MEDIA RELEASE: Friday, October 14, 2011, 4:30 p.m.

REGIONAL MUNICIPALITY OF WATERLOO
PLANNING AND WORKS COMMITTEE
AGENDA

Tuesday, October 18, 2011
1:00 P.M.
Regional Council Chamber
150 Frederick Street, Kitchener, Ontario

1. DECLARATIONS OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT

2. DELEGATIONS

a) Brian Campbell, Lloyd Brown Settlement, Re: E-11-061.1, Fees and Charges By-law for Water Works Upgrade in Lloyd Brown (Township of North Dumfries)

3. REPORTS – PLANNING, HOUSING AND COMMUNITY SERVICES

COMMUNITY PLANNING


TRANSPORTATION PLANNING

b) P-11-080, Grand River Transit Service to Elmira

c) P-11-081, Grand River Transit 2011–2014 Business Plan Public Consultation Centres

d) P-11-082, Waterloo Spur Line Multi-Use Trail Feasibility and Design Study – Public Consultation Centre

REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES

DESIGN AND CONSTRUCTION

e) CR-RS-11-067, Authorization to Expropriate Lands (2nd Report) for Road Improvements to Trussler Road (Regional Road 70), New Dundee Road (Regional Road 12) to Bleams Road (Regional Road 56), in the City of Kitchener and Township of Wilmot

f) E-11-091, Westmount Road Improvements, Greenbrook Drive to Highland Road, City of Kitchener

g) E-11-099, Consultant Selection – Preliminary Design, Detailed Design and Construction Administration and Inspection Services, King Street Reconstruction, St. Jacob’s Settlement Area, Township of Woolwich
RAPID TRANSIT

h) **E-11-105**, Rapid Transit Project Update

TRANSIT

i) **E-11-082**, GRT - Smoking Restrictions

j) **E-11-093**, 2012 GRT Replacement Bus Purchase

WASTE MANAGEMENT

k) **E-11-095**, Green Bin Program Update

WATER

l) **E-11-061.1**, Fees and Charges By-law for Water Works Upgrade in Lloyd Brown (Township of North Dumfries)

m) Strange Street Water Supply System Upgrade – Public Information Centre 2

4. INFORMATION/CORRESPONDENCE

5. OTHER BUSINESS

a) Memo re: Update on Homer Watson/Blockline Roundabout
   *To be distributed prior to the meeting*

b) Council Enquiries and Requests for Information Tracking List

6. NEXT MEETING – November 8, 2011

7. ADJOURN
### NEXT MEETINGS

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning and Works Committee</strong></td>
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</tr>
<tr>
<td>November 8, 2011</td>
<td>1:00 P.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
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<tr>
<td>December 6, 2011</td>
<td>1:00 P.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
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<tr>
<td><strong>Planning, Housing and Community Services</strong></td>
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<tr>
<td>October 20, 2011</td>
<td>4:30 P.M. – 8:00 P.M.</td>
<td>2011-2014 Grand River Transit Business Plan</td>
<td>Cambridge Centre Mall 355 Hespeler Road Cambridge, Ontario</td>
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<tr>
<td>October 20, 2011</td>
<td>4:30 P.M. – 8:00 P.M.</td>
<td>2011-2014 Grand River Transit Business Plan</td>
<td>Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
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<td>October 27, 2011</td>
<td>4:30 P.M. – 7:30 P.M.</td>
<td>Waterloo Spur Line: Multi-Use Trail Feasibility and Design Study Public Consultation Centre</td>
<td>Regional Administration Building – Main Floor 150 Frederick Street Kitchener, Ontario</td>
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<tr>
<td>November 8, 2011</td>
<td>6:00 P.M. – 9:00 P.M.</td>
<td>Active Transportation Master Plan (Walk Cycle Waterloo Region) Public Consultation Centre</td>
<td>United Kingdom Club 35 International Village Drive Cambridge, Ontario</td>
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<td>November 9, 2011</td>
<td>6:00 P.M. – 9:00 P.M.</td>
<td>Active Transportation Master Plan (Walk Cycle Waterloo Region) Public Consultation Centre</td>
<td>First United Church 16 William Street Waterloo, Ontario</td>
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<td>November 17, 2011</td>
<td>6:00 P.M. – 9:00 P.M.</td>
<td>Active Transportation Master Plan (Walk Cycle Waterloo Region) Public Consultation Centre</td>
<td>St. Andrew’s Presbyterian Church 54 Queen Street North Kitchener, Ontario</td>
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<td><strong>Transportation and Environmental Services</strong></td>
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<tr>
<td>October 20, 2011</td>
<td>5:00 P.M.</td>
<td>Strange Street Water Supply System Upgrade, Public Information Centre No. 2</td>
<td>329 Glasgow Street Kitchener</td>
</tr>
</tbody>
</table>
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: D18-01

SUBJECT: MONTHLY REPORT OF DEVELOPMENT ACTIVITY FOR SEPTEMBER 2011

RECOMMENDATION:


SUMMARY:

In accordance with the Regional By-law 01-028, as amended, the Commissioner of Planning, Housing and Community Services has:

1. Accepted the following plan of subdivision and plan of condominium;
2. Released for registration the following plan of condominium; and
3. Approved the following official plan amendments.

REPORT:

City of Cambridge

1. Plan of Condominium Application 30CDM-11102
   Date Accepted: September 23, 2011
   Applicant: 1663680 Ontario Ltd.
   Location: 507-539 Parkview Crescent
   Proposal: To permit the conversion of 17 townhouse units to condominium ownership.
   Processing Fee: Paid September 19, 2011

City of Waterloo

1. Registration of Draft Plan of Condominium 30CDM-10403
   Draft Approval Date: May 20, 2011
   Phase: Entire Plan
   Applicant: K-W Palco Holdings Inc.
   Location: 75 Rankin Street
   Proposal: To permit the development of 7 industrial units.
   Processing Fee: Paid September 9, 2011
   Commissioner’s Release: September 9, 2011
2. **Registration of Draft Plan of Condominium 30CDM-09404**

   **Draft Approval Date:** July 8, 2010  
   **Phase:** Phase 4  
   **Applicant:** Kenmore Developments Inc.  
   **Location:** 555 Chablis Drive  
   **Proposal:** To permit the development of 11 condominium townhouse units.  
   **Processing Fee:** Paid September 1, 2011  
   **Commissioner’s Release:** September 21, 2011

3. **Official Plan Amendment No. 81**

   **Applicant:** City of Waterloo  
   **Location:** MacGregor/Albert Neighbourhood Heritage Conservation District  
   **Proposal:** To re-designate certain lands within the district from ‘High Density Residential’, ‘Medium Density Residential’, ‘Commercial’, and ‘Open Space’ to ‘Low Density Residential’, and to establish ‘Special Policy Area 77’. To amend Schedule A1 (Hierarchy of Commercial Areas) by removing the ‘City Commercial Core’ designation from certain lands within the District. To amend Schedule A2 (Height and Density) by re-designating certain lands within the district from ‘High Density 25 Storeys’, ‘Medium Density 12 Storeys’, ‘Medium Density 6 Storeys’ to ‘Low Density 4 Storeys’. Create Schedule ‘A’, which delineates the boundary of the district and identifies certain lands as Potential Commercial, University and Institutional Use Areas. To amend Chapter 6 (Special Policy Area) by adding ‘Special Policy Area 77’ corresponding policies that recognize and conserve the character of the District.  
   **Processing Fee:** Paid June 27, 2011  
   **Commissioner’s Approval:** September 8, 2011  
   **Came Into Effect:** September 29, 2011

4. **Official Plan Amendment No. 82**

   **Applicant:** Momentum Developments Inc.  
   **Location:** 186 and 188 King Street South  
   **Proposal:** To redesignate the lands from ‘Commercial’ to ‘Commercial’ and ‘Special Policy Area 76’ on Schedule ‘A’ (Land Use Planning) to facilitate the redevelopment of these lands into a six storey mixed use building comprised of commercial space, 63 residential units, 22 surface parking spaces and 44 underground parking stalls.  
   **Processing Fee:** Paid September 14, 2011  
   **Commissioner’s Approval:** September 14, 2011  
   **Came Into Effect:** October 5, 2011

**Township of North Dumfries**

1. **Plan of Subdivision Application 30T-11301**

   **Date Accepted:** September 27, 2011  
   **Applicant:** Jomar Cattle Feeders Inc.  
   **Location:** Part of Lots 32 and 33, Concession 7, Ayr  
   **Proposal:** To permit the development of 54 single detached and 5 townhouse units.  
   **Processing Fee:** Paid September 23, 2011
Residential Subdivision Activity January 1, 2011 to September 30, 2011

<table>
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<tr>
<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
<th>Pending Plans (Units Submitted)</th>
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<tr>
<td>Region of Waterloo</td>
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*The acceptance and/or draft approval of plans of subdivision and condominium processed by the City of Kitchener under delegated approval authority are not included in this table.

Area Municipal Consultation/Coordination

These planning approvals, including consultation with Area Municipalities, have been completed in accordance with the Planning Act. All approvals contained in this report were supported by the Area Municipal councils and/or staff.

CORPORATE STRATEGIC PLAN:

This report reflects actions taken by the Commissioner in accordance with the Delegation By-law adopted by Council. The activities described in this report are operational activities with the objective of Focus Area 2: Growth Management and Prosperity.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

PREPARED BY:  Andrea Banks, Program Assistant

APPROVED BY:  Rob Horne, Commissioner, Planning, Housing and Community Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: D28-50

SUBJECT: GRAND RIVER TRANSIT SERVICE TO ELMIRA

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the permanent operation of Route 21 – Elmira;

THAT the Regional Municipality of Waterloo approve the following action regarding the expansion of the Grand River Transit fleet to implement this service:

a) Include a budget provision of $1,015,000 in the 2012 GRT Capital Budget to be funded from debentures for the purchase of two (2) buses (net of HST rebate) and associated equipment and grant pre-budget approval for the purchase of these two buses prior to the approval of the 2012 budget;

b) Accept the proposal from NovaBus, a Division of Prevost Car Inc. for the 2012 delivery of two (2) diesel transit buses at a price of $1,079,561.32 including HST; and

c) Authorize the issuance of debentures in an amount not to exceed $1,015,000 not to exceed a 10 year term for this purchase;

AND THAT the net operating and debt financing costs of this service be area rated to the Township of Woolwich.

SUMMARY:

The Route 21 pilot service to Elmira began on April 6, 2009 as an introduction to providing transit service connecting the Regional Townships. In April 2010, Regional Council extended the pilot for an additional year to further gauge public interest and use. In April 2011, Regional Council approved a second extension to the end of 2011. This extension was to provide opportunities to further promote the route and to have additional discussion with the Township of Woolwich regarding issues such as ridership as well as establishing permanent GRT service.

Route 21 – Elmira connects the Town of Elmira to Conestoga Mall, with intermediate stops in St. Jacobs, at the St. Jacobs Farmer’s Market/Outlet Mall and the Wal-Mart Centre (Appendix 1).

To date, the route has demonstrated reasonably good ridership growth. The average daily ridership for revenue passengers (which excludes transfers) has increased from 245 in 2009 to a current figure of 351 in 2011. Additionally, boardings per service hour have begun to reach or exceed the minimum performance target of 25 riders. The route has also been adjusted during the pilot in response to customer feedback.

The Route 21 – Elmira continues to be widely used by the community. Residents of the Township of Woolwich, including teenagers, seniors, the Mennonite community, and commuters have communicated with Grand River Transit that they find the service to be a valuable travel choice.
Additionally, staff at the Township of Woolwich has stated that the Route 21 – Elmira benefits the community through the provision of safe and affordable transportation for all demographics, and through its contribution to economic development within Woolwich Township.

The consideration of Route 21 – Elmira as a permanent route, and the associated financial implications, were presented to Township of Woolwich Council on February 22, 2011. It was noted that operating and debt financing costs would be incurred by Woolwich Township taxpayers. Regional staff was present at the Public Open House that Township of Woolwich staff hosted in June 2011. Woolwich staff presented a summary of the feedback received at the Open House to Woolwich Council on August 2, 2011. On August 30, 2011, Woolwich Council passed a motion to support the implementation of Route 21 – Elmira as a permanent route.

This report has been prepared to recommend the permanent service, to confirm an area-rating to Township of Woolwich rate payers, and to establish financing arrangements.

REPORT:

The Route 21 pilot service to Elmira began operation on April 6, 2009. This service connects Elmira and St. Jacobs with the Conestoga Mall transit terminal. The route was introduced as a pilot service to provide public transit to the Township of Woolwich, as recommended by the GRT Business Plan 2008-2010. This corridor was selected for the pilot service as it was found to have the greatest ridership potential given its larger population in comparison to other township centres, and also the attraction of the Farmer’s Market. Since its implementation, operation of the pilot service has been extended twice.

Route Description

The route provides service between the Conestoga Mall Transit Terminal in Waterloo and the Town of Elmira with intermediate stops at the St. Jacobs Farmer’s Market, the Village of St. Jacobs, and the Highway 85 corridor (refer to Appendix 1 for a map of the route). Service is provided from Monday to Friday between approximately 6 am and 7 pm, and on Saturdays from approximately 7 am to 4 pm. On weekdays, service operates every half hour during peak periods, and every hour in off peak periods. On Saturdays, service runs every 40 minutes.

Route Performance

Overall, the route continues to demonstrate positive ridership trends. The minimum ridership target for local routes is 25 boardings per service hour which this route has now begun to meet or exceed. Ridership trends are discussed in more detail below.
Figure 1: Average Boardings Per Service Hour

Ridership Statistics

- Boardings per service hour have risen from an average of 18 in 2009 to a year to date average of 24 in 2011. Peak months have been October (33) and November (27) 2010, and July (31) and August (27) 2011.

- The average daily ridership has risen from 245 riders in 2009 to 309 riders in 2010. The current average daily ridership for 2011 is 351 (January 2011 to August 2011). Ridership peaked in July 2011 at an average of 463 riders per day.

- According to **year to date 2011** Automatic Passenger Counter (APC) data, the busiest route stops by total boardings are as follows:
  - Conestoga Mall Terminal (passengers transfer to and from other routes)
  - Church St. / Maple St. (downtown Elmira near Township Admin Office)
  - Farmers Market Road / Benjamin Rd. (inbound to Conestoga Mall at market)
  - Farmers Market Road / King St. (inbound to Conestoga Mall at Wal-Mart)
  - Farmers Market Road / Benjamin Rd. (outbound to Elmira at market)
  - King St. / Front St. (downtown St. Jacobs inbound to Conestoga Mall)
  - Snyder Ave. / Church St. (downtown Elmira)
  - Arthur St. S. / Howard Ave. (inbound to Conestoga Mall at No Frills in Elmira)

Passenger activity within the Township of Woolwich represents close to 60% of total passenger activity for all stops along the route, with over 25% of all passenger activity occurring at stops within the Town of Elmira, and almost 10% of all passenger activity occurring at stops within the Village of St. Jacobs. The majority of the remaining activity occurs at Conestoga Mall, where transfers can be made to other GRT routes.

Service Changes and Requests

Since the introduction of Route 21 – Elmira in April 2009, several changes have been implemented in response to customer requests. These include:

- The provision of additional stop locations along the Hwy 85 corridor between St. Jacobs and Elmira to accommodate residents in this area.
The adjustment of schedule times to coordinate with shifts at the Home Hardware in St. Jacobs. These adjustments also helped to improve connections to other routes at Conestoga Mall.

- Additional trips to the St. Jacobs Farmer’s Market on Thursdays during the summer to assist with customer overloads.
- Adjustment of the last outbound trip from Conestoga Mall travelling to Elmira to improve connections from additional routes.

Further requests have been received regarding expanded service hours, route alterations, and stop improvements. Requests include:

- Extended evening hours during weekdays and on Saturdays, as well as the provision of Sunday service.
  - STAFF RESPONSE: The addition of service hours would require increased funding. If ridership continues to grow and the route is added as a permanent service, staff would consult with Township of Woolwich staff to examine the possibility of extending service hours.

- Extend the route within the Town of Elmira to increase service coverage and facilitate local travel.
  - STAFF RESPONSE: The current routing within Elmira allows for a 60 minute round trip, which facilitates timed transfers to additional routes at Conestoga Mall and makes it possible to provide 30 minute frequency with two buses. If the route becomes permanent, staff would explore options to increase local area coverage in Elmira in consultation with Township of Woolwich staff. An extension of the route would require additional resources.

- Stop enhancements within the Town of Elmira to improve access to local business, as well as requests to improve stops at the Farmer’s Market.
  - STAFF RESPONSE: If the Route 21 – Elmira becomes a permanent service, staff would examine options to improve bus stop environments, such as the provision of landing pads or shelters. Activity at bus stops would be reviewed to determine which stops would most benefit from additional infrastructure. Improvements would be completed in relation to priority locations system wide.

- A request to improve access to the Health Centre at Sawmill Rd. in St. Jacobs.
  - STAFF RESPONSE: If the Route 21 – Elmira is implemented as a permanent service, it is recommended that the stop adjacent to the Health Centre at Sawmill Rd. and Parkside Dr. be shifted back slightly and a pedestrian path be installed to provide direct access to the facility.

Community Feedback

- Elmira District Secondary School (EDSS) – The EDSS Parent Council has contacted GRT to report that students are finding the service useful to travel back and forth to the tri-cities for their work experience/co-op programs.

- Elmira District Community Living – which provides support and services to persons with developmental disabilities – also contacted GRT to relate that the route provides an independent means of transportation to their clients which would otherwise be unavailable (Appendix 2).

- Rural Realities Network – a group aimed at addressing challenges for families in rural areas - communicated to GRT staff that Route 21 – Elmira provides an important service within the community where transportation options are often limited.
Several comments from the Mennonite community have been received, supporting the transit service.

Community Outreach

In February 2010, GRT staff held a session to familiarize Elmira residents with riding a bus, paying fares, reading transit schedules, and using the EasyGO trip planning system. The workshop was held to help potential transit riders overcome the perceived barriers to using transit.

Regional staff attended the Green Tech and Living Fair in St. Jacobs in April 2011 to promote Route 21 – Elmira.

In June 2011, Regional staff was present at a GRT Bus Route 21 Public Open House hosted by Township of Woolwich staff. The open house, held in Elmira, was well attended with over 50 people.

- All feedback received from the open house was in support for maintaining Route 21 – Elmira. Numerous comments were received related to extending the route to provide more service coverage within Elmira and that additional routes within the Township would be beneficial. It was also indicated that customers would be willing to pay more than the standard $2.50 cash fare to access the service. The introduction of zonal fares for transit service into the Townships will be investigated in the 2011-2014 Business Plan.
- Staff at Kiwanis Transit, a service within the Townships that provides transportation to residents with mobility restrictions, indicated that if Route 21 – Elmira were discontinued they would not be able to accommodate the influx in demand, as many residents who once relied on Kiwanis Transit now utilise the conventional transit service.

Route 21 Travel Survey

In April 2011, an onboard travel survey was completed to determine who travels on Route 21 – Elmira. The survey was completed over two days during all time periods. Over 400 responses were received. It was found that the majority of respondents used Route 21 – Elmira to travel to work (41%), to go shopping (20%), or to go to school (12%) or access recreational activities (12%) (see Figure 2).

![Figure 2. Purpose of Trip](image)

The travel survey also found that representatives from all age groups utilise the service. The greatest number of respondents were either in the 17-25 age range (31%) or the 36 to 55 age group (25%), as detailed in Figure 3.
Longer-Term Performance Expectations

- Given the very unique nature of the Route 21 – Elmira, as compared to other existing GRT services, this new route is performing generally well, and has begun to meet ridership targets.
- When compared to the experiences of other similar type services in other municipalities, the general industry experience indicated that transit ridership is expected to build over time, as people gradually learn to use the service. If the route becomes permanent, it is anticipated that ridership would continue to increase.
- Before the route was introduced, it was estimated that short-term ridership (2 years) would reach 295 passengers per day, and up to 510 per day in the longer term (5 years). Current ridership has already surpassed this initial short term figure, with an average of 309 daily boardings in 2010 and a year to date average of 351 in 2011.

Area Municipal Consultation/Coordination

Township of Woolwich staff and former Councillor Strauss were initially on the project team that implemented the pilot service. The addition of Route 21 as a permanent route, and the associated financial implications, were presented to Township of Woolwich Council on February 22, 2011. It was noted that the net operating costs of this service and the debt financing costs required to purchase two new buses, would be area rated to the Township of Woolwich. In June 2011, Regional staff was present at a GRT Bus Route 21 Public Open House hosted by Township of Woolwich staff.

On August 30, 2011, Township of Woolwich Council passed a motion to support the implementation as a permanent route. The following staff recommendations were supported:

1. Grand River Transit (GRT) Bus Route 21 be established as a permanent GRT Bus Route in Woolwich Township;
2. GRT Bus Route 21 be funded on a municipal-wide basis;
3. Township Council also support the recommendations that the GRT staff be requested to consult with the Township and the Woolwich community in 2011 and early 2012 to ensure that GRT Bus Route 21 is meeting the needs of the community; and, in 2012, report back and discuss next steps with Township Staff;
4. The Township of Woolwich continue to be involved and consulted in the development of the Regional Transit Strategy for the Townships; and
5. New GRT Bus Routes in Woolwich be developed in consultation with the Township, and include provisions for multi-modal transportation including: horse & buggy, bicycles, and pedestrians (infrastructure, timing, etc.).
CORPORATE STRATEGIC PLAN:

Public transit service to Elmira supports the implementation of Council's Strategic Focus, identified under Focus Area 2: Growth Management and Prosperity: Manage growth to foster thriving and productive urban and rural communities. This service would aid with Strategic Objective 2.1 Encourage compact, liveable urban and rural settlement form; and Objective 2.2 Develop, optimize and maintain infrastructure to meet current and projected needs.

This service also supports Focus Area 3: Sustainable Transportation: Develop greater, more sustainable and safe transportation choices; and Focus Area 4: Healthy and Inclusive Communities: Foster healthy, safe, inclusive and caring communities. Transit service would aid with Strategic Objective 4.1 Work collaboratively to reduce poverty and Strategic Objective 4.7 Collaborate with the community to support older adults to live healthy, active lives.

In addition, this service supports the Moving Forward 2031 - Regional Transportation Master Plan, which highlights the importance of providing additional service to the Regional townships within the next five years and beyond.

FINANCIAL IMPLICATIONS:

The annual net operating costs to operate the Route 21 – Elmira under the current pilot are estimated to be $357,000. Implementation of the pilot utilised the existing transit fleet as two buses scheduled to be retired were extended for the length of the pilot. If the pilot were to continue as a permanent service, the purchase of two additional buses would be required. Annual debt servicing costs for the provision of the two additional buses are estimated at an additional $105,000, resulting in a total estimated cost of $462,000. Based on 2010 assessment, it is estimated that the net cost per Township of Woolwich household would increase by approximately $35. These costs could be phased in over a two year period, with additional costs of approximately $28 in Year 1 and $7 additionally in Year 2.

