REGIONAL MUNICIPALITY OF WATERLOO
CONSOLIDATED COUNCIL AGENDA

Wednesday, April 25, 2012
Regular Meeting 7:00 p.m.
REGIONAL COUNCIL CHAMBER
150 Frederick Street, Kitchener, ON

*Denotes Item(s) Not Part of Original Agenda

1. MOMENT OF SILENCE

2. ROLL CALL

3. DECLARATION OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT

4. PRESENTATIONS
   a) The Lieutenant Governor’s Ontario Heritage Award for Lifetime Achievement – Peter Russell
      * Don Pearson, Board Member, Ontario Heritage Trust
   b) New Public Art at 150 Frederick – Lucille Bish
   c) 2012 Waterloo Region International Plowing Match - David Pyper, Chair/CEO

5. PETITIONS

6. DELEGATIONS
   a) Councillor Mark Bauman, Ward 2, Township of Woolwich regarding Live Snow Pilot Program
      Item 5 on Planning & Works Summary of Recommendation – April 17, 2012

7. MINUTES OF PREVIOUS MEETINGS
   a) Closed Council – March 28, 2012
   b) Council – March 28, 2012
   c) Closed Committee – April 20, 2012
   d) Planning & Works – April 20, 2012
   e) Administration & Finance – April 20, 2012
   f) Community Services – April 20, 2012

8. COMMUNICATIONS

9. MOTION TO GO INTO COMMITTEE OF THE WHOLE TO CONSIDER REPORTS
10. REPORTS

Finance Reports

a) F-12-031, T2012-005 Rural Recycling and Resurfacing in the Cities of Cambridge and Waterloo and the Townships of Wellesley and Wilmot

Committee Reports

a) Planning & Works - attached & marked PS-120320
   E-12-038 , Architectural Enhancements to Proposed Weber Street/CN Railway Grade Separation Structure North of Victoria Street, City of Kitchener
   E-12-034, Architectural Enhancements to the Grade Separation at the Weber Street/CN Railway Grade Separation Structure North of Victoria Street – attached for information

b) Planning & Works - attached & marked PS-120417
   Closed Planning & Works - attached & marked CPS-120417

* c) Administration & Finance - attached & marked FS-120417

d) Community Services - attached & marked SS-120417

Chief Administrative Officer

Regional Chair
Regional Clerk

11. OTHER MATTERS UNDER COMMITTEE OF THE WHOLE

a) E-12-026, Consultant Selection – Region of Waterloo Rapid Transit Project: General Engineering Consultant Services

12. MOTION FOR COMMITTEE OF THE WHOLE TO RISE AND COUNCIL RESUME

13. MOTION TO ADOPT PROCEEDINGS OF COMMITTEE OF THE WHOLE

14. MOTIONS

15. NOTICE OF MOTION

16. UNFINISHED BUSINESS

17. OTHER BUSINESS

18. QUESTIONS

19. ENACTMENT OF BY-LAWS – FIRST, SECOND & THIRD READINGS

* a) A By-law to Amend By-law 06-072, as amended, Being the Region’s Traffic and Parking By-law (Rates of Speed)
   - Removed for Approval (to be brought forward Fall 2012)
b) A By-law for the Establishment and Continuation of Reserve Funds of the Regional Municipality of Waterloo

c) A By-law to Amend By-law 01-059, as amended, Being a By-law to Consolidate all By-laws with Respect to Roads Included in the Regional Road System (Fairway Road)

d) A By-law to Confirm the Actions of Council – April 25, 2012

20. **ADJOURN**
TO: Regional Chair Ken Seiling and Members of Regional Council

DATE: April 25, 2012

FILE CODE: F18-30

SUBJECT: T2012-005 RURAL RECYCLING AND RESURFACING IN THE CITIES OF CAMBRIDGE AND WATERLOO AND THE TOWNSHIPS OF WELLESLEY AND WILMOT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo accept the tender of Coco Paving Inc., for Rural Recycling and Resurfacing in the Cities of Cambridge and Waterloo and the Townships of Wellesley and Wilmot in the amount of $5,583,323.22 including all applicable taxes.

SUMMARY: Nil

REPORT:

Tenders were called for Rural Recycling and Resurfacing in the Cities of Cambridge and Waterloo and the Townships of Wellesley and Wilmot and were opened in the presence of J. Ellerman, D. Pletch and L. Buitenhuis.

The following tenders were received:

- Coco Paving Inc. Petersburg, ON $5,583,323.22
- Steed & Evans Limited Heidelberg, ON $5,726,162.51
- Capital Paving Inc. Puslinch, ON $5,888,016.77
- E&E Seegmiller Limited Kitchener, ON $5,929,146.73
- Cox Construction Limited Guelph, ON $6,069,105.25

The work of this contract is for asphalt recycling using the expanded asphalt process and asphalt overlay at the following locations:

- Regional Road 9 (Erb’s Road) from the west limits of the roundabout at Ira Needles Boulevard to Notre Dame Drive, City of Waterloo and Township of Wilmot
- Regional Road 15 (Lobsinger Line) from 0.6km west of Kressler Road to Anita Drive, Township of Wellesley

Asphalt Resurfacing at the following location:

- Regional Road 24 (Hespeler Road) from 500 metres north of Queen Street to 600 metres south of Kossuth Road, City of Cambridge

Culvert Repairs at the following location:

- Regional Road 15 (Lobsinger Line) 0.6km east of Anita Drive, Township of Wellesley
Construction Schedule

Construction is scheduled to commence on or about May 14, 2012 with completion expected on or about August 31, 2012.

Traffic Restrictions

Two-way traffic will be maintained at all times during the asphalt recycling operations on Erb’s Road and Lobsinger Line with full road closures required for short durations in order to place the final surface course asphalt. Full road closures will be required on Regional Road 24 (Hespeler Road) in order to complete the paving operations at the intersection of Hespeler Road and Maple Grove Road and from Maple Grove Road to 600 metres south of Kossuth Road. Local and Emergency traffic will be maintained while a full road closure is in effect.

The anticipated full road closures required and the proposed detour routes are summarized below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Closure Required for:</th>
<th>Detour</th>
<th>Time Period of Closure</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Road 9 (Erb’s Road) from Ira Needles Boulevard to Notre Dame Drive</td>
<td>Surface Asphalt</td>
<td>Ira Needles Boulevard/ Highland Road/Notre Dame Drive</td>
<td>7:00am-7:00pm</td>
<td>5-7 Days</td>
</tr>
<tr>
<td>Regional Road 15 Lobsinger Line) from 0.6km west of Kressler Road to Anita Drive</td>
<td>Surface Asphalt</td>
<td>Kressler Road/ Ament Line/ Herrgott Road</td>
<td>7:00am-7:00pm</td>
<td>2 Days</td>
</tr>
<tr>
<td>Regional Road 24 (Hespeler Road) and Maple Grove Road Intersection</td>
<td>Base and Surface Asphalt</td>
<td>Kossuth Road/ Fountain Street/ Hwy 401</td>
<td>9:00am-7:00pm</td>
<td>2 Weekends</td>
</tr>
<tr>
<td>Regional Road 24 (Hespeler Road) from Maple Grove Road to 600 metres south of Kossuth Road</td>
<td>Base and Surface Asphalt</td>
<td>Kossuth Road/ Fountain Street/ Maple Grove Road</td>
<td>7:00am-7:00pm</td>
<td>3-4 Weeks</td>
</tr>
</tbody>
</table>

Area residents will be notified in writing of the details of the full road closures.

CORPORATE STRATEGIC PLAN:

Award of this contract is in accordance with the Region’s public tendering practices and meets Focus Area 2.2 of the Region’s Corporate Strategic Plan which is to develop, optimize and maintain infrastructure to meet current and projected needs and specifically Strategic Objective 2.2.1 which is to continue to prioritize and implement capital program projects required to meet community needs and ensure sustainability.

FINANCIAL IMPLICATIONS:

| T2012-005 | $5,583,323.22 |
| Engineering – Regional | 150,736.77 |
| Geotechnical Consulting, Materials Inspection & Testing | 80,000.00 |
| Detours, Signing and Pavement Markings | 60,000.00 |
| Engineering – Consultant | 9,605.00 |
| Advertising & Printing | 4,500.00 |
| Permits | 1,000.00 |

Sub-total $5,889,164.99

Less Municipal Rebate of 86.46% of HST (564,270.61) Sub-total $5,324,894.38
The Region of Waterloo’s approved 2012 Transportation Capital Budget includes funds of $7,013,000 to complete these road projects. Based on the low tender result, the estimated total cost of this work is $5,324,894.38 to be funded from the Roads Rehabilitation Reserve Fund. The cost of this work is $1,688,105.61 (approximately 24%) under the budgeted amount. The surplus funds on this project will remain in the Roads Rehabilitation Reserve Fund and will be available for other capital projects.

The main reasons for the underrun of $1,688,105.61 are as follows:

i) Prices received for this contract are very competitive and are in the range of 6% - 8% lower than prices received for the 2011 rural recycling contract due to tendering early in 2012; and

ii) During the detailed design phase in early 2012, after the original project budget was established, a consultant was retained to provide a geotechnical investigation and recommend a strategy for the rehabilitation of Hespeler Road. The optimal rehabilitation strategy recommended for this road involves the milling of the existing asphalt surface and overlaying with 100 millimetres of new asphalt on Hespeler Road. This approach is less costly than the expanded asphalt recycling approach that the original budget was based on. Additionally, during a visual inspection of Hespeler Road in early 2012, it was determined that the extent of resurfacing could be reduced by approximately 600 metres from what was originally anticipated.

The final date of acceptance for this tender is May 19, 2012.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE: Nil

ATTACHMENTS: Nil

PREPARED BY: C. Whitlock, Director, Procurement & Supply Services

APPROVED BY: A. Hinchberger, Acting Chief Financial Officer
THE REGIONAL MUNICIPALITY OF WATERLOO
PLANNING AND WORKS COMMITTEE

Summary of Recommendations to Council

The Planning and Works Committee recommends as follows:

1. THAT the Region of Waterloo incorporate the architectural enhancements described in Report E-12-034 dated March 20, 2012 into the design of the proposed grade separation structure included in the Weber Street Reconstruction and Widening project between College Street and Union Street.

