Regional Municipality of Waterloo

Planning and Works Committee

Agenda

Tuesday, June 16, 2015

8:45 a.m. (← Note Time Change)

Regional Council Chamber

150 Frederick Street, Kitchener, ON

1. Motion to Go Into Closed Session

That a closed meeting of Planning and Works Committee be held on Tuesday, June 16, 2015 at 8:30 a.m. in the Waterloo County Room in accordance with Section 239 of the Municipal Act, 2001, for the purposes of considering the following subject matters:

a) proposed or pending disposition of land in the City of Waterloo

b) personal matters about identifiable individuals related to committee appointments

c) potential litigation and receiving of advice that is subject to solicitor-client privilege related to a matter before an administrative tribunal

2. Motion to Reconvene Into Open Session

3. Declarations of Pecuniary Interest Under The Municipal Conflict of Interest Act

4. Delegations

a) TES-DCS-15-11, Reconstruction of Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road) from King Street to Waterloo Spur Railway, St. Jacobs, Township of Woolwich - Project Approval
i. Bob and Sue Eckert

**Recommendation:**

That the Regional Municipality of Waterloo take the following actions with respect to the proposed improvements on Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road) from King Street to the Waterloo Spur railway, in the village of St Jacobs:

i) Approve the proposed roadway improvements on Regional Road 17 as outlined in Report TES-DCS-15-11;

ii) Upon completion of construction, amend Traffic and Parking By-law 06-072, as amended to accommodate the proposed improvements as follows;

a) Add to Schedule 1, No parking on both sides of Regional Road 17 (Sawmill Road) from King Street to Northside Drive;

b) Add to Schedule 1, No parking on both sides of Regional Road 17 (Northside Drive) from Sawmill Road to Hawkesville Road;

c) Add to Schedule 1, No parking on both sides of Regional Road 17 (Hawkesville Road) from Northside Drive to the west village limit of St. Jacobs;

d) Add to Schedule 24, Reserved lanes on both sides of Regional Road 17 (Sawmill Road) from King Street to Northside Drive for bicycles, horse-drawn vehicles;

e) Add to Schedule 24, Reserved Lanes on both sides of Regional Road 17 (Northside Drive) from Sawmill Road to Hawkesville Road for bicycles, horse-drawn vehicles; and

f) Add to Schedule 24, Reserved Lanes on both sides of Regional Road 17 (Hawkesville Road) from Northside Drive to the west village limit of St. Jacobs for bicycles, horse-drawn vehicles.

b) **TES-DCS-15-13**, King Street Improvements, ION Tracks to University Avenue, City of Waterloo – Approval of Project

i. Ray Millard

ii. Pete Neufeld, Waterloo Taxi
iii. Tony Rodrigues, Waterloo Taxi

**Recommendation:**

That the Regional Municipality of Waterloo take the following actions with respect to proposed improvements on King Street (Regional Road 15) in the City of Waterloo from the ION Tracks south of Erb Street, to University Avenue:

a) approve the Recommended Design Alternative as outlined in Report TES-DCS-15-13;

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

c) upon completion of construction, amend Traffic and Parking By-law 06-072 as amended, as follows:

   i. Remove from Schedule 1, No Parking Anytime on the west side of King Street (Regional Road 15) from (i) 240 m south of University Avenue (Regional Road 57) to 7 m south of Young Street, (ii) 35.6 m north of Bridgeport Road (Regional Road 9) to Bridgeport Road (Regional Road 9), and (iii) 50 m north of Princess Street to 25 m north of Princess Street;

   ii. Remove from Schedule 2, Limited Parking for 1 hour, on the west side of King Street (Regional Road 15) from (i) 7 m south of Young Street to 35 m south of Young Street, (ii) 25 m north of Princess Street to 12 m north of Princess Street, (iii) Princess Street to 14.4 m south of Princess Street, (iv) 12.4 m north of Dupont Street to 51.2 m north of Dupont Street, and (v) 24.6 m south of Dupont Street to 70.6 m south of Dupont Street, between the hours of 8:00 a.m. to 6:00 p.m. Monday to Saturday;

   iii. Remove from Schedule 6, Taxicab Stands on the west side of King Street (Regional Road 15) from 9 m south of Princess Street to 14.4 m south of Princess Street;

   iv. Add to Schedule 1, No Parking Anytime on the west side of King Street (Regional Road 15) from Erb Street (Regional Road 9) to Central Street; and

   v. Add to Schedule 24, Reserved Cycling Lanes Anytime, on both sides of King Street (Regional Road 15) from the ION
Tracks to University Avenue (Regional Road 57).

**Consent Agenda Items**

Items on the Consent Agenda can be approved in one motion of Committee to save time. Prior to the motion being voted on, any member of Committee may request that one or more of the items be removed from the Consent Agenda and voted on separately.

5. **Request to Remove Items from Consent Agenda**

6. **Motion to Approve Items or Receive for Information**


   **Recommendation:**


   b) Fischer Hallman Road Improvements, Bleams Road to Plains Road

   **Information Package** in Advance of Public Consultation Centre No. 1 (Information)

   c) Proposed Pedestrian Access Improvements Class Environmental Assessment between the Hanson/Hayward Industrial and Alpine Village Areas – **Information Package** in Advance of Public Consultation Centre (Information)


   **Recommendation:**

   That the Regional Municipality of Waterloo:

   a) Approve the phase out of municipal garbage collection service at large multi-residential complexes and commercial properties that are inconsistent with the currently approved multi-residential collection policy effective March 4, 2017; and

   b) Provide rebates to the affected multi-residential properties once the phase out has been completed.

Recommendation:

That The Regional Municipality of Waterloo:

1. Approve an agreement for an extension to the current agreement providing Southern Ontario Locomotive Restoration Society (“SOLRS”), a non-profit corporation, the right to use the Waterloo Spur railway as described in Report TES-TRP-15-15/PDL-LEG-15-52 dated June 16, 2015; and

2. Authorize and delegate to the Commissioner of Transportation and Environmental Services the authority to sign on behalf of The Regional Municipality of Waterloo such Agreement and any future agreements with SOLRS for the right to use the Waterloo Spur railway as deemed desirable or expedient, with all documentation to the satisfaction of the Commissioner of Transportation and Environmental Services and the Regional Solicitor.

Regular Agenda Resumes

7. Reports – Planning, Development and Legislative Services

Community Planning


Recommendation:

That the Regional Municipality of Waterloo take the following actions with respect to the development of a Community Energy Investment Strategy as described in report PDL-CPL-15-35, dated June 16th, 2015:

a) Initiate participation by the Region of Waterloo in the development of a Community Energy Investment Strategy for Waterloo Region in collaboration with local partners;

b) Authorize the Commissioner of Planning, Development and Legislative Services to enter into required agreements with the Ontario Ministry of Energy, Area Municipalities and regional electricity and natural gas utility companies, and any other related documents, with such agreements to be to the satisfaction of the Regional Solicitor;
c) Approve an increase in the 2015 Community Planning Ten Year Capital Forecast of $180,000 gross, with no net impact to be funded, as described in this report; and
d) Authorize staff to develop the Strategy, as described in this report.

Reports – Transportation and Environmental Services

Design and Construction

d) **TES-DCS-15-14**, Church Street Reconstruction, Elmira – Operation of Cycling/Buggy Lanes at Medians (Staff Presentation) (Information)
e) **TES-DCS-15-16**, Recommended Intersection Improvements at Erb Street and Waterloo Waste Management Centre Gates 1 and 2, City of Waterloo

**Recommendation:**

That the Regional Municipality of Waterloo approve the implementation of multi-lane roundabouts on Erb Street at Waterloo Waste Management Centre Gates 1 and 2, in the City of Waterloo, as presented in Report TES-DCS-15-16.

Rapid Transit

f) **TES-RTS-15-07**, Recommended ION LRT Stop Anchor Wall Designs

**Recommendation:**

That the Regional Municipality of Waterloo approve the ION LRT stop anchor wall designs as outlined in Report TES-RTS-15-07, dated June 16, 2015.

Transportation

f) **TES-TRP-15-12**, Revised 2015 Transportation Base and System Expansion Capital Budgets

**Recommendation:**


g) **TES-TRP-15-14**, Permanent Closure of Waterloo Street, City of Kitchener
Recommendation:

That the Regional Municipality of Waterloo approve the following actions regarding Regional Road 40 (Waterloo Street) established by Registered Plan 374, lying between Victoria Street (Regional Road No. 55) and Breithaupt Street in the City of Kitchener, designated as Part 6 on Reference Plan 58R-17870, being PIN 22319-0002 (LT) and Part 1 on Reference Plan 58R-18101, being Part of PIN 22319-0001 (LT), effective June 26, 2015 at 12:01 a.m.

1. Pass a by-law to permanently close Regional Road 40 (Waterloo Street), between Victoria Street North and Breithaupt Street;

2. Pass a by-law to amend Road Consolidation By-law 01-059 (Regional Road System) to remove Regional Road 40 (Waterloo Street) between Victoria Street North and Breithaupt Street from the Regional Road System; and

3. Pass a by-law to amend Traffic parking By-law 06-072 to reflect the removal of existing traffic regulations on Regional Road 40 (Waterloo Street) between Victoria Street North and Breithaupt Street.

Water Services

g) TES-WAS-15-16, Drinking Water Quality Management System Program Update

Recommendation:

That the Regional Municipality of Waterloo take the following actions, in accordance with Report TES-WAS-15-16 dated June 16, 2015:

1. Re-endorse the Quality Management System (QMS),
2. Re-endorse the Region’s 14 drinking water operational plans,
3. Re-endorse of the QMS Policy and
4. Re-appoint Top Management.


8. Information/Correspondence

a) Council Enquiries and Requests for Information Tracking List

9. Other Business
## Next Meetings

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<tr>
<th>Date</th>
<th>Time</th>
<th>Description</th>
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<tr>
<td><strong>Planning and Works Committee</strong></td>
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<tr>
<td>August 11, 2015</td>
<td>1:00 P.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building</td>
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<td>150 Frederick Street Kitchener, Ontario</td>
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<tr>
<td>September 15, 2015</td>
<td>1:00 P.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building</td>
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<td>150 Frederick Street Kitchener, Ontario</td>
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<td><strong>Transportation and Environmental Services</strong></td>
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<td>Wed., June 17, 2015</td>
<td>4:30 P.M. – 7:30 P.M.</td>
<td>Fischer Hallman Road Improvements, Bleams Road to Plains Road - Public Consultation Centre No. 1</td>
<td>Kitchener Portuguese Club Inc., 1548 Fischer Hallman Road Kitchener, Ontario</td>
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<tr>
<td>Thurs., June 18, 2015</td>
<td>4:30 P.M. – 7:00 P.M.</td>
<td>Proposed Pedestrian Access Improvements Class Environmental Assessment between the Hanson/Hayward Industrial and Alpine Village Areas – Public Consultation Centre</td>
<td>Activa Sportsplex Murray Fried Room 135 Lennox Lewis Way Kitchener, Ontario</td>
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Region of Waterloo

Transportation and Environmental Services

Design and Construction

To: Chair Tom Galloway and Members Of The Planning And Works Committee

Date: June 16, 2015

File Code: C04-30, 5603

Subject: Reconstruction of Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road) From King Street To Waterloo Spur Railway, St. Jacobs, Township Of Woolwich – Project Approval

Recommendation:

That the Regional Municipality of Waterloo take the following actions with respect to the proposed improvements on Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road) from King Street to the Waterloo Spur railway, in the village of St Jacobs:

i) Approve the proposed roadway improvements on Regional Road 17 as outlined in Report TES-DCS-15-11;

ii) Upon completion of construction, amend Traffic and Parking By-law 06-072, as amended to accommodate the proposed improvements as follows;

   a) Add to Schedule 1, No parking on both sides of Regional Road 17 (Sawmill Road) from King Street to Northside Drive;

   b) Add to Schedule 1, No parking on both sides of Regional Road 17 (Northside Drive) from Sawmill Road to Hawkesville Road;

   c) Add to Schedule 1, No parking on both sides of Regional Road 17 (Hawkesville Road) from Northside Drive to the west village limit of St. Jacobs;

   d) Add to Schedule 24, Reserved lanes on both sides of Regional Road 17 (Sawmill Road) from King Street to Northside Drive for bicycles, horse-drawn
vehicles;

e) Add to Schedule 24, Reserved Lanes on both sides of Regional Road 17 (Northside Drive) from Sawmill Road to Hawkesville Road for bicycles, horse-drawn vehicles; and

f) Add to Schedule 24, Reserved Lanes on both sides of Regional Road 17 (Hawkesville Road) from Northside Drive to the west village limit of St. Jacobs for bicycles, horse-drawn vehicles.

Summary:

The Region of Waterloo is planning roadway reconstruction on Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road) from King Street westerly to the Waterloo Spur railway crossing, in the Township of Woolwich, a total distance of approximately 725 metres. Please refer to Appendix ‘A’ for a plan view of the project area. The project is being undertaken as a Schedule ‘A+’ project under the provincial “Municipal Class Environmental Assessment” Act. A Project Team has directed this project and consists of staff from the Region of Waterloo and the Township of Woolwich, as well as Township Councillor Mark Bauman.

Improvements are required on Regional Road 17 to replace the deteriorated pavement, to install curb and gutter and storm sewer where none exists today to improve roadway drainage, to provide sidewalks and to provide cycling/buggy lanes since Regional Road 17 is designated as an on-road cycling route in the Region’s Active Transportation Master Plan. This section of roadway is also designated as an official horse and buggy route.

Based on the identified technical needs for this project, the Project Team developed a preferred design for improvements on this section of Regional Road 17. The original design preferred by the Project Team was presented to the public at a Public Consultation Centre (PCC) on Wednesday June 18th, 2014.

26 members of the public attended the PCC and 14 written comment sheets were submitted. The main concerns expressed by the public at the PCC included: concerns about the sight lines for vehicles turning at the southwest corner of Hawkesville Road and Northside Drive; concerns about lack of adequate road drainage; concerns about the installation of sidewalks and the requirement for fronting property owners to remove snow; concerns about parking loss for business customers with the addition of curbs and cycling/buggy lanes; and concerns that the proposed cycling/buggy lane width is too narrow for buggies. The Project Team’s responses to these public concerns are addressed in Appendix B of this report.

Based on the public feedback received and staff’s subsequent meetings and discussions with affected stakeholders, the Project Team has revised the original June
2014 design to include a larger corner radius to better accommodate trucks making the right turn from Hawkesville Road to Northside Drive. In addition, the sightline obstruction at this location is being addressed with the removal of a number of trees in the southwest corner of the intersection.

At this time the Project Team is now presenting a final Recommended Design Alternative to Regional Council for approval. The Recommended Design Alternative includes the following overall improvements:

- Full reconstruction of Regional Road 17 to an urban cross section from King Street westerly to Northside Drive, south to Hawkesville Road, and west along Hawkesville Road to past the United Calvary Church. This section includes storm sewer replacement, new curb and gutter, new sidewalks, on-road cycling/buggy lanes, geometric improvements at the intersections to improve truck turning movements;

- Full reconstruction of Regional Road 17 to a rural cross section, from United Calvary Church west to the Waterloo Spur railway crossing, including drainage improvements and on-road cycling/buggy lanes;

- Watermain and sanitary sewer repairs and rehabilitation for the Township of Woolwich; and

- Relocation of private utilities where required to implement the proposed improvements.

Property acquisitions are required from four (4) Hawkesville Road property owners to accommodate the recommended road improvements as part of this project.

The estimated total Region of Waterloo cost for the project is $1,985,000. Pending final approval of the project, construction is scheduled to commence in early 2018, with completion of the project in fall 2018. Construction will require closure of Regional Road 17 to through traffic with access maintained for local traffic only. Construction is therefore not scheduled until 2018 so that work on Regional Road 17 is not started until after completion of the adjacent road construction on King Street in St. Jacobs which is planned in 2016/2017.

Letters advising the public of the recommendations included in this report and the date the report is to be considered by the Public Works Committee were mailed and hand delivered the week of May 25th, 2015 to area businesses and residents and to those who attended the PCC.
1.0 Introduction

Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road) from King Street to the Waterloo Spur tracks, in the village of St. Jacobs is identified in the Region’s Ten-Year Transportation Capital Program as a road requiring reconstruction to correct the deteriorated asphalt surface, to install new storm sewer system, to replace aging and deteriorated storm sewer systems and to provide pedestrian and cycling/buggy facilities. The total length of the project is approximately 725 metres. Please refer to Appendix ‘A’ for a plan view of the Project Area.

This project is classified as a Schedule “A+” undertaking in accordance with the Municipal Class Environmental Assessment planning process and can proceed to construction provided that the public is notified in advance of construction. The planning of the roadway improvements is being undertaken in accordance with the Regional Context Sensitive Corridor Design Guidelines, the Regional Active Transportation Master Plan and other relevant Regional policies and practices.

The Context Sensitive Region Transportation Corridor Design Guidelines (CDG) is a planning policy document that guides the design of Regional Roads. The CDG identifies design parameters for necessary features within road allowances such as vehicular lanes, sidewalks and boulevards.

The Regional Active Transportation Master Plan is a planning policy document that identifies required improvements to the Region’s walking and cycling network and guides the implementation of these facilities.

The Regional Official Plan gives direction to balance the design of reconstructed roads to meet the needs of all modes of transportation including walking, cycling, motorized vehicles and transit.

A Project Team has directed this project and consists of staff from the Region of Waterloo and the Township of Woolwich, and Township Councillor Mark Bauman.

2.0 Existing Conditions

Within the project limits, Regional Road 17 is currently a two-lane rural road cross-section with a combination of paved and gravel shoulders, and grassed or paved ditches. With the exception of localized curb and gutter at the intersections on Northside Drive, these road sections do not have any curbs or gutters.

The existing sanitary infrastructure is generally in fair to good condition and will be retained. The storm sewer infrastructure is sporadic and undersized and it is proposed to be reconstructed. The water main infrastructure is reaching the end of life cycle, so it is proposed for replacement on behalf of the Township of Woowich.
3.0 Existing Needs and Proposed Improvements

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

a) Road Condition

Pavement conditions on the road sections indicate pavement distress in various areas and general deterioration due to age and drainage problems. Full reconstruction is proposed for the entire extent of the project limits.

b) Curb and Gutter

The proposed improvements will urbanize Regional Road 17 with the installation of new curb and gutter and storm sewers, on Sawmill Road from west of the King Street intersection to Northside Drive, along Northside Drive between Sawmill Road and Hawkesville Road, and along Hawkesville Road from Northside Drive to the St. Jacob village limit just west of the Calvary United Church. The introduction of curbs and gutters is needed to contain and convey surface drainage from the road and adjacent lands to a proper drainage outlet. A defined edge of the road will provide an element of traffic calming compared to the wide open appearance of the existing asphalt road width and will also provide separation and safety for pedestrians. Installation of the curb and gutters will eliminate the paved and gravel shoulders and will therefore eliminate the parking that is currently permitted on the roadway shoulders.

c) Drainage Issues

Surface drainage along this section of Regional Road 17 is currently provided by open ditches/asphalt swales, small diameter driveway culverts and deteriorated and aging storm sewers. Many of the storm sewers are in poor condition and are intermittent and/or of insufficient size. Currently some of the surface water drains off the roadway and onto residential driveways.

New storm sewer is proposed to correct these drainage deficiencies and to provide a proper storm drainage outlet for the new curb and gutter. Ditches will remain outside the village limit (west of Calvary United Church) and will be re-graded as required to properly convey drainage to the outlet near the tracks.

d) Sidewalks

Currently there are no sidewalks along this section of Regional Road 17. Sidewalks are proposed as part of this project to provide pedestrian facilities along both sides of Hawkesville Road within the village limits and along both sides of Northside Drive. On Sawmill Road, sidewalk is only proposed along the south side as there are no other connecting pedestrian facilities or pedestrian destinations on the north side.
e) Cycling and Horse and Buggy Needs

Regional Road 17 is designated as a core on-road cycling route in the Region’s Active Transportation Master Plan. To accommodate cyclists, the proposed reconstruction of Regional Road 17 includes a reserved lane for bicycles (1.5 metres in width) in both directions throughout the project limits.

This section of roadway is also designated as an official horse and buggy route. The 1.5m space for cyclists is also available for use by horse and buggy traffic and would therefore be designated as a reserved cycling/buggy facility.

f) Other Improvements

Other improvements to be completed with the implementation of this project include the following:

- Replacement of watermain including services and sanitary sewer repairs and rehabilitation subject to final approval of the Township of Woolwich; and
- Relocation of other private utilities where required to implement the proposed improvements.

4.0 Public Consultation Centre Issues and Project Team Responses

4.1 Public Consultation Centre – June 18, 2014

The Project Team considered various road cross-section alternatives for Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road). These alternatives included different combinations of roadway sections (urban vs. rural), sidewalks, cycling lanes, boulevards and utility locations within the corridor. Based on the Project Team’s comprehensive technical evaluation, a Preferred Alternative was developed and presented to the public in June 2014. The Typical Road Cross-sections presented to the public are shown in Appendix ‘D’.

The Public Consultation Centre (PCC) for this project was held at the Calvary United Church on Wednesday, June 18, 2014. Plans showing the proposed improvements were on display and Project Team representatives were present to answer questions and receive feedback. Twenty six (26) members of the public attended the PCC and thirteen (13) written Comment Sheets or emails were received from the public as a result of the PPC. Please refer to Appendix ‘C’ for a summary of the written comments received from the public and the Project Team responses.

4.2 Main Issues Raised by the Public at the PCC

The main issues and comments raised by the public are as follows:

a) Sightline concerns with the southwest corner of the intersection of Northside Drive
and Hawkesville Road;

b) Concerns with loss of parking for business customers along Sawmill Road between King Street and Northside Drive;

c) Concerns with installation of sidewalks and the owner responsibility for snow removal;

d) Requests to increase the cycling/buggy lane widths; and

e) Road drainage concerns.

Detailed descriptions of these main concerns along with the Project Team’s responses are provided in Appendix ‘B’, and all public comments received for this project are provided in Appendix ‘C’.

5.0 Recommended Alternative

Based on the public comments received from the PCC for this project as well as the technical considerations of the Project Team, the Project Team is now recommending a final Design Alternative to Regional Council for approval. The final Recommended Design Alternative includes the following overall improvements:

- Full reconstruction of Regional Road 17 to an urban cross section from King Street westerly to Northside Drive, south to Hawkesville Road, and west along Hawkesville Road to past the United Calvary Church. This section includes storm sewer replacement, new curb and gutter, new sidewalks, on-road cycling/buggy lanes, geometric improvements at the intersections to improve truck turning movements;

- Full reconstruction of Regional Road 17 to a rural cross section, from United Calvary Church west to the Waterloo Spur railway crossing, including drainage improvements and on-road cycling/buggy lanes;

- Watermain and sanitary sewer repairs and rehabilitation for the Township of Woolwich; and

- Relocation of private utilities where required to implement the proposed improvements.

These proposed improvements will correct the identified deficiencies on Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road) and will provide enhancements for all road users. Please refer to Appendix ‘D’ for the proposed Typical Road Cross Sections.

It is further recommended that Regional Council approve a proposed amendment to the existing By-law to restrict parking and enact a new By-law to designate dedicated
cycling/buggy lanes throughout the project limits.

In order to accommodate the widening for proposed cycling/buggy lanes and sidewalks, property acquisitions are required from three (3) adjacent properties on the south side of Hawkesville Road where the current right-of-way width is only 14.8 metres. An additional property acquisition is recommended at the southwest corner of Hawkesville Road and Northside Drive to create an appropriate “daylighting triangle” at this corner to protect the sight lines for road users.

Letters advising the public of the recommendations included in this report and the date the report is to be considered by the Public Works Committee were mailed and hand-delivered during the week of May 25th, 2015 to area businesses and residents and to those who attended the PCC.

6.0  Project Cost

The total estimated Region of Waterloo cost for the recommended Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road) reconstruction as outlined in this report for 2015-2018 is $1,985,000.

The Township of Woolwich is owner/operator of the section of local watermain and sanitary sewers within the project limits. The Township will be responsible for the costs in relation to upgrades to the watermain replacement and sanitary sewer repairs.

7.0  Project Schedule

Subject to Regional Council approval of the King Street Improvements project on April 22, 2015, the proposed project schedule is as follows:

Detailed design/property acquisitions and utility relocations……..……..2015 to 2017

Tender Period........................................................................................................... January-March 2018

Start of Construction.................................................................................................. April 2018

Construction Completion .........................................................................................November 2018

Construction will require the closure of Regional Road 17 to through traffic during much of the contract work in 2018. Access will be maintained to local businesses and residential driveways. Construction is scheduled in 2018 so that work on Regional Road 17 is not started until after completion of the adjacent road construction on King Street in St. Jacobs which is planned in 2016/2017.

Corporate Strategic Plan:

Construction of the proposed Regional Road 17 (Hawkesville Road / Northside Drive /
Sawmill Road) reconstruction meets the Region’s Corporate Strategic Plan Objective 2.2 to develop, optimize and maintain infrastructure to meet current and projected needs under Focus Area 2, “Growth Management and Prosperity”.

**Financial Implications:**

The 2015 Transportation Capital Program and Ten Year Forecast includes $1,985,000 of funding in 2015-2018 to complete the detailed design and construction of the proposed improvements on Regional Road 17 (Hawkesville Road / Northside Drive / Sawmill Road).

**Other Department Consultations/Concurrence:**

The Council and Administrative Services Division will be required to prepare the By-laws for the recommended parking restrictions and designated lane use.

**Attachments**

Appendix A - Key Plan identifying project limits

Appendix B - Main Issues Raised by the Public at the PCC and the Project Team’s Responses

Appendix C - Summary of All Public Comments and Responses

Appendix D - Typical Road Cross-Sections

**Prepared By: Jeff Medd, Project Manager**

**Approved By: Thomas Schmidt, Commissioner of Transportation and Environmental Services**
Appendix B

Main Issues Raised by the Public at the PCC and the Project Team’s Responses

a) Sight Line Obstructions

Public Comments:

A majority of the attendants at the PCC expressed concerns with the poor sight lines due to the presence of three cedar trees on private property at the southwest corner of Hawkesville Road and Northside Drive.

Project Team Response:

The proposed reconstruction plans at the PCC already included the planned removal of these trees as the Project Team was aware of this issue, as confirmed by the overwhelming number of public comments on the poor sight lines. The Project Team is also recommending that property be acquired at this corner to protect a “daylighting” triangle to preserve proper sight lines as part of the public road allowance. In addition, staff are negotiating with the property owner to remove the three trees prior to the property acquisition and in advance of construction.

b) Concerns with Loss of Parking along Sawmill Road

Public Comments:

One (1) response expressed opposition to the removal of on-street parking on Sawmill Road between King Street and Northside Drive due to the proposed addition of designated cycling/buggy lanes. The homeowner runs a registered massage therapy business out of his home and his clients use the Sawmill Road shoulder area for on-street parking; this parking would be eliminated with the addition of sidewalks and cycling/buggy lanes.

Project Team Response:

The Project Team discussed this issue and recommends that the proposed cycling/buggy lanes, barrier curbs and sidewalk be constructed as planned since these elements are all integral parts of the project and need to be included to facilitate pedestrian and cycling/buggy use.

Staff has met with the property owner to discuss the owner’s concerns and to explore alternative solutions.

For reference, the site is shown in plan and street view in the following photos. The site includes a standard double-driveway which can accommodate 4 vehicles comfortably but which would not allow for vehicles to maneuver in and out of the driveway easily, ie. before and after appointments. The garage is unavailable for parking as it was
converted to accommodate the massage therapy business.

![Figure 1 – 3099 Sawmill Road Plan View](image1)

The Project Team reviewed a number of possible alternatives to construct additional parking spaces within the owner’s property and these alternatives were shared with the property owner. The solution that is acceptable to the Project Team and the property owner includes the expansion of the existing driveway to the west on private property to provide additional angled parking spaces and room for vehicles to turn around within

![Figure 2 – 3099 Sawmill Road Street View](image2)
the driveway.

In addition at this same property, there are approximately 30 trees within the road allowance on the Northside Drive frontage that provide visual screening for this property. Most of these trees require removal for the installation of sidewalk. The Region’s practice is to replace trees on a 2 for 1 basis. There is insufficient space for the Region to re-plant 60 trees on the road allowance. Alternatively, trees can be re-planted on the property owner’s private property. Staff will work with the owner during the detailed design phase to assist the owner in re-landscaping the property in conjunction with the expansion of the driveway for additional on-site parking.

c) Concerns with Sidewalk installation

Public Comments:

Three (3) comments questioned the need to have sidewalks as there are currently no sidewalks within the project area. Comments were also included that snow removal of the sidewalks would be a burden on the property owner.

Project Team Response:

The Region’s Transportation Corridor Design Guidelines and the Active Transportation Master Plan recommend that sidewalks be installed on both sides of all Regional roads, which the Project Team supports with the exception of the north side of Sawmill Road. The Project Team recommends leaving the north side of Sawmill Road without a sidewalk at this time as there would be no connecting sidewalk links to the north or west.

With respect to snow removal, the Township By-law requires fronting property owners to clear snow up to 300mm in depth. If the depth exceeds 300mm, the snow is cleared by Township forces. On Sawmill Road and Northside Drive, the proposed design includes 2 metre boulevards which will adequately accommodate snow storage from the road and sidewalk. On the Hawkesville Road section of the project, there are too many constraints (building, cemetery wall, landscaping features) that limit the ability to provide wide boulevards; along Hawkesville Road therefore, the sidewalk would be separated from the curb by a 0.3m wide impressed coloured-concrete strip. Snow storage would therefore occur in the area of this 0.3m strip and the 0.5m curb and gutter.

d) Increase the Cycling/Buggy Lane Widths

Public Comments:

One (1) respondent questioned whether the cycling/buggy lane widths should be increased to 2.25 or 2.5m and be segregated from the vehicle lane by a semi-mountable curb.
Project Team Response:

The Region’s Corridor Design Guidelines (CDG) recommend a 1.5m cycling/buggy lane for this type of roadway. The Project Team feels the CDG guideline is appropriate in that the provision of a cycling/buggy lane wider than 1.5m would encourage car parking and/or travel in the cycling/buggy lane area, which would reduce the lane’s effectiveness and reduce safety for cyclists and buggies. The wider overall road width would also likely encourage higher vehicle speeds.

A standard buggy measures 1.54 metres (5 feet) in width and there are some larger buggies that are wider than 1.54 metres. It is recognized that the buggies have to encroach slightly into the driving lane but the 1.5 metre cycling/buggy lane width is considered appropriate in that it would discourage parking on the dedicated cycling/buggy lane. The same cycling/buggy lane width has been used successfully as part of the road reconstructions in the villages of Heidelberg and Linwood.

When vehicles do encounter a buggy, the vehicle is required to stay behind the buggy and wait for a gap in oncoming traffic and then safely pass the buggy by encroaching slightly into the oncoming lane.
### Appendix C

**Summary of Public Comments and Responses**

<table>
<thead>
<tr>
<th>Name</th>
<th>Survey Results</th>
<th>Comments</th>
<th>Response</th>
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</thead>
<tbody>
<tr>
<td>Jim Daniel</td>
<td></td>
<td>Would like to see stop signs in both directions at the intersection of Northside Drive and Hawkesville Road.</td>
<td>• Currently, traffic on Hawkesville Road has to stop at Northside Drive.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The sightline at the southwest corner of the intersection is the main safety concern, and that is going to be rectified prior to or during construction.</td>
</tr>
<tr>
<td>Tami &amp; Jan Schaafisma</td>
<td></td>
<td>We would like to make sure there is a catch basin on the left side of our driveway due to the flooding we get on out property in the spring and with heavy rain fall.</td>
<td>• Road drainage is being upgraded as part of the proposed reconstruction. Staff will consult with the property owner about identified drainage issues during the detailed design phase.</td>
</tr>
<tr>
<td>Chris McCracken</td>
<td>Drainage/Special Issues - <strong>No</strong></td>
<td>Support Urbanization – Yeah!</td>
<td></td>
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<tr>
<td></td>
<td>Sump discharge into storm sewer/ditch - <strong>No</strong></td>
<td>Support Urbanization – Yes</td>
<td></td>
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<tr>
<td></td>
<td>Support Urbanization – <strong>Yes</strong></td>
<td>Increase water service - <strong>No</strong></td>
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<td></td>
<td></td>
<td>Support Urbanization – <strong>Yes</strong></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Increase water service - <strong>No</strong></td>
<td></td>
</tr>
<tr>
<td>Maxine Shantz</td>
<td>Drainage/Special Issues - <strong>Unknown</strong></td>
<td>Support Urbanization – Yes</td>
<td>Special Issue – Cemetery Wall</td>
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<tr>
<td></td>
<td>Sump discharge into storm sewer/ditch - <strong>Unknown</strong></td>
<td>Support Urbanization - <strong>Yes</strong></td>
<td></td>
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<tr>
<td></td>
<td>Support Urbanization - <strong>Yes</strong></td>
<td>Increase water service - <strong>No</strong></td>
<td></td>
</tr>
<tr>
<td>Cathy Linseman</td>
<td>Drainage/Special Issues - <strong>Unknown</strong></td>
<td>Support Urbanization – Yes</td>
<td>Special Issue – Cemetery Wall</td>
</tr>
<tr>
<td></td>
<td>Sump discharge into storm sewer/ditch - <strong>Unknown</strong></td>
<td>Support Urbanization - <strong>Yes</strong></td>
<td></td>
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<tr>
<td></td>
<td>Support Urbanization - <strong>Yes</strong></td>
<td>Increase water service - <strong>No</strong></td>
<td></td>
</tr>
<tr>
<td>Paul Martin</td>
<td>Drainage/Special Issues - <strong>Yes</strong></td>
<td>Support Urbanization – Yes</td>
<td>Special Issue – Drinking water steel lines run under the road to our house from 55 Hawkesville Rd.</td>
</tr>
<tr>
<td></td>
<td>Sump discharge into storm sewer/ditch - <strong>No</strong></td>
<td>Support Urbanization – <strong>Yes</strong></td>
<td>Sump discharge – Septic tanks – drainage in front lawn near house</td>
</tr>
<tr>
<td></td>
<td>Support Urbanization – <strong>Yes</strong></td>
<td>Increase water service - <strong>No</strong></td>
<td>Water service – We are on well &amp; septic tank</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Staff will consult with the property owner in order to properly identify the water lines during the detailed design phase.</td>
</tr>
<tr>
<td>Unknown Comment</td>
<td>Drainage/Special Issues - <strong>No</strong></td>
<td>Sump discharge into storm</td>
<td></td>
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<tr>
<td>Name</td>
<td>Survey Results</td>
<td>Comments</td>
<td>Response</td>
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<tr>
<td>Sheet</td>
<td>sewer/ditch - No</td>
<td></td>
<td>The railway track must be reworked and smoothed out for sure. Need better foundation for the loaded trucks that use it.</td>
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<tr>
<td></td>
<td>Support Urbanization – Yes</td>
<td></td>
<td>• It is acknowledged that the crossing requires rehabilitation and this work will be completed as part of the 2018 reconstruction, or earlier if warranted.</td>
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<tr>
<td></td>
<td>Increase water service - No</td>
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<tr>
<td>Edward Gingerich</td>
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<tr>
<td>Oscar Weber</td>
<td>Drainage/Special Issues - Yes</td>
<td>Special Issue – Water at end of driveway after a good rain. Sump discharge – No sump pump, roof leader go on lawn Support Urbanization – Not sure why we need sidewalks on both side of road</td>
<td>• It is the Region’s policy to construct sidewalks on both sides of Regional Roads in urban areas in accordance with the approved Context Sensitive Corridor Design Guidelines, the Region's Pedestrian Charter and the proposed Active Transportation Master Plan.</td>
</tr>
<tr>
<td></td>
<td>Sump discharge into storm sewer/ditch - No</td>
<td></td>
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<tr>
<td></td>
<td>Support Urbanization – Yes/No</td>
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<tr>
<td></td>
<td>Increase water service - No</td>
<td></td>
<td></td>
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<tr>
<td>Scott Brueckman and</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Julie Jonas</td>
<td></td>
<td></td>
<td>• It is the Region’s policy to construct sidewalks on both sides of Regional Roads in urban areas in accordance with the approved Context Sensitive Corridor Design Guidelines, the Region's Pedestrian Charter and the proposed Active Transportation Master Plan.</td>
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<td></td>
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<td>The Project Team reviewed a number of possible alternatives to construct additional parking spaces within the owner’s property and these alternatives were shared with the property owner. The solution that is acceptable to the Project Team and the property owner includes the expansion of the existing driveway to the west on private property to provide additional angled parking spaces and room for vehicles to turn around within the driveway.</td>
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<tr>
<td></td>
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<td>1. On-street parking Our biggest concern is that parking is not included along Sawmill Road. We purchased this property in 1996 following council approval of a minor-variance allowing the operation of our family business, St. Jacobs Massage Therapy, from this residence, moving from the Woolwich Community Health Centre. This is our 24th year operating in St. Jacobs. This property works exceeding well for us and our clientele so long as on-street parking is maintained in some form. Prior to purchase we followed all required steps to allow our business to operate from this property and as such pay business property tax on the area of our home utilized for business. In the 18 years we have operated here I have meticulously maintained the on-road parking area (the paved shoulder east of our driveway to King Street) during winters as this area is seldom cleared by snowplows to ensure parked cars would not encroach onto the roadway causing a safety issue and have had no complaints. While we appreciate the addition of a sidewalk along Sawmill Road for pedestrian safety we wonder if</td>
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we might somehow have both. Suggestions include: increasing the boulevard depth along Sawmill Road to allow parking between the sidewalk and the bike/buggy lane in the area east of our driveway to King Street, or repositioning the sidewalk to the north side of Sawmill Road to facilitate parking on the south side of Sawmill Road. Checking Region of Waterloo guidelines for street parking would show that there should be room to provide four parking spaces. With our office facing onto Sawmill Road I did my best to do a pedestrian count from June 19 to June 27, I counted 5 pedestrians on the north side, and 2 on the south side in this time frame.

