Request for Proposal

For Consulting Services for the
Completion of the Campbellford Bridge and Arterial Road Network
Environmental Assessment

Closing Date: Tuesday, August 14, 2012
Time: 1:00 p.m. local time

Contact: Carl Bonitto
Purchasing Manager
bonittoc@northumberlandcounty.ca
REQUEST FOR PROPOSAL

COMPLETION OF THE CAMPBELLFORD BRIDGE AND ARTERIAL ROAD NETWORK ENVIRONMENTAL ASSESSMENT

1. GENERAL

Submissions of Proposals for the Campbellford Bridge and Arterial Road Network Environmental Assessment (EA) will be received in a sealed envelope, clearly marked as to its contents.

The purpose of this project is to prepare and file for public record an Environmental Study Report (ESR) that identifies and reports on the arterial road transportation solutions and alternatives for the former Town of Campbellford, in consideration of existing and future transportation issues, community enhancement, environmental and economic impacts, all intended to meet or exceed the current requirements of the Canadian Highway Bridge Design Code (CHBDC) and the Municipal Class Environmental Assessment Act under Schedule 'C'.

The work will involve a systematic and analytical review of available Trent River crossing and transportation options detailing all assumptions, environmental conditions, recommendations and other pertinent information. The ESR will also present the preferred alternative, the criteria used to select this alternative, the mitigation process, a summary of the Public Consultation process and an implementation plan.

The final ESR must satisfy the requirements of both the Ontario Environmental Assessment Act and the Canadian Environmental Assessment Act.

This study will inform the Municipality of Trent Hills and Northumberland County Councils of critical information so that planning for the community can proceed for the next 40-50 years without jeopardizing public and private sector business decision making.

Time is of the essence for the completion of this assignment.

Proposals will be received at the office of:

County of Northumberland
555 Courthouse Road
Cobourg, Ontario
K9A 5J6
Attention: Carl Bonitto, Purchasing Manager

not later than Tuesday, August 14, 2012, 1:00 p.m. local time.
Questions relating to this RFP must be directed to Carl Bonitto via e-mail no later than 1:00pm on Thursday, August 2, 2012.

The County may cancel or amend this RFP process at any time.

Award of the Proposal shall be subject to a review by an evaluation committee and is subject to approval by the County of Northumberland Council.

2. THE MODIFIED CONSULTANT SELECTION PROCESS

In 2007 the County of Northumberland retained Totten Sims Hubicki (now AECOM) to carry out a Class EA Study which at that time was called the Additional Trent River Crossing. Over a two-year period the Study progressed through the phases of the Class EA process culminating in a report with recommendations to construct a new bridge along the Second/Alma corridor. In December 2009 County Council deferred a decision on the EA, put it on hold, and directed staff to further investigate the feasibility and cost of an additional bridge within the existing Bridge Street corridor.

In April 2010 County Council retained GENIVAR Consultants to carry out a Feasibility Study which was completed and submitted to County Council in July 2012. The Feasibility Study is now complete with a recommendation to widen the existing bridge to accommodate three travel lanes and a recreation trail. The County of Northumberland now wishes to resume the EA study and retain engineering consultants to assist the County in completing the study. The critical first step in resuming the EA Study will be to determine how far back in the five-phase Class EA process the County will go in order to consider and evaluate the viable alternatives, appropriately involve the local community and successfully complete and obtain Council approval of the ESR options for resuming the EA Study.

The Study Steering Committee at its first meeting held on June 25, 2012 discussed two possible alternatives:

1. Carry out detailed comparisons of two options only - the Second/Alma corridor and the existing bridge corridor widening as identified in AECOM and GENIVAR reports respectively in accordance with the motion supported by the Steering Committee during the June 25, 2012 meeting.

2. Review the traffic demands and forecasts, examine all the corridors only on their ability to satisfy the transportation needs, screen out those options which don’t satisfy the traffic needs and carry out a comprehensive analysis of the shortlisted corridor options (ie. repeat Phase 3).

The Steering Committee favoured option 2 above, but wishes to receive input from the selected consultant and co-determine whether options 1 or 2 above or another alternative will be used to recommence and successfully complete the Class EA Study.
No matter which approach is selected, it is very likely and desirable to revisit and confirm the extent of the traffic capacity "problem" given the length of time since a detailed traffic origin and destination study has been carried out.

Given the uncertainty with respect to where in the Class EA process that this study will recommence, the County will not be following its normal two-envelope process for consultant selection, where envelope 2 would have contained the consultant's upset fee proposal. Instead the County will be selecting the consultant based upon their technical proposal, i.e. their study approach and the experience of the proposed Project Manager and consulting team.

After the consultant is selected, the Steering Committee will work with the consultant to develop an agreed-upon detailed work plan and budget for the assignment. It is estimated that it will be necessary to have two technical planning meetings and two Steering Committee meetings to reach agreement on the Class EA process to be followed.

The selected consultants will be paid on the basis of their hourly rates, plus sundry cost, for all work involved with the development of the alternative processes, the discussions with the Steering Committee and the preparation of the detailed work plan and fee proposals. The resulting detailed work plan and budget will then be recommended to County Council for adoption and an agreement will be signed with the consultants.

3. SUBMISSION REQUIREMENTS

Proposals should be submitted in a sealed envelope and should contain the following information:

- The Consultant's qualifications and experience to complete the assignment, including at least five (5) outlines of relevant and similar projects undertaken and successfully completed, complete with reference contacts.
- A brief description of two (2) different approaches to resume the Class EA Study and carry it through to a successful conclusion including the advantages and disadvantages of each approach, both in terms of phase and specific path. For each approach, a high-level schedule shall be provided.
- Presentation and discussion of issues as discovered during the preparation of the proposal submission.
- Outlines of key project team members, demonstrating relevant experience and roles that will be assumed in the execution of the work.
- A listing of sub-consultant support, as may be required, complete with details of the support role to be provided.
- A listing of the hourly rates for the key project staff. These rates will be used in the first work phase of the project - the development of the detailed work plan.
Six copies of the proposal should be submitted. As part of the evaluation process, the County may verify, clarify and supplement any additional, required information with any proponent.