March 20, 2012
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Design and Construction

TO: Regional Chair Ken Seiling and Members of Regional Council
DATE: April 25, 2012
FILE CODE: T04-20, 7101

SUBJECT: ARCHITECTURAL ENHANCEMENTS TO PROPOSED WEBER STREET/CN RAILWAY GRADE SEPARATION STRUCTURE NORTH OF VICTORIA STREET, CITY OF KITCHENER

RECOMMENDATION:
Additional information in support of Planning and Works Committee Report E-12-034 dated March 20, 2012.

SUMMARY:

At the Regional Council meeting of March 28, 2012, staff were requested to investigate several issues regarding the proposed architectural enhancements to the Weber Street grade separation structure recommended in Report E-12-034 presented at the March 20, 2012 Planning and Works Committee meeting. The issues related to the potential staining of the concrete abutments and sidewalks under the structure and the ability to remove graffiti from the structure.

After consideration of the issues, staff advise that:

- The design of the grade separation structure will include a runoff collection system to divert rainfall runoff from the structure directly into the roadway storm sewer system.
- The proposed configuration of the grade separation structure will make it very difficult for vandals to access the structure. If graffiti is applied to the structure, it will be easily removed by sandblasting at a nominal cost.

REPORT:

1. Background

The Region of Waterloo will be constructing a road-under-rail grade separation structure at the CN Rail crossing north of Victoria Street as part of the reconstruction and widening of Weber Street between College Street and Union Street. The construction of the structure is planned to begin in 2013 with completion anticipated by late 2014 in advance of the proposed construction of light rail transit facilities on King Street in 2015. In order to enhance the appearance of the Weber Street structure, a bridge architect has been retained by the Region to design architectural enhancements for incorporation into the overall design of the structure.
An Advisory Team consisting of staff from the Region of Waterloo and City of Kitchener as well as Regional Councillor Tom Galloway and Kitchener Councillor Dan Glenn-Graham directed the efforts of the architect, reviewed alternatives and selected the recommended enhancements which were presented to the Region’s Planning and Works Committee on March 20, 2012. The enhancements were described in Report Number E-12-034. The recommended enhancements were endorsed by the Committee. However, at the Regional Council meeting of March 28, 2012, some Councillors raised concerns about the self-weathering steel girders to be used for the proposed structure. The issues related specifically to the potential staining of the concrete abutments and sidewalks under the structure and the ability to remove graffiti from the structure. Staff were directed to consult with the Advisory Team on these issues and report back at a subsequent Council Meeting. This report has been circulated to Advisory Team members for comment and any significant concerns will be reported to Council.

2. Girder material for the Weber Street Grade Separation Structure

The materials used for the construction of bridges in Ontario must conform to the requirements of the Ontario Bridge Design Code (OBDC). In the case of the Weber Street structure, the requirements of CN Rail must also be met. Materials allowed in the OBDC include concrete, wood or steel; however, CN Rail has a preference for steel structures based on life-cycle cost.

In order to provide adequate clearance under the proposed structure to allow passage of vehicles on Weber Street, the major structural components of the grade separation structure must be installed above the elevation of the railway tracks. For the Weber Street structure, a wood structure is not feasible due to the extreme loads imposed by rail vehicles. The use of concrete for the structure is also not feasible as it would require excessively large structural components.

As described in Report E-12-034, the approved Class Environmental Study Report for the Weber Street project requires that the Weber Street grade separation structure be constructed of steel. The appearance of the exposed heavy steel girders supporting the railway tracks will be supplemented by a silver coloured stainless steel post and wire screen that will not only ‘lighten’ the appearance of the bridge girders, but also integrate visually with the silver coloured post and wire railings to be installed between the sidewalk and roadway.

The structural steel used for the bridge girders must conform to the requirements of the Bridge Code. Standard steel or ‘self-weathering’ steel may be used. The use of standard steel in locations exposed to the weather is discouraged due to the detrimental effects of corrosion. In locations where standard steel is used, the structural components must be over-designed to allow for the loss of strength over time as the structure deteriorates due to corrosion. The effects of corrosion on standard steel can be lessened somewhat by the application of a coating or paint. However the maintenance costs of this are significant since the coating must be inspected and re-applied on a regular basis to maintain an effective corrosion barrier.

The Advisory Team, project consultants and staff recommend that the structural components of the proposed Weber Street grade separation structure be fabricated using self-weathering steel (Cor-ten steel). This is a specifically developed, maintenance-free steel that is designed to rapidly oxidize to form a protective surface film. This film will stabilize after two to five years effectively stopping any deterioration due to corrosion. The resultant appearance of the steel varies in color from black to brown.
Cor-ten steel was designed primarily to be used in unpainted applications where a reduction in maintenance costs, such as painting, was desired. Self-weathering steels are now being used in a variety of applications, including bridges, transmission towers, chimneys and shipbuilding. It is also becoming increasingly popular with sculptors and as an architectural feature.

The final design of the Weber Street grade separation structure will be subject to the approval of CN Rail since the railway tracks are under their ownership. CN staff have indicated that Cor-ten steel is their desired material for use in the Weber Street structure given its maintenance-free qualities. The use of any material other than Cor-ten steel will likely not be acceptable to CN and will complicate and delay the negotiations for the cost-sharing of the bridge currently underway. Since the application of a coating or paint to the steel will negate its maintenance-free advantages, CN would likely require that the entire cost of maintenance of the bridge revert to the Region. The proposed use of another material or the recommendation to apply a coating is likely to delay the approval of the structure by CN Rail. This in turn will delay the Spring 2013 start of the construction of the Weber Street grade separation structure which must be met in order to ensure completion prior to the start of construction of LRT facilities on King Street in 2015.

3. Preventing Corrosion Staining of Concrete Surfaces

Until the surface film is formed on the Cor-ten steel by initial oxidization and stabilizes, some oxidized surface material may be washed off during rainfall and cause staining on surfaces below the structure. This is not a concern with respect to the strength of the steel itself. However, the staining can cause aesthetic concerns if not prevented. This problem has been reduced, but not eliminated, by newer formulations of weathered steel.

There are two basic methodologies to control this staining. One method involves applying a specially formulated coating (or paint) to all surfaces of the girders immediately after installation to prevent the desired initial oxidation from occurring. The application of a coating to Cor-ten steel is not usually done since this defeats the intended purpose of the self-weathering aspects of the steel. The coated surface is no more corrosion resistant than standard steel since the protective surface film is not allowed to form and small defects in the coating may actually lead to accelerated and concentrated corrosion. Concentrated corrosion can result in premature structural deficiencies in the bridge. This coating would have to be periodically inspected and re-applied. The estimated initial cost of applying this coating to the proposed Weber Street grade separation structure is $100,000. Several times during its life-cycle, the structure would have to be covered, sandblasted and the coating re-applied at a cost of approximately $250,000. It is unlikely that CN would approve coating of the Cor-ten steel. If they did, it is expected that they would require that the Region assume the entire cost of maintaining the structure.

A better method to prevent staining is to convey rain runoff flowing off of the surfaces of the structure into a collection system which would divert the runoff directly into the local storm sewers before it can flow onto adjacent concrete abutments or sidewalks. This approach was planned for this structure. The cost of such a collection system is estimated to be less than $50,000 and was included in the overall $48.4 million budget for the Weber Street project.
4. Graffiti Removal

The removal of graffiti from prominent structures can be a significant maintenance cost. Access to the steel girders on the proposed Weber Street grade separation structure by members of the public will be difficult. The only way to access the face of the girder visible to vehicular traffic would be to stand on the proposed concrete sacrificial beam. This beam will be mounted approximately 900mm in front of the girder meaning that someone would have to reach across this gap while suspended above the road to paint the girder. It would be easier for someone to paint the sacrificial beam itself, the concrete abutments or the retaining walls. In these cases, graffiti can be removed from the concrete surface by sandblasting at a relatively low cost.

In the unlikely event that someone were able to reach the girder and paint it, the paint could be removed by the use of solvents or by sandblasting. Sandblasting would remove the protective surface film from the Cor-ten steel; however, this protective film would re-form after a short period of time.

It should be noted that any exposed surface, be it concrete, steel or wood has the potential to attract the application of graffiti. The removal of graffiti is an on-going problem in most urban areas.

CORPORATE STRATEGIC PLAN:

The proposed architectural enhancements support Focus Areas Two (Growth Management) and Five (Service Excellence) of the Strategic Plan by meeting the objectives to promote and enhance local heritage and ensure services are responsive to comments made by the public.

FINANCIAL IMPLICATIONS:

Nil

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Nil

PREPARED BY: Peter Linn, Senior Project Manager, Design and Construction

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: March 20, 2012
FILE CODE: T04-20, 7101
SUBJECT: ARCHITECTURAL ENHANCEMENTS TO THE GRADE SEPARATION AT THE WEBER STREET/CN RAILWAY GRADE SEPARATION STRUCTURE NORTH OF VICTORIA STREET

RECOMMENDATION:
That the Region of Waterloo incorporate the architectural enhancements described in Report E-12-034 into the design of the proposed grade separation structure included in the Weber Street Reconstruction and Widening project between College Street and Union Street.

SUMMARY:
The Region of Waterloo will be constructing a road-under-rail grade separation structure at the CN Railway crossing north of Victoria Street as part of the reconstruction and widening of Weber Street between College Street and Union Street. The construction of the structure is planned to begin in 2013 with completion anticipated by late 2014. In order to enhance the appearance of the structure given its proximity to the downtown core of Kitchener, a bridge architect has been retained to design architectural enhancements for incorporation into the overall design of the structure. The recommended architectural enhancements are presented in this report.

REPORT:
1. Background
The Region of Waterloo undertook and received approval in July 2011 of a Municipal Class Environmental Assessment (EA) Study that recommended the reconstruction and widening of Weber Street between College Street in the City of Kitchener and Union Street in the City of Waterloo. The project includes the construction of a road-under-rail grade separation structure at the CN Railway crossing north of Victoria Street. This grade separation is necessary to reduce delays to vehicular traffic and to enhance safety at the crossing.

During the Class EA Study, the Project Team determined that several constraints, including the configuration of the existing railway tracks, the proximity of existing abutting properties and the location and depth of the storm sewers on Victoria Street available to drain Weber Street would limit the types of structures that were feasible for this grade separation. The Project Team investigated several span arrangements; however, the only structure type considered feasible based on the project constraints was an arrangement that
consists of steel girders constructed above the deck of the structure. Since Weber Street will be lowered below existing elevation at this location, concrete retaining walls will be constructed immediately adjacent to the roadway on the north side of the bridge as part of the overall structure. South of the bridge, retaining walls will be constructed parallel to the tracks (perpendicular to the road). These walls will have a maximum height of approximately 5 metres.