Estimated Household Impacts (2011 $)

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<tr>
<td>Estimated impact / household</td>
<td>$27.83</td>
<td>$7.71</td>
<td>$35.54</td>
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<td>% of cost relative to Regional Services</td>
<td>2.01%</td>
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Based on the supplier's confirmed purchase price from P2007-30 to purchase buses for delivery in 2012, the estimated cost to the Region for the supply of two (2) diesel transit coaches is as follows:

\[
\begin{array}{c|c}
\text{P2007-30} & $955,364.00 \\
\text{HST} & 124,197.32 \\
\text{Sub-Total} & $1,079,561.32 \\
\text{Less: Municipal HST Rebate of 11.24%} & (107,382.91) \\
\text{Total} & $972,178.41 \\
\end{array}
\]

The new buses would each be equipped with passenger information displays, automatic stop announcement features, computer aided dispatch, a vehicle location system and an automatic passenger counting system. They would also be outfitted with new radios, electronic fareboxes and video surveillance equipment at an additional estimated cost of $41,500, net of HST rebate.
This brings the total estimated cost of this purchase to $1,013,678.41.

The amended 2011 GRT Capital Program and 10 Year Forecast would include $1,015,000 in 2012 for this purchase to be funded from debentures.

Debenture authority in the amount of $1,015,000 would be required for this purchase.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation and Environmental Services (Transit Services) and Finance have assisted in the preparation of this report.

ATTACHMENTS:

Appendix 1 - Alignment of Route 21 – Elmira
Appendix 2 - Letter from Elmira District Community Living
Appendix 3 – Woolwich Council Resolution

PREPARED BY: Erica Springate, Principal Planner (Transit)

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
Appendix 1: Alignment of Route 21 – Elmira
February 2nd, 2011

Grand River Transit
250 Strasburg Road,
Kitchener, Ontario N3E 3M6

Attention: Mr. John Ciuffin
Manager Transit Development

Dear Mr. Ciuffin:

Re: Grand River Transit Route 21

Route 21: transit run Conestoga Mall, St. Jacobs, Elmira and return, may not see capacity ridership and therefore from a budgeting view this venture could be discontinued. For the 300 weekday paying riders, this bus is the most important bus on the Grand River Transit lines.

Route 21 provides independence, a feeling of achievement and so very much enjoyment for people previously dependent upon families, friends and carers for transportation. Route 21 is the means of transportation for people to arrive at their place of employment in North Waterloo. Future opportunities are attainable with transportation available.

Yes, the region’s busiest lines far outnumber Route 21 on a passenger level. Route 21 is a country run offering an independent freedom previously not experienced.

We ask for compassionate consideration from Grand River Transit when recommendations are presented to the Waterloo Region Planning and Works Committee on February 15th, 2011.

Route 21 is important. Please continue this run.

Yours in inclusion

Donna Haid
Board President

Elmira District Community Living Board of Directors

Willard Brubacher
Sandy Martin
Ruth Remers
Wayne Turpel

Amos Weber
Abner Metzger
Donna Martin
Stephen Mentic

Marg Martin
Earl Campbell
Dale Snider

C.C. Woolwich Township Mayor Todd Cowan
Waterloo Regional Chair Ken Seiling
Kitchener Conestoga MPP Harold Albrecht
Kitchener Conestoga MPP Leeanna Pendeneast

Registered Charity #1032973/01001
Appendix 3: Woolwich Council Resolution

THAT the Council of the Township of Woolwich supports the following recommendations:

1. Grand River Transit (GRT) Bus Route 21 be established as a permanent GRT Bus Route in Woolwich Township;
2. GRT Bus Route 21 be funded on a municipal-wide basis;
3. GRT staff be requested to consult with the Township and the Woolwich community in 2011 and early 2012 concerning possible route improvements to ensure that GRT Bus Route 21 is meeting the needs of the community; and, in 2012, report back to and discuss next steps with Township staff;
4. The Township of Woolwich continue to be involved and consulted in the development of the Regional Transit Strategy for the Townships;
5. New GRT Bus Routes in Woolwich be developed in consultation with the Township, and include provisions for multi-modal transportation including: horse & buggy, bicycles, and pedestrians (infrastructure, timing, etc.);

AND THAT Council directs Staff to forward the recommendations of Report A08-2011 to the Regional Municipal Council before September 9, 2011.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: D09-90(A)

SUBJECT: GRAND RIVER TRANSIT 2011–2014 BUSINESS PLAN PUBLIC CONSULTATION CENTRES

RECOMMENDATION:

For information.

SUMMARY:

The 2011 – 2014 Grand River Transit Business Plan is intended to guide the implementation of transit service improvements and fare strategies from 2011 – 2014 to help achieve the goals of the Regional Transportation Master Plan (RTMP). The RTMP was approved in 2010 and places a greater emphasis on the role of public transit to provide a sustainable transportation system that is required to achieve the compact urban form as prescribed by Ontario’s Places to Grow Growth Plan and the Regional Official Plan.

The Business Plan includes six major focus areas:

1) Develop service improvement plan and ridership growth strategy;
2) Update service standards
3) Develop financial plan;
4) Develop strategy to address AODA requirements;
5) Develop Customer Service Strategy and Strategic Marketing Plan;
6) Develop strategy to integrate GRT and inter-city transit services;

Proposed service improvements focus on the implementation of an express route every second year that connects residential areas and employment destinations with LRT and aBRT stations. Alternating with the implementation of these key express routes will be revisions to the local route structure to improve access to service by providing more frequency, increased service coverage or longer hours of operation.

Fare strategies will propose annual increases to help GRT support system expansion, ridership increase and financial productivity goals. Three strategies have been evaluated, including annual average fare increases of 5%, 7% and 9%. These strategies are expected to raise the cost recovery ratio of GRT from the current 37.3% to 40.4%, 42.4% or 44.4% by the end of 2014.

The GRT Business Plan, including proposed recommendations and information for presentation at public consultation centres, is being guided by a Steering Committee composed of Councillors Jim Wideman and Sean Strickland, staff from Transportation Planning and Transit Services and a consulting team led by Dillon Consulting Limited.
To discuss these strategies, as well as the remaining elements of the Business Plan, with the community, two public consultation centres will be held on Thursday October 20, 2011.

<table>
<thead>
<tr>
<th>Area</th>
<th>Date</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge</td>
<td>October 20, 2011</td>
<td>The Cambridge Centre Mall 355 Hespeler Road, Cambridge</td>
<td>4:30 p.m. to 7:30 p.m.</td>
</tr>
<tr>
<td>Kitchener - Waterloo</td>
<td>October 20, 2011</td>
<td>Regional Administrative Headquarters 150 Frederick Street, Kitchener</td>
<td>4:30 p.m. to 7:30 p.m.</td>
</tr>
</tbody>
</table>

REPORT:

The 2011-2014 Grand River Transit Business Plan (GRT Business Plan) will guide the improvement and expansion of the GRT network and services through the next 4 years while adhering to the long term vision set forth by the Regional Official Plan (ROP) and the Regional Transportation Master Plan (RTMP) and ensuring integration with Rapid Transit (RT) and inter-city transit services.

The Business Plan includes six major focus areas:

1) Develop service improvement plan and ridership growth strategy;
2) Update service standards
3) Develop financial plan;
4) Develop strategy to address AODA requirements;
5) Develop Customer Service Strategy and Strategic Marketing Plan;
6) Develop strategy to integrate GRT and inter-city transit services;

On June 15, 2011 Regional Council approved, subject to annual budget deliberations, an annual tax rate increase of 0.3% per year for the years 2012 to 2018 to fund the capital, operating and maintenance costs of improvements to Grand River Transit service related to implementation of the Rapid Transit project. This approval follows the 2010 approval of the Regional Transportation Master Plan (RTMP) which places a greater emphasis on the role of public transit to provide a sustainable transportation system that is required to achieve the compact urban form as prescribed by Ontario’s Places to Grow Growth Plan and the Regional Official Plan.

Accordingly, the 2011 – 2014 GRT Business Plan recommends a series of annual transit service improvements and fare strategies that help GRT meet the goals of the RTMP and integrate services with Rapid Transit within the approved funding envelope.

The GRT Business Plan, including proposed recommendations and information for presentation at public consultation centres, is being guided by a Steering Committee composed of Councillors Jim Wideman and Sean Strickland, staff from Transportation Planning and Transit Services and a consulting team led by Dillon Consulting Limited.

Service Plan

The Business Plan identifies and prioritizes express routes and local service improvements for the years 2011 – 2014, and identifies improvements through 2018 that can be sustainably funded by the 0.3% annual tax rate increase approved in 2011. The overall strategy, as described below, is to alternate between implementing express routes with related local route improvements and addressing other service issues in the existing network.
2012

Since the Fischer-Hallman express service was implemented in Fall of 2011 along with associated major route restructuring, the focus in 2012 would be on local service improvements that increase hours of operation, frequency, service coverage and directness of travel.

- Extend Sunday morning and evening hours of operation in the Cambridge service area
- Extend operation of iXpress on Saturdays to 11 p.m.
- Extend operation of iXpress on Sundays to 8 p.m.
- Improve service to northeast Galt residential areas, and to L.G. Lovell Industrial Park
- Extend operation of Route 13 Laurelwood on Saturdays to 10 p.m.
- Implement BusPLUS service in the Doon South area of Kitchener, during weekday peak periods

2013

The next express route is planned for 2013 along with the associated local route restructuring.

- Implement a new express route along Erb Street and University Avenue, connecting Ira Needles Boulevard with Bridge Street
- Provide a new route connecting west Waterloo with the Universities area via Keats Way
- Streamline Route 5 Erb West to reduce travel times
- Modify Route 12 Fairview/Conestoga in east Waterloo to provide improved access to central Waterloo
- Extend Route 201 iXpress to Conestoga Mall and the employment node at University Avenue and Northfield Drive in east Waterloo

2014

In 2014 the focus will be on local service improvements that increase hours of operation, frequency, and service coverage.

- Increase frequency of service in Cambridge on Sundays to every 30 minutes from the current 60, between 10am and 6pm
- Extend Route 31 Lexington weekday evening service
- Extend Route 23 Idlewood weekday and evening service to Fairview Mall Terminal
- Provide Sunday service on Route 6 Bridgeport

2015 – 2018

Beyond the years in this Business Plan, service expansions each year will continue to alternate between additional express service and local service improvements.

- Implement Mid-Region express connecting Cambridge with Sportsworld via Maple Grove Road during weekday peak periods
- Provide two-way service in L.G. Lovell Industrial Park, connecting to two RT stations
- Implement a new express route connecting Ira Needles Boulevard with Lackner Boulevard via Highland Road, downtown Kitchener and Victoria Street
- Modify Route 24 Highland and Route 25 Queen South to improve service in Highland West area of Kitchener and connect to commercial destinations on Ira Needles Boulevard.
- Extend Route 201 iXpress to Block Line Rapid Transit Station
- Implement Ottawa Street Express with east Kitchener local service improvements
- Provide Saturday service on Route 31 Lexington
Fare Strategies

To ensure the above service improvement strategy can be more sustainably funded within the approved funding envelope, annual transit fare increases are proposed from 2012 – 2018. Staff evaluated three fare strategies intended to improve the cost-recovery ratio. The Steering Committee discussed that an appropriate target would be to ultimately achieve a 50% cost-recovery where net operating costs are equally funded between farebox revenues and the property tax. Depending on which fare strategy is selected a 50% cost-recovery is projected to be attained in either 2017, 2018 or 2021.

The effect of these fare strategies on ridership, revenue and the overall rate of cost recovery (R/C) through fares is summarized below.

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2014</th>
<th>2014</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ridership</td>
<td>18,055,000</td>
<td>23,540,873</td>
<td>23,296,572</td>
<td>23,056,873</td>
</tr>
<tr>
<td>Net Operating Cost</td>
<td>$38,230,562</td>
<td>46,964,613</td>
<td>45,409,976</td>
<td>43,809,862</td>
</tr>
<tr>
<td>Cost Recovery</td>
<td>37.34%</td>
<td>40.37%</td>
<td>42.35%</td>
<td>44.38%</td>
</tr>
</tbody>
</table>

The proposed fare increase strategies are annual averages, and specific fares may increase by a greater or lesser amount during implementation as staff works to achieve revenue increases while maintaining a fare strategy that rewards the frequent rider. Staff will also continue to work to expand existing subsidy programs for social assistance registrants and low-income residents to ensure the system is able to provide equitable access to transportation while achieving financial targets.

Pending more detailed review, the above fare strategies would affect key transit fares as summarized below:

<table>
<thead>
<tr>
<th>Fare type (Current fare)</th>
<th>2012: 5% average fare increase</th>
<th>2012: 7% average fare increase</th>
<th>2012: 9% average fare increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Fare ($2.50)</td>
<td>$3.00</td>
<td>$3.00</td>
<td>$3.00</td>
</tr>
<tr>
<td>Adult Pass ($63)</td>
<td>$63</td>
<td>$65</td>
<td>$67</td>
</tr>
<tr>
<td>Adult Ticket ($1.95)</td>
<td>$2.00</td>
<td>$2.10</td>
<td>$2.20</td>
</tr>
</tbody>
</table>

U-Pass Fees

Currently, fees for U-Pass contracts with student groups increase annually based on the Ontario All Items Consumer Price Index (CPI). In recent years, staff has negotiated additional fee increases with these partners to offset increased costs related to serving increased transportation demand from participants. To ensure the financial sustainability of the U-Pass program, staff recommends setting U-Pass fees so that the cost recovery of U-Pass programs increases towards the system average. Once this price adjustment is achieved, staff recommends U-Pass fees would increase at the average rate of the general fare structure.
Township Transit Service Strategy

There are several potential service options that have been identified for the townships. These include the extension of a conventional transit route like the Route 21 Elmira, the use of a BusPLUS type vehicle for some peak period trips between township centres and a GRT transfer location, a demand responsive zone bus one or two days a week and park and ride at LRT and GO rail stations.

The potential service option and timing of implementation would be determined in collaboration with the Townships. The proposed funding model would be similar to the Route 21 Elmira where net operating costs and capital financing costs would be area rated to the townships. Based on preliminary discussions with the townships, there is general support for this proposed approach to the township transit service strategy.

Interregional Service Coordination

It is anticipated that by January 2012, two GO train trips in the a.m. peak and two in the p.m. peak will operate between the existing VIA Station in downtown Kitchener and Union Station in downtown Toronto along with nine intermediate stops. Staff have been discussing with GO staff opportunities for fare integration and joint marketing programs. Discussions are on-going regarding potential future enhancements to interregional service including service and fare integration, coordinated information systems and joint marketing. Examples include, the future multi-modal hub where regional and interregional services would be integrated, expanded hours and frequency of interregional service, improved two-way rail service and expanded service between Waterloo Region and surrounding urban centres such as Guelph, Brantford, Hamilton, Peel and Halton.

Public Consultation

To discuss these strategies, as well as the remaining elements of the Business Plan, with the community, two public consultation centres will be held on Thursday October 20, 2011.

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<th>Area</th>
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</tr>
</tbody>
</table>

Public Notification and Advertising

In advance of the consultation centres, notification will be sent out via various means including:

- Roadside signs will be erected at major intersections in Cambridge, Kitchener and Waterloo;
- Notices will be posted in the local newspapers;
- Posters informing transit riders of the Public Consultation Centres will be posted at terminals and on buses;
- Notices of proposed service improvements and changes will be posted on the GRT website: www.grt.ca;
- Comment forms will be available online and at the Public Consultation Centres;
- Mass emailing will be sent to those who subscribe to our rider e-alerts; and
- Information will be sent out via social media including Twitter.
Next Steps

Following the consultation centres, staff will review the responses gathered and develop preferred strategies for the Business Plan. Proposals and public input will be discussed with the Business Plan Steering Committee and refined as necessary. Any residents who have indicated an interest during the process will be contacted and provided a summary of the proposed plan, including any changes. The final Business Plan would be presented to Regional Council in December 2011 or January 2012. Annual service improvements and fare changes would involve further public consultation and would be subject to Regional Council approval.

Area Municipal Consultation/ Coordination

A copy of this report has been sent to Area Municipal staff for information. Prior to recommendation, Area Municipal staff will be invited to review and comment on the Business Plan. Marketing information will be distributed to Area Municipal communications staff to be posted on City web pages.

CORPORATE STRATEGIC PLAN:

The new 2011 – 2014 GRT Business Plan supports Council’s Strategic Action 3.1.2: “Expand the bus network (Conventional Transit) and begin to integrate it with the future Rapid Transit System” by directing and prioritizing projects that will expand the conventional transit network and prepare it for integration with Rapid Transit.

FINANCIAL IMPLICATIONS:

The costs of preparing materials for, and holding the Public Consultation Centres are Included within the approved budget for the 2011 – 2014 GRT Business Plan.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Public Consultation Centres for the 2011 – 2014 GRT Business Plan were prepared in cooperation with staff from the Transit Services division of the Transportation and Environmental Services Department.

ATTACHMENTS:

Appendix A: Public Brochure for Grand River Transit Business Plan Public Consultation Centres

PREPARED BY: Gethyn Beniston, Principal Planner – Transit

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
Appendix A:

GRT Business Plan 2011-2014

Public Consultation Centre

October 20, 2011
We need your input

Thank you for attending today’s Public Consultation Centre for the 2011-2014 Grand River Transit Business Plan.

The GRT Business Plan details proposed transit service improvements that would make progress towards the ridership growth targets of the Moving Forward 2031 Regional Transportation Master Plan (RTMP).

The RTMP provides long-term guidance on transportation infrastructure and services for the community. Building a more effective transit network is a key transportation strategy to accommodate the mobility needs generated by population and employment growth.

In order to accomplish the objectives of the RTMP, the GRT Business Plan proposes to:

1. Provide a Level and Quality of Service To Accelerate Ridership Growth
2. Improve Productivity and Financial Performance
3. Support and Promote a Sustainable, Equitable and Environmentally Responsible Community
4. Ensure Fiscal Responsibility and Long-term Sustainable Financing of Transit
5. Move Towards Seamless Integration of GRT Bus, Light Rail Transit, adapted Bus Rapid Transit, and Interregional Services
6. Achieve a High Level of Employee Satisfaction and Workplace Excellence

Please provide us with your comments on the service and fare strategies included in this plan. Your comments will be considered when finalizing the GRT Business Plan and in the development of annual transit service improvement plans.

Transportation Choice

An important goal of the RTMP is to provide transportation choice by creating more opportunities to take transit, walk, and cycle. The strategies included in the GRT Business Plan would increase the competitiveness of GRT’s service and encourage greater transit use, supporting the Region’s goal of being a thriving and sustainable community.
Building for the Future

We can build a more sustainable transportation system that is focused around public transit, walking and cycling, while recognizing that travel by car will still be an essential part of getting around our community by:

- Balancing investment in transit, road improvements and active transportation infrastructure;
- Increasing the percentage of people travelling by transit share in the peak hour from 3.8per cent to 14.8per cent;
- Increasing the percentage of people travelling by bike or on foot from 7.8per cent to 12per cent;
- Decreasing the percentage of people travelling by car from 85.2per cent to 70per cent; and,
- Making strategic road improvements to support transit and economic development.
Let’s continue our success

The new transit service improvements proposed in the Business Plan would continue to build the Regional transit network (GRT) that was established in 2000. By the end of 2011, annual ridership is projected to increase to 19.5 million, a 106 per cent increase from 9.4 million annual rides at the end of 1999 when GRT was established, and an 8 per cent increase from 18 million in 2010. As illustrated below, the key to the success in ridership growth is continued service improvements.
Planning for Rapid Transit

Network Redesign

With the introduction of Light Rail Transit and adapted Bus Rapid Transit service, the GRT bus network must be redesigned to provide seamless connections between bus and rail service and improve overall travel options for transit riders. A series of new iXpress routes will be introduced and local route improvements will be made in order to simplify the bus network, reduce travel times, improve access and convenience, and ensure transit services are integrated. Transit service improvements in 2011 represented the first step in the implementation of the Regional Transportation Master Plan (RTMP) and the redesign of the GRT network. These improvements included the new Route 201 Fischer-Hallman iXpress as the first in a series of new iXpress routes. Additional express routes would be introduced during the course of the Business Plan. Improvements to local routes in 2011 included frequency increases and expanded hours of operation. Page 5 illustrates these improvements.

Express Route Priority

In addition to the Fischer-Hallman iXpress, seven other planned express routes have been evaluated based on the need to address existing system issues and pressures, connectivity to Rapid Transit, support for Regional land use planning objectives, potential for advancement towards RTMP mode share targets, financial impacts and revenue performance, and ease of implementation. Based on this evaluation it is recommended that the remaining express routes be implemented in the following order:

- University Express in 2013;
- Victoria Highland Express in 2015; and
- Mid-Region Express, Ottawa Street Express, Coronation Express, South East Express, South West Express in 2017-2021.

Recommended 2012-2014 improvements to local routes are illustrated on Page 6.
2011 Service Improvements

Route 32 extended to end of Kumpf Dr.
Route 26 extended to The Boardwalk on Ira Needles Blvd and to King and University.
Route 7 Evening Service increased and UWaterloo-bound 7E buses moved from Regina St to King St.
IXpress Frequency and Hours of Operation increased, New Stop added at King St and Victoria St.
Route 12 rerouted to Westmount Rd, Summer Frequency increased.
IXpress via Fischer-Hallman Rd introduced.
Route 61 and Route 111 Extended to Conestoga College South Campus.
Route 52 Frequency increased.
Revised route boundaries.

Legend:
- Route 4 Hoover
- Route 7 Mainline
- Route 12 Conestoga Mall/Sunrise Park
- Route 26 Friesen Way
- Route 32 Kumpf
- Route 62 Friesen Park/Arts St.
- Route 61 Cambridge Centre/Conestoga College
- Other GRT Routes
- Route Network
- Responsive Network Boundaries

Heather area routes changed to improve efficiency, expand service coverage, and reduce travel times.
2012 – 2014 Service Plan
# 2015 – 2018 Service Proposals

Proposed service improvements for 2015-2018 are described below. These proposals will be reviewed and updated when the GRT Business Plan is updated in 2014-2015.