4. EVALUATION OF PROPOSALS & CONSULTANT SELECTION

Step 1 - Evaluation of All Submitted Proposals and Short-Listing

The Consultant Selection Evaluation Committee will reference the following evaluation criteria in selecting the 2-3 firms to be chosen for an interview:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points</th>
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<tbody>
<tr>
<td>1. Ability to execute project in a timely fashion</td>
<td>10</td>
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<tr>
<td>2. Experience of the consultant's team with respect to similar projects</td>
<td>20</td>
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<td>3. Capabilities of the consultant's Project Manager</td>
<td>15</td>
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<td>4. The effectiveness of the consultant's two proposed approaches to complete the study</td>
<td>25</td>
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Subtotal 70

Step 2 - Interviews With Short-Listed Firms

Two to three of the highest-scoring firms will be shortlisted and invited to make a presentation to the Evaluation Committee. The presentation should cover critical submission details such as the proposed Project Manager and other members of the consultant's team and their related experience, and the options to recommence and complete the Class EA study with the benefits and drawbacks of each. The formal evaluation will be scored out of a maximum of 30 points and will demonstrate the consultant's presentation skills and ability to communicate complex technical information in a clear and understandable manner.

A copy of the detailed breakdown of the interview marking scheme will be provided to the successful consultants prior to the interview.

The Evaluation Committee will also review the scores allotted for the four factors in Step 1 above and adjust them appropriately based upon the information provided in the interviews. The recommended consultant will have earned the highest score of both phases, combining steps 1 and 2.

5. RIGHT TO ACCEPT OR REJECT PROPOSALS

Selection of the top-ranked proponent will be within the discretion of the County evaluation team and approval of same shall be within the sole discretion of County Council.
6. INQUIRIES DURING PROPOSAL PREPARATION

All inquiries regarding the scope and interpretation of this Request for Proposal (RFP) shall be directed to the office of Carl Bonitto, Purchasing Manager at bonittoc@northumberlandcounty.ca no later than 1:00pm on Thursday, August 2, 2012.

7. AWARD OF ASSIGNMENT

Award of this assignment shall be based on the consultant with the highest score of steps 1 and 2, and will be subject to approval by County Council, anticipated on September 19, 2012.

8. BACKGROUND

The former Town of Campbellford, located in the Municipality of Trent Hills, is bisected by the Trent River. A single high-level bridge structure (Campbellford Bridge) crosses the Trent River, serving as a vital east-west community link for both pedestrian and vehicular access. The next closest available high-level river crossing is more than nine (9) kilometres away.

The Campbellford Bridge also functions as a link for traffic and goods movement between the major centres of the City of Peterborough and the City of Belleville through County Road No. 30 and County Road No. 8.

The bridge, constructed in 1968, is a five-span post tensioned bridge with expansion joints at abutments. The deck length is 136 metres in length with an overall deck width of 12.3 metres.

The design of the existing bridge is unique in nature and, at the time of its construction was recognized for its distinctive, slender profile and design elements that allowed the structure to match the road grades of the existing road intersections on both sides of the bridge.

With a design lifespan of up to 75 years, the replacement of the existing bridge is of concern with an estimated twenty (20) plus years of service life remaining for the Campbellford Bridge.

The Campbellford Bridge, under the jurisdiction of the County of Northumberland, continues to accommodate high traffic volumes with growth influences from local development as well as growth impacts from outside of the community. At 136 metres in length, span lengths of 23.1m, 29.9m, 29.9m, 29.9m and 23.1m and 8.5 metre of road width, the functional capacity of this 2-lane bridge is exceeded from time to time.

The Trent Severn Waterway is a navigable waterway from Victoria Day to Thanksgiving of every summer. The navigable opening required by the Trent Severn
Waterway (Parks Canada) is a vertical clearance of 6.7m and a horizontal clearance of 15.24m.

Traffic congestion is exacerbated by the presence of signalized intersections located at both ends of the bridge, necessary to provide traffic progression on to side streets and for access to the Central Business District of the downtown core of the former Town of Campbellford.

As such, the County of Northumberland and the Municipality of Trent Hills have a joint interest in completing an Environmental Assessment for the former Town of Campbellford.

The following reports and studies have been compiled with respect to the Campbellford Bridge and will be available digitally upon request:

2. Additional Bridge Crossing, Need and Justification Study, Totten Sims Hubicki, 1996
3. Additional Trent River Crossing Schedule 'C' Class Environmental Assessment Environmental Study Report (Draft), AECOM, 2009 - To Be Recommended
5. Trent River Crossing - Campbellford: Socio and Economic Factors to Consider - Existing Bridge Location, Meridian Planning, December 2011
7. Correspondence from Steering Committee Meeting, Monday, June 25, 2012

Pre-Engineering Report on the Campbellford Bridge, 1966

The Roads Commission of the United Counties of Northumberland and Durham retained Totten, Sims and Associates Limited in 1966 to prepare a pre-engineering report titled "Pre-Engineering Report on the Campbellford Bridge, Totten, Sims and Associates Limited, January 1966" to determine the feasibility of repairing or replacing the existing bridge on Bridge Street in Campbellford.

Five alternatives were proposed in the report to address the criteria at this location. A compromise was necessary at this location since none of the alternatives satisfied all of the requirements. The recommended solution for the replacement bridge was a new high-level two-lane bridge at the present site with 6.5% grade approaches.