Detailed Design of the proposed roadworks and grade separation is currently underway. This work is on an aggressive schedule in order to allow construction to start as early as possible in 2013. This schedule must be maintained to ensure that traffic can be accommodated when construction of the Rapid Transit project is started on King Street in 2015.

During the Class EA Study, the Project Team recognized the importance of enhancing the aesthetics of the new grade separation structure by adding architectural features that would reflect the manufacturing heritage of this area and support the City of Kitchener’s Economic Development Strategy involving the creation of an Innovation District in the downtown core. The Design Concept for the proposed grade separation structure referred to in the Class EA Study, as approved by Council, included a recommendation that the Region retain the services of a bridge architect to design architectural enhancements for the structure and that an allowance for the construction of these features be included in the construction budget for this project.

2. Recommended Architectural Enhancements to the Railway Grade Separation Structure

Stantec Consulting Ltd. has been retained by the Region of Waterloo to complete the overall Detailed Design for this project including the basic grade separation structure. An architectural design sub-consultant, Montgomery Sisam Architects Ltd, has also been retained to design the architectural enhancements for the grade separation. Montgomery Sisam is a mid-sized architectural firm based in Toronto, Ontario. Their design practice encompasses various project types and scales, including several significant bridge structures in and around the Greater Toronto Area, such as the Fort York and Humber River pedestrian bridges, the Eastern Gap bridge and the John Street bridge. Several of their bridge designs have won awards for design innovation.

Design and Construction staff met with Stantec, Montgomery Sisam, the Region’s Cultural Heritage Planner and the City of Kitchener’s Heritage Planner to discuss possible themes for the architectural design of the grade separation structure. It was decided that a theme centred on the manufacturing heritage of the project area and also recognizing Kitchener’s designation of the area as an Innovation District would be appropriate.

An Advisory Team made up of the following staff was formed to provide direction to Montgomery Sisam and make recommendations to Planning and Works Committee regarding the architectural enhancements to the grade separation structure. The Advisory Team includes;

- Tom Galloway – Regional Councillor
- Dan Glenn-Graham – City of Kitchener Councillor
- John Hammer – Director, Transportation (Region of Waterloo)
- Kate Hagerman – Cultural Heritage Principal Planner (Region of Waterloo)
- Peter Linn – Senior Project Manager (Region of Waterloo)
- Sandro Bassanese – Planner (City of Kitchener)
- Kevin Mick – Engineer (City of Kitchener)
The Advisory Team met twice with Montgomery Sisam staff to discuss design alternatives for various architectural enhancements created to support the selected theme. After consideration of these alternatives, a consensus of opinion could not be reached on all matters; however the majority of the Team is recommending that the structure include the following features;

- Exposed heavy steel girders supporting the bridge structure. The steel will be self-weathering to create a maintenance-free surface with a uniform color. The steel girders will create an appearance similar to older train bridges reflecting the heritage of the railway itself and the importance of rail transportation in the development of Kitchener.

- Exposed aggregate / colored cast-in-place concrete lower retaining walls between the lowered roadway and elevated sidewalk on each side of the road. This textured surface treatment is meant to reflect natural soil conditions in the area.

- Cast-in-place concrete upper retaining walls between the elevated sidewalk and existing ground surface on each side of the road. The walls are to be faced with fibre reinforced concrete panels textured to resemble felt, leather, wood and buttons representing historic manufacturing industries in the vicinity. Descriptive plaques will be installed to inform interested pedestrians of these industries.

- Stainless steel post and wire railings installed on the top of the lower retaining walls. The purpose of the railings is to provide safe separation between pedestrians and the roadway. This railing will also be extended across each face of the grade separation structure in front of the exposed steel girders supporting the railway tracks. This will help to integrate the bridge structure with the pedestrian railing system and provide contrast with the weathered steel of the girders.

- Fluted concrete posts and decorative lighting on the western bridge abutments of the structure. Matching smaller scale posts and lighting will be installed at the ends of the upper retaining walls. These will be gateway features signalling the approach to the proposed multi-modal station for train passengers and the entrance to the Kitchener downtown core for vehicle drivers and pedestrians.

The Advisory Team selected these architectural features because they effectively highlight several aspects of local manufacturing heritage and past innovation. The estimated cost of these architectural features is $550,000. Conceptual drawings of the features are included in Appendix “A” to this report. Staff from Montgomery Sisam will be in attendance at the March 20, 2012 Planning and Works Committee meeting to make a presentation regarding the recommended features.

3. Project Schedule

The proposed grade separation structure is planned to be constructed in 2013 and 2014 so that it will be complete and operational prior to the construction of the proposed grade separation structure on King Street to be constructed in conjunction with the Rapid Transit system. To meet this aggressive schedule, the detailed design of the Weber Street grade separation structure must be completed as soon as possible and all required approvals obtained. Planning and Works Committee endorsement of the recommended architectural enhancements at the March 20, 2012 Committee meeting is vital to maintaining the project schedule.
CORPORATE STRATEGIC PLAN:

The proposed architectural enhancements support Focus Areas Two (Growth Management) and Five (Service Excellence) of the Strategic Plan by meeting the objectives to promote and enhance local heritage and ensure services are responsive to comments made by the public.

FINANCIAL IMPLICATIONS:

The estimated cost of the architectural features recommended in this report is $550,000. The approved 2012 Transportation Capital Program includes total funding in the amount of $48,400,000 for the Weber Street project. There are sufficient funds available in this overall budget to construct the recommended architectural enhancements.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff of the Community Services Division of the Planning, Housing and Community Services Department has been consulted in the consideration of the alternatives and recommendations contained in this report.

ATTACHMENTS

Appendix “A” - Architects concept of design enhancements

PREPARED BY: Peter Linn, Senior Project Manager, Design and Construction

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services

DOCS #1118897
APPENDIX A
Architects concept of design enhancements
THE REGIONAL MUNICIPALITY OF WATERLOO
PLANNING AND WORKS COMMITTEE

Summary of Recommendations to Council

The Planning and Works Committee recommends as follows:

1. THAT the Regional Municipality of Waterloo take the following actions with respect to the Class Environmental Assessment for Fountain Street – King Street Improvements, Shantz Hill Road to Eagle Street, City of Cambridge:
   
a) Approve the implementation of a realigned intersection at Fountain Street/Shantz Hill Road, conventional intersection improvements at King Street/Fountain Street and at King Street/Eagle Street, and other road improvements in the City of Cambridge as presented as Recommended Design Concept 3A in Report E-12-029.
   
b) Direct staff to file the Notice of Completion for this Class Environmental Assessment by means of advertisements in the local newspapers and mailings to the adjacent property owners, tenants, and agencies and place the Environmental Study Report on the public record for a period of 30 days.
   
c) Amend the Consulting Services Agreement with Stantec Consulting Ltd. (Stantec) of Kitchener, Ontario to authorize an increase of $307,200 to the upset limit fee for the detailed design phase for this project with contract administration and construction inspection to be paid on a time basis.
   
d) Direct staff to commence a Class Environmental Assessment Study, in conjunction with the City of Cambridge, to explore the feasibility of an off-road multi-use trail with new pedestrian/cycling bridge across the Speed River and trail connection from Fountain Street South to the City of Cambridge Linear Trail.
   
e) Direct staff to work with affected property owners to potentially minimize impacts.

2. THAT The Regional Municipality of Waterloo direct and authorize the Regional Solicitor to take the following actions with respect to the expropriation of lands for the reconstruction of Weber Street West between Wilhelm Street and Guelph Street, in the City of Kitchener, in the Region of Waterloo as detailed in report CR-RS-12-019 dated April 17, 2012:

   1. Complete application(s) to the Council of the Regional Municipality of Waterloo, as may be required from time to time, for approval to expropriate land, which is required for the reconstruction of Weber Street and described as follows:

      Fee Simple Partial Taking:

      1. Part of Lot 8, Plan 373 being Parts 4 and 5 on 58R-17416, City of Kitchener, PIN 22332-0021 (LT) (306 Guelph Street, Kitchener);

      2. Part of Lot 8, Plan 373 being Part 6 on 58R-17416, City of Kitchener, PIN 22325-0009 (LT) (307 Guelph Street, Kitchener);

      3. Part of Lot 8 Plan 373 being Part 11 on 58R-17416, City of Kitchener, PIN 22326-0174 (LT) (26 Blucher Street, Kitchener);
4. Part of Lot 8, Plan 373 being Part 2 on 58R-17416, City of Kitchener, PIN 22332-0019 (LT) (340 Weber Street West, Kitchener);

5. Part of Lot 8, Plan 373 being Part 10 on 58R-17416, City of Kitchener, PIN 22326-0175 (LT) (311 Weber Street West, Kitchener);

6. Part Lot 8, Plan 373 being Part 9 on 58R-17416, City of Kitchener, PIN 22326-0176 (LT) (315 Weber Street West, Kitchener);

7. Part of Lot 8, Plan 373 being Part 8 on 58R-17416, City of Kitchener, PIN 22326-0177 (LT) (319 Weber Street West, Kitchener);

8. Part of Lot 8, Plan 373, being Part 3 on 58R-17416, City of Kitchener, PIN 22332-0020 (LT) (336 Weber Street West, Kitchener);

9. Part of Lot 8 Plan 373, being Part 7 on 58R-17416, City of Kitchener, PIN 22326-0167 (LT) (295 Guelph Street, Kitchener); and


Fee Simple Full Taking:

1. Part Lot 17, Plan 131, City of Kitchener, PIN 22326-0203 (LT) (225-227 Weber Street W, Kitchener);

2. Part Lot 20, Plan 131, City of Kitchener, PIN 22326-0198 (LT) (249 Weber Street West, Kitchener);

3. Lot 24, Plan 131, City of Kitchener, PIN 22326-0193 (LT) (269 Weber St W, Kitchener);

4. Part Lot 8, Plan 373, City of Kitchener, PIN 22331-0095 (LT) (296 Guelph Street, Kitchener);

5. Part Lot 8, Plan 373, City of Kitchener, PIN 22331-0100 (LT) (357 Weber Street West, Kitchener);

6. Part Lot 28-29, Plan 131, City of Kitchener, PIN 22326-0182 (LT) (281 Weber Street West, Kitchener);

7. Part Lot 8, Plan 373, City of Kitchener, PIN 22331-0096 (LT) (341 Weber Street West, Kitchener);

8. Part Lot 8, Plan 373, City of Kitchener, PIN 22331-0097 (LT) (345 Weber Street West, Kitchener);

9. Part Lot 8, Plan 373, City of Kitchener, PIN 22331-0098 (LT) (349 Weber Street West, Kitchener); and

10. Part Lot 8, Plan 373, City of Kitchener, PIN 22331-0099 (LT) (353 Weber Street West, Kitchener).
2. Serve notices of the above application(s) required by the Expropriations Act;