<table>
<thead>
<tr>
<th>Proposed Year</th>
<th>Service Improvement</th>
<th>Hours</th>
<th>Buses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Implement Highland-Victoria Express</td>
<td>26,855</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Modify Route 24 Highland and Route 25 Queen South to improve service in Highland West area of Kitchener and connect to commercial destinations on Ira Needles Boulevard.</td>
<td>5,422</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Provide Saturday service on Route 31 Lexington</td>
<td>1,248</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Provide Sunday service on Route 22 Laurentian West</td>
<td>488</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Provide Sunday service on Route 35 Eastbridge</td>
<td>1,364</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Provide service to east Kitchener industrial areas along Shirley Avenue</td>
<td>1,008</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Provide two-way service in L.G. Lovell Industrial Park, connecting to two Rapid Transit stations</td>
<td>2,896</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Implement Mid-Region express connecting Cambridge with Sportsworld via Maple Grove Road during weekday peak periods</td>
<td>14,742</td>
<td>9</td>
</tr>
<tr>
<td>2017</td>
<td>Implement Ottawa Street Express with east Kitchener local service improvements</td>
<td>40,312</td>
<td>14</td>
</tr>
<tr>
<td>2018</td>
<td>Extend Route 201 iXpress to Block Line Rapid Transit Station</td>
<td>4,530</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Local route restructuring in Central Transit Corridor</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>New service</strong></td>
<td></td>
<td><strong>98,865</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>
Funding Strategy

Service improvements will be funded through a combination of municipal subsidy, farebox revenue and efficiency improvements. Subject to annual budget review, the approved RTMP funding envelope would allow 138,000 annual hours of service and 41 additional buses between 2011 and 2018. Service improvements proposed between 2011 and 2018 will require 242,500 annual hours of service and 73 buses. Approximately 40 per cent of this will be sourced from the reallocation of iXpress and Route 7 service when rapid transit is introduced. The remaining 60 per cent will be sourced from the approved funding plan.

<table>
<thead>
<tr>
<th>Year</th>
<th>Improvements</th>
<th>Hours</th>
<th>Buses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 - 2018</td>
<td>Reserve Fund*</td>
<td>138,000</td>
<td>41</td>
</tr>
<tr>
<td>2012 - 2018</td>
<td>Efficiency Improvements</td>
<td>19,000</td>
<td>6</td>
</tr>
<tr>
<td>2015/2017</td>
<td>iXpress service reallocated</td>
<td>71,732</td>
<td>17</td>
</tr>
<tr>
<td>2017</td>
<td>Route 7D/E reallocated</td>
<td>13,728</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Service Plan</strong></td>
<td><strong>242,460</strong></td>
<td><strong>73</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Service Expansion</strong> <em>net of reallocation of existing service</em></td>
<td><strong>138,000</strong></td>
<td><strong>41</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Percentage Increase to GRT service, 2011 - 2018</strong></td>
<td><strong>25 per cent</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fare Strategies

Three fare strategies are being considered. Each strategy has a different effect on the amount of GRT service funded by transit riders and municipal taxes. In each strategy, net operating costs are equally funded between farebox revenues and property tax. Depending on which fare strategy is selected a 50 per cent cost recovery is projected to be attained in 2017, 2018 or 2021. The effects of these strategies are summarized below for comparison to:

- 2010 Ridership: 18.055 million
- Net Cost of Service*: $38.23 million
- Cost Recovery Ratio: 37.34 per cent

Option 1: increase fares annually by 5 per cent, to achieve 50 per cent Cost Recovery by 2021
- Ridership Forecast: 23.54 million in 2014
- Net Cost of Service*: $46.97 million in 2014
- Cost Recovery Ratio: 40.37 per cent in 2014

Option 2: increase fares annually by 7 per cent, to achieve 50 per cent Cost Recovery by 2018
- Ridership Forecast: 23.3 million in 2014
- Net Cost of Service*: $45.4 million in 2014
- Cost Recovery Ratio: 42.35 per cent in 2014

Option 3: increase fares annually by 9 per cent, to achieve 50 per cent Cost Recovery by 2017
- Ridership Forecast: 23.1 million in 2014
- Net Cost of Service*: $43.8 million in 2014
- Cost Recovery Ratio: 44.38 per cent in 2014

*Net cost of service is comprised of municipal contribution towards operating costs and debt service, from property taxes, plus provincial contribution.
Service to Township Urban Areas

A variety of strategies to enhance the mobility of township residents are being considered. Expanding service to the townships will require the support of and funding from township residents. A premium fare for township transit services will be considered due to the longer distance travel involved. Strategies being considered include:

- Establishing ‘Park and Ride’ facilities in strategic locations;
- For larger settlements, introduce weekday peak period transit service and phase in evening and weekend service as ridership increases;
- For smaller settlements try zone bus for 1 or 2 days per week;
- BusPLUS service model using smaller accessible vehicles; and
- Potential premium fares to help offset the costs to township taxpayers.

Regional and township staff will continue to collaborate to identify and evaluate potential service improvements to the township urban areas and public consultation will be undertaken to receive feedback on future service options considered by Regional Council.

Technology Strategy

In 2011, a forecast 4.5 million customers will use the easyGO trip planning services. The continued implementation of advanced transit technology will make public transit more attractive to current and future riders. Accurate travel information in real-time, and more reliable and secure service will all contribute to greater use of GRT. Advanced technology strategies to be implemented during the course of the Business Plan include:

- Advanced traveler information for express lines
- More widely available real-time information
- Adopt transit priority measures for aBRT service
- Implement a SmartCard automatic fare payment system

Other Initiatives

Further strategies, such as those described below, will be developed to enhance the mobility of Regional residents, continue ridership growth success, and enhance momentum towards the RTMP mode share targets.

- Develop strategy focused on service excellence
- Explore U-Pass with Conestoga College
- Improve accessibility at stops
- Develop a marketing plan and branding strategy

Next steps

Thank you for your participation in this important project. Please provide your thoughts on a comment sheet tonight or at a later date via www.GRT.ca. We plan to bring the GRT Business Plan to the Region’s Planning and Works Committee for consideration in late 2011 or early 2012.
TO: Chair Jim Wideman and Members of the Planning and Works Committee  
DATE: October 18, 2011  
FILE CODE: T13-50  
SUBJECT: WATERLOO SPUR LINE MULTI-USE TRAIL FEASIBILITY AND DESIGN STUDY- PUBLIC CONSULTATION CENTRE

RECOMMENDATION:  
For information.

SUMMARY:  
The Waterloo Spur Line Multi-Use Trail Feasibility and Design Study was initiated in December 2010 to assess the feasibility of creating a formal multi-use trail along the Waterloo Spur Line between Ahrens Street West, Kitchener, and King Street South, Waterloo. As a part of the study, two public meetings were planned in order to gain public and stakeholder feedback regarding this project. The initial Public Workshop was held on June 9, 2011. The project team used input gathered at this workshop to develop trail alternatives.

The second Public Consultation Centre is planned for October 27, 2011 at the Region of Waterloo Headquarters, 150 Frederick Street, in Kitchener from 4:30 p.m. to 8:30 p.m. The purpose of this Public Consultation Centre is to present alternative surface types, different ways to separate the trail from the railway tracks, options for lighting as well as the project team’s preliminary preferred option for the trail alignment. This Public Consultation Centre is an opportunity for the public to provide feedback and advice regarding the proposed trail alignment and material options, and ask questions to Regional and City staff.

Invitations to attend the Public Consultation Centre will be distributed to the residents and businesses within the study area as well as to the stakeholders including the Region of Waterloo Active Transportation Committee, City of Waterloo Transportation Trails Committee, City of Kitchener Cycling Committee, trail users and operating railways. The invitation will also be included in the Record newspaper, Kitchener Citizen, Kitchener Post, and Waterloo Chronicle. The attached information package will be used to share and seek information from participants during the Public Consultation Centre.

REPORT:  
In December 2010, the Region of Waterloo, in collaboration with the City of Kitchener and the City of Waterloo, initiated the Waterloo Spur Line Multi-Use Trail Feasibility and Design Study. The purpose of this study is to assess the feasibility of creating a multi-use trail along the Waterloo Spur Line between Ahrens Street West, in Kitchener, and King Street South, in Uptown Waterloo.

The feasibility study aims to:
- Examine how a trail can be physically accommodated within the rail right-of-way,
- Identify issues and constraints that need to be addressed,
- Develop and evaluate the alternative design concepts,
Determine which amenities are appropriate; and
Estimate the trail construction and maintenance costs.

The project team for this study consists of staff from the Region of Waterloo, the City of Waterloo, and the City of Kitchener and Victor Ford and Associates Landscape Architects Inc, the consulting firm that has been retained by the Region to help in undertaking the study.

Two public consultation meetings were planned for this project. The initial public workshop took place on June 9, 2011. Public input was gathered, summarized and distributed to the public after the meeting. The following points were mentioned by numerous participants at the public workshop and were important factors in the consideration of the different options for the trail:

- Maintain natural elements where possible,
- Year-round use of the trail,
- Appropriate way-finding and traffic signage,
- Connections to existing intersecting streets, parks, and entrances to the trail,
- Provide a smooth and continuous trail where possible,
- Safe crossings at intersections,
- Safety separation methods between trail and tracks,
- Trail lighting,
- Emergency access to and from the trail,
- Limited disruptions on adjacent properties; and
- Coordination of the trail with future street-realignments and transit projects.

The planned Public Consultation Centre (PCC) on October 27, 2011, will be the second public meeting for this project. The purpose of this Public Consultation Centre is to present alternative surface types, different ways to separate the trail from the railway tracks, options for lighting as well as the project team’s preliminary preferred option for the trail alignment. This Public Consultation Centre is an opportunity for the public to provide feedback and advice regarding the proposed trail alignment and material options, and ask questions to Regional and City staff.

The proposed typical trail section consists of a 3 metre multi use trail, 1 metre clear zone, 4 metre track bed, and 1 metre drainage swale (refer to Graphic 5 in Attachment A). Two alternative alignments have been developed on either side of the rail tracks for each study section (refer to Graphics 2, 3, 4, in Attachment A). The preliminary preferred alternative was chosen based on the physical space availability, existing swale and culvert, existing utilities, steep slopes, existing trees and root zones. Avoiding any rail signal control cabinets was a high priority in determining the preferred alignment as relocating the cabinets has significant cost and schedule implications (refer to Graphic 1 in Attachment A).

Transportation Association of Canada (TAC) standards and rail guidelines were used in combination to develop typical crossings with the intersecting streets. The proposed design of the intersecting street crossings aims to maximize safety and make the trail and vehicle users aware of each other’s path of travel (refer to Graphic 6 in Attachment A).

For the trail surface, several types of materials such as asphalt, compacted granular, wood, rubber, and concrete are being considered. Asphalt has been identified as the preferred surface for the trail. Several options for the track/trail separation such as, no physical separation, low rail, curb, and fence were also explored. The preferred separation for track/trail is no physical separation (no fences between the rail and the trail). Currently, Area Municipal practice is to not light any off-road trails. There has been a recommendation from the consultant to light the trail and public input is being sought.
The preferred trail alignment constructed, with the required utility work will cost an estimated $2,500,000 (including $100,000 for storm water management and $500,000 for amenities and landscaping). Lighting the entire preferred alignment will cost an additional $1,000,000.

A public comment sheet included in the information package (Attachment A) will be used during the public consultation to collect participant’s feedback. All feedback will be considered during the feasibility study.

**Next Steps:**

Victor Ford and Associates will provide a complete feasibility report to the Region that includes all the work completed to date including the background information, justification for the project, alternative analysis, development and evaluation of design options, and all public input received. The feasibility report, including the recommendations for the preferred trail alternative, will then be presented to Regional Council for approval. If it is determined, that the multi-use trail is feasible to be implemented, detailed working drawings and tender documents will be developed. A variety of funding resources are currently being pursued. The potential construction date is subject to budget approval, and will be determined when funding has been secured.

Regional staff has met with managerial representatives of both Canadian National Railway (CN) and Goderich-Exeter Railway (GEXR). CN and GEXR operate freight trains on the Waterloo Spur railway line in accordance with an agreement with the Region of Waterloo, the owner of the railway line. If the construction of the multi-use trail proceeds, both CN and GEXR will be afforded an opportunity to comment on the detailed design and tender documents.

**Area Municipal Consultation/Coordination**

The City of Waterloo and the City of Kitchener are actively participating in the study as project team members. The cities are both supportive of the implementation of the Waterloo Spur trail.

**CORPORATE STRATEGIC PLAN:**

The Waterloo Spur Line Multi-Use Trail Feasibility and Design Study supports the Region’s Strategic Focus Area 2 (Growth Management and Prosperity), that relates to developing, optimizing and maintaining infrastructure to meet current and projected needs. Strategic Focus Area 3 (Sustainable Transportation) is also supported by this project. This focus area relates to developing, promoting and integrating active forms of transportation (cycling and walking).

**FINANCIAL IMPLICATIONS:**

The 2011 Transportation Capital Program includes funding allocation of $165,000 for the Waterloo Spur Line Multi-Use Trail Feasibility and Design Study. The costs for holding this public consultation have been budgeted within this allocation. As indicated in the Capital Program, external funding opportunities and partnerships including grants are being investigated for the construction costs. The potential construction date will be determined when funding has been secured.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

Transportation and Environmental Services has representatives on the project team.
ATTACHMENTS:

Attachment A: Waterloo Spur Line Multi-Use Trail Feasibility and Design Study Information Package

PREPARED BY: Hanan Wahib, Transportation Planning Engineer

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
Region of Waterloo
Waterloo Spur Line: Multi-use Trail Feasibility and Design Study
(Ahrens Street West to King Street South)
City of Waterloo and City of Kitchener

Public Consultation Centre (PCC)
Thursday, Oct. 27, 2011
4:30 – 8:30 p.m.
Region of Waterloo: 150 Frederick St., Kitchener
Background
Having a range of transportation choices is a growing priority in urban areas across the country and around the world. Active transportation — whether that is walking, cycling, inline skating or other options — has proven personal health and quality of life benefits.

The Region of Waterloo is committed to increasing transportation choices for all residents. Multi-use Trails create opportunities for people to lower their travel costs, provide accessibility to a wide range of individuals, allow for more reliable travel times and contribute to vibrant and secure communities. The Multi-use Trail Feasibility and Design Study is a step towards providing these benefits in this area.

The Waterloo Spur Line is identified in the Regional Cycling Master Plan as a Core Off-Road Route. The envisioned facility is a three-to four-metre-wide hard-surface multi-use trail running along 2.5 kilometres of the rail line. The proposed trail would form a multi-modal transportation corridor connecting the northeast side of downtown Kitchener with the Trans Canada Trail and the Iron Horse Trail in Uptown Waterloo. The trail will promote active living by connecting established residential neighbourhoods, employment nodes, and future rapid transit station areas in Kitchener and Waterloo.

What is the purpose of this Public Consultation Centre (PCC)?
The purpose of this Public Consultation Centre is to present alternative surface types, different ways to separate the trail from the railway tracks, options for lighting, as well as, the project team’s preliminary preferred option for trail alignment. This Public Consultation Centre is an opportunity for the public to provide feedback and input on the proposed trail alignment and material options, and ask questions to Regional and City staff.

A comment sheet will be used during the consultation centre for collecting feedback. All feedback will be considered during the feasibility study and summarized in the final report.
1. What is the purpose of this Feasibility Study?
The purpose of this study is to assess the feasibility of creating a multi-use trail along the Waterloo Spur Line between Ahrens Street West, in Kitchener, and King Street South, in Uptown Waterloo. In addition, the study will include the development and evaluation of alternative design concepts for the multi-use trail, as well as the detailed design and tender documents.

The feasibility study will:

- Examine how a trail can be physically accommodated within the rail right-of-way,
- Identify issues and constraints that need to be addressed,
- Determine which amenities are appropriate,
- Estimate the trail construction and maintenance costs; and
- Provide a basis for an action plan.

2. Who is directing this Feasibility Study?
This feasibility study is being directed by a Project Team consisting of staff from the Region of Waterloo, the City of Waterloo and the City of Kitchener. Victor Ford and Associates Landscape Architects Inc. is the consulting firm that has been retained by the Region to lead the analysis, evaluation and design exercise with assistance from the engineering consulting firm, Delcan Corporation.

3. What have the Project Team and the consultants determined will be feasible for the multi-use trail along the Waterloo Spur Line? (Refer to Graphics 1, 2, 3 & 4 attached)
Overall, the multi-use trail is feasible, except for two short sections where alternative routes can be provided. The multi-use trail feasibility and design study area covers the Waterloo Spur Line from King Street South in Waterloo to Ahrens Street West in Kitchener – 14 blocks total. Connections to the Iron Horse Trail, the Laurel Trail, adjacent parks and future on-street bike routes have been considered. Each of the 14 blocks have been separated out into individual study sections to determine the opportunities and constraints and the possible trail alignments for each study section.
The feasibility study has revealed the following statistical results:

- 12 of the 14 study areas can easily accommodate a multi-use trail with the rail corridor.
- The two areas that do not easily accommodate the trail can be avoided through alternative on-street routes (sections close to King St. in the north and Weber St. in the South).
- Four of the 14 study areas can easily accommodate a multi-use trail with little to no complications and flexibility in alignment options.
- Five of the 14 study areas can accommodate a multi-use trail with minor complications and/or some inflexibility in alignment options.
- Three of the 14 study areas can accommodate a multi-use trail with major complications and cost implications (see question 5).
- 10 intersection crossings are recommended to be signed crossings.
- 12 of the 14 study sections have a preferred alignment option.
- 7 of the 14 study sections have an additional alternative alignment option.
- There are two alternative start/end locations at each end of the trail.

5. What factors/conflicts must be overcome to create the multi-use trail?
Typical conflicts encountered include:

- lack of physical space within the Spur Line property
- existing swales/ditches and culverts (require filling and piping)
- existing utilities (storm vault, hydro poles, catch basins, manholes)
- existing rail equipment (crossing control cabinet) - to be avoided
- existing steep slopes (require retaining walls)
- existing trees and/or tree root zones
- existing encroachments from private property
6. Was public input considered in the preparation of the preferred trail alignment and material selections?
Yes, all of the public input gathered at the initial public workshop in June 2011 was carefully reviewed, summarized and distributed to the public. The following points were mentioned by numerous participants at the initial public meeting and were important factors when considering options for the trail:

- maintain natural elements where possible
- consider the Spur Line Trail as part of the larger network of trails
- year-round use of the trail
- appropriate way-finding and traffic signage
- connections to existing side streets, parks and entrances to the trail
- provide as smooth and continuous a trail as possible
- safe crossings at intersections
- safety separation methods between trail and tracks
- trail lighting
- emergency access to and from the trail
- limited disruptions on adjacent properties
- co-ordination of the trail with future street realignments and transit projects

7. What are the design criteria that were used for the alignment of the trail as well as the options for materials?
The design criteria used to determine the options include spatial requirements, design requirements in accordance with Transportation Association of Canada (TAC) standards, City of Kitchener Development Manual, and input from the initial public workshop and questionnaire, as well as cost. All alignment options, preferred and alternative, strive to meet the spatial and design requirements.

8. How does the study consider options for the alignment?
The study considers different potential trail alignment options for each study section. A preferred alignment is chosen for each section and an alternative alignment option is provided only when it is feasible to do so. Avoiding conflicts such as rail signal control cabinets for example was a high priority in determining the alignment, as relocating the cabinets has significant cost and schedule implications. In particular circumstances where there are major conflicts or safety concerns, alternative start/end locations to the trail other than King Street South and Ahrens Street West are recommended. (Refer to the attached Graphics 5, 6 & 7 for typical conditions and spatial requirements that guided decision making regarding trail alignment)
9. What construction materials were considered for the multi-use trail? (Refer to Graphic 8 attached)
Options for trail surfacing, track/trail separation, lighting and security were evaluated. For the trail surface, several types of materials, such as asphalt, compacted granular, wood, rubber and concrete were evaluated. Asphalt has been identified as the preferred surface for the trail. Several options for track/trail separation including no physical separation, a low rail, a curb and a fence were evaluated. The preferred option is to have no physical separation between the track and the trail. Lighting options were also explored; mainly pedestrian poles and reflective lighting. Currently, area municipal practice is to not light any off road trails. Types of signage/way-finding, and amenities appropriate for use on the trail were also considered and are outlined in Graphic 8.

10. How much will the proposed trail cost to construct?
The preferred alignment of the Waterloo Spur Line Multi-Use Trail from Regina Street to Ahrens Street implemented with the preferred material selections will cost an estimated $2.5 million. Lighting the entire preferred alignment will cost an approximate additional $1 million.

11. What are the next steps?
This Public Consultation Centre (PCC) is the final step in the feasibility portion of this project. Victor Ford and Associates will provide a complete Feasibility Report to the Region that includes the public input from this PCC. The final report will be available to the public upon completion.

If it is determined that the multi-use trail is partially or fully feasible, detailed working drawings and tender documents that incorporate input from the Project Team and the PCC will be developed. A variety of funding resources will be looked at as well. Opportunities for funding will determine the potential construction date of the trail.
12. How will I receive further notification about this Project?
Adjacent property owners and tenants, as well as members of the public registering at this consultation centre and/or the initial public meeting will receive further information about this project.

13. How can the public be involved?
Community consultation is a critical component of the feasibility study. There are two public meetings included as part of this study – the first one took place on June 9, 2011 and introduced the project and sought feedback on key opportunities and challenges.

This is the second public meeting, where the results of the feasibility portion of this project will be presented and you are being asked to provide your input on this part of the study. Please provide all feedback no later than Nov. 10, 2011.

We thank you for your involvement and should you have any questions, please contact:

Hanan Wahib, Project Manager
Transportation Planning Engineer
Region of Waterloo
Planning, Housing and Community Services
150 Frederick St., Kitchener, ON,
N2G 4J3
Tel: 519-575-4811
Fax: 519-575-4449
HWahib@regionofwaterloo.ca

Matthew Sweig, Project Manager
Senior Landscape Architect
Victor Ford and Associates Inc Landscape Architects
955 Queen St. West, PH605, Toronto, ON,
M6J 3X5
Tel: 416-703-0081
Fax: 416-703-0083
matthew@victorford.ca
Public Comment Sheet

Please complete and hand in this sheet so that your views can be considered for this project. If you cannot complete your comments today, please take this home and mail, fax or email your comments to us by Nov. 10, 2011.