Original Design Drawings, 1968

The 1968 original design drawings drafted by Totten Sims Hubicki and Associates Ltd. illustrate the two-lane, high-level bridge at Bridge Street as recommended in the 1966 pre-engineering report. The bridge consists of a concrete, post-tensioned superstructure (760mm to 850mm) supported on four piers and two abutments. The approach grades increased to 6.6% with a flat portion over the navigable opening.
**Traffic Operations Study, 1989**

M.M. Dillon Limited was retained by the Town of Campbellford in 1989 to address traffic operational problems and provide an implementation plan to deal with the traffic concerns. The report titled "Traffic Operations Study, M.M. Dillon Limited, February 1989" provided recommendations for road improvements, upgrading of signal equipment and suggested safety improvements to the roadway networks for a period of 1 to 5 years. As the crossing was operating at or near capacity at that time, Dillon recommended that a study should be undertaken to determine the location of a second crossing of the Trent Severn Waterway as a result of anticipated development within the Town and the nearby areas.

**Additional Bridge Crossing, Needs and Justification Study, 1996**

Totten Sims Hubicki Associates were retained by the Town of Campbellford, County of Northumberland and the Township of Seymour in 1996 to undertake a study to complete Phases 1 and 2 of the Environmental Assessment Process for an additional crossing over the Trent River. The report titled "Additional Bridge Crossing, Needs and Justification Study, Totten Sims Hubicki Associates, 1996" concluded that during afternoon peak periods and summer peak periods, the bridge and adjacent intersections are performing at a lower level of service, and as a result longer periods of congestion are experienced. To address the traffic constraints at the existing bridge location, Totten Sims Hubicki recommended that a second bridge be built within the Town of Campbellford to relieve traffic congestion at the existing bridge.

**Objective of the Original Environmental Assessment, 2009**

Northumberland County retained AECOM in 2007 to complete an Environmental Study Report (ESR) to evaluate the need for a second river crossing within the former Town of Campbellford.

The 2009 Municipal Class Environmental Assessment titled "Additional Trent River Crossing Class Environmental Assessment" was prepared under Schedule ‘C’ Class Environmental Assessment for the Municipality of Trent Hills and Northumberland County. The objective of this study was to confirm the need for an additional Trent River crossing within the geographical limits of the Town of Campbellford, identify the scope and nature of improvements required to satisfy existing and future river crossing demands, select an appropriate crossing location/corridor, and prepare a preliminary design and cost estimate for all infrastructure associated with the preferred crossing alternative. AECOM recommended that the preferred alternative was to provide an additional crossing of the Trent River in the Alma Street to Second Street corridor, which would provide a connection between the intersections of Grand Road/Alma Street on the west side and Second Street/Front Street South on the east side of the Trent River.
During the EA process, the rehabilitation and replacement of the existing bridge was investigated as one of the alternatives to provide additional capacity to the Trent River crossing. The report suggested that neither of these two alternatives reviewed were feasible for the following reasons:

- The existing bridge cannot be widened to a three-lane bridge due to inadequate width;
- The existing bridge does not have the weight bearing capacity to accommodate three lanes of the traffic should the sidewalks be removed and replaced with a separate pedestrian bridge;
- The existing bridge does not have the structural capacity to allow for widening of the cantilever sections without affecting the structural capability of the bridge;
- Twinning of the existing bridge would require major property and commercial building impacts, and economic impacts on existing business during the construction period;
- Twinning of the existing bridge would incur significant costs for utility relocations and a partial loss of on-street parking along Bridge Street; and
- Twinning of the existing bridge would require a suspension-type bridge or a long-span structure that would be 3 to 4 times more costly than a standard girder bridge.

The two alternatives of twinning the existing bridge and rebuilding the existing bridge were not carried forward to the more detailed evaluation of their specific impacts for the reasons noted above.

The 2009 AECOM ESR was put on hold by County Council to further investigate the feasibility of and cost associated with building an additional bridge within the existing Bridge Street corridor in the Town of Campbellford.

Independent Review of the Existing Bridge, 2009

Northumberland County retained McCormick Rankin Corporation to prepare an independent review of the feasibility of twinning the existing bridge. The report titled "Independent Review, Campbellford Bridge, McCormick Rankin Corporation, May 2009" reviewed the findings to date and examined the possibilities of improving traffic flow at the existing crossing location. The intent of the report was to provide a conceptual review with no detailed structural analysis. Improving the traffic flow over the long-term across the existing bridge was considered by adding an additional lane to provide a left turn lane at each end of the bridge. The option of adding two new lanes to the bridge was not investigated, as it was determined that there were too many technical issues and excessive costs such as purchasing buildings to accommodate the wider approach roadway.

The study also reviewed the structural considerations and feasibility of rehabilitating the bridge to accommodate three lanes of traffic or to twin the structure to accommodate four lanes. The conclusions reached for the structural alternatives are as follows:
Addition of a third lane across the entire structure with pedestrians on a new structure on either side of the structure would require further analysis to ensure that the existing structure can take the additional loading.

The addition of a third lane at the ends of the bridge to accommodate left-turning vehicles queuing for the traffic signals can be implemented as a temporary measure until a new crossing is built in 3-5 years.

Addition of two lanes to the bridge (either to the south or one lane on either side of the bridge) can be achieved structurally; however, the capacity of the road network at the approaches is limited. Thus, this option is not considered feasible at the existing site.

The recommended options were to construct the widening of the ends of the bridge for a short-term, 3 to 5 year solution until the new crossing is constructed, and to “do nothing” structurally while optimizing signal timings and coordination of the existing signals to manage the traffic congestion until a second crossing is constructed.

Objective of the Feasibility Study, 2012

On February 24, 2010, a Request for Proposal (RFP) was issued calling for Consultants to submit proposals for the preparation of a study report and design drawings for the future replacement of the existing bridge in the Town of Campbellford.

The primary purpose of this feasibility study was to determine, to a very high degree of confidence, the feasibility of constructing a new bridge at the same crossing location at some point in the future, all intended to meet the current requirements of the Canadian Highway Bridge Design Code (CHBDC).

Should it be determined to be feasible and cost-effective at the conclusion of the study process, the Feasibility Study and preliminary designs generated as part of this study would form the basis for a final design and shape infrastructure decisions leading up to the construction at some point in the future if deemed to be the preferred option through the overall EA process.