3. Forward to the Chief Inquiry Office any requests for a hearing that may be received;

4. Attend, with appropriate Regional staff, at any hearing that may be scheduled;

5. Discontinue expropriation proceedings or any part thereof, in respect of the above described lands, or any part thereof, upon the registration on title of the required documentation to complete a transaction whereby the required interests in the lands are conveyed; and

6. Do all things necessary and proper to be done, and report thereon to Regional Council in due course.

3. THAT the Regional Municipality of Waterloo enter into an agreement with Hydro One to prepare tender documents, manage the tendering process, and deliver Class A cost estimates to remove and relocate Hydro One infrastructure underground between Courtland Avenue and Fairview Park Mall, at an upset fee limit of $530,000 plus applicable taxes. [E-12-051]

4. THAT the Regional Municipality of Waterloo amend Traffic and Parking By-law 06-072, as amended following the completion of construction of Fairway Road (Regional Road 53) from Zeller Drive to Fountain Street (Regional Road 17), to:

   a) Remove from Schedule 18, 60 km/h maximum speed, Fairway Road (Regional Road 53) from 120 metres east of Old Chicopee Trail to Lackner Boulevard (Regional Road 54); and

   b) Add to Schedule 18, 60km/h maximum speed, Fairway Road (Regional Road 53) from 120 metres east of Old Chicopee Trail to 50 metres east of Zeller Drive, in the City of Kitchener, as outlined in Report E-12-030, dated April 17, 2012.

5. THAT the Regional Municipality of Waterloo endorse the creation of a 500 metre live snow fence along the west side of Regional Road 85 in the Township of Woolwich, as detailed in Report E-12-032 dated April 17, 2012;

   AND THAT the Regional Municipality of Waterloo authorize the Commissioner of Transportation and Environmental Services to execute an agreement with the Corporation of the Township of Woolwich relating to the design, planting, monitoring, and maintenance of the live snow fence area, to the satisfaction of the Regional Solicitor.

6. THAT the Regional Municipality of Waterloo pass a by-law to amend Road Consolidation By-law 01-059 (Regional Road System) to:

   a) Effective upon passing of the by-law assume Woolner Drive, from Pebblecreek Drive / Upper Mercer Street to Old Zeller Drive (described as Part 13 on reference Plan 58R-16364) from the City of Kitchener and add to the Regional Road System to form part of Regional Road 53 (Fairway Road).

   b) Effective upon passing of the by-law assume a portion of Old Zeller Drive, (being
Part of PIN 22713-3863 of Part 14 on the reference plan to be deposited at the land registry office) from the city of Kitchener and add to the Regional Road System to form part of Regional Road 53 (Fairway Road).

c) Effective upon passing of the by-law establish and open as part of Regional Road 53 (Fairway Road) of the Regional Road System the lands as described below:

- Part 1, Part of Block 172, R. P. 58M-331, PIN 22713-2599, on reference plan 58R-16364;
- Part 2, Part of Lot 8, R. P. 591, PIN 22713-2688, on reference plan 58R-16364;
- Part 3, Part of Block 37, R. P. 58M-449, PIN 22713-3860, on reference plan 58R-16364;
- Part 4, Part of Block 37, R. P. 58M-449, PIN 22713-3860, on reference plan 58R-16364;
- Part 5, Part of Lot 117, G. C. T and Part of Lot 9, R. P. 591, PIN 22713-3863;
- Part 6, Part of Lot 13, R. P., 591, PIN 22713-2695 on reference plan 58R-16364; and
- Part 1, Lot 8, PIN 22713-2688, on reference Plan 58R-14717.

d) Effective at 12:01 a.m. on October 1, 2012 establish and open as part of Regional Road 53 (Fairway Road) of the Regional Road System the lands as described below:

- Part 8, Part of Lot 9, R. P. 591, PIN 22713-4566, on the reference plan to be deposited at the land registry office;
- Part 9, Part of Lot 9, R. P. 591, PIN 22713-4566, on the reference plan to be deposited at the land registry office;
- Part 10, Part of Lot 9, R. P. 591, PIN 22713-4566, on the reference plan to be deposited at the land registry office;
- Part 6, Part of Lot 14, R. P. 591, PIN 22713-2424, on reference plan 58R-16576;
- Part 7, Part of 14, R. P. 591, PIN 22713-2424, on reference plan 58-R-16576;
- Part 8, Part of Lots 14 and 16, R. P. 591, PIN 22713-2424, on reference plan 58R-16576;
- Part 9, Part of Lot 16, R. P. 591 and Part of Lot 117, G. C. T, PIN 22713-2424;
- Part 24, Part of Lot 116, G. C. T., PIN 22713-0918, on reference plan 58R-16369;
- Part 26, Part of Lot 116, G. C. T., PIN 22736-0010, on reference plan 58R-16369; and

e) Effective at 12:01 am on October 1, 2012 assume a portion of Riverbank Drive (described as Part 25, Part of Lot 116, G. C. T., PIN 22736-0001, on reference plan 58R-16369) from the City of Cambridge and add to the Regional Road System to form part of Regional Road 53 (Fairway Road).

f) Establish and open as part of Regional Road 31 (Kossuth Road) of the Regional
Road System the lands as described below:

- Part 30, Part of Lot 126, G. C. T., PIN 22736-0010, on reference plan 58R-16369. [E-12-049]

7. THAT the Regional Municipality of Waterloo provide one-time co-funding of $50,000 to support the Water Research Foundation Tailored Collaboration Proposal for the development of a Quantitative Microbiological Risk Assessment (QMRA) probabilistic model to estimate annual risk of illness and disability adjusted life years (DALYs) based on source water pathogen concentrations and treatment barriers. [E-12-042]

8. THAT the Regional Municipality of Waterloo endorse the recommendations and proposed actions of the Region of Waterloo International Airport Program Review 2011-2012 as noted in Report CA-12-002.1/E-12-017.1 Appendix “A” dated April 17, 2012, including the change of the one contract administrative position to a permanent position, all at a decrease of approximately $15,000 to the 2012 Airport operating budget.


10. THAT the Regional Municipality of Waterloo direct staff to hold a public meeting under Sections 17(15) and 22(1) of the Planning Act, R.S.O. 1990, Chapter P.13, as amended, to give the public an opportunity to comment on an application by Thomasfield Homes Ltd. to amend the 1995 Regional Official Policies Plan with respect to the Breslau Rural Settlement Area in the Township of Woolwich, as outlined in Report No. P-12-045, dated April 17, 2012.

11. THAT the Regional Municipality of Waterloo, in its role as the delegate of the Minister of Municipal Affairs and Housing, refer the portion of Map 5 of the City of Kitchener Official Plan located west of Fischer-Hallman Road and north of Huron Road that is subject to Deferral 3a to the Ontario Municipal Board under the provisions of Section 17(11) of the Planning Act R.S.O. 1990 and request this referral be consolidated with the Official Plan Amendment, Plan of Subdivision and Zoning By-law amendment appeals by Tru-Villa Inc. and 2040796 Ontario Limited currently the subject of Ontario Municipal Board Case No. PL090526, as explained in Report P-12-046, dated April 17, 2012.

April 17, 2012
THE REGIONAL MUNICIPALITY OF WATERLOO
PLANNING AND WORKS COMMITTEE

Summary of Closed Recommendations to Council

The Planning and Works Committee recommends as follows:

1. THAT the Regional Municipality of Waterloo approve, enter into an Agreement for, and execute all documentation related to, the acquisition of land for road improvements to Weber Street West described as described as Part Lot 155-156, Plan 376, Part Lot 45 Streets and Lanes as described in Instrument Number 672554, PIN Number 22319-0159(LT), City of Kitchener, Regional Municipality of Waterloo and known municipally as 127 Weber Street West, from The Ontario English Catholic Teachers’ Association for the sum of $482,000.00, plus associated acquisition costs, on terms and conditions satisfactory to the Regional Solicitor.

2. THAT the Regional Municipality of Waterloo approve, enter into an Agreement for, and execute all documentation related to, the acquisition of land for road improvements to Weber Street West described as Part Lot 155-156, Plan 376, Part Lot 45 Streets and Lanes as described in Instrument Number 416103, PIN Number 22319-0160(LT), City of Kitchener, Regional Municipality of Waterloo, known municipally as 131 Weber Street West from The Ontario English Catholic Teachers’ Association for the sum of $220,000.00, plus associated acquisition costs, on terms and conditions satisfactory to the Regional Solicitor.

April 17, 2012
The Administration and Finance Committee recommends as follows:

1. THAT the Regional Municipality of Waterloo declare surplus the lands known municipally as 14 Erb Street West and described as, Lots 1, 2, 3 and 4 West Side of King Street North, plan 491, designated as Part 1, on reference Plan 58R-5290, (PIN 22375-0092) City of Waterloo, Regional Municipality of Waterloo, and provide the standard public notification as required by the Region’s property disposition by-law, as described in Report CR-RS-12-018 dated April 17, 2012.

April 17, 2012
THE REGIONAL MUNICIPALITY OF WATERLOO
COMMUNITY SERVICES COMMITTEE

Summary of Recommendations to Council

The Community Services Committee recommends as follows:

1. THAT the Regional Municipality of Waterloo approve the 2011-2013 performance indicator targets, with two modifications from Region of Waterloo, as part of the Public Health Accountability Agreement with the Province of Ontario effective January 1, 2011 for a term of three years, as outlined in report PH-11-041 Public Health Budget Approval & Accountability Agreement, dated September 27, 2011. [PH-12-012]

2. THAT the Regional Municipality of Waterloo approve the Operating Management Plans for Macton Regional Forest and Townline Regional Forest, attached to Report P-12-050, dated April 17, 2012.