Hanan Wahib, Project Manager
Transportation Planning Engineer
Region of Waterloo
Planning, Housing and Community Services
150 Frederick St., Kitchener, Ontario, N2G 4J8
Tel: 519-575-4811 Fax: 519-575-4449
HWahib@regionofwaterloo.ca

Comments or concerns regarding this project:

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Name:_____________________________________________________________________
Address:_________________________________________________________________
Phone & email:_________________________________________________________________

Collection Notice: All comments and information received from individual, stakeholder group and agencies regarding this project are being collected under the authority of the Municipal Act to assist the Region of Waterloo in making a decision. Under the Municipal Act, personal information such as name, address, telephone number, and property location that may be included in a submission becomes part of the public record. Questions regarding the collection of this information should be referred to the Region’s Project Manager.
Graphics
Graphic 2: Enlargement Plan 1

Please See Legend on Page 12
Graphic 4: Enlargement Plan 3

Please see Legend on Page 12.
Graphic 5: Typical Section and Plan

**Typical Section A**
Scale 1:150

- 3.0 m - MULTIPLE TRAIL
- 1.0 m - CLEAR ZONE - LOW GROWTH GRASS
- 0.5 m - TRACK BED
- 1.0 m - GRADESIDE SHADE WITHIN TRACK ENVELOPE
- VARIOUS - OTHER CONDITIONS

**PROS:**
- allows permeability in case of emergency
- reduced maintenance costs

**CONS:**
- no physical or visual barrier between trail and tracks could be safety hazard if the train is travelling at high speeds
Graphic 6: Typical Intersection

TAC standards and rail guidelines are used in combination to develop typical intersections that are most appropriate for the site and safe for trail users. The goal is to make both trail and vehicles users aware of each other’s path of travel by using clear and demarcated routes. The line painting options at the roadway / railway crossings are currently being reviewed by the Region and local municipalities.
Graphic 7: Typical Mid-Block Crossing

TAC standards and rail guidelines are used in combination to develop typical crossings that are most appropriate for the site and safe for trail users. The goal is to make trail users aware of their path of travel by using clear and demarcated routes.
Graphic 8: Preferred Materials Selection

Paving:

Asphalt (Preferred)

**PROS:**
- smooth surface appropriate for cycling and rollerblading
- softer surface (than concrete) appropriate for jogging and walking
- moderate cost and low maintenance
- durable with relatively long life span
- applicable in colour and finishes
- combustible with line painting
- good winter maintenance

**CONS:**
- petroleum based, perceived environmental impact

**RECOMMENDATION:**
Asphalt is the preferred surface material for the multi-use trail.

Compacted Granular (Side Track)

**PROS:**
- soft surface appropriate for jogging and walking
- informal quality fits into natural environment

**CONS:**
- not appropriate for sloped areas
- higher maintenance requirements
- surface is messy in wet conditions
- rough surface not appropriate for rollerblading
- not compatible with line painting
- bad winter maintenance

**RECOMMENDATION:**
Compacted granular is not appropriate for the multi-use trail, however consideration can be made for a mix compacted granular + asphalt condition appropriate for both cycling and walking/jogging.

Track/Trail Barrier:

No separation (Preferred)

**PROS:**
- no physical barrier allows flexibility of movement in emergencies
- minimal width required (0.5m), suitable for constrained spaces
- minimal physical and visual impact to surroundings
- lowest cost option

**CONS:**
- no physical or visual barrier between trail and tracks could be a safety hazard if the train is travelling at high speed

**RECOMMENDATION:**
No additional separation is the preferred option; pending Regional / Municipal / community comfort level and approval.

Low Rail (Second Choice)

**PROS:**
- formal separation using a physical barrier discourages access to tracks
- applicable in various materials
- additional buffer space required (min. 1m separation = width of rail)

**CONS:**
- physical barrier restricts access (at a lesser extent than the fence option) between trail and adjacent properties in emergencies (control points)
- minor visual impact

**RECOMMENDATION:**
A low rail is the preferred rigid barrier option, but may not be necessary.
Graphic 8: Preferred Materials Selection

**Lighting:**

**Pedestrian Pole (Selective Use)**
- **Pros:**
  - High light levels per pole, requires less poles for entire trail than smaller lights
  - Can create linear uniformity at a regional/municipal scale
- **Cons:**
  - Requires footings and excavation
  - May create light pollution on adjacent properties (depending on lighting system)
  - Requires space in addition to clear zone
  - Medium visual impact

**Reflective (Supplementary)**
- **Pros:**
  - Requires no electrical energy source; ecological benefits
- **Cons:**
  - Low light levels
  - Light source required by user

**Recommendation:**
The pedestrian scaled pole is the preferred lighting option.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: L07-90

SUBJECT: AUTHORIZATION TO EXPROPRIATE LANDS (2nd REPORT) FOR ROAD IMPROVEMENTS TO TRUSSLER ROAD (REGIONAL ROAD 70), NEW DUNDEE ROAD (REGIONAL ROAD 12) TO BLEAMS ROAD (REGIONAL ROAD 56), IN THE CITY OF KITCHENER AND TOWNSHIP OF WILMOT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the expropriation of the lands for the purposes of construction of road improvements to Trussler Road, in the City of Kitchener and the Township of Wilmot, in the Region of Waterloo as detailed in Report CR-RS-11-067 dated October 18, 2011 described as follows:

Fee Simple Partial Taking:

a) Part Lot 1, Concession 1, Block ‘A’, Township of Wilmot, being Part 2, on Reference Plan 58R-16917, PIN 22186-0233(LT) (1465 Trussler Road)

b) Part Lot 1, Concession 1, Block ‘A’, Township of Wilmot, being Part 3, on Reference Plan 58R-16917, PIN 22186-0232(LT) (1359 Trussler Road)

c) Part Lot 136, German Company Tract, City of Kitchener, being Part 5, on Reference Plan 58R-16917, PIN 22728-0010(LT) (1434 Trussler Road)

d) Part Lot 135, German Company Tract, City of Kitchener, being Part 6, on Reference Plan 58R-16917, PIN 22728-0009(LT) (no municipal address)

e) Part Lots 129, 133 & 134, German Company Tract, City of Kitchener, being Part 9, on Reference Plan 58R-16917, PIN 22728-0005(LT) (no municipal address)

f) Part Lot 129, German Company Tract, City of Kitchener, being Part 11, on Reference Plan 58R-16917, PIN 22727-0022(LT) (808 Trussler Road)

g) Part Lot 15, South side of Huron Road, Plan 585 and Part Lot 149, German Company Tract, City of Kitchener, being Part 12, on Reference Plan 58R-16920, PIN 22723-0006(LT) (no municipal address)

h) Part Lot 1, Concession 2, Block ‘A’, Township of Wilmot, being Parts 13 and 14, on Reference Plan 58R-16920, PIN 22207-0025(LT) (1743 Trussler Road)
AND THAT staff be instructed to register a Plan of Expropriation for the property within three months of the granting of the approval to expropriate the property, as required by the *Expropriations Act*;

AND THAT the registered owners be served with a Notice of Expropriation and Notice of Possession for the property after the registration of the Plan of Expropriation;

AND THAT if no agreement as to compensation is made with an owner, the statutory Offer of Compensation and payment be served upon the registered owners of the property in the amount of the market value of the interests in the land as estimated by the Region’s appraiser in accordance with the *Expropriations Act*;

AND FURTHER THAT the Regional Solicitor be authorized to 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 the transaction.

**SUMMARY:** Nil

**REPORT:**

The Region is in the process of acquiring lands for improvements to Trussler Road from Bleams Road to New Dundee Road, in the City of Kitchener and Township of Wilmot, which is included in the Region’s approved 2011 Transportation Capital Program for construction in 2012. The project consists of replacement of the deteriorated pavement, improvements to the vertical alignment to increase visibility and the provision of paved shoulders for use by cyclists, pedestrians and farm vehicles.

Council approved the commencement of expropriation of the subject properties on August 25, 2011 as detailed in report CR-RS-11-052. The appropriate forms under the *Expropriations Act* were served in order to initiate formal proceedings under the Act for these properties. All of the affected property owners were previously contacted by Legal Services staff and informed of the project as well as the Region’s intention to commence the expropriation process and the Region’s Expropriation Information Sheet was provided to each of them. Legal Services staff also contacted all property owners and informed them of the Region’s intention to continue with the expropriation process in order to ensure that the construction timeline is maintained, including this report being presented to Council, as detailed in the Region’s Expropriation Information Sheet.

The Region has entered into agreements with four of the property owners to obtain the required fee simple partial takings. To date three of these agreements have not been completed by registration of the Transfer on title conveying interest in the lands to the Region. The lands described above in the recommendation therefore include this property. Legal Services staff recommends to the Committee that Expropriation proceedings cease with respect to those owners with whom agreements have been entered into as soon as the conveyances of the interest required have been completed.

The Region did not receive a notice for a Hearing of Necessity within the statutory time frame established by the *Expropriations Act* from any of the affected property owners. The next step in the proceedings is for Council to approve the expropriation of the property. This approval will ultimately be endorsed upon a certificate of approval on the Plan of Expropriation for those properties not acquired under agreement. The Plan is then registered within three months of the approval. Ownership of the property vests with the Region upon the registration of the Plan. Notices of Expropriation are then served upon all registered owners, including tenants as shown on the assessment roll.
Once ownership of the Region is secured through the registration of the Plan, it is possible to serve the Notice of Possession. The date for possession can be no sooner than three months following the date of service of the Notice of Possession. The Notices of Expropriation and Notices of Possession may be served at the same time.

After the registration of the Plan of Expropriation and prior to the taking of possession of the property, the expropriating authority is required to serve the registered owners with an offer in full compensation for their interests in the land. The offer must be accompanied by the immediate payment of one hundred (100%) percent of the appraised market value of the land to the registered owners as estimated by the Region’s appraiser. The registered owners are also to be served with a report of appraising the market value of the property, which report formed the basis for the offer of compensation.

The expropriation process is proceeding to ensure that the Region has possession of the required land to coincide with construction to begin in the spring of 2012.

Transportation and Environmental Services staff advises that they are not aware of any environmental concerns with respect to the subject lands. The expropriation of the lands is on an “as is” basis and upon closing the Region assumes all responsibility for the lands.

The subject lands are shown attached as “Appendix A”.

CORPORATE STRATEGIC PLAN:

One of the goals of the Corporate Strategic Plan is to ensure that the Region maintains and improves the Regional Roads Network.

FINANCIAL IMPLICATIONS:

Transportation and Environmental Services staff advises that the 2011 Transportation Capital Program includes $9,815,000 from 2011 to 2013 for this project all to be funded from the Roads Rehabilitation Reserve Fund. This overall budget provides adequate funding for all land purchases outlined within this report together with tree and fence removals and relocations which will be required for all lands acquired for the project.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation and Environmental Services staff has been consulted in the preparation of this report.

ATTACHMENTS

Appendix “A”- location map of lands.

PREPARED BY:  Fiona McCrea, Solicitor, Property

APPROVED BY:  Gary Sosnoski, Commissioner, Corporate Resources
Appendix “A”

Separate future project to be completed after further traffic analysis.

Public consultation centre location.

Project limits.

Trussler Road Reconstruction
Regional Road No. 70
New Dundee Road to Bleams Road (South)
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: CO4-20, 5574, 5575

SUBJECT: WESTMOUNT ROAD IMPROVEMENTS, GREENBROOK DRIVE TO HIGHLAND ROAD, CITY OF KITCHENER

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approves the proposed improvements as outlined in Report E-11-091 for Westmount Road (Regional Road No. 50) from Greenbrook Drive to Highland Road in the City of Kitchener.

SUMMARY:

The Region of Waterloo is currently considering improvements to Westmount Road (Regional Road 50) from Highland Road to Greenbrook Drive in the City of Kitchener. (Please refer to Appendix ‘A’ for a Key Plan.) This project has been initiated to address safety concerns at various locations along the corridor, along with addressing deteriorated roadway conditions and improving underground infrastructure on Westmount Road.

The planning for these infrastructure improvements is being undertaken by a “Project Team” consisting of staff from the Region of Waterloo, the City of Kitchener and City of Kitchener Councillor Zygmunt Janecki – Ward 8. The engineering consulting firm of The Walter Fedy Partnership has been retained by the Region of Waterloo to assist in carrying out the work of the project.

Plans for the Project Team’s proposed improvements were presented to the public at a Public Consultation Centre (PCC) held on May 12th, 2011 at the Faith Lutheran Church. Comments received from the public and the Project Team’s responses are addressed under Section 3.0 and in Appendix C of this Report.

Based on the public comments received and the technical considerations for this project, the Project Team is now recommending that Regional Council approve the proposed improvements to Westmount Road described as follows:

- Complete replacement of the pavement structure on Westmount Road from Highland Road to Greenbrook Drive including isolated curb and sidewalk repairs/replacement;
- Isolated rehabilitation of the City of Kitchener sanitary sewer and full replacement of Region of Waterloo storm sewers on Westmount Road from Highland Road to Greenbrook Drive.
- Construction of pedestrian crossing improvements at Queen’s Boulevard with installation of ladder crosswalks.
- Upgrades to existing northbound channelized right turn lane at Highland Road.
• Minor widening of Westmount Road south of Greenbrook Drive to south of Queen’s Boulevard to achieve Regional standard of 3.35m lane width.
• Construction of northbound and southbound left turn lanes at Greenbrook Drive; and,
• Enhancement of boulevard landscaping treatments where possible.

The Region’s Approved 2011 Transportation Capital Program and 10-Year Capital Forecast includes funds of $1,630,000 in years 2011 to 2013 inclusive in order to complete design and construction of the improvements to Westmount Road from Greenbrook Drive to Highland Road and is to be funded from the Roads Rehabilitation Reserve Fund. The City of Kitchener will fund its sanitary sewer rehabilitation work at an estimated cost of $64,000.

REPORT:

1.0 Background

The Region of Waterloo is currently considering improvements to Westmount Road (Regional Road 50) from Highland Road to Greenbrook Drive in the City of Kitchener. (Please refer to Appendix ‘A’ for a Key Plan.) This project has been initiated to address safety concerns at various locations along the corridor, along with addressing deteriorated roadway conditions and improving underground infrastructure on Westmount Road. The planning of the roadway improvements is being undertaken in accordance with the Regional Context Sensitive Transportation Corridor Design Guidelines, the 2010 Regional transportation master Plan, the Regional Cycling Master Plan and other relevant Regional policies and practices.

The planning for these infrastructure improvements is being undertaken by a “Project Team” consisting of staff from the Region of Waterloo, the City of Kitchener and City of Kitchener Councillor Zygi Janecki – Ward 8. The engineering consulting firm of The Walter Fedy Partnership has been retained by the Region of Waterloo to assist in carrying out the work of the project.

Westmount Road is designated as a Regional Road under the Regional Official Plan (ROP). Westmount Road between Highland Road and Greenbrook Drive is a four lane urban arterial roadway with a posted speed of 50 km/h.

This section of Westmount Road is not designated as a cycling route in the Regional Cycling Master Plan and there are no dedicated cycling facilities immediately north and south of the project limits.

2.0 Project Issues

2.1 Pavement Condition

• The pavement structure in this section of Westmount Road is in poor condition and requires replacement.

2.2 Sanitary and Storm Sewers

• The City of Kitchener requires isolated repairs to the sanitary sewers due to deterioration of the infrastructure. The Region requires full replacement of the storm sewers due to both deterioration as well as capacity needs.
2.3 Traffic Volumes, Collisions & Operational Issues

- Currently there are safety and operational concerns at Westmount Road and Greenbrook Drive intersection, including a high number of southbound collisions, as well as infiltration of Westmount Road traffic onto residential streets (i.e. Forest Hill Drive).

- Currently there are safety concerns at Queen’s Boulevard and Westmount Road intersection (pedestrian collisions).

- This project provides an opportunity to bring other project elements up to current Regional Standards including increasing lane widths to minimum standards between Greenbrook Drive and Queen’s Boulevard and improving the northbound channelized right turn lane at Highland Road.

3.0 Public Consultation

A Public Consultation Centre (PCC) was held at the Faith Lutheran Church, 247 Westmount Road East in the City of Kitchener on Thursday May 12th, 2011 from 5:30 pm to 8:00 pm. Plans showing the Project Team’s proposed improvements (as described in Section 4.0 of this report) were on display and Project Team representatives were present to answer questions and to receive feedback from members of the public. Approximately ten (10) members of the public attended the PCC and seven (7) members of the public formally signed in. Seven (7) comment sheets were received.

The main concerns raised by the public are as follows:

- Diversion of traffic onto local roads.
- Speed of travelling public.
- Noise levels due to traffic.

Please refer to Appendix ‘C’ for a summary of all written comments received and the Project Team’s responses to these comments.

4.0 Recommended Improvements

Based on a review of the technical information gathered for this project as well as a review of all public comments received, the Project Team is recommending that Regional Council approve the following proposed improvements for Westmount Road from Greenbrook Drive to Highland Road as presented at the May 12, 2011 Public Consultation Centre.

- Complete replacement of the pavement structure on Westmount Road from Highland Road to Greenbrook Drive including isolated curb and sidewalk repairs/replacement;
- Rehabilitation of the City of Kitchener sanitary and replacement of Region of Waterloo storm sewers on Westmount Road from Highland Road to Greenbrook Drive.
- Construction of pedestrian crossing improvements at Queens Boulevard consisting of ladder crosswalks.
- Upgrades to existing northbound channelized right turn lane at Highland Road.
- Minor widening of Westmount Road south of Greenbrook Drive to south of Queen’s Boulevard to achieve Regional standard of 3.35m lane widths; and,
- Construction of northbound and southbound left turn lanes at Greenbrook Drive.
- Enhancement of boulevard landscaping treatments where possible.
Please refer to Appendix ‘B’ for drawings of the existing roadway and the Project Team’s proposed improvements to Westmount Road.

Letters advising of the recommendations contained in this report were mailed to all those who attended the May 12th PCC and hand-delivered to all owners/residents abutting the Westmount Road project limits (and on side streets within one block of Westmount Road Street) on October 3rd, 2011.

5.0 Project Timing and Construction Staging

Construction on Westmount Road is currently scheduled to occur in 2013.

It is tentatively proposed that construction be completed in two (2) separate stages in order to minimize disruption to traffic. These two (2) stages of construction are described as follows:

Stage 1 – Westmount Road from Highland Road to Queens Boulevard

Stage 2 – Westmount Road from Queens Boulevard to Greenbrook Drive

Westmount Road will remain open to through traffic, with temporary lane restrictions, during construction in each stage. It may be necessary to detour traffic on local intersecting side streets for short periods of time during construction.

The Fire Department, Waterloo Regional Police and Ambulance Services will all be advised of the traffic restrictions during the construction period.

Grand River Transit services will be maintained during construction through the implementation of temporary bus stop locations as required.

A pedestrian facility will be maintained on one side of Westmount Road for the duration of the construction. Where the sidewalk is close to deep excavations, the sidewalk will be separated from the work area by temporary fencing. Signage will be erected in order to direct pedestrians through the project area.

As is customary with Regional Roads under construction, motorists will be advised of the construction timing and traffic restrictions through advance signage, the Region’s web site, and radio and newspaper notices.

CORPORATE STRATEGIC PLAN:

This project is in harmony with the Corporate Strategic Plan in that implementation of the Westmount Road Improvements achieves Focus Area #2 Growth Management and Prosperity. Under Strategic Objective 2.2 which is to develop, optimize and maintain infrastructure to meet current needs and projected needs.

FINANCIAL IMPLICATIONS:

The Region’s Approved 2011 Transportation Capital Program and 10-Year Capital Forecast includes funds of $1,630,000 in years 2011 to 2013 inclusive in order to complete design and construction of the improvements to Westmount Road from Greenbrook Drive to Highland Road, and is to be funded from the Roads Rehabilitation Reserve Fund. The City of Kitchener will fund its sanitary sewer rehabilitation work at an estimated cost of $64,000.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from the Transportation Planning Division of the Planning, Housing and Community Services were consulted for the preparation of this report.

ATTACHMENTS

Appendix A  Key Plan
Appendix B-1 to B-2 Typical Cross-Section – Existing Conditions
Appendix B-3 Recommended Cross-Section
Appendix C  Written Comments Received From the May 12th, 2011 Public Consultation Centre and project Team Responses

PREPARED BY:  Ken Brisbois, Project Manager

APPROVED BY:  Thomas Schmidt, Commissioner Transportation and Environmental Services
Appendix A
Key Plan

KEY PLAN
WESTMOUNT ROAD IMPROVEMENTS
Appendix B-1

Typical Cross Section – Existing Conditions

TYPICAL SECTION - QUEENS BOULEVARD TO HIGHLAND ROAD

TYPICAL SECTION - GREENBROOK DRIVE TO QUEENS BOULEVARD

Appendix B1

Westmount Road

Existing Typical Cross-Sections
Appendix B-2

Typical Cross Section – Existing Conditions

Appendix B2

Westmount Road

Existing Typical Cross-Sections
Appendix B-3

Typical Cross Section – Recommended Design Alternative

Appendix B3

Westmount Road

Preferred Design Option #2 at Greenbrook Drive Intersection

Reconstruct Westmount Road to Accommodate four 3.35 metre travel lanes from Greenbrook Drive to Queens Boulevard and northbound and southbound 3.25 metre left turn lanes at Greenbrook Drive
### Appendix C-1

| Name          | Comments Relevant to the Westmount Road Improvement Project                                                                                                                                                                                                 | Project Team Response                                                                                                                                                                                                 |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| John Innanen  | Thanks for the great explanations and conversation last night at the Public Consultation meeting @ Faith Lutheran Church. Re: Westmount Road Improvements Highland Road to Greenbrook Drive.  
I have lived at 202 Greenbrook Drive since 1999 so am familiar with the traffic pattern and traffic congestion spots on Westmount Road.  
**I agree with the intended improvements as a whole.** I have two areas of concern that I ask you to consider.  

The most dangerous area of concern in my mind is the parking lot entrance on the east side of Westmount Road, just south of Queen’s Boulevard. Westmount Road is a congested 2-lanes of traffic, and one or two southbound vehicles attempting a left turn into the apartment building parking lot can cause an immediate storage problem that can back into the Queen’s Boulevard intersection. Due to the proximity of the intersection, northbound storage and/or volume can quickly prevent clearance for a left turn of the southbound vehicles. The stationary vehicles then cause a backup of the middle southbound lane. My first and easiest suggestion would be to close the Westmount entrance to the parking lot entrance and use only the Queen’s Boulevard entrance, for safety improvement. Otherwise please consider a storage lane for southbound vehicles turning left off Westmount Road, into the parking lot entrance. I believe it is a safety issue, particularly for the turning vehicles as they have very little time and leeway to safely complete their turns.  

I agree with the necessity to widen Westmount at the points shown in the design drawings. The major problem is the first bend in the road; southbound traffic in the centre lane habitually encroach over the centre line; causing an undesirable opportunity for a head-on collision. | There are no unusual collision patterns at this time at the access and a left lane is not warranted. This particular location will be monitored and options reviewed if a pattern is seen to develop in the future.  
Existing section from Greenbrook to Queen’s Boulevard has narrow lanes of 3.05m and the proposed lanes widths are 3.35m. With respect to the concern pertaining to head-on collisions, the 5-year collision history does not indicate any unusual collision patterns resulting in head-on collisions. |
## Appendix C-2

<table>
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<tr>
<th>Name</th>
<th>Comments Relevant to the Westmount Road Reconstruction Project</th>
<th>Project Team Response</th>
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</table>
| John Innanen (Cont’d)| I agree with widening the Westmount portion of the Westmount/Greenbrook intersection to accommodate left-turn storage lanes in both directions. I believe that promoting the option of two straight-through lanes both directions rather than turning left or right is a good design.  

As for size of the storage lane(s), keep in mind that the Westmount/Stirling section of Greenbrook Drive experiences 9,900 vehicles daily, whereas the Westmount/Fischer-Hallman section of Greenbrook experiences 3,300 vehicles daily.  