If it is not feasible or cost effective to replace the existing bridge, the study would inform Trent Hills and County Councils of critical information so that planning for the community can proceed for the next 40-50 years and so that public and private sector business decision making are not jeopardized.

At the April 21, 2010 Council meeting, a Request for Proposal (RFP) was awarded to GENIVAR Consultants to prepare a report to confirm the feasibility of the future replacement of the existing bridge in the Town of Campbellford.

Meridian Planning was retained by Northumberland County to develop the evaluation criteria to which alternatives were to be developed and is documented in Meridian's report Trent River Crossing – Campbellford: Socio and Economic Factors to Consider – Existing Bridge Location, Meridian Planning, December 2011.
Meridian's report recommended that a broader and more inclusive objective be established as follows:

*How can the level of service be maintained to provide long term surety of access across the Trent River in a cost effective manner (short and long term) and in a manner that provides opportunities for the enhancement of the existing downtown core and new investment in key locations that support an enhanced quality of place and quality of life.*

From this objective, a list of 54 factors were developed that should be considered during the evaluation of the design alternatives for the existing corridor. It was recommended that a “study lens” approach be utilized, with each study lens providing the basis for the establishment of criteria groups, which are supported by a number of factors that deal with transportation and community enhancement.

There were 11 design alternatives considered and assessed for the existing corridor location, and the 'Modified 3-Lane Bridge' at the existing crossing was identified as the preferred alternative.

County Council received GENIVAR Consultants 60% design drawings and final Feasibility report for a 'Modified 3-Lane Bridge' option during the July 18, 2012 session of County Council, all in accordance with RFP 15-10 - Feasibility Study of the Replacement of the Trent River Crossing in the Town of Campbellford.

9. **SCOPE OF WORK**

The Scope of Work is general in nature and will be further developed by the successful consultant in consultation with the EA Steering Committee.

**Recommencement of the ESR**

The purpose of this project is to recommence the original 2009 AECOM ESR (document No. 3 as listed above) for the Campbellford Bridge and determine the arterial transportation needs and demand within the former Town of Campbellford through the Class Environmental Study process.

The Consultant will be required to undertake the appropriate level of environmental analysis to complete the Municipal Class EA Planning and Design Process (MEA June 2007 or as amended in 2011). The Consultant selected for this project must be capable of completing all planning, environmental and engineering work associated with this project.

A thorough and comprehensive public participation process must be developed at the beginning of the project and carefully implemented throughout. The public participation element must drive the overall planning process, and the technical planning and design activities must be integrated into this process. Communications with affected agencies will be necessary, including but not limited to Transport
Canada, Parks Canada, Ministry of the Environment, Ministry of Natural Resources, Department of Fisheries and Oceans, Campbellford BIA, emergency services and other interested groups.

This Environmental Study Report will include a comprehensive evaluation of alternatives for the Campbellford Bridge as well as an analysis of the current and future transportation needs in order to establish the estimated cost of the preferred solution to address the future transportation demand in the former Town of Campbellford.

Completion of Phase 5 of the Municipal Class EA Planning and Design Process is to be considered as provisional to the scope of this assignment and proceeding with this phase of the work will be subject to securing adequate funding for the construction phase.

**Project Objectives**

The primary objectives of this project are:

- To recommence the 2009 ESR and conduct an analysis of the current and future transportation needs in the former Town of Campbellford to complete an Environmental Study Report of sufficient detail while satisfying the requirements of Phases 1 - 4 of the Municipal Class EA Planning and Design Process (MEA June 2007 or as amended in 2011);

- Complete an Origin-Destination Traffic Study to fully understand the transportation needs and demand within the former Town of Campbellford;

- Analyze the property impacts particularly the loss of housing stock, condition of the existing housing within buildings adjacent to site(s) of interest, desirability to keep housing in identified corridors, availability of alternate accommodation within the vicinity, how severe impacts may be on the community, etc.

- Explore the various river crossing design alternatives in consideration of:
  - possible alignment options within and around the geographic limits of the former Town of Campbellford; or the viable options selected through consultation with the Steering Committee;
  - existing traffic volumes, patterns and transportation demands;
  - future growth related to development in the area and pass-through traffic;
  - potential detour routes for various design alternatives;
  - impacts on adjacent properties and economic impact on existing businesses;
  - Loss of housing units, condition of the impacted housing stock, desirability to keep the impacted housing and availability of alternate accommodation within the vicinity;
impacts on existing facilities, utilities and structures;
- cultural, historical, socio-economic, archeological and heritage issues;
- geotechnical investigations; and
- pedestrian and trail linkages.

- Establish detailed cost estimates for construction, provision for detour routes during construction if required, cost to acquire property and/or businesses necessary for the preferred alternative if applicable, and other related impacts;

- Upon completion of the necessary budgeting and fundraising activities by the County and the Municipality, complete Phase 5 of the Municipal Class EA Planning and Design Process.

**Project Scope and Process**

The consultant is to work with the Steering Committee to develop a detailed scope of work and work plan.

A number of alternative solutions have been developed and reviewed as part of the original EA and Feasibility Study. The Consultant is to develop a screening process to determine if all options or a selected group of viable options should proceed to the final stages of the EA process.

The Consultant’s attention is further drawn to the fact that as part of this study they will be working with a large Steering Committee composed of Trent Hills and County staff, County Warden, Trent Hills and County Councillors, as well as representatives from the Campbellford Business Improvement Area, Trent Hills and District Chamber of Commerce and Second Street Residents Association.

The Consultant is to further work with the Steering Committee to generate evaluation criteria and weighting for the EA process to evaluate possible alternatives.

The Consultant is to develop high-level evaluation criteria to screen available options to create a shorter list that will be carried forward to a more detailed evaluation.