April 17, 2012
TO: Chair Ken Seiling and Members of Regional Council

DATE: April 25, 2012

FILE CODE: A02-30/PW

SUBJECT: CONSULTANT SELECTION – REGION OF WATERLOO RAPID TRANSIT PROJECT: GENERAL ENGINEERING CONSULTANT SERVICES

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into a consulting agreement with Parsons Brinkerhoff Halsall Incorporated to provide General Engineering Consulting (GEC) services for the Rapid Transit project for an initial term of three years at an upset fee limit of $16.58 million plus applicable taxes, as described in Report No. E-12-026, dated April 25, 2012.

SUMMARY:

The Region continues to plan for population and employment growth over the next two decades. Recognizing this challenge, Council approved rapid transit as the preferred transportation mode to move people and to shape urban form.

Earlier this year, in February 2012, Council also approved the procurement delivery model for Stage 1 of the rapid transit implementation plan.

More recently, the Region received “Approval in Principle” letters from both the Federal and Provincial Governments that authorize the Region to accrue eligible costs for future cost sharing with the two senior funding partners.

With these critical approvals, the Region is now poised to advance the system design and prepare output specifications for the procurement process, leading to final design and construction. This groundwork will allow for a strong competition to build a sustainable system efficiently and economically.

The project construction is planned to commence in 2014 with system operations beginning in 2017. To execute the project within this schedule, Regional staff advertised a request for proposals to provide General Engineering Consulting (GEC) services in November 2011. Five consulting teams responded to the advertisement.

Staff used evaluation criteria, in accordance with the Project Charter and the Region’s Purchasing By-laws, to select the successful consultant. Consultants were short-listed from their written proposals based on the following quality factors and then were interviewed prior to reviewing their cost proposals:

- Team experience with light rail projects;
- Team qualifications and strengths;
- Project understanding and the ability to deliver innovative and quality results;
- Quality of work plan and staffing approach to meet the project schedule; and
- Personnel qualifications.

Following the interviews, the consultants were evaluated based on their cost proposals. Based on the final rankings, the Regional staff entered into contract negotiations with the highest ranked consultant. The negotiations resulted in substantially reduced rates, and overall project cost reductions.

Based on a comprehensive review and assessment of the detailed submissions, it is recommended that Parsons Brinkerhoff Halsall Incorporated be awarded an initial term of a three-year assignment at an upset fee limit of $16.58 million plus applicable taxes, with the option for contract renewal up to an additional three years, in three one-year extensions. Regional staff will prepare recommendations for Council approval prior to executing these contract extensions.

REPORT:

1. Background

The Region is at a “pivotal point” in the development and implementation of region-wide rapid transit system. The Region over the last decade has carefully studied and planned for how to address the challenges and opportunities associated with population and employment growth. The Region went through several planning phases (including alternative transportation strategies, funding options, field/engineering reviews and community input processes) to formalize the preferred project option: rapid transit technologies of light rail transit (LRT) and adapted bus rapid transit (aBRT), alignment/route, and station locations. The preferred rapid transit system option, as approved by Regional Council for implementation on June 15, 2011, is fully aligned with the 2003 Regional Growth Management Strategy. The preferred option is expected to mitigate urban sprawl, shape efficient transportation choices, re-urbanize/intensify the Region and improve overall environmental conditions.

With project approval in place, the Region now faces the challenge of ramping up project implementation activities to meet the schedule. The project is currently poised for final design, followed by construction to begin in 2014 and system operations to begin in 2017. The project is being funded by the provincial government ($300 million), the federal government (one-third of the project cost up to $265 million), and the Region ($253 million). The Region has recently received funding “Approval in Principle” (AIP) letters from both provincial and federal governments. These letters allow the Region to begin to incur costs that will be eligible for provincial and federal cost sharing. The AIP letters are a significant milestone in the provincial and federal funding approval process. The next step will be to develop a detailed provincial transfer payment agreement and a federal contribution agreement. Both of these agreements require additional details about the project design and cash flow projections, which will be developed over the next year.

As approved by Council on February 8, 2012 (Report E-012-011), the project will be delivered under a Design-Build-Finance-Operate-Maintain (DBFOM) delivery model. To select the DBFOM contractor, the Region will undertake a staged selection process involving a Request for Qualification (RFQ) followed by a more detailed Request for Proposals (RFP). The RFP will require that contractors submit lump sum fixed price proposals for the detailed design, construction, operation and maintenance of the LRT system. To ensure that these proposals are comprehensive and comparable, the RFP documents will need to be very detailed in order to receive comprehensive responses on submission requirements such as:
• Short-term and long-term private financing to fund the construction phase and portion of the construction costs that will be deferred to be repaid over the maintenance term
• Design of the project (e.g. architectural, structural, electrical, systems, mechanical and civil disciplines)
• Construction of the project
• Management of traffic (vehicular and bus), pedestrians and cycling movements during construction
• Site preparation including demolition of existing structures
• Relocation and protection of existing utilities
• Filing and obtaining all required permits and requisite sign-offs
• Environmental Assessment and Conditions of Approval compliance, monitoring and reporting
• Implementation and integration with operating governmental entity
• Commissioning, operational training and eventual transfer of Systems & Vehicle to operating governmental entity
• Asset preservation, life cycle and hand-back replacement/rehabilitation maintenance of the project for the contract term
• Risk management

Developing the RFQ/RFP documents will require considerable expertise from a range of disciplines including: transportation, planning, civil, structural, electrical, mechanical, architectural, landscaping, etc. To provide the expertise needed to develop the technical aspects of the RFQ and RFP documents, and to provide technical support to the Region during project implementation, the Region needs to retain a multi-disciplinary “General Engineering Consultant” team.

To select a GEC, the Region has undertaken a comprehensive selection process. The GEC scope of work (as specified in the Region’s RFP for GEC services) is provided in Appendix A.

In general, the GEC will assist Rapid Transit staff in both hands-on production and oversight functions, where applicable, throughout the implementation of the project. The GEC, drawing upon their extensive expertise, will assist and guide the Region in meeting the following two key implementation objectives.

1.1 Development of General Requirements and Performance and Output Specifications

The deliverables under this task will encompass all general requirements, special provisions and performance and output specifications (in all areas of engineering, construction, operations and maintenance) with enough/required level of detail. These requirements and specifications will enable prospective DBFOM contractors to be able to prepare and submit a comprehensive lump-sum fixed-price proposal to successfully implement the rapid transit project within the proposed timeline.

This task also represents the majority of the work that the Region will authorize during the initial three-year tenure of the GEC contract term. The bulleted items below are provided to illustrate a sample of what the services will entail:

• Project management and administration support;
• Planning support and environmental coordination;
• Assistance with utility/railway relocation;
- Regulatory/interagency approvals and coordination;
- Community relations and public outreach management;
- Design/engineering support services;
- Performance and output specifications for engineering, construction, operation and maintenance;
- DBFOM procurement support services;
- Development/review of vehicle specifications;
- Inspection of vehicles during manufacturing;
- Quality assurance/audit; and
- Other general/management support services.

The GEC will provide the majority of the technical expertise required to write the output specifications that are critical to a successful DBFOM procurement process. The output specifications will outline the Region’s requirements from the DBFOM contractor who will be designing and building the project. The contractor will be responsible for developing innovative ways to meet these requirements. The GEC will review and inspect the design and help oversee the construction to ensure that the output specifications are being met.

It should be noted that the Region is also continuing to grow its internal expertise to become a knowledgeable client and to help reduce the amount of consulting work required in the future. Once the construction of the project is completed this technical core team will ensure ongoing meeting of the output specifications and performance of the system. In the long term, internal staff will be the technical experts who will protect the Region’s interests in the running of the rapid transit system.

1.2 Rapid Transit Implementation Oversight Assistance

Following the selection and on-boarding of the DBFOM contractor, the GEC could assist the Region staff in overseeing the implementation of the project for compliance with contract performance and output specifications. Some of the tasks during this future phase of work may include:

- Construction oversight/inspection services;
- Start-up, testing and commissioning support;
- Quality assurance/audit; and
- Other general/management support services.

2. Consultant Selection

The RFP to provide GEC services was advertised on November 4, 2011. The advertisement was published in the Globe and Mail, The Record, Merx, Bindingo, Ontario Public Buyers Association, United States Federal Transportation Agency and Region of Waterloo websites.

Five consulting teams responded to the advertisement, by submitting proposals on December 15, 2011 to Procurement & Supply Services.

The selection process to evaluate the proposals was conducted in accordance with the Region’s Purchasing Policy and the Region’s Bid Procedures. Accepted proposals were evaluated by the following two committees, comprised of a Council representative, Regional staff and its representatives:
Rapid Transit Procurement Working Group
- Thomas Schmidt (Commissioner, Transportation and Environmental Services)
- Bill Brodribb (Director, Design and Construction)
- Charles Whitlock (Director, Procurement and Supply Services)
- Calvin Barrett (Director, Financial Services)
- Debra Arnold (Director, Legal Services)
- Eric Gillespie (Director, Transit Services)
- Graham Vincent (Director, Transportation Planning)
- Glenn Roach (Director, Employee Relations)
- Darshpreet Bhatti (Acting Director, Rapid Transit)
- Rapid Transit Consultant

Selection Committee
- Councillor Jim Wideman
- Thomas Schmidt (Commissioner, Transportation and Environmental Services)
- Darshpreet Bhatti (Acting Director, Rapid Transit)
- Lisa Buitenhuis (Manager, Procurement)
- Masood Mirza (Sr. Project Manager, Rapid Transit Engineering)
- Rapid Transit Consultant

The Region used a four-step process (with weights for the first three steps) to evaluate and select the highest ranked consultant.

Step 1: Evaluation of written proposals 50%
- Team organization and qualifications/experience
- Project understanding and approach
- Work plan/schedule
- Staffing quality and ability

Step 2: Oral interview/presentation 35%
- Oral presentation
- Personnel quality
- Questions and answers

Step 3: Cost Proposal 15%
- Evaluation of rates
- Evaluation of normalized labour analysis and costs

Step 4: Negotiation of scope and cost

Step 1: The Region evaluated each written proposal based on a set of established evaluation criteria and subsequent discussions among members of the Rapid Transit Procurement Working Group and the Selection Committee.

Step 2: The short-listed consultants were invited to appear before the Selection Committee for an oral interview, presentation of their proposal and detailed discussion on the elements of their proposal. A set of questions relevant to each proposal submission were developed and issued to the respective teams before the interview. Members of the Selection Committee also directed additional follow-up questions to the consultant teams during the interview.
Step 3: Upon receipt of all cost proposals, the Selection Committee scored each cost proposal submission based on the pre-selected and approved criteria.