It is my personal opinion, that, in the 1960’s, when it was initially intended that Homer Watson Boulevard was to extend to Highland Road. Consequently, Greenbrook Drive was designated a major collector via Stirling to Homer Watson. With the ending of Homer Watson Boulevard at Stirling, I will suggest the volume on the Westmount/Stirling section of Greenbrook Drive is wildly beyond its designation as a major collector, as proven by the 3,300 vehicle volume on the other side of Westmount. Any efforts to divert or promote additional vehicular traffic onto this section of Greenbrook Drive will cause more problems for residents on this section.  

The traffic signaling sequences need to be studied to promote a safer intersection. Two lanes of less encumbered traffic flow each direction will unfortunately promote higher speeds, thus forcing motorists turning through the flow into narrower time and space tolerances. I suggest advanced left turn signals for the left turn lane stored vehicles, but in the interest of safety, add a red signal indication that once the advanced green is complete, left turns are not allowed until the next advance signal sequence. | Greenbrook Drive is a road under the jurisdiction of the City of Kitchener. Region staff were advised by volumes on this road and between 3114 and 7251 vehicles/day which is within the 8000 vehicles/day design criteria for City of Kitchener major collectors.  

It is acknowledge that the addition of left turn lanes at the intersection of Westmount Road and Greenbrook Road may cause a minimal increase to traffic on Greenbrook drive; however the left hand turn demand is already existing and the improvements will increase the safety of this turning movement.  

As part of the Westmount Rd work, the signal timings along this corridor will be reviewed. The need for and type of left turn phasing will also be reviewed specifically at the intersection of Westmount at Greenbrook where left-turn lanes are to be installed. Currently there is a protected-permissive southbound left turn phase based on current volumes and the existing lane configuration. Generally, protected-only left-turn phases as requested are only implemented in conjunction with two sided by side left-turn lanes (i.e. Ottawa at Fischer-Hallman) or where there is an unusually high number of left-turn collisions (i.e. Ottawa at Westmount). |
## Appendix C-3

<table>
<thead>
<tr>
<th>Name</th>
<th>Comments Relevant to the Westmount Road Reconstruction Project</th>
<th>Project Team Response</th>
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<tbody>
<tr>
<td>John Innanen (Cont’d)</td>
<td>I agree with the design, particularly if the design is intended as an initial package to promote vehicle traffic to access Homer Watson using Block Line rather than Greenbrook or Ottawa. Block line has a good opportunity to be an effective east/west feeder street, from Courtland to Fischer-Hallman. I believe if the focus is to promote commuter traffic toward Homer Watson or Fischer-Hallman rather than making them traverse residential streets, is a good plan. The Courtland connection is already edging toward completion, so it may be worthwhile to explore the Westmount/Fisher-Hallman link extension next.</td>
<td>Protected-only movements generally increase intersection delay and generate longer queues which mean longer storage lanes are required. Once the construction is complete we will monitor the intersections with respect to turning movements and speeds and make signal timing adjustments as required.</td>
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</table>

The road network near Westmount Road, Block Line Road and Fischer-Hallman Road was planned during the development of the community in the area with the developers and the City of Kitchener. The Region is not aware of any current plans to change the road network in this area other than to make Fischer-Hallman Road four lanes and potentially upgrade the intersection of Fischer-Hallman Road and Westmount Road.
## Appendix C-4

| Name          | Comments Relevant to the Westmount Road Reconstruction Project                                                                                                                                                                                                                                                                                                                                                     | Project Team Response                                                                                                                                                                                                                     |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Margaret Stahle | On Wednesday October 21, 2009, interim repairs to Westmount Road at the Forest Hill Drive intersection were done. Seventy percent of the troublesome conditions were eased; 30 percent remains due to the drainage grates on the east side of Westmount Road, parallel to the back of my house. My gratitude to Mr. Chrys Greenwood of the City of Kitchener, who, with professionalism and compassion, responded to my calls and initiated meeting(s) with Mr. Emil Marion of the Region of Waterloo and later a meeting with me, to do this work. After many years, there is now some relief here. Thank you. Yes road conditions and sound levels will be modified by repairs as per your proposed preferred improvements. However, I have lived here since November 26, 1965, 46 years, and I invite you to visit with me to experience the NOISE LEVELS OF VOLUME AND ALL TRAFFIC. To know it is to feel it and it can only be felt by experiencing it. YOU HAVE MY INVITATION TO DO SO. Please exclude long holiday weekends to be fair. I am requesting your additional consideration for NOISE BARRIER or other solutions(s).  
  - Have you and your family ever lived through EMERGENCY VEHICLES’ SIRENS (starting full blast half way between Greenbrook Drive and Forest Hill Drive; sound sucking HEAVY 18 WHEELERS AND BUSES; loud RACING CARS AND MOTORCYCLES “Gunning it” to take advantage of the slight grade from Forest Hill Drive to Queens Boulevard (IN STEREO)?  
  - Who absorbs the cost of the depreciation of my devalued house due to cracks sprung from the constant road thumping adjunct to my house? How would you feel about contending with these issues on a regular, constant, on-going basis? This condition has taken an extremely negative affect on my well being and property value. Moving is NOT an option. Thank you for providing this opportunity to comment. Thank you for taking a step beyond your proposed preferred improvements for a more pleasant life on the corner of Westmount Road and Forest Hill Drive Kitchener. |
|               | With the proposed reconstruction of Westmount Road, the storm structures will either be rebuilt or converted to side inlet catchbasins which will reduce and/or eliminate the noise from traffic hitting the grates as the grates are removed from the pavement and set back along the curb. Due to the front lotted properties along this section of Westmount Road, noise attenuation options (i.e. noisewalls) cannot be installed. However, with the road reconstruction, the driving surface will be replaced, which provides a smoother ride which reduces the noise level to the surrounding area. |
### Appendix C-5

<table>
<thead>
<tr>
<th>Name</th>
<th>Comments Relevant to the Westmount Road Reconstruction Project</th>
<th>Project Team Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lois Smith</td>
<td>I am a homeowner at 104 Greystone Ave., in Kitchener, near the Westmount and Greenbrook extension. In regards to the Westmount Road reconstruction I’m in favour of Option 1 – “Do Nothing” with wider lanes the traffic will speed faster than they already do not to mention increased noise pollution. The Police should be checking for speeding along Westmount like they used to, maybe accidents would decrease. People make left and right hand turns without stopping properly. The speed bumps on Greenbrook do not work, I have seen many near misses from my front window with people passing on the left because of impatience to go around another car who is slowing down.</td>
<td>This project will incorporate the minimum lane widths as per “The Context Sensitive Corridor Design Guidelines” adopted by Regional Council as current lane widths from Greenbrook Drive to Queen’s Boulevard are below current Regional standards. Although the lane widths are increasing to meet the minimum width, it is not expected that speeds will increases on this section of Westmount. Your concerns regarding speeding were forwarded to the Region of Waterloo Police. Region staff was provided with a report that was prepared in 2009 by The City of Kitchener regarding the speed humps that were installed on Greenbrook Drive. At that time it was reported that speeds, traffic volumes and accidents were reduced after installation of the speed humps. Due to the front lotted properties along this section of Westmount Road, noise attenuation options (i.e. noisewalls) cannot be installed. However, with the road reconstruction, the driving surface will be replaced, which will provide a smoother ride and reduces the noise level to the surrounding area.</td>
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### Appendix C-6

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<th>Name</th>
<th>Comments Relevant to the Westmount Road Reconstruction Project</th>
<th>Project Team Response</th>
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<tr>
<td>Lois Smith (Cont'd)</td>
<td>I hate to walk around the block now on Westmount so with decreased boulevard size the cars could end up on the sidewalks more easily like on Weber Street. Why not install cameras to catch speeders.</td>
<td>The boulevard size is 1m to 3.8m wide throughout most of the project limits; and it will be reduced at the Greenbrook Drive intersection to accommodate the proposed southbound and northbound left turn lanes which will still provide an adequate buffer between the road and the sidewalk. There is also a slight narrowing (approximately 0.5m) of the boulevard between Greenbrook Drive to just south of Queen's boulevard to achieve the 3.35m minimum lane widths.</td>
</tr>
<tr>
<td>Kandace Steward</td>
<td>Noticed the intersecting streets mostly have a narrowing opening at Westmount. Will this impair visibility to oncoming traffic?</td>
<td>Side street radii will be reviewed with respect to intersecting Westmount Road and corrected if warranted, however sight line visibility at the side streets has not been identified as a problem.</td>
</tr>
<tr>
<td>Mike Boos</td>
<td>Omission of Westmount from Cycling Master Plan in unacceptable. Widening the lanes will enhance cyclist safety, but bike lanes are desperately needed to make commuting by bike safe and convenient.</td>
<td>The Region's Cycling Master Plan does not identify this stretch of road as requiring core on-road cycling lanes; however, the Region's Transportation Planning staff will be undertaking a gap analysis as part of a review of the Cycling Master Plan in 2011/2012.</td>
</tr>
<tr>
<td>William Rodgers</td>
<td>Please remove watermain clean out pipe down to flush or below.</td>
<td>Region staff has contacted the City with regards to this concern and it will be rectified in the near future.</td>
</tr>
</tbody>
</table>
### Appendix C-7

<table>
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<th>Name</th>
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<th>Project Team Response</th>
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<tbody>
<tr>
<td>Lillian Ruppenthal</td>
<td>I am very disappointed that you are adding any road to our 4 lanes; this is a nice residential area, and we have more traffic than we deserve. Where would the snow go? Are you going to remove it like it was done in 1960? What about the sign no trucks between 11 p.m. and 7 a.m. We fought hard for that and the traffic light on Greenbrook &amp; Westmount. Who lives on Forest Hill that they can’t have traffic? Thank God no roundabouts.</td>
<td>The existing roadway width varies throughout the project limits. The intent of the redesign is to provide consistent minimum land widths throughout the project limits. The proposed lane widths are the minimum land widths as per guidelines adopted by Regional Council. There is currently adequate snow storage through this section of Westmount Road. With the addition of dedicated northbound and southbound left turn lanes at Greenbrook Drive, the boulevard width will be reduced, however, it still remains adequate for snow storage and still provides a buffer between the road and the sidewalk. All signage will be reviewed during the design phase of the project.</td>
</tr>
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</table>
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: C04-30, 5431

SUBJECT: CONSULTANT SELECTION – PRELIMINARY DESIGN, DETAILED DESIGN AND CONSTRUCTION ADMINISTRATION AND INSPECTION SERVICES, KING STREET RECONSTRUCTION, ST. JACOB’S SETTLEMENT AREA, TOWNSHIP OF WOOLWICH

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into a Consultant Services Agreement with IBI Group of Waterloo, Ontario to provide consulting engineering services for the preliminary design, detailed design, contract administration and construction inspection for King Street Reconstruction in the St. Jacob’s Settlement Area, Township of Woolwich at an upset limit of $334,548.00 plus applicable taxes for the preliminary design and detailed design phases with contract administration and construction inspection to be paid on a time basis;

AND THAT the Region of Waterloo approve an increase in project costs of $66,998.00 plus applicable taxes gross and $0 net to facilitate the preliminary and detailed design phases of the work undertaken for the Township of Woolwich, with contract administration and construction inspection to be paid on a time basis.

SUMMARY:

The Region of Waterloo wishes to proceed with the King Street Reconstruction in the St. Jacob’s Settlement Area, Township of Woolwich in 2015. This project includes consideration of improvements to address poor pavement condition, storm drainage concerns, replacement of a deteriorated culvert, reconstruction of the channelized right turn lane at Sawmill Road, and consideration of pedestrian and cycling facilities within the project limits.

In conjunction with this project the Township of Woolwich requested that the Region include the following Township of Woolwich works;

- Replacement of watermain saddles and services that were not previously replaced,
- Replacement and/or repair of isolated water valves
- Replacement of existing fire hydrants
- Repair and replacement of existing deficient sidewalks where required,
- Extension of the sanitary sewer collection and water distribution systems from approximately 1212 King Street North to Printery Road, subject to the Township’s approval, and
- Potentially the repair and/or replacement of the sanitary sewers within the project limits, if identified, as part of the recommendations of the Township’s current Inflow and Infiltration study being conducted for the St. Jacob’s Settlement Area and expected to be completed by December 2011.
In light of the Township work incorporated, a representative from the Township of Woolwich will be asked to be on the Project Team.

In order to meet the 2015 construction timeline, an engineering consultant must be hired now to undertake the preliminary design, detailed design and construction administration.

An invitation for Letters of Interest to provide engineering services was advertised in the Waterloo Region Record. Seven (7) firms submitted proposals, out of which three (3) were short-listed.

Based on the evaluation criteria, review of the detailed work plans, schedules and upset fees provided by the shortlisted consultants, the Evaluation Team recommends that IBI Group be retained to undertake this assignment at an upset fee limit of $334,548.00 plus applicable taxes for the preliminary design and detailed design phases with contract administration and construction inspection to be paid on a time basis.

REPORT:

1. Background

King Street within the St. Jacob’s Settlement Area is identified in the Region’s 2011 Transportation Capital Program for reconstruction in 2015 in order to address deteriorated road condition, storm drainage repair and replacement and/or extension to address storm drainage concerns. Other needed improvements are urbanization of the road cross section with concrete curb and gutter, the repair/replacement of deteriorated and inadequate pedestrian facilities, the extension of new pedestrian facilities (sidewalk infilling) and consideration of cycling facilities as part of the proposed reconstruction. Planning of these improvements will be completed in accordance with Schedule ‘A’ requirements of the Municipal Class Environmental Assessment (Class EA).

The King Street project limits are from Printery Road to Sawmill Road as shown in Appendix “A”. King Street is a two lane roadway with urban, semi-urban and rural road cross-sections within the project limits. The urban cross-section is mainly located between the Conestogo River Bridge and Highcrest Lane. The semi-urban/rural cross-section is located mainly between Eby Street/ Northside Drive and Sawmill Road and from Highcrest Lane to Printery Road. The posted speed limit is 50 km/hr. within the project limits.

Under the Region’s new Transportation Corridor Design guidelines, King Street is designated as a Neighborhood Connector – Main Street between Eby Street/ Northside Drive and Henry Street and a Rural Village – Main Street between Eby St. / Northside Dr. and Sawmill Road and from Henry Street to Printery Road. King Street is also designated as an “Extremely Scenic Roadway” in the Region’s Draft Special Character Streets and Scenic Roads Resource Document.

The abutting land on King Street is a mix of residential, institutional and commercial uses.

King Street has no signalized intersections within the project limits. No signalized intersections are planned.

Left turn lanes are located as follows;
- Tim Horton’s entrance,
- Henry Street intersection and,
- Printery Road

A channelized right turn lane is located on King Street at Sawmill Road. This right turn lane will be
reconstructed to Region standards and illumination installed at the intersection as part of the reconstruction.

The objectives of this project are to: correct road structural deficiencies; correct drainage deficiencies; provide for concrete curb and gutter, bus pads, sidewalks and cycling facilities to meet the Transportation Corridor Design Guidelines (Neighborhood Connector – Main Street and Rural Village – Main Street); assess and implement improvements to correct undefined accesses to commercial and residential properties abutting the road; and assess adequacy of the lane configuration, alignment and turning radii at the intersections to accommodate the traffic types and traffic volume.

Improvements under consideration for this project include:

- Repair, replacement and extension of the storm sewers where necessary to address drainage problems and accommodate the urbanization of the road cross section with concrete curb and gutter;
- Replacement of the existing pavement structure to improve pavement performance;
- Turning radii improvements at intersections where required;
- Replacement of a deteriorated culvert at the Sawmill Road intersection including the reconstruction of the channelized right turn lane and illumination of the intersection;
- Water proofing and repaving of the Conestogo River bridge deck;
- Construction of bus pads;
- Define access to commercial land and residential uses abutting the road through the use of curb and gutter to improve operation and safety; and
- Urbanization of the road cross-section with concrete curb and gutters, and provision of pedestrian and cycling facilities and boulevard landscaping (tree planting, topsoil and sod), all in accordance with the “Context Sensitive Regional Transportation Corridor Design Guidelines”.

The Region’s approved 2011 Transportation Capital Program includes funding in the amount of $2,610,000.00 in 2011-2015 inclusive for the preliminary design, detailed design and construction of King Street in the St. Jacob’s Settlement Area, Township of Woolwich. Regional staff is fully committed to other capital projects and therefore staff recommends that an external consultant be hired to complete this project. Staff has determined that it is necessary to commence the engineering for this project now, in order to provide sufficient time to complete the design phases, acquire any necessary property and complete utility relocations, if necessary, in advance of construction.

2. Consultant Selection

An invitation for Letters of Interest to provide engineering services for this project was advertised in the Waterloo Region Record on July 12, 2011. Seven (7) consultants submitted Letters of Interest. Following a review of the submissions, three (3) firms were short-listed based on their qualifications. The detailed work plans and upset fee quotes for design activities, plus an estimate of fees for contract administration and construction inspection services from the short listed consultants were then reviewed and a final selection was made based on the evaluation criteria.

The three short-listed consultants were:
- IBI Group
- MTE Consultants Inc. and
- Walter Fedy
The Team involved with the consultant selection consisted of:

Bob Wheildon, Sr. Project Manager, Design and Construction  
Marcos Kroker, Head, Transportation Rehabilitation Program, Design and Construction  
Mike Henderson Project Manager, Design and Construction

The evaluation criteria used for selecting the successful consultant were in accordance with the Region’s Purchasing By-law and included price as a factor in the selection process. These evaluation criteria and their respective weightings were as follows:

**Quality Factors**

- Project Approach and Understanding: 35%  
- Experience of the Project Manager: 20%  
- Experience of the Project Support Staff: 15%  
- Experience on Similar Projects: 10%

**Equity Factors**

- Current Workload for Region: 3%  
- Local Office: 2%

**Price Factor**

- Upset Price: 15%

The Letter of Interest submitted by the three short-listed consultants demonstrated a good understanding of the project, capable project teams and experience on similar projects. When considering all quality, equity and price factors, the submission from IBI Group scored the highest. IBI Group was the second lowest fee received and was 3.7% lower than the average fee. Based on the above evaluation criteria, including the review of the detailed work plans, project approach, schedules and upset fees provided, the Project Team recommends that IBI Group be retained to provide the preliminary design, detail design, contract administration and construction inspection services for this project.

3. **Scope of Work**

For this engineering assignment, the consultant will: undertake a complete review of required infrastructure for existing and future conditions; develop and assess transportation improvement/reconstruction alternatives; conduct a public participation program; complete the preliminary and detailed design for the road improvements/reconstruction; assess the advantages and disadvantages of different construction staging alternatives; make presentations to Township of Woolwich Council and Regional Planning and Works Committee; prepare contract drawings, specifications and tender documents; obtain all necessary agency approvals; assist during the tendering period; provide contract administration and site inspection services during construction; prepare record drawings; and provide post-construction services during the warranty period. A breakdown of the consultant’s upset fee is included in Appendix B attached to this report.
4. **Schedule**

Subject to Council’s approval of the consultant assignment, the proposed implementation schedule is as follows:

<table>
<thead>
<tr>
<th>Event</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>Base Plan, Preliminary Design and Generation of Alternatives</td>
<td>Fall 2011 – Summer 2012</td>
</tr>
<tr>
<td>Public Consultation Centre</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>Council Approval of Recommended Alternative</td>
<td>Winter 2013</td>
</tr>
<tr>
<td>Property Acquisition, Utility Relocations, Final Design and Tendering</td>
<td>Spring 2013 – Spring 2015</td>
</tr>
<tr>
<td>Start of Construction</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>Construction Completion</td>
<td>Fall 2015</td>
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</table>

5. **Consultant’s Upset Fee**

The short-listed consultants provided an upset fee for professional services for public consultation and engineering design, and also an estimate of contract administration and construction inspection fees. On road and bridge projects, the time required for contract administration and construction inspection can vary significantly depending on weather conditions, unforeseen developments during construction, contractor performance, and other unknown variables. Because an upset fee does not lend itself well to these types of services, it has been the Region’s practice on road and bridge projects to pay for contract administration and construction inspection services on a time basis. It is recommended that this same practice be followed for this project. For budgetary purposes, staff has estimated the cost of contract administration and construction inspection services to be $282,000.00 which is based on the preliminary estimate of fees submitted by IBI Group and a review of costs on similar projects.

The upset limit for IBI Group to undertake the preliminary and detailed design phases of this project is $334,548.00 (plus applicable taxes) for consultant fees and disbursements. This upset fee includes a provisional amount for the Township of Woolwich’s related work; the break down is as follows:

- Region of Waterloo Related Work = $267,550.00
- Township of Woolwich Related Work = $66,998.00
- Total Upset Fee Limit (plus applicable taxes) = $334,548.00

The total estimated construction cost approved in the 2011 Transportation Capital Budget for the Region’s work is $2,610,000.00. The Region’s portion of the upset fee is $267,550.00 for the design phases and approximately represents 10% of the estimated construction value. Although at first appearance the design fees appear high, this is due to the project complexity which includes construction through the downtown business core of St. Jacobs, a comprehensive public consultation program and the development of construction staging and traffic management options to maintain access during construction. The upset fee includes the assembly of base plans, investigation of various alternatives, coordination with concerned agencies, a public participation program, preliminary design, detail design and preparation of tender documents.
CORPORATE STRATEGIC PLAN:

This project meets the Region's (2011-2014) Corporate Strategic Plan objective 2.2 to “Develop optimize and maintain infrastructure to meet current and projected needs” under Focus Area 2 “Growth Management and Prosperity”.

FINANCIAL IMPLICATIONS:

The Region’s approved 2011 Transportation Capital Program includes $2,610,000.00 in years 2011-2015 inclusive for this project to be funded from the Road Rehabilitation Reserve Fund.

Based on the $267,550.00 upset fee limit of IBI Group the net cost of this consulting assignment for the Region’s portion of the work is $272,259.42 as per the following breakdown:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBI Group</td>
<td>$267,550.00</td>
</tr>
<tr>
<td>H.S.T (13%)</td>
<td>+$34,781.50</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>$302,331.50</td>
</tr>
<tr>
<td>Less: Municipal Rebate of 86.46% of HST</td>
<td>-$30,072.08</td>
</tr>
<tr>
<td>Total</td>
<td>$272,259.42</td>
</tr>
</tbody>
</table>

A combined amount of $2,610,000.00 is included for engineering design and construction in the 2011 Ten Year Transportation Capital Program in years 2011 – 2015. IBI Group’s total fees for the preliminary and detail design and contract administration/construction inspection are within the consulting fee allowance provided for in the total budget for this project, which is all to be funded from the Roads Rehabilitation Reserve Fund. The approved 2011 Transportation Capital Program includes $70,000.00 for this project in 2011, which is sufficient funding to cover the scheduled consultant expenditures in 2011.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Appendix A: Project Key Plan
Appendix B: Breakdown of Consultant’s Upset Fee

PREPARED BY: Bob Wheildon, Sr. Project Manager, Design and Construction.