2. Loss of sound and privacy buffer along Northside Drive
A huge consideration in purchasing this property is the privacy afforded to our backyard from the mature trees along Northside Drive. Without these mature trees visibility is clear across the depth of our yard to our swimming pool on the east side of our yard. Road salt runoff into this treed portion of our yard from the current snowmelt drainage issues has severely damaged the spruce trees. We understand that Region of Waterloo policy is to replace every one tree removed with two trees, which are to be selected from a master list provided by the Region. Our concerns along Northside Drive are twofold; one, maintaining privacy, and two, tree health post-construction. One, what height/age of trees are provided as replacement, how many years until privacy is again afforded? Are screening trees, such as spruce, available as an option? Two, post-construction, will salt spray again degrade tree health. One of my thoughts to address these issues would be the installation of a small earth berm along Northside Drive where it abuts our property. This berm combined with the draft plans lowering of Northside Drive and raising of the sidewalks abutting our yard to rectify drainage

- There are approximately 30 trees within the road allowance on the Northside Drive frontage that provide visual screening for this property. Most of these trees require removal for the installation of sidewalk. The Region’s practice is to replace trees on a 2 for 1 basis. There is insufficient space for the Region to re-plant 60 trees on the road allowance. Alternatively, trees can be re-planted on the property owner’s private property. Staff will work with the owner during the detailed design phase to assist the owner in re-landscaping the property to provide visual screening.
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- Concerns would not need to be too large to provide immediate privacy, sound buffering and tree protection. Replacement trees could be planted above and inside this berm increasing salt spray protection for the trees.

3. **King Street and Regional Road 17 reconstruction timelines**
   While this one is a long shot it never hurts to point out what might not seem apparent. While we very much look forward to the proposed road improvements the construction of King Street and Regional Road 17 in adjoining years (2016 and 2017) would significantly impair the summertime enjoyment of our property as we are literally surrounded on all sides. Moving construction of Regional Road 17 forward to 2016 to tie into King Street reconstruction would be optimal.

4. **Streetscaping**
   The streetscaping proposed in the draft plan along Northside Drive is very desirable and well planned. Currently, this is a very narrow road to walk with no shoulder. Both grade school and high school students are picked up/dropped off in front off 51 Northside Drive. Children walk both sides of this street to and from the bus. Three busses pick up/drop off on the east side and one drops off on the west side. Hence both sides of this street are utilized by pedestrians notably walking to housing further north on Northside Drive past Sawmill Road. Also, Northside Drive is the preferred route for pedestrians from “uptown” walking “downtown”. The addition of trees on the boulevard as proposed will greatly enhance the residential feel of the neighborhood. The addition of sidewalk and a grass boulevard in front of Martin’s Garage will have the same effect. It will be change for Martin’s but negative impacts to their business can hopefully be mitigated by rethinking how they arrange their cars and better utilize their existing land. However, they are a

- The upgrade of the storm sewer and outlet on King Street needs to be completed before the work on Regional Road 17 can happen, therefore separate contracts are required. In addition, both projects will require lane closures and each project provides a critical alternate route during construction on the other project.
very good neighbour and I would like to see any concerns they see addressed according to their needs.

Traffic speeding around the corners causing excessive road noise has long been a concern. We feel that the “tightening up” of the street intersections as proposed will greatly reduce vehicle speed and safety. Currently it feels that some cars/trucks like to see how fast they can take the corner, notably those turning from Northside onto Sawmill. A tighter corner will necessitate a slower speed, a very desirable traffic calming measure.

5. Curbs and storm sewers
Rain water and snow melt drainage has long been a concern. Most heavy rains or spring thaws lead to flooding in the NW corner of our yard and lakes at the end or our driveway. At the worst, I had a sump pump running for 2 ½ hours to remove snow melt flooding off the roadway into our driveway causing a not so small lake late this past winter. The addition of storm sewers and curbs will be a welcome addition and should remediate this problem.

6. Current drainage ditches along Northside Drive and Sawmill Road
Will the existing drainage ditches along Northside Drive and Sawmill Road abutting our yard be infilled to the existing grade of our yard?

- The ditches along Northside Drive and part of Sawmill Road at this property will be eliminated along with the removal of the driveway culvert. The adjacent property is lower than the road so a ditch inlet will be installed to pick up the drainage from the property and take it into the adjacent storm sewer. A shallow drainage swale will still be required from the driveway easterly on the Sawmill Road frontage to drain that part of the homeowner’s property.
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<th>Name</th>
<th>Survey Results</th>
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<tbody>
<tr>
<td>Bob and Sue Eckert</td>
<td>We (Bob and Sue Eckert) of 32 Northside Drive, St. Jacobs are not in support of the proposed urbanization. After speaking to several of the neighbours that this project would affect, they too have said that they are not in favour. I wish that the process would have been discussed before all the preliminary money had been spent to see what residence want. We have lived her for 35 years and part of the reason we have stayed is because we have a country feel. Sidewalks would be used rarely as there is not alot of pedestrian traffic. We have the snowplows go by our house several times a day and at this point we have hired someone to plow our driveway as it's just too heavy at the end for us to lift. That being said with the snowplows going through so often it would be a losing battle to shovel a sidewalk. Not to mention that any boulevard grass would be killed by the salt. There are many more issues that we find far more important than this project such as the transfer station remaining open and it is a valuable service to our township. Also, several bridges in Woolwich township have been closed and there is no word that they are to be fixed if ever. I did speak personally with Mark Bauman and he spoke that it was already a done deal. I ask you then, why are we filling out this survey if everything is already settled. What is the point of even trying to change this if minds are already made up? We have no problem with the road being lowered as are driveway floods out regularly. That is really the only thing that we are comfortable with!</td>
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<td>Changes to the preferred design have been made based on comments from the community; however, it is the Region's policy to construct sidewalks on both sides of Regional Roads in urban areas in accordance with the approved Context Sensitive Corridor Design Guidelines, the Region’s Pedestrian Charter and the proposed Active Transportation Master Plan.</td>
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<td>The boulevards proposed for along Northside Drive are 2m wide, which would provide for snow storage.</td>
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<td>The proposed boulevard grass will be able to withstand salt in the same way as the grassed areas adjacent to the existing paved shoulders. The proposed curbing may even allow the raised boulevard grass to thrive better than the existing grassed edge.</td>
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<tr>
<td>Name</td>
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<tr>
<td>Dale Schieck</td>
<td>Drainage/Special Issues - Yes</td>
<td>Special Issue – We have lawn sprinklers along the road edge. Sump discharge – Not that I know of but the sump discharge is buried Support Urbanization – our main focus is curbs and gutters to support proper drainage</td>
<td></td>
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<td></td>
<td>Sump discharge into storm sewer/ditch – Unknown(No)</td>
<td>I would like to see if there could be another street light placed between Northside Dr. and Chris Court on Hawkesville Road. It is very dark approaching that corner.</td>
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<td></td>
<td>Support Urbanization – Yes</td>
<td>The heavy truck traffic (length and weight) on Hawkesville Road has become extremely heavy over the years. Hawkesville Road is used as an escape to not have to go up to Elmira and north. Especially with the Steed &amp; Evans plant at the end of Hawkesville Road, there is a lot of construction trucks from early morning till late at night. I would be interested in them designating Hawkesville Road a non-truck route, if possible.</td>
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<td>Increase water service - No</td>
<td>All the traffic, trucks and smaller passenger vehicles, approach the stop sign at Northside Dr. with some fairly intense speeds. There are lots of times I wonder how they will ever get stopped in time. If I had small kids, this is not a road I would ever live on because of the traffic size and speed.</td>
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<td>Our specific property, 26 Hawkesville Road. The drawings we saw at the public consultation night made us wonder about how steep the drop off will be between the sidewalks and our property.</td>
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<td>I know home owners are responsible for clearing sidewalks. Since there is virtually no boulevard, I am concerned that we will be responsible for moving all the heavy road snow dumped on the sidewalk by the plow. Also, has anyone considered snow clearing with the design of the sidewalk abutting the stone wall at the cemetery?</td>
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- Illumination will be updated in accordance with the Region’s Illumination Policy. Newer lamps will be provided on the existing poles which will improve the illumination levels from the current condition.

- In accordance with the Region’s Truck Policy, all Regional roads are truck routes. The Policy allows for prohibitions or time restrictions on a certain sections of road but only in very special circumstances. This section of road was reviewed to see if it satisfies the criteria in the Truck Policy and it is confirmed that it does not qualify for restrictions, based on the distance of travel and the number of homes on the available alternate routes. In addition, it is noted that only through truck traffic would be affected by any restrictions; “No-truck route” rules do not apply to trucks entering the zone for direct business and based on the existing zoning of the area and location of businesses within the zone, there would still be truck traffic.

- The proposed design with curbs is expected to calm traffic.

- Specific grading details will be available after Council gives approval to the preliminary design. Staff will consult with the property owner about identified drainage issues during the detailed design phase.

- Snow removal has been taken into consideration within the design. It is preferred to have a larger grass boulevard, however in order to deal with the existing ROW limits,
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<td></td>
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<td>The issue of traffic sight lines at the corner of Hawkesville Rd and Northside should not wait until this project is completed in 3 years. It is dangerous and getting worse as the tree grows. Would appreciate you forwarding that concern to the appropriate department in the meantime.</td>
<td>buildings, trees, and other obstructions, curb faced sidewalk with an impressed concrete is all that can fit on Hawkesville Road. Curb/gutter and the concrete strip provide 0.8m of snow storage. It is within The Township of Woolwich’s By-Law Number 55-2009 that the Township will come clear the sidewalk if they had been notified that the sidewalk is covered by 300mm or more of snow that has been pushed onto the sidewalk by road clearing operations.</td>
</tr>
<tr>
<td>Patrick Gleeson</td>
<td></td>
<td>Comment - Do you support the proposed urbanization (curbs &amp; gutters, sidewalks, Boulevards, cycling/buggy lanes)? Yes, but see my comments I am a resident of Elmira. I am also the chairperson of Woolwich On Road Cycling Group. Your design calls for a 3.35m road surface and 1.5 m bicycle/buggy lane. Buggies are much wider than 1.5 meters. Why not put in 2.25 or 2.5 meter lane with a semi mountable curb? This route has significant buggy traffic mixed in with heavy truck traffic especially gravel trucks. I gain this experience from witnessing the Church St West Elmira are where a 1.5 meter extension is causing troubles with the buggies.</td>
<td>• The Corridor Design Guidelines recommend a 1.5m buggy/bike lane. Staff feels that the provision of a buggy/bike lane wider than 1.5m might encourage car parking or travelling in the lane area which would reduce the effectiveness and safety for cyclists and buggies.</td>
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Appendix D-1
Typical Road Cross-Sections

PROPOSED CROSS SECTION
REGIONAL ROAD NO. 17
(SAWMILL ROAD)
Appendix D-2
Typical Road Cross-Sections

RIGHT OF WAY
20.15m

PROPOSED CROSS SECTION
REGIONAL ROAD NO. 17
(NORTHSIDE DRIVE)
Appendix D-3
Typical Road Cross-Sections

PROPOSED RURAL CROSS SECTION
REGIONAL ROAD NO. 17
(HAWKESVILLE ROAD - WEST OF VILLAGE LIMITS)
Appendix D-4
Typical Road Cross-Sections

PROPOSED URBAN CROSS SECTION
REGIONAL ROAD NO. 17
(HAWKESVILLE ROAD - WITHIN VILLAGE LIMITS)
Region of Waterloo
Transportation and Environmental Services
Design and Construction

To: Chair Tom Galloway and Members of the Planning and Works Committee
Date: June 16, 2015
File Code: C04-30, 5494, 6265
Subject: King Street Improvements, ION Tracks to University Avenue, City of Waterloo – Approval of Project

Recommendation:

That the Regional Municipality of Waterloo take the following actions with respect to proposed improvements on King Street (Regional Road 15) in the City of Waterloo from the ION Tracks south of Erb Street, to University Avenue:

a) approve the Recommended Design Alternative as outlined in Report TES-DCS-15-13;

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

c) upon completion of construction, amend Traffic and Parking By-law 06-072 as amended, as follows:

   i. Remove from Schedule 1, No Parking Anytime on the west side of King Street (Regional Road 15) from (i) 240 m south of University Avenue (Regional Road 57) to 7 m south of Young Street, (ii) 35.6 m north of Bridgeport Road (Regional Road 9) to Bridgeport Road (Regional Road 9), and (iii) 50 m north of Princess Street to 25 m north of Princess Street;

   ii. Remove from Schedule 2, Limited Parking for 1 hour, on the west side of King Street (Regional Road 15) from (i) 7 m south of Young Street to 35 m south of Young Street, (ii) 25 m north of Princess Street to 12 m north of Princess Street, (iii) Princess Street to 14.4 m south of Princess Street, (iv) 12.4 m
north of Dupont Street to 51.2 m north of Dupont Street, and (v) 24.6 m south of Dupont Street to 70.6 m south of Dupont Street, between the hours of 8:00 a.m. to 6:00 p.m. Monday to Saturday;

iii. Remove from Schedule 6, Taxicab Stands on the west side of King Street (Regional Road 15) from 9 m south of Princess Street to 14.4 m south of Princess Street;

iv. Add to Schedule 1, No Parking Anytime on the west side of King Street (Regional Road 15) from Erb Street (Regional Road 9) to Central Street; and

v. Add to Schedule 24, Reserved Cycling Lanes Anytime, on both sides of King Street (Regional Road 15) from the ION Tracks to University Avenue (Regional Road 57).

Summary:

The Region of Waterloo in collaboration with the City of Waterloo is planning roadway improvements on King Street (Regional Road 15) in Uptown Waterloo, from the ION Tracks south of Erb Street, to University Avenue, a total project distance of approximately 1.3 km. The project is being undertaken as a Schedule ‘C’ project under the provincial Municipal Class Environmental Assessment guidelines. (Please refer to the Key Plan in Appendix “A” for the project limits.) King Street is in need of reconstruction to replace the deteriorated pavement, sidewalks and streetlights and to replace aging underground municipal services. In addition, this project provided an opportunity to consider a reduction in the number of traffic lanes in order to make room for cycling lanes and enhanced pedestrian facilities.

A multi-discipline Project Team was established to guide the work of this project and includes staff from the City and Region of Waterloo, and consultants from the Waterloo office of IBI Group. In addition, a separate Task Force was formed to provide direction throughout the planning process and provide stakeholder input at key milestones of the project. Members of the Task Force include: representatives from City Council; members of City advisory committees; the Uptown Waterloo Business Improvement Association (BIA); other businesses from Uptown Waterloo; Wilfred Laurier University (WLU); and staff from the City and Region of Waterloo.

The Region’s Corridor Design Guidelines classifies this section of King Street as a “Neighborhood Connector – Main Street”, which requires the boulevards to have an urban cross section including wide sidewalks, street trees, landscaping, pedestrian and transit amenities that complement the active transportation priority recommended for a Main Street. This section of King Street is identified as a designated “Constrained Corridor” cycling route in the Region’s Active Transportation Master Plan (ATMP) approved by Council in 2014.

Immediately south of this project’s limits, the addition of the ION tracks on King Street...
will reduce the number of travel lanes from four to two adjacent to the ION tracks. Traffic analysis for this EA project confirmed that King Street from south of Erb Street to University Avenue can also operate satisfactorily now and in the future with only one through lane in each direction. With the number of through lanes reduced from four to two, the Project Team was able to consider several types of cycling facilities for King Street including conventional on-road bike lanes, buffered on-road bike lanes (separated from traffic by a painted buffer) and segregated bike lanes (separated from traffic by a 0.7m wide mountable “roll-over” curb and/or parked vehicles). It is recognized that segregated bike lanes provide the greatest separation from traffic and as a result increase the level of comfort for cyclists.

Four (4) Public Consultation Centres (PCCs) and a number of workshops have been held for this project to engage members of the public and to obtain input from key stakeholders. Over four hundred and eighty (480) people have registered at the PCCs and hundreds of comments have been received about the project and the public’s preference for improvements on this section of King Street. The main issues raised by the public included a preference for cycling lanes separated from traffic, concern with on-street parking loss, concerns with traffic infiltrating into adjacent neighborhoods and a concern with a lack of space for delivery vehicles and emergency vehicles.

Based on a review of the comments received during public consultation and all of the technical information gathered during the preliminary design phase, the Project Team has developed a final Recommended Design Alternative for King Street that includes the following elements:

King Street, Erb Street to Central Street:

- One 3.8m travel lane in each direction (wider lanes to provide additional space for emergency service vehicles and stopped delivery vehicles);
- 3.0m left turn lanes at Erb Street, Bridgeport Road, Spring Street and Central Street;
- 2.0m on-street parking stalls on the east side of the street;
- 1.8m segregated bike lane with green asphalt surface on both sides of the street;
- 0.7m mountable roll-over curb;
- 4.0m sidewalk and amenity space with new street tree planting/landscaping;
- Accessibility ramps at some building entrances; and
- Opportunities to convert parking spaces into dedicated loading/unloading zones (to be considered further with BIA during detailed design).
King Street, Central Street to University Avenue:

- One 3.25m travel lane in each direction;
- 3.0m centre left turn lanes at side streets;
- Raised islands with landscaping and/or pedestrian refuge;
- 1.8m segregated bike lane with green asphalt surface on both sides of the street;
- 0.7m mountable roll-over curb;
- 2.4m sidewalk on the west side and 2.0m sidewalk on the east side of the street; and
- Adjustments to the eastbound right turn lane on University Avenue to include a new channelized right turn lane with pedestrian refuge island.

King Street, ION tracks to Erb Street:

- One 3.35m travel lane in each direction;
- One 3.25m transit lay-by on the east side of the street to accommodate two buses;
- 2.0m on-street parking stalls on both sides** of the street (parking on both sides required to satisfy commitments to the BIA and City for Uptown parking as part of the ION project); and
- 1.5m on-road** bike lanes on both sides of the street.

** Staff will continue to work with City and BIA staff during the detailed design phase to determine if parking spaces could be removed on the west side which would allow for segregated bike lanes through this section of King Street.

Please refer to Appendix “B” for cross-sections of the Recommended Design Alternative.

Property acquisitions are required from adjacent property owners as part of this project to accommodate transit stop upgrades at the Bridgeport Road intersection and sidewalk improvements on the west side of King Street between Central Street and Ezra Street. In addition, the existing sidewalk currently encroaches onto private property at several locations along King Street between Erb Street and Central Street. Narrow strips of road allowance widening will be acquired in these areas to formalize the road right-of-way and eliminate these sidewalk encroachments onto private property.

The existing trees between Erb Street and Central Street that are located in raised
concrete planter beds will require removal to accommodate the Recommended Design Alternative. As shown on the typical cross-sections in Appendix “B”, there is a proposed one metre wide “amenity space” included on both sides of King Street in this area which will contain new street trees, benches, bike racks and landscape planters. North of Central Street, a similar amenity space is available on the west side which will include new landscape plantings.

The total estimated Region of Waterloo cost for this project is $6,610,000 for road reconstruction, roadway lighting upgrades, storm sewers, cycling lanes and traffic signal modifications. The City of Waterloo is contributing $3,620,000 for the streetscaping work (sidewalk, landscaping, decorative lighting) and underground sewer/watermain replacement between Erb Street and Central Street, and will also be contributing funding for any sanitary sewer/watermain improvements that may be completed as part of this project north of Central Street, to be confirmed in advance of the City’s 2016 capital budget process. The Uptown Waterloo BIA is contributing $250,000 for a share of the decorative lighting costs. Additionally, Wilfred Laurier University (WLU) representatives have expressed an interest in contributing financially towards possible enhancements within the corridor in the vicinity of WLU, which will be finalized during the detailed design phase. These would all be subject to Region of Waterloo permit approvals and could include improvements such as enhanced landscaping, pedestrian-level decorative streetlights and a pedestrian plaza with seating areas in the south-west corner of the University Avenue intersection.

At its May 25, 2015 Council meeting, the City of Waterloo approved the City’s streetscape improvements and the proposed new cross-sections on King Street between Erb Street and Central Street. At this time, staff is recommending that Regional Council approve the Recommended Design Alternative as outlined in this report for King Street improvements from the ION tracks south of Erb Street to University Avenue, which includes the same recommendations that were endorsed by City Council on May 25th.

Construction of this project is scheduled to start in 2017 following completion of the ION construction in Uptown Waterloo. Depending on confirmation of the scope of the City’s underground repairs/replacements and other utility work to be included in the project, it could require up to three (3) years to construct the work of this project. The Project Team has agreed to consult with BIA representatives in the near future to discuss construction timing as there may be merit in waiting until late 2017 or later to start construction, in order to provide the Uptown businesses with a construction-free period following ION completion.

Report:

1.0 Background

The Region of Waterloo in collaboration with the City of Waterloo are planning
roadway improvements on King Street (Regional Road 15) in Uptown Waterloo, from the ION Tracks south of Erb Street, to University Avenue. The project is being undertaken as a Schedule ‘C’ project under the provincial Municipal Class Environmental Assessment guidelines. (Please refer to the Key Plan in Appendix “A” for the project limits.) King Street is in need of reconstruction to replace the deteriorated pavement, sidewalks and streetlights and to replace aging underground municipal services. In addition, this project provided an opportunity to consider a reduction in the number of traffic lanes in order to make room for cycling lanes and enhanced pedestrian facilities.

The current streetscape on King Street in Uptown Waterloo was reconstructed by the City of Waterloo in the 1980’s when features such as concrete landscape planters and interlocking paving sidewalks were installed. Sections of the sidewalk and asphalt surface were rehabilitated in the 1990’s and the pavement is currently in fair to poor condition. King Street currently functions as a four lane roadway although, travel lanes do not comply with current Regional standards and the capacity of the road is reduced without left turn lanes at signalized intersections. On-street parking is provided on both sides of King Street and the land-use primarily consists of low-rise buildings with ground floor commercial or retail use. North of Central Street, on-street parking is not permitted and the land-use is predominantly high density residential developments. In addition, the corridor includes two major educational institutions fronting King Street; MacGregor Public School and Wilfred Laurier University (WLU).

The City of Waterloo had initiated a Municipal Class Environmental Assessment (EA) in 2010 for streetscape improvements (lighting, sidewalk, landscaping) on King Street between Erb Street and Central Street. In early 2011, the project was put on hold to await final information on the approved route of the Region’s Rapid Transit (ION) project in Uptown Waterloo. The City’s EA was re-initiated in 2013 following approval of the ION project.

Since the final approved ION route crosses King Street south of Erb Street, the City’s project scope was expanded to include a review of the section of King Street south from Erb Street to the newly approved ION track crossing. In addition, the Region had a reconstruction project planned in the near future for the section of King Street north of Central Street to University Avenue. So in 2013, it was decided to combine all of these projects into one overall initiative to review all of the needs on King Street from the ION track crossing northerly to University Avenue. The extension of the project limits would ensure a coordinated planning approach for the entire 1.3 km section of King Street from the ION project limits south of Erb Street, northerly up to University Avenue.

To guide the streetscape improvements to King Street in the Uptown core, the following key objectives had been developed for consideration during the planning
and design process:

- To make King Street more accessible for all modes of transportation, including pedestrians and cyclists;
- To create a streetscape environment that offers a lively, accessible and attractive place to work, live, shop, learn and play; and
- To enhance streetscape elements and improve the quality of business and economic life in Uptown Waterloo.

In order to achieve these objectives, a multi-discipline Project Team was established to guide the work of this project and includes staff from the City and Region of Waterloo, and consultants from the Waterloo office of IBI Group. In addition, the City has formed a Task Force to provide direction throughout the planning process and to provide public input at key milestones of the project. Members of the Task Force include; representatives from City Council; members of City advisory committees; the Uptown Waterloo Business Improvement Association (BIA); other businesses from Uptown Waterloo; Wilfred Laurier University (WLU); and staff from the City and Region of Waterloo. Regional staff has been part of the Project Team since the inception of the streetscape EA and continue to provide a lead role in the development of the design for King Street. The Region is the road authority for King Street and any changes proposed as part of the King Street project require approval from Regional Council.

2.0 Planning Context

The Region and City of Waterloo Official Plans designate Uptown Waterloo as an Urban Growth Centre and Primary Node within the City. The Urban Growth Centre is planned to accommodate a wide range of commercial, employment, social, cultural, entertainment, accommodation, open space, recreational, institutional, as well as residential uses, municipal facilities and public spaces. More specifically, the Uptown Waterloo Urban Growth Centre is intended to: serve as a destination within the community; accommodate a significant share of the City’s future population and employment growth; and encourage development that will support major transit, pedestrian and cyclist infrastructure.

In December 2013, Regional Council endorsed a new Community Building Strategy for the Central Transit Corridor. This strategy, which includes a portion of this project area along King Street, provides a broad framework for fostering investment and shaping future growth around the planned ION transit stations. Key elements of the Community Building Strategy include: greening the corridor; creating high quality urban places; and enhancing mobility throughout the Region.

Through the Official Plans and the Community Building Strategy, it is the intent of
Regional and City staff to enhance pedestrian/cycling connections in Uptown Waterloo and improve community links with surrounding neighborhoods. Presently, King Street in Uptown Waterloo primarily serves auto traffic and one of the primary goals through these improvements is to create an environment that promotes walkability/active transportation. There are significant development projects which are currently proposed and/or have been constructed within the last five years. These include commercial/institutional projects, residential condominium/mixed use developments and student housing complexes for the nearby universities representing approximately $350 million in total construction value.

As of 2014, infill housing projects currently built or under construction are expected to add close to three thousand and seven hundred (3,700) new residents to Uptown Waterloo within 400m of King Street. This in turn will increase localized trip-making in Uptown Waterloo, especially by non-auto modes, and will contribute towards the current customer base for Uptown businesses. Therefore, it is imperative that improvements on King Street create a more pedestrian and cycling-friendly environment, in addition to providing space for public transit and the movement of goods in Uptown Waterloo.

The Region’s Corridor Design Guidelines classifies King Street from William Street to University Avenue as a “Neighborhood Connector – Main Street”. Main Streets have the potential to intensify in the future given the existing building configurations and mixed land uses. Opportunities exist to preserve and enhance the existing character of Main Streets to positively connect alternative modes of transportation. Challenges include balancing the road and boulevard requirements within a narrow and constrained right-of-way, as well as identifying and preserving key characteristics of special character streets, including natural and built heritage features. The boulevard should have an urban cross section including wide sidewalks, street trees, landscaping, pedestrian, transit amenities that complement the active transportation priority recommended for a Main Street. Streetscapes should be designed with landscaping features that will enhance the pedestrian-cycling environment and the adjacent businesses and residential/commercial developments.

3.0 Project Issues/Needs

The following issues and needs were reviewed by the Project Team in developing alternatives for improvements on this section of King Street.

3.1 Traffic Volumes, Collisions and Operational Issues

There are approximately one thousand and one hundred (1,100) vehicles in the PM peak hour that move into and/or though Uptown Waterloo using King Street. The intersections all function at acceptable levels of service and the corridor is currently operating under capacity based on the current lane configuration. A comprehensive
traffic analysis conducted for the study area concluded that over the next twenty (20) years, King Street can continue to operate at an acceptable level-of-service if the lanes were reduced from four to two through lanes. This is due in part to the addition of new turning lanes at a number of key locations, the Region’s continued arterial road network improvements (along alternative routes such as Weber Street), increasing trends in transit ridership and alternate modes of transportation.

A reduction in the number of through lanes from four to two would also match the lane configuration that will be in place immediately south of this project’s limits, adjacent to the ION tracks.

On average, there have been sixty-three (63) collisions per year that have occurred over the last five years within this section of King Street. These collisions are twice the expected rate for comparable Regional roads and include some of the highest in the Region involving pedestrians and cyclists. Most of these collisions can be attributed to the substandard widths of the travel lanes which are as narrow as 2.75m (desirable minimum lane width is 3.25m). Examples of the collision types and their associated rankings Region-wide include:

- King Street, Willis Way to Erb Street - Ranks #1 for collisions involving a municipal bus;
- King Street, Erb Street to Dupont Street - Ranks #2 for side swipe collisions;
- King Street, Dupont Street to Princess Street - Ranks #1 for collisions with parked cars;
- King Street and University Avenue intersection - Ranks #2 for pedestrian collisions;
- King Street and Central Street intersection - Ranks #3 for pedestrian collisions; and
- King Street, Erb Street to Central Street - seven (7) reported collisions involving cyclists (5-year period).

The new travel lanes on King Street will be constructed wider to meet current standard lane width requirements and it is expected that the wider lanes will serve to reduce the number of collisions on King Street.

3.2 Underground Infrastructure

The existing underground infrastructure is generally in fair condition. However, since the roadway is being reconstructed, it is timely to upgrade and/or replace storm, sanitary and water infrastructure to avoid future disruption or repairs. Additionally, the sewers and watermain sizes can be increased at this time to
accommodate the future capacity needs as this part of the City intensifies through new developments. It is anticipated that other utility agencies may wish to upgrade their infrastructure as part of the underground reconstruction and the scope of work/cost sharing arrangements will be confirmed during the detailed design phase of this project.

3.3 Cycling Needs

This section of King Street is identified as a designated “Constrained Corridor” cycling route in the Active Transportation Master Plan (ATMP) approved by Regional Council in 2014. Several types of cycling facilities were considered by the Project Team for King Street including conventional on-road bike lanes, buffered on-road bike lanes (separated from traffic by a painted buffer) and segregated bike lanes (separated from traffic by a 0.7m wide mountable “roll-over” curb and/or parked vehicles). Segregated bike lanes provide the greatest separation from traffic and as a result increase the level of comfort for cyclists. The Project Team is recommending segregated bike lanes as the most appropriate type of cycling facility for King Street to increase comfort for cyclists, promote ridership and encourage more use by average cyclists. The ATMP indicates approximately 60% of the population is “Interested but Concerned” about cycling. Very few of this demographic regularly ride a bike but would consider cycling if they felt safer on the roadways and if vehicles were slower and less frequent.

Cycling facilities can improve local economies: by increasing the number of street users who might stop and shop; by improving the pedestrian environment to encourage non-cyclists to shop in the area; and by changing the demographics and spending habits of some consumers. For example, a recent study was completed in November 2013 by the School of the Environment, University of Toronto on the economic impacts associated with cyclists, bike lanes and on-street parking. The study concluded that “bicycle infrastructure can bring very positive economic impacts to business communities … in urban shopping strips”. Today, North American urban cyclists are a desirable demographic for local businesses, and cycling infrastructure is important to them. Therefore, cycling infrastructure is also important for businesses who want to attract them. The report concluded that in walkable urban cores, bicycle infrastructure is likely to provide a bigger boost to local businesses than on-street parking, especially where off-street parking exists nearby.

3.4 Pedestrian Needs

The width of the existing walking surface on King Street is considered quite narrow in places for pedestrians to walk side by side in a dense urban environment. The sidewalk width varies and is as low as 1.5m in some sections of the corridor adjacent to building entrances. Raised concrete planters have been constructed between Erb Street and Young Street and encroach into the sidewalk area creating
obstacles/tripping hazards for pedestrians. Sidewalks have been constructed mainly with concrete, with some sections of coloured paving stones. Additionally, paving stone crosswalks exist at the Bridgeport Road and Erb Street intersections which have settled and shifted creating an uneven walking surface.

Based on traffic counts completed in 2014, pedestrian movement in Uptown Waterloo is comparatively high, reaching up to one thousand and seven hundred (1,700) people crossing in an 8-hour period at the King Street and Erb Street intersection. Crossing pedestrians present potential conflicts with turning vehicles at signalized intersections and must be considered during detailed design to accommodate pedestrian crossings and traffic. The preferred pedestrian clearway width identified in the Region’s Corridor Design Guidelines is 2.5m, in addition to any space designated for landscaping and street furniture. Wider sidewalks are one of the primary design objectives developed during the planning process for King Street as it will provide: additional space for pedestrians; the ability to construct accessibility ramps at building entrances; and opportunities for improved landscaping, outdoor seating, retail signage and other outdoor business uses.

3.5 Transit Needs

A study completed by the University of Waterloo in August 2013 indicates that transit and non-motorized modes of travel are significant contributors to overall travel in Uptown Waterloo. In the PM peak period, about 33% of all person trips are made by transit which is significantly higher than the average in the Region. Grand River Transit (GRT) currently operates Route 7C, 7D, 7E and 200 iXpress along the King Street corridor in the north-south direction from University Avenue to the southerly boundary of Uptown Waterloo at Union Street. Additionally, Route 5 provides east-west connections and operates on King Street between Bridgeport Road and William Street.

Route 200 will be modified in the future once ION is operational although service will be maintained for Routes 5 and 7. Transit service is anticipated to be as frequent as six (6) buses per hour in each direction during the day with the late-night loop operating on King Street two evenings a week. GRT staff has identified a need for transit stop relocations at the Erb Street intersection to improve connectivity with the future ION station at Waterloo Public Square. GRT staff has also requested that the existing bus stops be upgraded with new bus shelters along the corridor south of University Avenue to improve the ridership experience and provide protection from inclement weather.