Step 4: Based on the final rankings, the Parsons Brinkerhoff Halsall Incorporated team was selected as the preliminary preferred consultant and staff entered into negotiations with them to finalize the scope of work and price. The negotiations resulted in reduction of hours and hourly rates with a slightly increased scope of work. These reductions represent approximately $3.9 million in savings from the initial proposal.

The Parsons Brinkerhoff Halsall Inc. had the highest overall score and demonstrated a thorough understanding of the project, a capable project team and experience on a number of similar projects.

The not-to-exceed contract amount submitted by Parsons Brinkerhoff Halsall Incorporated for this assignment was negotiated by Regional staff and represents roughly two per cent of the total estimated project cost of $818 million, which is considered competitive for a project of this nature and complexity.

With over 15,000 employees worldwide, Parsons Brinckerhoff Halsall Incorporated is the premier LRT engineering firm in the world. Over the last ten years alone, they have led more than 20 LRT projects around the globe with 13 of them being some form of Design/Build.

The team is organized with Parsons Brinckerhoff Halsall Incorporated as the lead firm supported by three specialist sub-consultants: Genivar, LEA and Hanscomb. These sub-consultants have considerable Canadian experience with LRT and BRT projects. The contract also has the provision to add any additional sub-consultants that might be warranted during the contract tenure.

Based on the above evaluation criteria, including a review of the detailed work plans, schedules and upset fees provided, it is recommended that Parsons Brinkerhoff Halsall Incorporated be retained for an initial term of three years to undertake the requested services for the rapid transit project at a not-to-exceed contract amount of $16.58 million plus applicable taxes. Details of the costs are provided in Appendix B.

2.1 Contract/Agreement Length & Renewal Options

The proposed agreement is set up to have an initial term of three years and continuing up to a period of six years. Beyond the three-year base contract, the agreement may be renewed up to an additional three years in three one-year extensions upon (1) the Region’s sole discretion, (2) satisfactory performance evaluations by the Region and (3) availability of funds. The total fee for the next 3 years has been negotiated at $14 M plus applicable taxes, subject to possible revision due to changed circumstances.

Regional staff will prepare recommendations for Council approval prior to executing these contract extensions.
2.2 Contract Type

Upon execution of the “Agreement for Professional Consulting Services” between the Region and Parsons Brinkerhoff Halsall Incorporated, individual task orders will be negotiated on an as-needed and ongoing basis between both parties, and then the Region will formally release task authorization paperwork to initiate tasks.

The individual task orders will be negotiated either under a not-to-exceed time-and-materials cost or under a lump-sum fixed cost. For all task orders, Parsons Brinkerhoff Halsall Incorporated will use the contract’s fully-burdened hourly rates as approved by the Region. Approved travel and lodging expenses will be separately reimbursed based on the Region’s travel policies.

3. Next Steps in the Rapid Transit Project

Implementation of the rapid transit project is being done on an aggressive schedule. There are a number of key decision points and major milestones that will have to be met to maintain the schedule. Adherence to the aggressive project schedule is critical because delays to the project schedule have the potential to result in scope creep and increased costs. Staff anticipate that the next steps in the rapid transit project will include:

- May 2012: report on a memorandum of understanding with Infrastructure Ontario;
- May 2012: begin aBRT design;
- May 2012: complete the transit project assessment for Stage 1;
- October 2012: issue request for qualifications from potential DBFOM teams;
- February 2013: shortlist qualified DBFOM teams;
- February 2013: complete performance specifications and a draft project agreement;
- February 2013: finalize funding agreements with federal and provincial governments;
- March 2013: issue request for proposals from shortlisted DBFOM teams;
- June 2013: begin aBRT construction;
- January 2014: evaluate and select preferred DBFOM team;
- May 2014: approve final agreement with the preferred DBFOM team;
- 2014: full implementation of aBRT;
- 2014: begin construction of LRT Stage 1; and
- 2014: begin the environmental approval process for LRT Stage 2; and
- 2017: complete construction and begin operation of LRT Stage 1.

CORPORATE STRATEGIC PLAN:

The report supports Focus Area 3.1 of Council’s Strategic Focus: Implement a light rail transit system in the central transit corridor, fully integrated with an expanded conventional transit system.

FINANCIAL IMPLICATIONS:

The capital cost of Stage 1 of the rapid transit project is estimated to be $818 million, in 2014 dollars. The Region’s portion of the capital cost is $253 million. On June 15, 2011, Council approved the funding for the Region’s portion of the Stage 1 capital costs, subject to annual budget deliberations.

Approved 2011 Regional budget for rapid transit provides the necessary funding resources for the entire Rapid Transit project. The project budget includes an allocation for soft costs that include,
engineering design, construction management and design support. The scope of work for the GEC assignment is reflective of these tasks and will be funded from the soft cost budget of over $100 million.

In addition, the AIP letters will allow the Region to cost share the fees of the GEC assignment with the senior funding partners.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

This report was prepared with input from Finance, from Planning, Housing and Community Services, from Transportation and Environmental Services, from Corporate Resources and from Human Resources.

**ATTACHMENTS:**

Appendix A – Scope of Services
Appendix B – Cost Estimate Summary

**PREPARED BY:** Darshpreet Bhatti, Acting Director, Rapid Transit

**APPROVED BY:** Thomas Schmidt, Commissioner of Transportation and Environmental Services
APPENDIX A  Report:  E-12-026

Scope of Services

SECTION 3.0 – SCOPE OF SERVICES

With Project approval in place, the Region now faces the daunting challenge of ramping up project implementation activities to meet the adopted schedule. The Project is currently poised for final design, followed by construction to begin in 2014 and system operations to begin in 2017. The Region is currently considering various implementation options under a Design-Build (DB) type of project delivery model and the Region is yet to make a final decision on the exact nature and form of the Design-Build type. For the purpose of this RFP, the Proposer must be wary that the Region’s final DB option may include a Design-Build only option or a Design-Build-Operate-Maintain (DBOM) only option or Design-Build-Finance-Operate-Maintain (DBFOM) only option and/or any other DB options. In order to execute the Project within an aggressive schedule and under a non-traditional project delivery model (like DB), the Region is seeking professional expertise and services from a qualified Proposer who can provide General Engineering Consultant (GEC) Services.

3.01 Proposer’s Role and Region’s Expectations

The Proposer’s role is to fully enable the Region in successfully achieving its mission to implement the Rapid Transit Project. The Proposer will function as the “Owner’s Representative” in both hands-on production and oversight functions, where applicable throughout the implementation of the Project. The Proposer must demonstrate successful experience and qualifications in assisting transit agencies with Light Rail DB projects. The Proposer, drawing upon such relevant expertise, must assist and guide the Region in meeting the following implementation objectives:

- **Development of General Requirements and Performance and Output Specifications**: the Proposer must execute and deliver on all aspects of light rail project development work in such manner that the Proposer's final deliverables will be used in preparing the DB bid package for implementing Rapid Transit Project. The final deliverables must encompass all general requirements, special provisions and performance and output specifications (in all areas of engineering, construction, operations and maintenance) with enough/required level of detail. These requirements and specifications must enable prospective DB Contractors to be able to prepare and submit a comprehensive Lump Sum Fixed Price (LSFP) Proposal to implement the Rapid Transit Project. The Proposer must work with Region staff and do “what ever is necessary” to develop the most superior performance and output specifications/DB bid package that will enable both the Region and the prospective DB Contractor to design and build a successful light rail system for the Region within the proposed timeline; and

- **Rapid Transit Implementation Oversight Assistance**: the Proposer, following the selection and on-boarding of the DB Contractor, will assist the Region staff in overseeing the implementation of the Project. The Proposer, in its proposal for the oversight assistance, must clearly demonstrate an understanding of reduced level of oversight for DB contracts; and as such, the Proposer must craft an approach detailing the “oversight framework” that would be necessary for effective verification of implementation quality and compliance with performance and output specifications.
The Proposer is expected to not only assume typical GEC responsibilities (technical engineering functions) but also assume implementation oversight responsibilities; the Proposer must possess high-quality subject matter expertise in various areas of light rail project development. The Proposer in assembling its key Personnel therefore must consider the expertise “breadth and depth” as needed during different stages of the Project including a wide range of general, technical and functional expertise that may include but not be limited to the following areas (in no particular order):

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<td>Architectural and landscape</td>
<td>Procurement support</td>
</tr>
<tr>
<td>Structural design</td>
<td>Bid evaluation</td>
</tr>
<tr>
<td>Mechanical services</td>
<td>Transit/intermodal planning and integration</td>
</tr>
<tr>
<td>Geotechnical</td>
<td>Train control</td>
</tr>
<tr>
<td>Drainage</td>
<td>Traffic engineering</td>
</tr>
<tr>
<td>Performance and output specifications for engineering, construction, operation and maintenance</td>
<td>Risk management</td>
</tr>
<tr>
<td>Design standards</td>
<td>Value engineering</td>
</tr>
<tr>
<td>Environmental planning</td>
<td>Quality control/assurance</td>
</tr>
<tr>
<td>Public consultation/community relations</td>
<td>Commissioning/system start-up</td>
</tr>
<tr>
<td>System safety/security</td>
<td>Document control</td>
</tr>
</tbody>
</table>

The Proposer, through its proposed work plan, shall minimize to the maximum extent possible the Region’s need to apply its own resources to work directives/assignments as might be authorized. The Region, at its option, may elect to expand, reduce, or delete the extent of each work element as authorized. There is no guarantee that any or all of the services described in this “Scope of the Services Section” will be assigned to the Selected Proposer during the term of this Agreement. Further, the Proposer will be providing all services on a non-exclusive basis. It should be noted that the Region will have other Consultants and the Regional staff who may perform a portion of the services set forth herein.
3.02 Proposer’s Scope of Services

This section represents major tasks that the Region may authorize during the tenure of the Contract term. The tasks identified below are not meant to be all inclusive of all major or vital tasks. Should the Proposer believe that there are other major tasks that are critical for this project and, if missed and/or not included in this RFP, the Proposer is encouraged to identify and include such services in its response, along with a justification/rationale. The tasks below are not listed in any particular order of priority or importance, nor are they meant to be equal in weight. The bulleted items below are provided to illustrate a sample of what the services may entail. The Proposer is encouraged to propose its own description of services or subtasks under each of the following major tasks:

- Project Management and Administration Support;
- Planning Support and Environmental Coordination;
- Utility/Railway Relocation;
- Regulatory/Interagency Approvals and Coordination;
- Community Relations and Public Outreach Management;
- Design/Engineering Support Services;
- Performance and Output Specifications for engineering, construction, operation and maintenance;
- DB Procurement Support Services;
- Construction Oversight/inspection Services;
- Start-up, Testing and Commissioning Support;
- Quality Assurance/Audit; and
- Other General/Management Support Services.