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services.
APPENDIX B

PRELIMINARY AND DETAILED DESIGN FOR KING STREET NORTH RECONSTRUCTION, ST. JACOB’S SETTLEMENT AREA, TOWNSHIP OF WOOLWICH

BREAKDOWN OF CONSULTANT’S UPSET FEE

A. Region of Waterloo Related Work

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project Initiation/Data Collection/Base Plan Preparation</td>
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</tr>
<tr>
<td>2. Class EA and Preliminary Design</td>
<td>$114,849.11</td>
</tr>
<tr>
<td>3. Detailed Design and Approvals</td>
<td>$57,546.31</td>
</tr>
<tr>
<td>5. Bridge Deck Repairs (Provisional)</td>
<td>$19,287.46</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>$267,550.00</strong></td>
</tr>
<tr>
<td><strong>HST</strong></td>
<td><strong>$34,781.50</strong></td>
</tr>
<tr>
<td><strong>Total Upset Fee (Region’s Portion)</strong></td>
<td><strong>$302,331.50</strong></td>
</tr>
</tbody>
</table>

B. Township of Woolwich Related Work (Provisional)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project Initiation/Data Collection/Base Plan Preparation</td>
<td>$14,408.45</td>
</tr>
<tr>
<td>2. Class EA and Preliminary Design</td>
<td>$26,550.02</td>
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<tr>
<td>3. Detailed Design and Approvals</td>
<td>$15,874.50</td>
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<tr>
<td><strong>Sub-total</strong></td>
<td><strong>$66,998.00</strong></td>
</tr>
<tr>
<td><strong>HST</strong></td>
<td><strong>$8,709.74</strong></td>
</tr>
<tr>
<td><strong>Total Upset Fee (Township of Woolwich Portion)</strong></td>
<td><strong>$75,707.74</strong></td>
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</table>
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Rapid Transit

TO: Chair Jim Wideman and Members of Planning and Works Committee
DATE: October 18, 2011
FILE CODE: A02-30/PW

SUBJECT: RAPID TRANSIT PROJECT UPDATE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo appoint four Regional Councillors to the Rapid Transit Steering Committee including:

• Chair of the Regional Planning and Works Committee;
• Chair of the Regional Administration and Finance Committee;
• Chair of the Regional Community Services Committee; and
• A Regional Councillor to represent the City of Cambridge;

AND THAT The Regional Municipality of Waterloo approve the hiring of seven permanent and four non-permanent staff to be added to the Rapid Transit and Legal Services Divisions, as described in Report No. E-11-105, dated October 18, 2011.

SUMMARY:

Staff have developed a Rapid Transit Project Charter that sets out the roles and responsibilities of the groups and individuals who will bring the rapid transit project to fruition. The charter notes that the Rapid Transit Steering Committee will provide project direction and guidance, and staff recommend that Council appoint four Regional Councillors to this Committee. To ramp up implementation activities to meet the project schedule, staff also recommend the hiring of seven permanent and four non-permanent staff within the Rapid Transit and Legal Services Divisions.

Staff will be issuing a Notice of Commencement in November 2011 for the start of the six-month Transit Project Assessment process, and holding public consultation centres in January 2012 as part of that process.

Staff have begun an evaluation of rapid transit project procurement options. Staff are considering the options available, the risks and benefits associated with the various options, and an evaluation framework. Staff discussions with Infrastructure Ontario have confirmed that Infrastructure Ontario is interested in having a role with respect to the procurement of the Region’s rapid transit project. Staff will continue to evaluate procurement options and the potential role of a procurement partner such as Infrastructure Ontario, and plan to bring a report to Planning and Works Committee in December 2011 for Council approval of the project procurement and delivery method, and in January 2012 for Council approval of the procurement partner.
REPORT:

1. Introduction

Rapid transit is needed in Waterloo Region because it will move people and shape urban form as the Region continues with tremendous population and employment growth. In June 2011, among other motions related to rapid transit, Council approved the technology, route, stations, staging and funding of Stage 1 of the Region’s rapid transit project. Council directed staff to evaluate project procurement and delivery options. Stage 1 of the rapid transit project includes 19 km of light rail transit (LRT) from Conestoga Mall to Fairview Park Mall and 17 km of adapted bus rapid transit (aBRT) from Fairview Park Mall to the Ainslie Street Terminal.

2. Project Implementation

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 of the risks associated with any delays to the project including inflation and scope creep. Staff have developed a detailed schedule that documents and tracks the steps required to complete the project. Key project decision points and major milestones are listed below, along with their anticipated completion dates.

- Determine route through Uptown Waterloo – November 2011
- Determine procurement approach – January 2012;
- Select general engineering consultant – February 2012;
- Complete Transit Project Assessment & Environmental Project Report – May 2012;
- Finalize funding agreements – June 2012;
- Acquire properties – 2012 - 2013;
- Relocate utilities including hydro corridor – 2012 - 2014;
- Issue request for qualifications – September 2012;
- Shortlist qualified contractors – January 2013;
- Complete performance specifications – January 2013;
- Issue request for proposals – February 2013;
- Evaluate and select preferred contractor – December 2013; and
- Start LRT construction – August 2014.

3. Project Governance

Appropriate project governance is key to the success of the rapid transit project, allowing timely and informed recommendations and decisions. Staff have developed a Rapid Transit Project Charter that sets out the roles and responsibilities of the groups and individuals who will bring the rapid transit project to fruition, making the right decisions at the right time. It is anticipated that the project charter will be a living document and will evolve as the project progresses. The charter mission is to implement the rapid transit project, on time and on budget.

The charter notes that Regional Council has authority for the approval of key decisions for the rapid transit project.

As with many significant Regional initiatives, staff are proposing the creation of a Steering Committee to guide the implementation of the rapid transit project. The role of the Rapid Transit Steering Committee would include the following:

- Review project-related reports and information;
- Provide input and guidance to the project team on significant issues and decisions; and
- Review and provide input to staff reports and recommendations.
The Rapid Transit Steering Committee would meet as needed, perhaps once per month for the next six months, and once every two to three months thereafter. It is proposed that the Steering Committee include senior Regional staff as well as members of Regional Council. The staff members on the Steering Committee would include:

- Mike Murray, CAO;
- Thomas Schmidt, Commissioner, Transportation and Environmental Services;
- Rob Horne, Commissioner, Planning, Housing and Community Services;
- Angela Hinchberger, Acting Chief Financial Officer;
- Nancy Button, Director, Rapid Transit; and
- Graham Vincent, Director, Transportation Planning.

It is proposed that the Rapid Transit Steering Committee include four members of Regional Council. Including four Councillors will provide a range of perspectives, and yet will keep the Steering Committee to a manageable size. This will ensure that it will be possible to schedule meetings in a timely way, and that the necessary agenda material can be dealt with in an expedient way. Because the rapid transit project touches on all aspects of the Region’s activities including Transportation, Planning, Public Health, Social Services, Finance and Legal, it is recommended that the four Councillors include the Chairs of each of the three Standing Committees. Should the Standing Committee Chairs be unable or unwilling to serve on the Steering Committee, it is recommended that the vice-Chair or a recommended alternate be appointed. It is also recommended that the Steering Committee include one Regional Councillor from Cambridge.

4. Rapid Transit Staffing

The Region faces the task of ramping up implementation activities to meet the rapid transit project schedule. Although the Region currently implements large capital programs, the nature of this project is different from others in terms of size, skills, complexity, risk, etc. Not having the necessary staff complement and knowledge base within the organization will be a distinct disadvantage and a significant risk in delivering the project. Therefore, it is critical for the Region to make the necessary investment in building up its internal team to full capacity.

Based on the current available staffing in the Rapid Transit Division, there is an urgent need to increase staffing levels to keep the project schedule on time. Currently there are six full-time staff allocated to deliver the rapid transit project and these positions are fully optimized. An additional seven permanent and four non-permanent staff are needed in 2011 to successfully implement the project. The additional staff are needed to immediately start preparing the performance specifications for the rapid transit project. The performance specifications will lead to the request for qualifications and the request for proposals from potential contractors, the evaluation and selection of a preferred contractor, and the start of LRT construction in 2014. These tasks are on the critical path that will see LRT service in operation, on time and on budget, in 2017.

Staff recommend that Council approve the hiring of the 2011 positions. Staff will submit an issue paper for additional staff that will be required in 2012 and beyond, as the project progresses. The positions required for hire in 2011 (including major responsibilities) are as follows:

- Manager, Rapid Transit Community Relations
  - Responsible for managing public outreach and communication programs including business liaison pre, during and post construction.
  - Oversees the creation and production of literature, presentations, public displays, and quotations and tenders for materials and services contracted out to advertising agencies.
October 18, 2011

Manager, Rapid Transit Procurement, Finance and Controls
  o Responsible for managing the procurement agent and process (including contract creation, selection and award).
  o Coordinates with the procurement agent in establishing the procurement strategy, criteria and detailed procedures consistent with Regional policies, project requirements and good commercial and legal practice.
  o Monitors provincial and federal funding and establishes financial and budgetary controls for the project.

Senior Project Manager, Signals/Systems
  o Responsible for the translation of the project requirements to performance specifications that will be used in the construction contract documents.
  o Oversight of performance specifications development and final design of the system, prototyping, systems development, systems installation, testing and commissioning.

Project Engineer, Communications
  o Responsible for all activities related to designing, procuring, installing and testing the Communications systems.
  o Witnesses and coordinates tests and inspections of the Communications components and systems, and evaluates their performance pre and post implementation.

Project Engineer, Mechanical/Electrical/Power
  o Responsible for all activities related to designing, procuring, installing and testing of mechanical, electrical, and traction power equipment, including substation equipment and the overhead catenary system.

Project Engineer, Track
  o Responsible for all aspects of track technology, design, and correct implementation of installations.

CAD Technologist
  o Drawing and drawing support for engineering and public communications groups.

Real Estate Lawyer
  o Responsible for coordinating all aspects of land acquisition, utility relocations, and also contract disputes.

two Property Agents
  o Responsible for negotiations and land acquisition. Coordinates activities related to expropriation proceedings.

Legal Assistant, Property
  o Responsible for document preparation (e.g. easements, leases, deeds, expropriation), support for property acquisition (e.g. title searches) and plan filing at land registry office.

5. Transit Project Assessment Process

Ontario Regulation 231/08 establishes a Transit Project Assessment Process (TPAP) that allows a proponent such as the Region to obtain approval for a transit project from the Ministry of Environment (MOE) in six months. The regulation provides for a focused impact assessment process to address matters of provincial significance. Matters of provincial significance as defined under the new regulation include the natural environment and matters of cultural heritage value. Examples of provincially significant natural and cultural heritage environment features include such features as watercourses, fish habitat, rare or endangered species, environmentally sensitive areas, recreational areas, tourist facilities, social service facilities, etc.
The TPAP is initiated after the preferred transit project has been selected, and requires that the Region:

- file a Notice of Commencement;
- assess site-specific negative impacts of the project;
- identify appropriate mitigation measures;
- undertake consultation. The consultation process will provide information to interested parties about the basis for the project, assessment and evaluation of both positive and negative impacts on provincially significant matters, and mitigation measures;
- file a Notice of Completion;
- file an Environmental Project Report, including a record of consultation, for public and agency review, and
- file a Statement of Completion.

The regulation imposes the following timelines:

- consultation and completion of documentation and project report – 120 days;
- final public and agency review and submission of objections – 30 days;
- MOE decision-making (if necessary) – 35 days; and
- MOE requires additional studies – 30 days (optional).

The Notice of Completion must be issued within four months of the Notice of Commencement. If the Region fails to meet this timeframe, then the six-month process must be re-started from the beginning. If, during the four-month consultation period, the Region encounters an issue that requires additional study and/or consultation to resolve or mitigate, the Region may elect to file a Notice of Issue and suspend the four-month “clock.” Consistent with the intent of the regulation, only issues that may result in a negative impact on a provincially significant matter can be cited in a Notice of Issue.

Staff plan to issue a Notice of Commencement for the TPAP for the rapid transit project in November 2011. Public consultation centres will be held for the TPAP in January 2012. The dates and locations have not yet been finalized.

6. Project Procurement

Staff have begun an evaluation of rapid transit project procurement and delivery options. Staff are considering the options available, the risks and benefits associated with the various options, and an evaluation framework. An initial overview of the options and evaluation criteria being considered is provided in the following sections.

6.1 Procurement Options

The following is not an exhaustive list of available project procurement and delivery options, but rather a list of the most likely options for delivering of the rapid transit project:

Design Bid Build (DBB): The Region completes the preliminary and detail design and then tenders the project to the private sector for construction through separate and distinct procurements. Payment is typically on a monthly progress basis.

Design Build (DB): The private sector completes the preliminary and detail design and the construction in an integrated process. Payment is typically on a monthly progress basis.
Design Build Finance (DBf): A portion of construction payments are withheld until completion, adding short-term financing to the DB process, with payments to the private sector based on major milestone payments or substantial completion.

Design Build Operate Maintain (DBOM): This adds operating and maintenance to the design-build process, which can be DB or DBf. Payment for operation and maintenance is typically on a monthly basis based on performance, with security in the form of performance bonding or a letter of credit, equal to about the annual maintenance fee. The term is typically a relatively short 10 to 15 years. This provides incentive to the private sector to maintain the systems in good repair so that they are in a better position to be awarded the next operating and maintenance term. At the same time, this approach reduces the lifecycle cost to the private sector and the Region.

Design Build Finance Maintain (DBFM): A portion of construction payments are withheld and paid during maintenance to secure performance. This adds long-term maintenance and long-term financing to the DBf process for the portion of the construction costs that have been withheld. The Region pays the private sector for this withheld payment in installments over the length of the project term, subject to compliance with performance specifications. The term is typically 25 to 30 years to ensure that the lifecycle is covered. The 25-year lifecycle includes major capital refurbishment, including the full rehabilitation of civil infrastructure, vehicles and systems.

Design Build Finance Operate Maintain (DBFOM): This adds long-term operation to the DBFM process.

<table>
<thead>
<tr>
<th>Roles allocated to private sector by procurement option</th>
<th>DBB</th>
<th>DB</th>
<th>DBOM</th>
<th>DBf</th>
<th>DBFM</th>
<th>DBFOM</th>
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<tbody>
<tr>
<td>Preliminary design</td>
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<td>Detail design</td>
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<tr>
<td>Design and construction co-ordination</td>
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</tr>
<tr>
<td>Maintenance</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Lifecycle (major capital refurbishment)</td>
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<td>Operations</td>
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<tr>
<td>Short-term financing during construction</td>
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<td>Long-term financing</td>
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<td></td>
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<td>X</td>
</tr>
</tbody>
</table>

Generally, fare setting and ridership risk are retained by the Region. A small portion of ridership risk may be allocated to the private sector as a performance incentive under DBFOM.

6.2 Potential Evaluation Criteria for Procurement Options

Potential evaluation criteria for procurement and delivery options provide conflicting measures that must be balanced to find the best option for the Region. Potential evaluation criteria include:

- project cost;
- level of funding contributions from senior government;
- the Region’s experience and qualifications to fill the roles that could possibly be allocated to the private sector (does the Region have the ability to perform the roles required for the different options);
- incentives for private sector performance, including quality of product and service over the lifecycle;
- transfer of appropriate risks from the Region to the private sector that the private sector can price and mitigate or manage e.g. construction cost overruns. The transfer of risk is
also tied to incentives for performance in terms of on-time construction and long-term operational performance, including a consideration of the related performance security upon which the Region can rely; and
- operational and expansion flexibility in the long term.

Appendix A includes an initial comparison of some of the pros and cons associated with the procurement options. Staff will provide a more detailed evaluation of the various procurement options in a subsequent report to Council, in late 2011 or early 2012.

### 6.3 Potential Role of Infrastructure Ontario

Staff discussions with Infrastructure Ontario (IO) have confirmed that IO is interested in having a role with respect to the procurement of the Region’s rapid transit project. IO is a crown agency that has delivered many of Ontario’s public-private partnership (P3) projects for the provincial government. IO considers their role to be the delivery of infrastructure and partnership solutions through lending, project delivery, asset management and advisory services. IO is currently working with the City of Ottawa on the delivery of their rapid transit project. Staff will continue to evaluate procurement options and the potential role of a procurement agent such as IO.

### 7. Upcoming Rapid Transit Reports

Through the fall of 2011 and in early 2012, staff plan to bring forward rapid transit reports to Planning and Works Committee addressing:

- Rapid transit procurement;
- Rapid transit procurement consultant; and
- Rapid transit general engineering consultant.

### 8. Associated Initiatives

There are a number of other initiatives occurring concurrently with the rapid transit project that deal with integrating new development and rapid transit. Working collaboratively with Cambridge, Kitchener and Waterloo staff, a Corridor Development Strategy is being undertaken that will begin to define such matters as the land use expectations of the area municipalities in station areas and along the transit corridor, the primary activities expected in specific station areas and the visualization of what the corridor could look like as redevelopment occurs in the future. This work will be foundational for more detailed station area planning, which will significantly rely on the application of development tools by the area municipalities (e.g. zoning, site plan control, detailed design standards). A future report will be tabled with Regional Council on these and other matters, including the Region’s reurbanization “tool box”.

**CORPORATE STRATEGIC PLAN:**

The report supports Focus Area 3.1 of Council’s Strategic Focus: Develop an implementation plan for light rail transit including corridor and station area planning.

**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. The costs for Regional staff are included in the capital and operating and maintenance estimates.
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 – Preliminary Comparison of Procurement Options

PREPARED BY: Nancy Button, Director, Rapid Transit

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

Preliminary Comparison of Procurement Options

The most likely options for the delivery of the rapid transit project include:

- Design Bid Build (DBB);
- Design Build (DB);
- Design Build Finance (DBf);
- Design Build Operate Maintain (DBOM);
- Design Build Finance Maintain (DBFM); and
- Design Build Finance Operate Maintain (DBFOM).

The procurement and delivery options are compared in a stepwise fashion starting with DBB and ending with DBFOM because each option contains all of the pros and cons of the previous option plus a step of added features.

**DB compared to DBB:**

**Cons:**
- The Region has less control over the design process.

**Pros:**
- The private sector has more experience and qualifications than the Region in designing and constructing a light rail transit (LRT) system.
- Design and construction can proceed at the same time, with significant time savings.
- Coordination efficiencies provide strong incentives for the private sector to design an LRT system that can be constructed efficiently.
- Less risk of implementing a less-than-optimal project.
- Less risk of change orders during construction because of design coordination issues.
- Lower net present value of Regional capital and operating costs when the Region’s retained risks are included.

**DBOM compared to DB:**

**Cons:**
- Choices for who would maintain and/or operate any LRT expansion and choices for LRT integration with Grand River Transit (GRT) would be impacted by private sector operation of the first stage of the LRT system.

**Pros:**
- Provides for consideration of operations and maintenance costs during design and construction, which can introduce greater opportunities for cost savings through innovation, because the contractor will be responsible for operations and maintenance.
- Transfers operations and maintenance risk to a corporate counterpart secured by a letter of credit and/or bonding, each of which is priced based on the annual fee.
- The private sector has more experience and qualifications than the Region in maintaining and operating an LRT system at start-up.
- Greater experience to provide trained and certified staff to operate vehicles. Particularly for a small LRT system, it can be difficult to draw transit operators because it will be a smaller pool of operators and harder to schedule time off.


**DBf compared to DB:** All of the pros and cons of DB plus:

**Cons:**

- Higher capital cost to the Region because of risk transfer security in the form of the cost of private short-term financing during the construction period because the private sector’s borrowing costs are higher than the Region’s. The costs of short-term private financing may be mitigated by providing milestone payments during construction.

**Pros:**

- Less risk to the Region in design, procurement, construction and maintenance because of higher up-front due diligence because of private sector financial risks. Less risk of ambiguities in the project legal documents that could lead to disagreements at a later stage.
- Full co-ordination and control by the private sector results in less risk of change orders because change orders are difficult to get in public-private partnerships (e.g. requires approval of lender and Region).
- Less risk of construction contractor defaults because, in public-private partnerships, the private sector (project equity sponsor and/or the lender) is responsible to replace the construction contractor.
- Strong incentive for the private sector partner to complete construction on schedule because of deferment of payment until completion of construction or major milestones.
- Lower net present value of Regional capital and operating costs when the Region’s retained risks are included.

**DBFM compared to DBf:** All of the pros and cons of DBf plus:

**Cons:**

- Highest capital cost to the Region because of the cost of private long-term financing during the term of the project.
- Choices for who would maintain any LRT expansion would be impacted by private sector maintenance of the first stage of the LRT system.
- May cause integration issues between maintenance and operational components.
- Commitments to pay the contractor over the long term for debt and maintenance combined may affect Region’s credit rating.

**Pros:**

- The financing component gives strength to the contractual obligations; the contractor is less likely to default on their contractual obligations if the project goes poorly.
- Long-term capital providers will monitor private sector performance. The lender is introduced between the equity sponsor (e.g. builder) and the Region and many of the lender’s interests are aligned with those of the Region.
- Fixed maintenance costs for the term of the project, which are locked in during the bid process and require the consideration of lifecycle cost efficiencies as part of the design-build process.
- The private sector has more experience and qualifications than the Region in maintaining an LRT system at start-up.
- The longer project term (25 to 30 years) introduces a strong incentive for the private sector to meet maintenance standards through payments and penalties based on system performance and availability and introducing opportunities for innovation, and result in an LRT system in good working condition at the end of the project term.
- Lower net present value of Regional capital and operating costs when the Region’s retained risks are included.
**DBFOM compared to DBFM:** All of the pros and cons of DBFM plus:

**Cons:**
- Choices for LRT integration with GRT and for who would operate any LRT expansion would be impacted by private sector operation of the first stage of the LRT system.

**Pros:**
- The private sector has more experience and qualifications than the Region in operating an LRT system at start-up.
- Greater experience to provide trained and certified staff to operate vehicles. Particularly for a small LRT system, it can be difficult to draw transit operators because it will be a smaller pool of operators and harder to schedule time off.
- Strong incentive for the private sector to meet operational service standards through payments and penalties based on system performance and availability.
- Better accountability where performance and availability issues may be related to either maintenance or operation (no integration issues between operations and maintenance).
- Greater long-term asset quality.
- Lowest net present value of Regional capital and operating costs when the Region’s retained risks are included.

**Project term:**
The options that include long-term financing (DBFM and DBFOM) have a project term that defines the length of period over which the project is financed by the private sector. The project term could range from 15 to 25 or 30 years. The impacts of the project term include:
- The capital cost to the Region increases with the length of the project term because of the cost of private long-term financing over that term.
- Maintenance risk is reduced with a longer project term. A longer project term of 30 years more than covers one full lifecycle so that significant rehabilitation and replacement occurs within the project term.
- A longer finance period results in a lower net present value of Regional capital and operating costs when the Region’s retained risks are included, principally because of the transfer of lifecycle risks.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: A09-01

SUBJECT: GRT - SMOKING RESTRICTIONS

RECOMMENDATION:

For information.

SUMMARY:

NIL

REPORT:

Introduction

Earlier this year a delegation outlined their concern to the Planning and Works Committee regarding the impact of people smoking near GRT buses. Specifically, they asked to “have bus entrances second-hand smoke free”. Their concern was that second-hand smoke often flows into the buses causing a potential health impact to children, students and families using GRT. They requested a policy be introduced to address this concern and Committee members asked staff to prepare a report regarding this issue.

The purpose of this Report is to address the Region’s ability to regulate smoking at bus entrances, outline current practices and highlight changes that will be implemented to respond to the delegation’s concerns about second-hand smoke.

Legislative Background

The Region has three acts under which smoking could be regulated or prohibited. The legislation is as follows:

i. Smoke-Free Ontario Act
ii. Municipal Act, 2001
iii. Trespass to Property Act

The Smoke-Free Ontario Act prohibits smoking in enclosed public places and workplaces as well as certain prescribed locations such as schools. In effect, this Act prohibits smoking within GRT buildings, enclosed bus shelters and on buses.

The Municipal Act, 2001 allows municipalities to enact by-laws to regulate or prohibit smoking in public places and workplaces whether enclosed or outdoors. However, the Act specifically excludes the regulation of smoking on a highway. The Region’s Smoking By-law was enacted pursuant to the Municipal Act in September 1996. The Region’s Smoking By-law prohibits smoking in Regional buildings and transit vehicles. It does not prohibit smoking on highways because of the restriction in the Municipal Act, 2001.
The *Trespass to Property Act* (together with the natural person powers given in the *Municipal Act, 2001*) generally allows municipalities, like private land owners, to regulate the conduct of individuals on their property. The Region’s Code of Conduct By-law for GRT was enacted in October 2005. This by-law applies to all lands used by GRT and it prohibits smoking in any indoor or outdoor service line, public area or an area where “no smoking” signs have been posted. The By-law then allows the Region to use its rights under the *Trespass to Property Act* to enforce such.

**Current Restrictions and Suggested Changes**

GRT’s current practice in regard to smoking is as follows:

a) No smoking is permitted on any GRT vehicles / equipment;

b) No smoking is permitted inside the Ainslie Street and Charles Street transit terminal buildings as well as designated exterior “no smoking” areas at the terminals which include all building access doors and at a semi circle area located at the front door of each bus parking spot. Smoking is permitted in the remaining outdoor spaces at both of these transit terminals;

c) No smoking is permitted within enclosed transit shelters; and

d) Smoking is permitted at outdoor bus stops and at the outdoor platform areas at the five (5) GRT transfer terminals located in various shopping malls.

GRT does not intend to designate outdoor bus stops on highways as non-smoking based on the limitations in the *Municipal Act, 2001* and the enforcement difficulties associated with the 2900 bus stops across Waterloo Region. Instead an awareness program will be implemented asking people not to smoke near the front doors of the bus as a courtesy to those people onboard.

GRT will designate outdoor platforms at the five (5) GRT transfer terminals located in various shopping malls as “no-smoking”. GRT will rely on public awareness for enforcement.

GRT will also increase the “no-smoking” areas at the Ainslie Street and Charles Street transit terminals to include the majority of the outdoor platforms. GRT intends to allow restricted outdoor smoking areas away from waiting areas so that GRT patrons do not enter bus routes, highways or private property in order to smoke. The introduction of this broader outdoor smoking restriction at the two regional transit terminals will be promoted through a public awareness campaign. If necessary, enforcement can be used through the GRT Code of Conduct By-law and the *Trespass to Property Act*.

**CORPORATE STRATEGIC PLAN:**

Broadening the outdoor no smoking areas at the Regional Transit Terminals supports Strategic Focus Area 4; Healthy, Inclusive and Safe Communities.

**FINANCIAL IMPLICATIONS:**

The cost of an awareness program asking people not to smoke near the front doors of GRT buses at bus stops or shopping mall bus terminals along with promoting the new outdoor smoking sections at the two Regional transit terminals is estimated at $5,000. This cost can be accommodated through the Transit Services operating budget.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

The following departments have been consulted in the preparation of this report: Licensing and Enforcement Services, Facilities Management and Legal Services.
ATTACHMENTS

NIL

PREPARED BY: Eric Gillespie, Director Transit Services

APPROVED BY: Thomas Schmidt, Commissioner Transportation and Environmental Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: F05-31

SUBJECT: 2012 GRT REPLACEMENT BUS PURCHASE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo takes the following action regarding the Grand River Transit's 2012 replacement bus purchase:

a) grant pre-budget approval for the purchase of eighteen (18) transit buses prior to the approval of the 2012 budget.

b) accept the proposal from NovaBus, a Division of Prevost Car Inc., for the 2012 delivery of eighteen (18) diesel transit buses at a price of $9,716,051.88 including all applicable taxes.

c) authorize the issuance of debentures in an amount not to exceed $8,015,000 for a term not to exceed 10 years for this purchase.

SUMMARY:

In 2007, Regional Council accepted a proposal from NovaBus (Report: E-07-112) for the delivery of transit buses over the five year period from 2008–2012. This procurement approach was adopted to enhance the operational benefits of fleet standardization and provided a pricing advantage due to the longer term commitment. The proposal was accepted by Regional Council on the understanding that the quantity of buses ordered and the price will be determined annually subject to final council approval.

The production and delivery schedule for transit buses requires a lengthy lead-time from order to delivery and staff is requesting pre-budget approval to ensure the eighteen (18) buses are available when needed in 2012.

A separate request for the expansion buses needed to support a potential transit expansion in September 2012 will be presented during the 2012 budget process. Due to the delivery time required for new transit buses, the retirement of some of these buses scheduled for replacement in 2012 could be delayed to ensure vehicles are available to implement a transit service expansion should it be approved for a fall 2012 implementation.

REPORT:

Background

In 2007, Regional Council accepted a proposal from NovaBus, a Division of Prevost Car Inc., for the delivery of transit buses over the five year period from 2008–2012 (Report: E-07-112). This procurement approach was adopted to enhance the operational benefits of fleet standardization and provided a pricing advantage due to the longer term commitment. The proposal was accepted by Regional Council on the understanding that the quantity of buses ordered and the price will be
determined annually subject to final council approval.

Over past several years investments in preventative maintenance, quality assurance programs and the initial stages of implementing a 12 year replacement cycle for conventional buses have resulted in greater fleet reliability and reduced downtime. These improvements are translating into efficiency improvements and specifically reducing the number of buses needed as fleet maintenance spares. For 2012 one fewer bus is needed to maintain the daily bus deployment and results in a reduced capital expenditure of $486,000.

**Transit Fleet Accessibility**

Since the inception of GRT, all Regional bus purchases have been low floor accessible vehicles. These buses are easier for all passengers to board and exit as there are no stairs to navigate. This feature is particularly important to customers travelling with mobility devices or strollers. With the purchase of these replacement buses and retiring the oldest buses in the fleet, the entire fleet of 238 conventional buses will be low floor and fully accessible in 2012. In 2010 approximately 106,000 rides were provided to MobilityPLUS customers using accessible conventional transit buses.

On September 14, 2011 (P-11-071) Regional Council approved the implementation of advanced technology including automated auditable and visual stop announcements on an additional 37 buses. With the purchase of the replacement buses and the subsequent retirement of the oldest buses in the fleet this will mean all buses will provide automated stop announcements. These features greatly assist visually and hearing impaired customers with exiting the bus at the proper bus stop location.

**Clean Diesel Technology**

These buses operate on Ultra Low Sulphur Diesel fuel and are equipped with post emission control devices known as Continuous Regenerating Technology (CRT) which use particulate filters to reduce diesel emissions to levels comparable to compressed natural gas (CNG). To date 141 buses have been purchased with this technology. On an annual basis, these buses are estimated to have reduced approximately 67 tons of emissions from non-methane hydrocarbons, particulate matter, carbon monoxide and sulphur dioxide.

To meet the 2010 emission control requirements the new buses will also include a Selective Catalytic Reduction (SCR) system which, through the injection of a highly purified solution of urea and water into the exhaust system, converts the harmful nitrogen oxides of the exhaust gases into water and atmospheric nitrogen. This technology can deliver near zero emissions of nitrogen oxides.

**CORPORATE STRATEGIC PLAN:**

The purchase of the clean diesel buses supports Focus Area 1 – Environmental Sustainability: Protect and Enhance the Environment.
FINANCIAL IMPLICATIONS:

Based on the supplier’s confirmed purchase price from P2007-30 to purchase buses for delivery in 2012, the estimated cost to the Region for the supply of eighteen (18) diesel transit coaches as follows:

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>P2007-30</td>
<td>$ 8,598,276.00</td>
</tr>
<tr>
<td>HST</td>
<td>1,117,775.88</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>$ 9,716,051.88</td>
</tr>
<tr>
<td>Less: Municipal HST Rebate of 11.24%</td>
<td>( 966,446.22)</td>
</tr>
<tr>
<td>Total</td>
<td>$ 8,749,605.66</td>
</tr>
</tbody>
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Each of the eighteen (18) new buses will include passenger information displays, automatic stop announcement features, computer aided dispatch, a vehicle location system and an automatic passenger counting system.

The approved 2011 GRT Capital Program and 10 Year Forecast includes $10,800,000 for scheduled bus replacements in 2012 to be funded from a combination of debentures ($10,066,000) and the GRT vehicle reserve ($734,000).

Debenture authority in the amount of $8,015,000, which represents the estimated cost net of reserve funding, is required for this purchase.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Finance Department and Transportation Planning have provided input into this report.

ATTACHMENTS

NIL

PREPARED BY:  
Peter Zinck, Assistant Director Transit Services
Larry Smith, Financial Analyst

APPROVED BY:  
Thomas Schmidt, Commissioner of Transportation and Environmental Services
Angela Hinchberger, Acting Chief Financial Officer
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: E20-01

SUBJECT: GREEN BIN PROGRAM UPDATE

RECOMMENDATION:

For information

SUMMARY:

Nil

REPORT:

Full Scale Curbside Residential Program

The final phase of the three year (2008-2010) roll-out of the curbside residential green bin program was completed in November 2010 and targeted single family homes and townhouse complexes. Approximately 132,000 households across the Region now have access to this program. Monitoring of curbside collection indicates that:

- on average, close to 50 percent of households participate in the green bin program;
- of those households participating, the average number of garbage cans/bags placed for set-out has reduced significantly; and,
- contamination of green bin materials (i.e. plastic, metal, etc.) is well below 5%.

Given the voluntary nature of this program, the current level of participation is comparable to new/developing green bin programs in other communities. It is estimated that over 10,000 tonnes of organic waste will be diverted from the landfill through the curbside residential green bin program in 2011.

Green Bin Demonstration Projects – Multi-Residential and IC&I Properties

Report E-10-049 was approved by Council in May 2010 to undertake a green bin demonstration project for larger multi-residential buildings and a range of commercial and industrial properties. Between late fall of 2010 and spring of 2011, participants that have volunteered to be part of the demonstration program include:

- thirty five (35) large multi-residential buildings (apartments and townhouses) representing approximately 2,325 individual housing units;
- nine (9) commercial and institutional properties including an office complex, a church and food service providers;
- twenty nine (29) schools; and,
- forty-five (45) Regionally owned buildings.
Each participant has been given a number of 120 litre capacity collection carts as well as smaller internal bins to suit the needs of each type of property. Collection of the mid-sized cart organics is generally twice weekly to maximize tonnage and minimize collection truck routing.

The demonstration project is intended to serve two purposes:

- to confirm the suitability of the collection method and fine tune the program for larger multi-residential properties before adding in large multi-residential units to the full scale green bin program (subject to Council approval); and,
- to demonstrate that organic waste diversion from commercial and institutional properties can be practical and cost-effective, especially if a ban of organic waste from landfill is considered.

The demonstration project findings indicate:

- approximately 30 tonnes/month of organic waste material has been diverted from landfill;
- tonnage is typically greater from the food services industry and the multi-residential complexes as it is comprised of a greater volume of food waste; tonnage is somewhat lower at the schools and Regional buildings due to higher volumes of lighter weight paper-based organics; and,
- contamination varies from site to site with the highest levels observed in the multi-residential complexes.

The demonstration project is scheduled to run until the end of October, 2013. It is anticipated that upon conclusion, staff will have obtained sufficient information in order to determine a preferred approach for the addition of large multi-residential properties to the green bin program. Likewise, staff will be able to provide further information regarding the role the Region should play in encouraging the IC&I sector to divert green bin waste material from landfill.

Processing of Green Bin Material

A four year green bin processing contract was awarded to Aim Waste Management Inc. (Aim) in October 2009. Processing was originally done at the City of Hamilton owned processing facility but has recently shifted (beginning of October) to the newly commissioned City of Guelph processing facility. Both the City of Hamilton and City of Guelph facilities were designed, constructed and are operated by the same consortium of firms including Maple Reinders and Aim.

As directed by Council in 2009, staff entered into discussions with both the City of Guelph and City of Hamilton regarding a potential long-term contract as both cities expressed serious interest in providing longer-term processing capacity for the Region’s green bin material. In accordance with report E-10-020, the Region entered into a 10-year processing contract (with two optional five year extensions) effective October 2013 with the City of Guelph, to align with the end of the four (4) year Aim agreement. The Region is guaranteed 20,000 tonnes of processing capacity annually.

Next Steps

With the curbside residential program now fully rolled out across the Region, staff will be implementing a new promotion and education program this fall to increase participation. The new promotional program, referred to as the “Don’t Waste Another Day” campaign, will be broad-based and include the use of social media (Facebook, Twitter), print media (press releases, newspaper ads, community posters, billboards), TV commercials (CTV), videos (website/Facebook), green bin “thank-you” packages and GRT bus wraps.

In addition to the Don’t Waste Another Day campaign, a review of green bin programs in other
jurisdictions will be undertaken as part of the Division’s upcoming master planning project. This review will provide options for consideration such as bag limits, alterations to collection frequency and/or a landfill organics ban that could further increase program participation and tonnes diverted from landfill.

CORPORATE STRATEGIC PLAN:

This report has been prepared consistent with the Corporate Strategic Objective 1.3 of “Reducing the Amount of Waste Requiring Landfill.”

FINANCIAL IMPLICATIONS:

Nil

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Nil

ATTACHMENTS

Nil

PREPARED BY: Jon Arsenault, Director, Waste Management

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 18, 2011

FILE CODE: E03-20/C06-60/PWC/WS.11

SUBJECT: FEES AND CHARGES BY-LAW FOR WATER WORKS UPGRADE IN LLOYD BROWN (TOWNSHIP OF NORTH DUMFRIES)

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enact the Fees and Charges By-Law for the Lloyd Brown settlement area in the Township of North Dumfries, attached as Appendix A, pursuant to Report E-11-061.1, dated October 18, 2011.

SUMMARY:

In 2010, the Region extended the municipal water distribution system to 49 unserviced properties in the Lloyd Brown settlement area, in the Township of North Dumfries (from now on “Benefited Properties”). Staff recommends passing a fees and charges by-law to fully recover the costs from the 49 Benefited Properties when property owners opt to connect to the municipal system (from now on “Connection Charge”). The connection charges for this by-law will be as follows:

1) Single Family Dwelling (SFD) with water service lateral (41 units) $9,600.00
2) SFD without water service lateral (7 units) $8,400.00 + actual cost of lateral at the time of request
3) 1001 Orr’s Lake Road (7 equivalent SFD units) $65,500.00

REPORT:

Background

Based on discussions with the Township of North Dumfries, residents of the Lloyd Brown settlement, and the Ministry of the Environment (MOE), the Region initiated a project to extend the water distribution system to all unserviced properties in Lloyd Brown. On June 30, 2010, Regional Council awarded a construction contract for the above work (Report F-10-067). This project included extending water services to all unserviced properties within the Lloyd Brown settlement boundary at a total cost of $516,893.01 funded by the Region’s water distribution capital program. A summary of these costs is presented in Appendix B at the end of this report.

There were three categories of Benefited Properties from the watermain extension in the Lloyd Brown settlement area:

1) 41 SFD properties with water laterals extended to their property line.
2) Seven (7) SFD properties without water laterals installed.
3) One (1) multi-residential property (1001 Orr’s Lake Road) with 10 units serviced by one water lateral and one metering chamber.
The categories of Benefited Properties have been identified on a map in Schedule A of the proposed by-law in Appendix A. The multi-residential property on 1001 Orr’s Lake Road is equivalent to seven (7) SFD units. There are 10 units on the property, each treated as a townhouse, and each equivalent to .699 of a SFD as per Regional Development Charges. Therefore, 1001 Orr’s Lake Road is equivalent to seven (7) SFD Benefited Properties.

It is not compulsory for Benefited Properties to connect to the municipal water distribution system. However, each property owner will have to pay the Connection Charge in a lump sum before connecting to this system. For the Benefited Properties with laterals installed up to the property line (41 SFD units) the Connection Charge includes all water works within the municipal right-of-way up to the property line, and the cost to install the service lateral. The Connection Charge for the Benefited Properties without laterals installed (7 SFD units) includes only the water works within the municipal right-of-way. The actual cost for the installation of the laterals from the watermain to the property line will be charged at the time a water service connection for the property is requested. Properties without a water lateral are those along the existing transmission main on Roseville Road that expressed no interest to be connected to municipal water services in the short term. The Connection Charge for the multi-residential property on 1001 Orr’s Lake Road includes the water works within the municipal right-of-way for seven (7) equivalent Benefited Properties, the cost to install the service lateral, and a water metering chamber that was specially required by this property.

Appendix B shows a summary of all capital costs for the implementation of this project and details about the calculation of connection charges. The Connection Charge part of this by-law for each category of Benefited Properties is as follows:

1) SFD with water service lateral (41 units) $ 9,600.00
2) SFD without water service lateral (7 units) $ 8,400.00 + actual cost of lateral at the time of request
3) 1001 Orr’s Lake Road (7 equivalent SFD units) $65,500.00

The connection charges include all costs incurred on the public roadway. All costs for the installation of the water service within the boundary of the benefited property will be the responsibility of the property owner and are not included in the Connection Charge.

Subject to any needed readjustments pursuant to the proposed by-law, 100% of any recouped fees from the Benefited Properties are contributed to the Water Distribution Reserve Fund of the Water Services Division.

Public Consultation

On June 22, 2010, a Public Information Centre (PIC) was held for the Benefited Properties identifying the opportunity for extending water services to the whole Lloyd Brown settlement area. The estimated construction cost per property at the time was $11,000. At the same time, a survey was conducted to quantify the intent of the Benefitted Properties in connecting to the municipal system. Of the 49 benefitting properties, the Region received 39 responses: 10 expressed interest in connecting, and 29 expressed no interest in connecting at this time. The owner of 1001 Orr’s Lake Road has already negotiated with Region staff to expedite the water service connection to his property, and has already provided the necessary securities to cover the costs of this connection in advance of this by-law.

As requested by residents of Lloyd Brown, the Region held another PIC on September 15, 2011, to answer any further questions residents may have. The Township of North Dumfries also requested that Regional staff evaluate the possibility of providing financing to Benefitted Properties interested in connecting. A survey similar to one in the 2010 PIC was conducted, including an additional
question to quantify benefited property owners’ intent in connecting if financing would be provided. Five (5) property owners attended the meeting and filled out the survey. 36 other property owners submitted the survey by September 29, 2011. A total of 36 out of 41 property owners who submitted the survey expressed no interest in connecting to the municipal system at this time.

Costs to Be Recovered and Proposed By-law

The final cost for the extension of water services to the Benefited Properties in the Lloyd Brown settlement area was $516,893.01. These costs included all construction works, Regional staff costs, legal and survey fees, application fees and consulting engineering fees and were funded by the Water Distribution Reserve Fund.

In order to recover these costs, Region’s staff is proposing a fees and charges by-law where each benefiting property owner pays a proportionate share of the water extension described above. The Connection Charge must be paid in full once a property owner opts to connect to municipal water system. The recoverable costs as proposed in the fees and charges by-law amount to a total of:

1) 41 Benefiting Properties With Laterals $393,600.00
2) Seven Benefiting Properties Without Laterals $58,800.00*
3) 1001 Orr’s Lake Road $65,500.00

Costs to Be Recovered through Connection Charges $517,900.00

*Note: All associated costs for installing the water service lateral will be borne by the property owner at the time a water service connection is requested.

The proposed by-law is attached as Appendix A to this Report.

The original cost estimate, provided to residents at the June 2010 PIC, was $11,000 per benefited property. The final cost per property is less than initially estimated due to very competitive bids for this project.

The authority for the proposed by-law is Part XII of the **Municipal Act, 2001** which specifically allows municipalities to pass fees and charges by-laws to recover costs including those for the installation of capital works. Additional authority is also found in Part II of the **Municipal Act, 2001** which grants “natural person” powers to municipal corporations that are general in nature.

Additional Future Connections and Proposed By-law

The extension of water on Roseville Road, Hillside Avenue, Oakwood Drive, and Brown Avenue in the Lloyd Brown settlement area currently benefits 49 properties. However, there is potential for severance of some of the existing properties, and, therefore, potential for more connections to the municipal system. If that were to happen, and those property owners chose to connect to the municipal system, they would be subject to the proposed by-law under a provision where they would be subject to a fee of $8,400.00 for the installation of the watermain plus the actual cost of the installation of each water lateral from the watermain to the property boundary on the municipal roadway and within their property. Therefore any new properties that are created from severances will be treated as the SFD units without water laterals installed.
Public Notice of By-Law

In accordance with the Region’s Notice Policy (Class 2) letters were mailed on October 4, 2011, to all Benefited Properties advising them that the Region will be considering the proposed by-law at the October 18, 2011, meeting of the Planning and Works Committee and the October 26, 2011, meeting of Regional Council. A notice will also be posted on the Region’s Web Site and published in the Ayr News October 12, 2011, and in the Cambridge Times October 11, 2011.

Financing Arrangements for Water Service Connections:

Financing of connection charges for water works was provided by the Region and/or Local Municipalities (Municipal Providers) in situations when the connection to the municipal system was made mandatory. This occurred in systems where the MOE had ordered the Municipal Providers to take over ownership and operation of existing private systems. Fees and Charges By-Laws were passed by local municipalities for the systems in St. Agatha (Township of Wilmot), Breslau and Heidelberg (Township of Woolwich). A similar By-Law was passed by the Region for Heidelberg (Township of Wellesley side).

The Region also passed a Fees and Charges By-Law for water works completed on Northumberland Street, Village of Ayr, in the Township of North Dumfries. Funds for these works were partially up-fronted by a benefited developer and by the Region. In this case, connection was optional and no long term financing was provided. Any connection by a Benefited Property would require immediate payment to the Region prior to connection. Two of the 13 Benefited Properties have already paid the connection charge and connected to the municipal system.