4.0 Public Consultation

4.1 Public Consultation Centre (PCC) No.1 - June 29, 2010

On June 29, 2010 the first Public Consultation Centre (PCC) for King Street
between Erb Street and Central Street was held to provide an introduction to the project and input opportunities for agencies, stakeholders and the public. The PCC display boards presented at this meeting primarily focused on questions pertaining to the frequency and purpose for visiting Uptown Waterloo, the preferred mode of transportation, responses to the project vision and guiding principles, improvement priorities for the street and general comments including likes or dislikes about the street. Responses were received on-line from one hundred and fifty-two (152) participants, plus an additional sixty-six (66) comments were received through on-street interviews.

Following the PCC, guiding principles were developed by the Project Team for King Street based on input received at the PCC and at stakeholder workshops held on August 31, 2010 and October 5, 2010. Some of these principles include:

1. Maintain an appropriate level of service for vehicles on King Street in Uptown Waterloo recognizing growth and destination traffic to area businesses;

2. Accept that the current travel lane widths on King Street are substandard and any reconstruction would require lane widening to meet minimum lane requirements;

3. Acknowledge traffic diversion potential based on changes to King Street and consider traffic calming measures on adjacent streets to discourage traffic infiltration into adjacent neighbourhoods;

4. Follow the Region’s Corridor Design Guidelines and incorporate design elements recommended as part of the Neighbourhood Connector – Main Street classification;

5. Recognize the Region’s Active Transportation Master Plan (ATMP) designation for King Street as a designated cycling route (“Constrained Corridor”) and the desire to provide a comfortable space for cyclists where possible;

6. Maintain an acceptable traffic level of service at intersections and provide dedicated left turn lanes where warranted;

7. Focus on enhanced pedestrian/cycling crossing safety features on King Street at the Bridgeport Street and Erb Street signalized intersections;

8. Integrate dedicated taxi pick-up/drop-off areas where possible at convenient and accessible locations throughout King Street;

9. Recognize the potential for on-street double parking and the need for service vehicles to conduct pick-ups and deliveries for businesses; and

10. Identify the importance of maintaining transit service and traffic flow,
especially at key intersections. Consider requirements for transit including safe bus stops and integrated routes.

4.2 Public Consultation Centre (PCC) No.2 - December 2, 2010

The second PCC for this project was held on December 2, 2010 at the City of Waterloo’s Council Chambers. The event was well attended with one hundred and nineteen (119) people providing contact information on the sign-in sheet. The display information included further information on the vision and guiding principles for the project, as well as the preliminary cross-section alternatives being considered by the Project Team for King Street between Erb Street and Central Street. These alternatives included:

- Alternative 1A: 4 Lane existing (i.e. “Do-Nothing”);
- Alternative 1B: 4 Lane with standard widths and on-street parking;
- Alternative 2: 3 Lanes with on-street parking;
- Alternative 3: 2 lanes with on-street parking; and
- Alternative 4: 2 Lanes with on-road cycling lanes/on-street parking.

4.3 Public Consultation Centre (PCC) No. 3 – November 13, 2013.

Planning work for King Street was put on hold in 2011 until the route of the Region’s ION project was determined and approved by Regional Council. The King Street project was re-initiated in 2013 following approval of the ION routing. This project’s scope was expanded at that time to include a review of the section of King Street south from Erb Street to the newly approved ION track crossing. In addition, the project limits were extended north to University Avenue to ensure a coordinated planning approach for the entire 1.3 km section of King Street from the ION project limits south of Erb Street, northerly up to University Avenue.

The primary intent of PCC No. 3 was to present the Project Team’s preferred cross-sections and conceptual plans (Erb Street to Central Street) for public feedback, and also to present the preferred cross-section and plans for the other sections of King Street, from Erb Street south to the ION tracks and from Central Street to University Avenue.

The meeting was held in the Hauser House at the Waterloo Memorial Recreation Centre and was well attended with one hundred and thirty-two (132) providing contact information on the sign-in sheet. Public comments from this PCC are provided in Appendix “C” and suggest that the priority of most attendees was on the type of cycling facilities being included in the preferred design alternatives. The Project Team’s preferred design at PCC No. 3 had included 1.25m on-road bike lanes. Concerns were raised regarding the narrow width of these 1.25m on-road
June 16, 2015.

bike lanes and potential conflicts with parked vehicles. Numerous responses were submitted at the PCC, and approximately one thousand and forty (1,040) names have been received to date from an on-line petition requesting changes to the proposed design alternatives. This feedback indicated a lack of support for the proposed on-road bike lanes in this type of environment and asked that the Project Team consider other alternatives to separate cyclists from traffic.

The main concern noted was that narrow bike lanes are not safe or comfortable for cyclists on a busy street in such close proximity to the adjacent traffic and parked vehicles. Many responders commented that if bike lanes on King Street are not safe and comfortable for users, they simply would not be used. In response, the Project Team has explored alternate cycling options to increase ridership and encourage all types of cyclists. Alternatives considered included wider bike lanes along each side of King Street, either on-road with a painted buffer or separated from traffic by parked cars and/or roll-over curbs.

Through this evaluation, the Project Team determined that a supplementary cycling design alternative was required and should be presented back to the public for further feedback on the associated impacts. Of all the alternatives considered, the option of two travel lanes with segregated bike lanes and parking on only one side of the street yielded the most opportunity to attract new cyclists and maintain sufficient space for sidewalks. A modified alternative was therefore developed by the Project Team and presented at PCC No. 4 for public feedback.

4.4 Public Consultation Centre (PCC) No. 4 – May 29, 2014.

PCC No. 4 for this project was held at the City of Waterloo City Hall, Atrium, 100 Regina Street South, Waterloo on Thursday, May 29, 2014.

Appendix “B” shows the new Design Concept presented at PCC No. 4 which includes segregated bike lanes and parking on only one side of the street. Seventy-eight (78) members of the public attended PCC No. 4 and provided contact information on the sign-in sheet. Seventy-four (74) comments supported the new Design Concept with parking removed on the west side of the street in Uptown Waterloo and segregated bike lanes between Erb Street and University Avenue. In opposition though, negative feedback was received in some of the public comments regarding the plans presented south of Erb Street and the lack of a cycling connection to access the new Waterloo Public Square ION station and the Waterloo Spur Trail.

The concept plans presented at the PCC No.4 excluded cycling facilities between Erb Street and the ION tracks at the Public Square. At that time, the Project Team felt that cycling facilities and on-street parking could not be justified because bike lanes are not planned south on King Street adjacent to the ION project, and that broader network connections would be provided as part of future improvements on
Erb Street. Based on public response at and following PCC No.4, the Project Team explored options to include cycling facilities south of Erb Street to the ION tracks.

The section of King Street south of Erb Street was originally approved under the EA completed for the ION project. The ION project EA did not include any provision for cycling lanes due to space limitations. In addition, parking commitments were made to the City and BIA which required parking to be retained on both sides of King Street south of Erb Street to maximize on-street Uptown parking opportunities.

Based on the requirement to maintain parking on both sides south of Erb Street, the Project Team determined there was no opportunity to provide segregated cycling lanes because of the limited width available. Accordingly, on-road cycling lanes are being proposed in this short section from Erb Street south to the ION tracks, which provides a cycling connection to the new ION station and to the new Waterloo Spur multi-use trail. Staff will continue to work with City and BIA staff during the detailed design phase to determine if parking spaces could be removed on the west side which would allow for segregated bike lanes through this section of King Street.

5.0 Main Public Issues and Project Team Responses

Presentation of the various design alternatives to Uptown stakeholders and the general public has generated a number of questions and concerns about preferred changes to King Street from the ION Tracks to University Avenue. The Project Team’s response to some of the main issues and concerns raised by the public through the public consultation process on this project are as follows:

a) Concern with the Loss of Parking in Uptown Waterloo

Presently, there are 3,995 parking spaces located within the Uptown Waterloo BIA area. Of this, 2,433 or 60.9% are private off-street spaces, 1,308 or 32.7% are public off-street spaces provided in surface lots and garages managed by the City, and there are 254 or 6.4% on-street spaces. North of Erb Street, the Recommended Design Alternative requires removal of twenty-two (22) of the existing on-street spaces on the west side of King Street. This amount of parking represents 1.4% of the total public parking supply in the BIA area. The elimination of the parking on the west side is necessary to provide sufficient space to accommodate the wider sidewalks and segregated bike lanes separated from traffic. City staff is exploring opportunities to add more parking on streets adjacent to King Street and to increase the supply of off-street parking spaces as part of redevelopment projects in Uptown Waterloo.

South of Erb Street, parking is to be retained on both sides of King Street to satisfy commitments as part of the ION project for Uptown parking. In this area, five (5) spaces require removal to accommodate a GRT bus lay-by for two buses. In addition, if segregated bike lanes are included south of Erb Street, an additional six
(6) spaces would be removed on the west side of King Street.

b) Concern with Road Capacity and Potential Traffic Diversion Into Neighborhoods

Changes to transportation conditions were one of the primary issues considered as part of the lane configuration and traffic assessment for Uptown Waterloo. A comprehensive traffic analysis and forecast confirmed that King Street is currently operating under capacity, at approximately sixteen thousand (16,000) vehicles per day (Average Annual Daily Traffic - AADT) and would continue to operate effectively under a reduced lane configuration over the next 20 years. This conclusion is based on: the Region’s growth forecasts; road capacity improvements on alternative travel routes (i.e. Weber Street); the addition of dedicated left turn lanes on King Street; and the growing trend in transit ridership or alternative modes of transportation. Transit use is relatively high along the King Street corridor with approximately 33% of person trips in the Uptown made by transit in the PM peak period.

It is anticipated that reducing the number of travel lanes will encourage some motorists to find alternative routes around Uptown Waterloo. A subsequent travel pattern survey indicates that approximately 33% of auto-trips on King Street south of Central Street are destined to Uptown Waterloo for business or work based trips. These type of trips are considered destination oriented and are expected to remain in the core although motorists may consider alternate routes adjacent to King Street, particularly Regina Street, Albert Street or Bridgeport Road. Secondly, the survey concluded that the other 66% of King Street traffic is through traffic and are not destined for Uptown Waterloo. It is important to note that 85% of businesses in Uptown Waterloo attract destination-based customers who are not considered impulse-buying customers who might stop while passing through the core.

c) Preference for Segregated (vs. on-road) Bike Lanes

Following the public comments received, the Project Team has evaluated a number of cycling facility alternatives to meet the needs of the community, increase ridership and encourage all types of cyclists. Some of the alternatives considered during the evaluation process include, conventional on-road bike lanes in constrained lane configurations; wider bike lanes with sidewalk widths reduced on each side of King Street; on-road bike lanes with a 0.5-0.7m painted buffer; and off-road segregated bike lanes separated from traffic by parked cars and/or roll-over curbs. One of the primary safety concerns considered during this evaluation was the interaction between cyclists and motorists entering or exiting parked vehicles. It was concluded by the Project Team that an additional 0.5m-1.0m was required adjacent to the bike lane in order to provide safe separation for each mode of transportation.
The cycling facility best suited to meet these requirements on King Street between Erb Street and University Avenue is segregated bike lanes on both sides of the street, separated from traffic by a 0.7 metre wide roll-over curb on the west side and parking with a roll-over curb on the east side. This segregated bike lane design alternative was presented to the Region’s Active Transportation Advisory Committee (ATAC) and was fully endorsed given the context of the King Street corridor and objectives of the Project Team.

For this project, the capital cost of installing segregated bike lanes would be comparable to on-road bike lanes. On other projects like the recently approved Manitou Drive Improvements project, the cost of segregated bike lanes is more expensive than on-road bike lanes primarily because of the additional curb included behind the segregated bike lane (approximately $115,000 more per km of road, compared to on-road cycling lanes). In Uptown Waterloo however, the Project Team felt that an additional curb would present more of a hazard and is not necessary or desirable due to the slower speeds and the presence of parked cars and pedestrians. In addition, the location of the segregated bike lane in Uptown Waterloo is behind the parking spaces and behind the bus stops and therefore does not require a design to support bus loading.

For information, on a typical project the unit cost used for budgeting purposes of on-road cycling lanes is estimated to be $600,000 per km of road. The $115,000 per km extra cost for segregated cycling lanes on the Manitou Drive project equates to a 19% premium compared to conventional on-road cycling lanes.

It is recognized that segregated bike lanes will require additional maintenance funding for snow clearing and sweeping. Conventional on-road bike lanes can be cleared/cleaned with the same equipment and in the same operation as the roadway. The annual cost for on-road bike lane maintenance averages approximately $5,000 per km of road, which would equate to $6,500 annually for this 1.3km section of King Street. Segregated lanes would require a separate operation after the initial roadway clearing. The frequency of snow removal in Uptown Waterloo would also likely be greater than on other bike lanes in the Region due to the nature and use of the corridor.

It is noted that the proposed reduction in travel lanes from 4 to 2 on this section of King Street would result in a decrease in maintenance costs payable to the City for summer and winter maintenance. The annual payment for road maintenance for this 1.3km length of King Street will be reduced from approximately $31,000 to $15,500, which would help offset the extra cost to maintain segregated bike lanes.

d) **Concern with Lack of Space for Emergency Vehicles and Deliveries**

The need for timely emergency response along King Street in Uptown Waterloo has been discussed with Waterloo Fire Rescue and renderings have been developed to
show space for emergency vehicles along the centre of the road. In an emergency scenario, motorists are required to stop, pull over to the side of the road and allow passage of an ambulance, police car or fire truck. The Recommended Design Alternative meets these requirements by providing sufficient lane widths to accommodate three (3) vehicles to pass side by side if necessary. The total width of the pavement is 7.6m and total available driving space is 8.4m including the gutter portion of concrete curbs. (Please refer to Appendix "B" for an illustration of the cross-section dimensions). The same philosophy applies for the movement of motorists around a stopped delivery truck or disabled vehicle on King Street.

e) Desire for Improved Accessibility and Pedestrian Mobility

The Recommended Design Alternative improves accessibility on King Street by increasing the width of the sidewalks and providing additional space for pedestrians, wheelchairs and people with mobility or visual impairments. The reconstruction of the road and sidewalk will create opportunities for the Project Team to elevate the surface, improve sidewalk sloping and remove steps into some businesses. If barrier-free access cannot be provided through the design of King Street, then wider sidewalks will provide business owners with the opportunity to consider wheelchair access ramps to entrances as part of the building permit process. Additionally, the reduced traffic lanes and narrowing of the street will provide shorter crossing distances, improved crosswalks and upgraded ramps with detectable warning plates at all intersections.

6.0 Recommended Design Alternative

Based on a review of all of the comments received during public consultation and based on the technical information gathered during the preliminary design phase of the project, the Project Team conducted a thorough evaluation of the various design alternatives for this project. The evaluation process was based on criteria developed for the following areas of the design: Social Environment/Transportation; Social Environment/Streetscape; Natural Environment; Economic Environment; and Physical Environment.

Following this evaluation process, the Project Team has developed the Recommended Design Alternative for King Street as follows:

King Street, Erb Street to Central Street:

- One 3.8m travel lane in each direction (wider lanes to provide additional space for emergency service vehicles and stopped delivery vehicles);
- 3.0m left turn lanes at Erb Street, Bridgeport Road, Spring Street and Central Street;
- 2.0m on-street parking stalls on the east side of the street;
- 1.8m segregated bike lane with green asphalt surface on both sides of the street;
- 0.7m mountable roll-over curb;
- 4.0m sidewalk and amenity space with new street tree planting/landscaping;
- Accessibility ramps at some building entrances; and
- Opportunities to convert parking spaces into dedicated loading/unloading zones (to be considered further with BIA during detailed design).

King Street, Central Street to University Avenue:
- One 3.25m travel lane in each direction;
- 3.0m centre left turn lanes at side streets;
- Raised islands with landscaping and/or pedestrian refuge;
- 1.8m segregated bike lane with green asphalt surface on both sides of the street;
- 0.7m mountable roll-over curb;
- 2.4m sidewalk on the west side and 2.0m sidewalk on the east side of the street; and
- Adjustments to the eastbound right turn lane on University Avenue to include a new channelized right turn lane with pedestrian refuge island.

King Street, ION tracks to Erb Street:
- One 3.35m travel lane in each direction;
- One 3.25m transit lay-by on the east side of the street to accommodate two buses;
- 2.0m on-street parking stalls on both sides** of the street (parking on both sides required to satisfy commitments to the BIA and City for Uptown parking as part of the ION project); and
- 1.5m on-road** bike lanes on both sides of the street.

** Staff will continue to work with City and BIA staff during the detailed design phase to determine if parking spaces could be removed on the west side which would allow for segregated bike lanes through this section of King Street.

Please refer to Appendix “B” for cross-sections of the Recommended Design.
Alternative.

Property acquisitions are required from adjacent property owners as part of this project to accommodate transit stop upgrades at the Bridgeport Road intersection and sidewalk improvements on the west side of King Street between Central Street and Ezra Street. In addition, the existing sidewalk currently encroaches onto private property at several locations along King Street between Erb Street and Central Street. Narrow strips of road allowance widening will be acquired in these areas to formalize the road right-of-way and eliminate these sidewalk encroachments onto private property.

The existing trees between Erb Street and Central Street that are located in raised concrete planter beds will require removal to accommodate the Recommended Design Alternative. As shown on the typical cross-sections in Appendix “B”, there is a proposed one metre wide “amenity space” included on both sides of King Street in this area which will contain new street trees, benches, bike racks and landscape planters. North of Central Street, a similar amenity space is available on the west side which will include new landscape plantings.

7.0 Project Cost

The Project Team has estimated the total engineering and construction costs based on the Recommended Design Alternative. The total project costs are estimated as follows:

Region of Waterloo (road reconstruction, roadway lighting upgrades, share of storm sewers, cycling lanes, traffic signal modifications, landscaping)  $ 6,610,000

City of Waterloo (streetscaping, sidewalks, decorative lighting and sanitary sewer/watermain between Erb Street and Central Street)  $ 3,620,000

Uptown Waterloo BIA (share of decorative lighting)  $ 250,000

**Total Estimated Cost**  $10,480,000

The City of Waterloo will also be contributing funding for any other sanitary sewer and watermain repairs/improvements that may be completed north of Central Street as part of this project, to be confirmed in advance of the City’s 2016 capital budget process. Additionally, Wilfred Laurier University (WLU) representatives have expressed an interest in contributing financially towards possible enhancements within the corridor in the vicinity of WLU, which will be finalized during the detailed design phase. These would all be subject to Region of Waterloo permit approvals and could include improvements such as enhanced landscaping, pedestrian-level decorative streetlights and a pedestrian plaza with seating areas in the south-west corner of the University Avenue intersection.
8.0 City of Waterloo Council Approval

At its May 25, 2015 Council meeting, the City of Waterloo approved the City’s streetscape improvements and the proposed new cross-sections on King Street between Erb Street and Central Street. Since King Street is a Regional road, final approval of the improvements on King Street for this joint project is through Regional Council. At this time, staff is recommending that Regional Council approve the Recommended Design Alternative as outlined in this report for King Street improvements from the ION Tracks south of Erb Street, to University Avenue. The recommendations in this report for the section between Erb Street and Central Street are the same as those that were endorsed by City Council on May 25th. A copy of the staff report and the draft minutes from the City’s May 25, 2015 Council meeting is attached in Appendix “E”.

9.0 Construction Timing

Construction of this project is scheduled to start in 2017 following completion of the ION construction in Uptown Waterloo. Depending on confirmation of the scope of the City’s underground repairs/replacements and other utility work to be included in the project, it could require up to three years to construct the work of this project. The Project Team has agreed to consult with BIA representatives in the near future to discuss construction timing as there may be merit in waiting until late 2017 or later to start construction, in order to provide the Uptown businesses with a construction-free period following ION completion.

It is currently proposed that the work of this project would proceed in the following four stages:

- Stage 1: ION Tracks to Bridgeport Road**;
- Stage 2: Bridgeport Road to Central Street;
- Stage 3: Central Street to Marshall Street; and
- Stage 4: Marshall Street to University Avenue.

** A portion of the work from the ION Tracks to Erb Street may be completed with the ION construction in 2016.

Staff feel that one-way traffic can be maintained in the southbound direction at all times during construction, with some closures required for short-term durations. Regional staff would endeavor to keep these closures to a minimum and require the contractor to work outside of normal business hours for specific types of operations, for example water service disruptions or sidewalk replacement. Temporary pedestrian access will be provided at all times during construction for business customers, staff and deliveries.
The impact on business deliveries and customer access during construction will be discussed during the detailed design stage, including further consultation with businesses, property owners and area residents. Stakeholders will have an opportunity to provide input through the design process in response to regular e-mail updates, newsletters, information provided by the BIA, one-on-one meetings and website updates.

10.0 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 Alternative, 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 thirty (30) day review period. This filing will be advertised by means of mail-outs and notices posted in the local newspaper.

If there are no significant unresolved objections following the thirty (30) day review period, the project will be considered approved in accordance with the Ontario Environmental Assessment Act (OEAA) and will proceed with detailed design in 2015/2016 and construction starting as early as 2017.

Corporate Strategic Plan:

The Recommended Design Alternative proposed for King Street from south of Erb Street to University Avenue supports the Region’s Corporate Strategic Plan in the following Focus Areas, Strategic Objectives and Actions:

Focus Area 2.0 - Growth Management and Prosperity: Manage growth to foster thriving and productive urban and rural communities.

Strategic Objective/Action:

2.2 Develop, optimize and maintain infrastructure to meet current and projected needs.

2.2.1 Continue to prioritize and implement capital program projects required to meet community needs and ensure sustainability.

Focus Area 3.0 - Sustainable Transportation: Develop greater, more sustainable and safe transportation choices.

Strategic Objective/Action:

3.2 Develop, promote and integrate active forms of transportation (cycling and walking).
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.

Financial Implications:

The Region’s 2015 Ten-year Transportation Capital Program includes funding in 2015-2018 of $6,655,000 for improvements on King Street from south of Erb Street to University Avenue, to be funded from the Roads Rehabilitation Capital Reserve Fund.

Other Department Consultations/Concurrence:

The Planning, Development & Legislative Services Department has been consulted in the course of preparing this report.

Attachments

Appendix A  Key Plan
Appendix B  Recommended Design Alternative
Appendix C  Minutes of BIA Forum and Feedback from Public Consultation Centre No. 3
Appendix D  Cycling Petition Comments and Feedback from Public Consultation Centre No. 4

Prepared By:  Eric Saunderson, Project Manager, Design & Construction Division
Approved By:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix A

Key Plan
Appendix B

Recommended Design Alternative (King Street, Erb Street to Central Street)
Appendix B

Recommended Design Alternative (King Street, Central Street to University Avenue)
Appendix B

Recommended Design Alternative (King Street, ION Tracks to Erb Street)
Appendix C

Minutes of BIA Forum and Feedback from Public Consultation Centre No. 3

A hardcopy of this appendix is available for viewing in the Regional Council Office Library and in the Regional Clerk’s Office.

When this report is published to the Region’s website, the full appendix will be included.
Appendix D

Cycling Petition Comments and Feedback from Public Consultation Centre No. 4

A hardcopy of this appendix is available for viewing in the Regional Council Office Library and in the Regional Clerk’s Office.

When this report is published to the Region’s website, the full appendix will be included.
Appendix E

Draft Minutes of Meeting, City of Waterloo Council,

Council Follow Up – King Street Streetscape Improvement Project Environmental Assessment – Erb Street to Central Street. (Barb Magee Turner & Phil Hewitson)

Section 12f) of Draft Minutes of May 25, 2015 – Council Meeting

f) Title: King Street Streetscape Improvement Project Environmental Assessment – Erb Street to Central Street

Report No.: IPPW2015-001

Prepared By: Barb Magee Turner & Phil Hewitson

Phil Hewitson, Manager, Active Transportation and LRT reviewed the report and responded to questions from Council.

Don Drakley, IBI Group explained that the proposed King Street Streetscape improvement design will provide a more accessible, safe, inclusive and lively place to work, live, shop, learn and play. Mr. Drakley advised that there will be pedestrian sidewalk and protected bike lanes on either side of the road, single sided on-street parking and single lane vehicular traffic going both directions and provided an overview of the next steps in the process. Mr. Drakley responded to questions from Council.

Graham Whiting, Chair, EA Taskforce & Business Improving Area (BIA) Member spoke mostly in favour of the streetscape design, however had a few concerns with regards to the effects on small businesses in the UpTown with the amount construction on King Street; Light Rail Transit followed by this streetscape construction and suggested these projects be coordinated to provide minimal disruption to the UpTown businesses.

Mike Boos, Tri-Cities Transport Action Group spoke in favour of the recommendations.

Chris D. Klein, Region of Waterloo’s Active Transportation Advisory Committee spoke in favour and requested Council to vote in support of the recommendations.

Patti Brooks, Executive Director, UpTown Waterloo Business Improvement Area (BIA) advised that the Business Improvement Area Board of Management supports the recommendations outlined in the report.

Graham Roe, Cofounder, WaterlooBikes.ca spoke in support of the recommendations and the protected bike lanes which will promote an encouraging, learning and positive experience for all transportation modes.

Anne Crowe, Chair, Waterloo Advisory Committee on Active Transportation requested that Council vote in favour of the recommendations and looks forward to biking on King Street once construction is complete.

Peter Dedes, Chair, Cycling & Trails Advisory Committee for the City of Kitchener spoke in support of the recommendations and encouraged the City of Waterloo to work with sister-cities in hopes for continuous infrastructure improvements like this.
Council Follow Up – King Street Streetscape Improvement Project Environmental Assessment – Erb Street to Central Street. (Barb Magee Turner & Phil Hewitson)

Moved by Councillor Durrell, seconded by Councillor Vieth:


2. That Council receive the Environmental Study Report (ESR) completed for the City & the Regional Municipality of Waterloo by IBI Group dated May 6, 2015.

3. That Council endorse the recommended King Street Streetscape Improvement design option outlined in staff report IPPW 2015-001 for King Street from Erb Street to Central Street and request that the Region of Waterloo approve this recommended streetscape design option for King Street between Erb Street and Central Street at a future Region of Waterloo Council meeting.

4. That Council request that staff file a Notice of Completion for the King Street Streetscape Improvement project Environmental Assessment (EA) between Erb Street and Central Street, in accordance with requirements of the Schedule C Municipal Class EA protocol, by means of advertisements in local newspapers, mailing to stakeholders, and placing the ESR on public record for a review period of 30 days, following Regional Council approval.

5. That Council approve the municipal cost sharing arrangement (City share 60% Regional share 40% based on ownership of the infrastructure impacted) for the design and construction components of this project and request that Council support in principle the estimated contributions by the Region for their share of underground infrastructure and surface works as per Table 2. These costs are based on preliminary estimates for the recommended concept.

6. That Council authorize City staff to initiate the detailed design process once the 30-day EA appeal period is completed.

7. That Council direct staff to return to Council prior to tender award if the project estimate is beyond the current funding approved in the Capital Budget for the City’s share of the project. Tender to be awarded by Region of Waterloo in consultation with City staff.

8. That the City’s capital funding for the King Street Streetscape Improvement project in the amount of $1,734,000 funded $204,000 from CIRRF, $256,000 funded from Sanitary Sewer Utility Reserve, $307,000 from Water Utility Reserve, $202,000 from Stormwater Utility Reserve, $765,000 from Uptown Development Reserve be approved as per the 2015 Approved Capital Budget ref #783.
Council Follow Up – King Street Streetscape Improvement Project Environmental Assessment – Erb Street to Central Street. (Barb Magee Turner & Phil Hewitson)

9. That Council recognize staff will review the 2016 Capital Budget allocations for this project during the 2016 budget process to address any other funding requirements.

10. That Council direct staff to continue to work with the BIA through the design and construction phases of the project to provide for business continuity in the Uptown.

11. That Council recognize the valuable work of the Citizen Task Force established for the King Street Streetscape Improvement Project and thank all members for their efforts.

12. That Council endorse in principle the Region of Waterloo’s proposed streetscape plan for King Street from Central to University Avenue as outlined in staff report IPPW 2015-001 and authorize staff to continue to work with the Region of Waterloo to finalize the design and construction for 2018/19.

Carried Unanimously
Region of Waterloo
Planning, Development and Legislative Services
Community Planning

To: Chair Tom Galloway and Members of the Planning and Works Committee
Date: June 16, 2015
File Code: D18-01

Recommendation:

Summary:
In accordance with the Regional By-law 01-023, as amended, the Commissioner of Planning, Development and Legislative Services has:

- Accepted the following plan of condominium;
- Draft approved the following plan of subdivision;
- Modified the following plan of subdivision and plan of condominium;
- Released for registration the following plans of subdivision and plans of condominium.

Report:

City of Cambridge
Modification of Draft Plan of Subdivision 30T-07103
Draft Approval Date: OMB Draft Approved October 24, 2012
Applicant: Brookpoint Estates Inc.
Modification of Draft Plan of Subdivision 30T-07103

Location: Limerick Road and Linden Drive
Proposal: To allow minor adjustments to the unit ranges within the draft plan, as well as minor changes to the conditions of draft approval.

Regional Processing Fee: Paid March 4, 2015
Commissioner’s Approval: May 15, 2015
Came Into Effect: Immediately

Registration of Draft Plan of Subdivision 30T-07103

Draft Approval Date: OMB Draft Approved October 24, 2010
Phase: Entire Plan
Applicant: Brookpoint Estates Inc.
Location: Limerick Road and Linden Drive
Proposal: To permit the development of 290 single detached residential units and 388-457 multiple residential units.

Regional Processing Fee: Paid May 25, 2015
Commissioner’s Release: May 28, 2015

City of Kitchener

Registration of Draft Plan of Subdivision 30T-94009

Draft Approval Date: February 3, 1997
Phase: Stage 12
Applicant: Deer Ridge Heights
Location: Pioneer Tower Road
Proposal: To permit the development of 42 single detached residential units.

Regional Processing Fee: Paid February 25, 2015
Commissioner’s Release: May 12, 2015
Registration of Draft Plan of Subdivision 30T-07204

Draft Approval Date: April 9, 2009
Phase: Stage 1
Applicant: Monarch Development Corporation
Location: New Dundee Road
Proposal: To permit the development of 29 single detached residential units.

Regional Processing Fee: Paid April 13, 2015
Commissioner’s Release: May 15, 2015

Registration of Draft Plan of Condominium 30CDM-14203

Draft Approval Date: December 15, 2014
Phase: Entire Plan
Location: 1 Adam Street
Proposal: To permit this common element plan of condominium comprised of four private roads, amenity area, landscaped areas, garbage enclosures and visitor parking spaces.

Regional Processing Fee: Paid March 3, 2015
Commissioner’s Release: May 25, 2015

City of Waterloo

Modification of Draft Plan of Condominium 30CDM-14401

Draft Approval Date: December 9, 2014
Applicant: Spring Village Inc.
Location: 261 Lester Street
Proposal: To permit a reduction in parking that was needed to facilitate the conversion of interior space to a model suite to office space and to address sign maintenance.
Modification of Draft Plan of Condominium 30CDM-14401

relative to parking.

Regional Processing Fee: Paid April 13, 2015
Commissioner’s Approval: May 12, 2015
Came Into Effect: Immediately

Registration of Draft Plan of Condominium 30CDM-13406

Draft Approval Date: November 14, 2014
Phase: Entire Plan
Applicant: 144 Park Ltd.
Location: 144 Park Street
Proposal: To permit the development of 148 residential apartment units, 1 guest unit and 1 Roof Top Terrace unit.

Regional Processing Fee: May 6, 2015
Commissioner’s Release: May 19, 2015

Township of Wellesley

Draft Approval of Plan of Subdivision 30T-14501

Applicant: WM J Gies Construction Limited
Location: Gerber Road and Greenwood Hill Road
Proposal: To permit the development of 10 single detached residential units and 12 semi-detached residential units.

Regional Processing Fee: Paid March 24, 2015
Commissioner’s Approval: May 6, 2015
Came Into Effect: May 27, 2015

Township of Wilmot

Plan of Condominium Application 30CDM-15601

Date Accepted: May 1, 2015
Applicant: Bill and Freda Klassen
Plan of Condominium Application 30CDM-15601

Location: 61 Greenhouse Drive, New Hamburg
Proposal: To permit the development of 3 residential townhouse condominium units.
Regional Processing Fee: Paid April 24, 2015

Area Municipal Consultation/Coordination:

These planning approvals and releases, including consultations with Area Municipalities, have been completed in accordance with the Planning Act. All approvals included 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 of Focus Area A: Growth Management and Prosperity.

Financial Implications:

Nil.

Other Department Consultations/Concurrence:

Nil.

Prepared By: Andrea Banks, Program Assistant

Approved By: Rob Horne, Commissioner, Planning, Development and Legislative Services
Fischer-Hallman Road Improvements City of Kitchener

Information Package

What: Reconstruction and Widening of Fischer-Hallman Road to four (4) lanes

Where: From Bleams Road to Plains Road

Why: To Repair Pavement, Provide Additional Traffic Capacity and Provide Enhancements for Cyclists and Pedestrians

When: Construction in 2019 and 2020

Who: Region of Waterloo Project Manager
Mr. Delton Zehr, C.E.T., C.R.S.
Phone: (519) 575-4757 ext. 3637
DZehr@regionofwaterloo.ca

We Want Your Input!

There is a Comment Sheet at the back of this package. Please fill it out and share your comments with us.

Public Consultation Centre No. 1
Wednesday, June 17th, 2015 from 4:30 p.m. to 7:30 p.m.
Kitchener Portuguese Club Inc.,
1548 Fischer-Hallman Road, Kitchener, ON
1. Why is the Region of Waterloo considering this project?

The Region of Waterloo is currently undertaking a planning study to consider proposed improvements to Fischer-Hallman Road from Bleams Road to Plains Road. Please refer to the Key Plan on the backside of the cover page of this Information Package for a drawing of the study area.

These proposed improvements are intended to address future transportation and servicing needs along the Fischer-Hallman Road corridor, including enhanced facilities for pedestrians and cyclists.

Fischer-Hallman Road runs through the middle of the Rosenberg Secondary Planning Area. The Rosenberg Secondary Plan, adopted by Kitchener Council in August 2011, designates lands in Southwest Kitchener for a variety of uses and establishes a high level vision for the Fischer-Hallman Road corridor. Development lands adjacent to Fischer-Hallman Road south of Bleams Road have been planned to achieve high residential and employment densities. As part of the Rosenberg Secondary Plan, the City of Kitchener has prepared a set of urban design guidelines for the mixed-use corridor planned along Fischer-Hallman Road between Bleams Road and south of Huron Road including recommendations that emphasize the importance of designing for pedestrians, cyclists and transit users.

The 2010 Regional Transportation Master Plan identifies the need to widen Fischer-Hallman Road from Bleams Road to Plains Road in the 5-10 year time horizon. Also, Fischer-Hallman Road from Bleams Road to Plains Road is designated as a “controlled access” road that is constructed with raised centre medians to restrict access to right-in right-out movements only, other than at intersections with a roundabout or traffic control signals.

The Region’s Active Transportation Master Plan identifies this section of Fischer-Hallman Road as a candidate for a multi-use trail or another form of pedestrian and cycling facility segregated from traffic on each side of Fischer-Hallman Road.

2. Who is directing this project?

This Project is being directed by a Project Team consisting of Region of Waterloo staff, City of Kitchener staff, Region of Waterloo Councillor Tom Galloway and City of Kitchener Councillor Kelly Galloway-Sealock. The Region has retained the consulting engineering firm Associated Engineering to assist with the planning, design and contract administration of this project.
3. **How is this project being planned?**

Under Ontario’s Environmental Assessment Act, routine infrastructure projects are planned in accordance with the Municipal Class Environmental Assessment (Class EA) process. Please refer to Appendix “A” for more information about the Class EA process.

The widening of Fischer-Hallman Road from Bleams Road to Plains Road is being undertaken as a Schedule “C” Class EA Study.

The Regional Transportation Master Plan has fulfilled Phase 1 and Phase 2 of this Class EA Study and has identified road widening as the preferred overall solution for Fischer-Hallman Road from Bleams Road to Plains Road.

The Project Team is now completing Phase 3 and Phase 4 of this Class EA Schedule “C” Study by considering specific design alternatives for the widening of Fischer-Hallman Road from Bleams Road to Plains Road.

4. **What is the purpose of this Public Consultation Centre?**

The public is invited to this Public Consultation Centre (PCC) to:

- Review the design alternatives that have been developed by the Project Team for Fischer-Hallman Road from Bleams Road to Plains Road;
- Learn how these design alternatives are being evaluated by the Project Team;
- Review the preferred design alternative identified by the Project Team;
- Review the other improvements planned for Fischer-Hallman Road;
- Ask questions of staff from the Region of Waterloo and City of Kitchener; and
- Provide comments and input regarding the improvements being considered.

Please refer to Section 31 of this Information Package for details on how to obtain additional information about the Regional Master Plans, design guidelines and about this project including electronic versions of the display boards at this PCC.

We ask that you complete the **Comment Sheet** attached to the back of this Information Package and put it in the box at the PCC, or send it to the address indicated on the Comment Sheet. Your comments will be considered along with other information received over the course of the project to assist the Region of Waterloo in completing the planning and design for this project.
5. What improvements are being considered?

As part of the planning process, the Project Team analyzed the future traffic operations on Fischer-Hallman Road based on 2031 forecasted traffic volumes to confirm the transportation needs for this corridor. Based on this analysis, other technical studies and investigations completed, as well as the objectives of the Regional Official Plan, Regional Transportation Master Plan, Regional Transportation Context Sensitive Corridor Design Guidelines, the Region’s Active Transportation Master Plan, the City of Kitchener’s Rosenberg Secondary Plan and the City of Kitchener’s Trails 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 Plains Road:

- Reconstruction and widening of Fischer-Hallman Road to provide two (2) through lanes in each direction from Bleams Road to Plains Road with raised centre median to control access to adjacent properties and curb & gutter on each side of the road;
- Construction of either a roundabout or a signalized intersection at the planned intersection of Fischer-Hallman Road and Rosenberg Way and at the planned intersection of Fischer-Hallman Road and Street 1;
- Construction of enhanced pedestrian and cycling facilities that may include multi-use trails, cycle tracks and/or sidewalks;
- Construction of two pedestrian crossings for connectivity to existing and proposed City of Kitchener trails on the east and west sides of Fischer-Hallman Road;
- Construction of new storm sewers, sanitary sewers and watermains beneath Fischer-Hallman Road;
- Installation of new streetlights; and,
- Planting new trees and landscaping.

For comparison purposes, a “Do-Nothing” alternative is also being considered.

6. Why does Fischer-Hallman Road need to be widened?

The Regional Transportation Master Plan evaluated alternative transportation solutions to address long-term traffic needs in the region to the year 2031 and recommended that Fischer-Hallman Road be widened to four lanes by the year 2021. Additionally, the updated traffic analysis completed in support of this Class EA Study confirmed the need to widen Fischer-Hallman Road from two (2) to four (4) lanes based on projected 2031 traffic volumes.
Recent (2013) and projected 2031 traffic volumes on Fischer-Hallman Road from Bleams Road to Plains Road are summarized below as follows:

<table>
<thead>
<tr>
<th>Road Section</th>
<th>2013 AADT</th>
<th>Projected 2031 AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleams Road to Seabrook Drive</td>
<td>13,500</td>
<td>29,000</td>
</tr>
<tr>
<td>Seabrook Drive to Huron Road</td>
<td>11,500</td>
<td>20,000</td>
</tr>
<tr>
<td>Huron Road to Plains Road</td>
<td>10,000</td>
<td>17,500</td>
</tr>
</tbody>
</table>

7. What design alternatives are being considered for this project?

Based on the relevant technical studies, policies and planning guidelines, the Project Team has developed the following four (4) design alternatives:

- **Design Alternative No. 1**
  - Do Nothing (Baseline “alternative” for comparison)
  - (Retain Existing Roadway Configuration.)

- **Design Alternative No. 2**
  - Reconstruct Road as 4-Lane Urban Roadway with a Raised Centre Median and Construct a 4.0 metre wide Multi-Use Trail on each side of the Road

- **Design Alternative No. 3**
  - Reconstruct Road as 4-Lane Urban Roadway with a Raised Centre Median, and Construct a 1.8 metre wide One-Way On-Road Cycle Track and a 2.1 metre wide Concrete Sidewalk on each side of the Road

- **Design Alternative No. 4**
  - Reconstruct Road as 4-Lane Urban Roadway with a Raised Centre Median, and Construct a 2.0 metre wide One-Way Off-Road Cycle Track and a 2.1 metre wide Concrete Sidewalk on each side of the road

Please refer to Appendix “B” for a drawing of all four (4) design alternatives.

The Project Team is also considering the following additional elements that would be undertaken as part of Design Alternatives 2, 3 and 4.

- **Transit Service**
  - Upgrade and construct new Grand River Transit bus stops.

- **Future Rosenberg Way Intersection**
  - Construct a new roundabout at the intersection of Fischer-Hallman Road and future Rosenberg Way. Please refer to Section 10 of this Information Package for further details.
Future Street 1 Intersection  • Construct a new roundabout at the intersection of Fischer-Hallman Road and future Street 1. Please refer to Section 10 of this Information Package for further details.

Storm Drainage  • Convert the roadway drainage system from roadside ditches to storm sewers.

Municipal Services & Utilities  • Expand existing sanitary services to support adjacent future development lands. Please refer to Section 20 of this Information Package for details.

Other  • Provide new boulevard landscaping, new streetlighting and pedestrian crossings through the raised centre median.

8. How are the design alternatives being evaluated?

In accordance with the requirements of the Municipal Class EA for Schedule “C” projects, the Project Team developed a set of criteria for evaluating the design alternatives according to their impacts (positive or negative) on the Natural, Social/Cultural, Transportation and Technical Environments, as well as capital costs. For each of these categories, the Project Team established specific criteria for evaluation. The Project Team has preliminarily evaluated the design alternatives using the above criteria, and will incorporate input from the public and technical agencies into the evaluation process. For each design alternative, these criteria are scored using a rating of “Aligns”, “Partially Aligns” or “Does Not Align”. Please refer to Appendix “C” for a summary of the Project Team’s evaluation of the design alternatives.

9. Which design alternative is preferred by the project team?

Based on an initial evaluation of the design alternatives and subject to public comment, the Project Team prefers Design Alternative No. 2 (Reconstruct the road as a 4-lane urban roadway with raised centre median and construct a 4.0 metre wide multi-use trail on each side of the road). The Project Team assessed that Design Alternative No. 2 best addresses the future transportation needs for all modes of travel along the Fischer-Hallman Road corridor and fully aligns with the Region’s Active Transportation Master Plan. Additionally, Design Alternative No. 2 is supported by the Region’s Active Transportation Advisory Committee. Design Alternative No. 2 also best aligns with the City of Kitchener’s Rosenberg Secondary Plan, the City of Kitchener’s Trails Master Plan and has environmental impacts that can be mitigated during detailed design and construction.
10. Why are roundabouts preferred at the intersections of Fischer-Hallman Road and future Rosenberg Way and at Fischer-Hallman Road and future Street 1?

Rosenberg Way is a proposed future road, intersecting with Fischer-Hallman Road approximately 500 metres south Bleams Road. This new local road is intended to service proposed residential and commercial developments in the area both east and west of Fischer-Hallman Road.

Street 1 is a proposed future road, intersecting with Fischer-Hallman Road approximately 300 metres south of Huron Road. This new road is intended to service a proposed residential and commercial development area east of Fischer-Hallman Road and act as a primary access to the proposed City of Kitchener multi-sports complex on the west side of the road.

To assess whether traffic control signals or a roundabout is preferred at an intersection, an “Intersection Control Study” is typically completed. An Intersection Control Study compares these two intersection options using the following factors:

- Delays to vehicles;
- Safety for motorists, transit, pedestrians and cyclists;
- Expected collision rates and collision severity;
- Initial construction costs;
- Operational costs (e.g. electricity);
- Long-term maintenance, rehabilitation and reconstruction costs; and
- Collision costs over a 20-year period.

As part of this planning study, an Intersection Control Study was completed for these two intersections using forecasted 2031 traffic volumes to identify the preferred traffic control measures for these intersections.

Based on the recommendations of the Intersection Control Study for each intersection, a roundabout is preferred over traffic control signals at the future intersection of Rosenberg Way and Fischer-Hallman Road and at the future intersection of Street 1 and Fischer-Hallman Road.
11. **How do the improvements being considered relate to the objectives of the Regional Official Plan, Regional Transportation Master Plan, the Active Transportation Master Plan, and the Regional Transportation Context-Sensitive Corridor Design Guidelines?**

The Project Team is planning the road improvements within the project limits to address infrastructure needs on this 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 goals of optimizing our transportation system, promoting transportation choice and supporting sustainable development. This project considers measures to improve transportation operations, and to enhance pedestrian and cycling facilities via new multi-use trails and enhanced boulevard landscaping to improve the pedestrian and cycling environment. Improving the pedestrian and cycling environment is a key objective of the Regional Transportation Master Plan and the Region’s Active Transportation Master Plan. 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.

12. **How will the proposed improvements enhance the pedestrian and cyclist environments for this project?**

Currently, there are no active transportation facilities along this section of the Fischer-Hallman Road project corridor. As part of planned construction in 2016 to widen Fischer-Hallman Road from Ottawa Street to Rockwood Road, the existing on-road cycling lanes and concrete sidewalk will be replaced with 3.0 metre wide boulevard multi-use trails constructed on each side of the road.

Under the Project Team’s Preferred Design Alternative No. 2, multi-use trails would be constructed on each side of Fischer-Hallman Road from Bleams Road to Plains Road. These multi-use trails would provide connectivity to existing and proposed multi-use trails in the area and access to existing and future planned transit stops along Fischer-Hallman Road.
13. **Who will be responsible for winter maintenance of the new sidewalks and/or multi-use trails?**

Under the Project Team’s Preferred Design Alternative No. 2, the City of Kitchener will assume responsibility for clearing snow from the multi-use trails. Under Design Alternative No. 3 and No. 4, the City of Kitchener would be responsible for snow clearing of all concrete sidewalks and the Off-Road One-Way Cycle Track. The responsibility for clearing snow from the On-Road One-Way Cycle Track would be the Region’s.

14. **Will the posted speed limit be changed?**

Following construction, the Region will reduce the current 80 km/h posted speed limit to 60 km/h on Fischer-Hallman Road between Bleams Road and Plains Road.

15. **How will trees, driveways, boulevards and private lawns be affected?**

**Driveways** - Driveways will be re-graded as necessary in order to blend smoothly with the newly constructed roadway.

**Trees** - It is expected that approximately 84 existing larger trees will have to be removed during construction to accommodate the potential improvements. It is the Region’s practice to plant two replacement trees for each tree removed as a result of any road projects. The Project Team proposes replacing any removed trees with large diameter replacement salt tolerant trees (i.e. 75 mm to 80 mm calliper). In addition to replacing any trees removed on a 2-for-1 basis, new boulevard landscaping, including additional salt-tolerant native species trees and/or shrubs, will be included as part of the project where feasible.

**Boulevards and Lawns** - Any grassed areas disturbed during construction will be repaired to equal or better condition with topsoil and seed or sod.

16. **Is any private property required for this project?**

The intent of the design process is to minimize the need to acquire property. The Region’s Official Plan identifies Fischer-Hallman Road from Bleams Road to Plains Road as a 36.576 metre wide right-of-way. The existing right-of-way is only 30.48 metres in some sections. In order to widen Fischer-Hallman Road from Bleams Road to Plains Road, to construct the pedestrian and cycling facilities and to construct the roundabout at Fischer-Hallman Road and future Rosenberg Way and at Fischer-Hallman Road and future Street 1, the Region will need to acquire a number of parcels and strips of property from several abutting property owners.
Please refer to Appendix “D” for a list of these potentially impacted property locations and the tentatively estimated area of property required. The locations where the Region will need to acquire property are shown on the display boards at this PCC.

It is noted that the Region’s Contractor will also need to temporarily enter onto private property in order to undertake construction activities. Additionally, temporary construction easements may be required at some locations to detour traffic around the construction zone.

As the project proceeds, the Region’s Real Estate staff will contact affected property owners to discuss the necessary property acquisitions. It is the Region’s standard practice to negotiate agreements of purchase and sale with the affected property owner, based on an independent appraisal of the land’s fair market value. If agreements cannot be reached in time to meet the project schedule, the Region may acquire the needed lands through Expropriation. For further information, please see the Property Process Information Sheet and Expropriation Information Sheet in Appendix “E”.

### 17. Are noise barriers being considered for this project?

Determination of the need for 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. The "outdoor living area" typically refers to the patio or deck space that exists behind the residence.

In the event that non-barrier alternatives are not sufficient, construction of a noise barrier will be recommended for consideration 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.

Additionally, it is noted that noise control measures are implemented only when the back yard directly abuts the roadway corridor or is in the direct line of sound transmission from the roadway corridor. Accordingly, rear-lotted or side-lotted properties may be considered for noise control measures such as noise barriers or berms, if so warranted by noise levels. Front-lotted properties are not considered for noise control measures because the outdoor living area is shielded from the road by the residence and because openings in the noise barrier or berm required for driveways negates the noise mitigating abilities of the noise barriers or berms.
The Region’s consultant for the Class EA Study retained the specialist firm Novus to complete a noise study in accordance with Ministry of Environment requirements. This noise study took into account the existing and proposed features along Fischer-Hallman Road. The results of the noise study for all rear-lotted and side-lotted properties within the Study Area are summarized as follows:

<table>
<thead>
<tr>
<th>Address</th>
<th>Description</th>
<th>2015 Current Average Daytime Noise Levels (dBA)</th>
<th>2031 Projected Average Daytime Noise Levels (dBA)</th>
<th>Difference (Values over 60 dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1375 Bleams Road</td>
<td>Side-Lotted</td>
<td>48.6</td>
<td>52.0</td>
<td>-</td>
</tr>
<tr>
<td>167 Sophia Crescent</td>
<td>Rear-Lotted (Includes 21 Adjacent Properties)</td>
<td>53.7</td>
<td>56.1</td>
<td>-</td>
</tr>
<tr>
<td>1384 Huron Road</td>
<td>Side-Lotted</td>
<td>39.6</td>
<td>42.0</td>
<td>-</td>
</tr>
<tr>
<td>1970 Fischer-Hallman Road</td>
<td>Side-Lotted – Driveway from Plains Road</td>
<td>48.7</td>
<td>51.2</td>
<td>-</td>
</tr>
<tr>
<td>380 Plains Road</td>
<td>Side-Lotted</td>
<td>51.9</td>
<td>54.3</td>
<td>-</td>
</tr>
</tbody>
</table>

Based on the results of the Noise Study as summarized above, no noise mitigation is warranted for any of the rear-lotted or side-lotted properties.

**18. Will any heritage resources be impacted by this project?**

Heritage resources, including buildings, can be designated or listed under the Ontario Heritage Act. Please refer to Appendix “F” for definitions of the various heritage classifications under the Ontario Heritage Act.

The Project Team has retained a consultant to undertake a Cultural Heritage Assessment to identify and determine the cultural heritage value or interest of all potential Built Heritage and/or Cultural Heritage Landscapes within the project area.

One (1) cultural heritage resource was identified within and/or immediately adjacent to the Fischer-Hallman Road study area. The stone house at 1940 Fischer-Hallman Road known as the “Becker Estate” has been identified by the City of Kitchener to be protected under the Ontario Heritage Act. Construction of the planned Fischer-Hallman Road improvements is not anticipated to adversely impact this house.
The Regional Heritage Planning Advisory Committee and the City of Kitchener Heritage Committee have been circulated detailed project information and will be providing heritage related comments as the project moves through the public consultation and design stages.

19. **How is the natural environment being considered?**

The Region has retained the specialist firm Natural Resource Solutions Inc. to complete an Environmental Impact Study (EIS) which has been scoped based on input from the Grand River Conservation Authority and the Ministry of Natural Resources and Forestry (MNRF). Completion of the EIS involves documenting all natural habitats, individual trees, and wildlife in the study area which may be impacted by the road widening. Work to date has identified the potential for Species at Risk to inhabit areas in close proximity to Fischer-Hallman Road within the Study Area. The Project Team is working closely with the MNRF to ensure potential impacts to Species-at-Risk are adequately mitigated and/or addressed in accordance with the Endangered Species Act. Measures which are being considered include wildlife exclusion fencing, a wildlife eco-passage under the road, and habitat enhancements.

20. **Will there be any new underground municipal services installed?**

In order to provide sanitary sewer services to adjacent development lands south of Bleams Road and north of Williamsburg Cemetery, a new sanitary sewer is required from approximately the future proposed Rosenberg Way roundabout northerly to Bleams Road in order to service the lands north of Bleams Road and south of Rockwood Road. A new storm sewer would be constructed in conjunction with the urbanization of Fischer-Hallman Road to convey storm water collected from Fischer-Hallman Road and a portion of Bleams Road. Additionally, the Region is planning to construct a new trunk watermain that will include a section of watermain under Fischer-Hallman Road from approximately the Hydro One crossing at Fischer-Hallman Road to Street 1 approximately 300 metres south of Huron Road.

21. **How do the Strasburg Creek Drainage Improvements impact this project?**

The City of Kitchener recently completed an Addendum to their Strasburg Creek Flood Control Class Environmental Assessment that now recommends the construction of a new larger culvert to convey stormwater under Fischer-Hallman Road. Additionally, the Addendum recommends providing a new level crossing for pedestrians over Fischer-Hallman Road to connect the future City of Kitchener trail on each side of Fischer-Hallman Road.
22. When will construction occur?

Construction of the Fischer-Hallman Road improvements is currently scheduled to be undertaken in 2019 and 2020 in the Region’s approved 2015 Transportation Capital Program. However, the road widening may be phased to coincide with servicing needs of the adjacent land developments. Final surface course asphalt and landscaping work will be scheduled for 2020 or 2021.

Should development of certain adjacent lands occur in advance of the above-noted timeline, the Region or City of Kitchener may elect to install underground services (water, sanitary sewers, storm sewers and/or the Strasburg Creek culvert) earlier than the currently anticipated 2019/20 timeframe.

The timing of this project is subject to receipt of all technical and financial approvals, acquisition of required property and final approval of Regional Council.

23. How will access to properties be maintained during construction? Will there be detours?

General

Traffic will generally be maintained in both directions during construction. It will be necessary to employ full road closures to through traffic for certain periods to allow for construction of the roundabouts, sanitary sewer and the Strasburg Creek box culvert. In such instances, the duration of full closures will be kept to a minimum and detours will be provided and appropriate signage posted. Local and emergency services traffic will be maintained at all times during construction.

While detailed construction staging plans are still under development, it is anticipated that construction will be completed in stages over the course of two (2) or more years. A detailed construction staging plan will be developed during the detailed design stage of this project and area property owners will be provided with details of the construction timing, staging and traffic management plans well in advance of construction.

Residential and Commercial Driveway Access

Access to residential / commercial driveways will be maintained to the greatest extent possible during construction. The Contractor will be required to temporarily block access to and from driveways and side streets for short-term periods when completing certain construction operations. Where a disruption to a driveway is expected, the Contractor will be required to hand-deliver a notice at least 48 hours in advance advising you of the time and duration of the driveway disruption.
For commercial properties, access for customers will be maintained at all times. If only one driveway access exists to a property, the Contractor will endeavour to complete the work across the driveway in two phases where feasible in order to maintain access.

The Project Team encourages all businesses to contact the Region should they wish to discuss any access needs specific to their business.

During construction, property and business owners are encouraged to contact the Region’s on-site supervisor with any concerns in relation to access, signage or other issues during the project so it can be determined if reasonable changes or modifications can be made.

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

Additionally, signage will be provided to direct patrons of businesses along Fischer-Hallman Road.

24. How will garbage/recyclables be collected during construction?

For residential properties on Fischer-Hallman Road, garbage, green bins, yard waste and blue boxes will continue to be picked up curbside as usual. When work is occurring in front of your property and waste collection vehicles do not have access to your driveway on garbage collection day, the Contractor will deliver your garbage and recyclables to an adjacent side street for collection and return the empty containers afterwards. We will ask that all residents mark their containers with their address for easy identification.

For properties with private garbage collection, driveway access will be maintained during each phase of construction to provide access for private garbage collection.

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 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 City of Kitchener.
26. **What is the estimated cost of this project? How will it be funded?**

Roadworks (including roundabouts, cycle tracks and sidewalks and/or multi-use trails), new Strasburg Creek box culverts under Fischer-Hallman Road will be funded by the Region of Waterloo from the Roads Development Charges Fund in the estimated total amount of approximately $17,095,000.

The Region trunk watermain will be funded by the Region from the Water Development Charges Fund in the estimated total amount of $2,750,000.

The sanitary sewer from Rosenberg Way to Bleams Road and east approximately 100 metres on Bleams Road will be funded by developers under separate agreements.

27. **What are the next steps for this project?**

Prior to selecting a Recommended Design Alternative for Regional Council’s approval, the Project Team is asking for the public’s input on the proposed improvements. The Public Consultation Centre is your opportunity to ask questions, provide suggestions, and make comments. The Project Team will use the comments obtained from the public during this Public Consultation Centre to select the Preferred Design Alternative in conjunction with other technical data.

28. **When will a final decision be made for this project?**

The Project Team will review the public comments received from the Public Consultation Centre and use them as input for identifying a Recommended Design Concept for the Fischer-Hallman Road Improvements project. It is planned to present the Recommended Design Concept to Region of Waterloo Planning and Works Committee and Council in the Fall 2015 for approval. In advance of this meeting, letters will be sent to all adjacent property owners and tenants (as well as to all members of the public specifically registering at the Public Consultation Centre) so that anyone wishing to speak to Committee or Council about this project can do so before final approval.

29. **How will I receive further notification regarding this project?**

Adjacent property owners and members of the public registering at the PCC will receive all forthcoming public correspondence, and will be notified of any future meetings.
30. How can I provide my comments?

In order to assist the Project Team in addressing any comments or concerns you might have regarding this project, we ask that you fill out the attached Comment Sheet and leave it in the comment box provided at the registration table. Alternatively you can mail, fax or e-mail your comments using the attached comment sheet to the Project Team member listed below, no later than June 29, 2015.

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

<table>
<thead>
<tr>
<th>Mr. Delton Zehr, C.E.T.</th>
<th>Mr. Peter Lejcar, P.Eng.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Senior Project Manager</td>
</tr>
<tr>
<td>Region of Waterloo</td>
<td>Associated Engineering</td>
</tr>
<tr>
<td>150 Frederick Street, 6th Floor</td>
<td>508 Riverbend Drive, Suite 302</td>
</tr>
<tr>
<td>Kitchener, ON N2G 4J3</td>
<td>Kitchener, ON N2K 3S2</td>
</tr>
<tr>
<td>Telephone: (519) 575-4757 ext. 3637</td>
<td>Telephone: (226) 214-3187 ext. 5301</td>
</tr>
<tr>
<td>Fax: (519) 575-4430</td>
<td>Fax: (226) 214-3188</td>
</tr>
<tr>
<td>Email: <a href="mailto:dzehr@regionofwaterloo.ca">dzehr@regionofwaterloo.ca</a></td>
<td>Email: <a href="mailto:lejcarp@ae.ca">lejcarp@ae.ca</a></td>
</tr>
</tbody>
</table>

31. How can I view project information following the PCC?

All of the Display Boards from this Public Consultation Centre and other relevant project information, notifications of upcoming meetings and contact information are available for viewing at the Region of Waterloo municipal office as identified above. Alternatively, you may visit the Region’s website to view project specific documents, drawings or Regional Master Plans and design guidelines at the web links below:

|--------------------------------------------|----------------------------------------------------------------------------------|
Appendix “A”

Class EA Process

Municipal Class Environmental Assessment

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.

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule “A”</td>
<td>Routine projects that are considered straight-forward and minimally impactful, such as maintenance, operations and emergency activities. Such projects are designated as “pre-approved” under the Class EA and may proceed directly to implementation.</td>
</tr>
<tr>
<td>Schedule “A+”</td>
<td>Routine projects that are considered straight-forward with minor or short-term impacts. Such projects are designated as “pre-approved” under the Class EA and may proceed directly to implementation; however, the proponent is required to advise area residents and stakeholders of the pending commencement of the project.</td>
</tr>
<tr>
<td>Schedule “B”</td>
<td>Projects with the potential for some adverse environmental effects.</td>
</tr>
</tbody>
</table>
Such projects must undergo a program of public, stakeholder and agency consultation and a detailed Project File documenting the planning process must be placed on the public record. Subsequently, the project is considered to be “approved” under the Class EA.

Schedule “C”

Larger and more complex projects with the potential for significant environmental effects. Such projects must undergo a program of public, stakeholder and agency consultation, including 3 points of formal public contact. A detailed Environmental Study Report (ESR) must be completed and placed on the public record. Subsequently, the project is considered to be “approved” under the Class EA.

The Class EA process includes four (4) key phases:

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Identify the problem, deficiency or opportunity, and develop a clear statement of the issues that are to be addressed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 2</td>
<td>Identify the reasonable alternative solutions that could be implemented to address the issues. Establish the preferred solution based on an assessment of the environmental impact, including consideration of stakeholder input.</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Identify alternative methods of implementing the preferred solution. Establish the preferred method based on an assessment of the environmental impact, including consideration of stakeholder input.</td>
</tr>
<tr>
<td>Phase 4</td>
<td>Compile all relevant study information, including study rational, environmental considerations, consultation process and recommendations into a clear and easily understood report entitled an &quot;Environmental Study Report&quot; (ESR), and make the document available for review by interested or affected parties.</td>
</tr>
</tbody>
</table>

**Public Involvement**

Members of the public that have a stake in the project are encouraged to provide comment throughout the Class EA process.
## 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 “B”

Drawing of Design Alternative 1 – “Do Nothing”

OPTION #1 'DO NOTHING'

OPTION #2 'MULTI-USE TRAIL (MUT)'
CONTINUOUS RAISED ASPHALT MEDIAN, MULTI-USE TRAIL ON BOTH SIDES OF THE ROAD
OPTION #3 'ONE-WAY ON-ROAD CYCLE TRACK'
CONTINUOUS RAISED ASPHALT MEDIAN, SEGREGATED CYCLE Lanes ON BOTH SIDES OF THE ROAD

OPTION #4 'ONE-WAY OFF-ROAD CYCLE TRACK'
CONTINUOUS RAISED ASPHALT MEDIAN, SEGREGATED CYCLE PATHS ON BOTH SIDES OF THE ROAD
## Evaluation Table of Design Alternatives

### Evaluation Criteria

<table>
<thead>
<tr>
<th>No.</th>
<th>Factor</th>
<th>Indicator</th>
<th>Points Allocated</th>
<th>Description</th>
<th>Score</th>
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<tr>
<td>1.0</td>
<td>Natural Environment</td>
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<td>25</td>
<td>Total Impact/Benefit Points Allocated</td>
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<td>2.0</td>
<td>Social/Cultural Environment</td>
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<td>4.0</td>
<td>Technical</td>
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<td>Total Impact/Benefit Points Allocated</td>
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</table>

**Evaluation Score (excluding cost factor):**

100

50

78

63

68

### Cross Section Alternatives

<table>
<thead>
<tr>
<th>Fischer Hallman Road</th>
<th>Option #1: Do Nothing</th>
<th>Option #2: 4 lanes Multi-Use Trail (MUT)</th>
<th>Option #3: 4 lanes Cycle Track 'On-Road' One-Way</th>
<th>Option #4: 4-lanes Cycle Track 'Off-Road' One-Way</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Score</td>
<td>Description</td>
<td>Score</td>
<td>Description</td>
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<tr>
<td><strong>Total Impact/Benefit Points Allocated</strong></td>
<td><strong>25</strong></td>
<td><strong>25</strong></td>
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### 5.0 Adjustment for Capital Cost

<table>
<thead>
<tr>
<th>5.1</th>
<th>Cost</th>
<th>Estimated capital cost ($)</th>
<th>$4.32M</th>
<th>$10.83M</th>
<th>$11.04M</th>
<th>$11.07M</th>
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<tbody>
<tr>
<td>Capital Cost</td>
<td><strong>See Note</strong></td>
<td><strong>See Note</strong></td>
<td>1.00</td>
<td>9.31 / 10.83 = 0.86</td>
<td>9.31 / 11.04 = 0.84</td>
<td>9.31 / 11.07 = 0.84</td>
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</tbody>
</table>

**Final Cost Factored Score**

(Adjusted by Factor): Evaluation Score x Factor

| 100 | 50 x 1.0 = 50 | 78 x 0.86 = 67 | 63 x 0.84 = 53 | 68 x 0.84 = 57 |

**Note:**

* Average Capital Cost includes the cost of 'Do Nothing' - $9.31M
** 'Do Nothing' Cost Factor is always 1.0 as a baseline. Alternative costs are adjusted against 'Do Nothing'
## Evaluation Criteria

<table>
<thead>
<tr>
<th>No.</th>
<th>Factor</th>
<th>Indicator</th>
<th>Points Allocated</th>
<th>Description</th>
<th>Score</th>
<th>Description</th>
<th>Score</th>
<th>Description</th>
<th>Score</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Fischer Hallman Road</strong></td>
<td></td>
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</tr>
<tr>
<td>1.0</td>
<td>Natural Environment</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.1</td>
<td>Wetland Communities</td>
<td>Encroachment on ESP/AVDs/buffer areas or Core Environmental Features</td>
<td>5</td>
<td>No encroachment into wetland buffer areas</td>
<td>5</td>
<td>Minimal encroachment into wetland buffer areas requiring mitigation/compensation</td>
<td>5</td>
<td>Minimal encroachment into wetland buffer areas requiring mitigation/compensation</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Vegetation communities (including SBAs)</td>
<td>Impact on vegetation communities (number, area, type, quality, composition, relative extent, and potential for mortality, stress, composition change)</td>
<td>5</td>
<td>No vegetation communities disturbed (trees remain)</td>
<td>5</td>
<td>Minimal impact to trees; some compensation required (50 trees +)</td>
<td>5</td>
<td>Minimal impact to trees; some compensation required (50 trees +)</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Wildlife habitat (Terrestrial and Aquatic) including SBAs</td>
<td>Impact on interior habitat (area, fragmentation), Effects on wildlife movement corridors or corridors between critical habitat features (e.g. number of crossings), Animal-vehicle conflicts</td>
<td>5</td>
<td>Does not outright fragment SARA habitat areas however increase in traffic will degrade wildlife crossing potential</td>
<td>5</td>
<td>Urbanization fragments SARA habitat areas; ESA C Permit and strategies (crossings/compensation) required</td>
<td>5</td>
<td>Urbanization fragments SARA habitat areas; ESA C Permit and strategies (crossings/compensation) required</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Air Quality</td>
<td>Impact to Air Quality</td>
<td>5</td>
<td>Impact due to increased air pollution</td>
<td>5</td>
<td>Impact due to increased air pollution</td>
<td>5</td>
<td>Impact due to increased air pollution</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Watercourses</td>
<td>Impact on existing watercourses and surface runoff, requirement for in-water work</td>
<td>5</td>
<td>Increase in surface runoff although re-directed with control opportunities; potential for in-water work (mitigation required)</td>
<td>5</td>
<td>Increase in surface runoff although re-directed with control opportunities; potential for in-water work (mitigation required)</td>
<td>5</td>
<td>Increase in surface runoff although re-directed with control opportunities; potential for in-water work (mitigation required)</td>
<td>5</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Total Impact/Benefit Points Allocated</td>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td></td>
<td></td>
<td>15</td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>2.0</td>
<td>Social/Cultural Environment</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Property Requirements</td>
<td>Impact on individual properties influence of defining proposed community areas</td>
<td>5</td>
<td>No additional widening required beyond OP requirements</td>
<td>5</td>
<td>Property may be needed west of potential heritage building at 1940 Fischer Hallman in addition to OP widening to minimize encroachment of travelled lanes to property</td>
<td>5</td>
<td>Property may be needed west of potential heritage building at 1940 Fischer Hallman in addition to OP widening to minimize encroachment of travelled lanes to property</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Residential and Business Access</td>
<td>Impact to ingress/egress of traffic, entrances (temporary/permanent)</td>
<td>5</td>
<td>Accesses provided and controlled at intersections; existing rural sections have limited to no access provisions; raised median in all options</td>
<td>5</td>
<td>Accesses provided and controlled at intersections; existing rural sections have limited to no access provisions; raised median in all options</td>
<td>5</td>
<td>Accesses provided and controlled at intersections; existing rural sections have limited to no access provisions; raised median in all options</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>Noise</td>
<td>Impact on sound quality levels over pre-existing conditions</td>
<td>5</td>
<td>Noise levels limited to existing and future conditions; no closer to existing/future development</td>
<td>5</td>
<td>Proximity of Traffic to existing/future development reduced by widening; although traffic volume growth influenced by development, No Noise mitigation required</td>
<td>5</td>
<td>Proximity of Traffic to existing/future development reduced by widening; although traffic volume growth influenced by development, No Noise mitigation required</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Built Heritage/Cultural Landscape</td>
<td>Number/Type/Significance of direct/indirect impacts to built cultural heritage landscapes</td>
<td>5</td>
<td>No impact to Built Heritage or Cultural Landscapes</td>
<td>5</td>
<td>Alignment deviation at 1980 Fischer Hallman offsets direct impact to property; minimal mitigation required</td>
<td>5</td>
<td>Alignment deviation at 1980 Fischer Hallman offsets direct impact to property; minimal mitigation required</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>Archaeological Heritage</td>
<td>Number/Type/Significance of direct/indirect impacts to registered archaeological sites</td>
<td>5</td>
<td>No impact to Archaeological Heritage</td>
<td>5</td>
<td>Archaeological impacts to be assessed; Stage 2 Assessment likely required</td>
<td>5</td>
<td>Archaeological impacts to be assessed; Stage 2 Assessment likely required</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Impact/Benefit Points Allocated</td>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td></td>
<td></td>
<td>20</td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

*DOCS #1812849*
<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Cross Section Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.0 Transportation</strong></td>
<td><strong>Fischer-Hallman Road</strong></td>
</tr>
<tr>
<td>3.1 Traffic/Transit Operations</td>
<td>Option #1: Do Nothing; Capacity, LOS, Intersection controls, Traffic Operations&lt;br&gt;Does not address Capacity needs; does not address transit needs; traffic may overflow into adjacent side streets</td>
</tr>
<tr>
<td>3.2 Emergency Services</td>
<td>No improvements to response times</td>
</tr>
<tr>
<td>3.3 Transportation Policy and Planning Initiatives</td>
<td>Does not align with Region’s Active Transportation Master Plan/Walk Cycle</td>
</tr>
<tr>
<td>3.4 Cycling/Pedestrian Operations</td>
<td>Limited transportation modes: Does not offer user ‘choice’</td>
</tr>
<tr>
<td>3.5 Study Purpose/Objective</td>
<td>Study Objective not achieved</td>
</tr>
</tbody>
</table>

**Total Impact/Benefit Points Allocated**

| 3.0 Transportation | 25 |
| 3.1 Traffic/Transit Operations | 5 |
| 3.2 Emergency Services | 5 |
| 3.3 Transportation Policy and Planning Initiatives | 5 |
| 3.4 Cycling/Pedestrian Operations | 5 |
| 3.5 Study Purpose/Objective | 5 |

**4.0 Technical**

| 4.1 Roadway/Corridor Design Parameters | Existing conditions - No opportunity to improve geometrics/sight lines/lane widths/surface & boulevard treatments | Addresses Region/City planning needs regarding wider boulevards (snow storage, larger canopy trees); access control/traffic calming | Partially addresses corridor requirements; wider boulevards although sidewalks not considered as open space MUT (City) | Partially addresses corridor requirements; reduced available boulevard |
| Design Complexity & Constructability | No design impact | Low design complexity; uniform trail width; standard road widening and associated surface treatments | Moderate complexity with off-road connections at intersections; additional surface treatment elements introduced (curbs) | Moderate complexity with material and surface treatments |
| 4.3 Operations & Maintenance | Existing maintenance costs remain although subsequent rehabilitation costs associated with deterioration | Standard operating and maintenance requirements | Moderate operational and maintenance costs of off-road cycle track and buffered sidewalk independently | Moderate operational and maintenance costs of off-road cycle track and buffered sidewalk independently |
| Municipal Services and Utilities (Existing and Proposed) | No impact to existing services and utilities | Some flexibility with service and utility conflicts (4.0m trail width) | Some flexibility with service and utility conflicts (2.1m sidewalk width) | Some flexibility with utility conflicts within the ROW (overall wider footprint in boulevard) |
| 4.5 Boulevard Area for Snow Storage and Trees | Does not address space for trees and has good snow storage | Provides desired boulevard width for trees and snow storage | Provides desired boulevard width for trees and snow storage | Provides satisfactory boulevard width for trees and snow storage |

**Total Impact/Benefit Points Allocated**

| 4.0 Technical | 25 |
| 4.1 Roadway/Corridor Design Parameters | 5 |
| 4.2 Design Complexity & Constructability | 5 |
| 4.3 Operations & Maintenance | 5 |
| Municipal Services and Utilities (Existing and Proposed) | 5 |
| 4.5 Boulevard Area for Snow Storage and Trees | 5 |
## Appendix “D”

### Potentially Impacted Permanent Road Widening Property Acquisitions and Temporary Grading Property Requirements

<table>
<thead>
<tr>
<th>Address / Owner / Location</th>
<th>Estimated Area of Permanent Property Required (m²)</th>
<th>Estimated Area of Temporary Property Required (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>380 - 388 Bleams Road</td>
<td>475.4</td>
<td>-</td>
</tr>
<tr>
<td>1198 Fischer-Hallman Road</td>
<td>1,066.3</td>
<td>-</td>
</tr>
<tr>
<td>1255 Fischer-Hallman Road</td>
<td>11,079.5</td>
<td>6,842.7</td>
</tr>
<tr>
<td>1295 Fischer-Hallman Road</td>
<td>1,161.2</td>
<td>3,331.8</td>
</tr>
<tr>
<td>1314 Fischer-Hallman Road</td>
<td>557.5</td>
<td>-</td>
</tr>
<tr>
<td>1340 Fischer-Hallman Road</td>
<td>6,950.4</td>
<td>-</td>
</tr>
<tr>
<td>1548 Fischer-Hallman Road</td>
<td>836.4</td>
<td>-</td>
</tr>
<tr>
<td>1672 – 1680 Fischer-Hallman Road</td>
<td>144.4</td>
<td>-</td>
</tr>
<tr>
<td>1940 Fischer-Hallman Road</td>
<td>7,884.1</td>
<td>-</td>
</tr>
<tr>
<td>1970 Fischer-Hallman Road</td>
<td>287.8</td>
<td>-</td>
</tr>
<tr>
<td>945 Huron Road</td>
<td>373.9</td>
<td>-</td>
</tr>
<tr>
<td>1384 Huron Road</td>
<td>510.6</td>
<td>-</td>
</tr>
<tr>
<td>1440 – 1664 Huron Road</td>
<td>6,149.6</td>
<td>-</td>
</tr>
<tr>
<td>Activa Property north of 1548 Fischer-Hallman Road</td>
<td>163.8</td>
<td>-</td>
</tr>
<tr>
<td>Northeast Corner Property at Intersection of Seabrook Drive and Fischer-Hallman Road</td>
<td>459.0</td>
<td>-</td>
</tr>
<tr>
<td>Northwest Corner Property at Intersection of Huron Road and Fischer-Hallman Road</td>
<td>1,298.1</td>
<td>-</td>
</tr>
<tr>
<td>2427101 Ontario Limited (Southeast Corner Property at Intersection of Seabrook Drive and Fischer-Hallman Road)</td>
<td>85.3</td>
<td>-</td>
</tr>
<tr>
<td>W.R.D.S.B. (South of 1440 – 1664 Fischer-Hallman Road)</td>
<td>2,517.6</td>
<td>-</td>
</tr>
</tbody>
</table>

### NOTES

1. Permanent easements may be required from certain properties for specific utilities apparatus (e.g. guy cables).
2. Temporary construction easements may be required at some locations to detour traffic around the construction zone.
3. The Region’s Contractor will also need to temporarily enter onto private property in order to undertake construction activities.
4. 10,000 m² equals 1 ha (hectare) 1 ha equals approximately 2.47 acres.
Appendix “E”

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 drawing 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.

**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.
The following information is provided as a general overview of the expropriation process and is not legal advice. For complete information, reference should be made to the Ontario Expropriations Act as well as the more detailed information in the Notices provided under that Act.

Expropriation Information Sheet

What is Expropriation?

Governmental authorities such as municipalities, school boards, and the provincial and federal governments undertake many projects which require them to obtain land from private property owners. In the case of the Regional Municipality of Waterloo, projects such as the construction or improvement of Regional Roads sometimes require the purchase of land from private property owners. In many cases, the Region of Waterloo only needs a small portion of the private property owner’s lands or an easement for related purposes such as utilities, although in certain instances, entire properties are required.

Usually the governmental authority is able to buy the land required for a project through a negotiated process with the affected property owners. Sometimes, however, the expropriation process must be used in order to ensure that the land is obtained within a specific timeline. 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.

IMPORTANT NOTE: The Region of Waterloo tries in all instances to obtain lands needed for its projects through a negotiated agreement on mutually acceptable terms. Sometimes, the Region of Waterloo will start the expropriation process while negotiations are underway. This dual approach is necessary to ensure that the Region of Waterloo will have possession of all of the lands needed to start a construction project on schedule. However, it is important to note that Regional staff continues to make every effort to reach a negotiated purchase of the required lands on mutually agreeable terms while the expropriation process is ongoing. If agreement is reached, expropriation proceedings can be discontinued and the land
transferred to the Region of Waterloo in exchange for payment of the agreed-upon compensation.

What is the process of the Region of Waterloo under the Expropriations Act?

- Regional Council considers a request to begin an application under the *Expropriations Act* to obtain land and/or an easement for a specific Regional project. No decision is made at this meeting to expropriate the land. This step is simply direction for the Region of Waterloo to provide a “Notice of Application for Approval to Expropriate” to affected property owners that the process has started to seek approval to expropriate the land.

- As stated in the Notice, affected property owners have 30 days to request a Hearing to consider whether the requested expropriation is “fair, sound and reasonably necessary in the achievement of the objectives” of the Region of Waterloo. This Hearing is conducted by a provincially-appointed Inquiry Officer. Prior to the Hearing, the Region of Waterloo must serve the property owner with a Notice setting out its reasons or grounds for the proposed expropriation. **Compensation for lands is not determined at this Hearing.** The Inquiry Officer can order the Region of Waterloo to pay the property owner up to $200.00 as compensation for the property owner’s costs in participating in this Hearing, regardless of the outcome of the Hearing.

- If a Hearing is held, a written report is provided by the Inquiry Officer to the property owner and the Region of Waterloo. Council must consider the Report within 90 days of receiving it. The Report is not binding on Council and Council may or may not accept the findings of the Report. After consideration of the Report, Council may or may not approve the expropriation of the land or grant approval with modifications. A property owner may wish to make written and/or verbal submissions to Council at the time that it is considering the Report.

- If no Hearing is requested by the property owner, then Council may approve the expropriation of the land after expiry of a 30 day period following service of the Notice of Application for Approval to Expropriate.

- If Council approves the expropriation then, within 3 months of this approval, the Region of Waterloo must register a Plan at the Land Registry Office that describes the expropriated lands. The registration of this Plan automatically transfers title of the lands to the Region of Waterloo, instead of by a Deed signed by the property owner.
• Within 30 days of registration of the Plan, the Region of Waterloo must serve a Notice of Expropriation on the affected property owner advising of the expropriation. Within 30 days of this Notice, the property owner may serve the Region of Waterloo with a Notice of Election selecting the valuation date under the *Expropriations Act* for calculation of the compensation.

• In order to obtain possession of the expropriated lands, the Region of Waterloo must also serve a Notice of Possession setting out the date that possession of the land is required by the Region of Waterloo. This date has to be 3 months or more from the date that this Notice of Possession is served on the affected property owner.

• Within 3 months of registration of the Plan, the Region of Waterloo must provide the affected property owner with payment for the full amount of the appraised fair market value of the expropriated land or easement and a copy of the appraisal report on which the value is based. If the property owner disagrees with this amount, and/or claims other compensation and/or costs under the *Expropriations Act*, the compensation and/or costs matter may be referred to a provincially-appointed Board of Negotiation in an effort to reach a mediated settlement and/or an appeal may be made to the Ontario Municipal Board (OMB) for a decision. In any event, the Region of Waterloo continues in its efforts to reach a negotiated settlement with the affected property owner prior to the OMB making a decision.
Appendix “F”
Ontario Heritage Act – Cultural Heritage Definitions

Designated Properties – Protected from demolition and other adverse impacts
A designation confers a legal status on a property by a specific municipal by-law under the Ontario Heritage Act. Designation may fall under one of two categories under the Ontario Heritage Act: Part IV (individual designation) or Part V (district designation). Designation is an Area Municipal responsibility. The Area Municipal Council has the legal authority to refuse an application that will adversely affect the property's heritage attributes.

Municipally Registered/Listed Properties – Interim protection from demolition
The municipal register is the official list or record of cultural heritage properties that have been identified as being important to the community. The register includes all properties in the municipality that are designated under Part IV (individual designation) and Part V (district designation) of the Ontario Heritage Act. In addition, the municipal register may include properties of cultural heritage value or interest that have not been designated under the Ontario Heritage Act. This is commonly known as “listing.” The Area Municipal Council must be given at least 60 days notice of intention to demolish or remove a building or structure on the property. This allows time for the municipality to decide whether to begin the designation process to give long term protection to the property.

Pre-1900 Residential Properties – For information
Residential structures in the project area that were built prior to 1900 have been identified. These identified historic structures have no formal heritage protection. However, historic buildings that have maintained their heritage value could be candidates for further heritage protection. Property data is taken from the Municipal Property Assessment Corporation (MPAC). The date that is assigned to a property represents the oldest structure on the lot.

Scenic Roads – Identified as possessing cultural value and require additional design consideration
Certain transportation corridors are characterized by natural, cultural heritage and recreational features that contribute to their scenic value or special character. Area municipalities are responsible for the designation of those municipal roads that possess scenic or cultural value. Likewise, the Region has identified sections of Regional road corridors that are considered scenic. The Special Character Streets and Scenic Roads Resource Document is a supplement to the Implementation Guidelines for Regional Transportation Corridor Design. It identifies and provides recommendations for the treatment of Scenic Roads and Special Character Streets that are part of the Regional road system within the Region of Waterloo. These recommendations should be considered before undertaking any work on a road that has been identified as possessing scenic value.

DOCS #1812849
Comment Sheet

Regional Municipality of Waterloo
Fischer-Hallman Road Improvements
Public Consultation Centre # 1

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 June 29, 2015 to:

Mr. Delton Zehr, C.E.T., C.R.S.  Mr. Peter Lejcar, P.Eng.
Project Manager, Region of Waterloo  Associated Engineering Ltd.
150 Frederick Street, 6th Floor  Suite 301, 508 Riverbend Drive
Kitchener, ON N2G 4J3  Kitchener, ON N2K 3S2
Tel: (519) 575-4757 x 3637  Tel. (226) 214-3187 x 5307
Fax: (519) 575-4430  Fax. (226) 214-3188
Email: dzehr@regionofwaterloo.ca  Email: lejcarp@ae.ca

Comments regarding this project can be provided on the backside of this Comment Sheet:

Name: 

Address: 

Postal Code:  Phone: (  )  --

Email: 

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.

Comments:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

DOCS #1812849
Thank you for your interest and time.
Public Consultation Centre For

Proposed Pedestrian Access Improvements Class Environmental Assessment between the Hanson/Hayward Industrial and Alpine Village Areas

Information Package

Thursday, June 18, 2015
Drop-In Anytime: 4:30 – 7 p.m.

LOCATION

Activa Sportsplex
Murray Fried Room
135 Lennox Lewis Way
Kitchener, ON

Please fill out the Comment Sheet at the end of this Information Package and place it in the box at this Consultation Centre or send it to the address on the Comment Sheet.
1. Background

In 2007, in an effort to bring improved pedestrian and transit access to the Hanson/Hayward Industrial and Alpine Village areas, and specifically The Family Centre at 65 Hanson Ave., the Region of Waterloo and the City of Kitchener planned and designed a pedestrian connection from Homer Watson Boulevard to Kingswood Drive. This connection was designed to run along the industrial side of the existing landscaped berm between the industrial buildings at 10, 20 and 30 Alpine Court, and the condominium development at 190/192 Alpine Road.

This proposed walking and cycling connection would have three main purposes:

1. Provide a new walking and cycling link to Homer Watson Boulevard between Ottawa Street and Block Line Road;

2. Provide a walking and cycling link for Alpine Village Area residents to specific destinations on the east side of Homer Watson Boulevard, including St. Mary’s High School, Country Hills Community Library, the Activa Sportsplex and associated sports fields; and

3. Make it feasible for those using GRT Route 11 on Kingswood Drive to access these destinations on the east side of Homer Watson Boulevard, including The Family Centre (FC) and Family and Children’s Services (FACS).

Since then, the Region of Waterloo has completed a new Active Transportation Master Plan (ATMP) for walking and cycling in the Region called Walk Cycle Waterloo Region. The ATMP recognizes a gap in connectivity along Homer Watson Boulevard between Ottawa Street and Block Line and recommends further study for the "Alpine to Hanson connection".

At the same time, the Region of Waterloo has continued to receive requests and petitions to improve access to The Family Centre. As a result, this Environmental Assessment (EA) project has been conducted to determine the best way of providing pedestrian, cycling and transit access between the Alpine Village Area west of Homer Watson Boulevard, and the Hanson/Hayward Industrial Area to the east between Ottawa Street/Highway 7/8 and Block Line Road. See Appendix A for a map of the Environmental Assessment study area.

2. Why is Improved Access Needed for the Study Area?

There are four main reasons why improved access for walking, cycling and transit is needed for the Hanson/Hayward Industrial and Alpine Village areas:

1. Homer Watson Boulevard between Ottawa Street and Block Line Road is a major arterial road separating two interrelated land use areas. To the west is the well-established Alpine Village Area, with its residential neighbourhood including elementary schools, parks and trails, plus an employment area along Alpine Road. To the east is the Hanson/Hayward Industrial Area with a variety of industrial and business operations plus social services (The Family Centre, Family and Children’s Services), St. Mary’s High School, the Activa
Sportsplex and public sports fields. All of these destinations would benefit from improved access to walking, cycling and transit facilities;

2. There is no pedestrian or cycling access connecting the two areas for the entire 1.3 kilometre length of Homer Watson Boulevard between Ottawa Street and Block Line Road;

3. The Region of Waterloo’s new Active Transportation Master Plan recognizes this gap in pedestrian and cycling access across Homer Watson Boulevard in the study area. It includes an "Alpine to Hanson connection" as one of the areas for further study as part of the Region’s planning for specific pedestrian and cycling route improvements; and

4. As noted above, the Family Centre has requested improved transit access to its operations at 65 Hanson Ave. According to the Centre, improved access to transit is needed for its staff, volunteers, clients and visitors.

3. What happened at the June 17, 2014 Public Consultation Centre?

At the June 17, 2014 Public Consultation Centre, the project team presented six pedestrian connection alternatives (Appendix B) and a number of transit route modification alternatives for consideration by interested persons. These alternatives are described in more detail in sections 10 and 11.

4. What Progress Has Been Made on this Study Since the June 17, 2014 Public Consultation Centre?

Input from attendees (study area residents and stakeholders) provided at and following the last Public Consultation Centre on June 17, 2014 has been reviewed by the Project Team.

The main concerns raised by The Family Centre and Family and Children Services are that many users of the facilities are low income, have mobility issues or disabilities, and some of the pedestrian connection alternatives (i.e. #2 and #6) will continue to involve excessive walking distances for them.

The residents of 190/192 Alpine Road raised concerns regarding Alternative #2. These concerns include maintenance, trespassing, aesthetics/appearance and other safety/security issues.

The owner of the industrial business at 30 Alpine Court also raised concerns regarding Alternative #2 and its impacts on the loading area and operation.

To address these concerns the Project Team introduced the following mitigation measures:

- The 2007 proposed walkway alignment between Alpine Road and Homer Watson Boulevard (Alternative #2) has been reviewed and revised to avoid the impacts to the loading area at 30 Alpine Court.

- Conceptual drawings (Appendix C) have been developed to show how the walkway could look in the context of the area, and to show additional features (i.e. fence, lights) that address some of the concerns of residents at 190/192 Alpine Road:
Trespassing: A fence between the proposed walkway and the condominium development was added to reduce the possibility of trespassing on 190/192 Alpine Road.

Safety/Security: Trail lighting and the fence described above were added to improve personal security at night and reduce interactions with adjacent properties.

Impact to the 190/192 Alpine Road property: The conceptual design shows clearly that the proposed walkway would not be constructed on the condominium property.

- Regional staff has also evaluated the feasibility and cost of a special BusPLUS service for the Hanson area east of Homer Watson Boulevard, and its potential use until new route changes are in place to serve the new ION LRT stop at Courtland/Block line. The new route changes may also include a new GRT route along Homer Watson Boulevard with a stop at the Hanson Avenue intersection.

5. What is the Purpose of this Public Consultation Centre?

The purpose of this Public Consultation Centre is to provide updated information so that interested groups and individuals can:

1. Review and comment on the new transit service alternatives;
2. View the design renderings of the proposed walkway between Alpine Road and Homer Watson Boulevard, and the proposed ways to address adjacent resident concerns;
3. Consider the access alternatives that have been evaluated by the Project Team;
4. Ask questions of staff from the Region of Waterloo, City of Kitchener and our consultants from IBI Group; and
5. Provide comments about the proposed walkway.

We request that you fill out the Comment Sheet attached to the back of this Information Package and either put it in the Comment Box or send it to the address noted on the Comment Sheet no later than June 30, 2015. Your comments will be considered by the Project Team along with all other relevant information to develop the recommended alternative for this project.

6. Who is Directing the Project?

A Project Team consisting of staff from the Region of Waterloo and the City of Kitchener is directing this project along with staff from the Waterloo office of IBI Group (consultant).

7. What is an Environmental Assessment (EA)?

In Ontario, a Municipal Class Environmental Assessment (EA) is a planning and decision-making process that must be conducted for public infrastructure projects so
that potential environmental effects are considered before a project begins. It also requires consultation with the public and involved stakeholders and agencies.

8. Types of Alternatives that are Being Considered

In addition to the “Do Nothing” alternative, the project team considered two types of alternatives: pedestrian connection and transit route modification alternatives.

9. The “Do Nothing” Alternative

As required by the Municipal Class EA process, the “Do Nothing” alternative must be considered and evaluated against other alternatives being considered for a project. In the case of this study, a Do Nothing approach would continue to limit access for residents and employees between the Hanson/Hayward Industrial Area and Alpine Village Area primarily to private cars or to a long walk from existing transit stops. Pedestrian and transit access between the two areas would not be improved, and so a “Do Nothing” approach has not been selected as a preferred approach to this EA study.

10. Pedestrian Connection Alternatives

The following pedestrian access route alternatives have been evaluated for this EA as shown in Appendix B:

1. Through the Alpine Court industrial park connecting to GRT Route 11;
2. Previously planned walkway along the north side of the existing berm between the Alpine Court industrial area and 190 / 192 Alpine Road connecting to GRT Route 11;
3. Driveway on 190/192 Alpine Road condo development connecting to GRT Route 11;
4. Through the woodlot behind 190/192 Alpine Road connecting to GRT Route 11;
5. Driveway within the Autumn Woods condo development (220-236 Kingswood Drive) connecting to GRT Route 11; and
6. Hayward Avenue, GRT Route 8 (off Courtland Avenue on Walton Avenue).

These pedestrian connection alternatives were screened using the following criteria to determine what alternatives could be retained for further consideration in the EA:

- Availability of publically-owned property (i.e. road right-of-way);
- Walking distance to locations on the east and west sides of Homer Watson Boulevard (i.e. The Family Centre; St. Mary’s High School, businesses);
- Proximity to the signalized Homer Watson Boulevard and Hanson Avenue intersection; and
- Impact of the ION rapid transit project.

The findings to date indicate that Alternative #2 best responds to these criteria. It involves the previously planned walkway connection along the north side (industrial side) of the landscaped berm between 190/192 Alpine Rd and the Alpine Court
industrial area. A preliminary design of a walkway connection was prepared for the Region in 2007. The associated capital cost estimate is in the order of $500,000 including property acquisition, landscaping and construction.

Alternative #2 would result in a 525-645 metre walking distance between the existing GRT Route 11 transit stop at the Kingswood Drive/Alpine Road intersection and The Family and Children’s Services Centre and the Family Centre, respectively. This alternative is preferred because it will address the access to transit and the connectivity problems in the study area. Conceptual drawings of this walkway are on pages 11-13.

Alternative #6 also provides significant benefits with an improved south side sidewalk along Hayward Avenue between Lennox Lewis Way and Courtland Avenue. It will provide an improved pedestrian connection between The Family Centre along Hayward Avenue and GRT Route 8 off Courtland Avenue. This improvement is already approved for construction as part of the ION LRT project with a three metre wide multi-use trail on the north side and a 1.5-metre wide sidewalk on the south side of Hayward Avenue. These pedestrian facilities are expected to be open for use in the fall of 2017 when ION begins operation.

11. Transit Route Modification Alternatives

Three different types of transit route changes have been considered for this study:

1. Existing conventional transit route modifications;
2. Changes relating to the ION transit stops to be constructed on Courtland Avenue at Block Line Road; and
3. Introduce a new transit service route in the study area.

**Existing Conventional Transit Route Modifications** – Routing modifications were considered for each of the four existing Grand River Transit (GRT) routes (8, 11, 12 and 22) operating in the study area as potential ways of providing transit access to the area.

Regional staff has concluded that none of these existing routes have extra time in their schedule to travel the additional distance that would be required. Therefore, changing an existing route is not recommended, since this would involve significant impacts to existing riders, potential revenue loss and increased operating costs. On average, for each of the four potential transit route changes listed above, between 110,000 and 120,000 passenger trips yearly would be negatively affected. Each of these major route changes would also require at least one additional bus costing approximately $500,000. Operating expenses of the additional bus would be between $442,000 and $600,000 annually.

Therefore, for the purposes of this EA, any changes to the existing four transit routes within the study area have been screened out from further consideration.

**ION Rapid Transit Stops-Related Route Changes** – Another possibility would involve potential route changes associated with the new Courtland Avenue ION stop at Block Line Road. GRT believes that this could be a feasible alternative involving
the redesign of routes in the area to integrate with the future station scheduled to be open in 2017. This approach may provide an opportunity to reduce the walking distance to transit for destinations such as The Family Centre and Family and Children’s Services, but this will not be confirmed until transit route modifications associated with the Courtland / Block Line ION rapid transit stop have been finalized.

**New Transit Service Route** – Since the Public Consultation Centre in June 2014, the Region has considered the introduction of a new transit route or a BusPLUS pilot project within the study area to provide access to transit and monitor associated usage. A new route would operate out of the Forest Glen Transit Terminal. To provide adequate service, the bus would operate for at least 12 hours per day (8 a.m. to 8 p.m.) on weekdays, which would span most of the hours that Family and Children’s Services and The Family Centre operate. Service would be provided every 15-30 minutes, depending on the final route length. An optimistic ridership projection for each service concept of about 50-60 customers per day would result in annual user revenue of about $20,000.

- In order to provide a conventional 40’ bus for this service, there would be a capital cost of approximately $500,000 plus annual operating costs of $270,000. The annual net operating cost would be $250,000 ($270,000-$20,000).

- This service could also be operated using the contracted BusPLUS service at a lower cost and a smaller 19-passenger bus. This service would cost approximately $188,000 for annual operating costs. The annual net operating cost would be $166,000($188,000-$20,000).

A new transit route (conventional or BusPLUS) is not recommended for the following reasons:

- The cost relative to potential ridership is quite high, even for the lowest cost alternative. The net operating costs do not meet the GRT performance standards.

- In order to make it viable for the contractor to purchase a necessary vehicle, the contract GRT currently has in place is for a minimum of five years. While the vehicle could be reallocated, there are not currently other locations to move this vehicle to.

- Normally BusPLUS is used to develop service in an area in order to justify conversion to a full-size bus and this would be a different approach;

- Capacity at the closest logical connection point (Forest Glen terminal) is limited and space may not be available for an additional bus; and

- Longer term plans for route realignment would provide a better solution.

12. When Will a Final Decision Be Made for this Project?

The Project Team will review the public comments received from this evening’s Public Consultation Centre and use them as input in finalizing the EA report.
including the recommended alternative. This final recommendation is expected to be presented to the Regional Planning and Works Committee and then Regional Council for approval in September of 2015. In advance of that meeting, letters will be sent to all nearby businesses, property owners and tenants (as well as members of the public who registered at the Public Consultation Centres or project website) so that anyone wishing to speak to Regional Committee or Council about this project can do so before final approval.

13. When Would this Project be Constructed?

Hayward Avenue sidewalk improvements as part of ION construction are scheduled for completion in the fall of 2017. Any changes to conventional transit routes in the study area should also be finalized in 2017.

Constructing a new walkway between Alpine Road and Homer Watson Boulevard would not be contingent on these other potential transit service changes. However, based on final EA approval and required property acquisition, the earliest the walkway could be open would be 2018. The City of Kitchener would be a funding partner for the walkway because it is an off-road trail.

14. How Can I Voice my Comments at this Time?

In order to assist us in addressing any comments or concerns you might have about this project, please fill out the attached Comment Sheet and leave it in the box provided at the registration table. You can also mail, fax or email your comments to the Region of Waterloo/IBI Group no later than Tuesday, June 30, 2015. We thank you for your involvement and if you have any questions, please contact:

Hanan Wahib, P.Eng.
Project Manager
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Appendix B: Potential Pedestrian Access Routes
Appendix C: Proposed Walkway Conceptual Drawings
COMMENT SHEET
Regional Municipality of Waterloo
PUBLIC CONSULTATION CENTRE – June 18, 2015

Proposed Pedestrian Access Improvements Class
Environmental Assessment for the Hanson/Hayward Industrial and Alpine Village Area

All comments and information received from individuals, stakeholder groups and agencies regarding this project 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 included in a submission becomes part of the public record. Questions regarding the collection of this information should be referred to Hanan Wahib, P.Eng. at hwahib@regionofwaterloo.ca.

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 sheet home and mail, fax or email your comments by Tuesday, June 30, 2015 to:

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COMMENTS ON THE INFORMATION PRESENTED TONIGHT

______________________________________________________________________________________
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Turn Page Over
DEMOGRAPHIC INFORMATION (Optional)
For purposes of data analysis, please provide your age, gender and interest. This is entirely optional:

☐ Male  ☐ Female
☐ under 19  ☐ 19-34  ☐ 35-44  ☐ 45-54  ☐ 55-64  ☐ 65-74  ☐ 75+

Name: ____________________________

Address: ____________________________  Postal Code:__________

Email:______________________________

Thank you for your time and input into this project
Region of Waterloo
Transportation and Environmental Services
Waste Management Services

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 16, 2015  File Code: E33-30A

Subject: Aligning Waste Collection Practices at Multi-Residential Properties with Current Regional Policy

Recommendation:

That the Regional Municipality of Waterloo:

a) Approve the phase out of municipal garbage collection service at large multi-residential complexes and commercial properties that are inconsistent with the currently approved multi-residential collection policy effective March 4, 2017; and

b) Provide rebates to the affected multi-residential properties once the phase out has been completed.

Summary:

As directed by Council as part of Report TES-WMS-15-04, Multi-Residential Waste Collection Service Level Policies and Practices (March 2015), staff have prepared a plan to address existing waste collection inconsistencies at multi-residential complexes that currently receive curbside collection.

When the Region of Waterloo assumed garbage collection service in 2000, service levels in place at that time were maintained in all local municipalities. The first Regional waste collection contract began in 2002 which provided more equitable service across the rural and urban municipalities with respect to services offered to residents. Regional Council also established a waste collection policy for multi-residential properties. A second Region-wide waste collection contract began in 2009. Regional Council also approved rebates in lieu of garbage collection for large multi-residential complexes. Approximately 48,000 multi-residential units (1,170 properties) are eligible to receive a rebate in lieu of collection service. However, a relatively small
number of businesses and multi-residential complexes continue to pile waste to the curb, or have curbside service where collection trucks cannot drive through freely, which has been a point of frustration for the majority of multi-residential owners who do not receive municipal collection. Just over 3,700 multi-residential units (182 sites) in Waterloo Region would be affected by this phase out plan, which will then align multi-residential collection service with the existing approved Regional policy and establish equity among landlords and condominium complexes. Approximately 250 commercial establishments would also be affected by this phase out plan. The proposed March 4, 2017 transition date aligns with the end of the current waste collection contract.

Report:

Prior to the year 2000, each of the three cities individually managed garbage collection service. Each city had different standards and by-laws regulating eligibility for collection from apartment buildings and condominiums, and different policies regarding issuing rebates in lieu of collection. Historical standards are summarized below:

City of Waterloo:

- no collection from most apartments buildings larger than six units;
- no collection from condominiums of any size or configuration;
- rebates offered in lieu of collection; and
- policies consistently enforced with few exceptions.

City of Kitchener:

- no collection from most large apartment buildings;
- no collection from most condominiums;
- rebates offered in lieu of collection; and
- less consistent application of the standards.

City of Cambridge:

- no collection from most large apartment buildings;
- no collection from most condominiums;
- no rebates offered; and
- less consistent application of the standards.

Generally, businesses outside of the Business Improvement Areas (BIAs) were not eligible for residential curbside waste collection, however, some large commercial sites throughout the tri-cities were also provided service.

At that time, North Dumfries, Wilmot and Woolwich Townships also provided their own waste collection services and offered service to all properties, including commercial
sites. Tax rates were adjusted if sites requested service above their established bag limits. Wellesley Township did not offer municipal garbage collection.

In 2002, Regional Council approved a plan to rationalize service across Waterloo Region for apartments, townhouses and condominiums. The key elements of the policy are summarized below, and are in practice today:

   a) Provide garbage collection service to condominium and rental townhouses where interior road networks allow large trucks to pass through freely;

   b) Provide garbage collection service to rental and condominium buildings containing six or less units; and

   c) Provide an annual per-unit rebate for remaining complexes not eligible for collection services.

Over 120 sites (7,000 units) were transitioned to curbside waste collection at that time. In February 2007 at Council’s request, staff presented the report titled, Policy Review: Multi-residential Garbage Service Levels (E-07-033), that provided a number of potential service options, including no change to current policy, and providing full municipal collection. No changes were made. Collection policies at multi-residential complexes were again confirmed by Regional Council in March 2015, as per report TES-WMS-15-04, Multi-Residential Waste Collection Service Level Policies and Practices. This report also highlighted that the multi-residential sector is expected to grow significantly over the next several years, and staff were directed by Council to review the multi-residential policies and services as part of the Waste Management Master Plan second level priority recommendations (2019-2023), and to report back no later than 2021 with an update on possible collection service options.

**Existing situation**

Following implementation of Regional waste collection services and rebates, there remained large complexes (both rental and condominium) that continued to receive curbside collection like single family homes. At that time, staff discussed the new rebate with many landlords and a few opted to utilize a private bin collection service and receive a rebate. However there remain 182 complexes with over 3,700 units in Waterloo Region which do not comply with Regional policy and continue to receive municipal collection. The majority of these sites pile garbage to the curb, however there are several sites that receive internal blue box collection where collection trucks cannot drive through freely. These sites have private garbage collection and receive rebates from the Region.

The size of the buildings and number of units which continue to pile waste curbside are summarized below:
Twelve of these sites (643 units) that pile waste to the curb are managed by Waterloo Region Housing. Staff have initiated discussions with Community Services to align collection at these properties with Regional policy.

An additional 17 sites (431 units) have internal blue box recycling collection where collection trucks cannot drive through freely. These sites would be offered service through the Region’s recycling cart program.

**Issues related to collection from large multi-residential sites**

Maintaining the status quo of collecting from these sites results in four issues unresolved:

- Equity among landlords and condominium owners;
- Community aesthetics and litter;
- Potential by-law and health and safety issues; and
- The newly approved curbside garbage limits and bi-weekly collection frequency are not suitable at these larger sites.

The issue of equity is easily understood. Some landlords with buildings above the Council approved six or fewer units receive municipal collection, while the majority pay for private collection and receive rebates from the Region to offset some of their costs. Buildings receiving service generally have very large piles of garbage often mixed together with yard waste, recycling and uncollectable waste at the curb, resulting in challenging collection. It can be difficult for superintendents to manage tenants with respect to what, how and when materials are placed at the curbside. Waste can be placed curbside well in advance of the actual collection day and litter is inevitably blown around. Large piles of garbage can also attract rodents and are generally unsightly, and, with the recently approved new service levels and bi-weekly collection, these piles would be even greater.
Businesses with large piles of garbage at the curb, outside of the BIAs, are not suitable for residential collection, and the similar issues of equity, aesthetics and new collection standards apply. Approximately 250 commercial establishments will be affected by this change. Collection methods provided by the private sector such as large steel bins or in ground systems are much better suited to contain waste from these businesses, and multi-residential sites.

Staff recommend the phase out of collection service at large complexes and businesses be aligned with the end of the current waste collection contract. This lengthy notice period will give landlords, condominium corporations and businesses sufficient time to make any necessary changes. Approving the phase out plan prior to the development and issue (summer 2015) of the new waste collection tender is optimal for accurate bidding documents.

Possible next steps

Should Regional Council approve the recommendations, notices detailing the approved changes will be sent to applicable building, condominium, and business owners by the end of 2015. If required, staff can confirm ineligibility, and could also provide information on properties with similar site plans to demonstrate options for possible garbage bin placement for private collection.

Corporate Strategic Plan:

This report has been prepared consistent with the objectives of the Corporate Strategic Plan to ensure Regional programs and services are efficient and effective and demonstrate accountability to the public.

Financial Implications:

At present, approximately $1.47 million in annual rebates are provided to sites that comply with the approved policy. Based on the current annual rebate of $32/unit, approximately $107,000 in additional rebates would be expected to be provided commencing in 2017 to these newly transitioned multi-residential complexes. The changes, if approved, will be identified in the new waste collection bid documents and it is anticipated that the additional costs of rebates will be offset by savings in curbside collection costs from these properties.

Other Department Consultations/Concurrence:

Staff from the Corporate Services Department and Community Services Department have been consulted and provided input into the preparation of this report.

Attachments

Example of garbage piles being placed curbside for residential collection
Region of Waterloo
Transportation and Environmental Services
Transportation Planning, Development and Legislation Services
Legal Services

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 16, 2015  File Code: T16-50/WS/7.34 to 10.83/SOLRS

Subject: Southern Ontario Locomotive Restoration Society – Extension of Agreement to Operate Tourist Train

Recommendation:

That The Regional Municipality of Waterloo:

1. Approve an agreement for an extension to the current agreement providing Southern Ontario Locomotive Restoration Society ("SOLRS"), a non-profit corporation, the right to use the Waterloo Spur railway as described in Report TES-TRP-15-15/PDL-LEG-15-52 dated June 16, 2015; and

2. Authorize and delegate to the Commissioner of Transportation and Environmental Services the authority to sign on behalf of The Regional Municipality of Waterloo such Agreement and any future agreements with SOLRS for the right to use the Waterloo Spur railway as deemed desirable or expedient, with all documentation to the satisfaction of the Commissioner of Transportation and Environmental Services and the Regional Solicitor.

Summary: Nil

Report:

1888899
The Southern Ontario Locomotive Restoration Society ("SOLRS") has operated a tourist train service on the Waterloo Spur since 2007. Due to ION construction on the Waterloo Spur, use of the railway line by SOLRS between Uptown Waterloo and Northfield Drive West was terminated effective September 4, 2014. Appropriate changes were made to the existing agreement between the Region and SOLRS (the "Existing Agreement") to reflect this. The Existing Agreement expires on June 30, 2015.

SOLRS has now temporarily re-located its operations to run from Waterloo’s Farmers Market to Elmira for the period covering the latter half of 2015 and the first half of 2016. It is recommended that the Existing Agreement be extended for an additional twelve (12) month period to accommodate SOLRS’ ongoing operations.

SOLRS is examining options to establish a new station location and a new train-storage siding location given that it has been restricted from using the existing station located at 10 Father David Bauer Drive in Uptown Waterloo. SOLRS is considering several options for a new station location including locations near Northfield Drive in Waterloo and locations near Farmer’s Market Road in Woolwich. Regional Council committed to providing SOLRS assistance of the construction of a new train-storage siding in the form of a $150,000.00 grant and contribution for rail line materials from the existing siding in Waterloo subject to several conditions as detailed in Report CR-RS-13-086/E-13-128, approved by Council in 2013. Once SOLRS has finalized its plans to relocate its station and train-storage siding and has satisfied all other conditions in the 2013 report, staff plan to bring a report to Regional Council for approval of revised agreement to reflect the future operations of the tourist train.

**Corporate Strategic Plan:**

This report supports Focus Area 3.1 of Council’s Strategic Focus: promote and enhance arts, culture and heritage.

**Financial Implications:** Nil

**Other Department Consultations/Concurrence:** Nil

**Attachments:**

Appendix “A” – aerial view of alignment

**Prepared By:** Liviu Cananau, Solicitor, Rapid Transit
Steve van De Keere, Director, Transportation

**Approved By:** Debra Arnold, Regional Solicitor, Director Legal Services
Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix “A”

[Map of the area showing the location of Temporary Station, Former Station Waterloo Park, and other landmarks.]

- Discontinued SOLRS Alignment
- Ongoing Rail Line Operations
Region of Waterloo
Planning, Development, and Legislative Services
Community Planning

To: Chair Tom Galloway and Members of the Planning and Works Committee
Date: June 16, 2015 File Code: D06-80
Subject: Development of a Community Energy Investment Strategy

Recommendation:

That the Regional Municipality of Waterloo take the following actions with respect to the development of a Community Energy Investment Strategy as described in report PDL-CPL-15-35, dated June 16th, 2015:

a) Initiate participation by the Region of Waterloo in the development of a Community Energy Investment Strategy for Waterloo Region in collaboration with local partners;

b) Authorize the Commissioner of Planning, Development and Legislative Services to enter into required agreements with the Ontario Ministry of Energy, Area Municipalities and regional electricity and natural gas utility companies, and any other related documents, with such agreements to be to the satisfaction of the Regional Solicitor;

c) Approve an increase in the 2015 Community Planning Ten Year Capital Forecast of $180,000 gross, with no net impact to be funded, as described in this report; and

d) Authorize staff to develop the Strategy, as described in this report.

Summary:

The Regional Municipality of Waterloo, along with several local stakeholders, has been awarded a grant under a provincial program promoting community-scale energy planning. There are several reasons why communities would engage in this type of planning:
Advancing local economic development by attracting green tech/energy businesses, stimulating private and public investment in new innovative energy projects, job creation and reducing local business and residents’ expenditures on energy;

Responding to direction from the Ontario Ministry of Energy to engage stakeholders among different sectors within growing urban areas to coordinate regional energy planning efforts to become more energy self-sufficient;

Collaborating with local energy distributors to optimize their incentive programs that fulfill provincially-mandated Conservation and Demand Management (CDM) targets; and,

Achieving policies identified in the Growth Plan for the Greater Golden Horseshoe and updated Provincial Policy Statement related to land-use, energy and climate change.

This initiative proposes to build on the successful local collaboration established for climate action (i.e. greenhouse gas emission reduction targets), and would significantly leverage local resources to develop a Community Energy Investment Strategy. The strategy would help achieve other priorities such as economic development and community building in designated growth areas and will complement infrastructure master plans. This report provides an overview of the proposed scope and strategy development process. Several Ontario towns and cities are developing such strategies, but notably the Region of Waterloo would be the first regional municipality to be funded by Ontario’s community energy planning program.

Report:

Background – Needs Served by the Proposed Strategy

In 2011-2013, the Regional Municipality of Waterloo, along with Area Municipalities and utility stakeholders, completed a community scale greenhouse gas emissions inventory and Climate Action Plan for Waterloo Region (see CR-FM-13-022, dated December 3, 2013). A number of actions within this plan pertain to the generation, transmission, distribution and efficient end use of energy resources consumed at a community scale within Waterloo Region.

The Climate Action Plan is currently being administered within a collaborative framework and progress is publicly reported on annual basis. There is a clear need identified within this plan to better integrate community energy management with strategic economic development opportunities. This integrative approach to implementation would require additional technical assessments, financial support and stakeholder engagement to inform the requisite decision-making processes.

In May 2013, the Ontario Minister of Energy asked the Ontario Power Authority and the Independent Electricity System Operator to recommend a new integrated regional energy planning process. The Ontario Regional Energy Planning Review was tasked with a focus
on improving the way large energy projects are sited with regard to strengthening processes for early and sustained engagement with communities and the public. In August 2013, a report based on input from 1,250 Ontarians advised the Ministry how to enhance regional electricity planning.

As a result of the review, the Independent Electricity System Operator (now officially merged with Ontario Power Authority) and the local electricity distribution companies recently produced a plan to serve the projected electricity demands for the Kitchener-Waterloo-Cambridge-Guelph planning area out to the year 2023 based on provincial population and economic forecasts. In a broader context of serving the inter-related energy and economic needs of the region, the near-to-mid-term plan leaves several outstanding issues which require further attention including items such as:

- local concerns with the plan’s assumption that the electrical utility companies will meet aggressive energy conservation targets established for the year 2020;
- initiating a more robust exploration of the most cost-effective options to serve the region’s energy needs other than electricity;
- need for ongoing involvement of local stakeholders in energy planning decisions particularly in the context of their effect on rate payers;
- establishing a clear framework to identify, assess and capitalize on opportunities for innovative, locally developed energy solutions; and,
- development of plans to fulfill the region’s long-term energy needs beyond the year 2023.

**Funding Opportunity**

The Ontario Ministry of Energy launched a funding program in 2013 and broadened eligibility criteria in 2014 to support municipal community energy planning. Community energy planning integrates land use planning, policy, and region/city-scale energy management within the physical and jurisdictional boundaries of a municipality. This type of planning in Canada has demonstrated a real value in involving various different stakeholders who traditionally have had limited to no influence on community-scale energy planning processes in the past even though they are affected by related decisions and outcomes.

Community energy planning is a collaborative endeavour focused on addressing challenges and identifying opportunities related to reliably and cost-effectively meeting local energy needs, enhancing economic prosperity and promoting sustainable development. There are several reasons why communities would engage in this type of energy planning:

- Advancing local economic development by attracting green tech/energy businesses, stimulating private and public investment in new innovative energy projects, job creation and reducing local business and residents’ expenditures on energy;
Responding to direction from the Ontario Ministry of Energy to engage stakeholders among different sectors within growing urban areas to coordinate regional energy planning efforts to become more energy self-sufficient;

Collaborating with local energy distributors to optimize local programs that fulfill provincially-mandated Conservation and Demand Management (CDM) targets; and,

Achieving policies identified in the Growth Plan for the Greater Golden Horseshoe and updated Provincial Policy Statement related to land-use, energy and climate change.

Across Canada, 170 Community Energy Plans have been developed. In Ontario, this includes communities such as Barrie, Guelph, London, Markham, Oakville and Toronto, with several more in progress. The majority of Community Energy Plans have been developed in the past five years with many driven by concerns about rising energy costs, external influences on prices, greenhouse gas (GHG) emissions and climate change, and extreme weather impacts on energy infrastructure. Another important driver for community-scale energy planning is the recognition that it is a versatile tool to help capitalize on significant opportunities for local economic development.

Successful Funding Application

Regional staff met with a number of local stakeholders including area municipalities and local electric and natural gas utilities in October 2014 to explore interest in pursuing the provincial funding available to develop an integrated Community Energy Investment Strategy. Stakeholders discussed how development of the strategy could be tailored to help guide Waterloo Region to:

- optimize its use of energy resources;
- improve energy security and stability;
- achieve several economic development objectives,
- meet locally established GHG emission targets; and
- complement long-term municipal land use and infrastructure master plans.

In March 2015, a funding application was submitted to the Ministry of Energy by the Region with letters of support from the three Cities and the five utility companies serving the geographic area of Waterloo Region (collaborative organizations). Late in May 2015, the Region was notified that the application for maximum funding has been approved. The total project cost of $180,000 will be funded by the Province ($90,000), Collaborative Organizations ($80,000) and the redeployment of $10,000 from the Planning operating budget. Significantly, the Region of Waterloo is the first regional municipality within the Province to be funded by Ontario’s community energy planning program. The Region, as the applicant, will administer all financial aspects for the development of the strategy on behalf of the collaborative organizations.
The Sustainability Planner within the Planning, Development and Legislative Services department would be the Region’s staff lead for this initiative. The project is expected to take approximately two years to complete and is planned to commence this summer. Upon completion of the strategy, recommendations will be presented to regional and Area Municipal councils for their consideration along with the boards of local utilities and provincial authorities as required. An outline of the project’s objectives, timelines, roles of funding partners and resourcing is included in Attachment A.

Proposed Next Steps

An agreement with Ontario Ministry of Energy, which outlines the terms of reference for the provision of grant funding for this project, must be signed by the Region to initiate the strategy development process. Additional agreements will be prepared as needed to formally commit the local funding partners to assist in developing the strategy. An RFP will need to be issued, in accordance with Regional Purchasing by-laws, for the purpose of retaining an experienced consultant to assist with the technical aspects of this project. Establishment of project teams and final work plans will be completed over the summer.

Area Municipal Consultation/Coordination

On October 10th, 2014, the Regional Municipality of Waterloo hosted a preliminary meeting to discuss community energy planning within the Region. The meeting included representatives from:

- City of Cambridge
- City of Kitchener
- City of Waterloo
- Cambridge and North Dumfries Hydro*
- Kitchener Utilities*
- Kitchener-Wilmot Hydro Inc.*
- REEP Green Solutions
- Sustainable Waterloo Region
- University of Waterloo
- Union Gas Limited*
- Waterloo North Hydro Inc.*

* Utility companies serving the geographic area of Waterloo Region

The objective of the meeting was to discuss the level of interest among stakeholders to advance a CEP, and to identify next steps. Quality Urban Energy Systems of Tomorrow (QUEST), a national non-profit specializing in integrated community energy solutions, facilitated the discussion and provided insightful commentary that helped lead local partners to developing a funding proposal to the Ministry of Energy.

Over the 2014-15 winter, support for the initiative was obtained from senior management in each municipality and the local electric and natural gas utilities. An outline of the strategy proposal was sent to Township Planning staff. Further, staff gave a presentation to Area Municipal and Township Economic Development Officers regarding the opportunity to develop a Community Energy Investment Strategy.

The draft of this report was reviewed by Area Municipal staff.
Corporate Strategic Plan:

Development of a Community Energy Investment Strategy primarily addresses the following Strategic Focus Areas and Objectives:

Environmental Sustainability: Protect and Enhance the Environment
   - Integrate environmental considerations into the Region's decision making.
   - Reduce greenhouse gas emissions and work to improve air quality.

Growth Management and Prosperity: Manage growth to foster thriving and productive urban and rural communities
   - Develop, optimize and maintain infrastructure to meet current and projected needs.
   - Support a diverse, innovative and globally competitive economy.

Service Excellence: Deliver excellent and responsive services that inspire public trust
   - Strengthen and enhance partnerships with area municipalities, academia, community stakeholders and other orders of government.

Financial Implications:

An increase in the 2015 Community Planning Ten Year Capital Forecast of $180,000 gross, $0 net is required, to be funded $10,000 by the Regional Municipality of Waterloo from the existing 2015 operating budget and $170,000 by the Province, three cities and five local utility companies. The Region will administer all financial aspects for the development of the strategy.

Other Department Consultations/Concurrence:

The Region's Transportation and Environmental Services department has been consulted in the preparation of the funding application. The Region's Legal Services division is being consulted to develop the appropriate collaborative agreements with local funding contributors as well as to finalize required documentation with the Province of Ontario.

Attachments:
Attachment A - Community Energy Planning and Investment Strategy - Project Outline

Prepared By: David Roewade, Sustainability Planner

Approved By: Rob Horne, Commissioner, Planning, Development and Legislative Services
Attachment A - Community Energy Planning and Investment Strategy - Project Outline

Overall Purpose/Goal

Development of an integrated Community Energy Investment Strategy will guide Waterloo Region to optimize its use of energy resources, improve energy security, achieve several economic development objectives, reduce environmental impact (e.g. GHG emissions) and complement long-term municipal land use and infrastructure master plans.

Objectives

A. Identify and advance local opportunities to develop alternative and renewable energy generation, cogeneration, district energy as well as smart energy networks factoring in local land use, transportation, waste and water master plans.

B. Attract investment in local energy systems such as those mentioned above as well as use of bio-energy from agricultural residues and micro grids which can improve resiliency against external economic influences and weather-related impacts.

C. Provide advanced analytics and market intelligence to optimize the impact of local conservation and demand-side management programs with regard to their incentives such as those for new construction, equipment retrofits and process/systems efficiency upgrades. This also includes greater cross-promotion of these programs amongst the Region and Area Municipalities, for example, through delivery of parallel water and wastewater services, within the process of issuing building permits and planning policy.

D. Follow the Integrated Community Energy Solutions guiding technical and policy principles established by the national non-profit Quality Urban Energy Systems for Tomorrow in order to aid in optimizing energy efficiency and lowering GHG emissions from activities originating within Waterloo Region.

Stages (as required by Ontario Ministry of Energy funding program)

1. Baseline study and mapping - assessment of energy consumption spatially factoring in projected population/employment growth and forecasted energy needs.

2. Stakeholder engagement – identify local opportunities and priorities.

3. Plan development – evaluate actions identified, their cost/benefits and recommend options.

The Ministry of Energy expects stages 1 and 2 to each take six months to complete and stage 3 up to a year, to conclude with approval by local municipal/regional councils, for a total duration of 2 years.
## Timelines and Resources

<table>
<thead>
<tr>
<th>Stage</th>
<th>Timeline</th>
<th>Resources*</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep</td>
<td>Jan. – Mar. 2015</td>
<td>Regional, Municipal and Utility staff time</td>
<td>• Funding application prepared and submitted to Ministry of Energy &lt;br&gt; • Provincial review of application, funding approval, agreements signed, RFPs issued</td>
</tr>
<tr>
<td></td>
<td>April – July 2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Aug. 2015 – Jan. 2016</td>
<td>Time + $70,000</td>
<td>Baseline and forecasted energy profile (database and maps)</td>
</tr>
<tr>
<td>2</td>
<td>Feb. – July 2016</td>
<td>Time + $50,000</td>
<td>Summary report of stakeholder consultations and identified priorities</td>
</tr>
<tr>
<td>3</td>
<td>Aug. 2016 – June 2017</td>
<td>Time + $60,000</td>
<td>Approved Community Energy Plan</td>
</tr>
</tbody>
</table>

*Funding formula: Province 50%, Local partners 50% (Region/Cities/Utilities)

## Primary Stakeholders and Roles

<table>
<thead>
<tr>
<th>Region of Waterloo</th>
<th>Lead funding application and coordinate all stages</th>
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</thead>
<tbody>
<tr>
<td>Area Municipalities</td>
<td>Support funding application; co-lead all three stages with Regional staff as key stakeholders, decision-makers, and approval authorities</td>
</tr>
<tr>
<td>Local Utilities</td>
<td>Support funding application and participate in all three stages including providing data and technical guidance for stages 1 and 3.</td>
</tr>
<tr>
<td>Consultants</td>
<td>Services required for mapping and data modelling in stage 1, facilitation of stage 2 and cost benefit analysis within stage 3.</td>
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Additional input will be sought from organizations such as but not limited to the four area Townships, Waterloo Federation of Agriculture, Grand River Conservation Authority, REEP Green Solutions, Sustainable Waterloo Region, University of Waterloo Institute for Sustainable Energy, Wilfred Laurier Centre for Business and Sustainability, local
Chambers of Commerce and the new Waterloo Region Economic Development Corporation.

**Overview of Process**

The overall approach for this strategic undertaking recognizes the following challenges:

- energy-related decisions are made by various public and private sector stakeholders at different geographic scales and affect many others not involved;

- energy systems that serve communities are vulnerable to external economic and weather influences and many communities currently have limited understanding on how to effect change in this regard;

- in terms of energy supply, many cities and towns in Ontario see the vast majority of their expenditures on energy leave the community which may result in lost opportunities for local economic development, and;

- failure to provide reliable and cost-efficient infrastructure can limit economic growth potential and hinder effectively serving the needs of growing communities.

Therefore it is critical to examine the spatial characterization of energy use, distribution and supply as it overlaps with current and future land use as well as infrastructure planning in order to help identify opportune locations and the political and socio-economic context for local energy investments and improvements. Ancillary to this focus is the need to meaningfully engage stakeholders who historically are not involved in the energy planning dialogue from an energy systems perspective (i.e. supply, generation, distribution and recovery, end-use design including conservation and demand-side management as well as emissions).

The diagram below illustrates a high-level summary of the process to develop the Community Energy Investment Strategy.
Energy consumption and land-use planning data will be compiled from utility and area municipal stakeholders to construct a spatial illustration of energy density and intensity for both a base and forecasted year. These energy profiles will help form the analytical platform of which to assess opportunities, challenges and priorities established throughout the strategy development process.

Stakeholder engagement will likely be conducted via facilitated group consultations and forums and may include use of on-line social media tools. Overall engagement is proposed to be organized into the following six themes (includes suggested target stakeholder groups and sample topics to further investigate):

i) **New construction** (Developers, municipal planners and building officials, utilities, University of Waterloo Institute for Sustainable Energy, Waterloo Region Economic Development Corporation) – green building standards/incentives, potential for district energy, innovative smart grids and micro grids;

ii) **Medium to large industrial, commercial, institutional energy/water users** (large manufacturers, food/beverage processing and high tech sectors, local post-secondary schools, utilities, municipalities) – onsite combined-heat and power, biomethane reactors, renewable energy, energy storage, conservation and demand-side management;

iii) **Residential energy (existing building stock)** - (REEP Green Solutions, utilities, area municipalities) – neighbourhood energy retrofit programs, photovoltaics and solar hot water heating, geothermal heating and cooling systems, conservation and demand-side management;

iv) **Transportation** (area municipalities, Sustainable Waterloo Region and other non-governmental organizations focussed on mobility, local organizations with large fleets) – Transportation Demand Management, bio-fuels, electric vehicle charging infrastructure;

v) **Agribusiness and waste management** (farm groups, Region of Waterloo Waste Management, Township representatives, utilities, University of Waterloo Institute for Sustainable Energy) – Bio-energy from sustainably harvested residual crop waste and livestock manure management or from dedicated energy crops on marginal lands, energy from municipal solid waste, bio-gas cogeneration at wastewater treatment plants;

vi) **Strategic Finance** (Local Community Foundations, Sustainable Waterloo Region, REEP, local credit unions, municipalities, utilities, Wilfred Laurier Centre for Business and Sustainability other investor interest groups) – this theme will explore use of innovative financing mechanisms (e.g. green bonds, crowd funding) to support implementation of priorities arising from the other five themes.
By organizing community engagement into these clustered themes within the strategy development process, stakeholders will be linked to the technical, policy and financial experts and resources to achieve value-added outcomes as illustrated below. The proposed themes and overall consultation work plan will be further refined and developed with the use of consultant services and will involve input from funding partners. Assessment of opportunities and development of the final strategy will follow a similar process and incorporate specific considerations and recommendations as they relate to the growth and development of Waterloo Region.

**Community Energy Collaborative Value-Added Wheel**

- **Experts** (academia, consultants)
- **Utilities** (electricity, natural gas, water, vehicle fuel)
- **Enabling policy makers and investors**
- **Program delivery agents**
- **Residential users and groups**
- **ICI users and groups**
- **Data providers**

Informed direction for targeted investments in advancing technological solutions and improved CDM/DSM impact.
Region of Waterloo
Transportation and Environmental Services
Design and Construction

To: Chair Tom Galloway and Members of the Planning and works Committee
Date: June 16, 2015  File Code: C04-30, 7186
Subject: Church Street Reconstruction, Elmira – Operation of Cycling/Buggy Lanes at Medians

Recommendation:
For information only.

Summary:
On December 19th 2012, Regional Council approved Report E-12-128 for improvements on Church Street in Elmira from Barnswallow Drive to Herbert Street. A keyplan of the project area is included in Appendix A. Construction of most of the road improvements was completed in 2013/2014, with the final layer of asphalt scheduled for completion this summer. In the Fall, trees and shrubs are to be planted along the boulevard areas and in the medians to complete the enhanced streetscaping on this project.

The design included the transformation of this 800 metre section of Church Street from its original rural cross-section to an urban cross-section with curb and gutter, storm sewers, cycling/buggy lanes, landscaped medians, grassed boulevards and sidewalks. A Project Team directed the project and included staff representatives from the Region and the Township as well as two Woolwich Township Councillors, Julie-Anne Herteis and Allan Poffenroth.

One of the Project Team’s main goals was to create a corridor which provides amenities for all road users including motorists, pedestrians, cyclists and buggies and which provides visual cues to alert drivers that they are entering a slower-speed urban area. Included as part of the design were three sections of centre medians, which the Project Team felt needed to be included: to provide pedestrian refuge areas for future students...
crossing to the new public school opening in 2016; to provide a traffic calming effect to reduce vehicle speeds; and to allow trees and shrubs to be planted in the centre of the road to beautify the corridor and serve as an aesthetically appealing gateway on the westerly approach into Elmira. Appendix B shows a pre-construction photograph of the road and a post-construction photo rendering at the same location; these photos were included in the public consultation packages in 2012.

Since the completion of the construction in 2014, there have been a number of concerns expressed regarding the three centre medians. Comments have been received that: lane widths are too narrow at the medians; fire trucks will not be able to pass a disabled vehicle; and there is insufficient room for farm vehicles. This Spring, staff have conducted field observations and consulted again with the Mennonite community, the Township Fire department, local farm machinery manufacturers and Township staff to confirm that the design is operating as originally intended, ie. to slow traffic down and to accommodate all road users safely and effectively.

A video survey was completed on Sunday April 19\textsuperscript{th} and on Thursday April 23\textsuperscript{rd} to observe the interaction between buggies and vehicles. Staff also completed a speed survey and traffic counts to determine the numbers of the various types of vehicles using the roadway.

The results of the investigation revealed that on average, vehicles are travelling at or just slightly above the 50 kph posted speed limit in the newly reconstructed area. 85\textsuperscript{th} percentile speeds range from 57-61 kph in the newly reconstructed areas, meaning that 85% of drivers are travelling at these speeds or lower. It was also observed that drivers behind buggies are generally waiting appropriately for the gaps between medians where they can then safely pass the buggies. There were five occurrences observed in the video where motorists did pass a buggy that was travelling at the extreme right edge of the paved area next to the median. In order to reinforce the fact that passing buggies at the medians is not recommended, warning signs will be erected in advance of the medians to advise vehicle and buggy drivers that vehicles are not to pass buggies next to the medians.

After reviewing all the collected post-construction data, staff has confirmed that the design is operating as intended with vehicles travelling at appropriate speeds and there have been no reported collisions of any kind (involving buggies or not) since the completion of the median construction. It is also noted that operating speeds may be reduced even further once the landscape plantings are installed, since vertical elements in a road corridor are the most effective way to influence driver behaviour and reduce speeds.
With regard to the width of the cycling/buggy lanes, staff recognizes that there is a common misconception that these lanes are too narrow. This public comment was also received during the planning phase of the project, and staff included the rationale for the buggy lane width in the project approval report in 2012. The 1.5 metre wide cycling/buggy lane is consistent with the Region's approved Transportation Corridor Design Guidelines and has been implemented successfully on roads similar to Church Street in Heidelberg and in Linwood on past Regional projects. It is recognized that buggies have to encroach slightly into the driving lane however the 1.50 metre wide cycling/buggy lane width is considered appropriate because if it were any wider, it could be used for parking or be seen as a separate lane which would reduce its effectiveness and cause unsafe conditions for buggies and cyclists. In addition, previous consultation with Mennonite community representatives has also indicated that they prefer the 1.50 metre wide cycling/buggy lane width (as opposed to a wider lane) to ensure the lane is not used for parking.

Adjacent to the medians on the Church Street project, the 1.5 metre cycling/buggy lane width does not typically allow drivers to pass, as the buggies need to encroach slightly beyond the edge of the cycling/buggy lane into the vehicle lane. Staff reviewed this situation and determined that a full 6.0 metres of width would be required to allow vehicles to safely pass buggies in the vicinity of the medians. This width would counteract the intention of the medians to slow/calm traffic as the wider paved width would encourage higher speeds. Accordingly, the Project Team recommended the conventional 1.5 metre cycling/buggy lanes at the medians, recognizing that drivers would have to wait until the gaps in the medians to pass buggies. Prior to the operation of the new firehall in 2019 on Kissing Bridge Drive, it is also proposed that “No Stopping” signs be erected adjacent to the long median to discourage vehicles from stopping next to the median and impeding a fire truck, if a fire truck approached them from behind.

In conclusion, staff are confident that the design of Church Street including the median islands and cycling/buggy lanes is operating as intended and that there are no safety concerns with the design. The video evidence and collected data support this conclusion.

Report:

1. Introduction

On December 19th 2012, Regional Council approved report E-12-128 for improvements on Church Street in Elmira from Barnswallow Drive to Herbert Street. A Project Team directed the planning of the project and included staff representatives from the Region.
and the Township as well as two Woolwich Township Councillors, Julie-Anne Herteis and Allan Poffenroth. A keyplan of the project area is included in Appendix A.

Construction of most of the road improvements was completed in 2013/2014, with the final layer of asphalt scheduled for completion this summer. On many road projects, the top asphalt layer is postponed a year to allow any trench settlements to occur and be corrected in advance of final paving. Later this Fall, trees and shrubs are to be planted on Church Street along the boulevard areas and in the medians to complete the enhanced streetscaping on this project.

The design for this project included the transformation of this 800 metre section of Church Street from its original rural cross-section to an urban cross-section with curb and gutter, storm sewers, cycling/buggy lanes, landscaped medians, grassed boulevards and sidewalks. In addition, sanitary sewers and watermains were incorporated into the project on behalf of the developer and the Township of Woolwich to accommodate the adjacent 1100+/- home Lunor Estates development.

One of the Project Team’s main goals was to create a corridor which provides amenities for all road users including motorists, pedestrians, cyclists and buggies and which provides visual cues to alert drivers that they are entering a slower-speed urban area. Included as part of the design were three sections of centre medians, which the Project Team felt needed to be included: to provide pedestrian refuge areas for future students crossing to the new public school opening in 2016; to provide a traffic calming effect to reduce vehicle speeds; and to allow trees and shrubs to be planted in the centre of the road and have the corridor serve as an aesthetically appealing gateway on the westerly approach into Elmira. Appendix B shows a pre-construction photograph of the road and a post-construction photo rendering at the same location; these photos were included in the public consultation packages in 2012.

The new public elementary school is scheduled to open in the fall of 2016 on Country Club Estates Drive north of Church Street. The school board advises that over 240 future students (JK to Grade 6) live south of Church Street in the school catchment area and are not eligible for bus pick-up. Accordingly, up to 240 children could be required to cross Church Street at least twice daily to attend this school. Traffic studies completed for the Lunor subdivision had determined that traffic signals are not warranted now or in the future at any of the Church Street intersections within this project’s limits. The Project Team felt therefore that the presence of the medians on Church Street is imperative to provide a refuge area for these future student crossings so they only have to cross one direction of traffic at a time. In addition the presence of the medians and landscaping treatments will serve to slow traffic in general and will provide a safer and more comfortable environment for all pedestrians along and crossing Church Street.
2. Public Comments About Buggy Lane Width During the Public Consultation Phase

A Public Consultation Centre (PCC) was held in September 2012 and approximately 40 people attended. Twelve comment sheets were received and seven comments made reference to the proposed cycling/buggy lane width and noted that there would be no room to pass buggies adjacent to the proposed centre medians. Following the PCC, the Project Team reviewed the design and decided to reduce the number of centre medians from seven to three to afford more opportunity to pass buggies in between the medians. In the project approval report, staff also included the rationale for the cycling/buggy lane width. An excerpt from the approval report follows:

“The Project Team is recommending that the cycling/buggy lane remain 1.50 metres wide as presented at the Public Consultation Centre. The 1.50 metre wide cycling/buggy lane is consistent with the Transportation Corridor Design Guidelines and has been implemented successfully on roads similar to Church Street in Heidelberg and Linwood on past Regional projects. A standard buggy measures 1.54 metres (5 feet) in width and there are some larger buggies that are wider than 1.54 metres. The Project Team recognizes that buggies would have to encroach slightly into the driving lane however the 1.50 metre wide cycling/buggy lane width is considered appropriate because it discourages illegal car parking within the cycling/buggy lane. Based on previous consultation with the Mennonite community on past Regional projects, Mennonite representatives indicated that they prefer the proposed 1.50 metre wide cycling/buggy lane width (as opposed to a wider lane) to ensure the lane is not used for parking.”

Adjacent to the medians on the Church Street project, it is acknowledged that the 1.5 metre cycling/buggy lane width generally does not allow drivers to pass, as the buggies need to encroach slightly beyond the edge of the cycling/buggy lane into the vehicle lane. Staff reviewed this situation and determined that a full 6.0 metres of width would be required to allow vehicles to safely pass buggies in the vicinity of the medians. This width would counteract the intention of the medians to slow/calm traffic as the wider paved width would encourage higher speeds, as well as increase pedestrian crossing times. Accordingly, the Project Team recommended the conventional 1.5 metre cycling/buggy lanes at the medians, recognizing that drivers would have to wait until the gaps in the medians to pass buggies.

3. Post-Construction Comments

Since the completion of the construction in 2014, there have been a number of concerns expressed regarding the three centre medians. Region staff have received a number of emails from the public concerned that the lane widths are too narrow at the
medians for a vehicle to pass a buggy. Township of Woolwich staff have also received the same comments. Additionally, Township Fire department staff have expressed a concern that eastbound fire trucks from the future fire station at Kissing Bridge Drive would not be able to pass a disabled vehicle stopped adjacent to the median. These comments are addressed in the following sections.

4. Post-Construction Field Observations

This Spring, staff conducted field observations to confirm that the design is operating as originally intended, ie. to slow traffic down and to accommodate all road users.

A video survey was completed on Sunday April 19th and on Thursday April 23rd to observe the interaction between buggies and vehicles. Staff also completed a speed survey and traffic counts to determine the numbers of the various types of vehicles using the roadway.

The results of the investigation revealed that on average, vehicles are travelling at or just slightly above the 50 kph posted speed limit in the newly reconstructed area. 85th percentile speeds range from 57-60 kph in the newly reconstructed areas, meaning that 85% of drivers are travelling at these speeds or lower. This post-construction speed data indicates that drivers are travelling at acceptable speeds within this 50 kph zone.

There is no pre-construction speed data available for a direct comparison in the reconstructed area, however staff had received written and anecdotal comments during the public consultation phase that speeding through this area was an issue when the road cross-section included a wide paved area and shoulders. Speeds were recorded this Spring west of Barnswallow Drive in the rural cross-section area where the 50 kph speed zone begins. At this location, speeds were 69-72 kph on average with 85th percentile speeds of 79-81 kph.

Drivers behind buggies are generally waiting appropriately for the gaps between medians where they can then safely pass the buggies. There were five incidents observed in the video where motorists did pass a buggy that was travelling at the extreme right edge of the paved area next to the median. Staff feels that these five occurrences in the 331 observed buggy counts on the 2 surveyed days do not represent typical driver behaviour. It was apparent from the video that some drivers appeared confused and were unsure whether to attempt to pass buggies or not when travelling behind a buggy at the longer median. In order to reinforce the fact that passing buggies at the medians is not recommended, warning signs will be erected in advance of the medians to advise both buggy and vehicle drivers that vehicles are not to pass buggies next to the median. In addition, portable variable message signs will be placed on site in the upcoming weeks to educate motorists and buggy drivers that vehicles are not to pass buggies next to the medians.
On Sunday April 19th, there were total vehicle counts of 4258 cars, 52 medium/large trucks and 101 buggies. On Thursday April 23rd, there were total vehicle counts of 6678 cars, 298 medium/large trucks and 220 buggies. During the Thursday weekday count, there were 11 buggies in the morning commute hours 7-9 am, and there were 20 buggies in the afternoon peak hours of 4-6 pm. A more detailed summary of the data collected is found in Appendix C.

After reviewing all the collected post-construction data, staff has confirmed that the design is operating as intended with appropriate vehicle speeds and there have been no reported collisions of any kind (involving buggies or not) since the completion of the median construction. It is also noted that operating speeds may be reduced even further once the landscape plantings are installed, since vertical elements in a road corridor are the most effective way to influence driver behaviour and reduce speeds.

5. Post-Construction Consultation

Staff have consulted again with the Mennonite community, the Township Fire department, local farm machinery manufacturers and Township staff.

5.1 Mennonite Community Comments

The Mennonite Community Traffic Safety representative indicated that buggy drivers are sometimes subjected to gestures or honked horns on Church Street when drivers are impeded by a buggy next to the median. At the longest median (95 metres in length), staff have determined that a trotting horse takes 18 seconds to clear the median while an unimpeded vehicle would cover the distance in 6-8 seconds. The additional 10-12 seconds is not considered an unreasonable delay to motorists. In addition, the spacing of the medians (220 and 305 metres in between the medians) allows for safe passing opportunities where vehicles can pass using the 3.25 metre painted centre area that is available between medians.

There is the possibility that some large trucks may not have sufficient distance to accelerate between medians to overtake a buggy. It is recognized that these trucks could be inconvenienced but a 6 metre width would be required to allow safe passing at the medians and this width would likely encourage an increase in speeds and would result in an increase in the crossing distances for pedestrians. Accordingly staff feel that the use of the standard cycling/buggy lane width is appropriate even though it will lead to some driver inconvenience on this section of Church Street.

The Mennonite representative agrees that the presence of the medians is necessary for the pedestrian crossings but asked that the long 95 metre
median be shortened. However, staff feels that shortening the 95 metre median would provide only a slight reduction in driver inconvenience but leaving it as it is affords a significant opportunity for enhancing the streetscaping on this section of Church Street. In addition, shortening the median would introduce a passing opportunity immediately adjacent to the Elmira Mennonite Church entrance where buggies are turning left to attend church services; allowing passing in this area would introduce an additional conflict point at the church access and is not desirable.

5.2 Fire Department Comments

Following construction of the medians, Township of Woolwich Fire Department staff advised that fire vehicles exiting the new firehall at Kissing Bridge Drive (scheduled to open in 2019) travelling eastbound on Church Street into the centre of Elmira could encounter a disabled vehicle adjacent to the 95 metre long median. In that situation, the fire vehicle may not be able to pass the vehicle in the available 4.85 metre width (3.35m lane and 1.5 m cycling/buggy lane) adjacent to the median. In order to address this, it was agreed that the Region would sawcut the eastbound median curb down to a “driveway drop” profile, which will allow the fire truck to mount the median curb and maneuver around a disabled vehicle. The median would also be modified to include hard surfacing for the first 0.6 metres behind the curb to support the weight of a fire truck should this situation occur.

In addition, it was also agreed that “No Stopping” signs will be placed adjacent to the long median to dissuade vehicles from stopping in this area. The fire department is in agreement that these solutions will accommodate their future needs once the new firehall is operational in 2019.

5.3 Local Farm Machinery Manufacturers’ Comments

During the preliminary design phase of this project, staff had researched the width of farm vehicles using this section of Church Street. Premier Equipment Limited has since relocated to the west on Church Street but during the design phase, staff had measured the width of the largest farm equipment that would travel through Elmira along Church Street. It was confirmed that the 5.20 metre available width (face of outside curb to face of median curb) is sufficient for farm vehicles to negotiate through the median areas. Staff have recently consulted again with the 2 local farm equipment manufacturers (Premier Equipment Ltd. and Stoltz Sales and Service) and it is confirmed that the large farm equipment vehicles can drive past the medians but must do so slowly and carefully.
6. Conclusions

This report is provided for Regional Council's information to document the steps taken by staff to review the operation of traffic at the medians on Church Street. Staff feels that the road and median design is operating as intended by the Project Team and feels that the median lengths and lane widths should remain as they are today. The installation of additional signs will occur shortly. The alterations to the eastbound median curb east of Kissing Bridge Drive would occur this Fall as part of the landscaping contract.

Financial Implications:

No additional funds are required for this project as the minor works identified for additional sign installation and median alterations can be accommodated in the current budget for the project.

Attachments

Appendix A – Project Keyplan
Appendix B – Before and After Renderings
Appendix C – Post-Construction Collected Data

Prepared By: Gary MacDonald, Head Transportation Rehabilitation

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix A

CHURCH STREET REGIONAL ROAD 86
BARNSWALLOW DRIVE TO HERBERT STREET
ELMIRA, ONTARIO
TOWNSHIP OF WOOLWICH
Appendix B

Before and After Renderings
Appendix C

Post-Construction Collected Data

Traffic Counts – Church Street east of Kissing Bridge Drive

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Buggies</th>
<th>Cars</th>
<th>All Trucks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday April 19 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7am - noon</td>
<td>63</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>Noon - 7pm</td>
<td>38</td>
<td>4258</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>4258</td>
<td>52</td>
</tr>
<tr>
<td>Thursday April 23 2015</td>
<td>Buggies</td>
<td>Cars</td>
<td>All Trucks</td>
</tr>
<tr>
<td>7-9am</td>
<td></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>9am-noon*</td>
<td></td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Noon-4pm*</td>
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<td>93</td>
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<tr>
<td>4-7pm</td>
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<td>24</td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td>220</td>
<td>298</td>
</tr>
</tbody>
</table>

*not a typical weekday buggy count; a funeral was taking place at the Mennonite church

Speed Data – Church Street

<table>
<thead>
<tr>
<th></th>
<th>West of Barnswallow Drive, (posted speed = 50 kph)</th>
<th>At Killdeer Road (posted speed = 50 kph)</th>
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</thead>
<tbody>
<tr>
<td>Average</td>
<td>69-72 kph</td>
<td>51-53 kph</td>
</tr>
<tr>
<td>85th percentile</td>
<td>79-81 kph</td>
<td>57-60 kph</td>
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</tbody>
</table>
Region of Waterloo
Transportation and Environmental Services
Design and Construction

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 16, 2015

File Code: 7327

Subject: Recommended Intersection Improvements at Erb Street and Waterloo Waste Management Centre Gates 1 and 2, City of Waterloo

Recommendation:

That the Regional Municipality of Waterloo approve the implementation of multi-lane roundabouts on Erb Street at Waterloo Waste Management Centre Gates 1 and 2, in the City of Waterloo, as presented in Report TES-DCS-15-16.

Summary:

Current development planned for the proposed West Waterloo Commercial Centre along the north side of Erb Street opposite the Region’s Waste Management Centre (WMC) includes a Costco warehouse membership club and gas bar. Please refer to the Key Plan in Appendix A.

In order to provide access to the Costco site and maintain WMC access two multi-lane roundabouts and related road improvements on Erb Street at WMC Gates 1 and 2 are recommended.

The estimated total cost of the roundabouts and other related road improvements is $5.0 Million. Construction of the easterly roundabout at the site access and WMC Gate 1 is estimated at $1.4 Million and is to be fully funded by the developer as a new access to the Costco development. Construction of other road improvements on Erb Street and the westerly roundabout at the City of Waterloo’s north-south collector road and WMC Gate 2 is estimated at $3.6 Million and is the responsibility of the Region as an intersection improvement at a local municipal road. The developer will be required to enter into a cost sharing agreement with the Region as a condition of development.
approvals with the City of Waterloo.

Pending Regional Council approval of the roundabouts, development approvals and agreements with the developer, it is expected that construction of the roundabouts will commence in early 2016 with possible utility relocations commencing in late 2015. Construction of the roundabouts are required to be completed prior to the opening of Costco.

Further network road improvements are also being planned by the Region and City to service ongoing development and the increase in traffic projected in the west Waterloo area. These transportation system improvements include the City’s planned construction of a new north-south collector road from Erb Street to Columbia Street, as well as Region improvements to the intersection of Erb Street at Ira Needles Boulevard and completion of the widening of Ira Needles Boulevard north and south of Erb Street. The Region is also undertaking a Municipal Class Environmental Assessment (EA) to consider widening Erb Street from Fischer-Hallman Road to Wilmot Line.

A review of the transportation and planning work for the Costco site, undertaken for the City of Waterloo in late 2014/early 2015, recommended that further development of the West Waterloo Commercial Centre lands beyond the Costco uses not proceed until completion of a further transportation assessment, including the need to complete the longer-term network road improvements on Ira Needles Boulevard, Erb Street and the City of Waterloo’s north-south collector road.

Report:

1. Background

Current development planned along the westerly section of Erb Street, between Ira Needles Boulevard and Wilmot Line, includes for a proposed warehouse retail development, known as the West Waterloo Commercial Centre on the north side of Erb Street opposite the Region’s WMC. Please see key plan in Appendix A. The primary tenant for this development site is a Costco warehouse membership club and gas bar, with additional future uses on the site for retail, restaurants and services.

On April 7, 2014, Council of the City of Waterloo approved the zoning for the Costco development with a holding provision for completion of an Integrated Multi Modal Traffic Study (IMMTS) by City staff. The purpose of the IMMTS is to evaluate the implications of increased development in west Waterloo on the transportation system, and provide recommendations on: (1) transportation network and operational improvements to respond to growth; and (2) how to expand, connect, and integrate active transportation and transit in the study area. The holding provision for the IMMTS was removed as a result of a Settlement Agreement with the developer for approval of the Official Plan Amendment and Zoning By-Law at the Ontario Municipal Board on April 15, 2015.
On April 29, 2014, Report E-14-049 was presented to Regional Planning and Works Committee recommending approval of two multi-lane roundabouts on Erb Street at the WMC Gates 1 and 2 (see attached Appendix B, Report E-14-049).

Regional Council at their May 7, 2014 meeting deferred consideration of the roundabouts back to Planning and Works Committee for more information about landfill access, cost, timing of the roundabouts and other road improvements in the area and the City of Waterloo’s IMMTS.

2. Landfill Access

Traffic queueing and back-ups onto Erb Street have been observed at the Region’s WMC Small Vehicle Transfer Station (Gate 2 entrance) on Saturdays during specific times of the year, generally associated with spring and fall clean-up for residential yard waste/brush disposal. In order to reduce some of the traffic queues, the addition of a second inbound scale at the Region’s WMC Small Vehicle Transfer Station (Gate 2) is underway. This second inbound scale is anticipated to be completed by July 2015 and will enhance current operations at the Small Vehicle Transfer Station (Gate 2). Gate 2 will continue to be monitored for reductions in traffic queueing onto Erb Street.

3. Cost

The estimated total cost of the roundabouts and other related road improvements on Erb Street at the WMC Gate 1 and 2 is $5.0 Million. Construction of the easterly roundabout at the site access and WMC Gate 1 on Erb Street is estimated at $1.4 Million and is to be fully funded by the developer as a need solely associated with a new access to the Costco development. Construction of other related road improvements on Erb Street, and the westerly roundabout at the City of Waterloo’s north-south collector road and WMC Gate 2, is estimated at $3.6 Million and is the responsibility of the Region, with the north-south collector road opened as a public highway by the City of Waterloo. Region staff are working with the Costco developer and their consultant to complete the detailed design of the roundabouts and the developer will be required to enter into a cost sharing agreement with the Region as a condition of development approvals.

4. Roundabout Timing

Pending Regional Council approval of the roundabouts on Erb Street at WMC Gates 1 and 2, applicable City approvals for the Costco development and the necessary agreements with the developer, Region staff expect to construct the roundabouts starting in early 2016, with possible utility relocations starting in late 2015. As a condition of site development, the roundabouts on Erb Street at WMC Gates 1 and 2 are required to be constructed and operational prior to opening Costco to the public. In recognition of Costco’s desire to open at the earliest possible date in 2016, the
developer will be undertaking on-site construction concurrently with the Region’s construction of the roundabouts on Erb Street.

5. **Other Area Improvements**

In 2014, the City of Waterloo retained Salvini Consulting to complete a review of the current transportation and planning work for the West Waterloo Commercial Centre development. In review of the transportation and planning work completed, Salvini Consulting supports that development of the Costco uses on the West Waterloo Commercial Centre site can proceed in advance of the longer-term improvements on Ira Needles Boulevard and Erb Street. The report further identifies that development of the West Waterloo Commercial Centre lands beyond the Costco uses is not recommended to proceed until completion of a further transportation assessment, including the need to complete the longer-term network road improvements on Ira Needles Boulevard, Erb Street and the extension of the City of Waterloo’s north-south collector road from Erb Street to Columbia Street.

Widening of Ira Needles Boulevard from Highview Drive to 350 metres north of University Avenue was commenced in 2014 and will be completed in 2015. Widening of Ira Needles Boulevard from 350 metres north of University Avenue to Chablis Drive and the improvements to the intersection of Ira Needles Boulevard and Erb Street are planned for 2016.

The Region’s EA study for the longer-term improvements on Erb Street is underway. Improvements along Erb Street from Fisher-Hallman Road to Wilmot Line are being considered in order to improve roadway capacity to meet projected traffic demands and to improve active transportation facilities for pedestrians and cyclists along the corridor. The first Public Consultation Centre for this project was held on May 28, 2015 and completion of the EA study is expected in early/mid 2016. Pending project approval, detailed design and property acquisition would be completed throughout 2016 and 2017, with utility relocations in late 2017 and construction commencing in 2018.

6. **City of Waterloo IMMTS**

City of Waterloo staff have completed a draft Terms of Reference for the West Side IMMTS which was presented to the public for input and comment at a Public Consultation Centre held on March 26, 2015. It is expected that the IMMTS will take some time to complete and will evaluate the transportation implications of increased development in west Waterloo. Region staff are continuing to work City staff in the development and review of the City’s IMMTS study and any recommendations will be considered in future updates to the Regional Transportation Master Plan and Transportation Capital Program as appropriate.
Corporate Strategic Plan:

This project is consistent with the development of Strategic Focus Area 2 (Growth Management and Prosperity), specifically supporting Strategic Objective 2.2:

- Develop, optimize and maintain infrastructure to meet current and projected needs.

Financial Implications:

The Region’s 2015 Ten Year Transportation Capital Program includes a total budget of $6.58 Million for the widening of Erb Street from Ira Needles Boulevard to Wilmot Line in the years 2015-2019 to be funded from the Regional Development Charges Reserve Fund. This budget includes the Region’s cost for the roundabout at WMC – Gate 2, including associated road improvements on Erb Street, estimated at $3.6 Million.

Other Department Consultations/Concurrence:

Corridor Management staff from the Region’s Planning, Development and Legislative Services Department have been consulted in the preparation of this report.

Attachments

Appendix A – Key Plan – Erb Street Roundabouts at WMC Gates 1 and 2
Appendix B – Planning and Works Committee Report E-14-049, April 29, 2014

Prepared By: William Gilbert, Senior Project Manager, Transportation Expansion

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix “A”

Key Plan - Erb Street Roundabouts at WMC Gates 1 and 2
Appendix “B”

Planning and Works Report E-14-049, April 29, 2014

Region of Waterloo
Transportation and Environmental Services
Design and Construction

To: Chair Jim Wideman and Members of the Planning and Works Committee
Date: April 29, 2014
File Code: 7327

Subject: Recommended Intersection Improvements at Erb Street and Waterloo Waste Management Centre Gates 1 and 2, City of Waterloo

Recommendation:
That the Regional Municipality of Waterloo approve the implementation of multi-lane roundabouts on Erb Street at Waterloo Waste Management Centre Gates 1 and 2, in the City of Waterloo, all as presented in Report E-14-049 and subject to Regional Council approval of additional funding as part of the 2014 Mid-Year Review of the Transportation Capital Budget and 2015 Transportation Capital Program process.

Summary:
Road improvements to the existing intersections on Erb Street at the Waterloo Waste Management Centre Gates 1 and 2 (Please see key plan in Appendix A), between Ira Needles Boulevard and Wilmot Line, are necessary to address expected increases in traffic from ongoing development in the area.

The West Waterloo Commercial Centre is a proposed development on the north side of Erb Street immediately opposite the Region of Waterloo's Waste Management Centre (WMC). The current development proposal includes a large warehouse retail store (Costco) and associated gas bar with additional future uses for further retail, restaurants and services. A traffic study for this development identifies that in the short term (i.e. from opening day to 5 years) delays to motorists are expected during peak traffic times on Erb Street due to the additional traffic generated. These traffic delays are also expected to affect access and operations at the WMC.
In order to mitigate some of the traffic delays associated with the increase in traffic from the Costco development, a number of access and road improvements have been identified as necessary to support opening of the Costco development to the public. The short-term improvements required prior to opening of the Costco development include construction of intersection improvements at Gate 1 of the WMC to facilitate accesses to the Costco development and WMC. Construction of intersection improvements at Gate 2 of the WMC will follow construction of the Gate 1 intersection improvements, after opening of the Costco development to the public. The Gate 2 intersection improvements will provide a connection to a new north-south collector road (City Employment Collector) in servicing development of the City’s Future Employment lands north of Erb Street, as well as providing a secondary access to the Costco site. The Region is also widening Ira Needles Boulevard between Highview Drive to 350 metres north of University Avenue which is to be completed in the fall of 2014.

In addition to the road improvements for the Costco site development, Region and City staff have identified a number of longer-term road network improvements in the Erb Street area of west Waterloo to service development and the increase in traffic. These transportation system improvements include construction of a new north-south collector road by the City of Waterloo (City Employment Collector) between Erb Street and Columbia Street, opposite Gate 2 of the WMC (please see key plan in Appendix A), and improvements on Regional roads as included in the Region’s 2014 Ten Year Transportation Capital Program, for:

- Widening and improvements on Erb Street from Fischer-Hallman Road to Wilmot Line (subject to a Class Environmental Assessment Study currently being initiated by the Region), with construction in 2018;
- Improvements to the intersection of Ira Needles Boulevard and Erb Street, with construction in 2016 (pending land acquisition and utility relocation staff are planning to complete this in 2015); and
- Widening of Ira Needles Boulevard from 350 metres north of University Avenue to Chablis Drive, with construction in 2016.

On April 7, 2014, Council of the City of Waterloo approved the zoning for the Costco development on the north side of Erb Street with a holding provision for completion of an integrated multi-modal traffic analysis by City staff to identify and implement the necessary existing and long term transportation needs in this area of the City. City of Waterloo Council further requested that the Region continue the accelerated advancement of the required transportation network improvements to enable the anticipated west side development activity along Erb Street west and Ira Needles Boulevard.

In reviewing the need for intersection improvements at Gates 1 and 2 of the WMC, Regional staff assessed the feasibility of constructing multi-lane roundabouts in lieu of
conventional road improvements in accordance with Regional Policy (adopted in 2003 and updated on September 15, 2010). Conventional road improvements would include signalized intersections with additional turn and through lanes on Erb Street. Based on consideration of safety performance, traffic capacity and total life-cycle costing, staff are recommending the implementation of roundabouts because the roundabouts would result in fewer injury collisions and less delays to motorists and pedestrians than conventional road improvements.

Pending Regional Council approval of the roundabouts, applicable City approvals for the Costco development and agreements with the developer, staff will make best efforts to construct the easterly roundabout (Gate 1/Costco) in late 2014. This schedule is considered to be very aggressive and construction may not occur until 2015 due to the requirement to complete the design, acquire property and relocate utilities. Construction of the roundabout at Gate 2 of the WMC, connecting with the City of Waterloo’s new north-south collector road, is anticipated in 2015.

Report:

1. Background

The West Waterloo Commercial Centre is a proposed warehouse retail development on the north side of Erb Street West immediately opposite the Region’s Waste Management Centre. The primary tenant for this site is a Costco warehouse membership club and gas bar, with additional future uses on the site for retail, restaurants and services.

A traffic study completed for the Costco development identifies the need for a new access to Erb Street, as well as a secondary access to an adjacent future north-south City collector road to accommodate the traffic expected from the development. In addition, the traffic study identifies that in the short-term (i.e. from opening day to 5 years) average delays to motorists of over 6 minutes are expected, during peak traffic times, for travel from Ira Needles Boulevard westerly to the Costco site due to the additional traffic generated. During off-peak times this section of Erb Street would take on average 1 minute to travel. These traffic delays are expected to affect operations at the Waterloo Waste Management Centre (WMC) whereby contracted curbside collection vehicles, industrial, commercial and institutional customers, as well as members of the public, will likely be subject to increased delays when visiting the WMC. In association with the traffic implications from the Costco development, Regional staff presented an information report to Council on March 4, 2014 identifying the expected operational impacts and mitigation measures under consideration. Please refer to Report P-14-025 for details on the proposed Costco development and associated traffic and transportation impacts.
In recognition of the traffic impacts resulting from the Costco development, Regional and City of Waterloo staff, along with the developer, are in agreement that certain short-term access and road improvements must be implemented to mitigate some of the traffic delays associated with opening of the Costco development to the public. The short-term improvements required prior to opening of the Costco development include construction of intersection improvements at Gate 1 of the WMC to facilitate the development traffic and accesses to the Costco site and WMC. Construction of intersection improvements at Gate 2 of the WMC is to follow construction of the Gate 1 intersection improvements and will provide a connection to a new north-south collector road (City Employment Collector) in servicing development of the City’s Future Employment lands north of Erb Street. The Gate 2 intersection improvements will also provide a secondary access to the Costco development after its opening. Please see the key plan in Appendix ‘A’ for the location of these intersections. In addition, the Region will be widening Ira Needles Boulevard to four lanes from Highview Drive to 350 metres north of University Avenue with completion in the fall of 2014.

A number of longer-term road network improvements in the Erb Street area of west Waterloo have also been identified to service development and the increase in traffic. In addition to the City of Waterloo’s construction of a new north-south collector road (City Employment Collector) between Erb Street and Columbia Street, opposite Gate 2 of the WMC (please see key plan in Appendix A), improvements on Regional roads have been identified and are included in the Region’s 2014 Ten Year Transportation Capital Program as follows:

- Widening and improvements on Erb Street from Fischer-Hallman Road to Wilmot Line (subject to a Class Environmental Assessment Study currently being initiated by the Region), with construction in 2018;
- Improvements to the intersection of Ira Needles Boulevard and Erb Street, with construction in 2016 (pending land acquisition and utility relocation staff are planning to complete this in 2015); and
- Widening of Ira Needles Boulevard from 350 metres north of University Avenue to Chablis Drive, with construction in 2016.

The above noted projects are already planned or under way. Further changes to the Regional Road System are not anticipated. Review of landfill operations including site access will be completed in the future. Region staff have requested the City advance construction of the new north-south collector as an alternative route in assisting to accommodate the expected traffic on Erb Street.

On April 7, 2014, Council of the City of Waterloo approved the following motion with respect to the Costco site:
 Whereas the community desires a Costco Wholesale Club, and whereas the construction of a Costco in west Waterloo may generate traffic and increase travel delays, and whereas significant development has occurred on the west side of Waterloo with limited Regional or City Road improvements, that Council approve report IPPW2014-006 and the related Official Plan Amendment 5 and Zone Change Application Z-13-06 with a Holding Zone ‘H’ designated on all the lands until such time as:

a) An integrated multi-modal traffic analysis (including existing and planned development) has been completed and accepted to the satisfaction of the Commissioner of Integrated Planning and Public Works;

b) A public open house has been held regarding the integrated multi-modal traffic analysis;

c) That the necessary transportation improvements have been completed;

Further, that funding of such an integrated transportation study be provided in 2014 with City of Waterloo Senior Administration determining the appropriate funding source(s); and,

Further, Council requests that the Region of Waterloo continue the accelerated advancement of the required transportation network improvements to enable the anticipated west Side Development activity along Erb Street west and Ira Needles Boulevard.

In consideration for the construction of modifications to the existing WMC accesses to facilitate the development traffic and accesses to the Costco site, Regional staff developed two alternatives to address the capacity needs at the WMC Gates 1 and 2 intersections: conventional road widening with traffic signals or modern roundabouts. In accordance with Regional policy (adopted in 2003 and updated on September 15, 2010); Regional staff undertook a study to compare the advantages and the disadvantages of a roundabout in lieu of conventional road improvements at these intersections.

2. **Comparison of Roundabout and Conventional Road Improvements**

The conventional road improvements (as shown in Appendix ‘B-1’) required to address the capacity needs at these intersections would include:

- Four through lanes on Erb Street across the frontage of the Costco development;
- Left turn lanes on all approaches, westbound right turn lane and implementation of traffic signals at the intersection of the City’s north-south collector road and WMC Gate 2 entrance;
- Left turn lane on Erb Street and the WMC Gate 1 access; and
- Left turn lane and implementation of traffic signals on Erb Street at a new access
to the Costco development.

The roundabout option (as shown in Appendix ‘B-2’) includes:

- A multi-lane roundabout at each of the two Costco accesses, the easterly roundabout aligned with a new access to Costco east of Gate 1 to the WMC and the westerly roundabout aligned with the proposed City north-south collector road at Gate 2 to the WMC;
- Two-lane approaches on Erb Street, north-south collector and Costco development accesses;
- Single lane approaches from the Waterloo WMC Gates 1 and 2 entrances; and
- Four through lanes on Erb Street across the frontage of the Costco development.

An Intersection Control Study (ICS) was completed to compare the advantages and disadvantages of the roundabout versus the conventional traffic signals alternative for these intersections. In addition to assessing the safety performance of each alternative and the user delays associated with accommodating the anticipated traffic, a key component of the ICS assessment is to determine the total Life Cycle Cost (LCC) of each alternative. The LCC includes all costs associated with the implementation and maintenance of the alternatives over a 20-year period. The LCC also includes for each alternative an estimate of the injury crash costs based on the expected injury crashes over the 20-year period. Based on this assessment of total costs, it has been determined the total LCC of the roundabout option would be approximately $1.87 million lower than the LCC of the conventional road improvements option. The roundabout option’s lower LCC is due mostly to the expectation of fewer injury collisions at the roundabouts than would be expected at the traffic signals. Please refer to Table 1 in Appendix D for a detailed breakdown of the Life Cycle Cost for each alternative.

In order to further mitigate impacts from the increase in traffic in the area, Region staff have worked closely with City of Waterloo staff and the developer in identifying modifications to the easterly roundabout option that would locate the development access opposite to the WMC Gate 1 entrance. Please refer to Appendix B-3 for the modified roundabout option. Locating the easterly roundabout at the WMC Gate 1 entrance would reduce potential access impacts associated with the road improvements in maintaining full access (left and right turn movements) into and out of the WMC.

3. Public Consultation

Prior to developing a recommended option for this project, staff sought public input on the roundabout and the conventional road improvement alternatives. Notices were placed in the Kitchener-Waterloo Record on March 7 and 14, 2014. Letters were also hand delivered to business owners/residents within the immediate vicinity of the intersection on March 6, 2014 and project notification sign boards were placed on Erb
Street at the westbound and eastbound approaches to the Waterloo Waste Management Centre Gates 1 and 2 from March 7 to March 21, 2014.

4. **Main Issue Raised by the Public**

Two written comments were received from the public and expressed concern for the condition of the road, the need for the roundabouts and the traffic associated with development in the area. The other issues raised were related to development access, traffic and pavement conditions on Ira Needles Boulevard. Please refer to Appendix ‘C’ for a detailed summary of each written comment received and the staff responses.

Through written submissions received, staff has identified the main public concern as follows:

**Additional roundabouts on Erb Street**

Comments received expressed concern for another roundabout on Erb Street and whether two or potentially more were necessary.

**Staff Response:**

The lands on the north side of Erb Street opposite the Waterloo Waste Management Centre are designated by the City of Waterloo for commercial and employment (Industrial) development and include for a proposed City collector road that will connect Erb Street with Columbia Street to the north. This will result in a new intersection on Erb Street at Gate 2 of the Waterloo Waste Management Centre.

In addition, as identified through a traffic analysis completed for the proposed development on the north side of Erb Street, road improvements on Erb Street are needed to address the expected increase in traffic and vehicle delays. The identified road improvement needs include for a new access for the development on Erb Street opposite Gate 1 of the Waterloo Waste Management Centre. A new intersection at this location is proposed in order to accommodate the high volume of traffic associated with the development and to maintain full access to the Waste Management Centre.

In assessing the alternative of a roundabout in lieu of traffic signals at the new intersections, Regional staff are recommending the implementation of roundabouts because the roundabouts would result in fewer injury collisions and less delays to motorists and pedestrians than conventional road improvements for traffic signals. A Class Environmental Assessment (EA) Study for future road improvements on Erb Street between Fischer-Hallman Road and Wilmot Line is currently underway by Regional staff. This Class EA study will review needs and make recommendations for improvements along this section of Erb Street.
including widening up to 4 lanes. Public consultation is planned as part of the Class EA study and area property owners, residents, businesses and the general public will be advised of opportunities for input throughout the study. Interested parties are encouraged to become involved so that any concerns are incorporated into the considerations for improvement recommendations.

5. **Recommended Alternative**

Based on the technical study, the current experience with the Region’s existing roundabouts and input received from the public regarding this project, staff believe the multi-lane roundabouts are a better option for these intersections because:

- The roundabouts would result in fewer injury collisions than the signalized intersections;
- The roundabouts would result in fewer delays to all users; and
- The roundabouts would result in the lowest total Life Cycle Cost.

Although the estimated cost to initially construct the roundabouts ($4.58 million) is more than the estimated cost to construct the conventional road improvements ($3.42 million), the overall life-cycle costs of the roundabouts ($6.97 million) are anticipated to be lower than the overall life-cycle costs of traffic signals ($8.84 million) when one considers the cost of all the injury collisions that would be avoided by implementing the roundabouts. In addition to the increased benefit regarding reduced injury collisions, reduced delays and lower life-cycle costs, the roundabouts would also reduce idling times resulting in fuel savings and reduced vehicle emissions. The roundabouts would also provide an opportunity for aesthetic streetscape enhancements and minimize access impacts to the Region’s Waste Management Centre. In addition, with the intersections only 150 metres apart, constructing two traffic signals that close together would cause traffic queues to back up into the intersections resulting in further congestion and delays.

Given the increased benefits of a roundabout when compared to traffic signals, staff is recommending the implementation of multi-lane roundabouts at the intersections of Erb Street and the WMC Gates 1 and 2. Pending Regional Council approval of the roundabouts, applicable City approvals for the Costco development and agreements with the developer, staff will make best efforts to construct the easterly roundabout (Gate 1/Costco) in late 2014. This schedule is considered to be very aggressive and construction may not occur until 2015 due to the requirement to complete the design, acquire property and relocate utilities. Construction of the roundabout at Gate 2 of the WMC, connecting with the City of Waterloo’s new north-south collector road, is anticipated in 2015.
April 29, 2014  

The easterly roundabout at the site access and WMC – Gate 1 and associated road improvements on Erb Street would be fully funded by the developer as a need solely associated with a new access to the Costco development. The second westerly roundabout at the City of Waterloo’s new north-south collector road and WMC - Gate 2, and associated road improvements on Erb Street, would be the responsibility of the Region with the Collector Road opened as a public highway by the City of Waterloo. Regional staff are working with the Costco proponent to develop a detailed design for the road and intersection improvements on Erb Street. The cost of the roundabouts is being further developed as part of the detailed design for the road improvements and cost sharing arrangements will be brought back to Council as part of planning approvals and agreements with the developer. The total cost for the roundabouts and road improvements is estimated at approximately $4 - 5 million with Region’s cost for the roundabout at WMC – Gate 2, including associated road improvements on Erb Street, expected to be in the $2 – 3 million range.

Corporate Strategic Plan:

This project supports Focus Area 2 – Growth Management and Prosperity and meets the strategic objective to develop, optimize and maintain infrastructure to meet current and projected needs.

Financial Implications:

The Region’s 2014 Ten Year Transportation Capital Program includes a total budget of $3.1 million for the widening of Erb Street West from Ira Needles Boulevard to Wilmot Line in the years 2014-2018 to be funded from the Regional Development Charges Reserve Fund. The Region’s cost for the roundabout at WMC – Gate 2, including associated road improvements on Erb Street, is expected to be in the $2 – 3 million range and would be funded from the Regional Development Charges Reserve Fund. Staff have identified that the current funding for Erb Street improvements would be insufficient to cover the widening of Erb Street from Ira Needles Boulevard to Wilmot Line plus the additional improvements for the roundabout at WMC - Gate 2. As a result, it will be necessary to allocate additional funding to the Transportation Capital Program budget at mid-year review and as part of the 2015 Transportation Capital Program process to fund the Region’s share of the additional road improvements associated with the Costco development.