The Proposer should take into account that the tasks/services as sought above are under a DB project delivery model and not under the traditional design-bid-build model. With this as a major consideration, the Proposer must develop its work plan and recommend the appropriate number and type of qualified personnel for the successful execution of proposed services, also taking into consideration that Region’s staff will need to be integrated as part of the overall project delivery team.

3.02.01 – Project Management and Administration Support

The Proposer shall provide Project Management and Administration Support Services for successful development and implementation of the Project. The services under this task may be broadly classified into three categories: Project Management, Project Controls, and Project Administration.

**Project Management**

- Develop and implement a Project Management Plan (PMP) that defines a framework for managing and reporting on Proposer’s day-to-day work products/deliverables.
The PMP shall align with Rapid Transit Project Charter, which describes the overall Project Governance Model (as shown in Attachment "A"). The plan must address: the Proposer's operating roles, reporting relationships, and responsibilities; proposed Work Breakdown Structure (WBS) to get to the stage of DB performance and output specifications and DB bid packaging; oversight processes and controls to oversee DB implementation scope, schedule, cost, quality and risk; and approach to measure and report Project progress.

- Manage and coordinate the overall Project day-to-day work elements as identified and scheduled in the Project Master Schedule:
  - Establish a systematic schedule review/production work management process for the Project. Develop a framework for Project issues escalation, decision making and corrective actions;
  - Establish a systematic issues/risk management process for the Project and its components. Develop a framework by which Project risks are identified, assessed and controlled;
- Participate in regular project progress review meetings and other related meetings as appropriate. The Project Director will be responsible for the preparation of meeting agenda;
- Within two weeks of the first task order authorization, the Proposer must prepare templates/standard formats for all regular reports and invoices, for Rapid Transit Division's (RTD) approval; and
- Prepare and submit Project progress reports to RTD on a monthly basis within one week of the close of the preceding month. Assist RTD in preparing its monthly and quarterly reports of the Project status to the Region's Council and funding partners. All reports will at a minimum outline and update information with respect to progress, cost, budget, funding, schedule, QC/QA process, Project scope or Proposer's Contract changes, issues/corrective actions or resolutions, as well as a look-ahead for the upcoming month and quarter.

**Project Controls Support**

- Working under the direction of RTD, the Proposer will develop a Project Master Schedule based on the PMP. The Proposer shall review and analyze overall Project progress, including critical path, during the DB Contract specification, bid packaging, DB Contractor qualification and procurement stages, and DB design and construction phases. Review and analyze design and construction schedules for compliance with contractual and Project requirements. Monitor and update the Project Master Schedule, including critical path, regularly to include current information regarding Project progress. Identify areas of concern and provide input on corrective action plans as necessary;
- The Proposer will collect, analyze, track, monitor and separately report on a monthly basis the Project cost and budget information, including encumbrances, commitments, and actual expenditures. Develop earned value, trends, forecasts and variance information. Follow up and implement corrective/control measures where required;
The Proposer will define an efficient management system and/or process to translate and integrate the Project Cost Accounting structure with the Region's Finance/Procurement System (Grants tracking, Capital Budgeting, Purchasing, Accounts Payables); and

The Proposer will work with Regional staff, as and when needed, to provide independent cost estimates, respond to claims, etc.

**Project Administration Support**

- Document Management and Administrative Support: The services under this task may include the following:
  - Assist RTD with the implementation of document control procedures and policies and to ensure that all Project team members have access to all documents at all times. Establish and maintain a system of document management and control and change control functions to ensure that all Project team members have current and accurate information available;
  - Provide data, graphics and other materials as required by the Region for internal, external and public/website presentation; and

- Develop a Configuration Management System and procedures to ensure complete, accurate and consistent project baseline documents, and to ensure that changes in design and construction are controlled in accordance to Contract documents and/or controlling procedures.

**3.02.02 – Planning Support and Environmental Coordination**

The Proposer, on an as-needed basis, shall provide services to support the Region's Rapid Transit Project transportation planning, integration and environmental coordination needs:

- **Transit Project Assessment Process (TPAP) Support:** The Proposer shall provide necessary planning and environmental support tasks to Region staff as related to both Stage I and Stage II TPAP and other needs. The Proposer's work must assist Region staff in securing all necessary permissions and environmental clearances from Local, Regional, Provincial, and Federal agencies. Areas of support, not limited to the following, include: evaluation and preparation of revised/supplemental environmental project reports, traffic circulation and access reports, travel demand model/ridership forecasts update, etc.;

- Assist in any special studies such as multiple evaluation reports, financial/economic analysis and other as requested analytical services; and

- Assist in the coordination and integration of all planning studies/initiatives that are currently underway within various departments in the Region.

**3.02.03 – Utility/Railway Relocation**

The Proposer must note that Right-of-Way (ROW)/Tenant relocation is not part of this scope (however, the Proposer will coordinate with Regional staff to include, monitor and track ROW acquisition/coordination activities in the overall Project Master Schedule). This sub-
section specifically addresses the support needs on Utility/Railway Relocation. The Proposer will coordinate with Regional staff to provide all necessary support services as follows:

- Assist the Region in the Utilities/Railway relocation process to meet Project needs while ensuring conformity with all applicable Local, Regional, Provincial and Federal requirements;
- Assist the Region in identification, coordination and seeking relocation approvals so as to meet Project schedule requirements. Services may include:
  - Identify all Utility/Railway companies affected by the Project;
  - Secure from these companies all as-is plans and applications and coordination process for relocation;
  - Identify Utility/Railway adjustments and relocation impacts by each of the affected companies;
  - As and if necessary, conduct utility coordination meetings between the Region, Utility/Railway companies and DB Contractor;
  - Confer/Coordinate with utility/railroad companies and cities regarding crossings, closings and/or relocation of facilities; assist in the negotiation of agreements and permits;
  - Assist with applications to secure municipal consents or approvals;
  - Review and evaluate costs for relocations;
  - Review all relocation drawings;
  - Secure all necessary approvals and finalize relocation schedules;
- Assist in planning, managing, and implementing approved relocations; and
- Include, monitor and track all relocation activities in the Project Master Schedule.

3.02.04 – Regulatory/Interagency Approvals and Coordination

The Proposer will coordinate with relevant staff in technical areas that need Regulatory/Interagency approvals and coordination:

- Assist the Region in coordination with regulatory agencies and other stakeholders who have an interest or are participants in the Project and facilitate resolution of issues related to design, construction, operations and maintenance;
- Assist the Region in the development and coordination of cost-sharing agreements with municipalities and other stakeholders; and
- Assist in coordinating third-party agreements with other agencies and private parties for utility relocations and/or for joint use development.

3.02.05 – Public Consultations/Community Relations

The Region views Public Consultations/Community Relations as a critical element for the success of this Project and places special importance on the Project. Proposers shall assemble qualified personnel with established roots in the community, and with significant working experience on community relations work along the Project corridor. The Region will
lead and provide guidance for this task. The Proposer services under this task may include the following:

- Implement a master plan for a Public Consultations/Community Relations for the period extending through the Project;
- Assist the Region to interact with the community participants/groups and the public in a manner designed to foster good communications and a general public understanding and support of the Project;
- Assist the Region in conducting public meetings; record meeting minutes, provide coordination and follow up on issues raised at public or community meetings; and
- Assist the Region to address construction impacts to residents and businesses.

3.02.06 - Design/Engineering Support Services

The Proposer, as part of services under this task, will be broadly responsible for two parts: (i) performance and output specifications on engineering design and construction (in support of procuring a DB Contractor), which will enable the Region to clearly specify general requirements; special provisions, technical and performance and output requirements for the DB RFP; (ii) following the procurement of DB Contractor, the Proposer shall function in an oversight capacity in engineering design verification, coordination as liaison between DB Contractor and Region/other parties, design reviews/audits on compliance with established design standards/guidelines.


- Develop current design to a degree to be able to prepare technical/performance and output specification packages for final design, construction, operations and maintenance of the proposed Rapid Transit Project. The design work must encompass all necessary disciplines, including civil, structural, architectural, stations, roadway, transit/railroad, geotechnical, pavement, systems, vehicles, etc.;
- Generate performance and output specifications in support of procuring a DB Contractor;
- Develop procedures to ensure that the Proposer's design work/specification is in accordance with Regional, Provincial and Federal design and operating standards. The Proposer will ensure that its design/specification work is integrated across various disciplines for consistency and constructability;
- The Proposer will develop and maintain a decision-tracking system to assure timely decision making;
- Organize peer reviews (with personnel from other public transit and/or government agencies), at various stages, on technical/performance and output specifications that are being developed for the DB RFP;
- The Proposer's design team under this task will also work and coordinate closely with Proposer's team members working on the Utility/Railway Relocation task as described in sub-section 3.02.03. The design team will assist with any creative
strategies to accelerate and advance the relocation work and/or readiness for construction to be undertaken by the DB Contractor;

- Provide Value Engineering Analysis and serve on teams when requested;
- Review and provide written response regarding the development of design and construction comparative cost estimates; and
- Review for completeness and provide written response as to the applicability of construction Contract special provisions;

**Part 2: Engineering Design Verification/Liaison Oversight (Proposer’s role during DB Contractor’s Final Design)**

- Implement design reviews/audits on DB Contractor’s design packages (for applicable levels of design – 30%, 60%, 90%); to ensure that design intent by the DB Contractor is properly implemented;
- Establish and maintain a CADD database for the Project. Develop and implement procedures for ensuring timely and efficient flow of CADD documents and other design information among the DB Contractor, GEC, other and Region staff;
- Review, validate and provide written response as to the state of design completion (physical progress) as reported by DB Contractor in its request for progress payments;
- Monitor DB Contractor’s performance of services to determine adequacy of work performed relative to DB Contract intent; and
- Review, assist and coordinate with Region’s staff in the development of stage construction layouts;

**3.02.07 – DB Procurement Support Services**

The Region will take the lead in procuring the DB Contractor. The Proposer’s tasks, not limited to the following, may include:

- Assist Region in identifying, developing and implementing innovative contracting techniques for solicitation of DB services;
- Prepare detailed independent DB Contractor type cost estimates;
- Assist in preparing DB RFP scope of work;
- Assist in packaging DB RFP procurement documents;
- Assist with any services related to industry partnering sessions;
- Support in the preparation and release of procurement documents for the qualification and selection of the DB Contractor;
- Assist Region in organizing and conducting pre-bid meetings, site tours; record and issue pre-bid meeting minutes;
- Coordinate the responses to bidders’ questions with the Region and relevant parties and respond to all bidders;
- Assist in evaluation of bidder's pre-requisite experience;
- Assist Region in technical evaluation of DB Proposals;
- Upon receipt of DB Proposals, advise Region on pitfalls, risks, exceptions, deviations and non-conformance to the requirements of bid documents; and
- Assist Region in DB Contractor evaluation, selection, negotiations and award activities.

