will still be reset to its full Asset Value Contribution. Recognition of the difference in longevity of the two strategies will be revealed by the subsequent behaviour of the post-rehabilitation performance curve. Expressed as a percentage it forms the rationale for the overall Condition Index of the asset.

### Owner

An agency having jurisdiction and control over the bridge.

### Performance Curve

A plot of Condition Index over time. The vertical scale represents Condition Index from 0 to 100, the horizontal scale represents time in years. The plot will reflect the Condition Index of the Asset since original construction to the present and from the present to the end of the analysis period. The impact of rehabilitative work (already carried out since construction as well as that planned for the future) will be reflected in the curve as will the anticipated subsequent performance of that Rehabilitation.

### Person

An individual, board, commission, partnership or corporation, including a municipal corporation, and employees, agents, successors and assigns of any of them.

### Plans

All drawings, descriptions and specifications, being parts of the contract, and all drawings and descriptions produced by the constructor for the erection of a bridge or structure, and all revisions thereto.

### Portal Bracing

Overhead bracing at the ends of a through truss or arch and provides lateral stability and shear transfer between trusses.

### Primary Components

The main load carrying components of the structure.

### Primary Element

The elemental equivalent of the component it comprises. For example, an Abutment consists of the elements, Wingwalls, Abutment Wall, Ballast Wall, Bearings. It also has an element called "Abutment". This element is needed so that costing (which is carried out at the element level) can account for replacement of the entire component. This element is referred to as the Primary Element.

### Rehabilitation

Any modification, alteration, retrofitting or improvement to a structure sub-system or to the structure which is aimed at correcting existing defects or deficiencies. May involve repair of existing elements or complete replacement.

## 7. Glossary (cont.)

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### Repair

Any modification, alteration, retrofitting or improvement to a component of the structure which is aimed at correcting existing defects or deficiencies.

### Replacement Cost

Replacement Cost is the expenditure required to build, on a new site, or replace at an existing site, a bridge that meets all present and projected requirements of the site, community and current codes.

### Replacement Value

Traditionally, Replacement Value refers to the cost in today's dollars for the identical replacement of an existing bridge. In other words, it is the value of the existing installation.

### Retaining Wall

Any structure that holds back fill and is not connected to a bridge.

### Secondary Components

Any component which helps to distribute loads to primary components, or carries wind loads, or stabilizes primary components.

### Severe

Exposed and element not protected e.g. Exposed concrete deck, Barrier Wall

### Sign Support

A metal, concrete or timber structure, including supporting brackets, service walks and mechanical devices where present, which support a luminaire, sign or traffic signal and which span or extend over a highway.

### Span

The horizontal distance between adjacent supports of the superstructure of a bridge, or the longest horizontal dimension of the cross-section of a culvert or tunnel taken perpendicular to the walls.

### Stringers

Stringers span between floor beams and provide the support for the deck above.

### Structure

Bridge, culvert, tunnel, retaining wall or sign support.

### Suspected Performance Deficiency

A Suspected Performance Deficiency should be recorded during an inspection, if an element's ability to perform its intended function is in question, and one or more performance defects exist.

### Sway Bracing

Vertical bracing spanning between through trusses or arches, or outside of half-through trusses or arches and providing lateral stability and shear transfer between the trusses or arches.

## 7. Glossary (cont.)

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### Tunnel

Any bridge that is constructed through existing ground, and is used to convey highway or railway traffic through it.

### Utility

Refers to a local utility such as hydro, gas, telephone etc. not part of the structure itself but rather utilizing it to provide passage. Typically carried between girders or hanging from the underside of the deck. Of significance only because the integrity of its connection to the structure impacts public safety.

### Verticals

Components which span between the top and bottom chords of a truss or arch in the vertical direction.

### Whisker Graphs

Simple frequency distribution charts that are intended, at a glance, to convey a comparative reference. They are shown on the Structure Summary to give the reader an immediatesense of how the bridge compares to the rest of the network based on various criteria.

**Proposal Form “A”**

**A.** The Respondent identified below hereby declares that:

1. No person, firm or corporation other than the one whose signature or the signature of whose proper officers and the seal is or are attached below, has any interest in this request for proposal.
2. This Proposal is made without any connection, knowledge, comparison of figures or arrangement with any other company, firm or person making a bid for the same work and is in all respects fair and without collusion or fraud.
3. The Respondent is not aware of any potential or actual conflicts of interest that it, or members of its joint venture in the case of Joint Venture Respondents, has or may have as a consultant/contractor/service provider under the terms and conditions of the RFP.
4. There is no Municipal employee, Council member or member of a Municipal agency, corporation or commission or employee thereof who has a financial interest in the Respondent, including the supply work or business of the Respondent or any profit or revenue of the Respondent, except as stated in the submitted Proposal.
5. The contents of the Proposal are true.
6. The Respondent has read and understands and agrees with all the terms, conditions and requirements contained in the Request for Proposals

**B.** If awarded the contract, the Respondent agrees to complete the work in accordance with the specifications in the RFP and the following addenda, receipt of which is hereby acknowledged:

Addendum No. \_\_\_\_\_ , dated \_\_\_\_\_ , 20  
Addendum No. \_\_\_\_\_ , dated \_\_\_\_\_ , 20  
Addendum No. \_\_\_\_\_ , dated \_\_\_\_\_ , 20  
Addendum No. \_\_\_\_\_ , dated \_\_\_\_\_ , 20  
Addendum No. \_\_\_\_\_ , dated \_\_\_\_\_ , 20

Full Legal Name of Respondent: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

(Please Print)

In the case of a Respondent that is a limited liability corporation

Name & Position  
of Person Signing \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
I have authority to bind the Corporation

In the case of a Respondent that is a sole proprietor or partnership

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Witness

Date:

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Owner/Partner Signature

Name:

-----  
Witness

Date:

-----  
Owner/Partner Signature

Name: