REGIONAL MUNICIPALITY OF WATERLOO
PLANNING AND WORKS COMMITTEE
AGENDA

Note Time Change →
Tuesday, September 11, 2012
11:00 a.m.
(Time approximate; immediately following Closed Session)
Regional Council Chamber
150 Frederick Street, Kitchener, Ontario

1. MOTION TO RECONVENE IN OPEN SESSION

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

3. DELEGATIONS

a) Allan Clarke, resident, Re: E-12-076, Ira Needless Boulevard (Regional Road 70) at Yellow Birch Drive Intersection Reconfiguration

4. REPORTS – PLANNING, HOUSING AND COMMUNITY SERVICES

ADMINISTRATION

a) P-12-095, King/Victoria Transit Hub First Public Open House 1

COMMUNITY PLANNING

b) P-12-096, Monthly Report of Development Activity for July 2012 14

c) P-12-097, Region of Waterloo Central Transit Corridor Community Building Strategy Update 18

COMMUNITY SERVICES

d) P-12-098, Building Permit Activity, January to June 2012 26

TRANSPORTATION PLANNING

e) P-12-099, Amendment to Regional Municipality of Waterloo Controlled Access By-law #58-87 for a New Access to Regional Road #33 (Townline Road), City of Cambridge 32

f) P-12-100, Amendment to Regional Municipality of Waterloo Controlled Access By-law #58-87 for a Temporary Access to Regional Road #58 (Fischer-Hallman Road), City of Kitchener 36

g) P-12-101, City of Kitchener Fischer-Hallman Road Mixed Use Corridor Urban Design Brief 41
REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES

DESIGN AND CONSTRUCTION

h) E-12-085, Amendment to the Consulting Services Agreement for the Waterloo Wastewater Treatment Plant Upgrade

i) E-12-086, Class Environmental Assessment, Recommended Design Concept for Manitou Drive Widening, Bleams Road to Fairway Road, City of Kitchener

j) Fischer-Hallman Road Improvements, Bleams Road to Ottawa Street South, City of Kitchener - Information Package in Advance of PCC

k) Hutchison Road and William Hastings Line Improvements, Crosshill, Township of Wellesley - Information Package in Advance of PCC

l) Church Street Improvements, Barnswallow Drive to Herbert Street, Township of Woolwich - Information Package in Advance of PCC

TRANSPORTATION

m) E-12-076, Ira Needles Boulevard (Regional Road 70) at Yellow Birch Drive Intersection Reconfiguration

n) E-12-087, Removal of Raised Corner Islands on Myers Road (Regional Road 43), City of Cambridge

o) E-12-090, The Region of Waterloo 2011 Collision Report

p) E-12-092, Proposed Reserved Cycling Lanes on Erb’s Road (Regional Road 9) From Ira Needles Boulevard (Regional Road 70) to 260 Metres East of Notre Dame Drive (Regional Road 12)

WATER

q) E-12-096, Biosolids Heat Drying Facility - P3 Delivery

r) E-12-084, Kitchener Zone 4 Trunk Watermain Municipal Class Environmental Assessment – Notice of Completion

s) E-12-094, Natural Sciences and Engineering Research Council (NSERC) Chair Funding - University of Waterloo

t) Fountain Street North and Maple Grove Road Area Water Supply Class Environmental Assessment Study – Public Information Centre # 3

u) West Montrose Water Supply Class EA – Public Information Centre
5. INFORMATION/CORRESPONDENCE
   a) Memo, Provincial Places to Grow – Population and Employment Forecasts 252

6. OTHER BUSINESS
   a) Council Enquiries and Requests for Information Tracking List 253

7. NEXT MEETING – September 25, 2012

8. ADJOURN
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<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>September 25, 2012</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>
</tr>
<tr>
<td>October 16, 2012</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>Mon., Sep. 17, 2012</td>
<td>4:00 P.M. – 7:00 P.M.</td>
<td>Central Transit Corridor Community Building Strategy Open House – Presentation at 5:30 P.M.</td>
<td>Cambridge Centre for the Arts 60 Dickson Street Cambridge, Ontario</td>
</tr>
<tr>
<td>Tue., Sep. 18, 2012</td>
<td>4:00 P.M. – 8:30 P.M.</td>
<td>Central Transit Corridor Community Building Strategy Open House – Guest Speaker at 7:00 P.M.</td>
<td>Knox Church 50 Erb Street West Waterloo, Ontario</td>
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<tr>
<td>Thu., Sep. 20, 2012</td>
<td>4:00 P.M. – 7:00 P.M.</td>
<td>Central Transit Corridor Community Building Strategy Open House, Presentation at 5:30 P.M.</td>
<td>Project Storefront 220 King Street West Kitchener, Ontario</td>
</tr>
<tr>
<td>Thu., Sep. 27, 2012</td>
<td>4:00 P.M. – 8:00 P.M.</td>
<td>King/Victoria Transit Hub Public Open House</td>
<td>University of Waterloo School of Pharmacy 10 Victoria Street South Kitchener, Ontario</td>
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<td><strong>Transportation and Environmental Services</strong></td>
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<td>September 12, 2012</td>
<td>6:00 P.M.</td>
<td>Church Street Improvements, Barnswallow Drive to Herbert Street, Township of Woolwich - Information Package in advance of PCC</td>
<td>Elmira Mennonite Church, 58 Church Street West, Elmira</td>
</tr>
<tr>
<td>September 13, 2012</td>
<td>4:30 P.M.</td>
<td>Hutchison Road, Crosshill - Information Package in advance of PCC</td>
<td>Crosshill Mennonite Church, 2537 Hutchison Road, Crosshill</td>
</tr>
<tr>
<td>September 18, 2012</td>
<td>5:00 P.M.</td>
<td>West Montrose Class EA - PIC Information Package</td>
<td>Conestogo Public School, 1948 Sawmill Road, Conestogo</td>
</tr>
<tr>
<td>September 20, 2012</td>
<td>5:00 P.M.</td>
<td>Fountain Street North and Maple Grove Area Water Supply Class Environmental Assessment Study – PIC # 3</td>
<td>Water Services Operations Center, 100 Maple Grove Road, Cambridge</td>
</tr>
<tr>
<td>September 20, 2012</td>
<td>5:00 P.M.</td>
<td>Fischer-Hallman Road Improvements from Ottawa Street to Bleams Road - Information Package</td>
<td>John Sweeney Catholic School, 185 Activa Avenue, Kitchener</td>
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TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 11, 2012

FILE CODE: A23-20

SUBJECT: KING/VICTORIA TRANSIT HUB FIRST PUBLIC OPEN HOUSE

RECOMMENDATION:

For information.

SUMMARY:

On September 27, 2012, the Region and the City of Kitchener are co-hosting an open house from 4 to 8 p.m. at the University of Waterloo’s School of Pharmacy. The purpose of the meeting is to provide information to and get input from neighbouring property owners and residents and the broader community about the work that is being done now, and in the future, at the King/Victoria Transit Hub site.

The open house will feature information displays that will provide an overview on the 10 different initiatives related to the Hub site. City of Kitchener staff and Regional staff from each of the projects will also attend to answer questions. At 7 p.m., there will be a formal presentation that will focus primarily on two initiatives:

- The Region’s formal applications to the City of Kitchener to make changes to the City’s Official Plan and Zoning By-law for the King/Victoria Transit Hub site to allow for a broader range of uses, higher density and reduced parking at the site; and
- Preliminary Site Design Considerations and Proposed Station Area Access Plan for the Hub site that provides design and access concepts for consideration that will ensure the transportation infrastructure at the site will fit together to provide the best connections.

Amendments to both the City of Kitchener’s Official Plan and Zoning By-law are required to allow for a broader range of uses on the Hub site such as residential and ground floor commercial uses, higher density development and changes to the parking requirements. To support these requested amendments the Region has also prepared an Urban Design Brief that provides direction on urban design, and a Heritage Impact Assessment.

As the owner of the site, the Region has considerable influence in the development of this gateway property with high quality design and architecture, and as a state-of-the-art transportation facility.

The Preliminary Site Design Considerations and Proposed Station Area Access Plan provides design and layout options for the Hub site’s transportation infrastructure and interfaces with Rapid Transit, GO/VIA rail, Grand River Transit (GRT), local roads, buses, pedestrians and cycling routes. It includes features such as:

- A prominent pedestrian space along King Street that continues into a plaza and then into a Grand Hall in a building next to the railway;
- Generous sidewalk space;
- Dedicated cycling routes and cycling amenities such as racks and storage lockers;
- Ground floor retail, restaurants and services along the streets;
- Direct connections to Grand River Transit and the GO/VIA platform;
- Closing Waterloo Street to vehicles so there is more room for transportation functions and other development opportunities, but keeping it as a key access to the Hub for those arriving on foot or by bike; and
- New ‘streetscaping’ features such as trees, benches, lighting, shelters and planters. Streetscaping is primarily an Area Municipal responsibility within road allowances, and staff continue to discuss these options with City of Kitchener staff.

The Plan also includes design concepts for consideration that improve the initial designs for the King Street West grade separation project to help avoid the tunnel effect experienced by pedestrians, cyclists and people boarding and alighting transit that is typical of older rail underpasses.

Invitations to the open house have been mailed to property owners within 800 metres of the site, and Regional staff is working with City of Kitchener Ward Councillor Dan Glenn-Graham to ensure tenants in multi-storey buildings and commercial areas area also notified. In addition, the City will also be mailing notification of the Official Plan and Zoning By-law Amendment applications to all property owners within 120 metres of the property (in accordance with City Council Policy and Ontario Regulation). These letters provide more information with respect to the Official Plan and Zoning By-law Amendment application processes. The City of Kitchener and Regional notifications have been co-ordinated by City and Regional staff.

Communication staff at both the Region and the City of Kitchener will also notify the general public of the meeting through paid and unpaid media, social media channels such as Facebook and Twitter, and through notifications that will be sent using the various database of residents, agencies and businesses that have signed up to receive notifications related to transportation initiatives. The invitation that has been mailed to neighbours is attached as Appendix A.

Presentation materials that will be on display at the Open House are attached as Appendix B.

REPORT:

As described in Report #P-12-076 to the August 14, 2012 Planning and Works Committee, staff are continuing work on a number of initiatives for the Hub site, as well as other related projects, that are needed to prepare the Hub site for future redevelopment. The goal is to ensure the King/Victoria Transit Hub is not only a focal point for transportation in Waterloo Region, but also an attractive urban space that is both an iconic destination and a catalyst for future development in the area.

On September 27, 2012, the Region of Waterloo and the City of Kitchener are co-hosting an open house from 4 to 8 p.m. at the University of Waterloo’s School of Pharmacy (across the street from the Hub site) to provide information to and get input from neighbouring property owners and residents and the broader community about the work that is being done now, and in the future, at the Hub site.

The meeting will feature information displays that will provide an overview on the 10 different initiatives related to the Hub site. City of Kitchener staff and Regional staff from each of the projects will also be there to answer questions. At 7 p.m., there will be a formal presentation that will focus primarily on two initiatives:

- The Region’s formal applications to the City of Kitchener to make changes to the City’s Official Plan and Zoning By-law for the King/Victoria Transit Hub site to allow for a broader range of uses, higher density and reduced parking at the site; and
- The Preliminary Site Design Considerations and Proposed Station Area Access Plan for the Hub site that provides design and access concepts for consideration that will ensure the transportation infrastructure at the site will fit together to provide the best connections, as
well as safe and easy access to and from the site for pedestrians and cyclists, and those arriving by cars, buses and trains.

These initiatives are described in more detail below.

**Proposed Official Plan and Zoning By-law Amendments**

The site is now designated the Warehouse District in the City’s Official Plan, which permits industrial, office and commercial uses in mid-rise buildings. Residential within newly constructed buildings, institutional and general retail uses, however, are not permitted. The Warehouse District zoning that applies to the site aligns with the Official Plan permissions, and therefore does not permit residential or the full range of retail uses. The Warehouse District zoning sets a maximum amount of developable area of two times the lot area. As such, amendments to both the City of Kitchener’s Official Plan and Zoning By-law are required to allow for the creation of a high density mixed-use development on the Hub site.

The Region has submitted an Official Plan Amendment proposing that a Special Policy Area designation be applied to the Hub site. This Special Policy Area would allow for a broader range of land uses, such as residential and ground floor commercial uses, a higher scale of development, and changes to the parking requirements. The application also contains recommendations on urban design and a Heritage Impact Assessment, which has identified the original Rumpel Felt building (circa 1913) as significant from a heritage perspective and worthy of consideration for conservation.

The Hub site is currently zoned Warehouse District (D-6), which does not permit residential use of the site, or general retail on the ground floor of new buildings, and has a maximum scale of development of two times the lot area (with some increase possible if designated heritage resources are retained). The Region’s Zoning By-law Amendment application requests that the zoning be amended to allow residential, retail and research uses, adjust building setbacks and reduce parking requirements based on the availability of many transportation modes and the central location of the site. The Region is proposing that a special provision be applied in the Zoning By-law to prohibit residential use of the Site until a Record of Site Condition (RSC) is available to confirm that the site has acceptable soil conditions for this more sensitive use.

Several reports have also been completed to support the Region’s requested amendments, and were submitted to the City of Kitchener as part of the application process:

- A preliminary noise and vibration study was conducted that concludes it is feasible to develop residential units in the vicinity of King and Victoria Streets, as long as standard industry practices are used that are designed to reduce noise and vibration impacts;
- A Heritage Impact Assessment study was completed to define the built heritage of the site. This study recommends that the original portion of the Rumpel Felt building at the west end of the structure, built in 1913, be conserved. It does not recommend that subsequent additions to the building be retained. It should be noted that the future of this building is expected to be considered as the site’s ultimate design is finalized over the next few years. In the interim, Regional staff continue to keep the Rumpel Felt building secure through active property management; and
- An Urban Design Brief was prepared, in consultation with the City of Kitchener, to provide guidance on the overall design philosophy and principles that the Region expects to be used during the development of the Hub site. Urban design is a critical element, and the Urban Design Brief reflects the Region’s and the City of Kitchener’s shared vision of the Hub as a landmark gateway project.
Preliminary Site Design Considerations and Proposed Station Area Access Plan

The Preliminary Site Design Considerations and Proposed Station Area Access Plan provides conceptual design and layout options for the Hub site’s transportation infrastructure and interfaces with Rapid Transit, GO/VIA rail, Grand River Transit (GRT), local roads, inter-city buses, pedestrians and cycling routes.

The study was guided by a Working Group consisting of engineering and planning staff from both the City of Kitchener and Region of Waterloo. In addition, numerous meetings were held with other stakeholders representing the interests of active transportation, accessibility, rail operations and the surrounding property owners.

Everyone who will be using the Hub, whether they arrive by foot, bike, transit or car, will ultimately be a pedestrian. There will be a large volume of people travelling to/from the Hub and adjacent neighbourhoods and nearby destinations, as well as transferring between the various transportation modes at the Hub. Designing for these high levels of pedestrian activity was a key guiding principle in the development of the Site Design and Access Plan.

There are many functional elements that need to be accommodated at the Hub. These include the primary transportation-related elements:

- Light rail transit, running along King Street West and Victoria Street North and South;
- A relocated platform for GO trains and VIA trains;
- Layover space for intercity buses (including GO buses) and some GRT buses;
- Dedicated space for boarding and alighting GRT passengers;
- Passenger pick-up and drop-off (kiss and ride); and
- Vehicle parking to support development and an appropriate level of park and ride.

Overlaid on this is the need to optimize development potential on the site and surrounding areas in order to generate the level of activity that will ensure a vibrant pedestrian-oriented environment.

One of the key features included in the site design for consideration is the creation of a prominent pedestrian space along King Street West, which extends into a transit plaza and ultimately into the hub as a potential “Grand Hall”. Similar to the Uptown Station in Waterloo, it is envisioned that the transit plaza will become a gathering space for a wide range of activities. The site design also incorporates a south entrance which could connect future developments on the School of Pharmacy site and lands to the west.

The Plan also includes conceptual design features for consideration to make the hub a walkable destination such as generous sidewalk space, ground floor retail, direct connections to Grand River Transit and the GO/VIA platform, and enhanced streetscaping. These features will be refined as the design of the hub continues, including ongoing discussions with the City of Kitchener as streetscaping is a municipal responsibility.

Ensuring access to and from the Hub site for cyclists was also a priority. Using the City of Kitchener Cycling plan and draft Region of Waterloo Active Transportation Plan as a starting point, the Plan provides preliminary concepts to improve access for cyclists.

The possibility of a multi-use trail connecting the hub to the Iron Horse Trail and the Waterloo Spur (for which senior government funding is currently being sought by Regional Council) has also been identified in the Plan, pending further investigations to determine if it is feasible from a design perspective. In addition, the Plan includes for consideration amenities to support cyclists, such as large amounts of short-term and long-term parking, opportunities for bike sharing and facilities such as showers and lockers.
A review of the plans for the King Street Grade Separation was also undertaken as part of the Preliminary Site Design and Station Area Access Plan. King Street West currently crosses the rail tracks at grade. However, with the implementation of LRT and ultimately more frequent rail service, a grade separation is required. This separation will be created by lowering King Street West to pass under the rail corridor.

As part of the review of the original grade separation designs, the study team looked at different possible alignments options for LRT while considering how to avoid the tunnel effect experienced by pedestrians, cyclists and people boarding and alighting transit that is typical of older rail underpasses.

As a result of this review, the Plan includes different design concepts that improve the original concept. In developing the revised cross-section for King Street West, some trade-offs needed to be made in assigning space to different modes, given the limited right-of-way. These concepts will be considered by Regional staff working on the Rapid Transit project.

Finally, the Plan also recommends that Waterloo Street be closed to through traffic so that it no longer bisects the Hub site. The Plan recommends closing Waterloo Street in order to maximize opportunities for transportation functions and development potential, while maintaining it as a primary access for pedestrians and cyclists. In order to close Waterloo Street, a Schedule A+ Environmental Assessment is required. This process consists of a notification to adjacent land owners along with notification in local newspapers, and is currently being organized by Region and City of Kitchener staff. Once the process is completed, the request for closure would be sent to the City of Kitchener for final approval.

Other Related Projects
Display boards will also provide information about the following initiatives, all of which have been presented in previous Planning and Works reports and will be brought back to Regional Council in the future:

- **Class Environmental Assessment (EA) for the construction of the King/Victoria Transit Hub:** The Ontario government requires the Region to do an EA to assess potential impacts of the construction and operation of a Transit Hub. An EA is a regulatory process required for all significant transportation infrastructure projects and includes opportunities for public input.

- **Market Scope and Feasibility Study:** The Region has hired experts to look at how much demand there is in the market for different uses we may consider at the Hub site, and recommend possible site development options.

- **Rapid Transit:** The Region is building a rapid transit system with adapted Bus Rapid Transit (aBRT) service from the Ainslie Street terminal to Fairview Park Mall beginning in 2014, and Light Rail Transit service from Fairview Park Mall to Conestoga Mall beginning in 2017. For more information visit the rapid transit website at regionofwaterloo.ca/rapidtransit.

- **Community Building Strategy:** The Region is developing a strategy that will help shape how our community, especially in station areas, is planned and built around rapid transit. For more information, visit the website at centraltransitcorridor.ca.

- **Waterloo Street:** To accommodate GO Train service, Waterloo Street may need to be closed between the rail corridor and Victoria Street. The Region is completing the necessary studies in support of this closure, and will provide more details about when and how the street will be closed when they are finalized.
• **Realignment of Grand River Transit (GRT):** New GRT routes are now being designed and current bus routes are being realigned to complement the Region’s new rapid transit service.

• **King Street Reconstruction:** King Street West alongside the Transit Hub must be reconstructed so it runs beneath the railway tracks. This is called a grade separation because it separates activity on the rail corridor from the roadway, which will help meet future demand on both.

• **Weber Street Widening and Reconstruction:** The widening of Weber Street between College and Guelph Streets, and reconstruction of the road so that it runs under the railway tracks, will have an impact on the movement of people and vehicles in the neighbourhood, especially during construction in 2013 and 2014.

Invitations to the open house have been mailed to property owners within 800 metres of the site, and Regional staff is working with City of Kitchener Ward Councillor Dan Glenn-Graham to ensure tenants in multi-storey buildings and commercial areas area also notified. In addition, the City will also be mailing notification of the Official Plan and Zoning By-law Amendment applications to all property-owners within 120 metres of the property (in accordance with City Council Policy and Ontario Regulation). These letters provide more information with respect to the Official Plan and Zoning By-law Amendment application processes. The City of Kitchener and Regional notifications have been coordinated by City and Regional staff.

Communication staff at both the Region and the City of Kitchener will also notify the general public of the meeting through paid and unpaid media, social media channels such as Facebook and Twitter, and through notifications that will be sent using the various database of residents, agencies and businesses that have signed up to receive notifications related to transportation initiatives.

**Area Municipal Consultation/Coordination**

This Open House is being held as a joint meeting by the Region of Waterloo and the City of Kitchener. All the project work, including the scope across intersecting projects, is being undertaken in consultation with the City of Kitchener staff. In particular, (i) City of Kitchener Official Plan and Zoning Bylaw amendment applications and (ii) the joint promotion of the Hub site (to attract new economic development opportunities) are being jointly conducted. The City of Kitchener staff are also represented in steering committees and working groups of the component sub-projects.

**CORPORATE STRATEGIC PLAN:**

The Hub project will contribute, directly and indirectly, towards accomplishing the following Action Items of the *Region of Waterloo Strategic Focus 2011–2014*.

- **3.4.1** Implement the multimodal transportation hub at Victoria and King Streets.
- **3.2.1** Work with Local Municipalities and other stakeholders to expand an integrated and safe network of regional, local and off-road cycling and walking routes.
- **2.3.2** Continue to identify and support partnership opportunities that foster innovation and economic development (e.g. post secondary institutions, technology, manufacturing, food processing, etc.).
- **2.1.2** Work with area municipalities to develop and implement a comprehensive strategy to promote intensification and reurbanization within existing urban areas.
FINANCIAL IMPLICATIONS:

As reported in the June 2012 Periodic Financial Report, total spending to date on property relating to the Hub project is $6.8 million, which includes land acquisition and related costs, including land transfer taxes, commissions and consulting engineering fees associated with site redevelopment (including remediation, surveys and demolition). As part of a future Hub redevelopment strategy (to be considered by Regional Council), a detailed financing plan will be recommended.

Planning and consulting costs along with site operating, maintenance and repair costs associated with the ongoing development of the Hub project amounts to approximately $700,000 to July 2012 and will be funded from the RT/RTMP property tax commitment of 1.5% (1% net) per year to 2018. Ongoing site operating costs are being partially offset with revenues from building leases and parking space rentals.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff support has been drawn for various roles, including specialists and managers of component sub-projects, from Planning, Housing and Community Services and Facilities Management and Legal of Corporate Resources. Procurement activities are being processed with assistance from Finance. Staff from Rapid Transit are being consulted and closely coordinated within all intersecting scope and stages.

ATTACHMENTS:

Attachment 1 – Public Handout and Comment Form

PREPARED BY:  Keren Adderley, Coordinator of Communications and Marketing

APPROVED BY:  Rob Horne, Commissioner of Planning, Housing and Community Services
Welcome to the Open House for the King/Victoria Transit Hub!

Today’s event is being hosted by the Region of Waterloo and the City of Kitchener to provide you with an update on the work that is being done now, and in the future, at the Hub site. We would also like your input on two key initiatives:

- The Region’s formal applications to the City of Kitchener to make changes to the City’s Official Plan and Zoning By-law for the King/Victoria Transit Hub site; and
- The Preliminary Site Design Considerations and Proposed Station Area Access Plan for the Hub

We’ve also provided information displays on the many other projects underway that are related to the Hub site. Regional and City staff are here and available to answer any questions you may have.

Proposed Official Plan and Zoning By-law Amendments
Amendments to both the City of Kitchener’s Official Plan and Zoning By-law are required to allow for a broader range of uses, a higher scale of development, and reduced parking requirements on the Hub site.

The Region has submitted an Official Plan Amendment asking that a Special Policy Area designation be applied to the Hub site. This Special Policy Area would allow for additional land uses, such as residential and ground floor commercial uses, an increase in the scale of development and a reduction in parking requirements. It would also provide direction on urban design and recommends saving and reusing the original Rumpel Felt building from 1913.

The Region’s Zoning By-law Amendment application asks that the zoning be changed with the principal changes being to allow residential, retail and research uses, adjust the regulations for how far buildings must be set back from the street, and reduce the number of parking spaces that would need to be on the site because the site will be so well served by transit.

Preliminary Site Design Considerations and Proposed Station Area Access Plan
This study provides guidelines for how the site should be designed so that Rapid Transit, GO/VIA rail, Grand River Transit (GRT), local roads, buses, pedestrians and cycling routes all connect and work well at the Hub. This plan will help make sure the Hub is not only a focal point for transportation in Waterloo Region, but also an attractive urban space that will be a gateway to downtown Kitchener.
The Preliminary Site Design includes proposed features that will be further considered and refined as plans for the site develop, such as:

- A prominent pedestrian space along King Street that continues into a plaza and then into a Grand Hall in a building next to the railway;
- Generous sidewalk space;
- Dedicated cycling routes and cycling amenities such as racks and storage lockers;
- Ground floor retail, restaurants and services along the streets;
- Direct connections to Grand River Transit and the GO/VIA platform;
- Closing Waterloo Street to vehicles so there is more room for transportation functions and other development opportunities, but keeping it as a key access to the Hub for those arriving on foot or by bike; and
- New ‘streetscaping’ features such as trees, benches, lighting, shelters and planters (Streetscaping is primarily an Area Municipal responsibility within road allowances, so many of these features will need to be considered in consultation with the City of Kitchener).

The Plan also includes new design concepts for the King Street West grade separation project where King Street is being reconstructed to run underneath a new bridge for the railway tracks. These improvements were designed to help avoid the tunnel effect for pedestrians, cyclists and people using rapid transit that is typical of older rail underpasses.

The City of Kitchener is currently reviewing the Region’s applications to amend the City’s Official Plan and Zoning Bylaw and would like your input about the proposed changes before City Council makes any decisions. Additional information on the application is available online at kitchener.ca or at the Planning Division, 6th Floor, City Hall, 200 King St. W. in Kitchener.

Please use the attached comment form to give your feedback to the Region of Waterloo and the City of Kitchener. The comment sheet is also available online at regionofwaterloo.ca/transithub.
Public Open House – Sept. 27, 2012
COMMENT FORM

Please complete and hand in this sheet so that your views on the Official Plan and Zoning By-Law Amendments and the Preliminary Site Design Considerations and Proposed Station Area Access Plan can be considered. If you cannot complete your comments today, please take this home and mail, fax or email your comments to us by October 19, 2012. You can also complete this comment form online at regionofwaterloo.ca/transithub.

Becky Schlenvogt, Principal Planner
Region of Waterloo
150 Frederick St., 8th Floor
Kitchener, ON N2G 4J3
Fax: 519-575-4449
bschlenvogt@regionofwaterloo.ca

What do you like about the proposed Official Plan and Zoning By-Law amendments?
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What improvements do you suggest for the proposed Official Plan and Zoning By-Law amendments?
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In addition to the transportation uses, what other uses or activities would you like to see at the King/Victoria Transit Hub site?

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Any additional comments on the proposed Official Plan and Zoning By-Law amendments can be provided below:

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What are your first impressions of the Transit Hub concepts?

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What are your top three priority features that the Transit Hub must have to be useful to you? Are they part of the Transit Hub concepts?

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Do you see any features that are missing from the Transit Hub concepts that should be included?

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Thank you for taking the time to fill out this form. To ensure that we receive only one set of comments from each individual, staff can only consider comments if they include a name and address. All comments regarding this project are being collected under the authority of the Municipal Act to assist the Region of Waterloo and the City of Kitchener 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 become part of the public record. Questions regarding the collection of this information should be referred to the Region’s Project Manager.

Depending on comments received and issues raised, the City of Kitchener may hold another public meeting in the future to discuss the proposed Official Plan and Zoning By-Law amendments in greater detail with staff, the applicant and residents. If you submit written comments, you will receive notification of the time and date if a meeting is scheduled.

Name: ________________________________________________________________

Signature: ____________________________________________________________

Address: _____________________________________________________________

Phone: ______________________________________________________________

Email: ________________________________________________________________

Please provide an email address if you would like to be added to the Region’s electronic database for this project and receive email notices regarding project updates or future meetings.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 11, 2012

FILE CODE: D18-01

SUBJECT: MONTHLY REPORT OF DEVELOPMENT ACTIVITY FOR JULY 2012

RECOMMENDATION:


SUMMARY:

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

1. Approved the following part lot control exemption by-laws;
2. Draft approved the following plans of condominium;
3. Released for registration the following plan of subdivision and plans of condominium; and
4. Approved the following official plan amendments.

REPORT:

City of Cambridge

1. Registration of Draft Plan of Subdivision 30T-03102
Draft Approval Date: March 1, 2005
Phase: Phase 1C
Applicant: Greengate Village Limited
Location: Main Street and Dundas Street
Proposal: To permit the development of 93 single detached and 36 apartment units.
Processing Fee: Paid June 25, 2012
Commissioner’s Release: July 17, 2012

City of Kitchener

1. Registration of Draft Plan of Condominium 30CDM-11206
Draft Approval Date: September 20, 2011
Phase: Entire Plan
Applicant: 2014707 Ontario Inc. (Cook Homes)
Location: 2-16 Commonwealth Street
Proposal: To permit the development of 8 cluster townhouse units.
Processing Fee: Not applicable
Commissioner’s Release: July 13, 2012
2. **Registration of Draft Plan of Condominium 30CDM-09201**

   Draft Approval Date: December 8, 2009  
   Phase: Entire Plan  
   Applicant: Venkat Pao and Hargit Mangat  
   Location: 50 Westmount Road  
   Proposal: To permit the conversion of 31 existing townhouse units to condominium townhouse units.  
   Processing Fee: Not applicable  
   Commissioner’s Release: July 20, 2012

3. **Official Plan Amendment No. 93**

   Applicant: 1841362 Ontario Inc.  
   Location: 1 Adam Street  
   Proposal: To delete policies which specify a maximum height of 36 metres that shall apply to the site except for that portion of the site within 55 metres of the properties fronting Blucher Street, where a maximum height of 10.5 metres will apply.  
   Processing Fee: Paid May 9, 2012  
   Commissioner’s Approval: July 31, 2012  
   Came Into Effect: August 21, 2012

**City of Waterloo**

1. **Part Lot Control Exemption By-law 2012-075**

   Applicant: Heisler Homes Inc.  
   Location: Oak Park Drive  
   Proposal: To recognize and allow the creation of access easements.  
   Processing Fee: Paid July 6, 2012  
   Commissioner’s Approval: July 30, 2012

2. **Draft Approval of Plan of Condominium 30CDM-12401**

   Applicant: IN8 (Sage Developments Inc.)  
   Location: 4, 10 and 12 Hickory Street West and 310 Spruce Street  
   Proposal: To permit the development of 58 apartment condominium units.  
   Processing Fee: Paid June 29, 2012  
   Commissioner’s Approval: July 4, 2012  
   Came Into Effect: July 25, 2012

3. **Draft Approval of Plan of Condominium 30CDM-12403**

   Applicant: Coppertree Enterprises Ltd.  
   Location: 96 University Avenue West  
   Proposal: To permit the development of 28 apartment condominium units.  
   Processing Fee: Paid June 20, 2012  
   Commissioner’s Approval: July 13, 2012  
   Came Into Effect: August 3, 2012

**Township of North Dumfries**

1. **Part Lot Control Exemption By-law 2512-12**

   Applicant: 828543 Ontario Inc. and 839658 Ontario Inc.  
   Location: Vincent Drive, Ayr  
   Proposal: To permit the creation of 10 townhouse units.  
   Processing Fee: Paid July 5, 2012  
   Commissioner’s Approval: July 6, 2012
Township of Wilmot

1. Part Lot Control Exemption By-law 2012-42
   Applicant: Eastforest Homes Ltd.
   Location: Captain McCallum Drive
   Proposal: To permit the creation of 5 townhouse units and access easements.
   Processing Fee: Paid July 17, 2012
   Commissioner’s Approval: July 17, 2012

2. Official Plan Amendment No. 6
   Applicant: Tri-County Mennonite Homes
   Location: Boullee Street, New Hamburg
   Proposal: To redesignate lands to facilitate a parking lot expansion, partial building reconstruction and future expansion to the nursing home.
   Processing Fee: Paid July 10, 2012
   Commissioner’s Approval: July 13, 2012
   Came Into Effect: August 3, 2012

Residential Subdivision Activity January 2012 to July, 2012

<table>
<thead>
<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>
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<td>0</td>
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</tr>
<tr>
<td>Wellesley</td>
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<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.

For comparison, the following table has also been included:

Residential Subdivision Activity January 1, 2011 to July 31, 2011

<table>
<thead>
<tr>
<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
<th>Pending Plans (Units Submitted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Kitchener</td>
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<td>Wilmot</td>
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<tr>
<td>Region of Waterloo</td>
<td>645</td>
<td>56</td>
<td>10</td>
</tr>
</tbody>
</table>

*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 Consultations/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 1: Growth Management and Prosperity.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: Andrea Banks, Program Assistant

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
Report:  P-12-097

REGION OF WATERLOO
PLANNING, HOUSING AND COMMUNITY SERVICES
Community Planning

TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: September 11, 2012
FILE CODE: D10-20

SUBJECT: REGION OF WATERLOO CENTRAL TRANSIT CORRIDOR COMMUNITY BUILDING STRATEGY UPDATE

RECOMMENDATION:
For Information.

SUMMARY:
The Region of Waterloo’s rapid transit project has the dual objective of moving people efficiently and shaping the community by providing opportunity for greater development and investment in the rapid transit corridor. The Central Transit Corridor Community Building Strategy is the next step in the process of planning for investment and development along the corridor and within rapid transit station areas. It is intended to guide the preparation of future station area planning in the Area Municipalities. Regional Council retained Urban Strategies with sub consultants Nelson Nygaard and Colliers in February 2012 to complete this Strategy. Please see report No. P-12-012.

The development of a Community Building Strategy (the Strategy) includes the following four phases:
- Phase 1: Understanding the Regional Opportunity (complete)
- Phase 2: Exploring Key Relationships (complete)
- Phase 3: Describing a Strategy for the Corridor (underway)
- Phase 4: Finalizing the Vision

This report describes project progress to date and how the Strategy will be completed over the coming months. It also highlights the significant effort made to consult with various stakeholders and partners over the past six months.

Phases 1 and 2 are complete and Phase 3, Describing a Strategy for the Corridor, is currently underway. This Phase includes seven draft opportunity areas for community building along the corridor:
- Enhancing Mobility Throughout the Region. Including opportunities for: integrating iXpress and rapid transit, completing the cycling network, and connecting key destinations away from the corridor.
- Creating High Quality Urban Places. Including opportunities for: preserving and enhancing local characteristics, creating a public realm strategy, and identifying opportunities for new public spaces.
- Strengthening the Employment Opportunity. Including opportunities for: developing a corridor-wide investment strategy, enhancing access for employees, and connecting distant employment areas.
- Enhancing the Learning Experience. Including opportunities for: linking educational opportunities along the corridor, improving the walk to school and access to magnet schools, and supporting access to co-op opportunities.
- **Encouraging a Healthy, Inclusive Community.** Including opportunities for: locating community services in accessible locations, protecting stable neighbourhoods, and encouraging a diversity of housing types.
- **Greening the Corridor.** Including opportunities for: prioritizing streetscape enhancements, and establishing sustainability targets and low impact development standards.
- **Creating a Great Place to Visit.** Including opportunities for: creating a downtowns and centres strategy to market the five downtowns, a corridor-wide cultural strategy, and developing a transit-to-trails program.

Also as part of this phase, draft station area development typologies as well as 60-70 draft place-specific initiatives have been identified by the project team, which includes representatives from the Cities of Cambridge, Kitchener and Waterloo, and Regional staff (including the Rapid Transit division). These initiatives are intended to capitalize on investment in enhanced transit and will assist the Region and Area Municipalities in guiding the development and implementation of future work plans.

The draft strategies, opportunities and initiatives will be shared at three upcoming public consultation opportunities in September to gather public and stakeholder input. The details of these meetings are contained in this report.

Following the September public consultation process, the input received will be used to help shape Phase 4 of the Strategy. The fourth phase will occur over the next four months, and will include the refinement of the opportunity areas and place-specific initiatives. Importantly, it will also include the development of an implementation work plan. The work plan will identify priorities, roles and responsibilities, and where applicable, funding sources.

This phase will also include another opportunity for public input (tentatively planned for November), on the revised Strategy. A series of visual models and renderings, focusing on specific areas along corridor will also be presented. The visualizations, developed in consultation with the Area Municipalities, will be a key piece to help illustrate several examples of change that may occur over time as a result of implementing the Strategy.

After gathering input on the final Strategy in November, a Community Building Strategy report will be finalized and presented to Regional Council and offered to City Councils.

**REPORT:**

**Project Description**

To successfully implement the Rapid Transit Project and achieve reurbanization goals as established in the Provincial Places to Grow Growth Plan and the Regional Official Plan (ROP), a Central Transit Corridor Community Building Strategy (the Strategy) is underway. This is another step in the process of planning for development along the corridor and within rapid transit station areas. It is also intended to lay the foundation necessary for Area Municipalities to move forward with station area planning.

The completion of the Strategy will help the Region and the Area Municipalities to work collaboratively to establish a development-based vision for the rapid transit corridor that includes extensive input from the private sector and general public. This Strategy will inform future planning for development within the station areas, investment along the corridor, and some design of the rapid transit system itself, where appropriate. It will also help to ensure that development opportunities associated with rapid transit will achieve the Region’s strategic objectives as outlined by the 2011-2014 Strategic Focus. This includes:

- Encouraging compact, livable urban and rural settlement forms; and
- Implementing the light rail transit system in the central transit corridor fully integrated with an expanded conventional transit system.
The Strategy will establish a shared development-based vision for the corridor by outlining individual themes/strategies and a series of strategic actions/initiatives necessary to take advantage of the opportunities associated with the development of the rapid transit system that will arise over the next several decades. It is a first step in the various place-making exercises that will take place around the implementation of rapid transit and expanded transportation network - with the ultimate goal of making transit a great experience for all. For example, the Strategy will be used to inform and guide the preparation of detailed station area plans by the three Cities.

Further, this Strategy represents a critical next step, whereby the partnerships between all those involved in planning for rapid transit and the corridor can be strengthened, allowing for the continued coordination and communication as each partner moves forward. This includes the Region’s partner Area Municipalities, the public (including residents and business owners), the development industry, post-secondary institutions, financial institutions, utility providers and other key stakeholders.

Project Website
The website (www.centraltransitcorridor.ca) contains information and resources, news and media coverage, links to other related projects and project contact information. It also includes an interactive section where the public may view materials presented at past public events, including; consultant and speaker presentations, maps and display panels. There is also an opportunity to provide online comments. A Project timeline is also included as well as a detailed upcoming event schedule.

Storefront Space
A project storefront was established in April, 2012 at 220 King St. W., Kitchener to house project materials, provide a space to host discussions with various stakeholder groups and to act as a community resource for the public to drop in and have conversations with staff. The storefront will remain open regular weekly hours through the end of the year, Tuesdays 9:00 a.m.–1:00 p.m. Thursdays 12:00 p.m.–5:00 p.m. and Fridays 12:00 p.m.–4:00 p.m. The storefront was also open during special events held at the City of Kitchener (100th Anniversary, Cruising on King, Blues Festival) and is planned to be opened for additional events in 2012. A staff member is available during these times to speak with interested parties about the project. In addition, project working materials are available for review.

Upcoming Public Consultation
A series of Open Houses will be held in the three cities on September 17-20, 2012. These Open Houses will allow members of the public and key stakeholders to review the draft community building strategies and provide input. They will be a drop-in format with a presentation led by the consultant team starting at 5:30 p.m.

Upcoming public consultation opportunities include:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td><strong>Monday, September 17, 2012</strong></td>
<td><strong>Open House: Draft Community Building Strategies</strong></td>
</tr>
<tr>
<td>Cambridge Centre for the Arts, Cambridge (4 – 7:00 p.m.)</td>
<td></td>
</tr>
<tr>
<td><strong>Tuesday, September 18, 2012</strong></td>
<td><strong>Open House: Draft Community Building Strategies</strong></td>
</tr>
<tr>
<td>Knox Presbyterian Church, Waterloo (4 – 7:00 p.m.)</td>
<td></td>
</tr>
<tr>
<td><strong>Tuesday, September 18, 2012</strong></td>
<td><strong>Speaker Event: Karina Ricks, Nelson\Nygaard</strong></td>
</tr>
<tr>
<td>Knox Presbyterian Church, Waterloo (7 – 8:30 p.m.)</td>
<td>Moving by car and moving by rapid transit: Understanding the connection between greater choice and community prosperity</td>
</tr>
<tr>
<td><strong>Thursday, September 20, 2012</strong></td>
<td><strong>Open House: Draft Community Building Strategies</strong></td>
</tr>
<tr>
<td>Project Storefront, Kitchener (4 – 7:00 p.m.)</td>
<td></td>
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</tbody>
</table>
The September 18, 2012 Speaker Event will feature Karina Ricks with Nelson\Nygaard. In her former role as the chief transportation planner for Washington, DC, and with over 20 years experience connecting land use and transportation - Karina Ricks has first hand knowledge of what is needed to translate an ambitious vision into practical action on the ground. In her presentation, Ms. Ricks will provide insights on how providing more travel choices (from rapid transit to road improvements) combined with community building will help Waterloo Region continue to be a thriving, connected, and world-class community.

Work to Date

The Central Transit Corridor Community Building Strategy commenced in February, 2012 and is anticipated to be completed by December 2012. It includes four phases:

- Phase 1 - Understanding the Regional Opportunity (complete)
- Phase 2 - Exploring Key Relationships (complete)
- Phase 3 - Describing a Strategy for the Corridor (underway)
- Phase 4 - Finalizing the Vision

Phases 1 and 2 are now complete. Phases 3 and 4 will be carried out over the balance of 2012.

Phase 1 - Understanding the Regional Opportunity  (February – March 2012)

Status: Complete

The Central Transit Corridor Community Building Strategy was initiated in February 2012. Background work on the project included the review, analysis and assessment of numerous related studies, initiatives, and policy documents in order to gain a solid foundation from which to move forward. As part of this process, the Project Team also met with over 100 Area Municipal and Regional staff with an interest in the process to understand key relationships and connections with other initiatives that should be considered.

On March 24, media, politicians, key civic leaders, and the general public were invited to a launch event to kick-start the project. This event, in which several community leaders were invited to share their thoughts on the importance of community building, was intended to introduce the project and build momentum. It drew nearly 50 people, with the presentations also being made available online.

Following the launch event, a community visioning workshop was held on March 27th. This session was intended to provide the public with detailed information about the project process, and to allow them to discuss and explore the new opportunities for mobility, place-making and strengthening the community. It was also an opportunity to identify possibilities of what the introduction of rapid transit could mean for the people who live, work and recreate in the Region. Over 60 community members participated in the workshop.

In addition to the public events, a series of small group interviews with approximately 15 community stakeholders was also held over a three-day period in March. These interviews included community groups, institutions, the development industry, business leaders, and key agencies. The information gathered from these interviews were organized into challenges and directions in relation to key themes such as mobility, accessibility, economic development, tourism, education, health and social well-being, arts and culture.

The background review, workshops and interviews conducted during Phase 1 served to enhance the Team’s initial understanding of the Central Transit Corridor (CTC) and allowed the public to explore and define the opportunity for short and long term transformation along the CTC and beyond.
Phase 2 - Exploring Key Relationships (April – July 2012)

Status: Complete

Between April 24th and June 14th three “Exploring the Opportunity” Forums were held in Cambridge, Kitchener and Waterloo. These forums included a combination of detailed stakeholder workshops, open houses as well as a speaker series open to the general public. In all, over 133 participants contributed to the stakeholder workshops and over 280 people attended the three speaker events and open houses.

Stakeholder Workshops
As part of the Exploring the Opportunity Forum series, three in-depth stakeholder workshops were conducted using a combination of presentations, roundtable discussions and on-site physical 3D modeling.

- The first forum entitled “Enhancing Mobility” explored opportunities to enhance the way people move into and around the CTC. At this session, participants identified a series of broader principles for moving through the Region as well as a series of more specific principles and recommendations for unique places including neighbourhoods such as Westmount and Fairview, Employment Areas such as Northfield and the Cambridge Business Park.
- The second forum focused on the opportunities to “Create Great Places” along the corridor. These sessions explored how to capture the investment in transit to evolve key destinations, re-urbanize corridors, protect stable areas/great places, encourage transit supportive development, transform streets and street networks to move toward complete mobility and improve the quality of public spaces along the corridor. Using feedback received following Forum 1, participants discussed several key “places” including the downtowns, Hespeler Road, and Midtown and explored what creating great places might mean in a place specific way.
- Building on the previous sessions the final forum looked at opportunities for “Strengthening our Community”. These sessions were designed to capture, review and refine ideas related to strengthening region-wide assets including employment, culture, health, education, natural heritage, shopping, economic development, and connecting/linking the communities and Cities within the Region.

Open Houses and Speaker Series
In addition to the workshops noted above, an exciting open house and speaker series, held in each of the three cities, was developed to share work-to-date on the Strategy as well provide the public an opportunity to hear from international experts in the transportation and community building field. These speakers shared their own perspectives and experiences in order to encourage a broader based community dialogue on the full long-term potential of rapid transit in terms of mobility, place making and strengthening the Cities and Region. Speakers at these sessions included:
- Steve Cassidy, Director MRC McLean Hazel Ltd;
- G.B. Arrington, Principal Practice Leader for Parsons Brinckerhoff Place-making; and
- Sue Zielinski, Managing Director of SMART at the University of Michigan.

Outcomes
The Exploring the Opportunity Forums allowed the corridor to be “broken down” into a series of issues/parts for the purposes of understanding the implications of rapid transit for each as well as their relationship to each other. Input from participants provided the consultant and project team with strategies to integrate existing mobility initiatives into the CTC and contributed to the development of a series of strategies successfully used elsewhere to address challenges to community building.
Phase 3 - Describing a Strategy for the Corridor  (August – September 2012)

Status: Ongoing

The third phase of the process is currently on-going. This stage involves distilling and articulating the directions obtained thus far into a consolidated draft strategy, comprised of seven opportunity areas. The seven proposed opportunity areas that have been identified include:

- **Enhancing Mobility Throughout the Region.** Including opportunities for: integrating iXpress and rapid transit, completing the cycling network, and connecting key destinations away from the corridor.
- **Creating High Quality Urban Places.** Including opportunities for: preserving and enhancing local characteristics, creating a public realm strategy, and identifying opportunities for new public spaces.
- **Strengthening the Employment Opportunity.** Including opportunities for: developing a corridor-wide investment strategy, enhancing access for employees, and connecting distant employment areas.
- **Enhancing the Learning Experience.** Including opportunities for: linking educational opportunities along the corridor, improving the walk to school and access to magnet schools, and supporting access to co-op opportunities.
- **Encouraging a Healthy, Inclusive Community.** Including opportunities for: locating community services in accessible locations, protecting stable neighbourhoods, and encouraging a diversity of housing types.
- **Greening the Corridor.** Including opportunities for: prioritizing streetscape enhancements, and establishing sustainability targets and low impact development standards.
- **Creating a Great Place to Visit.** Including opportunities for: creating a downtowns and centres strategy to market the five downtowns, a corridor-wide cultural strategy, and developing a transit-to-trails program.

Also as part of this phase, draft station area development typologies (i.e. best approaches to developing in different parts of the community, such as downtowns and areas in transition) as well as 60-70 draft place-specific initiatives have been identified by the project team, which includes representatives from the Cities of Cambridge, Kitchener and Waterloo, and Regional staff (including the Rapid Transit division). These initiatives are intended to capitalize on investment in enhanced transit and will assist the Region and Area Municipalities in guiding the development and implementation of future work plans.

In addition to having a summary of the Strategy to date available for public review at each City Hall (Cambridge, Kitchener and Waterloo) during the week of September 3, 2012, a series of Open Houses will be held in each of the three cities on September 17-20, 2012. These Open Houses will allow members of the public and key stakeholders to review the draft material and provide feedback.

Phase 4 - Finalizing the Vision  (October – End of 2012)

Status: Upcoming

The fourth phase is expected to occur over the next four months, and will include the refinement of the opportunity areas and place-specific initiatives. Importantly, it will also include the development of an implementation work plan. The work plan will identify priorities, roles and responsibilities, and where applicable, funding sources.

This phase will also include another opportunity for public input (tentatively planned for November), on the revised Strategy. A series of visual models and renderings, focusing on specific areas along corridor will also be presented. The visualizations, developed in consultation with the Area
Municipalities, will be a key piece to help illustrate several examples of change that may occur over time as a result of implementing the Strategy.

**Initial Outcomes**

*Hosting Dialogue & Building the Constituency:*
The community and stakeholder sessions along with the *Exploring the Opportunity* Forums held during phases 1 and 2 have helped to build a broad-based constituency of community leaders, businesses, technology industry, development industry, mobility advocates, environmental leaders, and Area Municipalities. These groups will continue to provide support and input to the Region as the project proceeds.

*Community Building Strategies:*
Summaries and key directions from each of the sessions have been created and are built into the draft strategy. Scale models, diagrams and images from the sessions will be formatted into these summary documents.

*Station Snapshots*
Station “snapshots” for each of the 23 station areas have been developed. These snapshots bring together the setting, key market considerations, mobility considerations and city building opportunities.

**Next Steps**

It is anticipated that after the upcoming public consultation in September as part of Phase 3, additional opportunities for public consultation will be scheduled for November. After gathering input on the final Strategy in November, a Community Building Strategy report will be finalized and presented to Regional Council and offered to City Councils.

**Project Team**

A Project Team has been overseeing this work, which includes staff of the Cities of Cambridge, Kitchener, and Waterloo and Regional staff, including those from the Rapid Transit Office.

**Schedule**

This project will be completed over the next four months, concluding in December 2012.

**Area Municipal Consultation/Coordination**

Area Municipalities continue to play an important role in the implementation of the Central Transit Corridor Community Building Strategy. Staff from the Cities of Cambridge, Kitchener, and Waterloo participate both as part of the Project Team, as well as throughout the course of each Phase of the Strategy Development, through workshops, discussions and stakeholder interviews.

The Strategy will identify a number of potential initiatives, both public (Regional and Area Municipal) and private. This range of initiatives will provide a framework for future planning and implementation by each of the respective parties. The Region and Area Municipalities will be responsible for identifying their respective priorities and any required funding as appropriate.
CORPORATE STRATEGIC PLAN:

The Central Transit Corridor Community Building Strategy directly addresses Focus Area 2: Growth Management and Prosperity (Manage growth to foster thriving and productive urban and rural communities) and the Strategic Objective 2.1. Encourage compact, livable urban and rural settlement form.

Specifically it relates to Action 2.1.2. Work with area municipalities to develop and implement a comprehensive strategy to promote intensification and reurbanization within existing urban areas.

The Strategy also addresses Focus Area 3: Sustainable Transportation (Develop greater, more sustainable and safe transportation choices) and the Strategic Objective 3.1. Implement the Light Rail Transit system in the central transit corridor fully integrated with an expanded conventional transit system.

Specifically it relates to Action 3.1.1 Develop an implementation plan for Light Rail Transit including corridor and station area planning.

FINANCIAL IMPLICATIONS:

Funding is provided from the existing capital budget of Planning, Housing and Community Services and the Council-approved budget for project development expenditures related to Rapid Transit.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Rapid Transit, Transportation and Environmental Services has been consulted in work to date on the strategy, and participate on the study’s project team.

ATTACHMENTS:

NIL

PREPARED BY: Becky Schlenvogt, Principal Planner

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
REGION OF WATERLOO
PLANNING, HOUSING AND COMMUNITY SERVICES
Community Services

TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 11, 2012
FILE CODE: D07-40

SUBJECT: BUILDING PERMIT ACTIVITY, JANUARY TO JUNE 2012

RECOMMENDATION:
For information.

SUMMARY:
This interim report on building permit activity in the Region covers the first half of 2012. It reflects building permit data related to new construction (as provided by the Area Municipalities) for the period of January to June 2012. A subsequent yearend report on building permit activity will be compiled in early 2013, providing a summary of 2012 with comparisons to previous years, and further analysis.

Building permit activity across the Region was lower in the residential sector in the first half of 2012 over the same period in 2011. Residential permits were issued for 1,243 units in the first half of 2012, down 31.3% from the 1,810 units in the first half of 2011. The value of these permits also decreased 21% to $274.5 million from $349.2 million. The City of Kitchener issued the highest number of residential building permits (600); Cambridge and North Dumfries each recorded slightly more permits than the previous year for the same period.

New non-residential floor space increased 41% to 878,234 square feet from 621,308 square feet in the first half of 2011. However, the value of non-residential permits issued in the first half of 2012 decreased 46% to $183.3 million from $339.8 million in the same period in 2011. Notable non-residential projects in the first half of 2012 include permits for a new building for Grand River Transit (GRT) at Chandler Dr. in Kitchener ($25.5 million), and an addition to the Kitchener-Wilmot Hydro facility at 301 Victoria St. S. in Kitchener ($21 million).

Canada Mortgage and Housing (CMHC) reported in its Housing Now (2012) press release that overall, housing starts trended lower in the first half of 2012. Despite higher than usual starts within the first quarter due to greater apartment activity, the second quarter observed a lower trend within the Kitchener-Cambridge-Waterloo Census Metropolitan Area (KCW CMA). CMHC is forecasting an overall decline in 2013 nationally.

REPORT:
Building permit activity is one indicator of the strength of a local economy. This report summarizes building activity in both the residential and non-residential sectors for each Area Municipality in the Region of Waterloo, for the first two quarters of 2012 (January to March, and April to June). Building activity data for the same period in 2011 is provided for comparison. These figures are compiled by Planning, Housing and Community Services staff, based on data supplied by the Area Municipalities.
Comments on Residential Activity

- A total of 1,243 units were issued construction permits in the Region in the first half of 2011. Of these permits, 46% (566) were single detached units, 4% (46) were semi-detached, 19% (239) were townhouse units and 32% (392) were apartment units.

- The number of single detached units declined 18% from 692 units in 2011 to 566 units in 2012; semi-detached units increased 10% from 42 to 46; townhouse increased 51% from 158 to 239; and apartments units decreased 57% from 918 to 392.

- Apartment unit construction remained highly variable. There was a decline of 57% from 918 units in 2011 to 392 units in 2012 within the Region. Among the high value residential projects is an 8 storey apartment with 148 units at 1505 Ottawa St N. in Kitchener; a 12 storey apartment building with 58 units at 8 Hickory St; and a 6 storey mixed-use condominium with 63 units at 188 King St in Waterloo.

- Single detached units increased to 46% of new housing in the first half of 2012, from 39% in the same period of 2011. This change is primarily the result of a decrease in apartment activity in Kitchener (173 units) from a high level (618 units) in the same period last year.

- Senior’s housing continues to grow in the Region, with a new 6-storey retirement and care facility offering 145 beds, located at 30 Light Dr. in Cambridge. At $17 million, it is the highest value building permit issued among the residential housing projects. By comparison, in the first half of 2011, there were two similar senior’s housing projects in Kitchener and Waterloo.

- CMHC reported in its Housing Now publication that total starts were higher in first quarter but lower in second of 2012 when compared against the units built in similar quarters of 2011. CMHC described an overall lower starts trend, after peaking in last quarter of 2011. Single detached starts have declined with a continuing lowering trend. Apartment starts have also declined. There has been a moderate increase in semi-detached and townhome starts. The difference between municipal and CMHC reporting is the enumeration method. Municipalities count building permits, while CMHC counts the starts when building footings are poured.

- Figures 1 through 9 illustrate residential building activity in each Area Municipality by quarter. Building activity has declined with 567 fewer units, comparing the first half of 2011 to 2012. North Dumfries and Cambridge are the only municipalities with more units added in 2012 than in 2011. The trend by municipality in declining order is: North Dumfries (16); Cambridge (9); Wellesley (-3); Wilmot (-16); Woolwich (-53); Waterloo (-95); and Kitchener (-425).
Figure 3: First Quarter 2011 and 2012: Total New Residential Units By Township

Figure 4: Second Quarter 2011 and 2012: Total New Residential Units By Township

Figure 5: Total New Residential Units By Type, January - June *

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<td>32</td>
<td>86</td>
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<td>618</td>
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<td>6</td>
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<td>3</td>
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<td>918</td>
<td>392</td>
<td>1,810</td>
<td>1,243</td>
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* Permits cancelled during the year are reflected in this table

Figure 6: First Quarter 2011 and 2012: Total New Residential Construction Value By City

Figure 7: Second Quarter 2011 and 2012: Total New Residential Construction Value By City
Comments on Non-Residential Activity

- In the first half of 2012, institutional building permits accounted for 45% of total floor space; commercial 39%, and industrial permits 15%.

- The value of non-residential permits decreased 46% to $183.3 million from $339.8 million in the same period in 2011.

- The highest construction values for a project in the first half of 2012 by type are:
  - Institutional - $40.1 million for two permits for Grand River Transit (GRT): $14.5 million for an addition and renovation permit to the existing building (Building A) at 250 Strasburg Rd.; and $25.5 million for a new building permit (Building B) at 85 Chandler Dr. in Kitchener;
  - Commercial - $12 million for a new 4 storey office building with finished basement at 430 The Boardwalk in Waterloo;
  - Industrial - $21 million for an addition to Kitchener-Wilmot Hydro at 301 Victoria St. S. in Kitchener.

- Of the 14 permits with a construction value over $2 million, Kitchener had 5; Waterloo (5); Woolwich (3); and Cambridge (1).

Figures 10 through 18 illustrate non-residential building activity in each of the Area Municipalities. Non-residential building activity can be highly variable from year to year. Total floor space constructed increased 41% from 621,308 square feet in the first half of 2011 to 878,234 square feet in 2012.

### Figure 10: Total New Non-Residential Floor Space By Type, January - June*

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<tr>
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<th>Industrial</th>
<th>Institutional</th>
<th>Total</th>
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<td>2,867</td>
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<td>RMW</td>
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<td>344,431</td>
<td>110,420</td>
<td>135,754</td>
</tr>
</tbody>
</table>

*Values in square feet
Figure 11: First Quarter 2011 and 2012: Total Non Residential Floor Space By City

Figure 12: Second Quarter 2011 and 2012: Total Non Residential Floor Space By City

Figure 13: First Quarter 2011 and 2012: Total Non Residential Floor Space By Township

Figure 14: Second Quarter 2011 and 2012: Total Non Residential Floor Space By Township

Figure 15: First Quarter 2011 and 2012: Total Non Residential Construction Value By City

Figure 16: Second Quarter 2011 and 2012: Total Non Residential Construction Value By City

Figure 17: First Quarter 2011 and 2012: Total Non Residential Construction Value By Township

Figure 18: Second Quarter 2011 and 2012: Total Non Residential Construction Value By Township
Area Municipal Consultation/Coordination

Building permit data are collected by Area Municipal staff and submitted either electronically or in hardcopy. They are compiled by Regional staff for use in Regional development charge calculations, development tracking, forecasts, and reporting. Municipal staff is consulted for verification and insight into the data. Copies of this report will be circulated to the Area Municipalities.

CORPORATE STRATEGIC PLAN:

Tracking and reporting building permit activity contributes to Strategic Focus Area 2: Growth Management and Prosperity

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: Rehan Waheed, Planning Technician

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

DATE: September 11, 2012

FILE CODE: T15-40/33, C13-20/CA

SUBJECT: AMENDMENT TO REGIONAL MUNICIPALITY OF WATERLOO CONTROLLED ACCESS BY-LAW #58-87 FOR A NEW ACCESS TO REGIONAL ROAD #33 (TOWNLINE ROAD), CITY OF CAMBRIDGE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo Controlled Access By-law #58-87 be amended to include a permanent full movement access on the west side of Regional Road #33 (Townline Road) approximately 235 metres south of Concession 1, in the City of Cambridge, as described in Report No. P-12-099, dated September 11, 2012.

SUMMARY:

A new religious institution on Regional Road #33 (Townline Road) is being proposed and the owners have applied for Site Plan approval from the City of Cambridge (Appendix A). The subject property has an existing access onto Townline Road, however, this existing access is not in the preferred location for the redevelopment of the lands, nor does it conform to current Regional standards for an access onto a Regional Road. The proposed access would be located 235 metres south of Concession 1 in the City of Cambridge, on the west side of Townline Road (Appendix B). Townline Road is designated as a Controlled Access - Prohibited roadway under the Region’s Controlled Access By-Law #58-87. Therefore, an amendment to this by-law is required to permit the access.

Staff has reviewed this proposed access to Townline Road, confirmed visibility exceeds minimum standards, and recommends approval of the By-law amendment. The affected property owner and City of Cambridge staff support the location of the proposed access.

REPORT:

By-law #58-87, “A By-law to Designate and Regulate Controlled Access Roads”, was enacted to control the construction or alteration to the geometric design of any private means of access to a Regional road. All Regional roads are included in either Schedule “A” or Schedule “B” of the By-law. Regional roads included in Schedule “A” (Controlled Access – Prohibited), include arterial roads and freeways where access to these roads must be restricted due to high traffic volume and speed. All requests for changes to existing accesses or for new accesses require an amendment to the By-law. Regional roads included in Schedule “B” (Controlled Access – Regulated) include all remaining arterial roads within the Regional road system. Typically, these roads are front lotted with access available only to the Regional road or are comparatively lower volume roads.

Regional staff have reviewed and recommended approval of a site plan in the City of Cambridge at 1070 Townline Road for a proposed religious institution (Appendix A). The subject property is currently occupied by a single detached dwelling with a residential access to Townline Road. It is proposed that the existing residential access be closed and a new access meeting the Region’s
access standards be constructed to provide access to the new religious institution. The proposed access would be located approximately 235 metres south of Concession 1 in the City of Cambridge, on the west side of Townline Road, (Appendix B).

The owner, Regional and City of Cambridge staff support the location of the proposed access.

**Area Municipal Consultation/Coordination**

City of Cambridge staff supports the location of the proposed access.

**CORPORATE STRATEGIC PLAN:**

Managing access to the Regional Road system is integral to the development approval process and is represented in Focus Area 2: Growth Management and Prosperity: Manage growth to foster thriving and productive urban and rural communities.

**FINANCIAL IMPLICATIONS:**

The applicant for the proposed access will be responsible for the cost to construct the access, close the existing access and all related road improvements.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

Upon issuance of a Regional Access Permit, Transportation Engineering will issue a Regional Work Permit to perform works within the Regional right of way. Corporate Resources will be required to amend Controlled Access By-law #58-87.

**ATTACHMENTS:**

- Appendix A - Key map showing the location of the subject property
- Appendix B - Site plan showing the location of the proposed access and proposed amendment to Controlled Access By-law #58-87

**PREPARED BY:** Richard Parent, Transportation Planner

**APPROVED BY:** Rob Horne, Commissioner of Planning, Housing and Community Services
RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve an amendment to Controlled Access By-law #58-87 for a temporary all movement construction access on the east side of Regional Road #58 (Fischer-Hallman Road), approximately 256 metres north of Huron Road, in the City of Kitchener, as described in Report No. P-12-100, dated September 11, 2012.

SUMMARY:

Deerfield Homes Limited is proposing a residential development, Huron Landing, on the east side of Fischer-Hallman Road north of Huron Road in the City of Kitchener. Please see Appendix A. The proposed development includes the extension of Sienna Court through the development to intersect with Fischer-Hallman Road. The intersection will operate with right-in, right-out only traffic movements through the construction of a raised median on Fischer-Hallman Road. The development also includes an emergency access to Fischer-Hallman Road north of the proposed Sienna Court intersection. An amendment to the Region’s Controlled Access By-law #58-87 for the emergency access was approved by Regional Council on June 6, 2012 through report P-12-067. An amendment to the Controlled Access By-law is not required for the municipal street intersection of Sienna Street at Fischer-Hallman Road.

An existing residential property at 1680 Fischer-Hallman Road, which does not form part of the Huron Landing development, has an access to Fischer-Hallman Road which will conflict with the proposed Sienna Court intersection at Fischer-Hallman Road. In addition, this access will be restricted to right-in, right-out only traffic movements with the construction of the raised median noted above. Deerfield Homes representatives and Region staff, in consultation with City of Kitchener staff, are working with the property owner at 1680 Fischer-Hallman Road to determine if an access to Sienna Court can ultimately be created, allowing the closure of the existing access to Fischer-Hallman Road. This issue will be addressed as part of final site plan approval of the Huron Landing development by the City of Kitchener.

In the interim, in order to allow construction vehicles to access the site without proceeding through the neighbouring residential subdivision, Deerfield Homes has requested a temporary all movement construction access to Fischer-Hallman Road at the same location as the future emergency access with Fischer-Hallman Road, approximately 256 metres north of Huron Road. Please see Appendix B.

Regional Road #58 (Fischer-Hallman Road) is designated as a Controlled Access – Prohibited road from Regional Road #4 (Ottawa Street) to Regional Road #12 (New Dundee Road) in the Region’s
Controlled Access By-law #58-87. An amendment to this by-law is required for a temporary construction access prior to the issuance of an Access Permit by staff.

Region of Waterloo staff have reviewed the request for the temporary all movement construction access to Fischer-Hallman Road and recommend that approval be granted to amend the Region’s Controlled Access By-law #58-87 to permit the temporary access. City of Kitchener staff support the location of the proposed temporary construction access. The temporary construction access will revert to an emergency access upon completion of construction of the development.

REPORT:

By-law #58-87, “A By-law to Designate and Regulate Controlled Access Roads”, was enacted to control the construction or alteration to the geometric design of any private means of access to a Regional road. All Regional roads are included in either Schedule “A” or Schedule “B” of the By-law. Regional roads included in Schedule “A” (Controlled Access – Prohibited), include arterial roads and freeways where access to these roads must be restricted due to high traffic volume and speed. All requests for changes to existing accesses or for new accesses require an amendment to the By-law. Regional roads included in Schedule “B” (Controlled Access – Regulated) include all remaining arterial roads within the Regional road system. Typically, these roads are front lotted with access available only to the Regional road or are comparatively lower volume roads.

Deerfield Homes Limited is proposing to construct a 136 unit residential development called Huron Landing on the east side of Fischer-Hallman Road, north of Huron Road, in the City of Kitchener. Please see Appendix A. The site plan includes the extension of Sienna Court from the adjacent subdivision westerly to Fischer-Hallman Road. The intersection of Sienna Court and Fischer-Hallman Road will operate as a right-in, right-out only intersection through the installation of a raised median on Fischer-Hallman Road. The development also includes an emergency access to Fischer-Hallman Road north of the proposed Sienna Street intersection. An amendment to the Region’s Controlled Access By-law #58-87 for the emergency access was approved by Regional Council on June 6, 2012 through report P-12-067. An amendment to the Controlled Access By-law is not required for the municipal street intersection of Sienna Street at Fischer-Hallman Road.

The adjacent residential property at 1680 Fischer-Hallman Road, which is not part of this development, has an existing access that will conflict with the proposed Sienna Court intersection at Fischer-Hallman Road. In addition, the access will be restricted to right-in, right-out only traffic movements with the construction of the median extension on Fischer-Hallman Road. Deerfield Homes representatives and Region staff, in consultation with City of Kitchener staff, are working with the property owner at 1680 Fischer-Hallman Road to determine if an access to Sienna Court can ultimately be created, allowing the closure of the existing access to Fischer-Hallman Road. This issue will be addressed as part of final site plan approval of the Huron Landing development by the City of Kitchener.

In the interim, in order to allow construction vehicles to access the site without proceeding through the neighbouring residential subdivision, Deerfield Homes has requested a temporary all movement construction access to Fischer-Hallman Road at the same location as the future emergency access approximately 256 metres north of Huron Road. Please see Appendix B. Upon completion of construction of the development, the construction access will be closed and will revert to the emergency access.

Regional Road #58 (Fischer-Hallman Road) is designated as a Controlled Access – Prohibited road from Regional Road #4 (Ottawa Street) to Regional Road #12 (New Dundee Road) in the Region’s Controlled Access By-law #58-87. An amendment to this by-law is required for a temporary construction access prior to the issuance of an Access Permit by staff.
City of Kitchener Planning staff support the location of the proposed temporary construction access to Fischer-Hallman Road.

Staff has confirmed that the temporary construction access meets minimum standards and recommend the approval of the propose By-law amendment.

**Area Municipal Consultation/Coordination**

City of Kitchener staff support the location of the temporary construction access to Fischer-Hallman Road.

**CORPORATE STRATEGIC PLAN:**

Managing access to the Regional Road system is integral to the development approval process and is represented in Focus Area 2: Growth Management and Prosperity: Manage growth to foster thriving and productive urban and rural communities.

**FINANCIAL IMPLICATIONS:**

Deerfield Homes Limited will be responsible for all costs associated with the construction and maintenance of the temporary construction access to Fischer-Hallman Road.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

Corporate Resources would be required to amend Controlled Access By-law #58-87. Transportation Engineering would issue a Work Permit for any construction within the Fischer-Hallman Road road allowance.

**ATTACHMENTS:**

- Appendix A - Key Map showing the location of Proposed Huron Landing Subdivision.
- Appendix B - Location of the proposed access and proposed amendment to Controlled Access By-law #58-87.

**PREPARED BY:** Bruce Erb, Supervisor, Corridor Management

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

DATE: September 11, 2012

FILE CODE: D23-40/FHMUCDB

SUBJECT: CITY OF KITCHENER FISCHER-HALLMAN ROAD MIXED USE CORRIDOR URBAN DESIGN BRIEF

RECOMMENDATION:

For Information.

SUMMARY:

In August 2011, Kitchener Council adopted the Rosenberg Secondary Plan through City of Kitchener Official Plan Amendment No. 90. The Secondary Plan designates lands in Southwest Kitchener for a variety of uses and establishes a high level design vision for Fischer-Hallman Road, including that Fischer-Hallman Road south of Bleams Road acts as a “spine” and focal point for this part of the city. Importantly, the lands are planned to achieve high residential and employment densities. As part of the implementation of the Rosenberg Secondary Plan, the City has prepared a set of urban design guidelines for the planned mixed-use corridor along Fischer-Hallman Road between Bleams Road and south of Huron Road.

The Fischer-Hallman Road Mixed-Use Corridor Design Brief (Fischer-Hallman Brief), approved by Kitchener Council on June 25, 2012, includes recommendations for streetscape design, building design, public art, neighbourhood entrances, and natural and built heritage conservation. The guidelines emphasize the importance of designing for pedestrians, cyclists and transit users.

Finally, this section of Fischer Hallman Road is a Regional Road and the Regional Transportation Master Plan identified it for capacity improvements in the five to ten year period. The Fischer-Hallman Brief has been added to the City of Kitchener’s Urban Design Manual and is intended to be considered in the future Regional Road Environmental Assessment process for Fischer-Hallman Road south of Bleams and the design of new developments in the area. The Fischer-Hallman Brief is consistent with the Regional Council approved Context Sensitive Regional Transportation Corridor Design Guidelines, the Pedestrian Charter, the Regional Cycling Master Plan, the Draft Active Transportation Master Plan and the Transit Oriented Development (TOD) policies of the Regional Official Plan (ROP).

REPORT:

The City of Kitchener completed extensive planning studies for approximately 430 hectares of land in the southwest urban area, along Fischer-Hallman Road between Bleams Road and south of Huron Road (please see Attachment A). As a result of these planning studies, Kitchener City Council adopted the Rosenberg Secondary Plan (currently under appeal to the Ontario Municipal Board) which established a high level design vision for the Fischer-Hallman Road corridor.

An implementation policy in the Rosenberg Secondary Plan states that the City will prepare an Urban Design Brief for this section of Fischer-Hallman Road to expand the design vision established in the Plan, and to provide recommendations for the corridor design including streetscape design, building design, public art, gateway design and natural and built heritage conservation.
The vision of Fischer-Hallman Road Mixed Use Corridor in the Rosenberg Secondary Plan is as follows:

“Fischer-Hallman Road Corridor will function as a central spine for the Rosenberg Community. It will evolve into a transit-supportive corridor consisting of commercial activity, medium and high density residential, mixed use and office development. Although Fischer-Hallman Road will carry a high volume of vehicles, the needs of pedestrian, cyclists, and transit users will be a high priority, particularly through the neighbourhood areas of Rosenberg, which will have a different look character, and reduced traffic speed. The entire streetscape of Fischer-Hallman will have an overall sense of cohesion but will have distinguishable urban and natural character areas within it. Intersections which serve as neighbourhood entrance points will be inviting, attractive and reflect local neighbourhood character.”

All the design guidelines contained in the Fischer-Hallman Brief evolve from this vision. The design plan identifies Urban and Natural Character Areas. The Natural Character Areas intend to conserve, maintain, and enhance natural heritage features and landscapes, while the Urban Character Areas intend to accommodate medium and high density residential and mixed use developments oriented to the street.

The recommended urban built form in these guidelines is different from the existing form on the Fischer-Hallman Road corridor north of Bleams Road (please see Attachment B). The buildings are proposed to be located close to the street and entrances oriented towards the public realm with no blank building facades, sufficient front yard for landscaping and architectural projections. Accesses to residential developments will be permitted via private rear lanes and are encouraged to be consolidated for commercial/mixed use developments (please see Attachment C). The Urban Character Areas are envisioned as a walkable environment designed to be comfortable, interesting and inviting to pedestrians.

The design plan identifies the intersections along Fischer-Hallman Road as gateways and classifies them as either Community or Neighbourhood Gateways. The Community Gateways are envisioned to function as destinations and provide opportunities for commercial and employment uses. Neighbourhood Gateways are envisioned as vibrant lively places and intended to become inviting entrances into the neighbourhood. Furthermore, the design plan identifies cultural heritage resources, proposed trail connections, possible future transit stop locations, and desired street tree locations.

Fischer Hallman Road is a Regional Road. The Regional Transportation Master Plan identified the section of Fischer Hallman Road south of Bleams for capacity improvements in the five to ten year period. The guidelines established through Fischer-Hallman Brief (please see Attachment D) have been incorporated into the City’s Urban Design Manual, and are expected to be further implemented through the future Regional Environmental Assessment of Fischer-Hallman Road and through Planning Act applications as development occurs.

Conclusion:

The Fischer-Hallman Brief is an urban design guideline prepared for the planned mixed-use corridor along Fischer-Hallman Road between Bleams Road and south of Huron Road. The guidelines highlight the importance of designing for all road users including motorists, pedestrians, cyclists, and transit users.

The recommendations included in these guidelines for roadway elements design, and building design are consistent with the Context Sensitive Regional Transportation Corridor Design Guidelines, the Pedestrian Charter, the Regional Cycling Master Plan, the Draft Active Transportation Master Plan and the Transit Oriented Development (TOD) policies of the Regional
Official Plan (ROP). The Fischer-Hallman Brief is intended to be considered in future Fischer-Hallman Road Environmental Assessment and through future planning applications as development occurs.

**Area Municipal Consultation/Coordination**

The Fischer-Hallman Brief was a City of Kitchener initiated project led by City staff and approved by Kitchener Council. The project team consisted of staff from the City, and the Region’s Planning, Housing and Community Services and Transportation and Environmental Services staff.

**CORPORATE STRATEGIC PLAN:**

This report is aligned with Strategic Focus Area #2 “Growth Management and Prosperity, Manage growth to foster thriving and productive urban and rural community” including the objective to encourage compact livable urban and rural settlement. This report is also aligned with Strategic Focus Area #3 “Sustainable Transportation” including the objective to develop, promote and integrate active forms of transportation (cycling and walking.)

**FINANCIAL IMPLICATIONS:**

The capacity improvements (road widening) for the Fischer Hallman Road Corridor from Bleams Road to Plains Road are included in the 2012 Transportation Ten Year Capital Program and are funded from Development Charges (Construction Year, 2019). No funding is included in the capital project for other corridor enhancements such as decorative street lighting, increased landscaping, and street furniture and will require further discussion with the Area Municipalities regarding cost sharing.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

Staff from Transportation and Environmental Services also participated on the Fischer-Hallman Brief project team.

**ATTACHMENTS:**

Attachment A - Fischer-Hallman Road Mixed Use Corridor
Attachment B - Existing Built Form-North of Bleams Road
Attachment C - Proposed Built Form- Bleams Road to South Huron Road
Attachment D - Fischer-Hallman Road Mixed Use Corridor Brief

**PREPARED BY:**  Hanan Wahib, Transportation Planning Engineer

**APPROVED BY:**  Rob Horne, Commissioner of Planning, Housing and Community Services
Attachment A: Fischer-Hallman Mixed Use Corridor
Attachment B: Existing Built Form - North of Highway 7 & 8
Attachment C: Proposed Built Form - Bleams Road to South of Huron Road-
Attachment D: Fischer-Hallman Mixed Use Corridor Design Brief

4.8 FISCHER HALLMAN ROAD CORRIDOR

Overview
For the purpose of this Urban Design Brief the Fischer Hallman Road Corridor refers to the lands within the boundary defined on the enclosed Design Plan.

A Vision for the Fischer Hallman Road Corridor has been established and is contained in Part 1 of this Design Brief. All aspects of the Corridor design guidelines contained Part 2, 3 and 4 of this Design Brief have been prepared in accordance with this overarching Vision for the corridor so as to ensure an overall sense of cohesion.

Part 2 of this Design Brief pertains to the Character Areas of the corridor. More refined Design Visions have been established for the individual character areas comprising the Fischer Hallman Road Corridor. Detailed design guidelines for each character area have been developed to guide future decision making in order to achieve the character area visions and vision for the Fischer Hallman Road Corridor as a whole. Private realm guidelines are intended to be applied in the review of individual development applications. Public realm guidelines are intended to be considered for streetscape design through the Regional Environmental Assessment process and similar future municipal works opportunities.

Part 3 of this Design Brief pertains to the Gateways within the corridor. Gateways within the corridor have been classified into two typologies: Community Gateways and Neighbourhood Gateways. Detailed design guidelines have been prepared for the two Gateway typologies to clarify the design expectations for each.

Part 4 of this Design Brief identifies site specific considerations, as identified on the Design Plan for the Fischer Hallman Road Corridor.

It is intended that all of the General Corridor Guidelines contained in the Mixed Use Corridor Urban Design Brief and the Design Brief for Suburban Development and Neighbourhood Mixed Use Centres apply to lands within the Fischer Hallman Road Corridor.

It is intended that all parts of this Fischer Hallman Road Corridor Design Brief be considered together. Transitions between character areas and gateway typologies is a high priority. In areas of transition a combination of the applicable design guidelines may be appropriate. Site Specific considerations contained in Part 4 recognize unique site circumstances. In the event of conflicting guidelines, the direction in Part 4 of this Design Brief would take precedence.

Part 1 - Corridor Vision
Fischer Hallman Road Corridor will function as the central spine for the Rosenberg Community. It will evolve into a transit-supportive corridor consisting of commercial activity, medium and high density residential, mixed use and office development. Although Fischer Hallman Road will carry a high volume of vehicles, the needs of pedestrians, cyclists and transit users will be a high priority, particularly through the neighbourhood areas of Rosenberg, which will have a different look, character and reduced traffic speeds. The entire streetscape of Fischer Hallman will have an overall sense of cohesion but will have distinguishable urban and natural character areas within it. Intersections which serve as neighbourhood entrance points will be inviting, attractive and reflect local neighbourhood character.
Part 2- Corridor Character Areas

Urban Character Area Vision
The Urban Character Area of the Fischer Hallman corridor will promote compact mixed use development oriented to the street, transit and public sidewalk. It will be a walkable environment designed to be comfortable, safe, interesting and inviting to the pedestrian.

Public Realm - Streetscape Design Guidelines
The Fischer Hallman Road Environmental Assessment will help guide the future design considerations in the public realm. The public realm plays an integral role in the overall character of the streetscape. The public realm can be considered a sum of its component parts: the road way and the boulevard (which is comprised of several zones as illustrated below).

Road Way Guidelines
1. Consider water management and infiltration in the design of the road way.
2. Planned to be four lanes of through traffic.
3. Strive to maintain pedestrian friendly, walkable block lengths.
4. Right in/right out access to private developments are encouraged along Fischer Hallman Road subject to a Regional Road Access Permit.

5. Strive to improve connectivity and accessibility to local neighbourhoods by providing local street connections to Fischer Hallman Road with interval spacing of 200-250 metres between intersections.

6. Provide a dedicated cycling route along both sides of Fischer Hallman Road to accommodate cyclists travelling in both directions.

7. Consider traffic calming options, including curb extensions, bumpouts, on street parking and vertical cues (such as landscaped centre medians) to slow traffic speeds.

Landscaped center medians can narrow the perceived street width and provide a place of refuge at pedestrian crossings.

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6. Centre medians should be designed to provide sufficient soil volumes to support healthy tree growth in accordance with street tree best management practices.

7. Consider mid-block crossings at strategic locations to link neighbourhoods or to provide trail crossings to destinations.

8. Clearly demarcate pedestrian crossings and refuge locations.

**Buffer Zone Guidelines**

1. Utilities located within the Buffer Zone should be appropriately set back from the curb line.

2. The Buffer Zone should be adequately sized to minimize risk of damage to landscape treatments and site furnishings from passing traffic, maintenance vehicles and snow storage.

**Landscaping and Site Furnishing Zone Guidelines**

1. Sightlines should be regarded in the placing of all vertical elements in the streetscape, including street lights, landscaping, pedestrian-scaled lighting and other street furniture.

2. A high quality palette of the following streetscape elements will be considered to create a cohesive streetscape character:
   - Paving materials
   - Decorative street signs
   - Street furniture:
     - Garbage receptacles
     - Seating
     - Pedestrian-scaled lighting
     - Banner signage
     - Bollards
     - Bicycle Racks
     - Transit shelters

3. All of the above noted street furniture shall be:
   a) Located at regular intervals along the corridor;
   b) Located within the Landscaping and Site Furnishing Zone unless otherwise noted;
   c) Selected with regard for durability, ease of maintenance, compatibility with the local climate and availability for future replacement;
   d) Of a similar and complementary style;
   e) Of a coordinated palette of colours and materials that reflect the neighbourhood character (as shown above);
   f) Located so as not to obstruct the Pedestrian Clearway Zone and in locations which do not impede emergency and maintenance vehicles, including snow removal vehicles; and
   g) Located and oriented to optimize the pedestrian and transit-users’ experience (safety, comfort and convenience).

4. Encourage pedestrian-scaled lighting integrated with road way lighting (mid-pole luminaire attachments) or consider installing on decorative poles at intervals regular enough to cast sufficient illumination on the Pedestrian Clearway Zone. LED lighting is preferred.

5. Pedestrian-scaled lighting is a priority at neighbourhood gateway locations and crossings.

6. Landscaping in the Landscaping and Site Furnishing Zone may serve as a visual cue for passing motorists as a traffic calming tool.

7. Street trees in the Landscaping and Site Furnishing Zone are intended to create shade,
protection from wind, street spray and precipitation for pedestrians.

8. Street trees in the Landscaping and Site Furnishing Zone shall be planted at regular intervals dependent on soil volumes.

9. High branching street trees should be positioned to ensure there is no interference with large vehicular traffic or overhead lines. Canopies should be maintained at a minimum of 3 metres higher than the grade of the Pedestrian Clearway Zone for pedestrian comfort.

2. A wide, uninterrupted, unobstructed and barrier free Pedestrian Clearway will be provided along both sides of Fischer Hallman Road.

A clearly defined and uninterrupted multi-use trail can accommodate both cyclists and pedestrians (Kris Westwood)

Land Use Transition Zone Guidelines

1. Consideration may be given to encroachment agreements for architectural projects, signage, awnings, canopies, private street furnishings or outdoor displays into the public right of way if located entirely within the Land Use Transition Zone subject to City approval for City streets or Regional approval for Regional roads.

2. Transit stops and shelters should be designed in accordance with Grand River Transit Location and Design Guidelines. Encourage locating transit shelters near prominent building entrances in the Land Use Transition zone where reasonably practicable, or alternatively to be located in the Landscaping and Site Furnishing Zone.

Pedestrian Clearway Zone Guidelines

1. Dedicate space for pedestrians and cyclists for travel in both directions on both sides of Fischer Hallman Road separated from the road way. An uninterrupted multi-use trail on both sides of the road is one such option.
Private Realm - Streetscape Design Guidelines

The Design Plan for Fischer Hallman identifies residential and mixed-use/commercial streetscape areas comprising the Urban Character Area. The following design guidelines apply according to the streetscape area applicable to the subject site.
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Residential Streetscape</th>
<th>Commercial / Mixed Use Streetscape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot / Block configuration</td>
<td>Backlotting and sidelotting of residential development to Fischer Hallman Road or</td>
<td>Any blocks created should have sufficient frontage on Fischer Hallman Road.</td>
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<tr>
<td></td>
<td>neighbourhood gateway streets is not permitted.</td>
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<td></td>
<td>Long blocks of similar and/or concentrations of small lot frontage is discouraged.</td>
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<tr>
<td>Front yard and yard abutting a</td>
<td>Encourage front yard setbacks that are comparatively larger than front yards in the</td>
<td>Minimal front yard setback to ensure the building addresses the street. Locate buildings that are</td>
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<tr>
<td>street setbacks</td>
<td>commercial/mixed use streetscape areas to provide sufficient front yard for landscaping.</td>
<td>near transit stops closer to the street.</td>
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<tr>
<td>Building Placement</td>
<td>Prominent building entrances are to be oriented toward the public realm.</td>
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<td>Buildings to maintain a generally consistent street edge with subtle variations in</td>
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<td></td>
<td>setbacks.</td>
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<td></td>
<td>Siting and orientation of building(s) on a lot &amp; distribution of building heights and</td>
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<td></td>
<td>massing shall minimize the appearance of bulk, frame intersections and reduce impacts</td>
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<td></td>
<td>(shadow, overhang) on adjacent residential properties.</td>
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<tr>
<td>Front yard projections</td>
<td>Architectural projections (eg: steps, porches) in the front yard acceptable</td>
<td>Canopies, awnings and &quot;spillover&quot; uses (eg: restaurant patios, informal gathering places) in the</td>
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<tr>
<td></td>
<td></td>
<td>front yard encouraged.</td>
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<tr>
<td>Building height</td>
<td>Midrise building form encouraged. Heights will generally be between 3 to 6 stories with</td>
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<td>opportunities for taller buildings at locations specified by the Rosenberg Secondary Plan</td>
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<td></td>
<td>and Zoning By-law. Increased step backs and terracing of upper stories may be regulated.</td>
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<td></td>
<td>Subtle variations of building heights and rooflines are encouraged to create interest</td>
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<tr>
<td></td>
<td>along the streetscape.</td>
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<td>Ensure a compatible transition of building heights from buildings located in the</td>
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<td>corridor and the low-rise buildings in the adjacent low-rise neighbourhoods.</td>
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<tr>
<td>Street Enclosure</td>
<td>Massing of development will maintain a human scale and a 1:2 height-to-corridor ratio.</td>
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<tr>
<td></td>
<td>A podium base of 3 to 6 stories is considered appropriate with stepbacks for upper</td>
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<tr>
<td></td>
<td>stories.</td>
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<tr>
<td>Massing</td>
<td>Provide for interruptions of long spans of building mass along a streetscape to create</td>
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<td></td>
<td>permeable building blocks.</td>
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<td></td>
<td>Buildings will be oriented to reduce the appearance of mass and minimize shadow and</td>
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<td></td>
<td>overhang conditions on adjacent low-rise residential development.</td>
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<tr>
<td>Building Facades</td>
<td>Blank facades to Fischer Hallman and intersecting gateway streets are not permitted.</td>
<td>Encourage regular building openings for all facades addressing a street.</td>
</tr>
<tr>
<td></td>
<td>Corner lots will be developed with facades that address both street frontages.</td>
<td>Corner lots will be developed with facades that address both street frontages.</td>
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<tr>
<td></td>
<td></td>
<td>Ground floor facades, window openings, entrances &amp; outdoor patio areas may be regulated.</td>
</tr>
<tr>
<td>Materials/ articulation</td>
<td>High quality building materials and architectural articulation will be required for all</td>
<td></td>
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<tr>
<td></td>
<td>buildings fronting on Fischer Hallman and/or intersecting gateway streets.</td>
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<tr>
<td></td>
<td>Buildings at priority lots (gateways, corner lots, site of cultural heritage interest,</td>
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<td>village greens, neighbourhood parks or terminus sites) are encouraged to be designed as</td>
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<td>landmarks with architectural innovation.</td>
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<tr>
<td>Parking location</td>
<td>Structured parking is strongly encouraged.</td>
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<td></td>
<td>Surface parking lots should not be permitted in the front yard or yard abutting a</td>
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<td>street and may be further regulated through the zoning.</td>
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<td>Shared parking and internal accesses among uses and developments will be encouraged</td>
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<td>where appropriate.</td>
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</tbody>
</table>
## Urban Design Manual

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Residential Streetscape</th>
<th>Commercial / Mixed Use Streetscape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service areas</td>
<td>• Garbage facilities, parking, loading &amp; service areas will be designed and oriented to be hised from view from the public realm and adjacent low rise residential properties and to minimize adverse impacts on adjacent properties.</td>
<td></td>
</tr>
<tr>
<td>Access</td>
<td>• Access via private rear lanes or window streets may be considered to support planning objectives for streetscape, built form, and reduce conflict between multi-use pathways, cycling routes, sidewalks, driveways and transit.</td>
<td>• Consolidated access points may be encouraged as a measure to minimize impacts on traffic flow and to reduce the number of interruptions in the Pedestrian Clearway Zone. Connectivity internal to the site/block should also be considered.</td>
</tr>
</tbody>
</table>
| Transportation Demand Management| • Transportation Demand Management measures are encouraged for all development applications.  
   • Reduced parking requirements will be considered for all developments which achieve the objectives of the TDM Plan. |                                                                                                  |
| Landscape treatment in the front yard or yard abutting a street | • Soft landscaping treatments, including tree planting are encouraged. | • Hardscaping treatments (e.g. planter boxes) are encouraged. |
| Sustainable building strategies/ amenity space | • Private amenities may be provided in the form of rooftop gardens, private balconies.  
   • Solar panels, green roofs and other sustainable building design strategies are encouraged. | • Solar panels, green roofs and other sustainable building design strategies are encouraged. |
| Pedestrian scaled lighting      |                                                                                         | • Consideration may be given to integration of pedestrian-scaled lighting in building/site design where appropriate. |

* In the case of a residential development proposed within a Commercial/Mixed Use Streetscape area consideration of Residential Streetscape design guidelines may be appropriate.
Urban Character Area Streetscape
Potential Option (for illustrative purposes):
Off road multi-use trails, landscaped centre median, off street parking, residential and commercial frontages
Urban Design Manual

Urban Character Area Streetscape

Potential Development Options

Mixed Use Development
- Active uses at grade
- Regular building openings at the sidewalk
- Human scaled podium base with stepbacks to upper storesys

Commercial Development
- Curb extension to create semi-public plaza
- On street parking
- Articulated façades addressing both streets

Residential Development
- Soft landscaping within the front yard
- Pedestrian scaled lighting
- Front lotted development—driveways located at the rear

- Pedestrian Sealed lighting
- Landscaped centre median
- Wide, uninterrupted multi-use trail
- Parking areas screened from view
- Minimal front yard setbacks with landscaping to ammate Mixed Use street edge
- Relatively larger setbacks with softscaping along Residential street edge
Natural Character Area Vision
The primary focus in the Natural Character Area of the Fischer Hallman corridor will be to conserve, maintain and enhance natural heritage features and landscapes. This area will be characterized by a narrowed right of way with enhanced vegetation on both sides of the road. Opportunities to improve linkages between the Fischer Hallman corridor and the Huron natural area will be considered within this area.

Conserving the existing vegetation is a priority in this area.

Public Realm - Streetscape Design Guidelines
The Fischer Hallman Road Environmental Assessment will help guide the future design considerations in this area. The following public realm streetscape design guidelines provide high level design direction for consideration in this process.

Road Way Guidelines
1. Consider water management and infiltration in the design of the road way.
2. Minimize the width of the road way as a traffic calming measure and to minimize any impacts on the natural landscape.
3. Design of road way will maintain existing viewsheds (eg: to the Huron Natural Area).

Buffer Zone Guidelines
1. Utilities located within the Buffer Zone should be appropriately setback from the curbline

Landscaping and Street Furnishing Zone
1. Strive to conserve all existing vegetation.
2. Consider implementation of a naturalized streetscape treatment
3. Avoid introduction of any non-native landscaping.

Pedestrian Clearway Zone
1. Dedicate space for pedestrians and cyclists for travel in both directions on both sides of Fischer Hallman Road separated from the road way. An uninterrupted multi-use trail on both sides of the road is one such option.

Private Realm - Streetscape Design Guidelines
Policies in the Rosenberg Secondary Plan designate much of the Natural Character Area as open space and natural heritage, wherein private development is limited. The following guidelines apply for private development on lands in close proximity to the Natural Character Area.

1. Development in close proximity to the Huron Natural Area will maintain views and vistas to this key feature of the Natural Heritage and Open Space system.
2. Incorporate appropriate setbacks and buffers from natural heritage features including any significant habitat, if any.
3. Exercise environmentally responsible design and construction practices.
4. Maintain and enhance natural features and landscapes in building and site design.
Part 3 - Gateway Typologies
The Gateways within the Fischer Hallman Corridor are located at prominent intersections along the corridor. The Gateways are the primary cross-corridor connection points for pedestrians and cyclists and as such clearly defined pedestrian crossings are essential in these locations. The Gateways permit greater population and employment densities than elsewhere along the Fischer Hallman corridor. Most importantly, the Gateways serve a vital place making function. These are the locations where sense of place is instilled which helps define local neighbourhoods and/or the Rosenberg Community as a whole. Unless otherwise stated herein, the public and private realm principles of the Urban Character Area apply in the Gateways, and the additional guidelines for the Gateways contained herein also apply. There are two gateway typologies within the Fischer Hallman Mixed Use Corridor- Community Gateways and Neighbourhood Gateways. The following design guidelines apply according to the Gateway typology (as shown below):
Community Gateway Vision
Community Gateways will be destinations for the many residents and employees of the Rosenberg Community, providing a range of commercial and employment opportunities as well as transit hub connections to travel to and from other locations throughout the City. These community gateways will be key locations to express community identity and foster sense of place as the travelling public enters the Rosenberg Community.

Neighbourhood Gateway Vision
Neighbourhood Gateways will be vibrant lively places designed to reinforce neighbourhood character. These locations will become inviting entrances into the neighbourhoods. These gateways will be neighbourhood focal points; acting as gathering places for the residents of the surrounding area. Neighbourhood Gateways can be considered the local “Main Street” of the neighbourhoods they serve.
### Public Realm Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Community Gateway</th>
<th>Neighbourhood Gateway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place making capacity</td>
<td>• Intended to reinforce the sense of place of the City of Kitchener and/or Rosenberg Community as a whole</td>
<td>• Intended to reinforce the sense of place of the local neighbourhood</td>
</tr>
<tr>
<td>Land Use Transition Zone</td>
<td>• Minimal activity in this zone, not an optimal location for &quot;spillover&quot; uses</td>
<td>• Maximize use of this zone, promote &quot;spillover&quot; activity and social interaction</td>
</tr>
<tr>
<td>Right of Way design</td>
<td>• Higher volume of vehicular traffic.</td>
<td>• Lesser volume of vehicular traffic.</td>
</tr>
<tr>
<td></td>
<td>• Highly legible pedestrian crossings (including pedestrian refuge islands) are a top priority in road way design.</td>
<td>• Highly legible pedestrian crossings (including pedestrian refuge islands) are a top priority in road way design.</td>
</tr>
<tr>
<td></td>
<td>• On street parking not appropriate.</td>
<td>• Consider traffic calming options (such as bumpouts, onstreet parking) as a high priority in road way design.</td>
</tr>
<tr>
<td>Landscape and Site Furnishing Zone elements</td>
<td>• Will reflect the Rosenberg Community.</td>
<td>• Will reflect the local neighbourhood with some reference to the broader Rosenberg Community.</td>
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<tr>
<td></td>
<td>• Street trees should be planted at regular intervals along both Fischer Hallman Road and the intersecting street.</td>
<td>• Street trees should be planted at regular intervals along both Fischer Hallman Road and the intersecting street.</td>
</tr>
<tr>
<td>Gateway features</td>
<td>• Incorporate larger scale, more decorative entrance features such as decorative walls and pillars.</td>
<td>• Incorporate smaller scale, lower maintenance entrance features.</td>
</tr>
</tbody>
</table>

Prominent gateway features encouraged at Community Gateway locations to identify Rosenberg Community

Widened boulevard encouraged at a Neighbourhood Gateway to maximize activity in the land use transition zone (Don Boaden)
The following chart highlights the private realm characteristics which distinguish the two Gateway typologies.

**Private Realm Characteristics**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Community Gateway</th>
<th>Neighbourhood Gateway</th>
</tr>
</thead>
</table>
| Built form                              | • Balance of building heights on both sides of the street and at a scale that does not exceed 1:2 height to corridor width in order attractively frame the intersection.  
• Corner lot buildings to have articulated facades on both street frontages.  
• Landmark building design: architectural innovation and expression is encouraged. |                                                                                       |
| Ground floor use                        | • Active use                                                                      | • Active use, particularly restaurants and specialty retail.                          |
| Building orientation relative to Fischer Hallman Road | • Minimal setbacks; oriented close to Fischer Hallman Road                       | • Comparatively greater setbacks than Community Gateways.  
• Greater animation of private and semi-public space in front of the building particularly at the intersection. |
| Building orientation relative to intersecting street | • Generally similar setback as the setback to Fischer Hallman Road, in some cases lesser setback than to Fischer Hallman  
• Prominent building entrances will be oriented towards Fischer Hallman Road and interior to the site | • Lesser setback than the setback to Fischer Hallman Road; greater setbacks may be appropriate to accommodate outdoor patio areas  
• Prominent building entrances will be oriented towards the intersecting street (rather than Fischer Hallman Road) |

Opportunities for greater building heights at Community Gateway locations (Malinar Group)  
Minimal building setbacks along Neighbourhood Gateway intersecting street frontage (Dan Beals)  
Articulation of all street facing facades required along both Community and Neighbourhood Gateways
Part 4 - Site Specific Design Considerations
1. **Heritage Resource:** Conserve existing buildings and structures of historical or architectural significance or cultural merit. Development on adjacent lands will complement and where possible incorporate the heritage resource. Impacts to the heritage resource will be evaluated through the development review and Environmental Assessment processes.

![Heritage Resource Image]

Cultural Heritage Resource on the Municipal Heritage Register - 1940 Fischer Hallman Road

2. **Bleams Road-Heritage Road:** Consider an interpretive panel on the south side of Bleams Road to recognize the historical significance of Bleams Road and the Village of Williamsburg.

3. **Fischer Hallman and Bleams Community Gateway:** This Gateway is a destination for the Rosenberg Community for commercial and employment uses. It is an entrance point into Rosenberg from the north as well as an entrance point into Williamsburg from the south.
   a) Mid to high rise (8 to 10 storey) buildings are encouraged on easterly corners and lesser height (3 to 6 storeys) will be encouraged on westerly corners to ensure a compatible transition of building height from adjacent low rise residential area to the west. Mid and high rise buildings should maintain a human scaled podium base of 3 to 6 storeys with stepbacks of upper storeys to maintain a human scale and a 1:2 height-to-corridor ratio. High rise residential development south of the gateway must also maintain a similarly scaled podium base along Fischer Hallman Road with stepbacks to upper storeys.
   b) Buildings at this gateway will be oriented to Fischer Hallman Road with minimal building setbacks from the Fischer Hallman Road street line.

![Gateway Diagram]

Graduated increases in height from east to west along Bleams Road across Fischer Hallman Road

To reinforce the human scale a 1:2 height-to-corridor ratio (or 45 degree angular plane from the centre of the street) is encouraged

4. **Possible midblock crossing:** Consider a midblock crossing to improve east-west connectivity of neighbourhoods and linkages to the trail network.

5. **Fischer Hallman Road and Rosenberg Way Neighbourhood Gateway:**
   a) A top priority for this Gateway is to optimize connectivity and linkages to the trail network, the planned neighbourhood park to the east, the Huron Natural Area and the Huron Business Park. Consider incorporating this trail in the form of a multi-use trail in the design of Rosenberg Way.
b) Consider bump-out/curb extension to widen the Pedestrian Cleanway and Land Use Transition Zones and to create an opportunity for on street parking. On street parking is preferable on one side of the street on Fischer Hallman Road both north and south of the intersection during off peak hours and on one side of the street on Rosenberg Way both east and west of the intersection.

c) Orient primary building entrances with regard for siting of transit stop. Incorporate the transit stop in the Land Use Transition Zone if possible.

d) Building setbacks of up to 10 metres from the street line will be encouraged at the corner of Fischer Hallman Road to increase semi-public space and/or where necessary to accommodate outdoor commercial space (eg: patio or street retail). Parking will not be permitted within this setback.

e) Generally, minimal building setbacks will be encouraged along Rosenberg Way to promote a pedestrian-oriented streetscape. Consideration may be given to setbacks of up to 10 metres from the street line to increase semi-public space and/or where necessary to accommodate outdoor commercial space (eg: patio or street retail). Parking will not be permitted within this setback.

f) Incorporate public art, wayfinding signage and/or interpretive signage at trail connection e.g. to highlight landmarks, views and vistas and/or to provide information about the Huron Natural Area.

g) Building facades of corner buildings to address both streets but to be oriented towards Rosenberg Way.

h) Live/work developments will be encouraged along Rosenberg Way.

i) Midrise buildings of up to 5 storeys in height permitted on the west side of the intersection.

j) High rise buildings in a lower form of up to 10 storeys in height are encouraged on the east side of the intersection.

k) Podium base of high rise buildings should balance the mid rise scale of development on the west side of the intersection with setbacks to upper storeys.

6. Possible midblock crossing: Consider a midblock crossing to improve east-west connectivity of neighbourhoods and linkages to the community trail network. Consider the incorporation of public art, wayfinding signage and/or interpretive signage at this location to bring awareness to the Regional Core Environmental Features in the area.
7. Fischer Hallman Road and Seabrook Drive Neighbourhood Gateway:

a) Provide a dedicated cycling lane in the design of the Seabrook Drive road right of way.

b) Consider bump-out/curb extension to widen the Pedestrian Clearway and Land Use Transition Zones and to create an opportunity for on street parking. On street parking is preferable on one side of the street on Fischer Hallman Road north of the intersection during off peak hours and on one side of the street on Seabrook Drive both east and west of the intersection.

c) Orient primary building entrances with regard for siting of transit stop. Incorporate the transit stop in the Land Use Transition Zone if possible.

d) Building setbacks of up to 10 metres from the street line will be encouraged at the corner of Fischer Hallman Road and Seabrook Drive to increase semi-public space and/or where necessary to accommodate outdoor commercial space (eg: patio or street retail). Parking will not be permitted within this setback.

e) Generally, minimal building setbacks will be encouraged along Seabrook Drive to promote a pedestrian-oriented streetscape. Consideration may be given to setbacks of up to 10 metres from the street line to increase semi-public space and/or where necessary to accommodate outdoor commercial space (eg: patio or street retail). Parking will not be permitted within this setback.

f) Encourage live/work development along Seabrook Drive.

g) Maximum five storey building height permitted. Minimum façade height of 2 storeys required.

h) Buildings facades of corner buildings to address both streets but to be oriented towards Seabrook Drive.

8. Stormwater Management Pond: A stormwater management pond is likely to be located along the west side of Fischer Hallman Road. There is existing backfilled residential development with privacy fencing along the east side of Fischer Hallman Road. Streetscape character will differ from the guidelines in this location given these conditions.

9. Fischer Hallman Road and “Street A” Intersection:

a) Consider bump-out/curb extension to widen the Pedestrian Clearway and Land Use Transition Zones and to create an opportunity for on street parking. On street parking is preferable on one side of the street on “Street A” west of the intersection.
b) Generally, minimal building setbacks will be encouraged along "Street A" west of the intersection to promote a pedestrian-oriented streetscape.

c) Buildings facades of corner buildings to address both streets but to be oriented towards "Street A".

d) Midrise buildings of up to 8 storeys in height will be permitted on the west side of Fischer Hallman Road provided that a podium base of 3 to 6 storeys is established along the Fischer Hallman Road frontage with stepbacks to upper storeys.

e) A transition of building height will be required from taller buildings at the corner of Fischer Hallman Road and "Street A" to the nearby low density residential development to the east and west.

10. Huron Road - Heritage Road: Consider an interpretive panel on the north side of Huron Road to recognize its historical significance.

11. Fischer Hallman and Huron Community Gateway:

a) Encourage integration of public art and/or landscaped entrance feature on the northwest corner of Fischer Hallman Road and Huron Road to identify this location as the primary entrance into the City’s Urban Area and the Rosenberg Community from the South.

b) Buildings proposed on the northwest and southeast corners of the intersection are to be oriented to Fischer Hallman Road with minimal building setbacks from the Fischer Hallman street line. A podium base of 2 to 5 storeys in height is encouraged along Fischer Hallman Road. Mid to high rise buildings up to 8 to 10 storeys are encouraged if taller buildings are located interior to the site or stepped back from the Fischer Hallman Road and Huron Road street lines.

c) On the northeast corner of the intersection the buildings are encouraged to be oriented towards Huron Road and be of a low to mid rise scale (2 to 5 storeys) as a transition from nearby low rise residential development to the east.
d) Consider on street parking on Street One on both sides of the street.

e) Median to be incorporated in the road right of way on Street One.

f) Mid rise form of development (two to four storeys) encouraged along Street One.

g) Mid to high rise form of development (8-10 storeys) encouraged in a lower form stepped back from the Fischer Hallman and Street One streetlines.

h) Podium of any high rise development must reinforce human scale and complement the adjacent lower scale of development along Street One.

i) Building setbacks of up to 10 metres from the street line will be encouraged at the corner of Fischer Hallman Road and Street One to increase semi-public space and/or where necessary to accommodate outdoor commercial space (eg: patio or street retail). Parking will not be permitted within this setback.

j) Generally, minimal building setbacks will be encouraged along Street One to promote a pedestrian-oriented streetscape. Consideration may be given to setbacks of up to 10 metres from the street line to increase semi-public space and/or where necessary to accommodate outdoor commercial space (eg: patio or street retail). Parking will not be permitted within this setback.
a) Encourage integration of public art and/or landscaped entrance feature at this location.

b) Encourage mixed use buildings of up to 6 storeys in height at the intersection with possibilities for greater height if stepped back from the Fischer Hallman Road streetline.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 11, 2012  FILE CODE: E13-20, 8809

SUBJECT: AMENDMENT TO THE CONSULTING SERVICES AGREEMENT FOR THE WATERLOO WASTEWATER TREATMENT PLANT UPGRADE

RECOMMENDATION:

That the Regional Municipality of Waterloo approve an amendment to the existing Consulting Services Agreement with AECOM to include additional contract administration and site inspection services required for completion of the Waterloo Wastewater Treatment Plant for an upset fee increase of $596,000 plus applicable taxes, to be funded from the existing project capital budget in the 2012 Ten Year Wastewater Capital Program.

SUMMARY:

In 2008, AECOM (then KMK) was retained by the Regional Municipality of Waterloo (Region) to provide final design, contract administration and site inspection services for the Waterloo Wastewater Treatment Plant (WWTP) Upgrade project at an upset fee of $8,356,650 plus applicable taxes. The project consists of four (4) separate but overlapping construction contracts to be implemented over an estimated construction period of fifty one (51) months. Therefore, AECOM's project upset fee was based on a fifty one (51) month project construction period.

Based on the project progress to date, AECOM has assessed that completion of this project will be delayed by eleven (11) months and will require additional contract administration and site inspection services. Therefore, AECOM has submitted a request for additional fees to cover costs for additional contract administration and site inspection services to project completion. Region staff has thoroughly reviewed AECOM’s construction completion date assessment and related fee submission for the additional effort and recommend that an amendment to the existing Consulting Services Agreement with AECOM be approved to provide additional contract administration and site inspection services required for completion of this project. Staff negotiated an upset fee increase of $596,000 plus applicable taxes for the additional consulting services required of AECOM, to be funded from the existing project capital budget in the 2012 Wastewater Ten Year Capital Program.

Furthermore, the Contractor for Contract 4 is running about five (5) months behind schedule. In light of this, staff intends to assess liquidated damages against the Contract 4 Contractor in accordance with the construction contract terms and conditions for late completion of Contract 4. The liquidated damages will be used to help offset the cost of additional consulting fees.

REPORT:

1. Background

The Waterloo Wastewater Treatment Plant (WWTP) is located at 340 University Avenue, in the City of Waterloo. The Regional Municipality of Waterloo (Region) approved the Wastewater Master Plan (2007) and Biosolids Master Plan (2003) which recommended
upgrades to the plant to enhance effluent quality, ensure effective effluent disinfection, comply with Federal and Provincial requirements for non-acutely toxic effluent, and improve biosolids handling.

In 2008, AECOM (then KMK) was retained by the Region to provide final design, contract administration and site inspection services for the Waterloo WWTP Upgrade project. The project consisted of four (4) separate contracts namely:

- Contract 1 – Administration Building
- Contract 2 – UV and Blower Buildings
- Contract 3 – Headworks and Biosolids Building
- Contract 4 – Secondary Treatment and Digestion

AECOM’s consulting engineering assignment includes the design of all upgrades, as well as contract administration and site inspection services for all four (4) contracts. The work for this project had to be completed without causing any disruption to the daily operation of the plant. In order to comply with this requirement, the contracts were scheduled so that Contracts 1 and 4 could be completed in parallel with Contracts 2 and 3, while Contract 3 followed Contract 1, and Contract 4 followed Contract 2. Furthermore, all four (4) construction contracts were overlapped to reduce the project’s overall construction phase to a fifty one (51) month construction period. Contract 1 was awarded by Council in November 2009, Contract 2 in January 2010, Contract 3 in November 2010, and Contract 4 in December 2011. Contracts 1 and 2 have been completed and work on Contracts 3 and 4 is currently underway.

2. **Delay to Project Completion**

Contracts 2 and 4 were on the project’s critical path. Therefore, any extension or delay to the work on either of these two contracts would result in an extension to the project’s overall construction period and require additional consultant contract administration and site inspection services.

Contract 2 was originally scheduled to be completed in September 2011. Because the scoping of the various construction contracts required commencement of Contract 4 to follow the completion of Contract 2, Contract 4 was scheduled to commence in September 2011. Adverse weather conditions and additional construction work delayed the completion of Contract 2 by three (3) months, thus causing a 3-month delay to the earliest possible construction start date for Contract 4.

In addition, the start of construction on Contract 4 was delayed an additional three (3) months to March 2012 as a result of an extremely long Ministry of Environment (MOE) review and approval period for the Certificate of Approval (Sewage) (CofA) application. The overall result of the late start on Contract 4 is an addition of six (6) months to the original fifty-one (51) month construction period for the project.

Furthermore, the Contract 4 Contractor is running behind schedule. Based upon the Contract 4 Contractor’s latest construction schedule and current progress on site, it is now estimated that the completion of Contract 4 work will require an additional five (5) months to complete all contract work.

In summary, the overall construction period for AECOM to provide contract administration and site inspection services will be eleven (11) months longer than the 51-month construction period on which AECOM based their upset fee for this project. Therefore, staff
has now assessed that AECOM is entitled to be compensated for eleven (11) additional months of contract administration and inspection services. Since five (5) months of the delay in completion of the contract is the result of the Contractor's lack of progress on site, staff intends to assess liquidated damages against the Contractor for late completion in accordance with the construction contract. The liquidated damages will be used to help offset the additional cost of consulting fees required to complete the project.

3. Consultant’s Request for Fees

The Region’s current consulting services agreement with AECOM for the provision of design and contract administration services for the Waterloo WWTP is for an upset fee limit of $8,356,650 plus applicable taxes. AECOM’s upset fee was based on an overall project construction period of fifty one (51) months. Based on the eleven (11) months of additional time required to complete the project, AECOM submitted a request for additional fees to cover their additional costs for contract administration and site inspection to project completion.

Following a thorough review of AECOM’s request for additional fees, staff has confirmed that additional contract administration and site inspection services beyond the original scope of services are required and negotiated an upset fee increase of $596,000 plus applicable taxes to compensate AECOM for the provision of the required additional consulting services. This fee increase would bring the consultant’s current total upset fee limit of $8,356,650 to $8,952,650 plus applicable taxes. The revised total upset fee limit of $8,952,650 is an increase of 7% above the original consulting fee and represents approximately 8.5% of the project construction costs, which is still in the lower range of engineering fees for a project of this magnitude and complexity.

In view of the above, staff recommends that the Region approve an amendment to the existing consulting services agreement with AECOM to include additional contract administration and site inspection services required for completion of the Waterloo WWTP Upgrade project for an upset fee increase of $596,000 plus applicable taxes.

CORPORATE STRATEGIC PLAN:

The Waterloo WWTP Upgrade project meets the Corporate Strategic Plan Objective to “protect the quality and quantity of our water sources” under Strategic Focus Area 1 to “protect and enhance the environment”.

FINANCIAL IMPLICATIONS:

The Region’s 2012 Wastewater Ten Year Capital Program provides a total remaining budget of $73,872,000 for the Waterloo WWTP Upgrade project. The $596,000 for AECOM’s additional upset fee can be accommodated within the total project budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE: NIL

ATTACHMENTS: NIL

PREPARED BY: Jeff Medd, Project Manager

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

DATE: September 11, 2012

FILE CODE: T04-20, 5340

SUBJECT: CLASS ENVIRONMENTAL ASSESSMENT, RECOMMENDED DESIGN CONCEPT FOR MANITOU DRIVE WIDENING, BLEAMS ROAD TO FAIRWAY ROAD, CITY OF KITCHENER

RECOMMENDATION:

THAT the Regional Municipality of Waterloo take the following actions with respect to the Class Environmental Assessment for Manitou Drive Widening, Bleams Road to Fairway Road, in the City of Kitchener:

a) Approve the improvements to Manitou Drive from Fairway Road to Bleams Road in the City of Kitchener including a roundabout at the intersection of Manitou Drive and Bleams Road and replacement of the bridge at Schneider Creek, as presented as Recommended Design Concept 1 in Report E-12-086, dated September 11, 2012; and

b) Direct staff to file the Notice of Completion for this Class Environmental Assessment by means of advertisements in the local newspapers and mailings to the adjacent property owners, tenants, and agencies and place the Environmental Study Report on the public record for a period of 30 days.

SUMMARY:

The Regional Municipality of Waterloo is undertaking a Municipal Class Environmental Assessment (Class EA) study for the widening of Manitou Drive from Fairway Road and Courtland Avenue to Bleams Road in the City of Kitchener. The Class EA study is being guided by a team consisting of staff from the Region of Waterloo, City of Kitchener, Grand River Conservation Authority, Regional Councillor Jean Haalboom and City of Kitchener Councillor John Gazzola. A plan of the Study Area is presented in Appendix "A".

Currently, Manitou Drive is 4 lanes wide from Fairway Road to Webster Road and 2 lanes wide from Webster Road to Bleams Road. Sections of Manitou Drive between Bleams Road and Fairway Road are currently experiencing higher than expected numbers of collisions and are also experiencing high levels of traffic congestion during times of peak traffic demand. The congestion is caused primarily by capacity deficiencies at the Bleams Road and Fairway Road intersections. In addition, the capacity of the existing road is reduced by “friction” from numerous left turns at various locations along Manitou Drive. The existing Schneider Creek bridge structure is of concern both for the narrow width limiting traffic capacity and for the age and potential deterioration of the structure.

The Project Team, after reviewing various high-level planning-solutions to address the congestion and collision problems, developed two Alterative Design Concepts:

- Design Concept 1 – widen Manitou Drive to 3 lanes including a centre two-way left-turn lane,
- Design Concept 2 – widen Manitou Drive to 4 lanes.
There has been extensive public consultation on this project, including two Public Consultation Centres, a presentation to the Regional Active Transportation Advisory Committee and meetings with several affected property owners. Based on the public feedback received and a thorough review of all technical information, the Project Team is recommending Council approve Design Concept 1 (3 lanes) for implementation. Recommended Design Concept 1 includes:

- four lanes from Fairway Road to 100 metres south of Fairway Road
- two lanes with a centre two-way left-turn lane from 100 metres south of Fairway Road to the Schneider Creek bridge
- two lanes in each direction from Schneider Creek to Bleams Road
- replacement of the existing bridge at Schneider Creek with additional width for sidewalks, cycling lanes, and a centre two-way left turn lane and sufficient length and height for a pedestrian/cycling trail crossing beneath the bridge
- two-lane roundabout at Manitou Drive/Bleams Road
- signalized intersection improvements at Manitou Drive/ Fairway Road /Courtland Avenue
- on-road cycling lanes and sidewalks on both sides of the road from Fairway Road to Bleams Road
- construction of a median at the Manitou drive/Webster Road intersection to provide a pedestrian refuge and prohibition of left-turns at that intersection

Recommended Design Concept 1 is estimated to cost $8.5 - $9 million and is scheduled for construction in 2015 as per the Region’s Ten Year Capital Transportation Plan.

REPORT:

1. **Background**

1.1 **Existing and Future Conditions**

The Regional Municipality of Waterloo is undertaking a Class Environmental Assessment (Class EA) study for improvements to Manitou Drive from Fairway Road to Bleams Road in the City of Kitchener. A plan of the Study Area is presented in Appendix “A”.

Manitou Drive from Fairway Road to Bleams Road is a well travelled road in the City of Kitchener serving a mix of commercial and industrial land-uses. Currently, this section of Manitou Drive is a 4 lane curbed roadway from Fairway Road to Webster Road and a 2 lane roadway without curbs from Webster Road to Bleams Road. There are no sidewalks or cycling facilities on this section of Manitou Drive (excepting a short section of sidewalk on the west side for a limited distance immediately south of Fairway Road). A single line CP Rail Overpass crosses the four lane section of Manitou Drive south of Fairway Road.

The historic German Mills settlement is located in the area of Manitou Drive from Bleams Road northerly to Cress Lane and Connor Street. A 2-lane bridge on Manitou Drive crosses Schneider Creek within this area. A City of Kitchener trail follows the north bank of Schneider creek on the east side of Manitou Drive with no current connection to other pedestrian trail or sidewalks in the area. In addition, the Region’s Parkway Well Field and Water Reservoir are located beside Manitou Drive on the north bank of Schneider Creek.

The 1999 and 2010 Waterloo Region Transportation Master Plans (RTMP’s) both identified the need to widen Manitou Drive between Bleams Road and Fairway Road in order to reduce traffic congestion and accommodate future projected traffic demand. In addition, annual structural assessments of the Schneider Creek bridge on Manitou Drive north of Bleams Road are indicating a need to reconstruct the bridge. The existing Schneider Creek bridge structure is of concern both for the narrow width limiting traffic capacity and for the age and potential deterioration of the structure.
An updated traffic study for Manitou Drive completed in 2012 confirms that sections of Manitou Drive between Bleams Road and Fairway Road are currently experiencing higher than expected numbers of collisions and are also experiencing high levels of traffic congestion during times of peak traffic demand. These existing conditions are expected to worsen as traffic increases in the future. The factors which contribute to both the congestion and collision concerns include:

- Vehicles turning at numerous high volume driveway entrances in close proximity to each other and to intersections (between Schneider Creek bridge and Webster Road)
- Poor vertical and horizontal alignment (north side of Schneider Creek bridge)
- Low capacity of the intersection at Bleams Road

Existing and future traffic operations are summarized in Appendix “B”.

1.2 Municipal Class Environmental Assessment

The Manitou Drive Improvements study is being completed in accordance with the Municipal Class EA, October 2000 as amended in 2007 and 2011. The Manitou Drive Class EA is being conducted concurrently with the River Road Extension Class EA, also being completed by the Region of Waterloo. The River Road Extension Class EA is considering the extension of River Road to the west from its terminus at King Street East to the intersection of Bleams Road and Manitou Drive. The results of the River Road Extension Class EA will not be known until after completion of the Manitou Drive Class EA process and as such, analysis of options being considered for the Manitou Drive Class EA include both options for River Road being extended and River Road not being extended.

The Manitou Drive Class EA is being directed by a Project Team consisting of staff from the Region of Waterloo, City of Kitchener and the Grand River Conservation Authority (GRCA) as well as Regional Councillor Jean Haalboom and City of Kitchener Councillor John Gazzola. The engineering consulting firm of McCormick Rankin has been retained to assist with this Class EA study.

1.3 Problem Statement

The Project Team has developed the following problem statement for the project, identifying the traffic and transportation needs to be addressed as part of this study:

- Road improvements are required in the Manitou Drive corridor to reduce delays, queuing, and collisions for the current traffic conditions, as well as for the expected future traffic growth up to 2031 and beyond;
- The existing bridge over Schneider Creek is in need of replacement;
- There is a need to accommodate cycling, walking and transit use with a high level of service and network connectivity; and
- The extension of the River Road corridor would not alleviate the need for improvements within the Manitou Drive corridor.

1.4 Alternative Solutions and Alternative Design Concepts

Alternative Solutions

The Project Team developed Six Alternative Solutions to address the problems along Manitou Drive. The Project Team found that some of the solutions provided benefit when combined with others, while others were determined not to fully address the problem which has been identified. At the first Public Consultation Centre (PCC), the Project Team presented these Alternative Solutions
which are described in more detail in Appendix “C”. The Project Team considered the following Alternative Solutions:

- ALTERNATIVE 1 - “DO NOTHING”
- ALTERNATIVE 2 - INTERSECTION IMPROVEMENTS/ROUNDABOUTS
- ALTERNATIVE 3 - ROAD WIDENING OF MANITOU DRIVE
- ALTERNATIVE 4 - ACCESS MANAGEMENT
- ALTERNATIVE 5 - IMPROVING TRANSIT SERVICE
- ALTERNATIVE 6 - UPGRADE, EXPAND OR BUILD OTHER ROUTES

Preferred Alternative Solution: The Project Team identified a combination of Alternative 2 – Intersection Improvements and Alternative 3 – Widening of Manitou Drive as the Preferred Alternative Solution. Improvements to Transit Service as identified in the RTMP and consideration of access management are also carried forward in the Preferred Solution.

The “Do Nothing” solution (Alternative 1) would have little or no negative impact on the natural and cultural environments. The “Do Nothing” solution, however would not address the transportation problems for vehicles or pedestrians. Therefore, the Project Team rejected the “Do Nothing” solution for this Class EA study. Options to upgrade, expand or build other routes (Alternative 6) have been examined in the 2010 RTMP. Unfortunately these options are not feasible and the Project Team rejected Alternative 6 as a solution for this Class EA study.

Alternative Design Concepts

Two Alternative Design Concepts (as illustrated in Appendix “C”) were developed for the Preferred Solution and are described below. Both Alternative Design Concepts consist of combinations of intersection improvements and road widening complete with curbs and storm sewers. In addition, both alternative design concepts include: sidewalks and on-road cycling lanes on both sides of Manitou Drive; a raised concrete median at Webster Road, to prohibit left turns, reduce conflicts, delays and collisions, and to provide a pedestrian crossing refuge; and, replacement of the Schneider Creek bridge with a wider structure to provide additional traffic capacity and a longer structure to accommodate extension of the City of Kitchener’s multi-use trail under Manitou Drive. Other elements of the Alternative Design Concepts were also considered and evaluated by the Project Team, including: alternative intersection types; a continuous centre median; multi-use trails for pedestrians and cyclists; and alternative boulevard widths.

Alternative Design Concept No. 1 – Widen to Three Lanes Including a Centre Two-Way Left Turn Lane

This alternative would maintain Manitou Drive as 4 lanes south of Fairway Road, narrowing to 3 lanes (two through lanes with a centre two-way left turn lane) approaching the CPR bridge, continuing south as 3 lanes crossing Schneider Creek and widening to 4 lanes from the bridge to Bleams Road, along with signalized intersection improvements at Fairway Road and a 2-lane roundabout at Bleams Road. This option includes a single westbound left-turn lane from Fairway Road onto Manitou Drive if River Road is extended and dual westbound left-turn lanes if River Road is not extended.

This alternative would improve traffic operations and increase overall capacity of the transportation corridor by removing left turning vehicles from the through lanes and improving intersection capacity with a roundabout at Bleams Road and adding turning lanes at Fairway Road.
Alternative Design Concept No. 2 – Widen Manitou Drive to Four (4) Lanes

This alternative would maintain Manitou Drive as 4 lanes south of Fairway Road to Webster Road and widen it from the existing 2-lanes to 4 lanes from Webster Road to Bleams Road, along with signalized intersection improvements at Fairway Road and a 2-lane roundabout at Bleams Road.

Similar to Alternative Design Concept 1 this option includes a single westbound left-turn lane from Fairway Road onto Manitou Drive if River Road is extended and dual westbound left-turn lanes if River Road is not extended.

This alternative would improve traffic operations and increase overall capacity of the transportation corridor by providing two (2) lanes in each direction.

1.5 Issues Common to Both Alternative Design Concepts

CP Rail Bridge and Schneider Creek Bridge

The existing CP Rail Bridge is sufficient in size and structural integrity to meet the service requirements of the railway and the needs of the proposed Manitou Drive improvements. Neither of the two Alternative Design Concepts requires modification of the CP Rail bridge structure.

Both of the Alternative Design Concepts being evaluated require replacement of the existing Schneider Creek Bridge. Rehabilitation is not a viable option because of the deteriorated condition of the existing structure and the additional width and height required for a new structure. The proposed bridge will be widened to accommodate the required vehicle lanes, cycling lanes and sidewalks. An increased span of the bridge will be constructed to provide a sufficient size of opening for the creek to control the Regional flood impact. The proposed bridge will also be designed to provide sufficient height and width on the north bank of Schneider Creek to accommodate a multi-use trail by the City of Kitchener for pedestrians and cyclists to cross beneath the bridge. Preliminary details of the proposed bridge are shown in Appendix “C”.

Roundabouts Versus Signalized Intersections

The Project Team considered the use of roundabouts at both existing signalized intersections of Manitou Drive at Fairway Road and at Bleams Road. The value in reduction in expected injury collisions for a roundabout at Fairway Road would be outweighed by the additional cost of the need for a full buyout of a business at the intersection in comparison to the signalized intersection improvement option. A screening tool was prepared which compared the life cycle costs of a roundabout versus a signalized intersection at the intersection of Manitou Drive and Fairway Road. The screening tool determined that a signalized intersection would have substantially lower life cycle costs. Therefore, a roundabout at Fairway Road is not being recommended.

An Intersection Control Study (ICS) was undertaken for the intersection of Manitou Drive and Bleams Road. The ICS compared the implementation costs and expected injury collision costs to determine the total Life Cycle Costs for both the roundabout and signalized intersection configurations. The ICS concluded that the roundabout would have the least Life Cycle Cost. The roundabout would have advantages in terms of speed control, less overall negative environmental impact and is expected to operate with lower peak hour delays for motorists in either a three-leg or four-leg configuration. Pending the outcome of the River Road/Bleams Road Extension Class EA, adding a fourth leg to a roundabout at the Manitou Drive/Bleams Road intersection at a future date would not require any future modifications to the other approaches of the roundabout as currently proposed and would cost much less than expanding a signal control alternative.
After consideration of the forecasted transportation requirements, the life-cycle costs and safety performance for the intersection of Manitou Drive and Bleams Road, the Project Team determined that a roundabout is recommended at this intersection, with or without the River Road Extension.

**River Road Extension**

For the Manitou Drive Class EA, all of the Alternative Solutions and Design Concepts have been evaluated based on both scenarios of River Road being extended and not being extended from King Street to Manitou Drive. Taking this approach has allowed the Project Team for the Manitou Drive Class EA to identify the Manitou Drive improvements that are needed, with or without River Road Extension.

**Replacement and/or Extension of Existing Infrastructure**

The Project Team has consulted with City of Kitchener staff, the Region’s Water Services Division and all potentially impacted utility companies to identify any known requirements for replacement, improvement or expansion of infrastructure within the project limits that could be foreseen for the next 30 years. Staff will continue to liaise with the above stakeholders during the detailed design stage for the Manitou Drive improvements to incorporate all necessary works required in conjunction with the planned road improvements. Region staff also met with City of Kitchener staff in response to a request received at PCC No. 1 with respect to clarification of plans for the extension of sanitary sewer services along Manitou Drive from Schneider Creek to Bleams Road. City of Kitchener staff have advised the Project Team that the extension of sanitary services at this location is not being considered as part of this project.

Records show that a 450mm diameter cast iron watermain was installed across Schneider Creek beside the north side of the bridge on Manitou Drive prior to 1961. The watermain is located on the stream bed and is visible beneath the water. The watermain is jointly owned by the City of Kitchener and the Region of Waterloo and is a trunk watermain which also provides service to properties on both sides of Manitou Drive. The proposed Manitou Drive bridge improvements across Schneider Creek will require the watermain to be relocated. Region Water Services staff has advised that the watermain should be entirely replaced rather than relocated due to its age, location and condition. The preferred relocation methodology for the watermain is to realign it across the creek and lower it beneath the stream bed, clear away from the new bridge structure, utilizing trench-less construction technology in order to minimize any disturbance to the existing creek. Relocating and replacement of this section of the watermain will be undertaken in conjunction with the timing of the road improvements.

2. **Public Consultation**

2.1 **First Public Consultation Centre (PCC No. 1) February 2, 2012:**

The Project Team hosted a Public Consultation Centre (PCC) on February 2nd, 2012 at Conestoga Place, 110 Manitou Drive. At PCC No.1, the Project Team presented the Problem Statement, Alternative Solutions, draft Alternative Design Concepts and Evaluation Criteria for the Manitou Drive Improvements study. A total of 36 guests signed-in at PCC No. 1 and there was strong support received for road improvements at the PCC. Comments received from PCC No. 1 and Project Team responses are summarized in Appendix D. The comments included:

- Recognition/agreement with the problem;
- Support for widening of Manitou Drive;
- Support for improved pedestrian and cycling facilities and trail connection;
Concerns with impact of road widening on private property use, driveways, grading and access and redevelopment concerns;
- Concern about potential impacts on Schneider Creek, wetlands and the Regional flood plain; and;
- Requests for signals on Manitou Drive at Webster Road and the Wabanaki Drive at Fairway Road intersections.

2.2 Second Public Consultation Centre (PCC No. 2) June 7, 2012:
The Project Team hosted a second PCC on June 7th, 2012 at 110 Manitou drive. At PCC No.2, the Project Team’s evaluation of Alternative Design Concepts and the Project Team’s Preferred Design Alternative, Design Concept No. 1 – Widen to Three Lanes Including a Centre Two-Way Left Turning Lane, were presented to the public along with responses to comments received at the first PCC. A total of 25 guests signed-in at PCC No. 2. Comments received from PCC No. 2 and Project Team responses are summarized in Appendix “D”. The comments included:

- Support for Alternative Design Concept No. 1 including:
  - Trail under Schneider Creek Bridge,
  - Sidewalks and cycling lanes
  - Limited impact on Schneider Creek and on adjacent properties
- Concerns with the impact of road widening on private property use, driveways, grading and access. Region staff and project consultants met with owners of properties at 26, 38 and 50 Manitou Drive in relation to property impacts of the Project Team’s Preferred Design Alternative.
- Concern that a roundabout would be costly and lead to increased collisions
- Concern with the impacts of prohibiting left-turns at the Webster Road intersection

In preparation for and subsequent to the second PCC, Region staff and project consultants met with Grand River Conservation Authority staff regarding the Schneider Creek natural environment and flood plain. It was agreed that all requirements of the GRCA for approval of the work can be met by the detailed design of the Recommended Design Concept 1. The Region of Waterloo Active Transportation Advisory Committee reviewed facilities proposed in the Preferred Design Alternative for pedestrians, cycling and access to public transit and advised that they support the proposed facilities.

3. Evaluation of Alternative Design Concepts
The Project Team found that Alternative Design Concept 1, which includes road widening to 3 lanes (one lane in each direction plus one centre two-way left-turn lane), cycling lanes and sidewalks, satisfied all evaluation criteria better than Alternative Design Concept 2. Differences in the two Alternative Design Concepts are summarized below:

- **Transportation** - The Project Team closely examined the analyses of traffic volume forecasts and the capacity and performance of both the 3-lane and 4-lane alternatives and concluded that both would achieve the same levels of reduction to delays and congestion for traffic during the peak traffic volume periods, but that the 3-lane alternative, Design Concept 1, which features a centre two-way left-turn lane would also:
  - reduce sideswipe collisions; and
  - produce a significantly better pedestrian and cycling environment, with reduced pavement width and somewhat lower driving speeds. Design Concept 1 also provides sufficient width beneath the existing CP Rail bridge to accommodate sidewalks and avoid the need for pedestrian tunnels under the railway (as required by 4 lane Design Concept 2).
• **Natural Environment** - Alternative Design Concept 1 would have lower negative impacts on drainage to Schneider Creek, adjacent wetlands and existing vegetation adjacent to the road than would Alternative Design Concept 2.

• **Social Environment** - Alternative Design Concept 1 will not require the realignment of Cress Lane and Connor Street to intersect with Webster Road nor the demolition of the house at 28 Manitou Drive, all of which would be necessary as part of Alternative Design Concept 2. Alternative Design Concept 1 will require 1200 square metres of land to be acquired from 8 properties, which is 43% less than the land required for Alternative Design Concept 2 which will require 2100 square metres from 10 properties.

• **Costs** - Alternative Design Concept 1 will have a lower capital cost ($8.5M versus $10.9M) than Alternative Design Concept 2.

Therefore the Project Team has identified Alternative Design Concept 1 as the Recommended Design Concept for this project. A summary of the Project Team’s full evaluation of both Alternative Design Concepts and the evaluation criteria is presented in Appendix “E”.

4. **Project Team Recommended Design Concept 1**

4.1 **Description of the Recommended Design Concept:**

The Project Team’s Recommended Design Concept 1, which is illustrated in Appendix “F”, includes: maintaining Manitou Drive as 4 lanes for 100 metres south of Fairway Road and narrowing to 3 lanes (two through lanes with a centre two-way left turn lane) under the CPR bridge, continuing southerly as 3 lanes crossing Schneider Creek and widening to 4 lanes from the bridge to Bleams Road, along with signalized intersection improvements at Fairway Road and a 2-lane roundabout at Bleams Road. This design concept includes a single westbound left-turn lane from Fairway Road onto Manitou Drive and if it is determined in the future that River Road is not being extended, intersection improvements will be required at that time to provide dual westbound left-turn lanes from Fairway Road onto Manitou Drive.

A two-lane roundabout at the intersection of Bleams Road and Manitou Drive would provide efficient traffic operations for the projected future traffic volumes with fewer injury collisions than traffic signals, as well as provide for a low impact conversion for a fourth approach at the roundabout in the event that River Road would be extended from King Street to Manitou Drive in the future.

The full three-lane road cross-section with sidewalks and on-road cycling lanes can cross beneath the CP rail bridge, with a slight reduction in width of sidewalks and the centre turn-lane. The existing bridge across Schneider Creek will be replaced with a new single span structure at an increased height and width to accommodate pedestrians and cyclists both on Manitou Drive and those using the trail under the bridge. The new bridge would also provide hydraulic capacity for the Regional storm. Although the new Schneider Creek bridge will operate as a three lane structure with sidewalk and cycling lanes, it will be designed to accommodate 4 lanes of traffic with sidewalks and cycling lanes without any structural alteration to the bridge should future traffic volumes exceed future projections.

4.2 **Benefits of the Recommended Design Concept:**

Recommended Design Concept 1 would increase overall capacity of the transportation corridor by removing left turning vehicles from the through lanes and improving intersection capacity. Improved horizontal and vertical road geometry, most notably between Schneider Creek and Webster Road, together with the provision of the centre two-way left-turn lane will lead to an expected reduction in collisions. A median to prohibit left-turns at the Webster Road intersection will reduce conflicts that currently result in delays and collisions. In addition, the median will serve as a pedestrian refuge for crossing Manitou Drive near an existing transit stop at Webster Road.
The Recommended Design Concept will facilitate alternative modes of travel by incorporating the following improvements:

- Continuous sidewalks on both sides of the road throughout the entire project limits;
- Continuous on-road cycling lanes on both sides of the road throughout the entire project limits;
- A multi-use trail for pedestrians and cyclists beneath the bridge at Schneider Creek which will link the City of Kitchener trail currently located on the east side of Manitou Drive along Schneider Creek with proposed sidewalk and on-road cycling lanes on the west side of Manitou Drive and provide for a future westerly extension of the City’s Schneider Creek trail;
- Better access to public transit in coordination with Grand River Transit improvements via the improved cycling and pedestrian facilities; and

The Project Team notes that the proposed sidewalks and on-road cycling lanes on Manitou Drive will comprise the Manitou Drive portion of the proposed Trans Canada Trail from Schneider Creek to Fairway Road.

4.3 Staging and Detours,

Replacement of the bridge that carries Manitou Drive over Schneider Creek is expected to require complete closure of Manitou Drive for approximately eight months. Signage will be placed well in advance of the closure advising of the detour and duration of the closure. In addition, there will be times when the nature and extent of the construction work will require short-term temporary closures of one or more of the side streets.

A detailed construction staging and traffic management plan will be developed during detailed design and will include for identification of all detour routes. Detours using Wabanaki Drive and Wilson Avenue, which are City of Kitchener streets, are supported by engineering staff of the City of Kitchener. Both the Region’s Emergency Medical Services and Kitchener Fire Department have been consulted regarding the possible road closure and detours required for the reconstruction. Alternate emergency response routes are available and no additional concerns have been received.

4.4 Historic “German Mills” area:

While there are not many visible reminders of the German Mills settlement area remaining, the intersection of Connor Street and Cress Lane was centrally located in the settlement area. In recognition of this historic settlement area, Region staff will coordinate interests with City of Kitchener staff to identify opportunities for the City to provide enhanced trail features which could be incorporated in the trail crossing under Manitou Drive to provide historical interpretation of the “German Mills” area.

4.5 Impacts to Schneider Creek and Regional Water Supply Wells:

The proposed improvements on Manitou Drive and reconstruction of the Schneider Creek Bridge have raised concerns about the potential for adverse impacts on Schneider Creek, on two of the Region’s water reservoirs on the east side of Manitou Drive and on production water supply wells and pump station facilities located on the west side of Manitou Drive. In addition, several Region monitoring wells exist in the area adjacent to Manitou Drive. The potential for any of these adverse impacts resulting from the proposed road improvements has been reviewed as part of this Class EA in consultation with the GRCA and Regional Water Services staff. All of these concerns are addressed as follows:

- The design and construction of road and bridge impacts will incorporate the Region’s “Standard Recommendations for work near a Well Field” and “Standard Operating
Procedure for Construction in Proximity to a GUDI-EF Well” which will address security of the water supply during construction.

- Proposed road drainage improvements will collect storm runoff including de-icing salt for treatment and discharge to an outlet downstream of the water wells, which is an improvement of the existing road drainage.
- Existing buried infrastructure for operation of the water wells and reservoirs has been identified and will be protected and if necessary relocated during construction of the road and bridge improvements.
- The design of trail facilities and entrances to the water well facilities will ensure that proper maintenance access and protection of these facilities will be provided during and after construction of the road improvements.
- All requirements of the GRCA for approval of the work can be met by the detailed design of the Recommended Design Concept 1.

5. **Estimated Project Cost**

The capital cost for the Recommended Design Concept 1 is estimated to be in the range of $8.5 million to $9.0 million. The final cost will be further refined as part of the detailed design phase and will depend on costs for relocation of utilities and property acquisition.

6. **Next Steps**

All members of the public who have expressed an interest in this project have been notified directly of the opportunity to comment before a final decision is made for this project.

Subject to Regional Council approval of the Recommended Design Concept, the Environmental Study Report (ESR) documenting the planning and decision process for the project will be completed and a “Notice of Study Completion” will be ‘filed’ in the public record for a 30 day review period. This filing will be advertised by mail-outs and notices in newspapers. During this filing period, anyone concerned that the study did not fully follow the appropriate requirements of the Class EA process or address all of the issues may request that the Minister of Environment order the project to a more detailed environmental assessment, referred to as a Part II Order request. The Minister of Environment must receive such requests in writing, with a copy sent to the Region’s Commissioner of Transportation and Environmental Services. The Minister will determine if a more detailed environmental assessment is required and the Minister’s decision will be final. If there are no significant unresolved objections following the 30 day review period, the project will be considered approved and proceed to detailed design and construction.

It is anticipated that construction of the improvements will occur in 2015. This schedule is dependent on completion of property acquisitions, co-ordination of utilities and securing necessary approvals. It is anticipated that the relocation of the existing watermain across Schneider Creek will be completed in advance of the road improvements.

**CORPORATE STRATEGIC PLAN:**

The Manitou Drive Improvements between Bleams Road and Fairway Road /Courtland Avenue, when complete will support Focus Area 2 – Growth Management and Prosperity by optimizing infrastructure to meet current and projected needs and Focus Area 3 – Sustainable Transportation by optimizing existing road capacity to safely manage traffic.

**FINANCIAL IMPLICATIONS:**

The capital cost of the road improvements under Recommended Design Concept 1 is estimated to be in range of $8.5 million and $9.0 million to be funded from the Region Development Charges and
Roads Capital Levy Reserve funds. The capital cost of watermain replacement from Schneider Creek to Bleams road is estimated to be in the range of $550,000. to be funded from the Region’s Water and Development Charges Reserve funds.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**
Nil

**ATTACHMENTS**

Appendix “A” – Key Plan
Appendix “B” – Existing Traffic Operations Summary
Appendix “C” – Description of Alternative Solutions and Alternative Design Concepts
Appendix “D” – Summary of Responses to Concerns Expressed During the Class EA
Appendix “E” – Evaluation of Alternative Design Concepts
Appendix “F” – Recommended Design Concept 1

**PREPARED BY:** Wayne Cheater, Senior Project Manager

**APPROVED BY:** Thomas Schmidt, Commissioner Transportation and Environmental Services
APPENDIX B.1

EXISTING TRAFFIC OPERATIONS SUMMARY

Roadway Traffic

A transportation study has been completed, which includes a complete review of existing and projected future traffic operations within the study limits, and an analysis of possible improvement alternatives. The review evaluated measures of vehicle delay, queuing and collisions in the Manitou Drive corridor.

The primary conclusions of the transportation study are that the existing capacity of Manitou Drive, which is partly 2 lanes wide and partly 4 lanes wide, is limited by the capacity of the intersections at Courtland Avenue/Fairway Road and at Bleams Road and by friction from left turns at numerous locations. This results in:

- lengthy delays for all movements at the Manitou Drive and Courtland Avenue/Fairway Road intersection;
- lengthy delays for traffic entering or exiting Webster Road; and
- lengthy vehicle queues within the project limits, specifically for south-bound traffic at Bleams Road, west-bound left-turn traffic at Fairway Road and for traffic exiting Webster Road.

All the above problems exist for the current traffic levels during the PM peak traffic period and are expected to worsen with expected growth in traffic volumes.

In addition, a greater number of collisions than expected have been identified within the study limits, most notably rear-end collisions at the intersection of Manitou Drive and Fairway Road/Courtland Avenue and on Manitou Drive between Bleams Road and Cress Lane. Manitou Drive between Bleams Road and Cress Lane ranked 5th worst in the Region for roll-over collisions.

Public Transit, Pedestrians and Cyclists

Currently the Manitou Drive corridor is served by public transit. Within the study limits, Grand River Transit Bus Route 12 services west Kitchener / Waterloo and north Waterloo with stops along Westmount Road, Fairway Road and University Avenue. The route operates on a 15 minute schedule during the week and on a 30 minute weekend schedule.

Within the study limits, Manitou Drive has no sidewalk facilities, except on the west side of the road near the Fairway Road intersection. Sidewalk facilities are also found on the north side of Bleams Road. Based on the Region’s Transportation Corridor Design Guidelines, 2.1m sidewalks and 1.5m cycling lanes are to be considered along both sides of Manitou Drive.

The preliminary route for the Trans Canada Trail within the study limits is from Schneider Creek northerly along Manitou Drive to Fairway Road. It is proposed that the trail would cross Manitou Drive under a new bridge and extend northerly along both sides of the corridor. The Project Team will continue consultation with the City of Kitchener regarding the City’s requirements for enhanced trail features for the trail crossing beneath the bridge at Schneider Creek and for connectivity with planned extension of the City’s trail west of Manitou Drive beside the north bank of Schneider Creek. During the design stage of the Trans Canada Trail, the trail design team will consider opportunities for historical interpretation of the “German Mills” area.

Schneider Creek Bridge

Deterioration of the existing bridge on Manitou Drive across Schneider Creek requires annual inspection and evaluation. Previously, minor repairs have been made to the structure, including the
APPENDIX B.2

Installation of armour stone in 2011 to protect the foundations from scouring by the creek. A structural evaluation was completed for this Class EA study, which determined that the existing structure should be replaced in conjunction with other proposed road improvements. A load restriction is currently in place which applies to Manitou Drive between Fairway Road / Courtland Avenue and Bleams Road. The restriction’s main purpose is to restrict overall vehicle loads that are in excess of 70 tonnes or any vehicle load that exceeds 5 tonnes per axle from crossing the Schneider Creek Bridge on Manitou Drive. Any vehicle carrying a load in excess of these restrictions requires a Special Oversized Load Permit. The replacement would provide additional width for vehicles, pedestrians and cyclists and provide sufficient clearance height beneath the bridge for the existing Schneider Creek Trail for pedestrians and cyclists to cross under Manitou Drive. The existing trail at this location follows the north bank of Schneider Creek and is proposed for future expansion by the City of Kitchener.

Problem Statement

Manitou Drive is a key component to the Region of Waterloo’s transportation system. It runs north-south through the study area and provides an important transportation link between the industrial basin in south Kitchener, the Fairway Road commercial area and the residential areas to the north and south.

Without future investments in capacity and operational improvements on Manitou Drive, daily congestion will continue to be an issue for the residents and businesses located along the corridor. Provision of sufficient north-south transportation capacity for the study area in the future has been identified in a number of transportation studies. These transportation studies confirmed that in the long-term, Manitou Drive, between Bleams Road and Webster Road, requires capacity improvements. In addition, facilities for travel by pedestrians and cyclists are missing or deficient and disconnected through the study area.

The purpose of this study is to confirm the need and justification for improvements to Manitou Drive between Fairway Road and Bleams Road and to identify a recommended solution and preliminary design for improvements. The focus of the work is to address, wherever possible, the current operational and safety deficiencies and to improve overall traffic flow and safety.

The Project Team has developed the following problem statement for the project, identifying the traffic and transportation needs to be addressed as part of this study:

PROBLEM STATEMENT
MANITOU DRIVE CLASS EA

- Road improvements are required to reduce delays, queuing, and collisions for the current traffic conditions, as well as for the expected future traffic growth up to 2031 and beyond, in the Manitou Drive corridor;
- The existing bridge over Schneider Creek is in need of repair or replacement;
- There is a need to accommodate cycling, walking and transit use with a high level of service and network connectivity; and
- The extension of the River Road corridor would not alleviate the need for improvements within the Manitou Drive corridor.
APPENDIX C.1

DESCRIPTION OF ALTERNATIVE SOLUTIONS AND ALTERNATIVE DESIGN CONCEPTS

The following Preliminary Alternative Solutions were considered to address the problems along Manitou Drive. Some of the solutions were found to provide benefit when combined with others, while others were determined not to address the problem which has been identified. These alternative solutions were presented at the first PCC.

- **ALTERNATIVE 1 - “DO NOTHING”**
  As part of any Class EA process, there is always a consideration of the “Do Nothing” alternative to assess what would happen if no action is taken to address the study concerns. This assessment provides a baseline against which the other alternative solutions can be measured.

- **ALTERNATIVE 2 - INTERSECTION IMPROVEMENTS/ROUNDABOUTS**
  Roundabout screening tools, which test the feasibility of roundabouts, were prepared for the intersections of Fairway Road and Manitou Drive as well as for Bleams Road and Manitou Drive. The Bleams Road and Manitou Drive intersection supported carrying forward roundabout alternatives for evaluation. Signalized intersection improvement design concepts were carried forward for evaluation at the Fairway Road and Manitou Drive Intersection. The Transportation Study has determined that Intersection Improvements together with Road Widening would address the problem.

- **ALTERNATIVE 3 - ROAD WIDENING OF MANITOU DRIVE**
  The alternative of widening Manitou Drive by adding more traffic lanes within the study limits would provide increased traffic capacity and address existing and future traffic congestion issues. All road widening options will consider a new bridge structure over Schneider Creek to accommodate the widening of Manitou Drive. All road widening options will include efforts to maintain the existing Canadian Pacific Railway bridge without modification. The Transportation Study has determined that Intersection Improvements together with Road Widening, either to four lanes or two lanes plus a center-turn-lane, would address the problem.

- **ALTERNATIVE 4 - ACCESS MANAGEMENT**
  Some of the existing traffic and safety issues may be attributed to vehicles attempting to enter and exit properties along Manitou Drive. Access management initiatives on Manitou Drive would not adequately address the problem of vehicle delay and congestion. Consideration may be given to consolidating and restricting accesses within the study limits as a part of the Preferred Solution.

- **ALTERNATIVE 5 - IMPROVING TRANSIT SERVICE**
  Measures to improve the level of transit service within the corridor are being considered. These measures may potentially reduce reliance on vehicle travel and thereby reduce traffic on Manitou Drive. Improving Transit Service targets as identified in the RTMP will be a part of the Preferred Solution.

- **ALTERNATIVE 6 - UPGRADE, EXPAND OR BUILD OTHER ROUTES**
  The planning, design and construction of new north-south road corridors or the increase in capacity of other existing corridors may reduce the demands on Manitou Drive by diverting existing and future traffic demand away from Manitou Drive. Options to upgrade, expand or build other routes have been examined in the 2010 RTMP update study, which identified Manitou Drive, between Bleams Road and Webster Road, to have capacity improvements before 2021.

  The Region is undertaking a Class EA for the extension of River Road from King Street to Manitou Drive at Bleams Road. If the River Road Extension Class EA results in approval of the River Road extension, it would alter the volume of future traffic through the Manitou Drive corridor.

  The Transportation Study Report for the Manitou Drive Class EA concludes that some improvements to the Manitou Drive corridor are required with or without the future extension of River Road. For the Manitou Drive Class EA, all of the alternative solutions will be evaluated based on:
  a) River Road being extended from King Street to Manitou Drive; as well as
  b) River Road not being extended from King Street to Manitou Drive.

  Taking this approach will allow the Project Team for the Manitou Drive Class EA to implement the Manitou Drive improvements that are needed, with or without River Road Extension.
APPENDIX C.2

PREFERRED ALTERNATIVE SOLUTION:

The Project Team has identified a combination of Alternative 2 – Intersection Improvements and Alternative 3 – Widening of Manitou Drive as the Preferred Alternative Solution. Improvements to Transit Service as identified in the RTMP and consideration of access management will also be carried forward in the Preferred Solution.

Two Alternative Design Concepts were (as illustrated in Appendix “C”) developed for the Preferred Solution and described below. Both Alternative Design Concepts consist of combinations of intersection improvements and road widening complete with curbs and storm sewers. In addition, both alternative design concepts include: sidewalks and on-road cycling lanes on both sides of Manitou Drive; a raised concrete median at Webster Road, to prohibit left turns, reduce conflicts, delays and collisions, and to provide a pedestrian crossing refuge; and, replacement of the Schneider Creek bridge with a wider structure to provide additional traffic capacity and a longer structure to accommodate extension of the City of Kitchener’s multi-use trail under Manitou Drive. Other elements of the Alternative Design Concepts were also considered and evaluated by the Project Team, including: alternative intersection types; a continuous centre median; multi-use trails for pedestrians and cyclists; and alternative boulevard widths.

ALTERNATIVE DESIGN CONCEPTS:

Alternative Design Concept No. 1 – Widen to Three Lanes Including a Centre Two-Way Left Turn Lane

This alternative would maintain Manitou Drive as 4 lanes south of Fairway Road, narrowing to 3 lanes (two through lanes with a centre two-way left turn lane) approaching the CPR bridge, continuing south as 3 lanes crossing Schneider Creek and widening to 4 lanes from the bridge to Bleams Road, along with signalized intersection improvements at Fairway Road and a 2-lane roundabout at Bleams Road. This option includes a single westbound left-turn lane from Fairway Road onto Manitou Drive if River Road is extended and dual westbound left-turn lanes if River Road is not extended.

This alternative would improve traffic operations and increase overall capacity of the transportation corridor by removing left turning vehicles from the through lanes and improving intersection capacity with a roundabout at Bleams Road and adding turning lanes at Fairway Road.

Alternative Design Concept No. 2 – Widen Manitou Drive to Four (4) Lanes

This alternative would maintain Manitou Drive as 4 lanes south of Fairway Road to Webster Road and widen it from the existing 2-lanes to 4 lanes from Webster Road to Bleams Road, along with signalized intersection improvements at Fairway Road and a 2-lane roundabout at Bleams Road.

Similar to Alternative Design Concept 1 this option includes a single westbound left-turn lane from Fairway Road onto Manitou Drive if River Road is extended and dual westbound left-turn lanes if River Road is not extended.

This alternative would improve traffic operations and increase overall capacity of the transportation corridor by providing two (2) lanes in each direction.
FIGURE 1.2

MANITOY DRIVE (REGIONAL RD 69)
CLASS ENVIRONMENTAL ASSESSMENT STUDY
FAIRWAY ROAD TO BLEAMS ROAD
ALTERNATIVE DESIGN CONCEPT 1 - WIDEN TO THREE LINES

PROVISIONS FOR A PEDESTRIAN
REFUGE AND FOR FULL OR
PARTIAL RESTRICTION OF
LEFT TURNS AT WEBSTER ROAD
ARE STILL UNDER CONSIDERATION
BY THE PROJECT TEAM.
FIGURE 1.4

MANITOU DRIVE (REGIONAL RD 69)
CLASS ENVIRONMENTAL ASSESSMENT STUDY
FAIRWAY ROAD TO BLEAMS ROAD
ALTERNATIVE DESIGN CONCEPT 1 - WIDEN TO THREE LANES
APPENDIX C.8
FIGURE 2.2

PROVISIONS FOR A PEDESTRIAN
REFUGE AND FOR FULL OR
PARTIAL RESTRICTION OF
LEFT TURNS AT WEBSTER ROAD
ARE STILL UNDER CONSIDERATION
BY THE PROJECT TEAM.

LEGEND:
- EXISTING ROAD RIGHT OF WAY
- EXISTING PROPERTY LINE
- GRADING LIMITS
- PROPOSED RETAINING WALL
- MONITORING WELL
- SALT MONITORING WELL
- PROPERTY TO BE ACQUIRED

MANITOU DRIVE (REGIONAL RD 69)
CLASS ENVIRONMENTAL ASSESSMENT STUDY
FAIRWAY ROAD TO BLEAMS ROAD
ALTERNATIVE DESIGN CONCEPT 2 - WIDEN TO FOUR LANES
APPENDIX C.10
FIGURE 2.4

FIGURE 2.4

WEST

FUTURE
EXIST.
NOTE 1

23.2m (BACK OF SW TO BACK OF SW)
17.00m (COP TO COP)

EXIST.
FUTURE

NOTE 1
DAYLIGHT TO
EXIST. R.O.W.

2.60m
1.0m
3.50m
3.50m
3.50m
3.50m
1.0m
2.60m
VARES

CURB LANE
CENTER LANE
CENTER LANE
CURB LANE
BIKE LANE
CURB LANE
CURB LANE
CURB LANE
CURB LANE

CURB & GUTTER
CURB & GUTTER
CURB & GUTTER
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NOTE 1: PROPERTY WILL BE REQUIRED IN SOME AREAS TO ACCOMMODATE IMPROVEMENTS

36
36

MANITOU DRIVE (REGIONAL RD 69)
CLASS ENVIRONMENTAL ASSESSMENT STUDY
FAIRWAY ROAD TO BLEAMS ROAD
ALTERNATIVE DESIGN CONCEPT 2 - WIDEN TO FOUR LAINES
Summary of Responses to Concerns Expressed During the Class EA
SUMMARY OF COMMENTS RECEIVED FROM PCC No. 1:
At PCC No. 1, held on February 2, 2012, comments sheets were provided that asked attendees to respond to a number of questions, as well as explain any other issues associated with the study area. The comments received and responses that were given by the Project Team are summarized below:

Do you think there are any other problems or needs that should be considered and added to the project Problem Statement?

<table>
<thead>
<tr>
<th>Comment</th>
<th># of Responses</th>
<th>Project team Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make it a one way street, it does not need widening</td>
<td>1</td>
<td>Converting Manitou Drive to a one-way street is currently not an alternative being considered due to the lack of parallel route to counterbalance the removed direction.</td>
</tr>
<tr>
<td>Bicycle lanes and sidewalk. Continuation of bike lanes to other sections.</td>
<td>1</td>
<td>Both design concepts include sidewalks and cycling lanes. The multi-use trail under the bridge in this section of Manitou Drive will improve the active transportation network in this area and provide links to other future sections. The inclusion of cycling lanes is in accordance with the Regional Cycling Master Plan which identifies key cycling networks and establishes guidelines for the Region in working with local municipalities and other stakeholders toward an integrated network of regional, local and off-road routes.</td>
</tr>
<tr>
<td>Introduce traffic lights at Webster and Manitou Drive</td>
<td>2</td>
<td>This intersection does not warrant signals and the Region does not support the installation of unwarranted traffic control signals for a number of reasons.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Studies indicate that twice as many collisions occur at a signalized intersection compared to a stop controlled intersection with similar traffic volumes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- A 2-year before / after study of 47 signals in the Region documented a 20% increase in overall collisions after signalization.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Excluding angle collisions, injury collision increased by 70%. Studies also indicate that signals generally do not improve pedestrian safety.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Installation of unwarranted signals has a negative impact on the environment. Unnecessary driver delays leads to increased fuel consumption, carbon emissions and noise, as vehicles stop and start more often and idle at red lights.</td>
</tr>
</tbody>
</table>
APPENDIX D.2

<table>
<thead>
<tr>
<th>Comment</th>
<th># of Responses</th>
<th>Project team Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>The attitude of drivers must change so they are willing to seek other forms of transportation and reduce traffic congestion while improving those other forms of transportation. This will reduce costs to the municipality.</td>
<td>1</td>
<td>Both design concepts include sidewalks and cycling lanes. The multi-use trail under the bridge in this section of Manitou Drive will improve the active transportation network in this area and provide links to other future sections. The inclusion of cycling lanes is in accordance with the Regional Cycling Master Plan which identifies key cycling networks and establishes guidelines for the Region in working with local municipalities and other stakeholders toward an integrated network of regional, local and off-road routes.</td>
</tr>
<tr>
<td>Future traffic projections should include future development within the study area.</td>
<td>1</td>
<td>Potential development and zoning of existing lands are considered during the traffic analysis and future traffic projections.</td>
</tr>
</tbody>
</table>

Are there any other Evaluation Criteria that you think should be considered?

<table>
<thead>
<tr>
<th>Comment</th>
<th># of Responses</th>
<th>Project team Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should include impacts to future business and promoting future business. The City has a shortage of accessible serviced employment lands and many future employment opportunities exist along Manitou.</td>
<td>1</td>
<td>Potential development and zoning of existing lands are considered in the traffic analysis and future traffic projections.</td>
</tr>
</tbody>
</table>

Do you have any additional suggestions for possible solutions or alternatives to address the problem/needs?

<table>
<thead>
<tr>
<th>Comment</th>
<th># of Responses</th>
<th>Project team Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the Region extends Bleams Road and also extends Block Line Road the section of Manitou Drive that you want to make 4 lanes will not be necessary</td>
<td>1</td>
<td>Traffic analysis and projections have been completed considering both the Bleams Road extension proceeding or not proceeding. Our analysis indicates that improvements to Manitou Drive are required with both options with very little change in the overall volumes. The Project Team preferred alternative design concept is a 3 lane option, 2 lanes with a 2 way centre turn lane.</td>
</tr>
<tr>
<td>Bike lanes on road, roll curbs – escape for bike</td>
<td>1</td>
<td>Cycling lanes are included in both alternative design concepts. While roll curbs could offer an escape for the roadway, roll curbs do not provide sufficient drainage capacity during a heavy storm and do not define an urban roadway effectively. It is very difficult to control access to properties when roll curbs are utilized. Barrier curbs will be used where possible for this project.</td>
</tr>
<tr>
<td>Pedestrian sidewalk one side, number of people walking roadway is low</td>
<td>1</td>
<td>Sidewalks on one side do not provide sufficient accessibility for pedestrians on the opposite side of the road.</td>
</tr>
</tbody>
</table>
APPENDIX D.3

Are there any other general comments you have regarding this project?

<table>
<thead>
<tr>
<th>Comment</th>
<th># of Responses</th>
<th>Project team Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storm drains and sanitary sewers. We do not have sewers on my property</td>
<td>1</td>
<td>Storm sewer analysis and drainage are considerations within the EA process. Evaluation of existing and proposed sewers and drainage will be completed.</td>
</tr>
<tr>
<td>Put a traffic light on Fairway and Wabanaki</td>
<td>1</td>
<td>The requirement for signals at the intersection of Fairway Road and Wabanaki Drive fall outside the limits of our project. The traffic analysis for this intersection will be analyzed as part of the River Road Extension Class Environmental Assessment.</td>
</tr>
<tr>
<td>Move the road to avoid tearing down the house at 50 Manitou Drive</td>
<td>1</td>
<td>The Project Team will evaluate the alternatives presented based on the criteria included in the information package. Impact on existing properties is part of the evaluation criteria.</td>
</tr>
<tr>
<td>There is no doubt that the creek bridge needs replacement to 4 lanes and that the areas on both sides of the bridge need to be widened In times of economic uncertainty “buy what you need, need what you buy” should be our slogan. Changing what is necessary at this time is all that should be required.</td>
<td>1</td>
<td>It is our intention to buy property as required based on the preferred alternative. Typically a small buffer of property would be purchased to account for any unforeseen circumstances. Any left over land if still deemed large enough would be declared surplus lands and sold back to any interested parties.</td>
</tr>
</tbody>
</table>

SUMMARY OF COMMENTS RECEIVED FROM PCC No. 2:

At PCC No. 2, held on June 7, 2012, comments sheets were provided that asked attendees to respond to a number of questions, as well as explain any other issues associated with the study area. The 4 comment sheets received, other comments received at or immediately following PCC No. 2, and all responses that were given by the Project Team are summarized below:

Comment sheets returned from PCC No. 2:

<table>
<thead>
<tr>
<th>Comment</th>
<th>Project team Response (Date given)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) More pavement markings required in roundabouts to indicate persons intentions</td>
<td>(August 1, 2012) Please note that roundabout signage and pavement markings within the Region of Waterloo are standards developed by the Region of Waterloo’s transportation division in accordance with the Ontario Traffic Act. It should also be noted, that the Region of Waterloo is in the process of reviewing and revising its pavement marking strategies for roundabouts. Your comments will be forwarded to the committee. Please note that your comments that more way-finding signs are required to direct traffic to Hwy 401 from Doon South, have been referred to Region of Waterloo Transportation Engineering.</td>
</tr>
</tbody>
</table>
### APPENDIX D.4

*Comment sheets returned from PCC No. 2 Cont’d:*

<table>
<thead>
<tr>
<th>Comment</th>
<th>Project team Response (Date given)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Alternative 1 has less impact on the area Roundabout at (Bleams/Manitou) will relieve congestion immediately Happy to see improvements, hoping to keep impacts to Schneider Creek as little as possible</td>
<td>(August 1, 2012) We appreciate your comments regarding the roundabout. A roundabout is being recommended at this intersection based on consideration of traffic operations, capacity, safety and economics. Regarding your comment that you are hoping impacts to Schneider Creek are kept to a minimum, please note that the bridge and road improvements are designed with the intent to minimize any impacts to the creek and surrounding areas.</td>
</tr>
<tr>
<td>3) Force drivers to consider alternative transportation. Sidewalks and bike lanes will get plenty of use. Reduce driveways on south side Great to see trail under bridge Is there an opportunity to expand the network in the future? Concrete island at Webster should allow for emergency vehicles to turn left</td>
<td>(August 1, 2012) Both design concepts include sidewalks and cycling lanes. The multi-use trail under the bridge in this section of Manitou Drive will improve the active transportation network in this area. The inclusion of cycling lanes is in accordance with the Regional Cycling Master Plan which identifies key cycling networks and establishes guidelines for the Region in working with local municipalities and other stakeholders toward an integrated network of regional, local and off-road routes. Regarding your comments the concrete island at Webster Road, please note that the recommended design concept has been circulated for comment to all emergency services groups. To date, the Project Team has not received any comments with concerns regarding the preferred design concept.</td>
</tr>
<tr>
<td>4) Least intrusive and solves most of the issues / concerns Traffic circle will resolve most of the congested traffic No turns to Webster will be a huge burden on my business The island in front of Webster is dead space and no left turn from Webster makes the street redundant Strange that a project can be halted by salamanders but we have no problem expropriating a senior from his home of 72 years.</td>
<td>(August 1, 2012) Thank you for meeting with members of the project team on-site to discuss your concern regarding the Manitou Drive / Webster Road intersection. The Project Team is recommending that the design concept as presented at our PCC of June 7, with some adjustments to the dimensions of the median and the intersection and with prohibition of all left-turns at the Webster Road and Manitou Drive intersection, be carried forward. The median at this location will reduce conflicts that currently result in delays and collisions and in addition the median will serve as a pedestrian refuge for crossing Manitou Drive near a transit stop.</td>
</tr>
</tbody>
</table>
### APPENDIX D.5

**Other comments received at or immediately following PCC No. 2**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Form of Response</th>
<th>Project Team Response (Date given)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5) Concerned by timing and duration of road closure and many future employment opportunities exist along Manitou.</td>
<td>Verbal</td>
<td>(August 1, 2012) We appreciate your concern regarding the timing and duration of the construction. As we start to progress into detailed design we will look into construction staging and detours. New bridge construction will require Manitou Drive to be closed at Schneider Creek for approximately 8 months.</td>
</tr>
<tr>
<td>6) D. McLeod and W. Cheater met property owner on site on June 20/12.</td>
<td>meeting</td>
<td>(August 1, 2012) We understand your concerns of maintaining a suitable access and parking for your property. We are reviewing the potential to re-locate the access to your property to adjacent the south property line and will contact you to discuss the results when completed. MRC and the Region will contact you prior to the end of August 2012, to review our findings.</td>
</tr>
<tr>
<td>- Generally in favour of widening</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Unconvinced that the potential River Road extension will have little impact to the traffic issues on Manitou.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Request relocating entrance to property to the south to reduce impacts due to grading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Concerned with safety due to proximity of road widening to existing house.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Requested meeting to discuss impacts to 50 Manitou Drive.</td>
<td>meeting</td>
<td>(August 1, 2012) We understand your concerns with the prospect of your house being impacted by the improvements to the roadway and have investigated some preliminary options as requested.</td>
</tr>
<tr>
<td>Unhappy with the prospect of the house being demolished</td>
<td></td>
<td>The Grand River Conservation Authority has noted that a residence cannot be moved into the floodplain if another suitable location is available on the given property.</td>
</tr>
<tr>
<td>- Inquired if the house could be re-located on the property</td>
<td></td>
<td>The City of Kitchener has noted that the option to demolish the house and rebuild it in the location of the existing barn would be permitted under zoning only as a single home on the property, in association with the existing business.</td>
</tr>
<tr>
<td>- Inquired about a new house being built where the existing barn is located.</td>
<td></td>
<td>Please note that after the recommendation to the Regions Planning and Public Works Committee has been approved and the Environmental Assessment has been filed the Region of Waterloo legal department will be in contact to discuss options for your property.</td>
</tr>
</tbody>
</table>
## APPENDIX D.6

### Other comments received at or immediately following PCC No. 2 Cont’d:

<table>
<thead>
<tr>
<th>Comment</th>
<th>Form of Response</th>
<th>Project Team Response (Date given)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 &amp; 9) - Roundabout is a waste of tax payer funding.</td>
<td>2 emails</td>
<td>(August 1, 2012) Regarding your comment about roundabouts being a waste of tax payer’s money, please note that Region has completed an Intersection Control Study (ICS) for the intersection of Manitou Drive and Bleams Road. An ICS is undertaken to compare the safety, operations, construction and life cycle costs of a signalized intersection and a roundabout. The ICS noted that the more economical intersection control alternative with the existing three-leg configuration is traffic signal control. A roundabout at this location is the most economical alternative for a four-leg configuration. The roundabout would have advantages in terms of speed control, environmental factors and is expected to operate with low peak hour delays for motorists in either a three-leg or four-leg configuration. Adding a fourth leg at a future date to a roundabout would have no impacts on the rest of the intersection and would cost much less than expanding a signal control alternative. The added intersection capacity of a roundabout would not require Manitou Drive to be widened north of Bleams Road, and this may provide additional future cost savings.</td>
</tr>
<tr>
<td>- No need for Roundabout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Accidents will soar and there will be fatalities as a result</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Unwarranted roundabouts are destroying the City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Surface drainage runoff from Webster enters property</td>
<td>email</td>
<td>(August 1, 2012) Regarding your comment about surface drainage and consideration for curbs along Webster Road, please note that the overland drainage will be reviewed as part of the detailed design of the project. Regarding your request for information about maintaining the proposed sidewalk, please note the sidewalk is proposed at the location of a transit stop and therefore the maintenance of the sidewalk would normally be the responsibility of the City of Kitchener.</td>
</tr>
<tr>
<td>- Consideration for curbs along Webster to control drainage runoff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Requested information regarding who is responsible for maintenance of sidewalk on Manitou Drive.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# APPENDIX E.1:
EVALUATION CRITERIA AND EVALUATION OF ALTERNATIVE DESIGN CONCEPTS

<table>
<thead>
<tr>
<th>Criteria</th>
<th>ALTERNATIVE 1</th>
<th>ALTERNATIVE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reconstruct to 3 Lane Cross Section</td>
<td>Reconstruct to 4 Lane Cross Section</td>
</tr>
<tr>
<td></td>
<td>Corridor Road Widening to 3 Lanes to include 1 lane each direction, 1 shared centre LT lane, bike lanes and sidewalks</td>
<td>Corridor Road Widening to 4 Lanes to include 2 lanes each direction, bike lanes and sidewalks</td>
</tr>
</tbody>
</table>

## TRANSPORTATION

- **Forcasted Traffic / Transportation Network**
  - ALTERNATIVE 1: Meets the capacity requirements for existing and forecasted traffic volumes.
  - ALTERNATIVE 2: Meets the capacity requirements for existing and forecasted traffic volumes.

- **Expected Collisions**
  - ALTERNATIVE 1: Improved Horizontal and vertical alignment, Greater reduction in Sideswipe collisions with improved left-turn access
  - ALTERNATIVE 2: Improved Horizontal and vertical alignment, Additional lane will result in more sideswipes, offsetting improved left-turn access

- **Access Management**
  - ALTERNATIVE 1: Impacts to entrances; however business functionality maintained
  - ALTERNATIVE 2: Impacts to entrances and business function
    - For left turns out of entrances requires crossing of one through lane and storage in two way left turn lane

- **Transit**
  - ALTERNATIVE 1: Alternative serves the expected transit needs, Better traffic progression within corridor
  - ALTERNATIVE 2: Alternative serves the expected transit needs, Better traffic progression within corridor

- **Cycling Needs**
  - ALTERNATIVE 1: Provides for on-road cycle lane in each direction, Narrower road and somewhat lower speeds
  - ALTERNATIVE 2: Provides for on-road cycle lane in each direction, Wider road, somewhat higher speeds

- **Pedestrian Needs**
  - ALTERNATIVE 1: Provides for sidewalk on each side of roadway
  - ALTERNATIVE 2: Provides for sidewalk on each side of roadway
    - Pedestrians must use a long tunnel beneath the CP-Rail crossing

## Transportation Summary

**Alternative 1 is preferred** for the following reasons:
- Greater reduction in sideswipe collisions in comparison to Alternative 2.
- Greater improvements for pedestrians and cyclists in comparison to Alternative 2.

## NATURAL ENVIRONMENT

- **Water Courses Including Fisheries and Aquatic Habitat**
  - ALTERNATIVE 1: No impacts to navigable waters are expected with this alternative, Impacts to fisheries are temporary and can be mitigated with preventive measures.
  - ALTERNATIVE 2: No impacts to navigable waters are expected with this alternative, Impacts to fisheries are temporary and can be mitigated with preventive measures.

- **Terrestrial Habitat / Vegetation / Wetlands**
  - ALTERNATIVE 1: Reconstruction will result in minor impacts to existing vegetation and wetlands
  - ALTERNATIVE 2: Reconstruction will result in greater impacts to existing vegetation and wetlands in comparison to Alternative 1.

- **Storm water drainage**
  - ALTERNATIVE 1: Increase in impervious area minimized.
    - Oil/Grit Separators to be utilized for improved quality control
  - ALTERNATIVE 2: Greater increase to impervious area.
    - Larger Oil/Grit Separators required to improve quality control

## Natural Environment Summary

**Alternative 1 is preferred** for the following reasons:
- Less impacts to existing vegetation and wetlands in comparison to Alternative 2;
- Storm drainage impervious area minimized;
<table>
<thead>
<tr>
<th>Criteria</th>
<th>ALTERNATIVE 1</th>
<th>ALTERNATIVE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOCIAL ENVIRONMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built Heritage Features</td>
<td>• No impacts to protected heritage resources</td>
<td>• No impacts to protected heritage resources</td>
</tr>
<tr>
<td></td>
<td>• Built heritage feature (BHF) 6 and Built heritage feature (BHF) 7 (50 Manitou Dr. - yellow brick house and barn) will be demolished for the road widening</td>
<td>• Built heritage feature (BHF) 2 and Built heritage feature (BHF) 3 (28 Manitou Dr. - house and barn) will be demolished to realign Cress Lane</td>
</tr>
<tr>
<td></td>
<td>• Built heritage feature (BHF)4 (the 1958 bridge) will be replaced</td>
<td>• BHF 6 and BHF 7 (50 Manitou Dr. - yellow brick house and barn) will be demolished for the road widening</td>
</tr>
<tr>
<td>Cultural Landscapes</td>
<td>• Work would be limited to previously disturbed areas, therefore minimal impacts are anticipated</td>
<td>• Reconfiguration of the intersection of Cress Lane and Connor Street (Former German Mills Crossroads) and the demolition of BHF 2 and BHF 3 erase the final remnants of the former settlement of German Mills.</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to interpret the history of German Mills Cultural landscape unit (CLU 3) on the improved Schneider Creek Cultural landscape unit (CLU 4) trail</td>
<td>• Opportunity to interpret the history of German Mills Cultural landscape unit (CLU 3) on the improved Schneider Creek Cultural landscape unit (CLU 4) trail</td>
</tr>
<tr>
<td>Impacts to adjacent property owners</td>
<td>• Region will acquire additional property from adjacent landowners</td>
<td>• Region will require highest area of additional property from adjacent landowners.</td>
</tr>
<tr>
<td></td>
<td>• 8 Properties Impacted</td>
<td>• 10 Properties Impacted</td>
</tr>
<tr>
<td></td>
<td>• Approximate property requirement is 1200 sq. m</td>
<td>• Approximate property requirement is 2100 sq. m</td>
</tr>
<tr>
<td></td>
<td>• Demolition of House at 50 Manitou</td>
<td>• 28 Manitou will require full buyout</td>
</tr>
<tr>
<td></td>
<td>• Impacts in front of 38 Manitou</td>
<td>• Demolition of House at 50 Manitou</td>
</tr>
<tr>
<td></td>
<td>• Impacts to parking lots at 110 and 107 Manitou</td>
<td>• Impacts in front of 38 Manitou</td>
</tr>
<tr>
<td></td>
<td>• Impacts to parking lots at 110 and 107 Manitou</td>
<td>• Impacts to parking lots at 110 and 107 Manitou</td>
</tr>
<tr>
<td>Construction Impacts</td>
<td>• Manitou Drive to be closed at the bridge during construction</td>
<td>• Manitou Drive to be closed at the bridge during construction</td>
</tr>
<tr>
<td></td>
<td>• Construction durations similar for each alternative</td>
<td>• Construction durations similar for each alternative</td>
</tr>
<tr>
<td>Social Environment Summary</td>
<td>Alternative 1 is preferred for the following reasons:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lower impacts to Cultural Landscapes in comparison to Alternative 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reduced property required in comparison to Alternative 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reduced Built Heritage impacts in comparison to Alternative 2</td>
<td></td>
</tr>
<tr>
<td><strong>COSTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Costs (including property)</td>
<td>• Preliminary Cost Estimate is 8.5 M</td>
<td>• Preliminary Cost Estimate is 10.9 M</td>
</tr>
<tr>
<td>Costs Summary</td>
<td>Alternative 1 is preferred for the following reasons:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Less Capital Costs</td>
<td></td>
</tr>
<tr>
<td>Overall Assessment</td>
<td>Overall, Alternative 1 is preferred</td>
<td></td>
</tr>
</tbody>
</table>

Legend: Greater Impact/Least Benefit | Less Impact/Most Benefit
Regional Municipality of Waterloo
FISCHER-HALLMAN ROAD IMPROVEMENTS
BLEAMS ROAD TO OTTAWA STREET SOUTH
City of Kitchener

INFORMATION PACKAGE

Public Consultation Centre
Thursday, September 20th, 2012
5:00 p.m. – 8:00 p.m.
at
John Sweeney Catholic School
185 Activa Avenue, Kitchener

There is a Comment Sheet at the back of this package. If you wish, please fill it out and deposit it in the designated box provided at this Public Consultation Centre.
1. **What is the Purpose of this Public Consultation Centre?**

The Region of Waterloo is currently undertaking a Class Environmental Assessment (Class EA) Study to consider road improvements to Fischer-Hallman Road from Bleams Road to Ottawa Street South in the City of Kitchener. Please refer to Appendix ‘A’ for a Key Plan. Fischer-Hallman Road is an arterial roadway under the jurisdiction of the Regional Municipality of Waterloo. The intersection of Ottawa Street South and Fischer-Hallman Road is not part of the Study Area for this Class EA Study.

The Region has initiated this Class EA Study to consider widening this section of Fischer-Hallman Road from two (2) to four (4) lanes to provide an acceptable level of service for forecasted traffic demands along this corridor. Additionally, enhanced facilities for pedestrians and cyclists are being considered as part of this Class EA Study.

Improvements currently under consideration include:

- Widening Fischer-Hallman Road to provide two (2) through lanes in each direction from Bleams Road to Ottawa Street South;
- Modifications to some intersections within the project limits to improve traffic operations;
- Reconstruction or rehabilitation of the roadway to address the deteriorated pavement condition;
- Urbanization of the section of Fischer-Hallman Road from Bleams Road to Rockwood Road to accommodate cycling and pedestrian facilities and improve roadway drainage; and
- Enhanced boulevard landscaping and streetlighting.

This Public Consultation Centre is a forum for you to:

- Become informed of the current and future traffic operational issues;
- Review the alternative designs that have been developed;
- Learn how these alternative designs are being evaluated by the Project Team; understand how a preliminary preferred alternative design is being identified; and how a recommended alternative design will ultimately be established;
- Ask questions of Regional staff; and
- Provide comments on the design alternatives under consideration and indicate which alternative you prefer.

We encourage you to provide comments on the improvements under consideration and request that you fill out the Comment Sheet attached to the back of this Information Package and place it in the box at this Consultation Centre or send it to the address indicated on the Comment Sheet. Your comments will be considered by the Project Team, in conjunction with all of the other relevant information, in establishing a preferred alternative design for improvements to Fischer-Hallman Road from Bleams Road to Ottawa Street South.
2. **What is the Class Environmental Assessment Process?**

The Class Environmental Assessment Process is a formal planning process approved under the *Ontario Environmental Assessment Act* for the planning of municipal infrastructure projects. Under the Class EA process, consultation with the public and stakeholders is a key component. Please refer to Appendix ‘B’ for more information about the Class EA process. This planning study is being carried out in accordance with Schedule “C” requirements under the Municipal Class Environmental Assessment.

3. **Who is Directing this Class Environmental Assessment Study?**

This Class EA Study is being directed by a “Project Team” consisting of staff from the Region of Waterloo, the City of Kitchener, Regional Councillor Tom Galloway, and City of Kitchener Councillor Kelly Galloway.

4. **Why are we Considering Road Improvements?**

The Region’s 2010 Transportation Master Plan (RTMP) identifies the need to widen Fischer-Hallman Road from Bleams Road to Ottawa Street South within the five (5) to ten (10) year timeframe in order to provide adequate capacity for projected traffic volumes along this corridor. Additionally, the Region’s Draft Active Transportation Master Plan identifies the section of Fischer-Hallman Road from Bleams Road to Ottawa Street South as a candidate for boulevard multi-use trails to serve both cycling and pedestrian traffic. Pedestrian facilities along Fischer-Hallman Road within the study limits are currently discontinuous. The existing roadway asphalt on Fischer-Hallman Road from Bleams Road to Ottawa Street South is in fair condition and in need of rehabilitation or replacement.

5. **What Improvements are Being Considered?**

A Transportation Study has been completed as part of this Class EA Study. The purpose of the Transportation Study was to examine and summarize existing traffic operations, forecast future traffic volumes, and identify and evaluate alternative solutions for accommodating projected traffic volumes and improving traffic operations.

Current and projected traffic volumes on Fischer-Hallman Road from Bleams Road to Ottawa Street South are shown in Appendix ‘C’ of this Information Package.

Based on the recommendations in this Transportation Study, other technical studies and investigations completed, as well as the objectives of the Regional Official Plan, RTMP, Context Sensitive Regional Transportation Corridor Design Guidelines and the Draft Active Transportation Master Plan, the Project Team has identified a number of design alternatives incorporating the following elements for improvements to Fischer-Hallman Road from Bleams Road to Ottawa Street South:
Reconstruct and widen Fischer-Hallman Road to provide for two (2) through lanes in each direction from Bleams Road to Ottawa Street South with curb & gutter on both sides of the road and storm sewers;

Construct a two-lane roundabout at the intersection of Fischer-Hallman Road and Bleams Road with provision for expanding to an ultimate three-lane roundabout if required in the future;

Convert the existing opposing northbound/southbound designated left-turn lanes on Fischer-Hallman Road south of the intersection of Ottawa Street South at Fischer-Hallman Road to a two-way left-turn lane from approximately 100 metres south of Ottawa Street South to approximately 190 metres south of Ottawa Street South;

Extend the storage length of existing designated left-turn and right-turn lanes;

Provide enhanced facilities for cyclists and pedestrians on Fischer-Hallman Road from Bleams Road to Ottawa Street South;

Provide a pedestrian refuge island on Fischer-Hallman Road to provide city trail connectivity across Fischer-Hallman Road at the following locations:

► Opposite the northbound designated left-turn lane at the intersection of Cotton Grass Street and Fischer-Hallman Road; and,
► Approximately 350 metres north of the intersection of Cotton Grass Street and Fischer-Hallman Road;

Relocate existing transit stops as required;

Construct a painted flush centre median;

Provide boulevard trees on Fischer-Hallman Road where feasible; and,

Provide streetlights on each side of Fischer-Hallman Road within the project limits in accordance with Regional Policy.

6. What Design Alternatives are Being Considered?

Prior to this Public Consultation Centre, a series of design alternatives were developed by the Project Team to consider alternative means of providing enhanced pedestrian and cycling facilities along Fischer-Hallman Road. Each of the design alternatives, excluding the “Do Nothing” alternative, includes the elements described in Section 5 of this Information Package.

The following four (4) design alternatives were developed and considered by the Project Team in advance of this Public Consultation Centre. (The ‘Do Nothing’ Alternative is always considered in Class EA Studies to establish a baseline for comparison to other design alternatives being considered.)

Alternative 1 - ‘Do Nothing’ – Reconstruct the road in its current configuration.

Alternative 2 - Construct in each direction two (2) 3.35 metre wide through lanes, 1.25 metre wide on-road cycling lanes on each side of the road, 1.5 to 2.1 metre wide concrete sidewalk on the west side and a 3.0 metre wide asphalt multi-use trail on the east side of the road.
Alternative 3 – Construct in each direction two (2) through lanes comprised of a 3.35 metre wide inside lane and a 3.65 metre wide curb lane and a 3.0 metre wide asphalt multi-use trail on each side of the road.

Alternative 4 - Construct in each direction two (2) 3.35 metre wide through lanes, 1.25 metre wide on-road cycling lanes on each side of the road and a 3.0 metre wide asphalt multi-use trail on each side of the road.

Please refer to Appendix ‘D’ for drawings of each of the design alternatives.

7. How are the Design Alternatives being Evaluated?

The following criteria are being used by the Project Team to evaluate the design alternatives:

Transportation: How does the alternative serve the expected vehicular, transit, pedestrian and cycling traffic in terms of corridor capacity, level of service, transportation network and movement of emergency vehicles?

Social Economic Environment: How does the alternative affect the residential and commercial properties abutting the road (driveway access, on-site parking, property impacts, noise, air quality, archaeological, and cultural heritage)?

Natural Environment: How does the alternative affect existing trees, stormwater management, vegetation and wildlife?

Capital Cost: What is the total cost of the alternative including the cost for road construction, utility and streetlighting, property acquisitions, intersection improvements and landscaping?

Each design alternative has been preliminarily evaluated by the Project Team using the aforementioned criteria. Note that all design alternatives remain under consideration and are being presented for public comment at this Public Consultation Centre. Upon receiving input from the public and technical agencies, the Project Team will re-assess the alternatives before confirming the Project Team’s Recommended Design Alternative for approval by Regional Council. Please refer to Appendix ‘E’ for the Evaluation of Alternative Design Concepts.

8. Which Design Alternatives is Preferred by the Project Team?

Prior to this Public Consultation Centre, the Project Team has identified Design Alternative No. 3 as its Preferred Design Alternative. The Project Team assessed that Design Alternative 3 provides the following advantages:
• Full connectivity with existing City of Kitchener trails on each side of Fischer-Hallman Road;
• Best services both recreational and utilitarian cyclists;
• Fully aligns with the Region’s Draft Active Transportation Master Plan;
• Lowest capital cost of the design alternatives (excluding the ‘Do Nothing’ option).

9. **How will the Proposed Improvements Enhance the Pedestrian Environment on this Project?**

A 1.50 metre wide concrete sidewalk currently exists on the west side of Fischer-Hallman Road from Ottawa Street South to Max Becker Drive/Westmount Road and on the east side of Fischer-Hallman Road from Rockwood Road to Highbrook Court. The Project Team’s Preferred Design Alternative includes construction of a new 3.0 metre wide asphalt multi-use trail proposed along each side of Fischer-Hallman Road. The existing concrete sidewalk would be removed to accommodate the asphalt multi-use trail. The City of Kitchener is responsible for maintenance of the existing concrete sidewalk and proposed multi-use asphalt trail. Please refer to Appendix ‘F’ for photographic examples of concrete sidewalk and multi-use trail.

10. **Who is Responsible for Clearing Snow from Sidewalks or Multi-Use Trails on Fischer-Hallman Road?**

The City of Kitchener removes all snow from existing sidewalks along Fischer-Hallman Road within the study limits and will remove snow from the asphalt multi-use trails if implemented.

11. **Were Other Roundabouts Considered for this Project?**

The implementation of modern roundabouts was considered by the Project Team to replace all existing traffic control signals on Fischer-Hallman Road within the study limits. The intersections that were evaluated for implementation of a modern roundabout included: Bleams Road and Fischer-Hallman Road, Westmount Road and Fischer-Hallman Road and Activa Avenue and Fischer-Hallman Road. The intersections of Rockwood Road at Fischer-Hallman Road and Cotton Grass Street at Fischer-Hallman Road do not meet traffic control signal warrants and, therefore, these intersections were not evaluated any further for consideration of a modern roundabout.

The Project Team’s completed evaluation found that taking into account the estimated capital and operating costs of traffic control signals and roundabouts, collision histories at each intersection and property constraints, a roundabout is recommended over traffic control signals at the intersection of Bleams Road and Fischer-Hallman Road, but roundabouts were not recommended over traffic control signals at the other intersections assessed.
12. **Will Property be Required from Abutting Property Owners?**

Implementation of the Project Team’s preliminarily Preferred Design Alternative No. 3 would require that the Region acquire property and easements from a small number of abutting property owners. These property purchases generally consist of small ‘strips’ or ‘parcels’ of land immediately adjacent to the existing roadway right-of-way at intersections to provide room for the proposed additional right-turn lane requirements. Construction of the proposed roundabout at the intersection of Bleams Road and Fischer-Hallman Road requires permanent and temporary parcels from properties in all four corners of this intersection. In areas where property is required, the property owner will be contacted directly by the Region of Waterloo’s Land Property Agent. Compensation will be provided at fair market rates based on recent similar area sales.

Please refer to Appendix ‘G’ for the list of potentially impacted property locations.

13. **Will the Improvements Impact Heritage Features?**

One property at 1198 Fischer-Hallman Road was identified by the City of Kitchener as having potential heritage value, including the existing house, barn and garage located on this property. A heritage overview assessment was completed for this property by a licensed heritage consultant. The heritage overview concluded that the existing barn and garage require photographic documentation acceptable to the City of Kitchener before removal of the barn and garage. The removal of the existing barn and garage is necessary to accommodate the Fischer-Hallman Road widening and facilities for pedestrians and cyclists. The photographic documentation of the barn and garage must be completed in accordance with requirements of the City of Kitchener’s heritage documentation policy prior to demolition of these buildings.

The Preferred Design Alternative does not physically impact the existing house but will result in a reduced front yard setback to the front of the house.

14. **Will the Improvements Increase Traffic Noise?**

Implementation of noise control measures in connection with the widening of a Regional roadway is assessed in accordance with Part ‘B’ of the Region’s Implementation Guideline for Noise Policies. Under this Guideline, existing and projected average noise levels for the outdoor living area of abutting properties are calculated in accordance with Ministry of Environment procedures. In accordance with the Region’s Guideline, a noise barrier will be considered by residents, Area Municipal Council and Regional Council in the following situations:

- Where the projected noise level exceeds 65 decibels (dBA); or
- Where the projected noise level exceeds 60 dBA and the difference between the existing and projected noise levels is 5 dBA or more.
As part of this Class EA Study, the Region retained the engineering firm Stantec Consulting Ltd. to complete a noise study in accordance with Ministry of Environment requirements. This noise study took into account the existing noise walls along Fischer-Hallman Road and grass berms. The results of the noise study for representative receivers including the most sensitive receivers are summarized as follows:

<table>
<thead>
<tr>
<th>Location</th>
<th>2011 Current Average Daytime Noise Levels (dBA)</th>
<th>2027 Projected Average Daytime Noise Levels (dBA)</th>
<th>Difference (Values over 60 dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>136 Woodpoppy Court</td>
<td>54.42</td>
<td>55.88</td>
<td>-</td>
</tr>
<tr>
<td>144 Woodpoppy Court</td>
<td>55.10</td>
<td>56.21</td>
<td>-</td>
</tr>
<tr>
<td>30 Hackberry Street</td>
<td>52.96</td>
<td>54.20</td>
<td>-</td>
</tr>
<tr>
<td>151 Dinison Crescent</td>
<td>52.91</td>
<td>55.24</td>
<td>-</td>
</tr>
<tr>
<td>90 Bush Clover Crescent</td>
<td>54.81</td>
<td>56.52</td>
<td>-</td>
</tr>
<tr>
<td>102 Bush Clover Crescent</td>
<td>55.67</td>
<td>57.39</td>
<td>-</td>
</tr>
<tr>
<td>128 Bush Clover Crescent</td>
<td>59.96</td>
<td>61.66</td>
<td>1.70</td>
</tr>
<tr>
<td>140 Bush Clover Crescent</td>
<td>54.65</td>
<td>56.47</td>
<td>-</td>
</tr>
<tr>
<td>136 Bush Clover Crescent</td>
<td>58.86</td>
<td>60.59</td>
<td>1.73</td>
</tr>
<tr>
<td>327 Dinison Place</td>
<td>52.66</td>
<td>54.66</td>
<td>-</td>
</tr>
<tr>
<td>322 Highbrook Crescent</td>
<td>58.87</td>
<td>60.95</td>
<td>2.08</td>
</tr>
<tr>
<td>330 Highbrook Crescent</td>
<td>60.41</td>
<td>62.33</td>
<td>1.92</td>
</tr>
<tr>
<td>334 Highbrook Crescent</td>
<td>60.37</td>
<td>62.49</td>
<td>2.12</td>
</tr>
<tr>
<td>539 Highbrook Court</td>
<td>61.71</td>
<td>63.88</td>
<td>2.17</td>
</tr>
<tr>
<td>534 Highbrook Court</td>
<td>55.75</td>
<td>57.94</td>
<td>-</td>
</tr>
<tr>
<td>106 Highbrook Street</td>
<td>56.23</td>
<td>58.08</td>
<td>-</td>
</tr>
<tr>
<td>102 Highbrook Street</td>
<td>54.82</td>
<td>56.67</td>
<td>-</td>
</tr>
<tr>
<td>937 Erinbrook Court</td>
<td>51.20</td>
<td>52.66</td>
<td>-</td>
</tr>
<tr>
<td>46 Rockwood Road</td>
<td>51.41</td>
<td>53.14</td>
<td>-</td>
</tr>
<tr>
<td>83 Riehm Street</td>
<td>53.21</td>
<td>55.57</td>
<td>-</td>
</tr>
</tbody>
</table>

Based on the results of the noise study, additional noise mitigation measures are not warranted. A noise increase of up to 3 dBA is not noticeable for most people.

15. **How Does this Project Relate to the Objectives of the Regional Official Plan, the Regional Transportation Master Plan and the Regional Transportation Context Sensitive Corridor Design Guidelines?**

The Project Team is planning road improvements within the project limits to address the deteriorated roadway condition as well as to include enhancements to the roadway corridor consistent with Regional Bylaws, policies, plans and practices. The Regional Official Plan gives the direction to balance new and retrofitted roads for all modes of transportation including walking, cycling, automobiles and transit. This project supports the Regional Transportation Master Plan (RTMP) goals of optimizing our transportation
system, promoting transportation choice and supporting sustainable development. This project includes measures to improve transportation operations, and to enhance pedestrian and cycling facilities via new multi-use trail and enhanced boulevard landscaping to improve the walking environment. Improving the walking environment is a key objective of the RTMP. In addition, Regional Council also approved the Regional Transportation Context Sensitive Corridor Design Guidelines in 2010 that supports the integration of active and sustainable transportation on all Regional Roads.

16. **What are the Impacts to the Natural Environment?**

All design alternatives other than the ‘Do Nothing’ alternative require the existing ditches adjacent to the roadway from approximately 50 metres south of Rockwood Road to Bleams Road be filled in to accommodate the proposed curb and gutter and multi-use trail in the boulevards on each side of Fischer-Hallman Road. Under these design alternatives, storm water will be directed to storm sewers via catch basins located along the curb and gutter. This type of storm water collection system is common in urban areas; however, it is not as beneficial as grassed ditches are in removing sediment from the storm water. In order to mitigate this impact, the roadside catch basins will be equipped with sumps to collect sediment from the storm water run-off prior to discharge to the storm sewer system. The new storm sewer required for Fischer-Hallman Road from Rockwood Drive to Bleams Road will drain into the existing stormwater management pond adjacent to Bleams Road approximately 300 metres west of the intersection of Bleams Road and Fischer-Hallman Road. This stormwater management pond provides both quantity and quality treatment of stormwater runoff.

Implementation of the Preferred Design Alternative will require the removal of approximately 45 to 55 trees throughout the study area. These trees would be replaced with trees on a 2-for-1 basis in accordance with the Region’s Tree Planting Policy where space permits. Additional trees, beyond the replacement trees, will be planted in the boulevard areas where space permits.

Sediment and erosion control features will be designed, implemented and maintained throughout construction regardless of which design alternative is constructed. Key measures of the sediment and erosion control plan will include silt fencing, temporary tree protection fencing, swale/ditch check dams, temporary sediment basins and other Best Practice measures.

17. **Will the Posted Speed Limit be Changed or Parking Restrictions be Implemented?**

Fischer-Hallman Road is currently posted at 60 km/hr from Bleams Road to Activa Avenue and at 50 km/hr from Activa Avenue to Ottawa Street South. No change to the posted speed limit is proposed.

Parking is currently prohibited on Fischer-Hallman Road and no changes are proposed.
18. **Will New Landscaping be Provided?**

As part of this project, the Project Team is proposing that new trees be planted in boulevard areas along Fischer-Hallman Road where space permits. Additionally, where boulevard room is limited at intersections, the use of enhanced hard surface features, such as coloured impressed concrete, will be considered in order to improve the aesthetics of the roadway corridor.

19. **How will Entrances and Grassed Areas be Affected?**

Entrances will be re-graded, extending onto private property, if necessary, in order to blend the existing entrance with the newly constructed roadway.

Grassed areas or lawns disturbed during construction will be repaired to equal or better condition with topsoil and sod.

20. **When will Construction Occur and how will Construction Staging and Traffic be Managed?**

Subject to completion of this Class EA Study and receipt of all technical and financial approvals, construction is tentatively scheduled for 2016 in the Region’s Ten-Year Transportation Capital Program. The timing of construction will be confirmed upon completion of this Class EA Study.

It is anticipated that two-way traffic on Fischer-Hallman Road will be maintained at most times during construction although it may be necessary to reduce the road to a single lane with flagging operations for short periods.

Construction of the roundabout at the intersection of Fischer-Hallman Road and Bleams Road may require the full closure of this intersection for a period of up to two weeks.

Temporary fencing will be erected to separate pedestrians from the construction zone. Grand River Transit Service will be maintained during construction through the implementation of temporary transit stop locations as required.

Signage will be erected during construction in order to direct pedestrians through the construction area.

As is customary through Regional Road construction zones, the public will be advised of the construction timing and traffic restrictions through advance signage, the Region’s website, and radio and newspaper notices.

21. **How Has the Region’s Transit Priority Project Been Considered?**

The Region will be undertaking a study in the future to evaluate options to provide priority for transit vehicles, i.e., features that allow transit vehicles to have priority over other vehicles at intersections that may impact Fischer-Hallman Road from Ottawa.
Street South to Westmount Road. The Transit Priority Study is independent of this Class EA Study and may identify improvements in addition to the improvements identified as part of the Fischer-Hallman Road Improvements Class EA Study.

22. **How will Access be Maintained to Properties during Construction?**

For commercial properties, pedestrian access for customers will be maintained at all times. Vehicular access to commercial parking lots will be maintained to the greatest extent possible during construction. Deliveries and pick-ups will be coordinated with the Contractor during construction to minimize disruption in service. If only one driveway access exists, the Contractor will complete the work across your driveway in two stages where feasible in order to maintain customer access. Some commercial businesses have access to their parking lots from adjoining streets which will help to minimize parking access inconveniences. For commercial properties within the work zone, additional signage will be provided during construction to direct customers to their businesses.

Access to residential driveways will be maintained to the greatest extent possible during construction. The Contractor will be required to temporarily restrict access to and from driveways on Fischer-Hallman Road and intersecting side streets for short-term periods when completing certain construction operations. Where a disruption to your driveway is expected, the Contractor is required to hand-deliver a notice at least 48 hours in advance advising you of the time and duration of the driveway disruption. If necessary, alternate parking arrangements will be made, such as provision for temporary parking.

Special attention will also be given to ensure access is maintained for emergency vehicles during and after construction hours.

Property and business owners will be asked to contact the Region’s site representative or the Region’s consultant field representative immediately if they have any concerns in relation to access, signage or other issues during construction so that changes or modifications can be reviewed and implemented as feasible.

23. **Can my Existing Water and/or Sanitary Service be Upgraded?**

As part of this project, there are no plans to replace any watermain or sanitary sewer within the limits of this project.

For property owners fronting onto Fischer-Hallman Road within the project limits that may wish to upgrade their water service from the watermain to the property line with a larger diameter service and/or upgrade their sanitary service from the sanitary sewer main to the property line with a larger diameter service, they are encouraged to have this work included in this project. Undertaking these improvements in conjunction with the proposed construction typically results in cost savings to the property owner as
compared to undertaking the work independently at another time in the future. Subject to a mutual agreement between the City of Kitchener and the property owner, existing water and/or sanitary services may be upgraded from the watermain and/or sanitary sewer main under the road to the property line at the property owner’s expense.

If you wish to discuss an increase in the size of your water and/or sanitary service to a size greater than the existing size, please indicate so on your comment sheet. From this information, staff will contact you at a later date to discuss your plans and to provide a cost estimate for your desired improvements.

Additionally, property owners may wish to replace their water and/or sanitary service between the property line and their building at the same time as this construction. If property owners wish to pursue this additional work, please indicate so on the comment sheet and staff will contact you later to discuss how you can make arrangements to have this work completed. The property owner will be responsible for all costs to replace the water service on private property.

24. **How will Garbage / Recyclables be Collected During Construction?**

For residential properties fronting onto Fischer-Hallman Road that currently receive roadside garbage and recycling pick-up, we will ask that you continue to place your garbage, blue boxes, and green bin at the end of your driveway for pick-up as usual during construction. When work is occurring at or near the front of your property and garbage vehicles do not have access to your driveway on garbage collection day, our Contractor will deliver your garbage and recyclables to an adjacent side street and return the empty containers afterwards. We will ask that all residents mark their containers with their address for easy identification.

Commercial properties with private pick-up should indicate so on the comment sheet. Pick-ups will be coordinated with the Contractor to ensure service is maintained.

25. **What are the Expected Working Hours during Construction?**

In general, construction working hours are from 7:00 a.m. to 7:00 p.m. Monday through Friday, although the Contractor may also work Saturdays from time to time. There may also be occasions where the Contractor is required to complete a critical work item outside of these normal working hours. Work outside normal working hours must be approved by the Region and the City of Kitchener.

26. **What is the estimated Cost of this Project?**

The estimated project cost for the Project Team’s Preferred Design Alternative No. 3 is $9.5 Million.
27. **How will this Project Be Funded?**

Funding for the proposed road improvements on Fischer-Hallman Road is included in the years 2012 – 2018 of the Region’s approved 2012 Ten-Year Transportation Capital Program. The source of the project fund is the Region’s Development Charges Reserve Fund.

The Project Team is proposing the construction of new asphalt multi-use trails on each side of Fischer-Hallman Road under the Preferred Design Alternative. Normally, the City of Kitchener would pay for approximately half of the new multi-use trails for this project. However, because the multi-use trails would eliminate the need for the Region to construct more expensive on-road cycling facilities, and since the multi-use trails provide better connectivity with existing City trails that tie into Fischer-Hallman Road, the Project Team is proposing that the Region fully fund the cost of the proposed multi-use trails for this project, subject to receiving Regional Council approval.

28. **What is the next Step in Choosing a Recommended Design Alternative?**

Prior to making a final decision on the Preferred Design Alternative, the Project Team is asking for the public’s input. This Public Consultation Centre is your opportunity to ask questions, provide suggestions, and indicate which alternative you prefer. Any public input received by the Region will be given careful consideration and will be documented as part of the Class EA Process.

We will advise all those who attended the Consultation Centre as well as adjacent property owners and tenants of future opportunities to comment on this project.

Once your input is received, it will be used by the Project Team, in conjunction with the other relevant information, to re-assess the design alternatives and establish a Recommended Design Alternative for this project.

29. **When will a Final Decision be made for This Project?**

The Project Team intends to review the public comments received from today’s Public Consultation Centre and use them as input for developing a Recommended Design Alternative for this project. The Recommended Design Alternative will be presented to the Region’s Planning and Works Committee for their endorsement in late 2012 or early 2013. At this meeting, members of the public will be given an opportunity to provide comments on this project. Pending Committee endorsement, final approval of the Recommended Design Alternative for this project will be considered by Regional Council, which will make the final decision regarding the proposed improvements.

When Regional Council has made its decision as to which design alternative will be constructed for this project, the Environmental Study Report will be filed on the public
record for a period of thirty (30) days. Anyone still opposed to the Recommended Design Alternative would have thirty (30) days, after the notice of filing of the Environmental Study Report is advertised, to make an order for the project to comply with Part II of the Environmental Assessment Act. Such requests must be received, in writing by the Ontario Minister of Environment, with a copy sent to the Region’s Commissioner of Transportation and Environmental Services. If there are no Part II Order requests received in the 30-day period, the Recommended Design Alternative can proceed to design and construction in accordance with the concepts prescribed in the Environmental Study Report.

30. **How will I Receive Further Notification Regarding this Project?**

Adjacent property owners and tenants, as well as members of the public registering at this Public Consultation Centre, will receive further information and will be notified of future meetings via mail and/or hand delivered notices.

31. **How can I Voice my Comments at this Stage?**

In order to assist us in addressing any comments or concerns you might have regarding this project, we ask that you please fill out the attached Comment Sheet and leave it in the box provided at the registration table. Alternatively, you can mail, fax or email your comments to the Region of Waterloo, not later than October 5, 2012.

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

Mr. Delton Zehr, C.E.T., Project Manager  
Regional Municipality of Waterloo  
150 Frederick Street, 6th Floor  
Kitchener, ON N2G 4J3  
Tel: (519) 575-4757 ext. 3637  
Fax: (519) 575-4430  
Email: dzehr@regionofwaterloo.ca
APPENDIX A
KEY PLAN

PROJECT LOCATION

FISCHER-HALLMAN RD

BLEAMS RD

COTTON GRASS ST

MAX BECKER DR

WESTMOUNT RD

OTTAWA ST SOUTH

ALVY AVE

CONESTOGA PKWY

WESTMOUNT

Borden

DOCS #1190364
APPENDIX B

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT PROCESS

ONTARIO ENVIRONMENTAL ASSESSMENT ACT

The purpose of the Ontario Environmental Assessment Act (EA Act) is to provide for “the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management of the environment in Ontario”. Environment is applied broadly and includes the natural, social, cultural, built and economic components.

The key principles of successful environmental assessment planning include:

- Consultation with stakeholders and affected members of the public;
- Consideration of a reasonable range of alternatives;
- Assessment of the environmental impacts for each alternative;
- Systematic evaluation of alternatives; and
- Clear documentation of the process followed.

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT (EA)

The Municipal Class Environmental Assessment (EA) is a planning process approved under the Environmental Assessment Act that is used by municipalities to plan infrastructure enhancement projects while satisfying the requirements of the Environmental Assessment Act. Under the Class EA process, projects are planned in one of three ways depending on their scope, complexity, and potential for adverse environmental impacts.

Schedule “A”
- Includes routine maintenance, operation and emergency activities.
  - The Municipality can proceed with this work without further approval or public consultation.

Schedule “B”
- Includes projects with the potential for some adverse environmental effects.
  - These projects are subject to a screening process that includes consultation with directly affected public and agencies.

Schedule “C”
- Includes larger, more complex projects with the potential for significant environmental affects.
  - These projects are subject to all phases of the Class EA and require a minimum of 3 points of public contact.

PUBLIC INVOLVEMENT

Members of the public that have a stake in the project are encouraged to provide comment throughout the Class EA process. For Schedule “C” projects there are a minimum of three (3) opportunities for public contact. These typically include two Public Information Centers and the Notice of Study Completion.
Class EA Process for Schedule “C” Projects

_Change in Project Status – Appeal Provision_

It is recommended that all stakeholders (including the proponent, public and review agencies) work together to determine the preferred means of addressing a problem or opportunity. If you have any concerns, you should discuss them with the proponent and try to resolve them. In the event that there are major issues which cannot be resolved, you may request the Minister of the Environment by order to require a proponent to comply with Part II of the EA Act before proceeding with a proposed undertaking which has been subject to Class EA requirements. This is called a “Part II Order”. The Minister will make one of the following decisions:

1. Deny the request (with or without conditions);
2. Refer the matter to mediation; or
3. Require the proponent to comply with Part II of the EA Act, ordering a full Environmental Assessment.

All stakeholders are urged to try to resolve issues since it is preferable for them to be resolved by the municipality in which a project is located, rather than at the provincial level.

To request a Part II Order, a person must send a written request to:
Minister of the Environment
135 St. Clair Avenue West
12th Floor
Toronto, ON M4V 1P5

The request must address the following with respect to the identified concerns:
- Environmental Impacts and specific concerns;
- Adequacy of the planning and public consultation process;
- Involvement of the person in the planning process; and
- Details of discussions held between the person and the proponent.
## APPENDIX C

### CURRENT AND PROJECTED TRAFFIC VOLUMES

<table>
<thead>
<tr>
<th>Road Section</th>
<th>Current (2011) AADT</th>
<th>Forecasted (2027) AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fischer-Hallman Road South of Bleams Road</td>
<td>14,000</td>
<td>24,000</td>
</tr>
<tr>
<td>Fischer-Hallman Road (Bleams Road to Rockwood Road)</td>
<td>18,500</td>
<td>27,500</td>
</tr>
<tr>
<td>Fischer-Hallman Road (Rockwood Road to Westmount Road/Max Becker Drive)</td>
<td>17,500</td>
<td>26,500</td>
</tr>
<tr>
<td>Fischer-Hallman Road (Westmount Road/Max Becker Drive to Cotton Grass Street)</td>
<td>16,500</td>
<td>24,500</td>
</tr>
<tr>
<td>Fischer-Hallman Road (Cotton Grass Street to Activa Avenue)</td>
<td>18,000</td>
<td>27,500</td>
</tr>
<tr>
<td>Fischer-Hallman Road (Activa Avenue to Ottawa Street)</td>
<td>22,000</td>
<td>32,000</td>
</tr>
</tbody>
</table>
DESIGN ALTERNATIVE 1
DO NOTHING
FISCHER HALLMAN ROAD
(REGIONAL ROAD 58)
RECONSTRUCT IN CURRENT CONFIGURATION
EXISTING TYPICAL CROSS SECTION

35m ROW

PROPERTY LINE

1.5m SIDEWALK

1.5m BIKE

1.5m BIKE

3.5m LANE

3.5m LANE

1.0m PAINTED MEDIAN

PROPERTY LINE

GRAVEL SHOULDER

GRAVEL SHOULDER
DESIGN ALTERNATIVE 2
FISCHER HALLMAN ROAD
(REGIONAL ROAD 58)

3.35m TRAVEL LANES
1.25m WIDE BICYCLE LANES
CONCRETE SIDEWALK ON THE WEST SIDE
AND MULTI-USE TRAIL ON THE EAST SIDE
DESIGN ALTERNATIVE 3
FISCHER HALLMAN ROAD
(REGIONAL ROAD 58)
3.35m CENTRE LANE & 3.65m CURB LANE
3.0m WIDE MULTIUSE TRAIL, BOTH SIDES

35m ROW

PROPERTY LINE

PROPERTY LINE

1.0m

3.0m
MULTIUSE
TRAIL

VARIES
GRASS
BLVD

7.0m

7.0m

3.65m
TRAVEL
LANE

3.35m
TRAVEL
LANE

1.0m
TO 1.75m
PAINTED
MEDIAN

3.35m
TRAVEL
LANE

3.65m
TRAVEL
LANE

VARIES
GRASS
BLVD

3.0m
MULTIUSE
TRAIL

1.0m

APPENDIX D
DRAWING OF DESIGN ALTERNATIVE NO. 3
DESIGN ALTERNATIVE 4
FISCHER HALLMAN ROAD
(REGIONAL ROAD 58)

3.35m TRAVEL LANES
1.25m WIDE BICYCLE LANES
3.0m WIDE MULTI-USE TRAIL, BOTH SIDES

DRAWING OF DESIGN ALTERNATIVE NO. 4
APPENDIX E

APPENDIX E1 - EVALUATION OF ALTERNATIVE DESIGN CONCEPTS

Design Alternative No. 1

“Do Nothing” – Rehabilitation of Fischer-Hallman Road in its current configuration that currently includes a 1.0 metre wide painted centre median, a 3.5 metre wide through lane in each direction, 1.5 metre wide cycling lanes in each direction, discontinuous 1.5 metre wide concrete sidewalk on each side of Fischer-Hallman Road, gravel shoulders or concrete curb remaining in their current location and no additional streetlight improvements.

Design Alternative No. 2

Design Alternative No. 2 includes reconstruction and widening of Fischer-Hallman Road to provide for two (2) 3.35 metre wide through lanes in each direction, 1.25 metre wide on-road cycling lanes in each direction, 1.5 to 2.1 metre wide concrete sidewalk on the west side and a 3.0 metre asphalt multi-use trail on the east side.

Design Alternative No. 3

Design Alternative No. 3 includes reconstruction and widening of Fischer-Hallman Road to provide for two (2) through lanes in each direction that comprises a 3.35 metre wide inside lane, a 3.65 metre wide curb lane and a 3.0 metre asphalt multi-use trail on each side of Fischer-Hallman Road. Design Alternative No. 3 is consistent with the facilities proposed in the draft Active Transportation Master Plan currently being finalized.

Design Alternative No. 4

Design Alternative No. 4 includes reconstruction and widening of Fischer-Hallman Road to provide for two (2) 3.35 metre wide through lanes in each direction, 1.25 metre wide on-road cycling lanes in each direction and a 3.0 metre asphalt multi-use trail on each side.

Preliminarily Preferred Design Alternative

Prior to this Public Consultation Centre, the Project Team has identified Design Alternative No. 3 as its Preferred Design Alternative. The Project Team assessed that Design Alternative 3 provides the following advantages:

- Full connectivity with existing City of Kitchener trails on each side of Fischer-Hallman Road;
- Best services both recreational and utilitarian cyclists;
- Fully aligns with the Region’s Draft Active Transportation Master Plan;
- Lowest capital cost of the design alternatives (excluding the ‘Do Nothing’ option).
### APPENDIX E2 – PRELIMINARY EVALUATION OF ALTERNATIVE DESIGN CONCEPTS

<table>
<thead>
<tr>
<th>Criteria Group / Criterion</th>
<th>Design Alternative 1 “Do Nothing” Rehabilitation in Current Configuration</th>
<th>Design Alternative 2 Widen to two (2) lanes in each direction with on-road cycling lanes on each side, concrete sidewalk on the west side and multi-use trail on the east side</th>
<th>Design Alternative 3 Widen to two (2) lanes in each direction with multi-use trail on the both sides of road.</th>
<th>Design Alternative 4 Widen to two (2) lanes in each direction with on-road cycling lanes and multi-use trail on each side</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRANSPORTATION</strong></td>
<td>• Does not align with Region’s Transportation Master Plan</td>
<td>• Aligns with Region’s Transportation Master Plan</td>
<td>• Aligns with Region’s Transportation Master Plan</td>
<td>• Aligns with Region’s Transportation Master Plan</td>
</tr>
<tr>
<td>Transportation capacity for motor vehicles, transit, pedestrians, cyclists and emergency vehicle response times.</td>
<td>• Does not address capacity needs</td>
<td>• Partially aligns with Region’s Active Transportation Master Plan.</td>
<td>• Significant improvement in capacity compared to “Do Nothing”.</td>
<td>• Marginally aligns with Region’s Draft Active Transportation Master Plan.</td>
</tr>
<tr>
<td></td>
<td>• No change to existing conditions</td>
<td>• Provides continuity for existing on-road cycling lanes on Fischer-Hallman Road</td>
<td>• Provides trail continuity and connectivity with city trails on each side of Fischer-Hallman Road</td>
<td>• Provides trail continuity and connectivity with city trails on each side of Fischer-Hallman Road</td>
</tr>
<tr>
<td></td>
<td>• No improvement to existing condition for emergency services response times</td>
<td>• Provides enhanced pedestrian facilities, commuter cycling facilities and recreational cyclist facilities</td>
<td>• Provides enhanced pedestrian facilities and recreational cyclist facilities</td>
<td>• Provides continuity for existing on-road cycling lanes on Fischer-Hallman Road</td>
</tr>
<tr>
<td></td>
<td>• Does not improve transit operations</td>
<td>• Improved emergency response times compared to “Do Nothing”</td>
<td>• Improved emergency response times compared to “Do Nothing”</td>
<td>• Provides enhanced pedestrian facilities, commuter cycling facilities and recreational cyclist facilities</td>
</tr>
<tr>
<td></td>
<td>• Traffic may infiltrate into side streets</td>
<td>• Improvement to transit operations through reduction in delays</td>
<td>• Improvement to transit operations through reduction in delays</td>
<td>• Improved emergency response times compared to “Do Nothing”</td>
</tr>
<tr>
<td><strong>Social Environment</strong></td>
<td>• No change to existing conditions</td>
<td>• Some private property required to accommodate road widening, multi-use trail, sidewalks, turn lanes at intersections and roundabout at Bleams Road</td>
<td>• Some private property required to accommodate road widening, multi-use trail and/or sidewalk, turn lanes at intersections and roundabout at Bleams Road</td>
<td>• Some private property required to accommodate road widening, multi-use trail and/or sidewalk, turn lanes at intersections and roundabout at Bleams Road</td>
</tr>
<tr>
<td>Impacts to adjacent commercial residential properties including: driveway access, property acquisition, noise, archaeological, and cultural or built heritage.</td>
<td>• No change to driveway entrance gradal</td>
<td>• Minimal impact to driveway entrance grade</td>
<td>• Minimal impact to driveway entrance grade</td>
<td>• Minimal impact to driveway entrance grade</td>
</tr>
<tr>
<td></td>
<td>• Noise levels similar under all alternatives*</td>
<td>• Noise levels similar under all alternatives*</td>
<td>• Noise levels similar under all alternatives*</td>
<td>• Noise levels similar under all alternatives*</td>
</tr>
<tr>
<td>Natural Environment</td>
<td>• No impact to built heritage, archaeological or cultural heritage features</td>
<td>• Property at 1198 Fischer-Hallman Road identified as having potential heritage value requires the barn and garage to be removed to accommodate the road widening and multi-use trail</td>
<td>• Property at 1198 Fischer-Hallman Road identified as having potential heritage value requires the barn and garage to be removed to accommodate the road widening and multi-use trail</td>
<td>• Property at 1198 Fischer-Hallman Road identified as having potential heritage value requires the barn and garage to be removed to accommodate the road widening and multi-use trail</td>
</tr>
<tr>
<td>Impacts to watercourses, floodplains, trees, fish and animals.</td>
<td>• No changes to existing conditions</td>
<td>• Increased in surface run-off due to widening</td>
<td>• Slightly less run-off due to widening than Alternative 2 and 4.</td>
<td>• Increase in surface run-off due to widening</td>
</tr>
<tr>
<td></td>
<td>• Air pollution may increase due to increase in traffic congestion</td>
<td>• No impact to watercourses and flood plains</td>
<td>• No impact to watercourses and flood plains</td>
<td>• No impact to watercourses and flood plains</td>
</tr>
<tr>
<td></td>
<td>• Existing trees remain</td>
<td>• Removal of approximately 45 to 55 trees may be required to accommodate road widening and multi-use trail. New boulevard trees to compensate for tree losses, No aquatic habitat or fisheries are affected.</td>
<td>• Removal of approximately 45 to 55 trees may be required to accommodate road widening and multi-use trail. New boulevard trees to compensate for tree losses, No aquatic habitat or fisheries are affected.</td>
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</tr>
<tr>
<td>Economic Environment</td>
<td>• $2.5 Million</td>
<td>• $9.7 Million</td>
<td>• $9.5 Million</td>
<td>• $9.9 Million</td>
</tr>
<tr>
<td>Capital Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OVERALL EVALUATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Noise levels do not increase by widening a road surface. Noise levels are calculated based on traffic volumes and the distance from the traffic.

Lowest has poor evaluation. Highest has best Evaluation.
ILLUSTRATION OF MULTI-USE TRAIL AND NO-ON-ROAD CYCLING LANES
APPENDIX G
LIST OF POTENTIALLY IMPACTED PROPERTY LOCATIONS

Potentially Impacted Properties for Preliminarily Preferred Alternative Design

<table>
<thead>
<tr>
<th>Address</th>
<th>Length (m)</th>
<th>Width (m)</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1178 Fischer-Hallman Road</td>
<td>9.0</td>
<td>3.0</td>
<td>27.0</td>
</tr>
<tr>
<td>1188 Fischer-Hallman Road</td>
<td>70.0</td>
<td>1.0</td>
<td>70.0</td>
</tr>
<tr>
<td>1193 Fischer-Hallman Road</td>
<td>Varies</td>
<td>Varies</td>
<td>199.3</td>
</tr>
<tr>
<td>1198 Fischer-Hallman Road</td>
<td>Varies</td>
<td>Varies</td>
<td>1,200.9</td>
</tr>
<tr>
<td>1201 Fischer-Hallman Road</td>
<td>Varies</td>
<td>Varies</td>
<td>855.7</td>
</tr>
<tr>
<td>1250 Fischer-Hallman Road</td>
<td>Varies</td>
<td>Varies</td>
<td>1,468.2</td>
</tr>
<tr>
<td>1255 Fischer-Hallman Road</td>
<td>Varies</td>
<td>Varies</td>
<td>64.5</td>
</tr>
<tr>
<td>North-East Corner Property at intersection of Bleams Road and Fischer-Hallman Road</td>
<td>Varies</td>
<td>Varies</td>
<td>1,395.3</td>
</tr>
<tr>
<td>1270 Fischer-Hallman Road</td>
<td>~50.0</td>
<td>~2.3</td>
<td>116.3</td>
</tr>
<tr>
<td>Opposite 1275 Bleams Road</td>
<td>~31.0</td>
<td>~1.6</td>
<td>51.6</td>
</tr>
<tr>
<td>1375 Bleams Road</td>
<td>Varies</td>
<td>Varies</td>
<td>400.2</td>
</tr>
<tr>
<td>1385 Bleams Road</td>
<td>87.0</td>
<td>1.1</td>
<td>96.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>5,945.8</strong></td>
</tr>
</tbody>
</table>
Property Acquisition Process Information Sheet

The following information is provided as a general overview of the property acquisition process and is not legal advice. Further, the steps, timing and processes can vary depending on the individual circumstances of each case.

Once the Recommended Design Concept has been approved, the property acquisition process and the efforts of Regional Real Estate staff will focus on acquiring the required lands to implement the approved design. Regional staff cannot make fundamental amendments or changes to the approved design concept.

Property Impact Plans
After the project has been approved and as it approaches final design, the project planners will generate drawings and sketches indicating what lands and interests need to be acquired from each affected property to undertake the project. These drawings are referred to as Property Impact Plans (PIP).

Initial Owner Contact by Regional Real Estate Staff
Once the PIPs are available, Regional Real Estate staff will contact the affected property owners by telephone and mail to introduce themselves and set-up initial meetings to discuss the project and proposed acquisitions.

Initial Meetings
The initial meeting is attended by the project engineer and the assigned real estate staff person to brief the owner on the project, what part of their lands are to be acquired or will be affected, what work will be undertaken, when, with what equipment, etc and to answer any questions. The primary purpose of the meeting is to listen to the owner and identify issues, concerns, effects of the proposed acquisition on remaining lands and businesses that can be feasibly mitigated and/or compensated, and how the remaining property may be restored. These discussions may require additional meetings. The goal of staff is to work with the owner to reach mutually agreeable solutions.

Goal – Fair and Equitable Settlement for All Parties
The goal is always to reach a fair and equitable agreement for both the property owner and the Region. Such an agreement will provide compensation for the fair market value of the lands and address the project impacts (such as repairing or replacing landscaping, fencing, paving) so that the property owner will receive the value of the lands acquired and the restoration of their remaining property to the condition it was prior to the Project.

The initial meetings will form the basis of an initial offer of settlement or agreement of purchase and sale for the required lands or interests.

DOCS #1190364
Steps Toward Offer of Settlement or Agreement of Purchase and Sale
The general steps towards such an offer are as follows;

1) the Region will obtain an independent appraisal of the fair market value of the lands and interests to be acquired, and an appraisal of any effect on the value of the rest of the property resulting from the acquisition of the required lands and interests;
2) compensation will be estimated and/or works to minimize other effects will be defined and agreed to by the property owner and the Region;
3) reasonable costs of the owner will be included in any compensation settlement;
4) an offer with a purchase price and any other compensation or works in lieu of compensation will be submitted to the property owner for consideration; and
5) an Agreement will be finalized with any additional discussion, valuations, etc as may be required.

Depending on the amount of compensation, most agreements will require the approval of Council. The approval is undertaken in Closed Session which is not open to the public to ensure a level of confidentiality.

Expropriation
Due to the time constraints of these projects, it is the practice of the Region to commence the expropriation process in parallel with the negotiation process to insure that lands and interests are acquired in time for commencement of the Project. Typically, over 90% of all required lands and interests are acquired through the negotiation process. Even after lands and interests have been acquired through expropriation an agreement on compensation can be reached through negotiation, this is usually referred to as a ‘settlement agreement’.

Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario Expropriations Act must be followed to ensure that the rights of the property owners provided under that Act are protected.
 COMMENT SHEET

REGIONAL MUNICIPALITY OF WATERLOO

FISCHER-HALLMAN ROAD IMPROVEMENTS
(BLEAMS ROAD TO OTTAWA STREET SOUTH)
City of Kitchener

PUBLIC CONSULTATION CENTRE
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 e-mail your comments by October 5th, 2012 to:

Mr. Delton Zehr, C.E.T.
Project Manager
Regional Municipality of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3

Tel: (519) 575-4757 ext. 3637
Fax: (519) 575-4430
Email: dzehr@regionofwaterloo.ca

Comments or concerns regarding this project:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Are you interested in upgrading your water service as part of this contract? Yes ☐ No ☐
Are you interested in upgrading your sanitary service as part of this contract? Yes ☐ No ☐

Name: ________________________________________________________________

Address: _______________________________________________________________________

Postal Code: ______________________________

COLLECTION NOTICE

Personal information requested on this form is collected under the authority of the Municipal Act and will be used to assist Regional staff and the Regional Planning and Works Committee in making decisions on this project. All names and comments will be included in the material made available to the general public. Questions regarding this collection should be forwarded to the staff member indicated above.
Regional Municipality of Waterloo

HUTCHISON ROAD & WILLIAM HASTINGS LINE IMPROVEMENTS
CROSSHILL
Township of Wellesley

INFORMATION PACKAGE

Public Consultation Centre
Thursday, September 13, 2012
4:30 p.m. – 8:00 p.m.

at

Crosshill Mennonite Church
2537 Hutchison Road, Crosshill

There is a Comment Sheet at the back of this package. If you wish, please fill it out and deposit it in the designated box provided at this Consultation Centre.
1. What is the Purpose of this Public Consultation Centre?

The Region of Waterloo is currently considering improvements to Hutchison Road and William Hastings Line through Crosshill in the Township of Wellesley. (Please refer to Appendix ‘A’ for a Key Plan.) This project has been initiated to address the deteriorated roadway conditions on Hutchison Road and William Hastings Line from approximately 100 metres south of Lobsinger Line to approximately 620 metres west of Hutchison Road.

Improvements currently under consideration include:

- Full reconstruction of the deteriorated pavement structure on Hutchison Road and William Hastings Line within the Project limits;
- Installation of storm sewers within the Project limits; and
- Construction of on-road cycling / buggy lanes and enhanced pedestrian facilities on Hutchison Road and William Hastings Line within the Project limits.

We encourage you to provide comments on the improvements under consideration and request that you fill out the Comment Sheet attached to the back of this Information Package and place it in the box at this Public Consultation Centre or send it to the address indicated on the Comment Sheet. Your comments will be considered by the Project Team, in conjunction with all of the other relevant information, in establishing a preferred design for improvements to Hutchison Road and William Hastings Line.

2. Who is Directing the Planning of These Improvements?

The planning for these infrastructure improvements is being undertaken by a “Project Team” consisting of staff from the Region of Waterloo, the Township of Wellesley, Regional Councillor and Mayor of Wellesley Township Ross Kelterborn and Township of Wellesley Ward 2 Councillor Herb Neher.

3. What Improvements are being Considered?

Based on technical studies completed for this project, relevant Regional planning documents, including the Cycling Master Plan, the Draft Active Transportation Master Plan and Context Sensitive Corridor Design Guidelines, and other applicable Regional policies and practices, the Project Team has identified a Preferred Design Concept for the improvements to Hutchison Road and William Hastings Line within the Project limits described as follows:

- Complete replacement of the pavement structure on Hutchison Road and William Hastings Line;
  Construction of semi-mountable concrete curb and gutter on each side of Hutchison Road and William Hastings Line;
- Improvements to the roadway curve at the intersection of Hutchison Road and William Hastings Line to provide for better passage of large trucks around the corner;
- Construction of new 1.50 metre wide sidewalk on the west side of Hutchison Road from Lobsinger Line to William Hastings Road and on each side of William Hastings Line from Hutchison Road to approximately 350 metres westerly;
- Construction of 1.50 metre wide reserved on-road cycling / buggy lanes on each side of Hutchison Road and William Hastings Line within the Project limits;
- Wider boulevards, removal of the roadside ditches and enhanced boulevard landscaping where feasible;
- Installation of a new storm sewer system on Hutchison Road and William Hastings Line; and
- Street lighting upgrades (as required) on Hutchison Road and William Hastings Line within the project limits.

Please refer to Appendix ‘B’ for drawings of the Project Team’s Preferred Design Concept for the proposed improvements to Hutchison Road and William Hastings Line.

4. **How Does this Project Relate to the Objectives of the Regional Official Plan, the Regional Transportation Master Plan and the Regional Transportation Corridor Design Guidelines?**

The Project Team’s proposed improvements are being made to address the deteriorated roadway structure as well as to include enhancements to the roadway corridor consistent with Regional Bylaws, policies, plans and practices. The Regional Official Plan gives direction to balance new and retrofitted roads for all modes of transportation including walking, cycling, autos and transit. In addition, Regional Council also approved the Regional Transportation Master Plan and the Regional Transportation Corridor Design Guidelines in 2010 that support the integration of active and sustainable transportation on all Regional Roads. This project supports the Regional Transportation Master Plan (RTMP) goals of optimizing our transportation system, promoting transportation choice, supporting sustainable development and fostering a strong economy. This project includes facilities for all modes of transportation by providing new sidewalks and on-road cycling / buggy lanes.

5. **How will the Proposed Improvements Enhance the Pedestrian Environment on this Project?**

The Project Team’s Preferred Design Concept incorporates new sidewalk on each side of William Hastings Line and on the east side of Hutchison Road with a minimum 1.0 metre wide grassed boulevard in most areas between the curb and gutter and sidewalk. This wider boulevard area will provide more space for enhanced boulevard landscaping on Hutchison Road and William Hastings Line to improve the pedestrian environment. On the south side of William Hastings Line from Hutchison Road to approximately 160 metres westerly, existing trees and utility poles constrain the boulevard, necessitating that the sidewalk be located immediately adjacent to the new curb. In this section, the sidewalk will be 1.50 metres plus an additional 0.30 metre wide impressed concrete behind the new curb in order to provide additional comfort for pedestrians.

6. **Who is Responsible for Clearing Snow from the Proposed Sidewalks?**

In the Township of Wellesley, where a property has sidewalk along its frontage, the abutting property owner is responsible for snow removal in accordance with the Township’s By-law 10/2011.

7. **How Will On-Road Parking be Affected?**

On-road parking is currently permitted on Hutchison Road and William Hastings Line within the limits of Crosshill. The construction of reserved on-road cycling / buggy lanes on Hutchison Road and William Hastings Line will require within project limits that on-road parking be prohibited on both sides of Hutchison Road and William Hastings Line; however,
35.0 metre long parallel parking lane will be constructed on the north side of William Hastings Line directly opposite 4840 William Hastings Line in order to accommodate additional parking for the patrons of the variety store / gas station.

8. Will the Improvements Impact Heritage Features?

There are currently two (2) designated heritage properties and seven (7) pre-1900 residential properties with heritage interest identified within the project limits. No direct impact to the existing buildings is anticipated as a result of the proposed road improvements as all work in the vicinity of these two (2) properties will be confined to the road allowance.

9. When will Construction Occur and how will Construction Staging and Traffic be Managed?

Construction on Hutchison Road and William Hastings Line is tentatively scheduled to occur in 2015. The Region’s Ten Year Transportation Capital Program is reviewed annually and the timing of projects may change depending on several factors.

It is tentatively proposed that construction on Hutchison Road and William Hastings Line be completed concurrently in order to expedite the completion of the work.

Due to the requirement to lower the road profile at the curve, Hutchison Road and William Hastings Line will be fully closed to through traffic during construction. Local, emergency and buggy traffic will be maintained at all times. Detour routes will be developed for through traffic and signs will be erected to detour through traffic around the construction. The Fire Department, Waterloo Regional Police and Ambulance Services will all be advised of the traffic restrictions and detour routes during the construction period.

Pedestrian and buggy access will be maintained for the duration of the construction. Signage will be erected in order to direct pedestrians through the project area.

As is customary when Regional Road detours are required, motorists will be advised of the construction timing and traffic restrictions through advance signage, the Region’s web site, and radio and newspaper notices.

10. How will Access be Maintained to Properties during Construction?

Access to driveways will be maintained to the greatest extent possible during construction. The Contractor will be required to temporarily restrict access to and from driveways on Hutchison Road and William Hastings Line for short-term periods when completing certain construction operations. Where a disruption to your driveway is expected, the Contractor is required to hand-deliver a notice at least 48 hours in advance advising you of the time and duration of the driveway disruption. If necessary, alternate parking arrangements will be made.

Special attention will also be given to ensure access is maintained for emergency vehicles during and after construction hours.

Property and business owners will be asked to contact the Region’s site representative immediately if they have any concerns in relation to access, signage or other issues during construction so that changes or modifications can be reviewed and implemented as feasible.
11. Will Property Acquisition be Required for this Project?

Implementation of the Project Team’s Preferred Design Concept will require that the Region acquire small portions of land from two (2) abutting property owners at the corner of Hutchison Road and William Hastings Line to provide for improvements to the horizontal curve in this section of the roadway.

In areas where property is required, the property owner will be contacted directly by the Region of Waterloo’s Land Purchasing Officer. Compensation will be provided at fair market rates based on recent similar area sales. The plans presented at this Consultation Centre show the proposed property acquisition that will likely be required. Please refer to Appendix ‘C’ for further information on the property acquisition process.

12. How will Trees, Driveways and Lawns be Affected?

It is expected that between five (5) to ten (10) trees will have to be removed during construction to accommodate the proposed improvements. The plans presented at this Consultation Centre show trees that likely will require removal. It is the Region’s practice to plant two replacement trees for each tree removed as a result of any road projects. Any grassed areas disturbed during construction will be repaired to equal or better condition with topsoil and sod. In addition to replacing any trees removed on a 2-for-1 basis, new boulevard landscaping, including salt resistant trees and shrubs, will be included as part of the project where feasible. Driveways will be regraded, extending onto private property if necessary, in order to blend smoothly with the newly constructed roadway.

13. Can my Private Storm Drains be Connected to the Storm Sewer?

Any existing private storm drains that are encountered during the construction will be reconnected to the new storm sewer provided they conform to the Region of Waterloo’s Sewer Use By-Law. Under the Regional By-Law number 1-90 (Sewer Use By-Law), private connections are permitted to storm sewers if the discharges meet the quality criteria as outlined in Section 7 of the By-Law.

14. Will there be Street Lighting Improvements?

In order to provide adequate lighting for the improved roadway corridor, streetlighting upgrades are being considered for installation on existing poles on Hutchison Road and William Hastings Line within the project limits.

15. How will Garbage / Recyclables be collected During Construction?

We will ask that you continue to place your garbage and blue boxes at the end of your driveway for pick-up as usual during construction. When work is occurring in front of your property and garbage collection vehicles do not have access to your driveway on garbage collection day, our Contractor will deliver your garbage and recyclables to an adjacent side street and return the empty containers afterwards. We will ask that all residents mark their containers with their address for easy identification.

16. What about Dust During Construction?

The Region will be monitoring the amount of dust generated by construction activities on a daily basis. When necessary, the Region will ensure that the Contractor uses proper dust suppression measures (i.e. the application of water and/or calcium chloride) in accordance with the Region’s standard practice.
17. What are the expected Working Hours during Construction?

In general, construction working hours are from 7:00 a.m. to 7:00 p.m. Monday through Friday, although the Contractor may also work on Saturdays from time to time. There may also be occasions where the Contractor is required to complete a critical work item outside of these normal working hours. Work outside normal working hours must be approved by the Region and the Township of Wellesley.

18. What is the Estimated Cost of this Project and how will it be Funded?

The total estimated cost of this project is $3,375,000. The Region of Waterloo will be funding the road improvements (i.e. asphalt roadway, cycling lanes, driveway and boulevard restoration and landscaping), the sidewalk and the storm sewer costs through its approved 2012 Ten Year Transportation Capital Program.

19. Will the Current Speed Limit be Changed?

Following construction, the Region will retain the posted speed limit of 50 km/hr on Hutchison Road and William Hastings Line.

20. What are the Next Steps?

Prior to developing a Recommended Design Concept for Hutchison Road and William Hastings Line for Regional Council’s consideration, the Project Team is asking for the public’s input on the Preferred Design Concept. This Public Consultation Centre is your opportunity to ask questions, provide suggestions, and make comments. Once your input is received, it will be used by the Project Team, in conjunction with all other relevant information, to finalize the Recommended Design for the Hutchison Road and William Hastings Line Improvements project.

21. When Will Final Decisions be Made for this Project?

The Project Team will review the comments received from this Public Consultation Centre and use them as input for recommending a final Design Concept for the Hutchison Road and William Hastings Line Improvements project. This Final Recommendation will be presented to the Regional Planning and Works Committee and Council in December 2012 for approval. In advance of these meetings, letters will be sent to all adjacent property owners and tenants (as well as to all members of the public specifically registering at this Public Consultation Centre) so that anyone wishing to speak to Committee or Council about this project can do so before final approval.

22. How Can I Voice My Comments At This Stage?

In order to assist us in addressing any comments or concerns you might have regarding this project, we ask that you please fill out the attached Comment Sheet and leave it in the box provided at the registration table. Alternatively, you can mail, fax or e-mail your comments to the Region of Waterloo not later than September 21, 2012.

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

Mr. Samer Inchasi, P.Eng., PMP
Senior Project Manager
Region of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3
Phone: (519) 575-4757 Ext. 3686
Fax: (519) 575-4430
Email: Sinchasi@regionofwaterloo.ca
APPENDIX B-1

HUTCHISON ROAD
EXISTING TYPICAL CROSS SECTION
HUTCHISON ROAD
PREFERRED DESIGN CONCEPT
2 LANES, 2 BUGGY / CYCLING LANES

VARIES 20.11m - 28.33m R.O.W.
9.7m PAVED ROADWAY

MATCH TO
EXISTING

PROPERTY LINE WEST FENCE

PROPERTY LINE EAST FENCE

MATCH TO
EXISTING

1.5m WIDE SEMI-MOUNTABLE CURB

1.0m GRASS BLVD

1.5m BUGGY / CYCLING LANE

3.35m TRAVEL LANE

3.35m TRAVEL LANE

1.5m BUGGY / CYCLING LANE

0.5m WIDE SEMI-MOUNTABLE CURB

1.5m SIDEWALK

1.5m WIDE SEMI-MOUNTABLE CURB

WEST

EAST
Hutchison Road and William Hastings Line Improvements
Region of Waterloo

APPENDIX B-3

WILLIAM HASTINGS LINE
EXISTING TYPICAL CROSS SECTION
WILLIAM HASTINGS LINE
(FROM HUTCHISON RD. TO 160m WEST OF HUTCHISON RD.)
PREFERRED DESIGN
2 LANES, 2 BUGGY / CYCLING LANES
WILLIAM HASTINGS LINE

(FROM 160m WEST OF HUTCHISON RD. TO 350m WEST OF HUTCHISON RD.)
PREFERRED DESIGN
2 LANES, 2 BUGGY / CYCLING LANES
APPENDIX C

Property Acquisition Process Information Sheet

The following information is provided as a general overview of the property acquisition process and is not legal advice. Further, the steps, timing and processes can vary depending on the individual circumstances of each case.

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Region. Such an agreement will provide compensation for the fair market value of the lands and address the project impacts (such as repairing or replacing landscaping, fencing, paving) so that the property owner will receive the value of the lands acquired and the restoration of their remaining property to the condition it was prior to the Project.

The initial meetings will form the basis of an initial offer of settlement or agreement of purchase and sale for the required lands or interests.

**Steps Toward Offer of Settlement or Agreement of Purchase and Sale**

The general steps towards such an offer are as follows:

1) The Region will obtain an independent appraisal of the fair market value of the lands and interests to be acquired, and an appraisal of any effect on the value of the rest of the property resulting from the acquisition of the required lands and interests;
2) Compensation will be estimated and/or works to minimize other effects will be defined and agreed to by the property owner and the Region;
3) Reasonable costs of the owner will be included in any compensation settlement;
4) An offer with a purchase price and any other compensation or works in lieu of compensation will be submitted to the property owner for consideration; and
5) An Agreement will be finalized with any additional discussion, valuations, etc. as may be required.

Depending on the amount of compensation, most agreements will require the approval of Council. The approval is undertaken in Closed Session which is not open to the public to ensure a level of confidentiality.

**Expropriation**

Due to the time constraints of these projects, it is the practice of the Region to commence the expropriation process in parallel with the negotiation process to insure that lands and interests are acquired in time for commencement of the Project. Typically, over 90% of all required lands and interests are acquired through the negotiation process. Even after lands and interests have been acquired through expropriation an agreement on compensation can be reached through negotiation, this is usually referred to as a ‘settlement agreement’.

Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario *Expropriations Act* must be followed to ensure that the rights of the property owners provided under that *Act* are protected.
COMMENT SHEET

REGIONAL MUNICIPALITY OF WATERLOO

HUTCHISON ROAD & WILLIAM HASTINGS LINE IMPROVEMENTS
Township of Wellesley

PUBLIC CONSULTATION CENTRE

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 e-mail your comments by September 21, 2012 to:

Mr. Samer Inchasi, P.Eng., PMP
Senior Project Manager
Region of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3

Phone: (519) 575-4757 Ext. 3686
Fax: (519) 575-4430
Email: Sinchasi@regionofwaterloo.ca

Are you interested in connecting your sump pump discharge pipe to the storm sewer as part of this contract? Yes ___ No ___

Comments or concerns regarding this project:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Name:__________________________________________

Address: _________________________________________

Postal Code: ____________________________

COLLECTION NOTICE

Personal information requested on this form is collected under the authority of the Municipal Act and will be used to assist Regional staff and the Regional Planning and Works Committee in making decisions on this project. All names and comments will be included in material made available to the general public. Questions regarding this collection should be forwarded to the staff member indicated above.
REGIONAL MUNICIPALITY OF WATERLOO

CHURCH STREET IMPROVEMENTS
Barnswallow Drive to Herbert Street

Township of Woolwich

INFORMATION PACKAGE

Public Consultation Centre
Wednesday, September 12, 2012
6:00 p.m. to 8:00 p.m.

At

Elmira Mennonite Church
58 Church Street West
Elmira

There is a Comment Sheet at the back of this package. If you wish, please fill it out and deposit it in the designated box provided at this Information Centre.
1. WHAT IS THE PURPOSE OF THIS PUBLIC CONSULTATION CENTRE?

In 2013, the Region of Waterloo has scheduled the construction of roadway improvements on Church Street in Elmira, from Barnswallow Drive to Herbert Street, a distance of approximately 0.96 kilometres. Please refer to Appendix A for a plan view of the Project Area.

Church Street is a Regional Road under the jurisdiction of the Regional Municipality of Waterloo. The side streets within the project limits are Robb Road, Poffenroth Path, Killdeer Road, Springwagon Lane, Harness Lane, Carriage Hill Trail, Raising Mill Gate and Weigel Avenue which all intersect with Church Street within the project limits and are under the jurisdiction of the Township of Woolwich.

Proposed roadway improvements on this section of Church Street include: widening of the existing roadway to provide buggy/cycle lanes as well as concrete curbs and gutters on both sides of the road; installation of a new sidewalk on the north side; construction of new sidewalk where needed to provide continuous pedestrian facilities on the south side; storm sewer drainage improvements and minor improvements and/or extensions to the existing sanitary sewer and watermains to provide additional servicing. As well, there will be some relocation or upgrading of utilities incorporated into the project which is required to accommodate these improvements.

The proposed improvements on Church Street are considered a Schedule ‘A+’ undertaking in accordance with the Municipal Class Environmental Assessment document. This means the project is pre-approved to proceed provided that appropriate public consultation is conducted.

This Public Consultation Centre (PCC) is a forum for you to:

1. Review the proposed design;
2. Ask questions of staff of the Region of Waterloo, Township of Woolwich and the consulting engineer Stantec Consulting Ltd.; and
3. Provide any comments you may have on the design under consideration.

We kindly request that you fill out the Comment Sheet attached to the back of this Information Package and place it in the box at this PCC or send it to the address indicated on the Comment Sheet prior to September 28, 2012. Your comments will be considered by the Project Team in conjunction with all other relevant information in confirming the proposed design for improvements to Church Street.

2. WHO IS DIRECTING THIS PROJECT?

This road improvement project is being directed by a Project Team consisting of staff from the Region of Waterloo and the Township of Woolwich, Township of Woolwich Councillors Julie-Ann Herteis and Allan Poffenroth, as well as the consulting engineering firm of Stantec Consulting Ltd.

3. WHY ARE WE CONSIDERING ROAD IMPROVEMENTS?

There are a number of needs driving this project. The following sections describe these needs and the proposed improvements to address these needs:

Urbanization of Church Street

Existing Church Street within the project limits includes paved shoulders and ditches. In order to improve drainage and make the side slopes easier to maintain, it is proposed that the road be converted to an urban cross-section with curb and gutter and storm sewers allowing for the elimination of the deep ditches and steep side slopes.
Area Land Development

A proposed residential subdivision development north of Church Street is currently underway with anticipated occupancy of new homes to begin in early 2013. The development includes construction of side street entrances onto Church Street within the project limits, and will require connections to sewer and watermain infrastructure along Church Street. The development also requires improvements to Church Street to provide additional traffic capacity and safety improvements to adequately deal with the increase in traffic and pedestrians using the corridor.

To address these development-related needs, the Project Team has identified the following proposed improvements for the project:

- Installation of raised centre islands on Church Street in select locations for traffic calming and for pedestrian refuge areas;
- New turn lane improvements at the Killdeer Road and Raising Mill Gate intersections with Church Street; and
- Replacement of existing municipal servicing (watermains and sanitary sewers) on Church Street from Herbert Street to Raising Mill Gate.

Note: plans at the PCC will show the proposed island locations

Active Transportation Needs

There is currently a sidewalk on the south side of Church Street but no sidewalk on the north side and no formal cycling and/or buggy facilities along either side of Church Street.

Based on the approved Regional Transportation Corridor Design Guidelines, the Regional Cycling Master Plan, the 2011 Cycling Facility Map and other relevant policies/practices, the Project Team has identified the following proposed enhancements to the roadway corridor to address active transportation needs:

- Construction of a 1.5 metre designated on-road cycling lane/buggy lane on Church Street within the project limits to provide a continuous cycling facility as well as provide extra space for horse-and-buggy traffic;
- Construction of new sidewalk on the north side of Church Street where none currently exists from Barnswallow Drive to Herbert Street;
- Boulevard trees where feasible; and
- Trees, shrubs and grass in centre medians.

Located in Appendix B are typical cross-sections of the proposed improvements along Church Street and a photo rendering of how the proposed improvements would look.

4. HOW DOES THIS PROJECT ADDRESS THE REGION’S TRANSPORTATION MASTER PLAN?

The Regional Official Plan gives direction to balance new and retrofitted roads for all modes of transportation including walking, cycling, autos and transit. In addition, Regional Council also approved the Regional Transportation Master Plan and the Regional Transportation Corridor Design Guidelines in 2010 that support the integration of active and sustainable transportation on all Regional Roads. This project supports the Regional Transportation Master Plan (RTMP) goals of optimizing our transportation system, promoting transportation choice, supporting sustainable development and fostering a strong economy. This project includes facilities for all modes of transportation by providing new sidewalks and on-road cycling / buggy lanes.
5. WHO IS RESPONSIBLE FOR CLEARING SNOW FROM THE PROPOSED SIDEWALKS?

In the Town of Elmira, snow removal on sidewalks is completed by the Township of Woolwich.

6. WILL PROPERTY ACQUISITION BE REQUIRED FOR THIS PROJECT?

All property has been acquired for the proposed Church Street improvements and there is no further property acquisition proposed.

7. HOW WILL GARBAGE / RECYCLABLES BE COLLECTED DURING CONSTRUCTION?

We will ask that you continue to place your garbage and blue boxes at the end of your driveway for pick-up as usual during construction. When work is occurring in front of your property and garbage collection vehicles do not have access to your driveway on garbage collection day, our Contractor will deliver your garbage and recyclables to an adjacent location and return the empty containers afterwards. We will ask that all residents mark their containers with their address for easy identification.

8. WHEN WILL CONSTRUCTION OCCUR AND WILL THERE BE DETOURS?

Construction of the Church Street improvements is tentatively planned for the spring/summer of 2013 and is expected to take three months to complete, weather permitting.

There will be the need for short-term road closures to facilitate the installation of sewers across the road. During these closures, detours will be put in place for through traffic, i.e. traffic travelling through the construction zone. Signs would be erected to detour this through traffic around the construction area via Regional Roads.

As is customary when Regional Road detours are required, motorists will be advised of the construction timing and traffic restrictions through advance signage, the Region’s web site, and radio and newspaper notices.

9. HOW WILL ACCESS BE MAINTAINED TO PROPERTIES ON CHURCH STREET?

Access to all commercial and/or residential driveways along Church Street will be maintained to the greatest extent possible during construction. For commercial properties, access for customers will be maintained at all times. If only one commercial driveway access exists, the Contractor will endeavour to complete the work across your driveway in two stages where feasible in order to maintain customer access.

The Contractor may be required to temporarily block access to and from driveways for short-term periods when completing certain construction operations. Where a disruption to your driveway is expected, the Contractor is required to hand-deliver a notice at least 48 hours in advance advising you of the time and duration of the driveway disruption. If necessary, alternate parking arrangements will be made, such as provision for temporary parking on adjacent side streets.

Special attention will also be given to ensure access is maintained for emergency vehicles during and after construction hours.

Access may only be available at certain times from one end or the other on Church Street and not from both ends of the project. When this condition is scheduled to occur, the directly-affected properties will be kept informed prior to and during the restrictions via hand-delivered notices and on-site signage.
During much of the construction, the intersections of Church Street with Raising Mill Gate, Carriage Hill Trail, Harness Lane, Spring Wagon Lane, Killdeer Road, Poffenroth Path, Robb Road and Weigel Avenue will all be closed. During these times residents residing south of Church Street will be required to use internal streets to the south to access their properties.

10. HOW WILL PRIVATE PROPERTIES, TREES, DRIVEWAYS AND LAWNS BE AFFECTED?

It is expected that a small number of trees will have to be removed during construction to accommodate the proposed improvements. The plans presented at the Public Consultation Centre show trees that likely will require removal. It is the Region’s practice to plant two replacement trees for each tree removed as a result of any road projects.

Any grassed areas disturbed during construction will be repaired to equal or better condition with topsoil and sod or topsoil with grass seed and mulch.

11. HOW WILL DUST BE CONTROLLED DURING CONSTRUCTION?

The Region will be monitoring the amount of dust generated by construction activities on a daily basis. When necessary, the Region will ensure that the contractor uses proper dust suppression measures (i.e. the application of water and/or calcium chloride) in accordance with the contract documents and specifications.

12. WHAT ARE THE WORKING HOURS DURING CONSTRUCTION?

In general, construction working hours will be from 7:00 a.m. to 7:00 p.m., Monday through Friday, for a period of three months. There may be occasions where the contractor requests or is required to complete a critical work item after normal hours. In these special cases, this type of work outside normal working hours must be agreed to by the Region and the Township of Woolwich and must be proven to be critical to the requirements of the project or to lessen a public inconvenience associated with the work.

13. WILL THE POSTED SPEED LIMIT BE INCREASED?

The Region will retain the current posted speed limit of 50 km/hr on this section of Church Street following construction.

14. WHAT IS THE ESTIMATED COST OF THIS PROJECT AND HOW WILL IT BE FUNDED?

The Region of Waterloo is funding most of this project and the total estimated cost for the Region’s proposed improvements is $2,000,000. Other works that are being incorporated are being funded by the Township of Woolwich or by developers or private property owners.

15. WHAT IS THE NEXT STEP BEFORE FINALIZING THE DESIGN?

Prior to finalizing the design concept for this project, the Project Team is asking for the public’s input. This Public Consultation Centre is your opportunity to ask questions, provide suggestions, and make comments.

Once your input is received, it will be used by the Project Team, in conjunction with all other relevant information, to finalize the recommended design for this project.
16. WHEN WILL A FINAL DECISION BE MADE FOR THIS PROJECT?

The Project Team intends to review the public comments received from this evening’s Consultation Centre and use them as input for confirming the Final Recommended Design for this project. This Final Recommended Design will be presented to Regional Planning and Works Committee and Council in November or December 2012 for approval. In advance of these meetings, letters will be sent to all adjacent property owners and tenants (as well as to all members of the public specifically registering at this Public Consultation Centre) so that anyone wishing to speak to Committee or Council about this project can do so before final approval.

17. HOW CAN I VOICE MY COMMENTS AT THIS STAGE?

In order to assist us in addressing any comments or concerns you might have regarding this project, we ask that you please fill out the attached Comment Sheet and leave it in the box provided at the registration table. Alternatively, you can mail, fax or e-mail your comments to the Region of Waterloo not later than September 28th, 2012.

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

Mr. John Lee C.E.T.
Project Manager
Region of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3
Telephone: (519) 575-4746
Fax: (519) 575-4430
Email: jlee@regionofwaterloo.ca

Mr. Marko Paranosic, P. Eng., PE
Senior Project Manager
Stantec Consulting Ltd.
49 Frederick Street
Kitchener, ON N2H 6M7
Telephone: (519) 585-7447
Fax: (519) 579-4234
Email: marko.paranosic@stantec.com
Appendix B.1
Typical Sections and Renderings

EXISTING TYPICAL CROSS SECTION
Church Street Regional Road 86
Barnswallow Drive to Herbert Street

PROPOSED TYPICAL CROSS SECTION WITH TURN LANE
Church Street Regional Road 86
Barnswallow Drive to Herbert Street

PROPOSED TYPICAL CROSS SECTION WITH CURB ISLAND
Church Street Regional Road 86
Barnswallow Drive to Herbert Street
COMMENT SHEET

REGIONAL MUNICIPALITY OF WATERLOO

CHURCH STREET IMPROVEMENTS
Barnswallow Drive to Herbert Street

PUBLIC CONSULTATION CENTRE – SEPTEMBER 12, 2012

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 e-mail your comments by September 28th, 2012 to:

Mr. John Lee, C.E.T.
Project Manager,
Design and Construction Division
Regional Municipality of Waterloo
Facsimile: 519-575-4430

6th Floor, 150 Frederick Street
Kitchener, ON N2J 4G3
e-mail: JLee@regionofwaterloo.ca

Comments or concerns regarding this project:

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Name: _______________________________________________________________
Address: ___________________________________________________________________
Postal Code: _______________________

COLLECTION NOTICE

All comments and information received from individuals, stakeholder groups and agencies regarding these projects and meetings are being collected 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 should be forwarded to the staff member noted above.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 11, 2012

FILE CODE: T01-20/70

SUBJECT: IRA NEEDLES BOULEVARD (REGIONAL ROAD 70) AT YELLOW BIRCH DRIVE
INTERSECTION RECONFIGURATION

RECOMMENDATION:

THAT the Regional Municipality of Waterloo amend Traffic and Parking By-law 06-072, as amended, to add to Schedule 15, Prohibited Movements, Westbound Left-turn, Anytime at the intersection of Ira Needles Boulevard (Regional Road 70) and Yellow Birch Drive;

AND THAT the Regional Municipality of Waterloo approve the reconfiguration of Ira Needles Boulevard (Regional Road 70) and Yellow Birch Drive to limit the turning movements at the intersection to right-in/right-out and left-in configuration as outlined in Report E-12-076, dated September 11, 2012 in the City of Kitchener.

SUMMARY:

NIL

REPORT:

In response to public concerns regarding traffic safety, Transportation staff reviewed traffic operation at the intersection of Ira Needles Boulevard (Regional Road 70) and Yellow Birch Drive in the City of Kitchener.

The intersection of Ira Needles Boulevard and Yellow Birch Drive operates with an estimated daily traffic volume of 21,920 vehicles per day. Ira Needles Boulevard at its intersection with Yellow Birch Drive consists of 2 lanes in each direction and a southbound left-turn lane and Yellow Birch Drive consists of 1 lane in each direction. Figure 1 illustrates the location of this intersection in the City of Kitchener.
The Region follows Transportation Association of Canada’s (TAC) Geometric Design Guide for Canadian Roads to determine required sight distances. The required minimum departure sight distance along this roadway as determined by TAC is 138 meters. TAC also specifies that the minimum sight distance for a passenger vehicle turning left onto a four-lane roadway across a passenger vehicle approaching from the left is 150 metres. Staff determined that there are no visibility concerns when entering Ira Needles Boulevard looking to the south. Staff also measured the existing sight distance looking north from Yellow Birch Drive to be 195 metres. These distances exceed minimum sight distance requirements specified by TAC.

Turning movement counts were completed in 2009 and 2012 to determine need for additional traffic control. The Region assesses the need for additional traffic control at all intersections in the Region of Waterloo equitably using warrant methodology as described in Ontario Traffic Manual Book 12, Traffic Signals. Based on vehicle and pedestrian volumes observed in 2012, there is no need for additional traffic control at this time. For traffic signals to be considered, one of the following warrants as identified in Table 1 must be satisfied 100%. It is anticipated that the need for traffic signals will never be justified given that side street traffic will not increase due to the neighbourhood being fully built out. Furthermore, the Ministry of Transportation (MTO) has jurisdiction on access control within 400m of the Hwy 7/8 ramp terminal which includes the intersection of Ira Needles Boulevard and Yellow Birch Drive. The MTO has indicated they will not permit the installation of traffic control signals at this location due to their desire to maintain the integrity of operation at the highway interchange.
Table 1 – Traffic Signal Justification

<table>
<thead>
<tr>
<th>Warrant</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrant 1: Minimum Vehicular Volume</td>
<td>44%</td>
</tr>
<tr>
<td>Warrant 2: Delay to Cross Traffic</td>
<td>66%</td>
</tr>
<tr>
<td>Warrant 3: Combination - Warrants 1 and 2 above must both satisfy 80% or more</td>
<td>0%</td>
</tr>
<tr>
<td>Warrant 4: 4-hour Vehicular Volume</td>
<td>91%</td>
</tr>
<tr>
<td>Warrant 5: Collision Experience</td>
<td>20%</td>
</tr>
</tbody>
</table>

Staff also reviewed historical five year collision records to determine if there has been any unusual collision history that should be addressed through appropriate collision countermeasure treatments. Based on a review of collisions between 2006 and 2010 this intersection experienced 12 collisions where 5 were expected. This history of collisions is not necessarily considered overly unusual however there appears to be a developing pattern of turning collisions involving westbound left-turning and northbound straight through motorists. Based on the 2010 collision prediction model, this intersection ranked 343rd overall for most unexpected collisions and 30th for most unexpected collisions at a 3-legged stop-controlled intersection in 2010. Between 2007 and 2011 the intersection experienced 14 collisions where 4 were expected and as a result is likely to rank higher in 2011 indicating a degradation of safety at the intersection.

Several options were considered for this intersection to address safety concerns including do nothing, right-in/right-out/ left-in, right-in/right-out only, traffic signals and a roundabout.

Table 2 summarizes the analysis of the total 20-year lifecycle cost for 3 alternatives. Staff did not analyze traffic signals or a right-in/right-out only option because the Ministry of Transportation will not permit the installation of traffic signals and a right-in/right-out option unduly eliminates the southbound left-turn movement that is not considered problematic. Total lifecycle costs include capital construction costs as well as anticipated societal collision costs presented in today’s dollars.

Table 2 – Total 20-Year Present Value Costs

<table>
<thead>
<tr>
<th>20-year Present Value Lifecycle Cost</th>
<th>Do Nothing</th>
<th>Roundabout</th>
<th>Right-in / Right Out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$752,300</td>
<td>$2,633,167</td>
<td>$251,239</td>
</tr>
</tbody>
</table>

The right-in/right-out/left-in option yields the lowest total life-cycle cost compared to other options and best directly addresses collisions of concern. Anticipated increases in collision costs at Ira Needles Boulevard and Highview Drive roundabout were accounted for in the lifecycle cost analysis of the right-in/right-out option. The anticipated increase in collision costs are minimal as traffic volume redirected to the Highview Drive roundabout is predicted to be approximately 700 vehicles per day as a result of the change. Figure 1 illustrates the right-in/right-out/left-in configuration proposed for this intersection.
It is difficult to accurately predict how motorists who currently turn left out of Yellow Birch Drive will adjust their routing behavior following the implementation of this preferred option. These motorists will have two alternative route options as illustrated in Figure 2.

Figure 2 – Alternative Routes
Typically motorists will select routes that yield the shortest travel times. Staff therefore measured travel times for both routes during the morning peak period on July 17, 2012 and observed the following average travel times for each route:

Route A = 1 minute and 39 seconds
Route B = 1 minute and 9 seconds

Staff estimates that 30% (210 vehicles per day) of current daily left-turning traffic will utilize Route A and 70% (490 vehicles per day) will utilize Route B. It is anticipated that more drivers will prefer Route B over Route A because of the shorter travel time. Staff notes that Route A travel time is longer generally due to the left turn from Golden Meadow Drive to Highview Drive and not having right-of-way priority over northbound vehicles at the Ira Needles Boulevard and Highview Drive roundabout.

Staff undertook a two week public survey on July 9, 2012 requesting feedback on the Region’s proposal by placing signs at the intersection and providing a joint Region and City of Kitchener letter to 812 residential properties within the nearby neighbourhood. The survey requested feedback regarding whether or not the respondent was in favour of the preferred right-in/right-out/left-in option or a right-in/right-out only option by July 20, 2012.

Staff received 212 responses back with 58% of respondents in favour of the preferred proposed option (right-in/right-out/left-in), 10% in favour of an alternative option (right-in/right-out only) and 32% of respondents opposed to either option.

In summary, respondents not in support of the Region’s recommendation generally stated that:

- Motorists are free to choose when and how they turn at intersections;
- Motorists currently have the option to turn right and U-turn at roundabout;
- Turning left is only difficult at certain times of the day;
- Prefer a roundabout; and
- Traffic will divert through the neighbourhood to Highview Drive via Golden Meadow Drive.

Staff recommends proceeding with the installation of a right-in/right-out, left-in option. It is anticipated that construction required to implement this recommendation can be completed within the current construction season. City of Kitchener staff has been consulted with and concur with this recommendation.

The City of Kitchener plans to continue public consultation regarding neighbourhood traffic calming initiatives on Yellow Birch Drive, Golden Meadow Drive and Highview Drive and intend to hold another public meeting in September or October 2012. City staff has indicated that their traffic calming alternatives will be based on the pending approval of Ira Needles Boulevard and Yellow Birch Drive intersection configuration.

**CORPORATE STRATEGIC PLAN:**

This report addresses the Region’s goal to implement proven roadway safety strategies and education to enhance the safety of our roadways (Strategic Objective 3.3.2)

**FINANCIAL IMPLICATIONS:**

The estimated cost to construct a right-in/right-out/left-in configuration is approximately $35,000 and can be funded under the 2012 Transportation Capital Expansion Program.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:
NIL

ATTACHMENTS:
NIL

PREPARED BY:  Bob Henderson, Manager, Transportation Engineering

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

DATE: September 11, 2012

FILE CODE: T01-20/43

SUBJECT: REMOVAL OF RAISED CORNER ISLANDS ON MYERS ROAD (REGIONAL ROAD 43), CITY OF CAMBRIDGE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the removal of the raised corner islands (bump-outs) on Myers Road (Regional Road 43) in the City of Cambridge, as outlined in Report E-12-087, dated September 11, 2012.

SUMMARY:

NIL

REPORT:

On September 3, 1997 a report was submitted to Engineering Committee (see Appendix A) outlining a functional study dealing with various concerns on Myers Road (Regional Road 43)/Branchton Road (Regional Road 43) from Water Street (Regional Road 24) to Dundas Street (Regional Road 8). As part of that report, the installation of raised corner islands (bump-outs) were recommended as a “Traffic Calming” device to encourage lower travel speed and to provide pedestrian refuge areas. This recommendation was approved by Regional Council.

Figures 1, 2 and 3 illustrate the raised bump-outs on Myers Road at Enfield Drive/Woodland Drive, east of Lorraine Avenue at the existing midblock pedestrian signal and at its intersection with Greenbrier Road. Figure 4 illustrates the overall location of the bump-outs on Myers Road from Enfield Drive/Woodland Drive to Greenbrier Road.
Figure 1 – Myers Road at Enfield Drive/Woodland Drive

Figure 2 – Myers Road East of Lorraine Avenue (Midblock Pedestrian Signal)
Figure 3 – Myers Road at Greenbrier Road

Figure 4 – Myers Road from Enfield Drive/Woodland Drive to Greenbrier Road
As shown in the above figures reserved cycling lanes were also installed around 2001 and recently concerns have been raised about the conflict between the cycling lanes and bump-outs.

As a result, Regional staff undertook a review of the bump-outs along Myers Road to determine whether or not the reserved cycling lanes could be relocated so they would no longer cause an obstruction within the path of the cycling lane. The current posted speed limit along Myers Road is 50 km/h from Water Street to 30 metres west of Christopher Drive. It also has a 40 km/h (when flashing) speed limit from 30 metres west of Christopher Drive to 88 metres east of Greenbrier Road. Speed surveys conducted in 2009 indicate that the average travel speed along Myers Road is 50 km/h. Due to the existing road width, the reserved lanes cannot be relocated either in front of or behind the bump-outs and therefore staff is recommending the removal of the bump-outs on Myers Road, for the following reasons:

1. Eliminates the conflict between cycling lanes and the bump-outs;
2. Staff do not attribute lower travel speeds to the presence of the bump-outs and believe current travel speeds are generally influenced by the characteristics of the roadway environment; and
3. Staff do not anticipate an increase in travel speeds along Myers Road following the removal of the existing bump-outs.

Myers Road is scheduled for reconstruction in 2018. As part of the design process, staff is recommending that the Project Team review the possible installation of segregated reserved cycling lanes on the north and south sides of Myers Road.

City of Cambridge staff have been consulted and support the removal of the bump-outs.

The Principals of both the Cambridge Christian School and Monsignor EA Doyle Catholic Secondary School have also been contacted and have no concerns regarding the removal of the bump-outs.

CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to implement proven roadway safety strategies and education to enhance the safety of our roads (Strategic Objective 3.3.2).

FINANCIAL IMPLICATIONS:

The cost to remove the bump-outs, provide traffic control and restore with new asphalt on Myers Road is approximately $50,000 and would be included in the 2013 Transportation Capital Program.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Appendix A – Engineering Committee Report; Myers Road / Branchton Road Functional Study, Water Street to Dundas Street, City of Cambridge

PREPARED BY: Patricia Heft, Engineering Technologist (Traffic)

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

REPORT

TO: Chair Fred Kent and Members
DATE: October 8, 1997
SUBJECT: MYERS ROAD / BRANCHTON ROAD FUNCTIONAL STUDY, WATER STREET TO DUNDAS STREET, CITY OF CAMBRIDGE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the following actions with respect to the Myers Road / Branchton Road Functional Study:

a) the plans as presented at the September 3, 1997 Public Meeting be approved;
b) the truck sign on Water Street directing trucks to Myers Road be removed;
c) a sign be installed on Myers Road requesting that trucks avoid using engine brakes;
d) raised corner islands be constructed on Myers Road at Woodland Drive, Greenbrier Road and at the existing signalized crossing east of Lorraine Drive to encourage slower speeds and to provide pedestrian refuge areas;
e) upon completion of the Environmental Assessment Study for the Cambridge North-South Arterial, the Region of Waterloo will consider for inclusion in its Transportation Capital Works Program, the section of the South Cambridge Boundary Road between Water Street and Franklin Boulevard to reduce truck traffic on Myers Road; and
f) Letters of Credit received from developers adjacent to Myers Road and retained for turning lane construction be deposited by the Region:

1) until the need for turning lanes arises as a result of development traffic in which case the funds will be used to construct the turning lanes; or
2) until full subdivision development has occurred (estimated to be about the Year 2015) at which time the Region will return the morics (with accumulated interest) to the developers if turning lanes are deemed not to be constructed at that time.

SUMMARY:

A Functional Study was completed in early 1997 to determine future improvements required on Myers Road and Branchton Road between Water Street and Dundas Street in the City of Cambridge. A Project Team directed this study and was comprised of Councillor Gary Price and staff from the Region and the City of Cambridge. Based on future traffic projections, the study concluded that left turn lanes are needed at the 9 intersecting sidestreets between Water and Dundas Streets. Comments received from the public at two Information Centres (held April 17 and June 17, 1997) were predominantly opposed to any improvements on Myers Road and asked that the South Cambridge Boundary Road be constructed as soon as possible. Based on the public comments received, the Project Team is recommending that the scope of work be reduced and that turning lanes be constructed at only 3 intersections (Christopher Drive, Franklin Boulevard, and Cheesefactory Road/Elgin Street). The other intersections would be monitored and improvements would be considered in the future only as the need arises. Appropriate public consultation would occur at that time. The staff’s recommendation to construct turning lanes at only 3 intersections was presented to the public at a Public Meeting on September 3, 1997 and comments received from the public at the Public Meeting are addressed in this report.

REPORT:

A Public Meeting was held for this project on September 3, 1997 at 7:00 p.m. at the Grand River Conservation Authority, 400 Clyde Road, Cambridge. The report presented by staff at the Public Meeting is appended to this report as Appendix A and provides project details on the following:

- Needs justification for left turning lanes
- conclusions of the Functional Study
- staff responses to public concerns raised at the two Information Centres (safety, truck traffic and South Cambridge Boundary Road, speed, noise)
- front-yard drainage improvements

Approximately 25 members of the public attended the September 3 Public Meeting and 8 people appeared as delegations. Staff responses to public concerns raised at the Public Meeting are summarized as follows:

1. Truck Noise

A number of delegations indicated that they feel truck noise on Myers Road is excessive. Subsequent to the meeting, the Region confirmed with one of the adjacent property owners that engine brakes are being used by westbound trucks as they approach the hill down to Water Street. In order to minimize this practice of using engine brakes, staff are recommending that the Region install a sign on Myers Road between Ridgeway Avenue and Woodland Drive that reads, "PLEASE! AVOID USE OF ENGINE BRAKES". Though the restriction on engine brake use is not enforceable by law, usage of these signs in other areas in the Region has resulted in a reduction
in the use of engine brakes.

2. Truck Route Signs

One delegation asked that the truck sign on Water Street that directs trucks onto Myers Road be removed. This sign has been in place for a number of years to direct truck traffic that is destined for the Cambridge Industrial area and Highway 401 via Franklin Boulevard. However, since Myers Road includes front-lotting residential and school/church properties, staff concur that the designation of Myers Road as a truck route is not ideal. It is therefore recommended that the Truck sign on Water Street be removed. It should be noted that the truck route signs have been recognized by the Downtown Cambridge Study team as an important means to divert heavy trucks from the downtown core. In the Region’s 1999 study of improvements to Concession Street, the local residents strongly requested a truck restriction or prohibition and a diversion of all truck traffic to Myers Road. All three areas are impacted by truck traffic and it is probably not fair to single out one route as the designated truck route.

3. Weight Restriction

One delegation asked that a truck weight restriction be placed on Myers Road to eliminate heavy trucks from using the road. Weight limits are normally only used for structural reasons in the springtime when thawing conditions soften roads and make them vulnerable to structural damage from heavy truck loads. Staff believes restricting heavy trucks from using Myers Road is inappropriate because a suitable alternate heavy truck route is not available in this area of Cambridge.

4. Designated Alternate Truck Routes

A number of delegations asked that trucks be banned from Myers Road and an alternate route be designated on other roads. An option that was suggested included directing trucks from Water Street easterly along North Dumfries Township Road 3E, north on North Dumfries Township Road 16 (which becomes Cheese Factory Road) and connecting back to Myers Road at the Cheese Factory Road/Elgin Street intersection. Township Road 3E is a gravel road and both Township Roads 3E and 16 include a number of blind curves. Significant upgrades would be required to improve these roads to standards suitable for a truck route. It is estimated that the cost to upgrade the roads to desirable standards for use as a designated truck route would be $800,000. It is recommended that these Township Roads not be designated as a truck route because of the high costs associated with upgrading them to acceptable standards. In addition, this alternate route would become redundant as a truck route in the future once the South Cambridge Boundary Road is in place.

5. Encourage Truck Traffic on Water Street / Ainslie Street

One resident asked that improvements be done on Ainslie Street and Water Street to encourage trucks to use these roads instead of Myers Road. One of the conclusions of the Downtown Cambridge Study is that through traffic in the downtown core is not desirable and the reversion of Ainslie Street and Water Street to 2-way streets is proposed, among other reasons to discourage truck
traffic. Accordingly, any changes to encourage truck traffic in the downtown core conflict with the results of the Downtown Cambridge Study and therefore are not recommended.

6. Traffic Calming

One resident suggested that trucks could be deterred from using Myers Road and speeds could be reduced with the use of "Traffic Calming" devices. In the September 3, 1997 report, it was noted that staff are initiating the process to recommend the speed limit be lowered between Water Street and Greenbrier Road from 60 km/h to 50 km/h. Traffic Calming is another method of encouraging lower speeds. Traffic Calming measures are generally used to physically or visually (with different surface materials) constrict the roadway to slow traffic down. Traffic calming devices that could be used on Myers Road include: raised medians, raised islands in the shoulder areas and interlocking brick crosswalks. The Project Team has investigated these options and feels that raised islands in the shoulders would provide an effective Traffic Calming measure to encourage slower speeds on Myers Road. These islands would include dropped sections to accommodate cyclists or pedestrians using the shoulders (see sketch appended as Appendix B). The proposed locations for these islands are in the southeast and northeast corners of the following sidestreet intersections with Myers Road: Woodland Drive, Greenbrier Road and at the existing signalized crossing east of Lorraine Drive. In addition to helping slow down traffic, these islands would have additional benefit by providing safe pedestrian refuge areas adjacent to Myers Road in those areas currently used by pedestrians and would eliminate the use of the shoulder areas for passing. For these reasons, the Project Team is recommending that these raised islands be included in the road improvements scheduled for 1998 construction. The total cost of providing these Traffic Calming islands at the 3 intersections is estimated to be $60,000.

Drainage Issues

Drainage problems currently exist at a number of locations along Myers Road where proper drainage outlets are not present. As part of the proposed improvements on Myers Road, local storm drains would be provided to collect and remove water from front yards that are lower than the adjacent roadway. The Project Team has directed staff to include these storm drains in the road improvements scheduled for 1998 construction.

Letters of Credit

A number of developers with land holdings adjacent to Myers Road have submitted Letters of Credit (LC's) with the Region in the amount of $275,600 to fund the future construction of Myers Road turning lanes at intersecting sidestreets. Immediate construction of turning lanes is only proposed at Christopher Drive, Cheese Factory Road/Elgin Street and Franklin Boulevard. Only $112,000 of the existing Letters of Credit are allocated for work at these three intersections. The remaining amount of $163,600 is designated for intersections where turning lanes currently are not required but will be warranted as future development unfolds.

It should be noted that the turning lanes at these other 6 intersections will be warranted when the adjacent subdivisions are fully developed. Since there are no direct connections from the Myers Road subdivisions
to the future South Cambridge Boundary Road, the subdivision traffic will still have to use Myers Road and there is still a need for the turning lanes on Myers Road even with the Boundary Road in place.

Since construction of turning lanes for only 3 of the 9 intersecting sidestreets is scheduled in the near future, staff are recommending that the Region "cash in" these remaining LC's in the amount of $167,600 and deposit the funds in an interest-bearing account until such time as turning lanes at the other 6 intersections are needed. In the meantime, conditions at these other 6 intersections will be monitored to determine the timing of future turning lane construction. An appropriate public consultation program would take place at that time. Should the turning lanes at these other 6 intersections not be constructed by the time of full subdivision development (estimated to be about the Year 2015), the Region will make a final decision and if the turning lanes are not to be constructed at that time, the funds will be returned with interest to the developers.

FINANCIAL IMPLICATIONS:

The 1997 10 Year Roads Capital Forecast includes $595,000 for future intersection improvements in 1998-1999 within the Myers Road/Branchton Road corridor (at Water Street, Franklin Boulevard and Dundas Street).

Based on the results of this Functional Study, it is now proposed that the localized drainage improvements, the Traffic Calming Islands and construction of left turn lanes at the 3 intersections (Christopher Drive, Franklin Boulevard and Cheese Factory Road/Elgin Street) be considered for inclusion in the 1998 Transportation Capital Works Program at a total cost of $472,000. Letters of Credit from adjacent developments in the amount of $112,000 are in place for work at these 3 intersections. The balance of the costs for 1998 work including the Traffic Calming Islands is estimated to be $360,000 and would have to be funded from the Transportation Capital Works Program.

OTHER DEPARTMENT CONSIDERATIONS:

The Legal Services Division of the Corporate Resources Department, the Planning and Culture Department and the Finance Department were consulted in the preparation of this report.

PREPARED BY: Gary MacDonald, P. Eng., Project Manager

APPROVED BY: W.R. Pyatt, P.Eng., Commissioner of Engineering
APPENDIX A-1

REGIONAL MUNICIPALITY OF WATERLOO
ENGINEERING COMMITTEE REPORT

TO: Chair Fred Kent and Members

DATE: September 3, 1997

SUBJECT: MYERS ROAD/BRANCHTON ROAD FUNCTIONAL STUDY

RECOMMENDATION:

This report is submitted for information only prior to the Public Meeting to be held on September 3, 1997 at 7:00 p.m., Grand River Conservation Authority Boardroom, 400 Clyde Road, Cambridge.

SUMMARY:

A Functional Study was completed in early 1997 to determine future improvements required on Myers Road and Branchton Road between Water Street and Dundas Street in the City of Cambridge. Based on future traffic projections, the study concluded that left turn lanes would be needed at the 9 intersecting side streets between Water and Dundas Streets. Comments received from the public at two Information Centres were predominantly opposed to any improvements on Myers Road and asked that the South Cambridge Boundary Road be constructed as soon as possible. Based on the public comments received, the Project Team is recommending that the scope of work be reduced and that turning lanes be constructed at only 3 intersections (Christopher Drive, Franklin Boulevard, and Cheese Factory Road/Elgin Street); the other intersections would be monitored and future construction at these locations would not be considered without appropriate public involvement at that time. A Public Meeting is being held for this project at 7:00 p.m. on September 3, 1997 at Grand River Conservation Authority, 400 Clyde Road, Cambridge.

REPORT:

Functional Study

The Functional Study for Myers Road/Branchton Road was undertaken to develop a comprehensive plan that would accommodate the future traffic needs when all proposed subdivisions on the south side of Myers.
Road are completed. The projected traffic volumes for the study were based on full build-out of the subdivisions, assumed to occur by the Year 2016. Based on the traffic projections, turning lanes would be technically warranted at all 9 intersections within the study limits on Myers Road / Branchton Road between Water Street and Dundas Street.

A “Preferred Alternative” was originally selected by the Project Team which included a continuous center left turn lane on Myers Road from east of Water Street to west of Branchton Road, a total length of 2.9 km. The continuous left turn lane had been selected for the following reasons:

a. Left turn lanes will be warranted based on future traffic volumes at all nine intersecting sidestreets; at 3 locations, the tapers for the turn lanes would overlap each other because of the close proximity of the intersections.

b. 1.7 km. of the project includes either front-lotting residences (38 driveways) or front-lotting schools/churches; a center turn lane would improve safety for vehicles entering these properties.

c. Left turn lanes will reduce the potential for rear-end and sideswipe collisions

April 17, 1997 Public Information Centre

On April 17, 1997, a Public Information Centre was held to present the “Preferred Alternative” and obtain the public’s input. The Information Centre was attended by over 100 people and 47 comment sheets were handed in.

Comments received from the public at the Information Centre were predominantly opposed to the proposed improvements on Myers Road. Concerns were expressed regarding existing and future truck traffic (13 comments), safety (11 comments), speed (9 comments) and noise (9 comments). Twenty-nine (29) comment sheets asked that the South Cambridge Boundary Road (formerly “Highway 8 By-pass”) be constructed immediately to reduce traffic on Myers Road.

The Project Team met after the Information Centre and agreed to review the need for the continuous left turn lane as a result of the strong opposition voiced by the public. The traffic analysis was re-assessed to identify those improvements that are warranted now and those improvements that will become warranted as development proceeds. Left turn lanes are needed now at only 3 of the 9 intersecting sidestreets. The plans for improvements on Myers Road/Branchton Road were therefore revised to include proposed left turn lanes at only 3 intersections: Christopher Drive; Franklin Boulevard; and Cheesefactory Road/Eling Street.

Turning lanes at the other 6 intersections would be technically warranted when the subdivisions are fully developed, based on the traffic analysis; however, future construction at these other 6 intersections (Edgemere/Ridgehill, Enfield/Woodland, Lorraine, Greenbrier, Clover, Lisbon Pines) would not be considered without appropriate public participation at that time.
June 17, 1997 Public Information Meeting

On June 17, 1997, a Public Information Meeting was held to present the revised plans showing the reduced scope of work with turning lane construction proposed at only 3 intersections (Christopher Drive, Franklin Boulevard, and Cheese Factory Road/Elgin Street). Fourteen local residents attended this second meeting. The comments received at this meeting were predominantly about constructing the South Cambridge Boundary Road as soon as possible. The residents indicated that they are still opposed to any improvements on Myers Road because they feel the improvements would encourage more traffic, speeding and noise.

Subsequent to the meeting, a petition signed by 120 local residents was received. The petition states that the "undersigned are against any widening to Myers Road". Comments included with the petition note concerns about safety following any widening of the road and suggest that the South Cambridge Boundary Road be constructed instead of completing any work on Myers Road.

Needs Justification for Left Turn Lanes

The Ministry of Transportation has developed provincially-adopted warrants for left turn installations. Based on these warrants and existing traffic volumes, left turn lanes are needed now at the intersections of Christopher Drive, Franklin Boulevard and Cheese Factory Road/Elgin Street. There were 9 collisions at these three intersections over the past 3 years that could have been prevented by the installation of left turn lanes.

The existing traffic volumes on Myers Road range from 6600 to 7700 vehicles per day between Water Street and Franklin Boulevard. East of Franklin Boulevard, the existing volumes are only 2100 vehicles per day.

An additional 1,700 residential units are planned within the subdivisions on the south side of Myers Road. Once fully developed, traffic volumes on Myers Road are anticipated to reach 12,900 vehicle trips per day west of Franklin Boulevard and 7,700 trips per day east of Franklin Boulevard. These projections assume the South Cambridge Boundary Road is in place. Since there will be no direct access from the developments on the south side of Myers Road to the Boundary Road, the construction of the Boundary Road will have very little impact on reducing the trips from the subdivisions onto Myers Road.

Generally a road carrying 12,000-14,000 vehicles per day is entering the range where widening to 4 lanes is considered; however, because of the residential land use immediately fronting Myers Road, alternatives to road widening were considered in this Functional Study and resulted in the staff recommendation to construct left turn lanes.

Since left turn lanes improve traffic capacity, reduce the potential for rear-end and sideswipe collisions and improve safety for pedestrians and cyclists by eliminating the conflicts created when vehicles use the shoulder to by-pass turning vehicles, staff are recommending that as a minimum, left turn lanes be constructed at 3 intersections now. Conditions at the other 6 intersections would be monitored and future turning lane construction would not be considered without appropriate public involvement at that time.
Staff Responses to Public Concerns

Safety

A number of residents expressed safety concerns for children crossing Myers Road to access Churchill Park from the south side of Myers Road or to access the schools from the north side of Myers Road. The residents feel that any improvements on Myers Road will decrease safety for pedestrians crossing the road.

Pedestrian crossing signals exist immediately west of Lorraine Drive between Monsignor Doyle Catholic Secondary School and Cambridge Christian School. These signals were installed in November, 1991 and provide a safe crossing point to and from the schools.

Based on the traffic analysis, new traffic signals with pedestrian crosswalks are warranted at the Christopher Drive intersection within five years and at the Franklin Boulevard intersection within 15 years. These future traffic signals will provide alternate safe crossing locations for pedestrians crossing Myers Road.

On the whole, staff believe the proposed improvements on Myers Road will enhance safety for pedestrians crossing the road.

Truck Traffic and South Cambridge Boundary Road

Many of the public comments received asked that the South Cambridge Boundary Road (formerly "Highway 8 By-pass") be constructed as soon as possible to reduce general traffic as well as truck traffic on Myers Road.

Myers Road is a "Regional Controlled Access - Regulated Road". As a designated Regional Road, Myers Road is intended to provide multi-modal service for automobiles, trucks, transit, bicycles and pedestrians. The adjacent land use includes some front-lotted residential and institutional developments (3 churches and 2 schools) which creates conflict with the intended use of the Regional Road. Traffic counts show the percentage of trucks using Myers Road is high (7% at Water Street and up to 23% at Cheesefactory Road/Elgin Street).

Construction of the South Cambridge Boundary Road between Water Street and Franklin Boulevard would reduce through-traffic on Myers Road, and remove many of the trucks currently using Myers Road. Although the immediate construction of this section of the Boundary Road may be desirable, provincial legislation requires that the Environmental Assessment be completed for the entire alignment from Highway 401 to Highway 8 before construction of the section from Water Street to Franklin Boulevard can be considered.
The Region intends to initiate the Environmental Assessment study for the Cambridge North-South Arterial in 1997 which includes the South Cambridge Boundary Road. It is expected that this study will take approximately 2 to 3 years to complete mainly due to the controversial nature of the project. Once an alignment is established, the project would be considered for inclusion in the Region’s 10 Year Road Capital Forecast.

It should be noted that the construction of the Boundary Road would have little effect on the need for turning lanes on Myers Road. Since there are no direct connections from the Myers Road subdivisions to the Boundary Road, the subdivision traffic will still have to use Myers Road and there is still a need for turning lanes on Myers Road even with the Boundary Road in place. Because of this, staff believe turning lanes at Christopher Drive, Franklin Boulevard and Cheese Factory Road/Elgin Street need to be completed in 1998.

**Speed**

Concern was expressed about the speed of vehicles using Myers Road. The current speed limit on Myers Road is 60 km/h except in the school zone where the limit is 40 km/h when school is in session. In response to the public’s concerns, the Region will review the existing 60 km/h speed limit throughout the entire Myers Road corridor.

**Noise**

A number of residents noted that noise from Myers Road traffic is excessive. The Region’s Noise Policy requires the installation of noise walls if the projected noise increase from proposed construction will exceed 5 decibels-average (DbA). For this Functional Study, a noise analysis was undertaken and the increase in noise resulting from widening the road for left turn lanes and using projected 2016 traffic volumes is below 3 DbA and therefore noise walls are not warranted for this project.

**Other Issues**

A number of adjacent developments have deposited Letters of Credit with the Region in the amount of $280,000 to fund the future construction of Myers Road turning lanes at intersecting sidestreets. If turning lanes are to be constructed at only 3 of the 9 sidestreets, some of the development contributions in the amount of $168,000 will not be spent. Staff will be recommending in a future report that these Letters of Credit be retained for the purpose for which they were collected i.e. the construction of turning lanes at some point in the future.

Drainage problems currently exist at a number of locations along Myers Road where proper drainage outlets are not present. As part of the proposed improvements on Myers Road presented to the public on June 17, 1997, local storm drains would be provided to collect and remove water from front yards that are lower than the adjacent roadway.
Currently, it is proposed that the localized drainage improvements and construction of turning lanes at the 3 intersections (Christopher Drive, Franklin Boulevard and Cheese factory Road/Elgin Street) be considered for inclusion in the 1998 Transportation Capital Works Program. Letters of Credit from adjacent developments in the amount of $112,000 are in place for work at these 3 intersections. The balance of the costs are estimated to be $300,000 and would be funded from the Transportation Capital Works Program.

This project was originally categorized as a Schedule B project under the Class Environmental Assessment guidelines. Now that the project only includes turning lanes at intersections and minor drainage works, the project is classified as a Schedule A and may proceed without further review. No filing of documents is required for a 30-day review period. A formal Regional Public Meeting is also not required but is recommended to provide the public with an opportunity to express their concerns to members of Engineering Committee.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSIDERATIONS:

NIL

PREPARED BY: Gary MacDonald, P.Eng., Senior Project Manager

APPROVED BY: W.R. Pyatt, P.Eng., Commissioner of Engineering
100 mmØ STEEL BOLLARD WITH REFLECTORS

"STONE-DUST" WALKWAY (LIMESTONE SCREENING)

STANDARD CURB AND GUTTER

50mm HL-4

A-A

REGIONAL MUNICIPALITY OF WATERLOO

TRAFFIC CALMING SHOULDER ISLAND

MYERS ROAD 6573

DATE: 23 September 1997 SCALE: NOT TO SCALE
TO: Chair Jim Wideman and Members of the Planning and Works Committee  
DATE: September 11, 2012  
FILE CODE: T11-60/ACR  
SUBJECT: THE REGION OF WATERLOO 2011 COLLISION REPORT

RECOMMENDATION:
For information

SUMMARY:
NIL

REPORT:

Introduction
The Region of Waterloo 2011 Collision Report summarizes factors associated with traffic collisions that occurred in 2011. The information presented in this report is based upon vehicle collisions occurring on roads under the jurisdiction of the Region of Waterloo or signalized intersections under the jurisdiction of local municipalities and either investigated by Regional Police or reported at the Collision Reporting Centre.

Appendix A to this report is a copy of the Executive Summary of the 2011 Region of Waterloo Collision Report. The full 2011 Collision Report is available in the Transportation Division of the Transportation and Environmental Services Department, 7th Floor, Administration Headquarters Building. Copies of the full 2011 Collision Report will be circulated to the 7 local municipalities and the Waterloo Regional Police Services for their information and use. The full 2011 Collision Report will also be made available on the Region’s website under Getting Around / Traffic / Collision Reports.

Comparison of 2011 and 2010 Collision Statistics
Comparing collision statistics in 2011 to 2010, the following general observations have been made:

- The percentage of reported collisions involving drivers who had consumed alcohol slightly decreased from 2% in 2010 to 1.5% in 2011;
- The number of collisions involving cyclists decreased from 142 in 2010 to 104 in 2011;
- The number of horse-drawn vehicles involved in collisions on the Regional road system in 2011 and 2010 remained the same (6 in 2011 and 6 in 2010);
- The total number of reported collisions increased by 3.8% (5809 in 2010 to 6031 in 2011);
- The number of collisions involving pedestrians increased from 119 in 2010 to 151 in 2011;
- The number of injury collisions slightly increased from 1341 in 2010 to 1,379 in 2011;
- The number of persons sustaining injuries in collisions increased from 1870 in 2010 to 1939 in 2011;
The number of fatal collisions increased from 8 in 2010 to 15 in 2011; and
The number of persons sustaining fatal injuries in collisions increased from 8 in 2010 to 16 in 2011.

Table 1 and Figure 1 show the vehicle collision history on Regional roads.

**Table 1: Vehicle Collision History on Regional Roads**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Collisions</th>
<th>Collisions Per 1,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>6976</td>
<td>14.8</td>
</tr>
<tr>
<td>2003</td>
<td>6657</td>
<td>13.9</td>
</tr>
<tr>
<td>2004</td>
<td>6061</td>
<td>12.4</td>
</tr>
<tr>
<td>2005</td>
<td>5748</td>
<td>11.5</td>
</tr>
<tr>
<td>2006</td>
<td>5688</td>
<td>11.2</td>
</tr>
<tr>
<td>2007</td>
<td>5980</td>
<td>11.7</td>
</tr>
<tr>
<td>2008</td>
<td>5823</td>
<td>10.9</td>
</tr>
<tr>
<td>2009</td>
<td>5547</td>
<td>10.4</td>
</tr>
<tr>
<td>2010</td>
<td>5809</td>
<td>10.7</td>
</tr>
<tr>
<td>2011</td>
<td>6031</td>
<td>10.9</td>
</tr>
</tbody>
</table>

**Figure 1: Vehicle Collision History on Regional Roads**

**Collision Ranking**

Collision ranking is a tool that helps to identify locations likely to benefit from collision countermeasures. The 2011 collision ranking is based on the difference between the actual and expected number of collisions that occurred at each Regional intersection and midblock location between 2007 and 2011. The location with the largest difference between the actual and expected number of collisions over 5 years is ranked as #1, with #2 having the second largest difference and so on.
The Region of Waterloo collision prediction model is based on average collision rates for Regional roads with certain characteristics. Generally the Region’s expected collision rates are based on 5 years of collision data in order to have enough data to determine reliable expected collision rates. For intersections, the collision rate is given in terms of collisions per million vehicles entering the intersection (Coll/MVE) and it varies by the Average Annual Daily Traffic (AADT), the type of traffic control (stop, signal or pedestrian signal) and number of legs at the intersections (3 or 4 leg). For midblock locations, the collision rate is expressed as collisions per million vehicle-kilometers (Coll/MVKm) and it varies by AADT and the type of municipality (city or township).

The 2011 collision ranking provides a snapshot of locations experiencing more collisions than expected over 5 years. Some locations that are highly ranked (close to #1) may have collision patterns that could be mitigated through countermeasures.

Appendix B lists the first 100 ranked collision locations. Table 2 lists the first 10 ranked locations. Staff will review 5 years of collision data for each location ranked from #1 to #10 to determine if there is a collision pattern that could be mitigated through countermeasures. In addition, staff routinely review all locations where a fatal collision has occurred and also those intersections that have a high actual vs. expected collision ratio.

### Table 2: First 10 Ranked Collision Locations for 2010

<table>
<thead>
<tr>
<th>Rank</th>
<th>Location</th>
<th>Municipality</th>
<th>5-year Collisions</th>
<th>Actual</th>
<th>Expected</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OTTAWA ST AT HOMER WATSON BLVD</td>
<td>KIT</td>
<td>2011</td>
<td>200</td>
<td>101</td>
<td>99</td>
</tr>
<tr>
<td>2</td>
<td>KING ST AT FOUNTAIN ST</td>
<td>CAM</td>
<td>2010</td>
<td>116</td>
<td>31</td>
<td>85</td>
</tr>
<tr>
<td>3</td>
<td>UNIVERSITY AVE BTWN Regina AND WEBER</td>
<td>WAT</td>
<td>2011</td>
<td>81</td>
<td>19</td>
<td>62</td>
</tr>
<tr>
<td>4</td>
<td>FRANKLIN BLVD AT CAN-AMERA PKWY</td>
<td>CAM</td>
<td>2010</td>
<td>133</td>
<td>74</td>
<td>59</td>
</tr>
<tr>
<td>5</td>
<td>COURTLAND AVE/FAIRWAY RD AT MANITOU DR</td>
<td>KIT</td>
<td>2011</td>
<td>104</td>
<td>45</td>
<td>59</td>
</tr>
<tr>
<td>6</td>
<td>KING ST AT UNIVERSITY AVE</td>
<td>WAT</td>
<td>2011</td>
<td>121</td>
<td>66</td>
<td>55</td>
</tr>
<tr>
<td>7</td>
<td>EAGLE ST BTWN HESPELER &amp; Industrial</td>
<td>CAM</td>
<td>2010</td>
<td>74</td>
<td>19</td>
<td>55</td>
</tr>
<tr>
<td>8</td>
<td>FRANKLIN BLVD AT Elgin St/Saginaw Pkwy</td>
<td>CAM</td>
<td>2011</td>
<td>120</td>
<td>70</td>
<td>50</td>
</tr>
<tr>
<td>9</td>
<td>KING ST AT FAIRWAY RD</td>
<td>KIT</td>
<td>2010</td>
<td>105</td>
<td>57</td>
<td>48</td>
</tr>
<tr>
<td>10</td>
<td>HOMER WATSON BLVD at MANITOU/Doon Village Rd</td>
<td>KIT</td>
<td>2011</td>
<td>117</td>
<td>73</td>
<td>44</td>
</tr>
</tbody>
</table>

There were 3 locations (rank 6, 8 and 10) moving into the 2011 top 10 ranking. Staff undertook a preliminary review of collision trends at these 3 locations and our results are noted below. Five year timeline collision plots were also developed which are presented in Appendix D.

The 5-year collision history (2007-2011) at the King Street/University Avenue intersection shows that there were 53 rear-end type collisions and 33 turning movement type collisions. This total represents 71% of the total collisions (121) during this 5-year period.

A preliminary review of the 5-year collision history between 2007 and 2011 at the Franklin Boulevard/Saginaw Parkway/Elgin Street intersection shows that there were 69 (58%) rear-end collisions and 33 (28%) turning movement type collisions. Of the 69 rear-end collisions 61% are north/south along Franklin Boulevard approaching the intersection. 79% of the turning movement collisions (33) are also in the north/south direction turning from Franklin Boulevard.
Current countermeasures at the Franklin Boulevard/Saginaw Parkway/Elgin Street intersection include a southbound red light camera that was installed in October 2008. Also in October 2008, Regional staff installed pedestrian countdown signals to aid the crossing of pedestrians utilizing this intersection. The Transportation Capital Program includes the reconstruction of Franklin Boulevard from Pinebush Road to Myers Road in 2014 and includes the construction of a roundabout at the Franklin Boulevard/Saginaw Parkway/Elgin Street intersection. Staff are currently reviewing options for this intersection including a signalized intersection and will be reporting back to Council.

The Homer Watson Boulevard/Manitou Drive/Doon Village Road intersection experienced 117 collisions between 2007 and 2011. Of the 117 collisions, 78 or 67% are noted as rear-end type collisions with 64% occurring on Homer Watson Boulevard approaching the intersection. Typically, rear-end collision types are the result of motorists travelling too close or being inattentive.

Staff will review the collision histories at the above intersections in more detail to determine factors contributing to collisions and to develop countermeasures where appropriate.

As mentioned, each location is ranked according to the difference between the actual and expected number of collisions over a 5-year period. It should be understood that there are a number of factors that can impact rankings. The most influential factors typically include the total number of collisions over a 5-year period and the AADT volume. A slight change to either value at any given location can certainly influence rankings, especially when there are 3400 locations to be ranked.

Generally traffic volumes at any given location are stable and predictable; however, slight changes can occur annually in traffic volumes resulting in adjustments to annual AADT volumes. Approximately 250 to 300 intersections and 100 to 150 midblock sections are counted each year. The information obtained from these counts assist staff in developing AADT volumes for all 3400 ranked locations. In the context of 3400 locations, a year to year shift of ± 50 in overall ranking is a relatively small change.

**Red Light Camera Program and Effectiveness**

According to the Insurance Institute for Highway Safety (IIHS) red light camera’s (RLC’s) are in use in more than 400 cities across the United States and in at least 22 countries. In Canada, RLC are used in Ontario, British Columbia and Alberta. In Ontario, road authorities including Toronto, Hamilton, Ottawa, Peel Region, Halton Region and the Region of Waterloo participate in a RLC pilot project. If RLC are installed at locations with significant red-light running collisions and/or violations, they may:

- Substantially reduce red-light violation rates;
- Reduce collisions that result from red-light running;
- Reduce right-angle type collisions;
- Result in an increase in rear-end collisions;
- Reduce total collisions but rarely result in a substantial increase; and
- Reduce collision severity by virtue of reducing the more severe right-angle collisions while sometimes increasing the less severe rear-end collisions.

Table 3 provides a list of locations within the Region of Waterloo where RLC’s are currently operational.
Table 3 – Summary of Red Light Camera Locations

<table>
<thead>
<tr>
<th>Location</th>
<th>Direction</th>
<th>Date Installed</th>
<th>Mun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgeport Road at King Street</td>
<td>Northbound</td>
<td>June 17, 2008</td>
<td>Wat</td>
</tr>
<tr>
<td>Weber Street at Union Street</td>
<td>Northbound</td>
<td>July 2, 2008</td>
<td>Wat</td>
</tr>
<tr>
<td>Frederick Street at Duke Street</td>
<td>Northbound</td>
<td>July 2, 2008</td>
<td>Kit</td>
</tr>
<tr>
<td>Water Street at Park Hill Road</td>
<td>Eastbound</td>
<td>July 2, 2008</td>
<td>Cam</td>
</tr>
<tr>
<td>Homer Watson Boulevard at Ottawa Street</td>
<td>Eastbound</td>
<td>October 1, 2008</td>
<td>Kit</td>
</tr>
<tr>
<td>Homer Watson Boulevard at Pioneer Drive</td>
<td>Southbound</td>
<td>December 10, 2008</td>
<td>Kit</td>
</tr>
<tr>
<td>Franklin Boulevard at Saginaw Parkway/Elgin Street</td>
<td>Southbound</td>
<td>October 22, 2008</td>
<td>Cam</td>
</tr>
<tr>
<td>Weber Street at Bridgeport Road</td>
<td>Southbound</td>
<td>October 22, 2008</td>
<td>Wat</td>
</tr>
<tr>
<td>Erb Street at Regina Street</td>
<td>Eastbound</td>
<td>October 22, 2008</td>
<td>Wat</td>
</tr>
<tr>
<td>Bridgeport Road at Regina Street</td>
<td>Westbound</td>
<td>October 22, 2008</td>
<td>Wat</td>
</tr>
<tr>
<td>Weber Street at Wellington Street</td>
<td>Northbound</td>
<td>October 22, 2008</td>
<td>Kit</td>
</tr>
<tr>
<td>Weber Street at Lincoln Road</td>
<td>Northbound</td>
<td>October 3, 2008</td>
<td>Wat</td>
</tr>
<tr>
<td>Bridgeport Road at Albert Street</td>
<td>Westbound</td>
<td>August 16, 2010</td>
<td>Wat</td>
</tr>
<tr>
<td>University at Lincoln Road / Dale Crescent</td>
<td>Eastbound</td>
<td>July 19, 2010</td>
<td>Wat</td>
</tr>
<tr>
<td>Weber Street at Erb Street</td>
<td>Southbound</td>
<td>July 19, 2010</td>
<td>Wat</td>
</tr>
<tr>
<td>Hespeler Road at Langs Drive / Sheldon Drive</td>
<td>Northbound</td>
<td>August 4, 2010</td>
<td>Cam</td>
</tr>
</tbody>
</table>

Staff assessed the Region’s RLC program at all 16 signalized approaches by comparing 10 years of collision data for both angle and rear-end collisions. Figures 2 and 3 summarize the results of this assessment.

Figure 2 – Summary of Angle Collisions at Red Light Camera Locations

![Figure 2](image-url)
In summary, the average number of angle collisions at 16 intersections with RLC enforcement appears to be declining over time with the installation of RLC. Staff anticipates a continued reduction in angle collisions at these intersections. Rear-end collisions on average however appear to increase following the installation of RLC. City of Toronto staff advise, based on their research, that the increase in rear-end collisions are temporal and will likely reduce over time as motorists become accustomed to the presence of RLC. Unlike angle collisions, rear-end collisions typically do not result in severe injuries to occupants of motor vehicles.

Staff will continue to monitor the Region’s signalized network and need for RLC through a selective screening process. RLC will be considered at locations that demonstrate collision trends that are correctable with the installation of a RLC.

**Roundabouts**

The first full year of roundabout operation occurred in 2005. Established collision rates for roundabouts have not been established because collision rates continue to fluctuate. Once roundabout collision rates have stabilized, staff will include each roundabout location in the overall rankings. At this time Table 4 shows details of the total number of collisions, pedestrian collisions and injury collisions at 17 roundabout locations. Table 5 summarizes Average Annual Daily Traffic Volumes (AADT) at 15 roundabouts. Only roundabouts having at least one complete year of operation were included in this table. In general this table illustrates that volumes are steadily increasing at roundabouts on Regional roads which helps to explain the slight increase in the number of collisions occurring at roundabouts in 2011.
### Table 4: Collisions at Roundabout Locations

<table>
<thead>
<tr>
<th>Location</th>
<th>Opened</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erb &amp; Erbsville/Ira Needles, Waterloo</td>
<td>Nov. 04</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Townline &amp; Can-Amera, Cambridge</td>
<td>Dec. 04</td>
<td>4</td>
<td>0</td>
<td>18</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sawmill &amp; Arthur, Woolwich</td>
<td>Jun. 06</td>
<td>3</td>
<td>0</td>
<td>17</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fountain &amp; Blair, Cambridge</td>
<td>Oct. 06</td>
<td>1</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Can-Amera &amp; Conestoga, Cambridge</td>
<td>Nov. 06</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ira Needles &amp; Highview/Trussler, Kitchener</td>
<td>Nov. 06</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Ira Needles &amp; Highland, Kitchener</td>
<td>Nov. 06</td>
<td>1</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fischer-Hallman &amp; Huron, Kitchener</td>
<td>Oct. 07</td>
<td><em>0</em></td>
<td>0</td>
<td><em>1</em></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
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<td>Oct. 07</td>
<td><em>0</em></td>
<td>0</td>
<td><em>0</em></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Victoria &amp; Ira Needles, Kitchener</td>
<td>Dec. 07</td>
<td><em>0</em></td>
<td>0</td>
<td><em>0</em></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>University &amp; Ira Needles, Kitchener</td>
<td>Dec. 07</td>
<td><em>0</em></td>
<td>0</td>
<td><em>0</em></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pinebush &amp; Thompson, Cambridge</td>
<td>Aug. 09</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td><em>0</em></td>
</tr>
<tr>
<td>Lancaster &amp; Bridge, Kitchener</td>
<td>Nov. 09</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td><em>0</em></td>
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<tr>
<td>Ira Needles &amp; The Boardwalk, Kitchener</td>
<td>Sept. 10</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>0*</td>
</tr>
<tr>
<td>Fountain &amp; Dickie Settlement, Cambridge</td>
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<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>0*</td>
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<tr>
<td>Homer Watson &amp; Block Line, Kitchener</td>
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<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Fountain &amp; Kossuth, Cambridge</td>
<td>Nov. 11</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
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</table>

*Note: denotes partial year*

I = Injury Collision (Includes pedestrian collisions if pedestrian sustained an injury)
P = Pedestrian Collision
T = Total Number of Collisions
Table 5 – Average Annual Daily Traffic Volumes at Roundabouts

<table>
<thead>
<tr>
<th>Intersection</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<td>Sawmill Road at Arthur Street</td>
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<td>25562</td>
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<td>28204</td>
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<tr>
<td>Erb Street at Ira Needles Boulevard</td>
<td>16219</td>
<td>15528</td>
<td>20120</td>
<td>25076</td>
<td>27172</td>
<td>27927</td>
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<tr>
<td>University Avenue at Ira Needles Boulevard</td>
<td></td>
<td>12477</td>
<td>16623</td>
<td>20682</td>
<td>22703</td>
<td></td>
</tr>
<tr>
<td>Victoria Street at Ira Needles Boulevard</td>
<td>15047</td>
<td>17616</td>
<td>21915</td>
<td>24705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highland Road at Ira Needles Boulevard</td>
<td>19579</td>
<td>22923</td>
<td>25204</td>
<td>26714</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highview Avenue at Ira Needles Boulevard</td>
<td>10848</td>
<td>13689</td>
<td>18238</td>
<td>20036</td>
<td>20899</td>
<td></td>
</tr>
<tr>
<td>Fischer Hallman Road at Seabrook Drive</td>
<td></td>
<td>9784</td>
<td>12203</td>
<td>13015</td>
<td>15089</td>
<td></td>
</tr>
<tr>
<td>Fischer Hallman Road at Huron Road</td>
<td></td>
<td>11042</td>
<td>12747</td>
<td>13137</td>
<td>14860</td>
<td></td>
</tr>
<tr>
<td>Fountain Street at Blair Road</td>
<td>15061</td>
<td>14563</td>
<td>19402</td>
<td>19681</td>
<td>19022</td>
<td></td>
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<tr>
<td>Can-Amera Parkway at Conestoga Boulevard</td>
<td>14143</td>
<td>13006</td>
<td>16209</td>
<td>16252</td>
<td>15425</td>
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</tr>
<tr>
<td>Townline Road at Can-Amera Parkway</td>
<td>15799</td>
<td>17594</td>
<td>17682</td>
<td>21804</td>
<td>21900</td>
<td>23942</td>
</tr>
<tr>
<td>Pinebush Road at Thompson Drive</td>
<td></td>
<td>8940</td>
<td>9045</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lancaster Avenue at Bridge Street</td>
<td>23086</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24581</td>
</tr>
<tr>
<td>Ira Needles Boulevard at The Boardwalk</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>19577</td>
</tr>
<tr>
<td>Fountain Street at Dickie Settlement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23563</td>
</tr>
</tbody>
</table>

Intersections retrofitted with roundabouts continue to operate with approximately 70% fewer injury collisions. The overall average roundabout injury collision rate continues to be lower than the average injury collision rate seen at comparable traffic signals. Figure 4 illustrates average injury collisions at intersections retrofitted with roundabouts.
Staff is currently planning the implementation of additional countermeasures at roundabouts in an effort to further reduce collisions which include:

- Approach lane designation symbols;
- Circulatory lane markings;
- Arrow symbols within the circulatory lanes; and
- Shark teeth;

**2010 Countermeasures Program**

Appendix C to this report summarizes collision trends and recommended countermeasures for the first 10 ranked collision locations identified in the 2010 Collision Report. It also notes where countermeasures have already been implemented.

**CORPORATE STRATEGIC PLAN:**

This report addresses the Region’s goal to implement proven roadway safety strategies and education to enhance the safety of our roadways (Strategic Objective 3.3.2).
FINANCIAL IMPLICATIONS:
NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:
NIL

ATTACHMENTS:
Appendix A – Executive Summary of the 2011 Region of Waterloo Collision Report
Appendix B – Collision Ranking
Appendix C – 2010 Top 10 Collision Locations and Countermeasures Program
Appendix D – Collision Timeline Plots

PREPARED BY:  Mike Jones, Supervisor, Traffic Engineering

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
EXECUTIVE SUMMARY
2011 COLLISION REPORT

A total of 6031 reported traffic collisions occurred on Regional roads or signalized intersections in 2011. These collisions resulted in the following statistics:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Collisions</td>
<td>6031</td>
<td>5809</td>
<td>5547</td>
<td>5823</td>
<td>5980</td>
</tr>
<tr>
<td>Number of Fatal Collisions</td>
<td>15</td>
<td>8</td>
<td>9</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Number of Injury Collisions</td>
<td>1379</td>
<td>1341</td>
<td>1196</td>
<td>1359</td>
<td>1355</td>
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<tr>
<td>Number of Collisions Involving Pedestrians</td>
<td>151</td>
<td>119</td>
<td>98</td>
<td>119</td>
<td>122</td>
</tr>
<tr>
<td>Number of Collisions Involving Cyclists</td>
<td>104</td>
<td>142</td>
<td>105</td>
<td>128</td>
<td>128</td>
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<tr>
<td>Number of Persons Injured in Collisions (includes drivers, passengers, cyclists and pedestrians)</td>
<td>1923</td>
<td>1862</td>
<td>1649</td>
<td>1874</td>
<td>1817</td>
</tr>
<tr>
<td>Number of Persons Sustaining Fatal Injuries in Collisions (includes drivers, passengers, cyclists and pedestrians)</td>
<td>16</td>
<td>8</td>
<td>10</td>
<td>13</td>
<td>5</td>
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<tr>
<td>Percentage of Collisions Occurring at Intersections</td>
<td>63%</td>
<td>64%</td>
<td>57%</td>
<td>58%</td>
<td>57%</td>
</tr>
<tr>
<td>Day with Highest Number of Collisions</td>
<td>Friday</td>
<td>Friday</td>
<td>Friday</td>
<td>Friday</td>
<td>Friday</td>
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<td>Month with Highest Number of Collisions</td>
<td>October</td>
<td>December</td>
<td>January</td>
<td>February</td>
<td>February</td>
</tr>
<tr>
<td>Time of Day with Highest Number of Collisions</td>
<td>17:00</td>
<td>17:00</td>
<td>16:00</td>
<td>17:00</td>
<td>17:00</td>
</tr>
<tr>
<td>Most Common Collision Type</td>
<td>Rear End</td>
<td>Rear End</td>
<td>Rear End</td>
<td>Rear End</td>
<td>Rear End</td>
</tr>
<tr>
<td>Most Frequently Recorded Improper Driving Action</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
</tr>
<tr>
<td>Percentage of Alcohol-Related Collisions</td>
<td>1.5%</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Horse-Drawn Vehicle Collisions</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
### APPENDIX B

#### Report: E-12-090

## COLLISION RANKING

**LEGEND**
- **Tcon** = traffic control (TS=traffic signal, SS=stop sign, AWS=all-way stop sign)
- **F** = fatal collisions in 5 years
- **PI** = personal injury collisions in 5 years
- **PD** = property damage collisions in 5 years
- **NR** = non-reportable collisions (property damage less than $1000) in 5 years
- **Total Coll** = total collisions in 5 years
- **2010 Vol** = average annual daily traffic (veh/day)
- **Link Length** = length of road section in kilometres (for midblock locations)
- **Coll Rate** = expected average 5-year collision rate (collisions/million vehicles entering) or (collisions/million vehicle-kilometres)
- **Expect # Coll** = expected number of collisions in 5 years
- **Diff** = difference between total number of collisions and expected number of collisions in 5 years

<table>
<thead>
<tr>
<th>Rank</th>
<th>Geo ID</th>
<th>Location</th>
<th>Mun</th>
<th>Tcon</th>
<th>F</th>
<th>PI</th>
<th>PD</th>
<th>NR</th>
<th>Total Coll</th>
<th>2011 Vol</th>
<th>Link Length</th>
<th>Coll Rate</th>
<th>Expect # Coll</th>
<th>Diff</th>
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<td>OTTAWA ST at HOMER WATSON BLVD</td>
<td>KIT</td>
<td>TS</td>
<td></td>
<td>56</td>
<td>78</td>
<td>66</td>
<td>200</td>
<td>61993</td>
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<td>101</td>
<td>99</td>
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<tr>
<td>2</td>
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<td>CAM</td>
<td>TS</td>
<td>23</td>
<td>52</td>
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<td>WAT</td>
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<td>10</td>
<td>42</td>
<td>29</td>
<td>81</td>
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<td>16</td>
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## 2010 TOP 10 COLLISION LOCATIONS AND COUNTERMEASURES PROGRAM

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### 1. Ottawa Street at Homer Watson Boulevard, Kitchener

Ottawa Street (Regional Road 4) at Homer Watson Boulevard (Regional Road 28) experienced 197 collisions in 5 years (2006 to 2010) including 51 turning movement collisions where 25 would be expected and 112 rear-end collisions where 47 were expected.

In February 2001, staff installed a red-light camera to mitigate angle-type collisions. Installation of the red-light camera has resulted in a reduction of angle collisions at this intersection.

In 2004, staff assessed the feasibility of providing fully-protected left-turn phasing on all approaches to this intersection and determined that, at that time, this type of phasing would result in unacceptable increased delays to motorists. With annual vehicular growth, fully-protected left-turn phasing creates unacceptable delays.

As part of the Region’s on-going LED traffic signal conversion program, the perimeter of all traffic signal head backboards were supplemented with 3M reflective tape in April 2007. Reflective tape accentuates the traffic signal head backboard to create a more conspicuous traffic signal head especially during night-time conditions. Research indicates that this countermeasure can reduce night-time overall collisions and more specifically, rear-end collisions.

As part of the Region’s pedestrian countdown signal (PCS) pilot project, staff installed PCS at this intersection on September 30, 2008.

On February 2, 2011, Regional Council approved the installation of a roundabout at the intersection which is anticipated to be operational in the year 2015. Along with the roundabout installation, additional improvements to highway ramp terminals and a second roundabout at the Ottawa Street / Alpine Road intersection has also been approved for installation. It’s anticipated that these additional improvements will also occur in 2015.
2. King Street at Fountain Street, Cambridge

King Street at Fountain Street experienced 103 collisions in 5 years (2006 to 2010). Of the 103 collisions, 53 were turning-type collisions where 8 were expected and 23 were sideswipe collisions where 0 were expected.

Currently, an Environmental Assessment is underway which encompasses the King Street / Fountain Street intersection. In April 2012 Council passed a resolution in favor of the proposed solution which includes intersection improvements. The proposed design will reconfigure the intersection geometry and will incorporate two through lanes along Fountain Street to Shantz Hill Road. The proposed design removes the weaving action of motorists between King Street and Shantz Hill Road and as such is anticipated to reduce sideswipe collisions. Further design improvements include the addition of a southbound left-turn lane which removes left turning motorists from the through lane. Staff anticipate that the addition of a southbound left-turn lane will reduce southbound rear-end collisions.

3. Courtland Avenue / Fairway Road at Manitou Drive, Kitchener

There were 104 collisions at the Courtland Ave/Fairway Rd/Manitou Dr intersection between 2006 and 2010. Of the 104 collisions, 78 were rear end type collisions, with 45% occurring in the channelized right-turn lane from Manitou Drive to eastbound Fairway Road.

In 2011 staff reconstructed the right-turn channelized island from Manitou Drive onto Fairway Road. The new channel is known as a smart channel and is designed to reduce rear-end collisions. The smart channel was completed in November 2011 and since its installation there has been 0 rear-end collisions associated with turning right compared to 20 one year prior. Staff anticipates a 90% reduction in rear-end collisions on this channelized island based on the collision analysis of other similar Region projects.

4. Franklin Boulevard at Can-Amera Parkway, Cambridge

Franklin Boulevard at Can-Amera Parkway experienced 133 collisions in 5 years (2006 to 2010). Of the 133 collisions, 65 were rear-end collisions where 33 would be expected and 43 turning-type collisions where 18 would be expected. Of the 43 turning movement collisions the majority (61%) involve a westbound left turning motorist not yielding the right of way to an eastbound through motorist.

In June 2012, Regional Council passed a staff recommendation to implement a westbound duel left-turn from Can-Amera Parkway onto Franklin Avenue. The lane configuration requires the traffic signals to operate the westbound left-turn movement fully-protected such that westbound left-turning motorists are only permitted to move during an exclusive westbound left-turn phase. It is anticipated that the lane configuration and signal phasing change will reduce the westbound left-turn collisions by as much as 94% based on collision analysis other similar Regional projects.

In May 2012 Regional Council passed a resolution for road improvements on Franklin Boulevard from Pinebush Road to Myers Road. The improvements include an approved roundabout at the Franklin Boulevard / Can-Amera Parkway intersection which is scheduled to be complete in 2015.
5. Eagle Street between Hespeler Road and Industrial Road, Cambridge

There were 77 collisions on Eagle Street between Hespeler Road and Industrial Road in 5 years (2006 to 2010). Of the 77 collisions, 46 were turning-movement collisions and 2 were angle collisions. When these types of collisions occur on midblock road sections with commercial development they typically involve a vehicle entering or exiting area development. A cluster of these types of collisions are occurring at the accesses to 2445 / 2465 / 2475 Eagle Street and 2386 / 2396 Eagle Street.

As part of the Eagle Street, Hespeler Road to Concession Road / Speedsville Road Environmental Assessment, staff has redesigned the existing median islands on Eagle Street to mitigate collisions in this vicinity. Rapid Transit staff is assessing Eagle Street as a future rapid transit route and as such the planned road widening of Eagle Street has been delayed until their assessment is complete.

6. University Avenue East between Regina Street and Weber Street, Waterloo

University Avenue between Regina Street and Weber Street experienced 73 collisions in 5 years (2006 to 2010). Of the 73 collisions, 30 were rear-end collisions where 7 were expected, and turning movement collisions account for 41%. Our analysis shows that the majority of the angle / turning collision types are occurring at the accesses within this section of Weber Street.

Staff has assessed the potential for a median island or two-way centre left-turn lane along this section of University Avenue. It is anticipated that by eliminating turning movements a continuous centre median may reduce total collisions on this section of University Avenue by as much as 60%. A continuous centre median may further encourage pedestrian crossings along this section of University Avenue. Staff is recommending a more detailed assessment of costs and potential concerns regarding the installation of a continuous centre median on University Avenue between Regina Street and Weber Street in 2012 for potential installation in 2013.

7. Ottawa Street at Fischer-Hallman Road, Kitchener

Ottawa Street at Fischer-Hallman Road experienced 134 collisions during the previous 5 years between 2006 and 2010. Of the 134 collisions, 84 were rear-end type collisions where 37 were expected. Rear-end collisions are typically the result of motorists being inattentive and travelling too close. Our analysis shows that the majority of those involved in a rear-end collision were inattentive. A detailed review of the rear-end collisions at this intersection shows that the majority are occurring in the northbound (26) and southbound (27) directions along Fischer-Hallman Road.

The Ottawa Street / Fischer-Hallman Road intersection was part of a Class Environmental Assessment which included reviewing road improvements on Fischer-Hallman from Ottawa Street to Bleams Road including a roundabout at Ottawa Street and Fischer-Hallman Road. However, the Class Environmental Assessment is on hold pending the assessment of a Transit Corridor Study along Fischer-Hallman Road.

The Ministry of Transportation is currently construction cycling lanes, and additional southbound through lane and a new eastbound Highway 7/8 on-ramp between Greenbrook Drive and Ottawa Street. These planned improvements may help reduce southbound rear-end collisions at Ottawa Street due to improved capacity.
8. Pinebush Road between Franklin Boulevard and Wayne Avenue, Cambridge

Pinebush Road between Franklin Boulevard and Wayne Street experienced 55 collisions in 5 years (2006 to 2010). There were 47 turning movement collisions where 1 was expected. Previous analysis shows that the majority of the above collision types are occurring at the accesses to the commercial plazas on the northwest and southwest corners of the Pinebush Road / Franklin Boulevard intersection. The collisions typically involve a vehicle entering or exiting the development through vehicle queues.

In May 2012 Regional Council approved improvements on Franklin Boulevard from Pinebush Road to Myers Road. The improvements include an approved roundabout at the Franklin Boulevard / Pinebush Road intersection. The roundabout design includes the extension of the centre median from Franklin Boulevard to Wayne Avenue. It is anticipated that the earliest construction of the median extension will be in 2014.

The median extension is expected to significantly reduce the collisions occurring at the accesses to the commercial plazas on the northwest and southwest corners of the Pinebush Road / Franklin Boulevard intersection. It is anticipated that a continuous centre median may reduce the total collisions by as much as 87% as turning movements will be restricted.

9. King Street at Fairway Road, Kitchener

King Street at Fairway Road experienced 100 collisions in 5 years (2006 to 2010). Of the 100 collisions, 61 collisions were rear-end type collisions where 26 were expected.

Typically, rear-end collision types are the result of motorists travelling too close or being inattentive. According to the Motor Vehicle Accident Reports 48% of the rear-end collisions are the result of motorists travelling too close.

One potential measure to reduce rear-end collisions is to consider signal timing adjustments to improve the coordination between intersections and in particular the direction that is experiencing the majority of rear-end collisions. A detailed review of the rear-end collisions shows that the majority of collisions at this intersection are occurring in the southbound direction along King Street. As such, staff has requested that the existing signal timing and coordination between traffic control signals be improved in the southbound direction if possible recognizing that good coordination is also dependant on available lane capacity. The southbound curb lane at this intersection defaults to a right-turn only lane which consequently impacts through capacity and traffic signal coordination.

10. Weber Street at University Avenue, Waterloo

There were 104 collisions at the Weber Street / University Avenue intersection during the previous 5 years between 2006 and 2010. Of the 104 collisions, 46 collisions were rear-end type collisions where 28 were expected, 29 were turning movement collisions where 15 were expected and 22 were sideswipe collisions where 0 were expected.

A review of the rear-end collisions shows that 46% (22) of the rear-end collisions are noted as following too close. As previously noted the general cause of rear-end type collisions is the result of a motorist travelling too close or being inattentive.
Generally, turning movement collisions are the result of a left-turning motorist not yielding the right-of-way to an approaching vehicle. According to the Motor Vehicle Accident Reports, 52% of the turning movement collisions was the result of a motorist not yielding the right-of-way. A detailed assessment shows that 68% (19) of the turning movement collisions occurred in the north and southbound directions with 11 of the 19 occurring in the northbound direction.

Generally staff only consider fully-protected left-turn signal phasing when a particular left-turn movement is clearly operating with higher than normal left-turn collisions. In this case left-turn collisions are not overly unusual in any particular direction.

Lastly, a review of sideswipe collisions did not yield any particular direction or pattern of sideswipe collisions.
COLLISION TIMELINE PLOTS

KING ST AT UNIVERSITY AVE
FIVE-YEAR COLLISION ANALYSIS - JANUARY 1, 2007 TO DECEMBER 31, 2011

DATE

0 1 2 3 4 5 6 7 8 9

COLLISION TYPE

Pedestrian
Fixed Object
Animal
Turning Movement
Sideswipe
Rear End
Angle
Approaching

Collisions
FIVE-YEAR COLLISION ANALYSIS - JANUARY 1, 2007 TO DECEMBER 31, 2011

FRANKLIN BLVD AT Elgin St/Saginaw Pkwy

DATE

COLLISION TYPE

Approaching
Angle
Rear End
Sideswipe
Turning Movement
Animal
Fixed Object
Pedestrian
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 11, 2012

FILE CODE: T01-20/9

SUBJECT: PROPOSED RESERVED CYCLING LANES ON ERB’S ROAD (REGIONAL ROAD 9) FROM IRA NEEDLES BOULEVARD (REGIONAL ROAD 70) TO 260 METRES EAST OF NOTRE DAME DRIVE (REGIONAL ROAD 12)

RECOMMENDATION:

THAT the Regional Municipality of Waterloo amend Traffic and Parking By-law 06-072, as amended, to

a) Remove from Schedule #1, No parking Anytime on both sides of Erb’s Road (Regional Road 9) from 2504 metres east of Notre Dame Drive (Regional Road 12) to 2404 metres east of Notre Dame Drive (Regional Road 12);

b) Add to Schedule #24, Reserved Lanes on both sides of Erb’s Road (Regional Road 9) from Ira Needles Boulevard (Regional Road 70) to 260 metres east of Notre Dame Drive (Regional Road 12);

c) Add to Schedule #1, No Parking Anytime on both sides of Erb’s Road (Regional Road 9) from Ira Needles Boulevard (Regional Road 70) to 260 metres east of Notre Dame Drive (Regional Road 12);

in the City of Waterloo and the Township of Wilmot, as outlined in Report E-12-092, dated September 11, 2012.

REPORT:

Erb’s Road (Regional Road 9) from 30 metres west of Ira Needles Boulevard (Regional Road 70) to Notre Dame Drive (Regional Road 12) has recently been resurfaced which included partial paving of the gravel shoulders. It is being recommended that cycling lanes on both sides of Erb’s Road from Ira Needles Boulevard to 260 metres east of Notre Dame Drive be implemented because it has been identified as an important cycling component in the Cycling Master Plan.

The reserved cycling lanes will require the addition of a No Parking Anytime restriction for the same limits as the proposed reserved cycling lanes on both the north and south sides of Erb’s Road. The proposed reserved cycling lanes and proposed No Parking Anytime restriction along Erb’s Road are shown in Figure 1.
From August 13, 2012 to August 24, 2012, Transportation staff placed information signs along Erb’s Road requesting comments on the proposed reserved cycling lanes from the public through the Region’s website or via telephone; an internet questionnaire was setup to receive comments and a phone number was provided. As a follow up to the web survey, questionnaires were also hand delivered to residents fronting Erb’s Road within the project limits also requesting comments on the proposed changes. A total of 22 responses were received and 17 (77%) are in favour of installing reserved cycling lanes on both sides of Erb’s Road. In summary, residents opposed to the proposed reserved cycling lanes are concerned with:

- Vehicular speed;
- Traffic volume; and
- Loss of parking.

Speed surveys completed between Strauss Court and Wilmot Line (80km/h posted speed limit) indicate that the average speed of motorists is 80 km/h. The average speed of motorists between Wilmot Line and Ira Needles Boulevard (posted 60 km/h speed limit) has been observed to be 72 km/h. The average annual daily traffic volume on Erb’s Road between Wilmot Line and St. Agatha is approximately 8,500 vehicles per day. Staff has observed very little to no parking activity on Erb’s Road and residences between St. Agatha and Wilmot Line generally have driveways in excess of 85 feet.

Both City of Waterloo and Township of Wilmot staff were contacted in this regard and support the proposed changes.

Respondents wishing to be notified when this report will be dealt with by the Planning and Works Committee have been notified.
CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to implement proven roadway safety strategies and education to enhance the safety of our roads (Strategic Objective 3.3.2).

FINANCIAL IMPLICATIONS:

The cost to implement the proposed cycling lanes along Erb’s Road is approximately $12,000 and is included within the Erb’s Road Project #5432.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Council and Administrative Services Division will be required to prepare the amending by-law.

ATTACHMENTS:

NIL

PREPARED BY: Satinderjit Bahia, Engineering Technologist (Traffic)

APPROVED BY: Thomas Schmidt, Commissioner of Transportation and Environmental Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee  
DATE: September 11, 2012  
FILE CODE: C06-60/P&W/WS.12  
SUBJECT: BIOSOLIDS HEAT DRYING FACILITY – P3 DELIVERY

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into a Consulting Services Agreement with Deloitte and Touche LLP to complete a full Business Case Analysis in support of the implementation of a biosolids heat drying facility through a Public-Private Partnership (P3) delivery model at an upset fee limit of $250,182 including all applicable taxes;

AND THAT Regional Council appoint three Councillors representing the Cities of Cambridge and Waterloo and the Township of Wilmot to participate in the Biosolids Heat Drying Facility Class EA Steering Committee.

SUMMARY:

On August 14, 2012, Regional Council endorsed an application made by Regional Staff to the PPP Canada (Public-Private Partnership Canada, or P3 Canada) Fund seeking financial support for up to 25% of the cost of constructing a centralized biosolids heat drying facility using P3 delivery approach (Report No. E-12-078). Regional Council also approved a streamlined consultant selection process for undertaking the full Business Case Analysis and the Class EA study for this project.

Report E-12-078.1 dated September 11, 2012, awards the consulting assignment for completing the full Business Case Analysis, outlines the results of the consultant selection process to undertake the Class EA study and summarizes the results of the preliminary Value for Money (VFM) Analysis for a P3 model delivery of the biosolids heat drying facility.

As authorized by Regional Council, the Region completed negotiations with Deloitte & Touche LLP to extend their current VFM analysis to also complete a full Business Case Analysis. The total value of the VFM analysis is $55,627.64 and the grand total for the completion of the full Business Case is $250,182, including all applicable taxes.

The Region also completed the consultant selection for undertaking the biosolids heat drying facility Class EA study. The consulting firm CIMA+ was the successful consultant. As per the Region’s Purchasing By-law, this assignment is valued under $300,000 and will be awarded by CAO Approval.
The VFM analysis is a comparison of the risk-adjusted costs (capital, operating, maintaining, financing) of a project using a P3 delivery model versus traditional delivery model (Design-Bid-Build or DBB) over the life of the facility. In order to justify the project using a P3 delivery model, a positive VFM must be demonstrated. A positive VFM is achieved if the costs of a P3 approach can be offset by the reduction of retained risks, together with increasing value through greater efficiency and innovation. Three P3 delivery models were compared to the traditional model: Design-Build-finance (DBf), Design-Build-Operate-Maintain (DBOM) and Design-Build-Finance-Operate-Maintain (DBFOM).

The preliminary VFM analysis indicates that the DBOM and DBFOM are the preferred models to be adopted for a P3 delivery approach. The percentage risk adjusted savings for these two models are 10% and 14%, respectively. These savings represent total life cycle savings (includes costs for detailed design, construction, operation, maintenance administration) for the implementation of this project of $28.2 and $38.3 million, respectively. For the analysis, potential contributions from the P3 Canada Fund have not been included, and a facility life of 30 years was assumed. The preferred model will be confirmed as part of the full Business Case analysis. However, P3 Canada has indicated that DBFOM would be considered to be the preferred delivery model to ensure maximum risk transfer to the P3 contractor.

To guide the Class EA, a Steering Committee will be formed and it is recommended that Regional Council appoint three Councillors representing the Cities of Cambridge and Waterloo and the Township of Wilmot to participate.

REPORT:

Background

On August 14, 2012, Regional Council endorsed an application made by Regional Staff to the PPP Canada (Public-Private Partnership Canada, or P3 Canada) Fund seeking financial support for up to 25% of the cost of constructing a centralized biosolids heat drying facility using P3 delivery approach (Report No. E-12-078). The financial support would be provided at substantial completion of the construction of the project. Regional Council also authorized Regional Staff to enter into negotiations with Deloitte and Touche LLP to extend their current Value For Money (VFM) analysis to complete a full Business Case analysis to support the biosolids heat drying facility using a P3 delivery model. In addition, Regional Council approved waiving the Region’s Purchasing By-law requirement to publicly advertise consulting assignments in excess of $100,000 and allow issuing a request for quotation to obtain at least three quotes to undertake a Municipal Class Environmental Assessment (Class EA) for the biosolids heat drying facility.

Report E-12-078.1 dated September 11, 2012, awards the consulting assignment for completing the full Business Case Analysis, outlines the results of the consultant selection process to undertake the Class EA study and summarizes the results of the preliminary Value for Money (VFM) Analysis for a P3 model delivery of the biosolids heat drying facility.

Results of the Negotiations of the Business Case Analysis

Regional Staff entered into negotiations with Deloitte & Touche LLP to extend their current VFM analysis to complete a full Business Case Analysis for the biosolids heat drying facility. The total value of the VFM analysis is $55,627.64 and the grand total for the completion of the full
Business Case is $250,182, including all applicable taxes. Award of this assignment is part of this report.

The negotiations resulted in an agreed scope, which consists of undertaking a market sounding exercise from interested vendors, refined project costs, updated VFM and preparation of a Business Case report that meets the requirements of the P3 Canada Fund. The Business Case is expected to be complete by late fall/early winter 2012, after which the results will be reported to Regional Council and subsequently submitted to P3 Canada.

**Results of the Consultant Selection for Class EA Assignment**

Regional Staff prepared the Terms of Reference, and requested proposals and quotations for undertaking the biosolids heat drying facility Class EA study. Four consulting firms were invited for this assignment, and three proposals and quotations were received. Based on evaluation of the submissions, the consulting firm CIMA+ had the best overall proposal. The total upset cost to complete the Class EA is $234,125 including all applicable taxes. The Class EA is expected to be completed in summer 2013 when the Notice of Completion will be subject to Regional Council approval.

As per the Region’s Purchasing By-law, the assignment is valued under $300,000 and will be awarded by CAO Approval.

**Results of Preliminary Value for Money (VFM) Analysis and P3 Delivery Options**

Due to the overall aggressive schedule for delivery of the biosolids heat drying facility using the P3 approach, Regional Staff identified the need to carry out the first step of the Business Case analysis. The first step, a preliminary VFM analysis, is conducted to generally assess the feasibility for proceeding with a P3 delivery model and show that it provides good value to the Region, thereby confirming the application process should be continued.

The VFM analysis is a comparison of the risk-adjusted costs (capital, operating, maintaining, financing) of a project using a P3 delivery model versus traditional delivery model over the life of the facility. In order to justify the project using a P3 delivery model, a positive VFM must be demonstrated. A positive VFM is achieved if the costs of a P3 approach can be offset by the reduction of retained risks, together with increasing value through greater efficiency and innovation. This is accomplished by transferring to the private sector any or all of the following components of project delivery:

- Design,
- Build,
- Operate,
- Maintain,
- Finance (design, construction, maintenance and operation).

In August, 2012, the Region retained Deloitte and Touche LLP to undertake the preliminary VFM analysis for the biosolids heat drying facility. A full range of potential P3 delivery models was considered and screened down to three P3 delivery models to be compared to the traditional model. These four models are briefly explained below:

- **Design-Bid-Build (DBB):** This is the traditional project delivery model used as the baseline for comparison with other models below. The Region completes the preliminary
and detailed design and then tenders the project to the private sector for the construction through separate and distinct procurement phases. The selection of the construction contractor is generally focused on the lowest construction cost. Payment is typically on a monthly progress basis. The Region is responsible for operations and maintenance.

- **Design-Build-finance (DBf):** In this model, the private sector completes the preliminary design, detailed design and construction as an integrated assignment. A portion of the construction payments is withheld until completion of the construction, adding short-term financing (f) requirements from the private sector. Payments to the private sector are based on major project milestone(s) and/or substantial completion of the facility. The Region is responsible for operations and maintenance.

- **Design-Build-Operate-Maintain (DBOM):** In addition to the design and construction components of the DBf model, the private sector also integrates in this model the operation and maintenance of the facility for a fixed term typically of 10 to 15 years. Payment of the design and construction components is normally made at substantial completion of the facility. Payment for operation and maintenance is generally on a monthly basis subject to compliance with performance specifications. Performance securities are normally provided in the form of performance bonding or a letter of credit, equal to about the annual maintenance fee. This model provides incentive to the private sector to maintain the facility in good condition so that they are in a better position to be awarded the next operating and maintenance term.

- **Design-Build-Finance-Operate-Maintain (DBFOM):** In addition to the components of the DBOM, the private sector also arranges for long-term financing (F) for all components of the project. Under this model, a portion or all of the construction costs are withheld and paid during the maintenance term typically of 25 to 30 years. This longer term ensures that the lifecycle of the facility is covered, including the full rehabilitation of civil infrastructure, mechanical and electrical equipment. Payment for operation, maintenance, and the remaining design and construction costs is generally on a monthly basis, subject to compliance with performance specifications. This model generally provides more incentives than the others for innovations and efficiencies in all phases of the facility life cycle.

Two risk workshops were conducted to identify, valuate and assign risks to each of the above delivery models, which then formed part of the VFM analysis. A list of the risk categories considered and the value of risk to the Region under each of these models is shown in Appendix A. The greatest transfer of risk is with the DBFOM model.

The following table presents the results of the preliminary VFM analysis. For the analysis, potential contributions from the P3 Canada Fund have not been included. This is so that in the event the Region is unsuccessful with its P3 Canada Fund application, the Region can still consider a P3 delivery for the heat drying facility. All scenarios compare the three P3 models above with the traditional model: Design-Bid-Build (DBB) and includes detailed design, construction, operation and maintenance costs over a facility life of 30 years.

<table>
<thead>
<tr>
<th>P3 Model Comparison</th>
<th>VFM (% Risk Adjusted Savings) (value in $millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBf</td>
<td>2% ($4.8)</td>
</tr>
<tr>
<td>DBOM</td>
<td>10% ($28.2)</td>
</tr>
<tr>
<td>DBFOM</td>
<td>14% ($38.3)</td>
</tr>
</tbody>
</table>
The Value for Money (VFM) is based on the percentage of savings based on adjusted risks for each delivery model. For typical Canadian P3 projects, a VFM between 10% and 15% is considered attractive. The above VFMs are based on a preliminary analysis. As more information is available during the full Business Case Analysis, the VFM will be refined accordingly.

The Design-Build-finance (DBf) model provides marginal VFM when compared to the traditional model (DBB). Risks are only transferred to the private sector during the detailed design and construction phases of the project with no risk transfer during the operations and maintenance phases.

The Design-Build-Operate-Maintain (DBOM) model provides good VFM when compared to the traditional model (DBB), rated in the lower end of the optimum VFM range. Broad risk transfers during all components of the project are achieved, providing incentives for efficiencies and accountability throughout the life of the project.

The Design-Build-Finance-Operate-Maintain (DBFOM) model provides robust VFM when compared to the traditional model (DBB), rated in the higher end of the optimum VFM range. Advantages during all the phases of the project are similar to the DBOM model above with the advantage of providing private financing for all or most of the project. The presence of a long term financial investor adds value through a comprehensive up-front due diligence evaluation of the project and ongoing long term monitoring of the contractor carrying out the operation and maintenance components of the project.

The preliminary VFM analysis indicates that the DBOM and DBFOM are potential models to be adopted for a P3 delivery approach. The preferred model will be confirmed as part of the full Business Case analysis. However, P3 Canada has indicated that DBFOM would be considered the preferred delivery model to ensure maximum risk transfer to the P3 contractor. The first step confirms that a P3 model would be beneficial to the Region and the process is to be continued.

**Implementation and Next Steps**

Key milestone dates for the implementation of the biosolids heat drying facility using the P3 approach are as follows:

- Submission of P3 Canada Fund application: June 15, 2012 (completed)
- CAO Award for Class EA Study: September 2012
- Planning and Works Report to award Business Case: September 2012
- Case and summarize results of Value for Money: September 11, 2012 (this report)
- Short-listing of P3 Canada Fund applications: September 2012
- Submission of business case by Region: Late 2012/Early 2013 *
- Completion of Class EA by Region: Summer 2013 *
- Consultant selection for the procurement of the P3 consortium: Fall 2013 *
- Selection of the P3 consortium: Spring 2015 *
- Project ready for construction: middle of 2015
- Construction completion: end 2017

* anticipated future Council report
CORPORATE STRATEGIC PLAN:

The implementation of the biosolids heat drying facility, part of the Region’s Biosolids Master Plan, supports the Corporate Strategic Plan Focus Areas 1 and 2: Environmental Sustainability, and Growth Management and Prosperity, respectively; and the following strategic objectives: reduce greenhouse emissions and work to improve air quality in Waterloo Region, protect the quality and quantity of our drinking water sources, and develop, optimize and maintain infrastructure to meet current and projected needs.

FINANCIAL IMPLICATIONS:

The Council-approved 2012 Ten Year Capital Forecast includes a total of $51.5 million for the implementation of the biosolids management strategy. This value will be updated during the 2013 budget deliberations, and once more details on the level of contribution required by the Region through a P3 approach is available.

P3 Canada would provide up to 25% ($15 million) funding for the project.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Region’s Finance Department and Corporate Resources Department (Legal) have been consulted during the preparation of this report.

ATTACHMENTS

Appendix A – Matrix of Retained Risks by Region under Various Delivery Models for the Biosolids Heat Drying Facility

PREPARED BY: Kaoru Yajima, Senior Project Engineer

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

Matrix of Retained Risks by Region under Various Delivery Models for the Biosolids Heat Drying Facility

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>DBB (Traditional)</th>
<th>DBf</th>
<th>DBOM</th>
<th>DBFOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy and Strategic Risks</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>L</td>
</tr>
<tr>
<td>Environmental Assessment Risks</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>Property Acquisition, Approvals and Site Condition</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>Infrastructure Design &amp; Technology Specification</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>Procurement Risk</td>
<td>M</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>Construction Risk</td>
<td>H</td>
<td>L</td>
<td>L</td>
<td>L</td>
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<tr>
<td>Operations Risk</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>Maintenance Risk</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>L</td>
</tr>
<tr>
<td>Ownership and Concession Management</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>Project Agreement</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
</tbody>
</table>

High risk to Region (greater than $6M): H
Medium risk to Region (between $3.5M and $6M): M
Low risk to Region (less than $3.5M): L
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 11, 2012

FILE CODE: E03-20/4161

SUBJECT: KITCHENER ZONE 4 TRUNK WATERMAIN MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT – NOTICE OF COMPLETION

RECOMMENDATION:

THAT the Regional Municipality of Waterloo receive the Kitchener Zone 4 Trunk Watermain – Municipal Class Environmental Study Report prepared by Genivar Inc. including its recommendations as summarized in Report E-12-084 dated September 11, 2012;

AND THAT Regional Municipality of Waterloo issue the Notice of Completion of Environmental Study Report, and file the Environmental Study Report for public review in accordance with Municipal Class Environmental Assessment requirements

SUMMARY:

The Region of Waterloo has completed a Schedule B Class Environmental Assessment Study (Class EA) for a Trunk Distribution Watermain from Mannheim Zone 4 Pumping Station on Ottawa Street in the City of Kitchener to the south end of Kitchener Water Pressure Zone 4 at Strasburg Road. The Kitchener Zone 4 Trunk Watermain Environmental Study Report (ESR) is a thorough assessment of its potential environmental, technical, economical, and social impacts, and includes comments received from the public, agencies and other stakeholders. This watermain will improve water distribution in the Kitchener Zone 4 during peak water demand periods, and will help to support medium to long-term growth within the Region of Waterloo.

REPORT:

Background

In July 2009, Region staff completed an evaluation of the existing trunk water distribution system in the City of Kitchener’s largest water pressure zone, Kitchener Pressure Zone 4. This study identified decreased water flow during peak demand periods in the transmission watermains supplying the south end of Kitchener Pressure Zone 4. This issue will likely be aggravated given the medium- to long-term growth expected in the southern area of Kitchener Pressure Zone 4 and the adjacent Kitchener Pressure Zone 2 West that relies entirely on Kitchener Pressure Zone 4 for its supply. To address these issues, the Kitchener Zone 4 Analysis (July, 2009) study recommended a new 750mm trunk watermain be constructed from the Mannheim Zone 4 Pumping Station to the southern part of Kitchener Pressure Zone 4 at Strasburg Road.
Municipal Class Environmental Assessment

In 2011, the Region initiated a Schedule B Class EA to evaluate alignment alternatives for the proposed 750mm trunk watermain. The Study Area encompassed approximately 1500 hectares south of the Ottawa Street South, East of Trussler Road, North of Huron Road, and West of Strasburg Road.

The study has been conducted in accordance with the Municipal Engineers Association Class Environmental Process (October 2000, as amended in 2007) and included the following phases:

- Confirm the Study Area,
- Identified Feasible Alternative Routes,
- Established Criteria for Evaluating Alternatives,
- Evaluated Alternative Routes,
- Consult with the Public, Regulatory Agencies, and Potential Stakeholders,
- Recommended the Preferred Alternative

Due to the large number of possible alternative routes priority was given to alternatives with the shortest lengths, least overall environmental, social, economical, and technical impacts or constraints, and within existing utility corridors and municipal right-of-ways. Due to the length of the watermain, routing alternatives were broken down into smaller components so that the potential impacts were quantifiable and more understandable. In total, there were 22 components identified which were scored against the evaluation criteria. Components with the most favorable score were then shortlisted and assembled into five alternative routes.

The preferred alternative aligns with an existing hydro utility corridor from the Mannheim Zone 4 Pumping Station on Ottawa Street South to Fischer-Hallman Road. It then follows the Fischer-Hallman Road right-of-way to the entrance of Becker Estates south of Huron Road. The watermain alignment then crosses easterly through planned municipal right-of-ways on two planned subdivisions connecting to the future extension of Strasburg Road. The figure below shows the preferred route for the proposed watermain.
The benefits of this preferred alternative includes:

- Avoids major disruption to Species at Risk Habitat, several locally significant wetlands, crossings of watercourse, and Regional Core Environmental Features;
- Minimizes disruption from construction by aligning the watermain within existing utility corridors and municipal right-of-ways;
- Provides for optimal hydraulic conditions due to its minimal length;
- Avoids the Kitchener-Waterloo Hydro Transformer Substation;
- Has the lowest construction cost;
- Minimizes the dependency on development driven projects.

Public and Stakeholder Involvement

The following is a chronology of the opportunities for public and stakeholder involvement provided during the Kitchener Zone 4 Trunk Watermain Class EA Study:

Public Involvement

- September 5, 2011: Notice of Project Commencement
  Advertisements were placed in The Record and in the Region’s Water Service’s web page informing the public of the commencement of the Class EA Study. In addition, potential concerned groups, neighbouring municipalities, provincial agencies, federal agencies, First Nations, and the Grand River Conservation Authority (GRCA) were notified by letter.

- December 13, 2011: Public Information Centre (PIC)
  Advertisements were placed in The Record and in the Region’s Water Service’s web page informing the general public of the PICs, and requesting input from interested parties on the Kitchener Zone 4 Trunk Watermain Class EA. In addition, letters were sent to the same groups informed of the project. The PIC was held at the Huron Height Secondary School. Information presented included an overview of existing conditions, project rationale, and proposed alternatives. Eleven people attended the PIC. Attendees were primarily developers or representatives from the development community. Their comments were generally positive and their primary concerns were about construction impacts, project rationale, project timing, and the potential impacts to their own projects or developments. No written formal comments were received from the PIC.

- September 2012: Notice of Completion
  Upon Council approval, advertisements will be placed in The Record and in the Region’s Water Service web page informing the general public of the 30 day review period for the Final Environmental Study Report. All comments received will be reviewed and evaluated by the Project Team, and will become part of the project file.

Stakeholder Involvement

The following meetings were held with major stakeholders:

- September 28, 2011: Hydro One Network Inc.
- October 28, 2011: GRCA
- January 17, 2012: KW-Hydro
- February 21, 2012: MHBC
- May 4, 2012: Eby Estates
- July 30, 2012: Becker Estates
Meetings agenda and minutes as listed above and are available as part of the Environmental Study Report prepared by Genivar Inc.

**Next Steps**

Following Council approval, a Notice of Completion will be issued, and the Class EA Report will be placed for the 30-day public review starting September 26, 2012, in accordance with the Class EA Process. Preliminary Design of the watermain will begin after the 30-day public review and is expected to be completed by spring 2013. Detailed design and construction phases of the project are anticipated from 2014 to 2017.

**CORPORATE STRATEGIC PLAN:**

Completing Kitchener Zone 4 Trunk Watermain Class EA supports the Corporate Strategic Plan Focus Areas 1, 2 and 5: Environmental Sustainability, Growth Management and Prosperity, and Service Excellence, respectively; and the following strategic objectives: 1.1 Integrate environmental considerations into the Region’s decision-making, 1.5 Restore and preserve green space, agricultural land and sensitive environmental areas, 2.2 Develop, optimize and maintain infrastructure to meet current and projected needs, 5.3 Ensure Regional programs and services are efficient and effective and demonstrate accountability to the public, 5.5 Improve awareness of Regional services and facilitate processes for public input and involvement.

**FINANCIAL IMPLICATIONS:**

The Council-approved 2012 10-year Water Capital Program includes a budget of $12,896,000.00 between 2012 and 2017 for the Kitchener Zone 4 Trunk Watermain project to be fully funded by Region Development charges. More detailed costs will be available upon completion of the preliminary and detailed designs and will be updated in future water capital programs.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:** NIL

**ATTACHMENTS:** NIL

**PREPARED BY:** Nathan Morris, Project Manager

**APPROVED BY:** Thomas Schmidt, Commissioner of Transportation and Environmental Services
REPORT: NSERC CHAIR FUNDING – UNIVERSITY OF WATERLOO

RECOMMENDATION:

THAT the Regional Municipality of Waterloo provide funding of $75,000 per year from 2013 to 2017 to support the 5th term of the Natural Sciences and Engineering Research Council Chair in Drinking Water Research at the University of Waterloo, as outlined in Report E-12-094 dated September 11, 2012.

SUMMARY:

NIL

REPORT:

Background

The Region of Waterloo has been supporting Dr. Peter Huck, the Natural Sciences and Engineering Research Council (NSERC) Chair in Drinking Water Research at the University of Waterloo, for the last twenty five years (Original NSERC Chair (5 years) plus four 5 year renewals). During this time a significant amount of research has been performed that has provided benefits to the Region of Waterloo. Some of the highlights of the last five years include:

- A study of distribution system nitrification in 2011 demonstrated that changes made to distribution operation and management practices in 1998-2000 were successful in minimizing the potential of nitrification. In addition, a method to determine location-specific critical total chlorine residuals (CTRs) for preventing nitrification was developed.

- Investigative studies of ion exchange and reverse osmosis processes to reduce nitrate concentrations in water were conducted on representative wells in the Region. Both technologies showed promise with reverse osmosis nitrate removal being on the order of 80%.

- Survey of bacterial and protozoan pathogens in the Grand River watershed was performed (*Campylobacter, Salmonella, Yersinia*, pathogenic *E. coli, Cryptosporidium and Giardia*). This information along with previous work allowed for the development of a quantitative microbial risk assessment to be prepared by the Public Health Agency of Canada showing that the Mannheim Water Treatment Plant was indeed producing high quality water and the treatment process was sufficiently robust that the risk to human health was orders of magnitude less than that recommended by regulators.
- Pilot-scale ultrafiltration (UF) membrane filtration using Grand River water collected at the Mannheim Plant was shown to be an excellent technology for removing enteric viruses. This study demonstrated that ultrafiltration could be a viable technology for consideration at the Mannheim plant.

- Direct biofiltration pre-treatment (no coagulation) significantly reduced both reversible and irreversible fouling of ultrafiltration membranes using Grand River water at the Hidden Valley Intake.

- In the area of water reuse, an investigation is focusing on anthracite and proprietary media for biofiltration to reduce fouling potential in polymeric UF membranes in water reuse scenarios. Non-disinfected secondary effluent from the Waterloo Wastewater Treatment Plant is being used as the source water for this work.

The NSERC program has also provided opportunities for Region staff to improve their expertise and knowledge. This has occurred both informally through interactions, through technology transfer sessions and seminars, development of papers and presentations for major conferences, and direct participation in the program. Additionally, research (particularly in association with universities) inspires/reinforces public confidence in the management and safety of drinking water produced by the Region and other Chair partners. Pilot plants are often showcased on tours or during interviews. Long term planning and awareness of emerging issues pre-emptively deals with potential health risks and the public perception of risk as these issues are raised in the media.

The value of collaborating with the university water treatment researchers and international experts for advice and unbiased input cannot be overestimated. For example, the NSERC Chair recently facilitated interactions including discussions with a top cyanobacterial toxin international expert, Dr. Gayle Newcombe of the Australian Water Quality Centre, with the Region to address emerging issues in the raw water quality. Ultimately, Regional staff implemented process control and operational enhancements to mitigate this emerging water quality concern.

The Region has also been able to keep abreast of leading edge research and has benefited from our association with both a world class water researcher and a world class program at the University of Waterloo.

The proposed 5th five year term of NSERC Chair includes the following main research themes:

- Risk-based decision making tool to assist utilities for assessing and quantifying their treatment process in terms of identified health risks.
- Study of advancing treatment to improve understanding and optimizing of biofiltration, membrane filtration, chemical contaminant removal, and conventional treatment performance.
- Sustainable water systems to focus on municipal water reuse.
- Research on the use of nanotechnology for the rapid detection of contaminants.

The NSERC program relies on a combination of funding from public and private partners with matching funding provided by NSERC. The major chair partners that have committed to the 5th term are the City of Brantford, the City of Toronto, the Region of Niagara, City of Guelph, Durham Region, Lake Huron & Elgin Area, the City of Hamilton and Ontario Clean Water Agency. The Region of Waterloo’s proposed commitment to the NSERC Chair as a major partner is $75,000 per year for the five year term. The NSERC Chair team at the University of Waterloo is continuing to pursue additional private and public partners.
CORPORATE STRATEGIC PLAN:

This initiative supports the strategic goal of effective, efficient operations.

FINANCIAL IMPLICATIONS:

Subject to review of the 2013 User Rate Budget, the 2013 Region’s Operating Budget includes funding ($75,000) for the NSERC Chair for the next five years. There would be no impact on the Region’s Water User Rates.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: Nancy Kodousek, Director, Water Services

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
FOUNTAIN STREET NORTH AND MAPLE GROVE ROAD AREA WATER SUPPLY CLASS ENVIRONMENTAL ASSESSMENT STUDY

PUBLIC INFORMATION CENTRE #3

September 20, 2012  5pm – 8pm
Water Services Operations Center
100 Maple Grove Road, Cambridge
This study will determine the optimal water supply strategy in the area in coordination with the concurrent East Side Lands EA

- Region’s Water Supply Master Plan (2007) recommended an additional 22.7 million litres per day (an update currently underway to confirm projected demand)
- Earlier studies identified possible water supplies in the Fountain Street and Maple Grove Road area
- Supplies consisted of existing well P-16 and new sources
PHASE 1: PROBLEM STATEMENT
“This project will study the effects of collecting and distributing groundwater from the Fountain Street and Maple Grove Road Area within the Waterloo Regional Integrated Water System and identify the preferred water supply configuration.”

PHASE 2: DEVELOP ALTERNATIVES
- Review all available studies and data
- Desktop Hydrogeological Review
- Well Survey
- Pumping Test
- Ecological Survey
- Desktop Archaeological Review

PHASE 3: DEVELOPMENT OF PREFERRED ALTERNATIVE
- Evaluate Alternatives and Select Preferred Alternative
- Develop and present alternative design concepts of the Preferred Alternative to the Public
TESTING AND MONITORING PROGRAM

- New test well (FSTP1-10) constructed at 100 Maple Grove Road in December 2010
- Investigated the optimal production rate of FSTP1-10 and monitored response to pumping both FSTP1-10 and P-16
- 40-day pump test conducted on FSTP1-10 (P-16 was included for last 15 days of testing)
- Monitoring of 12 Region owned wells, 26 private residential wells and 2 wetland mini-piezometers
Desktop Archaeological Review

- Completed in 2009
- No impacts anticipated

Ecological Study

- Completed in 2009
- No effect on surface water levels
- No expected ecological impacts with any of the alternatives

Pump Test Results

- Demonstrated combined pump rate of 83 L/sec is a sustainable long term rate in the aquifer
- Negligible response in shallow aquifer
- Impacts mainly limited to deep aquifer (over an extensive area)
- Iron and Manganese treatment required
## EVALUATION OF ALTERNATIVES

### Evaluation Criteria:

<table>
<thead>
<tr>
<th><strong>Natural Environment</strong></th>
<th>Protection of the natural and physical components of the environment (i.e. air, land, water and biota) including the natural heritage/environmentally sensitive areas.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social/Cultural</strong></td>
<td>Potential effect on residents, neighborhoods, businesses, community character, social cohesion, community features, and historical/archaeological and heritage components in addition to municipal development objectives.</td>
</tr>
<tr>
<td><strong>Economic/Financial</strong></td>
<td>Comparison of the potential capital and operating costs.</td>
</tr>
<tr>
<td><strong>Legal/Jurisdictional</strong></td>
<td>Land requirements, permit requirements and the potential legal implications for each alternative.</td>
</tr>
<tr>
<td><strong>Technical</strong></td>
<td>Technical suitability and other engineering aspects of the alternatives.</td>
</tr>
</tbody>
</table>
# Alternatives

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternative 1</strong></td>
<td>Do Nothing</td>
</tr>
<tr>
<td></td>
<td>No improvements or changes would be undertaken. Represents what would occur if none of the alternative solutions were implemented.</td>
</tr>
<tr>
<td><strong>Alternative 2 – PREFERRED</strong></td>
<td>Upgrade P-16 and combine with FSTP1-10 for a total supply of 83 L/s. Provide treatment for both sources.</td>
</tr>
<tr>
<td>(Established at PIC # 2 held on March 1, 2012)</td>
<td>Rehabilitate P-16 and Complete FSTP1-10 as a Supply Well</td>
</tr>
<tr>
<td><strong>Alternative 3</strong></td>
<td>Decommission P-16 and complete FSTP1-10 as a supply well for a total supply of 60 L/s. Provide treatment for FST1-10.</td>
</tr>
<tr>
<td>Complete FSTP1-10 as a Supply Well</td>
<td></td>
</tr>
<tr>
<td><strong>Alternative 4</strong></td>
<td>Decommission FSTP1-10 and upgrade P-16 as a supply well for a total supply of 23 L/s. Provide upgraded treatment facility for P-16.</td>
</tr>
<tr>
<td>Upgrade P-16</td>
<td></td>
</tr>
</tbody>
</table>

*The “Do Nothing” alternative does not address the problem statement; it has been included as a benchmark for evaluating the other alternative solutions.
## Alternative 2 Design Concepts

### Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Design Concept 2a</th>
<th>Design Concept 2b</th>
<th>Design Concept 2c</th>
<th>Design Concept 2d</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Raw Water Treated at P-16</td>
<td>• Centralized equipment</td>
<td>• Centralized equipment</td>
<td>• Equipment required at both sites</td>
<td>• Centralized equipment</td>
</tr>
<tr>
<td>Treated at P-16</td>
<td>• Existing services on Fountain services multiple zones</td>
<td>• Existing services on Maple Grove &amp; Fountain services multiple zones</td>
<td>• Construction required at both sites results in smaller facilities at each</td>
<td>• Existing services on Maple Grove &amp; New raw watermains required</td>
</tr>
<tr>
<td>All Raw Water Treated at FSTP1-10</td>
<td>• Centralized treatment – minimize staff hours</td>
<td>• Centralized treatment – minimize staff hours</td>
<td>• Increased maintenance staff hours required to service 2 facilities</td>
<td>• Centralized treatment – minimize staff hours</td>
</tr>
<tr>
<td>Treatment at both P-16 and FSTP1-10</td>
<td>• Construction impacts on environmental features mitigated</td>
<td>• Construction impacts on environmental features can be mitigated</td>
<td>• Construction required at both sites results in smaller facilities at each</td>
<td>• FSTP1-10 near ecological features</td>
</tr>
<tr>
<td>Treatment at Freeport Water Tower Site</td>
<td>• Potential for minor impacts to sensitive features along Maple Grove</td>
<td>• Discussion with GRCA &amp; MOE required</td>
<td>• Construction impacts on environmental features mitigated</td>
<td>• Discussion with GRCA and MOE required</td>
</tr>
<tr>
<td>Site Requirements</td>
<td>• Minimal site restrictions</td>
<td>• Minimal site restrictions</td>
<td>• Minimal site restrictions</td>
<td>• Minimal site restrictions</td>
</tr>
<tr>
<td>Public Acceptance</td>
<td>• P-16 site not used by the public</td>
<td>• FSTP1-10 site located within the Regional Operations Centre property</td>
<td>• FSTP1-10 site located within the Regional Operations Centre property</td>
<td>• Freeport Tower Site already delineated.</td>
</tr>
<tr>
<td>Constructability</td>
<td>• Connection to watermain on Fountain services multiple zones</td>
<td>• Connection to watermain on Fountain services multiple zones</td>
<td>• Connections to watermains on Maple Grove &amp; Fountain services multiple zones</td>
<td>• Provides water supply to Freeport Tower which services multiple zones</td>
</tr>
<tr>
<td>Ability to meet Ontario Drinking Water Objectives</td>
<td>• Centralized treatment avoid need to monitor ODWQS at 2 separate sites</td>
<td>• Centralized treatment avoid need to monitor ODWQS at 2 separate sites</td>
<td>• Monitoring of ODWQS required at both sites</td>
<td>• Centralized treatment avoid need to monitor ODWQS at 2 separate sites</td>
</tr>
<tr>
<td>Costs</td>
<td>• Moderate</td>
<td>• Moderate</td>
<td>• High</td>
<td>• High</td>
</tr>
</tbody>
</table>

### OVERALL RATING

Preferred Option
PREFERRED DESIGN CONCEPT 2b

- FSTP1-10 CENTRALIZED TREATMENT
- PROPOSED LOCATION OF NEW TREATMENT BUILDING
- NEW FSTP1-10 PRODUCTION WELL WITHIN TREATMENT BUILDING
- MAINTAIN EXISTING BUILDING
- EXISTING P-16 WELL HOUSE
- P-16 WELL
  - REMOVE UV TREATMENT
  - INCORPORATE PRETREATMENT FOR IRON & MAGNESIUM
PREFERRED DESIGN CONCEPT 2b - TREATMENT

- Treatment building to accommodate pumps, filters, disinfection system, backwash water reservoir and clear well
- Encapsulation of new existing well (FSTP1-10)
- Discharge treated water to existing watermain on Maple Grove Road
• Keep existing wellhouse to accommodate pump to deliver up to 23 L/s
• Chlorine addition to oxidize iron and manganese (Pre-treatment)
• Discharge via raw water transmission main to FSTP1-10 site for further treatment
NEXT STEPS

PHASE 3: DEVELOPMENT OF PREFERRED ALTERNATIVE

• Discussions with Region Staff, stakeholders, GRCA and MOE (as required) to develop Preferred Alternative based on comments received

PHASE 4: ENVIRONMENTAL STUDY REPORT (ESR)

• Findings of entire project, including public feedback, published in Fall 2012 with notification to all stakeholders
• 30 Day Review Period (for public and agencies to provide comments to the project team and/or the Ministry of the Environment)

PHASE 5: IMPLEMENTATION OF THE PREFERRED ALTERNATIVE

• If there are no outstanding issues the Region will proceed with detailed design of the Preferred Alternative as outlined in the ESR
• A review of the Water Supply Master Plan will be complete by end of 2012, the results may affect implementation timing of the preferred alternative
The EA Process encourages public participation. If you have comments or would like more information about the project or the EA process please contact one of the project team members listed below.

Ms. Amy Domaratzki, M.A.Sc., P.Eng.
Senior Hydrogeologist – Water Services
Region of Waterloo
150 Frederick Street, 7th Floor
Waterloo, ON N2G 4J3
Phone: 519-575-4829
Fax: 519-575-4452
Email: adomaratzki@regionwaterloo.ca

Mr. Chris Spere, C.E.T.
Project Manager
MTE Consultants Inc.
520 Bingemans Centre Drive
Kitchener, ON N2B 3X9
Phone: 519-743-6500
Fax: 519-743-6513
Email: cspere@mte85.com

Thank you for your participation in this important project.
Welcome to the Region of Waterloo's West Montrose Water Supply Class EA Public Information Centre

September 18, 2012
This is an opportunity for you to provide comments and input
Existing Water Supply System

Water Supply
- Four infiltration wells with common header to water treatment plant (WTP)
  - Design capacity: 1 L/s each
  - Actual Maximum combined capacity = 0.8 L/s
- Water supply is augmented using trucked water deliveries

Water Treatment & Storage
- One (1) WTP consisting of disinfection, iron/manganese filter, cartridge filter and treated water reservoir

Water Distribution
- Water chloraminated for secondary disinfection
- Water is distributed to 60 household connections by the Township of Woolwich

Water Demands
- Current average day demand: 0.91 L/s
- Current maximum day demand: 1.91 L/s
Current Issues and Purpose Statement

- Current Water Supply issues include:
  - Existing wells supply is not adequate
  - West Montrose Water Treatment Plant (WTP) requires significant operational and maintenance upgrades
  - Trucking water into the community is a concern
  - Iron and manganese in source water; turbidity events during high river levels

- The **Purpose Statement** for this study consists of the following objectives:
  - To investigate the existing water source as well as other strategic water source alternatives which will provide an adequate amount of water in a sustainable and cost-effective manner
  - To develop solutions and identify a preferred alternative to meet the water supply needs of the community of West Montrose
  - New water supply system will be designed to accommodate an average and maximum day demand of 1.1 L/s and 2.4 L/s, respectively
# Water Supply Alternative Solutions and Screening

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Addresses Existing Issues / Screened ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do Nothing*</td>
<td>X Yes</td>
</tr>
<tr>
<td>2. Reduce Water Demand**</td>
<td>X Yes</td>
</tr>
<tr>
<td>3. Limit Community Growth</td>
<td>X No</td>
</tr>
<tr>
<td>4. Modify Current O&amp;M Practices</td>
<td>X No</td>
</tr>
<tr>
<td>5. Solely Truck Water In</td>
<td>✓ Yes</td>
</tr>
<tr>
<td>6. Addition of 5th Infiltration Well</td>
<td>X No</td>
</tr>
<tr>
<td>7. New Groundwater Source (deep overburden aquifer)</td>
<td>✓ Yes</td>
</tr>
<tr>
<td>8. Surface Water Source</td>
<td>✓ Yes</td>
</tr>
<tr>
<td>9. Use Surplus Capacity from another Water Supply System</td>
<td>✓ Yes</td>
</tr>
<tr>
<td>10. New Groundwater Source (bedrock aquifer)</td>
<td>✓ Yes</td>
</tr>
</tbody>
</table>

* Screened in for comparison purposes only  
** To be combined with the preferred alternative
Summary of Screened Water Supply Alternatives

**Alt 1:** Do Nothing

**Alt 5:** Solely Truck Water (owned and operated by Region):
- 5A: Truck water to existing WTP reservoir
- 5B: Truck water to new reservoir

**Alt 9A:** Use Surplus Water Capacity from Elmira

**Alt 9B:** Use Surplus Water Capacity from Conestogo Plains

**Alt 7:** New Groundwater Source (Deep Overburden Aquifer)

**Alt 8:** Surface Water Source (Grand River)

**Alt 10:** New Groundwater Source (Bedrock Aquifer)
Screened Alternatives: Alt. 1 and Alt. 5

**Alt. 1: Do Nothing**
- Continue to use infiltration wells and trucked water with no improvements to solve existing issues

**Advantages:**
- No capital investment

**Disadvantages:**
- Continued frequent truck traffic
- Water quality and quantity issues remain
- Treatment equipment requires replacement in the next 5 to 10 years.
- High O&M costs (aging infrastructure, trucking water)
- High 20-yr life cycle cost: $10.60/m³

**Option A:** Truck to existing WTP reservoir
- Low 20-yr life cycle cost ($5.96/m³)
- Schedule A Class EA

**Option B:** Truck to new reservoir (outside of settlement area)
- Moderate to high 20-yr life cycle cost ($8.86/m³), not including land acquisition
- Schedule B Class EA

**Alt. 5: Solely Truck Water In**
(Truck Owned and Operated by the Region)
- Purchase and operation of a tanker truck
- Construct bulk loading station at Laurel tank site
- Decommission infiltration wells and treatment system

**Advantages:**
- Addresses water quality/quantity issues

**Disadvantages:**
- Increased frequency of truck traffic
- Greenhouse gas emissions
- Transportation risks during inclement weather

**Schedule A+ Class EA**

Region of Waterloo – West Montrose Water Supply
Class Environmental Assessment
### Screened Alternatives: Alt. 7 and Alt. 8

#### Alt. 7: New Groundwater Source  
(Deep Overburden Aquifer)
- New well from deep overburden aquifer
- Acquire land outside of West Montrose for new facility containing well, treatment and pumps
- Decommission existing infiltration wells and WTP

**Advantages:**
- May provide sufficient water quantity

**Disadvantages:**
- Requires further hydrogeological investigation
- High 20-yr life cycle cost ($7.52/m³, not including land acquisition and further investigation)
- Potential interference with adjacent wells/extraction pit

#### Alt. 8: New Surface Water Source  
(Grand River)
- New intake pipe, intake pump and treatment system
- Decommission existing wells and treatment system

**Advantages:**
- Reliable source

**Disadvantages:**
- Complexity of operation
- Requires further hydrological/water quality investigation
- High 20-yr life cycle cost ($12.65/m³, not including land acquisition and further investigation)
Screened Alternatives: Alt. 9A and Alt. 9B

**Alt. 9A: Use Surplus Capacity from Elmira Water Supply System**
- Construct new watermain from Elmira to West Montrose (~6km)
- Construct new disinfection facilities
- Decommission existing wells and WTP

**Advantages:**
- Addresses water quality/quantity issues

**Disadvantages:**
- High maintenance requirements (long length of watermain)
- Potential water quality (age/temperature issues)

- Schedule A+ Class EA (if trenchless technology used for water crossings)
- Moderate 20-yr life cycle cost ($8.50/m³)

**Alt. 9B: Use Surplus Capacity from Conestogo Plains Water Supply System**
- Construct new watermain from Conestogo to West Montrose (~7km)
- Construct new disinfection facility in West Montrose
- Decommission existing wells and WTP

**Advantages:**
- Addresses water quality/quantity issues
- Conestogo appears to have surplus capacity

**Disadvantages:**
- High maintenance requirements (long length of watermain)

- Schedule A+ Class EA (if trenchless technology used for water crossings)
- Moderate 20-yr life cycle cost ($8.25/m³)
Screened Alt. 10 and Summary of Costs

Alt. 10: New Groundwater Source (Bedrock Aquifer)
- Use existing bedrock well located at WTP site
- Expand WTP to include a new sulphate treatment and disinfection system and replace existing equipment
- Use existing storage reservoir
- Decommission existing wells and WTP

Advantages:
- Reliable source
- Lower capital cost from use of existing infrastructure

Disadvantages:
- High operational costs to truck away wastewater generated from treatment system
- Effect on residents from trucking waste (noise and traffic disturbance)

Cost Summary for Alternatives *

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Conceptual Capital Cost</th>
<th>20-year Life Cycle Cost (per m³ Water Produced)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do Nothing</td>
<td>$ 2.5 M</td>
<td>$10.60</td>
</tr>
<tr>
<td>5A. Solely Truck Water to Existing Reservoir</td>
<td>$ 0.7 M</td>
<td>$5.96</td>
</tr>
<tr>
<td>5B. Solely Truck Water to New Reservoir</td>
<td>$ 2.8 M</td>
<td>$8.86</td>
</tr>
<tr>
<td>7. New Groundwater Source (deep overburden aquifer)</td>
<td>$ 4.2 M</td>
<td>$7.52</td>
</tr>
<tr>
<td>8. Surface Water Source</td>
<td>$ 5.2 M</td>
<td>$12.65</td>
</tr>
<tr>
<td>9A. Use Surplus Capacity from Elmira Water Supply System</td>
<td>$ 4.9 M</td>
<td>$8.50</td>
</tr>
<tr>
<td>9B. Use Surplus Capacity from Conestogo Water Supply System</td>
<td>$ 5.1 M</td>
<td>$8.25</td>
</tr>
<tr>
<td>10. New Groundwater Source (bedrock aquifer)</td>
<td>$ 3.2 M</td>
<td>$10.72</td>
</tr>
</tbody>
</table>

* Cost considerations account for 1/6 of evaluation

Region of Waterloo – West Montrose Water Supply
Class Environmental Assessment
Water Supply Alternatives: Preliminary Evaluation

Each alternative was evaluated equally in terms of impacts to the following criteria:

- **Public Health & Safety**
  - ground/surface water quality
  - air quality
  - water supply
  - impacts from truck traffic

- **Natural Environment**
  - environmentally protected lands
  - wetlands
  - sensitive species
  - stream crossings
  - disruption to natural features
  - impact on greenhouse gases

- **Social & Cultural**
  - community growth
  - archaeological/heritage resources
  - agricultural resources
  - community character
  - community features (Cultural Heritage Landscape)

- **Economic & Financial**
  - capital cost
  - O&M costs
  - life cycle costs
  - use of infrastructure

- **Legal & Jurisdictional**
  - approvals
  - land requirements
  - administrative functionality

- **Technical considerations**
  - ability to meet demands and provide reliable service
  - ease of construction
  - operational and maintenance complexity

---

**Evaluation Criteria**

- Public Health and Safety Summary
- Natural Environment Summary
- Social / Cultural Summary
- Economic / Financial Summary
- Legal / Jurisdictional Summary
- Technical Summary
- **TOTAL / FINAL EVALUATION**

**Legend:**

- Least preferred
- Maximal preferred
- *Red indicates preliminary preferred alternative*
Preliminary Preferred Alternative

Alt. 9B: Use Surplus Capacity from Conestogo Plains Water Supply System

- Rated capacity of water supply: 9.1 L/s
- Current average taking: 0.95 L/s
- Current maximum day taking: 3.8 L/s
- Further detailed investigation to confirm Conestogo Plains source (Region to undertake a Class EA study starting in 2013)

Connect to existing reservoir, including:
- Re-chlorination at reservoir
- Automatic flushing unit for watermain (and de-chlorination system)
- Use existing high-lift pumps; add one (1) new pump to provide firm capacity
- Decommission existing treatment system
- Trucking of water to be used as emergency back-up
Class EA and Public Consultation

- **Notice of Commencement**
- **Introduce Class EA Project**
  - May 2011
- **Public Input PIC**
- **Define Alternative Solutions, Evaluate and Select Preferred Solution**
  - September 2012
- **30 Day Public Review Period**
- **Environmental Study Report**
  - November 2012
- **Preliminary Design and Detailed Investigation of Conestogo Plains Supply**
  - Early 2013
- **Implementation (Design and Construction)**
  - 2013 - 2016
How You Can Provide Input

- Your input is used to develop and evaluate alternative solutions
- All comments collected will become part of the project file
- Place your comment sheets in the Comment Box tonight or send it via mail or email by **October 5, 2012** to either of the following:

**Ms. Pam Law, P.Eng.**
Project Engineer, Water Services
Regional Municipality of Waterloo
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Email: patty.quackenbush@aecom.com
This memo has been prepared to advise Council of the forthcoming release of revised population and employment figures by the Province of Ontario to the year 2041. This is important information as the Region is required to use these forecasts for planning and managing growth, including decisions about the location and capacity of infrastructure.

The Region of Waterloo’s population is anticipated to reach 729,000 by the year 2031, according to the Growth Plan for the Greater Golden Horseshoe (GGH), published in 2006 by the Ontario Growth Secretariat, and commonly referred to as “Places to Grow”. The Ministry of Infrastructure, where the Growth Secretariat is currently located, recently announced its intention to complete a 5-year review of the population and employment forecasts for the Greater Golden Horseshoe (GGH). Consequently, in the spring, staff from the Region of Waterloo, together with municipal colleagues from the GGH, were invited to participate in forecast review consultations.

The Ministry’s process has consisted of a review of the Ontario Ministry of Finance’s population projections (spring 2012) using recent demographic information from the 2011 census, and updated assumptions about the future birth rate, mortality rate, and net migration. A consultant was retained by the Ministry to incorporate these forecasts into a regional model, with additional assumptions about employment and the future migration of people and jobs between the Greater Toronto Area and the rest of the Greater Golden Horseshoe to achieve the compact growth objectives of the Growth Plan. While no forecasts were released by the Ministry during this review, the Region has been able to comment on some preliminary model results. Feedback was also solicited from a variety of Regional program areas, and focused on the implications of revised forecasts for Regional purposes.

The Ministry is expected to release a draft of the amended population and employment forecasts for 2031, as well as longer term forecasts for 2036 and 2041 in a draft amendment in early September. A technical backgrounder is scheduled for release at the same time. Updated policy statements related to the implementation of the revised forecast are also expected to be provided.

The Ministry has indicated that it will be receiving comments on this proposed amendment, and intends to finalize the amended forecasts early in 2013. Staff will prepare a detailed report for Council’s consideration, and to address any Regional concerns related to this proposed amendment.
<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Requestor</th>
<th>Request</th>
<th>Assigned Department</th>
<th>Anticipated Response Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-Aug-11</td>
<td>P&amp;W</td>
<td>One year review of Report E-11-085 re: Parking on Bleams Road</td>
<td>Transportation and Environmental Services</td>
<td>16-Oct-2012</td>
</tr>
<tr>
<td>10-Jan-12</td>
<td>P&amp;W</td>
<td>Update report on proposed Source Protection Policies after GRCA Source Protection Committee public consultation is completed</td>
<td>Transportation and Environmental Services</td>
<td>25-September-2012 and November 2012</td>
</tr>
<tr>
<td>31-Jan-12</td>
<td>P&amp;W</td>
<td>That staff meet with representatives of the Canadian National Institute for the Blind and the Grand River Accessibility Advisory Committee to develop solutions for the visually- and hearing-impaired at all roundabouts and intersections in the Region of Waterloo.</td>
<td>Transportation and Environmental Services</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>28-Feb-12</td>
<td>G. Lorentz</td>
<td>Staff review the safety of the intersection of Yellow Birch Drive and Ira Needles Boulevard</td>
<td>Transportation and Environmental Services</td>
<td>September 2012</td>
</tr>
<tr>
<td>28-Feb-12</td>
<td>P&amp;W</td>
<td>Report outlining consultant contracts, identifying the tender cost with upset limits and the final cost of the contract.</td>
<td>Transportation and Environmental Services</td>
<td>25-Sep-2012</td>
</tr>
<tr>
<td>28-Feb-12</td>
<td>J. Brewer</td>
<td>Report regarding reducing the speed limit from 70 kilometers per hour (70 kms) on Can-Amera Parkway approaching the Roundabout at Conestoga Boulevard.</td>
<td>Transportation and Environmental Services</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>28-Mar-12</td>
<td>D. Craig</td>
<td>Report on possible enhancements similar to what is proposed for Weber Street in Kitchener at the railway overpass for the Delta construction in Cambridge.</td>
<td>Transportation and Environmental Services</td>
<td>16-Oct-2012</td>
</tr>
<tr>
<td>28-Mar-12</td>
<td>Council</td>
<td>Staff to review the operation of the Homer Watson Boulevard/Block Line Road roundabout and report back to Council in 2013.</td>
<td>Transportation and Environmental Services</td>
<td>2013</td>
</tr>
<tr>
<td>Meeting date</td>
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<tr>
<td>08-May-12</td>
<td>P&amp;W</td>
<td>Report detailing the rationale for the Injury Crash Cost calculation used by staff in reports for roadway improvements. (E-12-045 page 48 authored by Frank Kosa)</td>
<td>Transportation and Environmental Services</td>
<td>27-Nov-2012</td>
</tr>
<tr>
<td>08-May-12</td>
<td>P&amp;W</td>
<td>Staff to review options for signalized vehicle lights and signalized pedestrian crosswalks in Roundabouts in the detailed design report prepared later in 2012 for Franklin Boulevard Improvements.</td>
<td>Transportation and Environmental Services</td>
<td>27-Nov-2012</td>
</tr>
<tr>
<td>16-May-12</td>
<td>G. Lorentz</td>
<td>Through the Transportation Master Plan exercise, that staff review the feasibility of providing Grand River Transit for community events and festivals.</td>
<td>Planning, Housing &amp; Community Services</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>29-May-12</td>
<td>P&amp;W</td>
<td>That the Sawmill Road and Northfield Drive Improvements project be referred back to staff to look at alternatives which include the following: relocating parking off of Sawmill Road; alternative multi-use trails or alternate cycling infrastructure on Flaxmill Drive; traffic calming and truck diversion for Sawmill Road; minimizing property impacts; and preserving the history and culture of the village.</td>
<td>Transportation and Environmental Services</td>
<td>11-Dec-2012</td>
</tr>
<tr>
<td>14-Aug-12</td>
<td>P&amp;W</td>
<td>Update report on the Regional Airport airline services.</td>
<td>Transportation and Environmental Services</td>
<td>25-Sep-2012</td>
</tr>
</tbody>
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