The proposed By-Law does not require that Benefited Properties connect to the municipal system. For this reason, the proposed By-Law does not give the Benefited Property owners the option of paying the fees and charges over a period of time. This is the same structure as the Northumberland Street Fees and Charges By-law. Staff believes that benefited owners in the Northumberland Street area may perceive it as unfair if the benefited owners in the Lloyd Brown Subdivision are treated differently. Staff also believes that allowing payment over a period of time for non-mandatory connections would set a precedent for future fees and charges by-laws of a similar nature.

As a result of the September 15, 2011 PIC, 36 of 41 property owners who submitted the PIC survey expressed no interest in connecting to the municipal system at this time.

CORPORATE STRATEGIC PLAN:

This project meets the objectives of the 2011-2014 Corporate Strategic Plan Focus Area 2: Growth Management and Prosperity, to “manage growth to foster thriving and productive urban and rural communities.” Strategic Objectives 2.2 to “develop, optimize and maintain infrastructure to meet current and projected needs.” Action 2.2.1 to “continue to prioritize and implement capital program projects required to meet community needs and ensure sustainability.”

FINANCIAL IMPLICATIONS:

The total cost for the construction of the water works to service the Benefited Properties was $516,893.01 and was funded by the Water Distribution Reserve Fund. It is proposed that this amount be recovered from the benefiting property owners in the Lloyd Brown settlement area, Township of North Dumfries, when they opt to connect to the municipal water system. The connection charge, as per the by-law referenced in this report and attached in Appendix A, must be paid in full to the Region before the connection is permitted.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Corporate Resources (Legal) and Finance staff assisted in the preparation of the proposed by-law of this Report. Finance staff will manage the fund recovery program.

ATTACHMENT(S)

Appendix A – “A By-Law to Impose a Fee and Charge Upon Owner of Land Who Derive or Will or May Derive a Benefit from Water Works Sufficient to Pay the Municipal Portion of the Capital Cost of the Works”

Appendix B – “Summary of Water Works and Connection Charges on Roseville Road, Hillside Avenue, Oakwood Drive, Brown Avenue”

PREPARED BY:  Nathan Morris, Coordinator, Engineering and Planning

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
A By-law to Impose a Charge Upon Owners of Land Who Derive or Will or May Derive a Benefit from Water Works Constructed Along Certain Parts of Roseville Road, Hillside Avenue, Oakwood Drive and Brown Avenue, Township of North Dumfries

WHEREAS The Regional Municipality of Waterloo has undertaken the installation of water works to provide water services to certain lands along Roseville Road, Hillside Avenue, Oakwood Drive, and Brown Avenue in the Township of North Dumfries pursuant to its authority under the Municipal Act, 2001, S.O. 2001, c. 25, as amended;

AND WHEREAS persons who connect or have connected to the municipal services will receive an ongoing benefit.

AND WHEREAS The Regional Municipality of Waterloo has determined that it is desirable to recover a part of the municipal portion of the capital cost of the construction of the water works within the said benefiting area by imposing a charge pursuant to Section 391 of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, upon the owners of the lands who derive or will or may derive a benefit there from;

NOW THEREFORE THE COUNCIL OF THE REGIONAL MUNICIPALITY OF WATERLOO ENACTS AS FOLLOWS:

1. In this By-Law:

   (1) "lateral charge" means the charge for the installation of each water lateral which shall be:

   (a) $1,200 for each water lateral that has been installed within the Lloyd Brown benefiting area as of the date this By-law comes into full force and effect; or
   (b) the actual cost of the Region, including but not limited to costs for construction works, staff time, legal and survey fees, application fees and consulting engineering fees, for the installation of each new water lateral within the Lloyd Brown benefiting area after the date this By-law comes into full force and effect;

   (2) "Lloyd Brown benefiting area" means:

   (a) the properties shown on Schedule “A” attached to this By-law that are designated as Benefiting Properties; and
   (b) any other properties that lie along the water main with the exception of those designated as Serviced Properties on Schedule “A” attached to this By-law;

   (3) "main charge" means the charge for the capital cost of the water main which shall be deemed to be $8,400 per property;
(4) “owner” means the person or persons registered on title as the owner or owners of the property;

(5) “Region” means The Regional Municipality of Waterloo;

(6) “Treasurer” means the Treasurer of the Region, his or her designate, or any successor position;

(7) “water lateral” means the pipe within the municipal road allowance that connects the water main to a property; and

(8) “water main” means the municipal water main that runs along Roseville Road between 520 meters west of the Brown Avenue road centerline and 110 meters east of the Brown Avenue road centerline, Hillside Avenue, Oakwood Drive and Brown Avenue in the Township of North Dumfries.

PART I – MAIN CHARGE AND LATERAL CHARGE

2. (1) Every owner of a property within the Lloyd Brown benefiting area who is connected to the water main as of the date this By-law comes into full force and effect shall pay the Region a main charge and lateral charge within 30 days of the date of any invoice from the Treasurer.

(2) The Region may charge interest at the rate of 12% per annum against any owner who fails to pay the main charge and lateral charge within 30 days of the Treasurer’s invoice.

(3) Without limiting any other remedy, the Treasurer shall have all necessary authority to request that the treasurer of The Corporation of the Township of North Dumfries add any outstanding main charge, lateral charge and interest under this section to the tax roll to the property that was connected to the water and collect them in the same manner as municipal taxes.

3. (1) Where an owner of a property within the Lloyd Brown benefiting area requests in writing to the Region that its property be connected to the water main then the owner shall pay the Region a main charge and lateral charge.

(2) Every main charge and lateral charge imposed pursuant to subsection (1) of this section shall be paid in full to the Region before the connection is permitted.

4. For the purposes of this By-law, 1001 Orr’s Lake Road, Township of North Dumfries, and the 9 residences thereon, shall be deemed to be 7 properties with 5.8 laterals.

PART II – GENERAL

5. Schedule “A” shall form part of this By-law.

6. This By-law may be cited as the “Lloyd Brown Fees and Charges By-law”.

7. If any section or sections of this By-law or parts of it are found by any Court to be illegal or beyond the power of Council to enact, such section or sections or parts of it shall be deemed to be severable and all other sections or parts of this By-law shall be deemed to be separate and independent and shall continue to be in full force.
8. This By-law shall come into full force and effect upon final passing.

By-law read a first, second and third time and finally passed in the Council Chamber in The Regional Municipality of Waterloo this "Insert date" th day of "Insert Month", A.D., 2011.

________________________________________
REGIONAL CLERK

________________________________________
REGIONAL CHAIR
SCHEDULE “B”

Summary of Water Works and Connection Charges on Roseville Road, Hillside Avenue, Oakwood Drive, Brown Avenue

1. Capital Costs for the Project
   Capital Costs for the Watermain $461,987.87
   Capital Costs for the Water Laterals $ 49,414.71
   Capital Costs for the Water Meter Chamber @ 1001 Orr’s Lake Road $ 5,490.43
   
   Total Cost for the Project $516,893.01

2. Watermain Charge Calculation
   Capital Costs for the Watermain $461,987.87
   Benefited Properties 55
   - 41 SFD with water laterals
   - 7 SFD without water laterals
   - 7 equivalent SFD (1001 Orr’s Lake Road)

   Watermain Charge per Benefiting Property $ 8,400.00

3. Lateral Charge Calculation
   Capital Costs for the Water Laterals $ 49,414.71
   Benefited Properties 42
   - 41 SFD
   - 1 (1001 Orr’s Lake Road)

   Lateral Charge per Benefited Property $ 1,200.00

   Note: For Benefited Properties without an installed water lateral the actual cost for the installation of each lateral from the watermain to the property line will be charged at the time the water service connection is requested.

4. Connection Charges

   SFD with Water Service Lateral (41 SFD units)
   - Watermain Charge $ 8,400.00
   - Lateral Charge $ 1,200.00
   
   Total Charge per Benefited Property $ 9,600.00

   SFD without Water Service Lateral (7 SFD units)
   - Watermain Charge $ 8,400.00
   - Lateral Charge to be determined
   
   Total Charge per Benefited Property $ 8,400.00 + actual lateral cost

   1001 Orr’s Lake Road (7 equivalent SFD units)
   - Watermain Charge $ 8,400.00 x 7
   - Lateral Charge $ 1,200.00
   - Water Meter Chamber $ 5,550.00
   
   Total Charge per Benefited Property $ 65,500.00
Welcome to the Regional Municipality of Waterloo

Strange Street Water Supply System Upgrade

Class Environmental Assessment Update

Public Information Centre No. 2

Region of Waterloo

Please Sign In

October 20, 2011
PROJECT BACKGROUND

The Strange Street Water Supply System, in the City of Kitchener, consists of five wells, a storage reservoir, and a pumping station.

2001 – The Region of Waterloo (Region) completed the Kitchener West Side Water Class Environmental Assessment (EA)

2010 – The Region began updating the 2001 EA, now known as the Strange Street Water Supply Class EA Update

An update is required because:

• Changes have been observed in the efficiency of some of the existing wells
• Recent water supply trends have impacted the 2001 study
PROBLEM AND OPPORTUNITY STATEMENT

Confirm and update the preferred alternative from 2001, and address the known deficiencies shown in the figure below.

Ensure sustainable continuous supply of water from the Strange Street Well Field by:

- Confirming the supply capacity of existing wells and the need for new wells
- Confirming the required water treatment and watermain upgrades

STRANGE STREET PUMPING STATION
The project is being planned and implemented according to the Municipal Class EA process (June 2000), amended (2007). This project is being undertaken as a Schedule ‘C’ EA.

OUTCOME FROM PUBLIC INFORMATION CENTRE NUMBER 1

- Comments received indicated that the Knell Drive well location was not preferred by local residents
- Further hydrogeological investigation was completed and found that Gzowski Park was a viable alternative for the location of a new well
PROJECT TIMELINE

**May 2010**
- Notice of Project Initiation
- PIC No. 1

**June 24, 2010**
- Search for additional production well Locations

**Summer 2010**
- Evaluation of Design Concepts and Recommend Preferred
- PIC No. 2

**Spring 2011**
- Selection of Preferred Alternative
- Selection of preferred design concept
- Public input required

**Fall 2011**
- Regional Council Endorsement

**Spring 2012**
- Notice of Completion & Public Review

**Spring 2012**
- Completion of Design

**2012 - 2013**
- Implementation

Ongoing Consultation as Required

- File Environmental Study Report at Clerk’s Office for mandatory 30 calendar day public review period.
- Identify deficiencies in existing raw water system
- Consider, evaluate, and detail design concepts
- Recommend Preferred Design Concept
- Overview of Project Objectives
- Discussion of Preferred Alternative and changes were made based on feedback received
- Public Input Requested
### WELL WATER QUANTITY

Permitted pumping rate from the Strange Street Well Field is to an annual average of 122 liters per second (L/s) and a maximum day of 191 L/s.

<table>
<thead>
<tr>
<th>Well</th>
<th>Year Constructed</th>
<th>Original Design (L/s)</th>
<th>Current Maximum Rate (L/s)</th>
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<tr>
<td>K10A</td>
<td>1982</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>K11A</td>
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<td>60</td>
<td>60</td>
</tr>
<tr>
<td>K13</td>
<td>1946</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>K18/K19*</td>
<td>1975/2005</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>213</td>
<td>177</td>
</tr>
</tbody>
</table>

* Includes water for municipal supply and golf course

Well K13 has shown a decreased production rate since its original installation. This may occur in the other Strange Street Wells over time. The design objective is to achieve a capacity of 122 L/s.

The existing well field is meeting the capacity objective. A capacity of 151 L/s will allow for some decline in well capacity efficiency before the design objective is not met.
Based on the drilling results in the area the conceptual understanding of the overburden geology is presented below. The overburden geology is divided into aquifer and aquitard sequences. Aquifers are water bearing units and aquitards do not transmit water easily. All of the production wells in the Strange Street Well Field get their water from Aquifer 1.

AQUIFER PROFILE
Currently, water going to distribution from the Strange Street Reservoir meets the Ontario Drinking Water Standards Aesthetic Objectives (ODWS AO) for iron. Manganese concentrations are normally found to be close to the ODWS AO but have been detected slightly above. Concentrations above the ODWS AOs can lead to discoloured water and undesirable taste.
**EVALUATION PROCESS**

The following categories and criteria were used for the evaluation process:

- **Natural Environment**: Discharge of waste streams, Groundwater resource, Terrestrial environment, Environmental sustainability

- **Social Environment**: Acceptance of treatment, Noise and traffic impacts, Visual impacts, Neighbouring land use

- **Technical Environment**: Complexity of treatment, Integration into existing plant, Robustness and reliability, Operators experience, Established track record

- **Cost**: Capital costs, Operating and maintenance, Land acquisition, Overall lifecycle costs

- **Schedule**: Timing for implementation, approvals requirement, staging opportunities

**Quantity Objective**: Provide an efficient and reliable supply of potable water from the Strange Street Well Field for distribution to Zone 4 in Kitchener. The Strange Street Well Field will be designed to provide a capacity of 122 L/s. Equipment used at the Strange Street Reservoir and pumping station will be designed to meet corresponding objectives.

**Quality Objective**: Meet the Ontario Drinking Water Standards (ODWS) for all health related parameters. The Strange Street WSS will be designed to provide the required primary disinfection and to meet the ODWS Aesthetic Objective (AO) for iron and manganese.

An evaluation of each of the alternatives was completed by assigning a relative scoring to each criteria. The purpose was to provide a relative comparison to each alternative by assigning “quarter circles” and then summing the number of “quarter circles” with the highest total being the preferred alternative. Each criteria is weighted equally based on the legend with a “poor” rating having zero quarters and a “good” rating having four quarters.

Legend

- ![Good](image)
- ![Neutral](image)
- ![Poor](image)

- Good
- Neutral
- Poor
WATERMAIN ALTERNATIVES

Option A: Direct Replacement of Watermain

Option B: Reroute Watermain on Iron Horse Trail

<table>
<thead>
<tr>
<th></th>
<th>Option A</th>
<th>Option B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity Objective</td>
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<tr>
<td>Schedule</td>
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Along the Iron Horse trail there is a narrow railway bridge which will limit construction activity and an existing sanitary sewer which may limit the space available for the new watermain. It is also likely that existing trees and vegetation along the trail would be disturbed as a result of construction.
**WELL ALTERNATIVES**

**Option A:** Rehabilitate or Replace all Existing Wells
- K19: 79 L/s
- K18: 60 L/s
- K11A: 48 L/s
- K10A: 26 L/s

Total Maximum Supply Capacity = 187 L/s

**Option B:** Install Well at New Location at Present Time and Rehabilitate or Replace Existing Wells
- K19: 79 L/s
- K18: 60 L/s
- 40 L/s (New Well)
- 48 L/s (K13/13A)
- 26 L/s (K10A)

Total Maximum Supply Capacity = 227 L/s

**Option C:** Install Well at New Location in Future and Rehabilitate or Replace Existing Wells
- K19: 79 L/s
- K18: 60 L/s
- 40 L/s (New Well)
- 48 L/s (K13/13A)
- 26 L/s (K10A)

Total Maximum Supply Capacity = 227 L/s

<table>
<thead>
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<th>Quantity Objective</th>
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<th>Option B</th>
<th>Option C</th>
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<tr>
<td>Schedule</td>
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Replacement of K13 is recommended in all options to restore the capacity of the well and replace aging infrastructure. Although not currently needed, a new well may be required in the future due to declining well capacities.
### CHLORINE DISINFECTION ALTERNATIVES

#### Option A: Maintain Chorine Disinfection at Wells

- Sodium hypochlorite (NaOCl) simplifies the system and allows for optimization of operation and maintenance.
- Using a portion of the reservoir for contact time for disinfection makes use of existing infrastructure.
- Modifications to the existing inlet and outlet of the reservoir will be required to enhance contact time.

#### Option B: Chlorine Disinfection at Strange Street

Centralized disinfection with sodium hypochlorite (NaOCl) simplifies the system and allows for optimization of operation and maintenance. Using a portion of the reservoir for contact time for disinfection makes use of existing infrastructure. Modifications to the existing inlet and outlet of the reservoir will be required to enhance contact time.

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<tr>
<td>Schedule</td>
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HIGH LIFT PUMP ALTERNATIVES

**Option A:** Do Nothing - Use Existing High Lift Pumps

**Option B:** New High Lift Pumps

The existing high lift pump infrastructure is at the end of its service life and replacement is recommended. Additional operational and maintenance costs will occur if these pumps are not replaced.
Similar treatment is currently provided at other facilities in the Region of Waterloo (Region). Iron and manganese removal by pressure filtration is effective and well known to Region Operators.

Pressure filtration was the preferred alternative from the 2001 Class EA and is also recommended with the current water quality. No other alternatives are considered.
SUMMARY & PREFERRED DESIGN CONCEPT

- **Watermain** – Direct Replacement of watermain along Belmont Avenue

- **Well** – Install well at new location in future and rehabilitate or replace existing wells

- **Chlorine Disinfection** - Chlorine disinfection at Strange Street using existing reservoir for contact time

- **High Lift Pump** – Replace existing infrastructure and increase capacity

- **Iron and Manganese Treatment** – Install three (3) vertical pressure filters in existing building

The preferred design concept would make use of the existing building as much as possible. A small expansion may be required in order to accommodate all process and electrical equipment. Minimal alterations to the façade of the existing building would be required.
The tentative timing of the proposed recommendations is presented below:

2011/2012 – Completion of Strange Street Class EA.

2012 – Replacement of Belmont Avenue Watermain (from Glasgow Street to Gage Ave). Reservoir and disinfection upgrade at water treatment plant.

2013 – Replacement of Glasgow Ave Watermain (from Knell Drive to Westmount Road) as part of the City of Kitchener’s road reconstruction program.

2014 – Replacement of Glasgow Ave Watermain (from Westmount Road to Belmont Avenue) as part of the City of Kitchener’s road reconstruction program.

2013/2014 – New well Construction (K13A)

2015+ - Treatment Upgrades at the Strange Street Water Treatment Plant. Installation of new well, when needed (not shown).
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Commissioner

Region of Waterloo
Date: October 18, 2011

MEMORANDUM

To: Regional Councilors
From: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Signature: [Signature]
Subject: Homer Watson Boulevard and Block Line Road Roundabout
File No: T11-00(A)

Since the opening of the Homer Watson Boulevard Region staff have been closely monitoring its operation. There have been 26 collisions to October 4, 2011, including a severe pedestrian collision involving a Grand River Transit bus. This has caused significant concerns respecting the safety of the roundabout for both vehicles and pedestrians. The following steps have been taken to improve safety at the roundabout:

- Portable “Stop for Pedestrians at Roundabout” signs placed on approaches to the roundabout;
- Education program for students including brochures in school packages, videos shown in high school, and Region staff present at the roundabout during morning and afternoon peak student traffic times to provide instruction and assistance in crossing the roundabout;
- Appropriate signing and marking for the roundabout;
- Awareness campaign to educate drivers on how to drive roundabouts and interact with pedestrians; and
- Extensive police presence to ensure compliance with traffic laws.

After the opening of the roundabout the following additional actions were taken:

- Move the portable “Stop for Pedestrians at Roundabout” sign closer to the roundabout. This has made the sign both more visible and locates it closer to where driver action may be required. Continued presence of the portable signs for at least 3 months. Review of the further need for the signs to be at that time. Re-install portable signs prior to and for a period of time after the start of the school year next year and in subsequent years (completed);
- Remove the construction project sign. This has improved sight lines and reduced visual distraction and clutter (completed);
Region staff continued to be present at the roundabout in the morning and afternoon assisting students crossing till September 16th. Since then Region staff were at the roundabout for 3 days following the pedestrian accident and were at St. Mary's High School last Friday distributing roundabout safety brochures and answering student's questions. (completed);

Post speed warning signs prior to the roundabout. These signs are not an enforceable speed limit but do warn motorists of a suggested speed through the roundabout. The signs have been posted with a suggested speed of 30 kph in the roundabout. (completed);

Conduct a speed study of Homer Watson Boulevard to determine if a change in speed limit is warranted (completed by end of 2011); and

The location and size of existing signage has been reviewed and some minor changes were made to maximize visibility and effect (completed).

Region staff have reviewed the collisions that have occurred to determine if there is a common cause and what additional changes could be implemented to improve safety at the intersection. The majority of the collisions have been minor fender benders with most caused by vehicles entering the roundabout failing to yield to vehicles already in the roundabout. While staff have done a preliminary review of the severe pedestrian accident all of the information to complete the review is not yet available. Once the information is available staff will complete the review of the pedestrian accident.

Region staff have met with Waterloo Catholic District School Board (WCDSB) staff to hear their concerns with the roundabout and discuss possible changes to the roundabout. A wide range of changes including minor and major, immediate and long term changes were considered. WCDSB staff are in agreement with the changes listed below.

Based on the reviews that have been completed Region staff are proposing to make the following changes:

- Immediately remove some of the lane markings in the roundabout and widen the yield line on entry to the roundabout. This is intended to make drivers approaching roundabout more aware that they don't have the right of way and that they need to yield to vehicles in the roundabout;
- Install overhead "yield for pedestrians" signs on all legs of the roundabout. The signs would be installed as those described in Planning and Works Committee Report E-11-059 on August 16, 2011. A diagram showing the general layout of the signs is attached to this memo. It is intended to install the signs prior to the end of the construction season;
- Region staff will meet with Waterloo Regional Police to discuss ways to increase compliance with the requirement to yield including possible increased enforcement;
- Region staff are also reviewing the configuration of the southbound entry lanes to the roundabout. There may be changes that could improve yielding. The changes could include narrowing the existing lanes or temporarily reducing the number of entry lanes to two. If changes are warranted and depending what they are implementation would take a minimum of two months;
- A traffic safety expert is being hired to review the roundabout and the changes that have been made. This will provide an outside review of the roundabout and could result in additional or modified changes;
- Region staff continue to meet with WCDSB staff to review and address concerns; and
- Since the above noted measures will take some time to implement Region staff propose to immediately have two crossing guards on the north leg of the roundabout during the
morning and afternoon when high school students are going to and from school. Until crossing guards can be arranged with the City of Kitchener Regional staff would be present in the morning and afternoon to assist students in crossing. The crossing guards are intended as a temporary measure until the short and medium term changes noted above are implemented. The crossing guards will remain in place until at least the end of this year.

Region staff will continue to monitor the roundabout and will provide a detailed update report including any recommendations required to implement the proposals noted in this memo to Planning and Works committee on November 8, 2011.

If you have any questions please contact:

John Hammer (519-575-4401) Jhammer@regionofwaterloo.ca or

Thomas Schmidt (519-575-4734) Tschmidt@regionofwaterloo.ca

/ts
OTM Book 15, Proposed Draft Pedestrian Traffic Control Device,

Example Application
<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Requestor</th>
<th>Request</th>
<th>Assigned Department</th>
<th>Anticipated Response Date</th>
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<td>Staff report on emerging technology and current technology being used for traffic signal control</td>
<td>Transportation and Environmental Services</td>
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