3.02.08 – Construction Oversight/Inspection Services

The Region, at its discretion, may exercise the option to extend the Proposer’s services into the construction phase of the Rapid Transit Project. Under such authorization, the Proposer will act on behalf of the Region to conduct Construction Oversight/Inspection tasks. Proposer must note and demonstrate their understanding on the need for reduced level of Construction Oversight/Field inspection services as the Design/Construction Contract is self-managed and implemented by the DB Contractor. The Proposer must, therefore, provide only those services that are necessary under a DB Contract scenario. The Proposer’s tasks, not limited to the following, may include:

- Inspection/Conformance review of the construction work with DB Contract requirements;
- Inspection/Conformance review of the construction work with design criteria/standards;
- Coordinate oversight of third party inspections;
- Coordinate field activity with Region’s Project Office activities;
- Monitor progress of the contractor’s field activities;
- Attend weekly construction meetings;
- Prepare weekly construction progress reports;
- Coordinate work with affected communities and businesses;
- Coordinate and verify the activities of third party utility relocations;
- Coordinate the development and completion of as-built drawings;
- Assist in the development of DB Contractor open/check list items;
- Assist in confirming attainment of substantial completion and Project closeout activities; and
- Compile and document lessons learned in the Project.

3.02.09 – Start Up, Testing and Commissioning

The DB Contractor will be responsible for start-up, testing and commissioning of the Rapid Transit System. The Region may request the Proposer to oversee the DB Contractor’s operational readiness tasks on behalf of the Region, which may include, but are not limited to.
• Participate in regular start-up meetings and other related meetings as appropriate. Prepare meeting agenda and meeting minutes of each meeting to establish status, progress, and task follow-up;
• Monitor, and update a schedule to enable start-up, testing, and commissioning of the Rapid Transit System. Identify activities, issues and milestones necessary to achieve initial revenue service;
• Assist the Region, DB Contractor, Municipalities and other governmental agencies in identifying and completing activities for start-up, testing, commissioning and initial revenue service;
• Review the DB Contractor’s testing and testing programs necessary to achieve commissioning and initial revenue service (opening of service for passengers); and
• Resolve issues impacting testing, start-up, testing, safety certification, commissioning and initial revenue service.

3.02.10 – Quality Assurance/Audit & Quality Control

The Proposer, as mentioned earlier, must take into account the DB Contract scenario and as relevant must define an approach to Construction Quality Assurance/Audit (QAA). Assuming that direct Quality Control (QC) functions will be owned by DB Contractor, the Proposer must clearly articulate an independent QAA methodology for overseeing and verifying the compliance of DB design and construction quality against DB Contract requirements. The Proposer’s tasks, not limited to the following, include:

• The Proposer shall prepare a QAA plan for the Region’s approval that will describe how the Proposer shall identify those elements of work for audit, who can perform the audit, the requirements that will be used as part of the audit, how non-conformance will be identified and tracked to closure, monthly reporting requirements and how the Proposer will integrate the plan into the DB Contractor’s activities;
• The Proposer shall also propose creative ways on how best to achieve independence and objectivity in implementing QAA (for e.g. third-party testing versus the Region’s right to conduct owner-assurance testing, Proposer QAA certification at the end of the Project, etc.); and
• The QAA approach, at a minimum, must cover verification/checking techniques on: (i) Design – audits on drawings, specifications and other design outputs; (ii) Construction/Operational – audits on quality of materials, public health and site/public safety, etc.; and (iii) Management System – audits on DB Contractor’s quality management system.

In addition to assuming and overseeing Construction Quality Assurance/Audit (QAA) functions during the construction period, the Proposer must also provide to the Region a Quality Control (QC) plan on the following:

• Develop and submit a QC plan, within 30 days of project authorization, which outlines the approach on how the Proposer intends to monitor, track and apply corrective measures on “quality” in all work products as developed and produced by the Proposer (e.g. design, design reviews, performance and output specifications, bid packaging, etc.); and
• Maintain quality control documentation and records at all times for the Region’s access and audit purposes.

3.02.11 – Other General/Management Support Services

The Proposer may provide assistance across a broad range of strategic, business and funding issues, including project schedules and procurement strategy, budgets and cash flows, input to agreements and assistance in coordinating with other agencies and other stakeholders. The Proposer’s services could include, but not limited to the following:

• Provide independent advice and professional opinion(s) on various technical issues relating to the Rapid Transit Project, as requested by Region, from time to time;
• Monitor project variables (schedule, cost, scope) against originally base-lined (at the beginning of the Project) Project Master Schedule (including critical path), cost and scope;
• As needed, hire and retain specialized expertise as new sub-consultants, as approved by the Region, to render opinions or advice or work on various technical and operational issues relating to the Project;
• Prepare content for issue-specific Council reports;
• Coordinate briefing material for other senior level meetings;
• Potentially co-ordinate with Infrastructure Ontario (IO) who may assist in procurement related tasks related to selection of DB Contractor;
• Assist in the identification and management of risks; and
• Provide strategic and corporate advice directly to the Region.

3.03 Contract Deliverables

As part of the Project scope of services, the Proposer will provide Region all the deliverables that are products/results of the assigned tasks as defined in sub-section 3.02 – Proposer’s Scope of Services. As part of the Proposal, Proposers are to propose the number, the type and title of all major deliverables for all proposed tasks and major subtasks. Deliverables will be subject to review and approval by the Region.

3.04 Task Order(s) Authorization

All work performed under this Contract will be authorized by the Region through the issuance of Task Orders. The procedure for developing Task Orders and obtaining authorization to proceed with the work will comply with the following:

• The Region will provide input and direction on the scope of required task order(s) services, including specific deliverables, along with the expected time of completion for each specific task and/or deliverable;
• The Region may request task order(s) to be proposed either under a fixed-fee (lump sum structure), where applicable or under a not-to-exceed proposed cost estimate;
• Proposer shall respond to the Region’s task order request by preparing and submitting a detailed Proposal for subject task assignment(s), which will include:
  o A description by task and subtask of the work to be performed and the means and methods that will be used to perform it;
  o Milestones for completion of each deliverable;
  o Proposer and Sub-Consultant personnel assigned to each part of the work, along with a brief justification of why such personnel are qualified to perform the work; together with their prior experience in performing work of this nature;
  o A cost estimate for each task or subtask showing:
    ✓ Breakdown of estimated hours by individual for each activity required to complete all tasks and subtasks;
    ✓ Total proposed cost to, based on approved rates, complete the task order(s), including profit (excluding travel expenses);
    ✓ Estimated out-of-pocket travel expenses;
• Proposer and Region will negotiate the scope of services, staff assignments, deliverables, schedule requirements and budget for all tasks and subtasks included in the task order(s);
• The Region will issue an Authorization Letter/Purchase Order (PO) for the Subject task order(s), including the agreed upon scope, schedule requirements and budget; and
• Recognizing the urgency on Project implementation schedule, the Proposer must make every effort to provide quick turnarounds on task-order negotiations and authorization materials and, as such, the Proposer will not delay the initiation of tasks until all subject negotiations are completed.
### Cost Estimate Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Yearly Cost Estimate Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1: Project management and administrative Support</td>
<td>2012: $895,000  2013: $854,000  2014: $929,000</td>
</tr>
<tr>
<td>Task 2: Planning support and environmental coordination</td>
<td>2012: $131,000   2013: $134,000   2014: $137,000</td>
</tr>
<tr>
<td>Task 3: Assistance with utility/railway relocation</td>
<td>2012: $241,000  2013: $246,000  2014: -</td>
</tr>
<tr>
<td>Task 4: Regulatory/interagency approvals and coordination</td>
<td>2012: $834,000  2013: -              2014: -</td>
</tr>
<tr>
<td>Task 5: Community relations and public outreach management</td>
<td>2012: $144,000  2013: $147,000  2014: $299,000</td>
</tr>
<tr>
<td>Task 6: Design/engineering support services</td>
<td>2012: $1,769,000 2013: $1,000,000  2014: $798,000</td>
</tr>
<tr>
<td>Task 7: Design Build procurement support services</td>
<td>2012: $1,166,000 2013: $906,000  2014: -</td>
</tr>
<tr>
<td>Task 8: Construction oversight and inspection services</td>
<td>2012: -          2013: $47,000   2014: $1,080,000</td>
</tr>
<tr>
<td>Task 9: Start up, testing, and commissioning support</td>
<td>2012: -          2013: -        2014: -</td>
</tr>
<tr>
<td>Task 10: Quality assurance/audit</td>
<td>2012: $236,000  2013: $241,000  2014: $247,000</td>
</tr>
<tr>
<td>Task 11: Other general/management support services</td>
<td>2012: $266,000  2013: $76,000   2014: $78,000</td>
</tr>
<tr>
<td>Disbursements (e.g. travel, production)</td>
<td>2012: $74,000   2013: $114,000  2014: $235,000</td>
</tr>
<tr>
<td>Early Works</td>
<td>2012: $1,627,000 2013: $1,627,000  2014: -</td>
</tr>
<tr>
<td>Total Per Year</td>
<td>2012: $7,383,000 2013: $5,392,000  2014: $3,803,000</td>
</tr>
<tr>
<td>3-year Total (excluding tax)</td>
<td>2012: $16,578,000</td>
</tr>
</tbody>
</table>

**Note:** Costs have been rounded up to the nearest thousand.

1. The estimated costs for each task will vary depending on possible revisions due to changed circumstances.

2. Early Works include consulting assistance to support projects that are required to be completed prior to the selection of a DBFOM contractor (e.g. utility relocation, vehicle procurement)