Within the scope of this assignment the Consultant would be expected to:

- Consult with the various approval agencies such as the Trent Severn Waterway, etc., to fully understand all restrictions and requirements applicable to the physical construction of the preferred structure, final clearances and other design parameters;
- Work closely with the project Steering Committee;
- Arrange Steering Committee meetings, and prepare and distribute meeting minutes;
- Project Manager shall attend all meetings, work closely with the Committee
Chair and staff, answer questions, concerns, prepare and provide presentations, work with the Steering Committee to reach consensus, and move the project forward;

- Project Manager shall provide direction and guidance to the Steering Committee to stay focused and assist to steer through to meet project objectives;
- Allow for 12 to 14 Steering Committee Meetings to be held in the Town of Campbellford while considering that meetings are generally 4 to 6 hours long and the time required to travel;
- Prepare satisfactory responses to the public, various agencies and Ministries in order to secure approvals;
- Present to local and County Councils for feedback and approvals;
- Prepare a complete file and master copy of the entire process for public viewing during the filing of the ESR;
- After filing the ESR, prepare responses comments and questions received during the 30-day viewing period from:
  - Public
  - Agencies
  - MOE, departments, or other stakeholders;
- Ensure all outstanding concerns or issues that arise throughout the EA process or as part of the previous feasibility or other studies are addressed;
- Investigate opportunities to modify or vary from navigational clearance over the Trent River (RFP Attachment No. 1);
- Investigate the feasibility of a temporary road/bridge detour(s) during the construction period, if required;
- Investigate various bridge structure options and profiles that meet the waterway clearance requirements and maintain the arterial road connections at both ends of the bridge;
- Identify potential property acquisitions, intersection and road network impacts; and
- Include any other options that the Consultant would consider such as modifications to the road network (i.e. relocate intersections on one or both sides of the Trent River) to increase the flexibility for bridge design alternatives.

The Consultant will prepare preliminary drawings, if required, based upon:
- desirable and alternative design standards (ie. % grade, lane widths, turning radii, approach lengths, span length, structure depth, superstructure & substructure, etc.);
- conducting structural analysis to determine live traffic and dead load requirements;
- geotechnical investigations;
- a review of property requirements;
- confirming adherence to the CHBDC; and
- a review of available construction materials and methods for the preferred design concept.

The Consultant shall determine the extent to which the design drawings may need to be advanced in order to determine, to a high degree of confidence, the feasibility
of constructing a new bridge at the location of the preferred alternative if deemed necessary (i.e., 30%, 50%, or more towards design completion).

**Tasks**

In order to address the primary objectives of this project, it is anticipated that the following specific tasks will be completed, as a minimum. The Consultant may include additional tasks in their submission that may enhance and benefit their overall proposal plan.

Task 1 – Records and Existing Conditions Research

The Consultant will review existing studies, reports, site conditions and other pertinent and available information. In particular, the “do-nothing” alternative is to be fully investigated and documented.

One-on-one interviews may be held with key municipal and emergency personnel, for example, to establish the effects of delays on vehicular traffic and other pertinent information.

As part of this task, a traffic Origin-Destination study will be completed for the project area. This study will analyze existing conditions and will include a review of traffic forecasts for a 30-year horizon, intersection level of service (LOS) calculations for key arterials in the area, perform a traffic operations analysis of the available alternatives to determine geometric and traffic control requirements. Traffic counts in the area will be required and, if unavailable from existing sources, may need to be collected/updated. The study will include an evaluation and projection of existing and future traffic conditions in the surrounding areas based on the Official Plan and land development projections in the area.

A network analysis of the transportation network in the former Town of Campbellford is also required to be completed to understand current conditions and determine the impact of the available alternatives on the road network.

Task 2 – Environmental Study Report

This task involves the review and documentation of available alternatives and identification of major issues, complete with functional design drawings (scale 1:1000) and an evaluation of alternative river crossing locations. The potential for construction at each location will be analyzed and assessed.

This task will be completed in sufficient detail to satisfy the requirements of both the Ontario Environmental Assessment Act and the Canadian Environmental Assessment Act, including but not limited to environmental, cultural, historic and socio-economic study.

Extensive public consultation and participation is required in order to ensure that the community is well informed and in favour of the preferred alternative.
The Consultant is to consider and analyze all available information and is to determine and recommend at which state or phase of the EA the 2009 AECOM ESR should be recommenced to successfully complete the EA process and achieve all EA compliance requirements.

Complete the ESR and present the report to County and Municipal Councils and file the report with the MOE.

Task 3 – Detailed Functional Design Plan of the Preferred Alternative

The functional design of the preferred alternative (scale 1:500) will be completed in sufficient detail to allow for a detailed cost estimate for the project.

The detailed design will include, as a minimum:

- The best location for a temporary detour, if recommended, complete with a detailed cost estimates.
- The estimated costs of constructing the preferred alternative.
- The impact of proposed construction on the existing utilities, complete with a relocations plan and estimated costs.
- The detailed impact on public and private properties and businesses of the recommended alternative on the neighbouring community.
- A property acquisition plan and costing based on the preferred alternative.

The Consultant will prepare detailed and in-depth preliminary design drawings to a sufficient detail to confirm the adequacy and feasibility of the design concept proposed for the replacement structure.

In undertaking this study, the requirements of maintaining the design parameters established in the Canadian Highway Bridge design Code will be of importance. However, where acceptable, alternative design standards may be a consideration during the preparation of the functional design.

Vertical and horizontal clearances must be checked to ensure that the adequate navigation clearances are provided. Consideration may be made for changes in either profile grade or superstructure depth.

10. INFORMATION SOURCES

Consulting Firms submitting a proposal shall satisfy themselves by personal examination of the site, review of the available documentation and by such means as they prefer, as to the actual conditions and requirements of the work.

Before submitting a proposal, Consultants may contact various agencies to review the available documents and to discuss any issues or requirements, including the Municipality of Trent Hills, Trent Severn Waterway and other agencies.
The Consultant may review all relevant documentation and resources, including:

1. Correspondence from Steering Committee Meeting, Monday, June 25, 2012
3. Trent River Crossing - Campbellford: Socio and Economic Factors to Consider - Existing Bridge Location, Meridian Planning, December 2011
11. Municipality of Trent Hills Official Plan

Digital copies of the listed documents are available through the Northumberland County website; hardcopies are available for viewing at the County's office and can be borrowed for copying purposes.

11. DELIVERABLES

The Consultant shall provide, as a minimum, the following deliverables in an acceptable format (electronic and printed) to the County of Northumberland through the course of the project:

- Electronic copy of draft EA report for review and comment.
- Electronic copy of final EA report in .pdf file format.
- Four (4) hard copies of final report.
- Drawings and display panels as may be required to support PICs.
- Other documents as indentified by the Consultant; and
- Itemized list of units and detailed estimate of costs.
12. MEETINGS

For the purposes of this proposal submission, project management and progress meetings shall be determined and arranged by the Consultant, and shall include as a minimum:

- Technical planning meetings and two or three (2 or 3) Steering Committee meetings to be held in the Town of Campbellford, Municipality of Trent Hills.

Should it be required, the Consultant shall chair and co-ordinate meetings with representatives from:

- Lower Trent Conservation Authority
- Parks Canada
- Other affected agencies

The Consultant will be reimbursed for meetings at the regular hourly and disbursements rate.

13. SCHEDULE

The Consultant will prepare a prioritized schedule for all tasks and activities to be undertaken for all components of the work including milestone dates, deliverables, meetings and approvals periods.

14. FEE SCHEDULE

The selected consultants will be paid on the basis of their hourly rates for all work involved with the development of the alternative processes, the discussions with the Steering Committee and the preparation of the detailed work plan and fee proposals. The detailed work plan and budget will then be recommended to County Council for adoption and an agreement will be signed with the consultants.

Consultants will be reimbursed for disbursements such as phone, fax, printing, courier, travel, meals and other such items.

The Consultant will identify any costs believed not to be covered by any of the other items noted herein.

15. PAYMENTS

Payments to the Consultant will be on a monthly basis upon an invoice being submitted by the Consultant to the County.
16. AGREEMENT

The Consultant will be required to enter into an Agreement with the County of Northumberland. The proposal for engineering services will become part of a standard form PEO agreement for engineering services between the County and the successful Consultant. Upon selection, the successful Consultant will be invited to enter into contract discussions and negotiations with the County.

17. ERRORS OR OMISSIONS

It is understood and acknowledged that while this RFP includes specific requirements, a complete review and recommendation is required. Minor items not herein specified but obviously required, shall be provided as if specified. Any misinterpretation of requirements within this proposal bid shall not relieve the Consultant of the responsibility of providing the services as aforesaid.

The successful consultant must hold the required Professional Liability Insurance to complete this project.

18. CONFLICT OF INTEREST

Proponents responding to this RFP must declare any actual, potential or perceived conflicts of interest in their proposals. The County will review any such declarations as part of the evaluation process and may reject any proposal if the County finds that a conflict of interest cannot be appropriately mitigated.

19. TERMS OF RFP PROCESS

This procurement process is not intended to create and shall not create a formal legally binding bidding process and shall instead be governed by the law applicable to direct commercial negotiations. For greater certainty and without limitation: (a) the RFP shall not give rise to any “Contract A”–based tendering law duties or any other legal obligations arising out of any process contract or collateral contract; and (b) neither the proponent nor the County shall have the right to make any breach of contract, tort or other claims against the other with respect to the award of a contract, failure to award a contract or failure to honour a response to the RFP.

The RFP process is intended to identify prospective consultants for the purposes of negotiating a potential agreement. No legal relationship or obligation regarding the procurement of any good or service shall be created between the proponent and the County by the RFP process until the successful negotiation and execution of a written agreement for the acquisition of such goods and/or services.

While the pricing information provided in responses will be non-binding prior to the execution of a written agreement, such information will be assessed during the evaluation of the responses and the ranking of the proponents. Any inaccurate, misleading or incomplete information, including withdrawn or altered pricing, could adversely impact any such evaluation, ranking or contract award.
**CONSULTANT PER DIEM RATES**

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<th>No.</th>
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<td>1</td>
<td>Consultant is to provide hourly rates for all work completed by each project team member involved with the development of the alternative processes, the discussions with the Steering Committee and the preparation of the detailed work plan and fee proposals for the Campbellford Bridge and Arterial Road Network EA for the former Town of Campbellford:</td>
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(Name of Project Team Member, Title)
ATTACHMENT No. 1 - Navigable Waters Plan, Existing Campbellford Bridge
ATTACHMENT No. 2 - January 28, 2010 Report to County Council

REPORT

Recommendation:

WHEREAS, at the January 5, 2010, County Council meeting, staff was directed to prepare plan of action of next steps as to proceed with this study with regard to the EA process, to review the suggested make-up of the Project Steering Team with a Terms of Reference and a Chair for the committee and to review the hiring of a project manager, the pros and cons, costs, duration of contract and the terms of reference;

NOW THEREFORE BE IT RESOLVED that Council accept the recommendations contained within this report with respect to Project Management; Steering Committee memberships; Terms of Reference; meeting locale and open meetings; Feasibility Study and Next Steps, subject to the approval of the Council of the Municipality of Trent Hills.

BACKGROUND

The County of Northumberland and Municipality of Trent Hills commenced the study of an Additional Crossing of the Trent River in November, 2007.

Following the Municipal Class Environmental Assessment process for Schedule ‘C’ projects, the purpose of this project was to identify transportation system improvements focused within the limits of the Town of Campbellford.

The completed ESR was to identify and report on alternatives for a second crossing of the Trent River for vehicular and pedestrian traffic, in consideration of existing and future transportation issues and traffic management options for the community with a recommendation for the location of a preferred future crossing to permit the County and Municipality of Trent Hills to plan accordingly.

October 19, 2009 Trent Hills Council meeting

On October 19, 2009, Trent Hills staff and AECOM presented the draft ESR prepared by AECOM to Trent Hills Council, who approved the recommendation for filing of the ESR for the public record.

October 21, 2009 County Council meeting
On October 21, 2009, County staff and AECOM presented the draft ESR to County Council with the same recommendation. County Council heard 13 delegations who expressed strong opposition to the recommended alternative. In order to address the delegations’ concerns and some unanswered question from Council, County staff was directed by Council to conduct further investigations and to report back to County Council on December 9, 2009, meeting.

Through staff and consultant support, the following investigations were conducted:

- alternative bridge alignments
- costing of property acquisition
- business impacts and associates costs
- planning implications and impacts on the downtown

December 9, 2009 County Council meeting

The additional investigations conducted by County staff for the December 9, 2009, meeting included preparation of drawings of alternative bridge alignments by AECOM, compilation of property sales information by a RE/MAX representative, review of business impacts by CN Watson and planning analysis of the downtown core prepared by Meridian Consultants.

As a result of concerns expressed by a number of delegations from the local community, County Council determined it wished to see further investigations to gain a higher degree of certainty with respect to:-

1. The feasibility and cost of constructing a new 2 lane bridge beside the existing bridge;
2. What the County’s long term costs will be to meet its arterial road responsibilities.

January 5, 2010 County Council meeting

A subsequent Council meeting was held on January 5th, 2010, at which time County Council discussed how the study management could be improved and what steps needed to be taken to bring the study to a successful conclusion. County staff were directed to:-

- Prepare a Detailed Plan of Action and the next steps as to proceed with this study with regard to the EA process;
- to review the Terms of Reference and a Chair for the Committee;
- to review the hiring of a project manager, the pros and cons, costs, duration of contract and the terms of reference.

Continuing Investigations

Since the December 9th, 2009 meeting of County Council, County staff carried out additional investigations. One key step was a meeting with AECOM on December 23rd, 2009. One of the items of discussion at this meeting was the feasibility and costs of constructing a new 2-lane bridge immediately adjacent to the existing bridge (referred to subsequently in this
County of Northumberland - Request for Proposal
Completion of the Campbellford Bridge and Arterial Road Network EA

Report as the Twinning Option). County staff wished to have a higher level of certainty of the feasibility of the Twinning Option and also the costs and impacts of replacing the existing bridge when it reaches the end of its serviceable life. In response to these questions in January, 2010, AECOM provided the following opinion:

“Our structural engineers have confirmed that it is not feasible to twin the existing bridge (i.e., construct a similar post-tensioned bridge with the same spans and structural depths as the existing bridge). It may be possible to build a second bridge adjacent to the existing, or replace the existing bridge with a new bridge, however, in order to meet the required structural depth, grades, and maintain navigational clearances, a non-standard bridge would be required such as a cable-stayed bridge or balanced cantilever structure. It is not feasible to construct a girder type bridge at this location, which would be the preferred structure type for this type of a crossing. A feasibility design exercise would be required to examine various non-standard bridge types, such as cable stay or other bridge types, that could be considered in order to provide the required navigational clearance, have road approaches that are no steeper than the existing bridge, and maintain the existing signalized intersection locations on both sides of the river. Part of that exercise would be determining if the existing piers would be re-used in the design/construction of a replacement bridge.

The non-standard bridge types would be expected to cost at least two to three times more than a post-tensioned bridge, and possibly much more. As noted at our meeting, it is not possible to construct a post-tensioned bridge that is identical (i.e., same spans and deck depth) to the existing bridge due to changes in the bridge code. Other options that the County could consider would be to make modifications to the road network (i.e., relocate intersections on one or both sides of the bridge) to increase the flexibility for bridge design alternatives at the Bridge Street location.”

This opinion and its potential cost implications could result in unsustainable costs for the County’s Transportation Budget both in the short term – providing additional road capacity to the existing bridge, and in the long term when the existing bridge must be removed. If it is going to cost three times or $35-$40 million in today’s dollars or more for the County to replace the existing bridge, then the County may wish to build the new bridge to a 4 lane width rather than 2 lanes so that the existing bridge does not need to be replaced when it reaches the end of its serviceable life. These unknowns pose considerable financial risk in making the decisions that both Councils are being asked to make in the present Class Environmental Assessment project.

A further possible and perhaps even more significant outcome related to the replacement of the existing bridge is the statement that one or both intersections (Bridge and Queen Streets at the west end and Bridge and Front Street at the east end) may have to be closed. This outcome would have dramatic impacts on the downtown and on the continuity of the County road system, particularly at the west end of the bridge. The Municipality of Trent Hills is in the middle of an Official Plan update process and needs to know if Queen and Front Streets will have to be closed at some point in the future so that the municipality, its merchants and its residents can plan appropriately. County staff believes that it would not be wise or
responsible to approve a long term transportation plan for Campbellford which assumes the existing bridge can be replaced when it may not be affordable and/or feasible. The decisions made in this Class EA must be made with the full knowledge of what the long term road system will be and the impacts on the community. At the December 23, 2009 meeting, AECOM Engineers supported the idea of an independent consulting engineer carrying out a study to explore the feasibility of twinning the existing bridge.

RECOMMENDATIONS:

1. Revised Steering Committee Membership

   At its January 5th, 2010 meeting, County Council considered the addition of three new members to the Steering Committee as follows:-

   - President of the Campbellford BIA;
   - President of the Campbellford Chamber of Commerce;

   At its January 18th, 2010 meeting, Trent Hills Council requested that two additional members be added:-

   - Jim Peters, Director of Planning for Trent Hills; and
   - Michael Nitsch, retired Engineer.

   County staff recommend that the five additional members be confirmed in addition to the existing Steering Committee members who are:-

   - Mark Lovshin, County Councillor
   - Hector Macmillan, Trent Hills Mayor and County Councillor
   - Bill Thompson, Trent Hills Councillor
   - Mike Rutter, Trent Hills CAO
   - Richard Bolduc, Director of Public Works, Trent Hills
   - Bill Pyatt, Acting Director of Transportation & Waste and CAO, Northumberland County
   - Peter Nielsen, Manager of Design & Construction, Northumberland County
   - Christina Harvey, Engineer In Training, Northumberland County.

   As part of its January 18th, 2010 Council resolution, Trent Hills Council also requested that all Steering Committee meetings be held in Campbellford and that they be open to the public. It is recommended that County Council agree to this request.

2. Confirm the Study Objectives

   In its January 5th, 2010 Council report, County staff recommended that the study recommendations be amended as follows:-
To develop an affordable, long term plan for the County road system in Campbellford which will support an attractive prosperous community.

Supporting Objectives

a) Ensure that the County road system will provide an acceptable level of traffic service while at the same time supporting a vibrant downtown, preserving healthy sustainable neighbourhoods and complementing the river waterfront development and supporting the Official Plans objectives for Campbellford.

b) When the existing bridge needs to be removed and replaced ensure that there is an acceptable road network in place such that adequate traffic flow will be maintained to the BIA, hospital and schools.

c) Determine if it is feasible and cost effective to extend the life of the existing bridge and thereby delay its costly and disruptive replacement as long as possible. Alternative measures could include additional structural reinforcement.

d) To ensure that these supplementary investigations follow the provisions of the Class EA Act, ensure full stakeholder involvement and meet with the approval of both Councils; the Municipality of Trent Hills and the County of Northumberland.

It is recommended that at its first meeting the revised Steering Committee should consider the above draft objectives and adopt them or develop a revised version. It is recommended that the Terms of Reference and mandate be forwarded to both Municipal Councils for approval.

3. Next Steps in the Class EA

County staff believes that it is not possible to complete the Class EA and file the ESR without knowing the feasibility and cost of replacing the existing bridge. If indeed the replacement cost is in the $40 million range or higher as advised by the AECOM engineers, then County Council might wish to consider a totally new ultimate transportation solution. County staff believes that it is not desirable to restart the Class EA until the questions regarding the replacement of the existing bridge and the twinning are answered.

4. Feasibility Study.

It is recommended that an RFP be issued to examine the costs and feasibility of the
twinning option and the replacement of the existing bridge. The RFP competition would be open to all qualified consultants and may need to go as far as preparing preliminary drawings based upon:

- Desirable and alternative design standards (i.e. % grade, lane widths, turning radii, approach lengths, span length, structure depth, superstructure & substructure, etc.);
- conducting structural analysis to determine live traffic and dead load requirements;
- geotechnical investigations;
- review of property requirements;
- confirming adherence to the CHBDC;
- review of available construction materials and methods for a box beam and hammerhead design concept.

It is possible that the selected consultant might have to go as far as 30, 40 or even 50% towards design completion to definitely answer the necessary questions. Consultants would be evaluated on the basis of their previous experience on similar projects and their proposed approach to effectively and efficiently provide the necessary answers. The costs of these investigations could range significantly and could be in the $100,000 - $200,000 range. These expenditures would not be wasted. If it is determined to be feasible and affordable the preliminary designs would form the basis for the final design and all infrastructure decisions leading up to the reconstruction. If it is not feasible or affordable to replace the existing designs it will be money well spent because it will inform Trent Hills and County Councils of critical information so that planning for the community can proceed for the next 40-60 years. If it is not feasible to rebuild the existing bridge, we need to know now so that public and private sector business decision making are not jeopardized. The timeframe from start to finish of the feasibility study would be approximately 4 months. It is recommended that the Steering Committee consider this proposal and forward its recommendations on to both Municipal Councils for approval.

5. **Completion of the Class EA**

If the bridge replacement is not viable County staff believes the study would have to revert back to phase 2 and that additional transportation system solutions would have to be developed and considered for a new 4 lane bridge. Without the Bridge Street crossing the arterial road system in Campbellford would likely have to be significantly modified.

If it is possible to replace the existing bridge and also to twin the existing bridge, the completion of the Class EA would proceed on a scope terms of reference basis most likely.

The feasibility study might result in an unforeseen qualified answer which would then lead to a different process needed to complete the Class EA. Until the results of this
study are known it is not recommended that time be spent doing alternative detailed Class EA action plans. It is recommended that upon completion of the feasibility study that the Steering Committee develops a detailed action plan to complete the Class EA and forward it to both Municipal Councils for approval.

Other Study Activities

While the feasibility study is underway it would be desirable to complete the 2009 Traffic Optimization Study. The effectiveness of the 2009 modifications would be evaluated and any necessary fine tuning carried out.

The Municipality of Trent Hills is presently conducting an Official Plan review and update and considering the results of the Growth Management Plan prepared by the County’s seven member municipalities. There may be implications from this update on the planning of the transportation network. It is recommended that Mr. Fournier be engaged subject to the approval of both Municipal Councils.

6. Project Management

County staff have had a discussion with Mr. Steve Fournier who performed the role of Project Coordinator for the Growth Management Study. Mr. Fournier would be quite interested in assuming a similar role working on the completion of the Campbellford Transportation Study. He is presently away on an extended vacation but will be back in Canada during the week of February 15th and able to start immediately. Mr. Fournier would be retained initially on an hourly basis until the scope of the EA can be clarified. Proceeding on this basis was very cost effective for the County on the Growth Management Study.

NEXT STEPS

It is recommended that this report and its recommendations be referred to Trent Hills Council for their review, comments and approval. If acceptable, a Steering Committee meeting will be arranged for the week of February 15th, 2010 in Campbellford.

FINANCIAL IMPLICATIONS

The Draft 2010 Transportation Budget includes a $150,000 contingency allowance available for the Campbellford Bridge and $50,000 for completion of the ESR. It is recommended that the County pay 100% of the cost of the feasibility study of the existing bridge replacement and the Twinning Option. It is recommended that upon completion of the feasibility study that a detailed action plan be developed to complete the ESR and that the two funding municipalities negotiate a mutually acceptable cost sharing agreement.