Other Department Consultations/Concurrence:

Staff from the Transportation Planning Division of the Planning, Housing and Community Services Department have assisted in the preparation of this report.
April 29, 2014

Attachments

Appendix A – Key Plan
Appendix B-1 – Traffic Signal Alternative
Appendix B-2 – Roundabout Alternative
Appendix B-3 – Modified Roundabout Alternative
Appendix C – Summary of Comments provided by the public and staff responses
Appendix D – Table 1: Life Cycle Cost Comparison

Prepared By: William Gilbert, Senior Project Manager, Design and Construction

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix A

Key Plan – Erb Street Intersection Improvements at Waterloo Waste Management Centre Gates 1 and 2
Appendix B-1

Intersection Improvements – Traffic Signals Alternative
Appendix B-2

Intersection Improvements – Initial Roundabout Alternative
Appendix B-3

Intersection Improvements – Modified Roundabout Alternative
Appendix C-1

Intersection Improvements at Erb Street and Waterloo Waste Management Centre Gates 1 and 2

City of Waterloo

Public Comments

Written Comments Received and Staff Responses

<table>
<thead>
<tr>
<th>Name</th>
<th>Comments and Concerns</th>
<th>Staff Response</th>
</tr>
</thead>
</table>
| Marcia Schmidt   | What an uninformed idea.  
1. The road in front of the dump was just completely redone last year and is now in perfect condition.  
2. The existing roundabouts on Ira Needles are in horrible shape as is the whole road around them. They are cracking and are poorly kept. Small repairs on them are poorly done and whoever was hired to do that road should have to pay back the money they got for doing such a lousy job. | Yes, this section of Erb Street was recently paved and is in good condition; however, the road improvements needed for ingress/egress to the Costco site are significant. Region staff are aware of the poor pavement conditions along sections of Ira Needles Boulevard and has ongoing maintenance programs to continually monitor and repair areas as needed. Some areas of spot repairs are being completed in 2014 with others planned for 2016. In addition, resurfacing of the road as needed will be considered as part of road widening scheduled in the Regions Transportation Capital Program for 2016. |
<table>
<thead>
<tr>
<th>Name</th>
<th>Comments and Concerns</th>
<th>Staff Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marcia Schmidt (cont'd)</td>
<td>3. When a road is being changed in any way and being resurfaced, some thought should be given to other factors surrounding the road, such as new construction and underground services. 4. I am really tired of roads being ripped up piece meal for different reasons. All departments should be working together.</td>
<td>Prior to construction the Region consults with and coordinates servicing and infrastructure needs with the local municipality, utility companies and adjacent development for incorporating any servicing needs within the road construction project. This is a standard practice to limit the potential for disrupting a newly constructed road. However, there are times when servicing needs are not known at the time of the road construction or when emergency works and repairs are needed.</td>
</tr>
<tr>
<td></td>
<td>5. There is no need for another roundabout. You obviously do not drive on Erb street past the dump. I do several times a day in fact. It is the only way into the city for me that does not take me miles out of my way. We just had two years of it and do not need any more.</td>
<td>The lands on the north side of Erb Street opposite the Waterloo Waste Management Centre are designated by the City of Waterloo for commercial and employment (Industrial) development. The development lands on the north side of Erb Street include for a City collector road that will connect Erb Street with Columbia Street to the north. This will result in a new intersection on Erb Street at Gate 2 of the Waterloo Waste Management Centre. In addition, as a result of increased traffic expected from development on the north side of Erb Street an additional site access to Erb Street has been identified. This development access has been located as a new intersection at Gate 1 of the Waterloo Waste Management Centre in order to maintain full operation of the Gate 1 Waste Management Centre access. Roundabouts at these intersections are being recommended by Regional staff as they would result in fewer injury collisions and less delays to motorists and pedestrians than conventional road improvements for traffic signals.</td>
</tr>
<tr>
<td>Name</td>
<td>Comments and Concerns</td>
<td>Staff Response</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Marcia Schmidt</td>
<td>6. That would put the &quot;oh so wonderful &quot; stop light right in the middle of the roundabouts. Fix that problem before you make any more roundabouts.</td>
<td>The need for improvements at the existing traffic signals on Erb Street west of Ira Needles Boulevard will be reviewed as part of the Erb Street Improvements study currently underway by the Region. See Staff Response to Stewart Bowring’s Comment #2 as below.</td>
</tr>
<tr>
<td>(cont’d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.a) I cannot see how a roundabout would improve the dump traffic. The cost alone should give you second thoughts.</td>
<td>The traffic studies completed for the development on the north side of Erb Street identify increased traffic delays due to the additional traffic generated by the proposed development. With the roundabouts and associated road improvements as proposed, over time, the delays would be reduced for all visitors to the Waterloo Waste Management Centre, although they would still remain higher than exists today.</td>
</tr>
<tr>
<td></td>
<td>7.b) At least do the roads right without the seams down the middle. Water gets into them and creates potholes and destroys the road before its best before date.</td>
<td>Construction paving joints can be problematic as road settlement and separation of the asphalt can result over time. For some projects construction joints (seams) cannot be fully eliminated as we need to maintain traffic during construction. Where possible the Region implements alternative construction practices for &quot;Tandem Paving&quot; which eliminates pavement joints, however, this requires full closure of the road over a lengthy period of time to complete the paving. This is often difficult to undertake as maintaining access to businesses and through traffic becomes a concern.</td>
</tr>
<tr>
<td>Name</td>
<td>Comments and Concerns</td>
<td>Staff Response</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Marcia Schmidt (cont'd)</td>
<td>8. Go sit at the stores that are built on Ira Needles and watch the people making left hand turns on the weekend where no left hand turns should be allowed. That was an absolute example of poorly co-ordinated planning. That has created excess traffic just because stores are in the area. No thoughts there. And how about Cambridge where they designed a road that was to move traffic around the city quickly and allowed shops to be built all along the road. Now they have traffic nightmare. The same thing is happening with Ira Needles. It was planned to be an arterial road to move traffic quickly NOT to be a road with ten thousand shops. Then someone discovered roundabouts.....HOW ABOUT SOME TRUE PLANNING ... and maybe learn from mistakes that have been made.....DO NOT CONTINUE TO MAKE MORE OF THE SAME MISTAKE.</td>
<td>Traffic impacts are considered by Region staff as part of all development applications. When there are concerns associated with generation of traffic from a development, or access onto a Regional Road, a Traffic Impact Study is required from the Developer. The Traffic Impact Study considers the volume of traffic anticipated to and from the site, proposed accesses and the operational impacts on the Region's roads. Regional staff work with the developer to determine recommendations for site access and the needs for improvements on the Regional roads. Ira Needles Boulevard has been designed to provide most of the accesses (particularly the Boardwalk) with a roundabout (University Avenue, Walmart access). Other accesses have been provided via previous agreements with landowners. In the case of the Sobey’s plaza entrance at 235 Ira Needles Boulevard, the southerly access to this plaza, which currently operates as a full traffic movement access, will be permitted to continue to operate with the widening of Ira Needles Boulevard. Two years after this section of Ira Needles Boulevard has been widened, the developer will prepare a transportation study to determine if this access must be redesigned to operate with restricted traffic movements.</td>
</tr>
<tr>
<td>Name</td>
<td>Comments and Concerns</td>
<td>Staff Response</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tbody>
</table>
| Marcia Schmidt (cont’d) | 9. AND how about making a buffer zone around the dump. Good grief did you learn nothing from the mount trashmore fiasco and building homes too close to a dump.  
Try experiencing the smell of the dump from Boston Pizza or Walmart or the homes down wind. | The Waterloo Landfill has a buffer zone as approved by the Ministry of Environment as part of the landfill approval process. The Waterloo landfill is ISO 14001 certified and operates within the Certificate of Approval issued by the Ministry of Environment. The Region of Waterloo Planning Division as well as the Waste Management Division recognize the impacts of the Waterloo Landfill and regularly provides input into zoning changes proposed by the City of Waterloo. The City of Waterloo ultimately determines the zoning. A warning clause has been implemented on new development to inform the purchasers/tenants of the proximity of the landfill. |
<table>
<thead>
<tr>
<th>Name</th>
<th>Comments and Concerns</th>
<th>Staff Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stewart Bowring</td>
<td>1. I am in favour of a new roundabout on Erb Street beside the landfill site. However, since the two landfill gates are only 100 metres apart (approx.), the installation of TWO roundabouts makes no sense. Two roundabouts so close together would inevitably interfere with each other, leading to increased traffic congestion – just what you claim to be trying to avoid. It would make more sense to have just ONE roundabout, with ONE main entrance to the landfill site and to create a new access road within the fenced area of the landfill site linking the driveways for the present two gates. There is clearly sufficient space for such an access road within the fenced area. The proposed development on the north side Erb Street should also have a single entrance/exit connecting with this single roundabout.</td>
<td>The two landfill gates (approx. 150 metres apart) operate two different types of traffic. Gate 1 is for commercial trucks and Gate 2 is the public gate. Both are required to be maintained for operation of the landfill. The proposed development to the north also requires two accesses to facilitate traffic movement for their development. Traffic analysis has been completed based on the proposed development and two roundabouts spaced approximately 150 metres apart can operate effectively at this location.</td>
</tr>
<tr>
<td>Name</td>
<td>Comments and Concerns</td>
<td>Staff Response</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stewart Bowring (cont'd)</td>
<td>2. Also, looking to the future, it will not be too long before yet another roundabout will be needed at the Wilmot Line intersection. There are already a set of traffic lights and a roundabout (at Ira Needles Blvd) on that section of Erb Street. Are we going to have to negotiate FOUR roundabouts and a set of lights in that short stretch of road on our way into Waterloo? With respect, that’s daft!</td>
<td>Road improvements on Erb Street between Ira Needles Boulevard and Wilmot Line are scheduled in the Region’s Transportation Capital Program for 2018. As part of the improvements planning along this section of Erb Street the Region has initiated a Class Environmental Assessment (EA) Study to review the improvement needs, develop and evaluate improvement alternatives and recommend a solution that best meets the traffic and community needs. Review of alternatives for intersection improvements at Wilmot Line is included in this study. This Class EA study will include for public consultation throughout the study process in reviewing the project needs and working towards recommendations for improvements. A notice of Study Commencement will be advertised when the public consultation for the study has been initiated and adjacent property owners, residents and businesses will be notified in advance of any public consultation centres and meetings regarding information and input on the project. Area property owners, residents, businesses and the general public are encouraged to become involved throughout the study process so that any concerns are incorporated into the considerations for improvement recommendations.</td>
</tr>
<tr>
<td>Name</td>
<td>Comments and Concerns</td>
<td>Staff Response</td>
</tr>
<tr>
<td>--------------------</td>
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<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stewart Bowring (cont’d)</td>
<td>3. Furthermore, I would request that the (single) roundabout be made bigger than the one at Ira Needles, and that any pedestrian crossings are located well away from the roundabout. These are major safety concerns at the existing roundabouts.</td>
<td>There is a balancing act on constructing the size of a roundabout. Too large a roundabout increases speeds and results in a higher amount of collisions at greater costs, along with an increase in injury collisions. In addition, a larger roundabout would increase the crossing distance and time for pedestrians creating greater exposure to traffic and increasing the potential for collisions. The size of a roundabout in the Region is optimized to provide for associated speed and collision reductions while accommodating the volumes of traffic and providing an improved environment for pedestrian crossing. Considerations for locating pedestrian crossings further away from the roundabout have in the past been reviewed by Region staff and are not recommended as traffic speeds tend to increase the further away from the roundabout which would create a greater number and severity of collisions between motorists and pedestrians.</td>
</tr>
</tbody>
</table>
April 29, 2014

Report:  E-14-049

Appendix D

<table>
<thead>
<tr>
<th>Erb Street and Waterloo Waste Management Centre Gates 1 and 2</th>
<th>Table 1: Life Cycle Cost Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>Traffic Signals</td>
</tr>
<tr>
<td>Estimated Construction Cost</td>
<td>$3.42 Million</td>
</tr>
<tr>
<td>Injury Crash Cost</td>
<td>$5.42 Million</td>
</tr>
<tr>
<td>Total Cost (Present Value)</td>
<td>$8.84 Million</td>
</tr>
<tr>
<td>Safety Performance (Expected Injury Collisions Per Year)</td>
<td>1.11 (Gate 1)</td>
</tr>
<tr>
<td></td>
<td>1.55 (Gate 2)</td>
</tr>
<tr>
<td>Operational Performance 2024</td>
<td>Level of Service (LOS) C (with some movements at a lower LOS)</td>
</tr>
<tr>
<td>Overall Assessment</td>
<td>Preferred</td>
</tr>
</tbody>
</table>
Region of Waterloo
Transportation and Environmental Services
Rapid Transit

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 16, 2015

File Code: A02-30/PW

Subject: Recommended ION LRT Stop Anchor Wall Designs

Recommendation:

That the Regional Municipality of Waterloo approve the ION LRT stop anchor wall designs as outlined in Report TES-RTS-15-07, dated June 16, 2015.

Summary:

This report outlines the recommendations for the ION light rail transit (LRT) stop anchor wall designs. The anchor wall is an architectural feature that reflects area specific design considerations, and provides visual prominence and way-finding functionality. The draft ION anchor wall designs were shared with the public via Public Consultation Centres and the rapid transit website in order to gather feedback on the proposed concepts. Comments received were reviewed and incorporated where applicable into the recommended ION LRT stop anchor wall designs.

Two Public Consultation Centres (PCCs) to present the anchor wall designs were held on May 20th and May 21st. The PCCs were well attended with 81 individuals who signed-in. There were a total of 176 comment sheets received via both the PCCs and the rapid transit website. The comments included both general notes on the ION stop design as a whole (including weather protection, durability, and overall impressions) as well as specific comments regarding each individual anchor wall.

Based on the comments received, the concepts for each individual anchor wall design are generally accepted and liked with the exception of the anchor wall design for the Victoria Park stop. Comments for this particular location suggested disconnect with the local theme being proposed as well as a perceived controversial symbology in the pattern. As a result of the input received, this report includes a recommendation from
staff to alter the Victoria Park anchor wall design to a new Eramosa stone with a polished fleuri-cut finish. Renderings of the recommended design can be viewed in Appendix A.

For each of the other 18 stop locations the comments were generally positive and non-controversial therefore, no change from the proposed designs presented to Committee on May 5th is recommended beyond that of the Victoria Park Stop. Accordingly, the recommended anchor wall designs are as follows:

<table>
<thead>
<tr>
<th>Stop Name</th>
<th>Material</th>
<th>Colours</th>
<th>Main Concept(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conestoga</td>
<td>Ceramic</td>
<td>Multiple Bold</td>
<td>Mall, Bold Presence, Mixed Use</td>
</tr>
<tr>
<td>Northfield</td>
<td>Stone</td>
<td>Algonquin</td>
<td>Heritage</td>
</tr>
<tr>
<td>Research and Technology</td>
<td>Ceramic</td>
<td>Red</td>
<td>Prominence, Identifiable</td>
</tr>
<tr>
<td>University of Waterloo</td>
<td>Glass</td>
<td>Black, White, Blue, Grey</td>
<td>Reflect Architecture, Modern</td>
</tr>
<tr>
<td>Laurier - Waterloo Park</td>
<td>Stone</td>
<td>Eramosa Vein Cut</td>
<td>Natural, Vertical</td>
</tr>
<tr>
<td>Willis Way</td>
<td>Glass</td>
<td>Black, White, Beige</td>
<td>Barrel Wall, Reflect Architecture</td>
</tr>
<tr>
<td>Waterloo Public Square</td>
<td>Glass</td>
<td>Blue, White</td>
<td>Heart of Uptown, Vibrancy</td>
</tr>
<tr>
<td>Allen</td>
<td>Glass</td>
<td>White, Beige, Red</td>
<td>Reflect Architecture, Old and New</td>
</tr>
<tr>
<td>Grand River Hospital</td>
<td>Ceramic</td>
<td>Blue</td>
<td>Hospital</td>
</tr>
<tr>
<td>Central Station - Innovation District</td>
<td>Glass</td>
<td>Blue, Green</td>
<td>Multiple Modes of Transportation</td>
</tr>
<tr>
<td>Victoria Park</td>
<td>Stone</td>
<td>Eramosa Fleuri Cut</td>
<td>Natural, Flowing</td>
</tr>
<tr>
<td>Kitchener City Hall</td>
<td>Glass</td>
<td>Frosted, White, Grey</td>
<td>Reflect City Hall</td>
</tr>
<tr>
<td>Queen</td>
<td>Ceramic</td>
<td>Blue, Orange, Grey</td>
<td>Diversity</td>
</tr>
<tr>
<td>Frederick</td>
<td>Glass</td>
<td>Frosted</td>
<td>Reflect Architecture, Safety</td>
</tr>
<tr>
<td>Kitchener Market</td>
<td>Ceramic</td>
<td>Red, Orange, Yellow</td>
<td>Harvest Vegetables</td>
</tr>
<tr>
<td>Borden</td>
<td>Ceramic</td>
<td>Blue, Green</td>
<td>Schneider Creek, Flow of Change</td>
</tr>
<tr>
<td>Mill</td>
<td>Ceramic</td>
<td>Brown, Grey, White</td>
<td>Traditional Ballasted Rail Tracks</td>
</tr>
<tr>
<td>Block Line</td>
<td>Ceramic</td>
<td>Purple, White</td>
<td>Two Row Wampum</td>
</tr>
<tr>
<td>Fairway</td>
<td>Glass</td>
<td>White, Black, Blue, Grey</td>
<td>Multiple Lines of Transit</td>
</tr>
</tbody>
</table>

Report:

This report outlines the recommendations for the ION light rail transit (LRT) stop anchor wall designs. The design of the ION stops is critical to the success of the Region of Waterloo’s rapid transit (RT) service. Stops are the first point of contact for users of the system. Therefore, it is important that they reflect the identity of the community, while also ensuring durability, comfort, and ease of use. A key feature of the ION stop designs is the anchor wall. The anchor wall is an architectural feature that reflects area specific design considerations, and provides visual prominence and way-finding functionality. The draft ION anchor wall designs were shared with the public via PCCs and the rapid transit website in order to gather feedback on the proposed concepts. Comments received were reviewed and incorporated where applicable into the recommended ION LRT stop anchor wall designs.
ION LRT Stop Design Process

ION LRT stop designs have been in development since 2013 when concepts were first shared with stakeholders and the public for feedback. Original concepts, created by the Region’s General Engineering Consultant in coordination with Region staff, showed a stop design that consisted of a modular design. This meant that although the stops would have a common language of elements to identify the stop as ION, modular components could be manipulated to create a unique context for each stop. One of the key variable elements of the stop design was the anchor wall. The intent for the anchor wall of all 19 stops is to have a unique design which will aid users in identifying each stop along the ION route and provide visual interest to the ION LRT stop and surrounding area.

Following the 2013 consultation process, Region staff incorporated the public and stakeholder feedback received into the output specifications for the ION project Request for Proposal (RFP). The RFP indicated to the potential Design Build Finance Operate Maintain (DBFOM) contractors which functional and design elements were required as part of final designs. The successful DBFOM contractor was GrandLinq, who is responsible for completing stop designs in coordination with Region staff.

The GrandLinq stop design in its entirety is nearing completion; this includes amenities, weather protection (including enclosed shelters), functional design requirements, and structural elements. However, the anchor walls went through a public consultation process leading to the recommended designs outlined in this report. One impressive feature of the GrandLinq design is the prominence of the anchor walls. The GrandLinq design incorporates a larger anchor wall than the original 2013 concepts, standing more than 4.5 metres tall, which will incorporate a variety of materials, colours, and patterns.

Material options, selected in coordination with Region staff, include ceramic in any colour, nine colours of glass, and six local stone options. These materials are recommended to be implemented in a panel design with multiple colours of a finish available for each wall to create a unique pattern. All materials were chosen for durability, aesthetics, and will be treated with an anti-graffiti coating.

Using these designated materials and panel design, Region staff and the General Engineering Consultant architects and designers created proposed anchor wall designs for each stop. In creating these proposed concepts the following criteria and questions were considered:

- What is the stop serving?
- What landmarks are in the vicinity of the stop?
- What material best represents the area? (e.g. stone tends to give a feeling of warmth, heritage, and nature whereas glass is more modern)
- What ought the colours represent? How will the colours make users feel?
Is it more appropriate to blend in with the area or to provide bold contrast?
How can symbolism be incorporated?

Proposed anchor wall design concepts were generated based on these criteria and shared with focus groups and stakeholders prior to being completed for public consultation. Stakeholders included the cities, universities, Public Art Advisory Committee, and the Downtown Kitchener and UpTown Waterloo BIAs, etc. The anchor wall concepts were also reviewed and commented on by the Rapid Transit Steering Committee and Regional Councillors from Kitchener and Waterloo.

Public Consultation Process

Two PCCs to present the anchor wall designs were held on May 20th at Knox Presbyterian Church and May 21st at the Region of Waterloo Administrative Headquarters. Residents were invited to attend the PCCs from 3 to 8 p.m. via eNewsletter, social media, local media coverage, the rapid transit website, as well as newspaper advertisements in the Waterloo Chronicle and the Kitchener Post. The proposed anchor wall designs and associated comment sheet (Appendix B) were also available on the rapid transit website for online comments. In total there were 52 attendees who signed in at the Knox Presbyterian Church PCC and 29 at the Region of Waterloo Administrative Headquarters PCC. There were a total of 176 comment sheets received via both the PCCs and the rapid transit website.

Throughout the public consultation period, proposed anchor wall concepts were shared and feedback was gathered for two main purposes. First, participants were asked to comment on their first impressions of each ION stop anchor wall in order to expand upon the story for each design. Participants were notified that the story would be incorporated into the stop potentially via a plaque or poster. Second, feedback received was considered for any required modifications prior to final recommendations.

Public Consultation Results

As noted earlier in this report, a total of 176 comment sheets were received via both the PCCs and electronic comment forms on the rapid transit website. Of the 176 comments, 86 comments were related to the general design of the ION LRT stop. These comments touched on the following:

1. Weather protection
2. Durability of the materials
3. General support or distaste of the overall concept of the anchor wall designs

Throughout the public consultation process the following responses were offered with regards to items 1 and 2 above.

- **Weather Protection:** An enclosed shelter will be included on all ION LRT stops.
The size of the enclosed shelter will be equivalent to a large GRT bus shelter. There will be one enclosed shelter for phase 1 of the platform and an additional enclosed shelter when the platform shelter expands for phase two. In addition, all enclosed shelters are provisioned to include radiant heating in the future, with five stops incorporating the heating for opening day. These include: Conestoga, Northfield, Grand River Hospital, Block Line, and Fairway. Lastly, in addition to the enclosed portion, phase one of the shelter will include 28 metres of glass canopy which will incorporate laminated safety glazing with treated glass for shade protection.

- **Durability of the Materials**: All three chosen materials (glass, ceramic, and stone) were in part chosen for their durability and longevity and all materials will be treated with an anti-graffiti coating. In addition, the recommended panel design allows GrandLinq to replace one damaged tile as opposed to an entire wall. GrandLinq is also required to maintain the anchor walls for a period of up to 30 years and must repair damaged elements within a reasonable timeframe.

Table 1 below summarizes how many comments were received for each individual anchor wall design. Note that although there were 176 submissions, some respondents chose to provide feedback on multiple anchor wall designs. Therefore the total amount of comments on the individual designs in addition to the general comments is greater than the number of comment sheets submitted.

**Table 1: Number of Public Comments by Stop Location**

<table>
<thead>
<tr>
<th>Stop Location</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conestoga</td>
<td>27</td>
</tr>
<tr>
<td>Northfield</td>
<td>17</td>
</tr>
<tr>
<td>Research and Technology</td>
<td>17</td>
</tr>
<tr>
<td>University of Waterloo</td>
<td>35</td>
</tr>
<tr>
<td>Laurier - Waterloo Park</td>
<td>31</td>
</tr>
<tr>
<td>Willis Way</td>
<td>8</td>
</tr>
<tr>
<td>Waterloo Public Square</td>
<td>16</td>
</tr>
<tr>
<td>Allen</td>
<td>17</td>
</tr>
<tr>
<td>Grand River Hospital</td>
<td>17</td>
</tr>
<tr>
<td>Central Station - Innovation District</td>
<td>15</td>
</tr>
<tr>
<td>Victoria Park</td>
<td>15</td>
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The most commented on designs were for the stops at University of Waterloo (35) and Laurier – Waterloo Park (31). The least commented on designs were for the stops at Willis Way (8) and Kitchener City Hall (9).

Figure 1 below provides a word cloud sample (which includes all key words from all question responses from all participants) for the Laurier – Waterloo Park stop location. This analysis was completed for all stops. This overall public impression of each anchor wall was used to inform the recommended designs.

**Figure 1: Laurier – Waterloo Park Public Feedback Word Cloud**

Overall the concepts for each individual anchor wall design were well received and liked. However, the anchor wall design for the Victoria Park stop was generally not supported. For instance, comments included that the design was bland, that it was too similar to the Central Station – Innovation District design, and that the grey band, intending to reflect the iron horse trail, may reflect a historically controversial symbol. In light of the comments, staff are recommending to alter the Victoria Park anchor wall design to the Eramosa stone with a polished fleuri-cut finish. Renderings of the recommended design can be viewed in appendix A.

**GeoThink Data Analysis**

In partnership with the University of Waterloo, a data analysis of the submitted comment sheets was also undertaken. This work was completed under the GeoThink Project Grant composed of 26 researchers and 30 partners. GeoThink’s mandate is to examine the implications of increasing two-way exchanges of locational information between
citizens and governments and the way in which technology shapes, and is shaped by, this exchange. A summary of results from this analysis can be viewed in Appendix C. The data analysis was very helpful in understanding the nature of comments from a different perspective. This information assisted staff in highlighting key themes and messages raised so that they could be addressed and reflected in the recommended anchor wall designs.

**Recommended Anchor Wall Designs**

The following provides the recommended materials and design story summary for each anchor wall design which reflects the input received at the PCCs. To view renderings of each recommended design, please see Appendix A.

1. **Conestoga**
   - **Material:** Ceramic
   - **Colour:** Multiple Bold
   - **Design Story Summary:**
     - Bright coloured blocks of ceramic reflect the design on the exterior of the mall.
     - The bright colours give the wall presence on an existing low density car oriented corridor.
     - Different blocks of colour represent the different types of development coming to the area as it redevelops (mixed use).
     - Provides a prominent feature to visually make ION and GRT transfers seamless.
     - The colour combination provides a feeling of excitement.
     - Reminiscent of the abstract artist Piet Mondrian.

2. **Northfield**
   - **Material:** Stone
   - **Colour:** Algonquin
   - **Design Story Summary:**
     - The Algonquin stone will tie into the heritage relationship of this stop as the park n’ ride and future tourist train will form an important connection to St. Jacob’s, Elmira, and the Mennonite Community.
     - The warm tones of the stone compliment the finishes of the surrounding buildings.
     - It’s corporate and work oriented design fits well with the North Waterloo employment zone which this stop will serve.

3. **Research and Technology**
   - **Material:** Ceramic
   - **Colour:** Red
   - **Design Story Summary:**
     - The red ceramic wall will reflect the red architectural features of Research and Technology Park.
The bold wall will give the stop visual prominence in a location that is currently remote from other landmarks.

- Bold red is easily identified by users.
- Red is the colour of energy, passion, youth, excitement, and action which is fitting for the high tech start-up focus of the area.

4. University of Waterloo
   - **Material:** Glass
   - **Colour:** Black, White, Blue, Grey
   - **Design Story Summary:**
     - The gray, white, black and dark blue glass ties in with surrounding buildings including Engineering V.
     - Black ties in with the University of Waterloo branding.
     - Dispersed colour blocks represent multidisciplinary areas of study coming together.
     - Blue and gray are colours of intelligence and black is a colour of sophistication.

5. Laurier – Waterloo park
   - **Material:** Stone
   - **Colour:** Eramosa Vein Cut
   - **Design Story Summary:**
     - Eramosa stone compliments the natural area of Waterloo Park.
     - The veins in the stone give an impression of wood grain which reflects the park.
     - The texture provides a feeling of warmth, nature, and earthiness.

6. Willis Way
   - **Material:** Glass
   - **Colour:** Black, White, Beige
   - **Design Story Summary:**
     - The black, white, and beige glass will symbolically represent the barrel wall in CIGI.
     - The neutral colours compliment the surrounding buildings including CIGI, Knox Church, Seagram Lofts, etc.
     - The glass ties in with the prevalent use of glass in the surrounding buildings and gives a nod to the Clay & Glass Gallery.
     - The neutral colours represent the heritage of the area whereas the glass represents the modern redevelopment of the area.
     - The vertical lines tie in with the verticality of the design of the surrounding buildings, especially the award winning Knox Church.

7. Waterloo Public Square
   - **Material:** Glass
   - **Colour:** Blue, White
Design Story Summary:
- The vibrant blue, dark blue and white glass reflects the vibrancy of Waterloo Public Square.
- The vibrant blue pattern abstractly looks like a heart, representing the heart of Uptown Waterloo.
- The vibrant blue pattern represents the Uptown Loop whereas the dark blue square abstractly represents the public square.
- The light blue is reminiscent of the Laurel Creek which flows under the Waterloo core.
- The light blue loop may also represent the ION LRT loop through the Uptown Core.

8. Allen
- Material: Glass
- Colour: White, Beige, Red
- Design Story Summary:
  - The red glass represents the Red Condominiums.
  - The beige glass represents the Bauer Lofts.
  - The design represents old and new coming together
  - The pattern compliments the architectural lines of buildings in the area.

9. Grand River Hospital
- Material: Ceramic
- Colour: Blue
- Design Story Summary:
  - A solid soft blue ceramic represents the colour used for the “H” hospital symbol used on signage and maps.
  - A soft blue will tie in with the design of the hospital.
  - The colour blue gives the feeling of serenity, calm, intelligence, and trust.

10. Central Station – Innovation District
- Material: Glass
- Colour: Blue, Green
- Design Story Summary:
  - Glass is the most representative finish for this innovative area.
  - The green glass pulls in the colours of the School of Pharmacy.
  - The blue glass pulls in the colours of One Victoria, the accents of the school and the ION branding.
  - The design of the lines represents multiple modes of transportation coming together at a hub.
  - The colour blue provides the feeling of intelligence.
  - The colour green provides the feeling of equilibrium/balance (amongst all modes) and environmental awareness.
11. Victoria Park
- **Material:** Stone
- **Colour:** Eramosa Fleuri-Cut
- **Design Story Summary:**
  - Eramosa stone compliments the natural area of Victoria Park.
  - The flowing veins of the stone represent the flow of Victoria Park Lake and other water features in the vicinity.
  - The texture provides a feeling of warmth, nature, and earthiness.

12. Kitchener City Hall
- **Material:** Glass
- **Colour:** Frosted, White, Grey
- **Design Story Summary:**
  - The frosted, white, and grey glass pattern will mimic the design of Kitchener City Hall.
  - The colours are neutral so as not to detract from the surrounding heritage buildings.
  - Glass will also tie in with design of the new City Centre Block.

13. Queen
- **Material:** Ceramic
- **Colour:** Blue, Orange, Grey
- **Design Story Summary:**
  - The orange, blue, turquoise, and gray ceramic are arranged like puzzle pieces.
  - The design concept is diversity, people and services coming together as puzzle pieces.
  - The design provides a vibrant contrast to the area which doesn't have a specific landmark for which the stop serves.

14. Frederick
- **Material:** Glass
- **Colour:** Frosted
- **Design Story Summary:**
  - The frosted glass will tie in with the glass design of the new Courthouse and Market Square.
  - As the anchor wall is directly adjacent to a vehicular lane the design is light, airy and non-distracting.

15. Kitchener Market
- **Material:** Ceramic
- **Colour:** Red, Orange, Yellow
- **Design Story Summary:**
  - Harvest coloured ceramic was chosen to represent food at the Kitchener Market.
- Bold colours will give the stop a distinct visual marker as it is located a block away from the Kitchener Market.
- The red border graphically represents a C for Cedar Street.
- Colours are reminiscent of a barn or farm where vegetables are harvested.

16. Borden
- **Material:** Ceramic
- **Colour:** Blue, Green
- **Design Story Summary:**
  - The green and blue ceramic pattern graphically represents Schneider Creek which is located near this stop.
  - The design represents the flow and change of development in the area.

17. Mill
- **Material:** Ceramic
- **Colour:** Brown, Grey, White
- **Design Story Summary:**
  - The neutral ceramic pattern represents ballasted rail tracks, the tracks that have rail ties.
  - This is the point where LRT from Borden and Ottawa come together and begin operation on the ballasted rail of the Huron Spur.
  - The neutral colours pull from the brick homes along Ottawa Street.

18. Block Line
- **Material:** Ceramic
- **Colour:** Purple, White
- **Design Story Summary:**
  - The white and purple ceramic pattern represents the two row wampum which is the symbolic record of the first agreement between Europeans and Native Americans. This is the closest ION stop to a native archaeological site.
  - Purple is the colour of creativity which is appropriate for the high school student users from St. Mary's High School.
  - The horizontal lines are reminiscent of the Block Line bridge.
  - The glass and/or anchor wall shape represents the “block” and the purple represents the “line” of “Block Line”.

19. Fairway
- **Material:** Glass
- **Colour:** White, Black, Blue, Grey
- **Design Story Summary:**
  - The blue, black, grey and white glass pattern represents multiple lines of transit coming together at a terminal.
  - The colours draw from the Fairview Park Mall branding and provide a sense of sophistication.
Corporate Strategic Plan:

This report supports Focus Area 3 Sustainable Transportation of the Region’s Corporate Strategic Plan to implement a light rail transit system in the central transit corridor, fully integrated with an expanded conventional transit system.

Financial Implications: Nil

Other Department Consultations/Concurrence: Nil

Attachments

Attachment A: Recommended Anchor Wall Designs
Attachment B: Comment Sheet
Attachment C: GeoThink Data Analysis

Prepared By: Danielle Bury, Principal Planner (Transit)

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Attachment A: Recommended Anchor Wall Designs
Attachment B: Public Comment Sheet

ION Stop Anchor Wall Designs
Public Consultation Centre – Comment Form

Stop Name:__________________________________________________________

1. What is your first impression of this anchor wall design?
   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

2. Describe your impression of how this anchor wall design reflects the character of the stop area.
   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

3. Circle up to five (5) words you associate with this anchor wall design.
   Bold Serene Warm Exciting Modern Nature Community Heritage Fun Intelligence
   ION Unique Sustainability Creative Practical Clean Busy Textured Vibrant Timeless
   Simple Future World-Class Neighbourhood “Waterloo Region” Other:______________

4. Is there anything controversial about this anchor wall design? No ___ Yes ___ Explain:
   _________________________________________________________________
   _________________________________________________________________

Stop Name:__________________________________________________________

1. What is your first impression of this anchor wall design?
   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

2. Describe your impression of how this anchor wall design reflects the character of the stop area.
   _________________________________________________________________
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3. Circle up to five (5) words you associate with this anchor wall design.
   Bold Serene Warm Exciting Modern Nature Community Heritage Fun Intelligence
   ION Unique Sustainability Creative Practical Clean Busy Textured Vibrant Timeless
   Simple Future World-Class Neighbourhood “Waterloo Region” Other:______________

4. Is there anything controversial about this anchor wall design? No ___ Yes ___ Explain:
   _________________________________________________________________
   _________________________________________________________________
Stop Name: ________________________________

1. What is your first impression of this anchor wall design?

___________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

2. Describe your impression of how this anchor wall design reflects the character of the stop area.

___________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

3. Circle up to five (5) words you associate with this anchor wall design.

	Bold  Serene  Warm  Exciting  Modern  Nature  Community  Heritage  Fun  Intelligence
	ION  Unique  Sustainability  Creative  Practical  Clean  Busy  Textured  Vibrant  Timeless
	Simple  Future  World-Class  Neighbourhood  “Waterloo Region”  Other:__________________________

4. Is there anything controversial about this anchor wall design? No ___ Yes ___ Explain:

___________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

Stop Name: ________________________________

1. What is your first impression of this anchor wall design?

___________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

2. Describe your impression of how this anchor wall design reflects the character of the stop area.

___________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

3. Circle up to five (5) words you associate with this anchor wall design.

	Bold  Serene  Warm  Exciting  Modern  Nature  Community  Heritage  Fun  Intelligence
	ION  Unique  Sustainability  Creative  Practical  Clean  Busy  Textured  Vibrant  Timeless
	Simple  Future  World-Class  Neighbourhood  “Waterloo Region”  Other:__________________________

4. Is there anything controversial about this anchor wall design? No ___ Yes ___ Explain:

___________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

Which stop(s) will you use most frequently?

Name: ___________________________  Phone #: ___________________________

Address: ___________________________  Email: ___________________________
Attachment C: GeoThink Data Analysis

The majority of the comments discuss the following aspects of ION stops:

a) Design (material used, shape and pattern of the design),
b) Representativeness (whether the stop represents the characteristics of surrounding area),
c) Display (display time, map or advertisement on the wall),
d) Color,
e) Accessibility,
f) Shelter,
g) General (comments that only use expressions such as “good”, “Okay”, “not so good”).

The graph below shows the number of comments that mention each of the above aspects. For example, more than 60 comments mention Representativeness and 40 mention Colour).
After geocoding addresses of participants, the below map shows the number of contributors each neighbourhood (according to the Region’s official neighbourhood boundary) has.

(Note: not all participants provided an address and there are a few participants whose home addresses are located out of the Region, and therefore are not included in this map.)
Participants’ answers to the question “What is your first impression of this anchor wall design?” were analyzed using a TF-IDF (term frequency-inverse document frequency) to analyze the most significant words/expressions coming out from participants’ answers. The following graphs show the results of the analysis. The larger the word is on the graph, the more unique/representative it is to the ION stop anchor wall compared to the entire set of keywords for all stops.

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To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 16, 2015
File Code: T02-04

Subject: Revised 2015 Transportation Base and System Expansion Capital Budgets

Recommendation:


Summary:

A mid-year review of the Transportation Base and System Expansion Capital Budgets is carried out each year so that variations caused by actual tender results, revised project estimates based on detailed design and changes in project scheduling can be reported.

The revised 2015 Base Capital Budget is proposed to be reduced by $2,525,000 (total revised budget $57.435 million) which is primarily attributable to actual tenders results, construction deferrals and revised project estimates. These revisions will reduce the amount required from the Roads Rehabilitation and Development Charge Reserve Funds in 2015.

The revised 2015 System Expansion Capital Budget is proposed to be reduced by $9,275,000 (total revised budget $90.475 million) which is primarily attributable to construction deferrals. These revisions will reduce the amount required from the Development Charge and Roads Capital Levy Reserve Funds in 2015.

Overall, the revised 2015 Transportation Base and System Expansion Capital Budgets are proposed to be reduced by $11,800,000 (total revised budget $147.910 million).
Report:

Background

Each year a mid-year review of the Transportation Base and System Expansion Capital Budgets is carried out so that major variations caused by actual tender results, revised project estimates based on detail design and changes in project scheduling can be reported.

Appendix A summarizes the revisions to the previously approved 2015 Transportation Base and System Expansion Capital Budgets.

Project Variations

The following are projects that have been added, deferred or have had their budget revised to a value greater than $500,000 and a summary of the reasons are provided below. Projects in which tenders or Council reports have been approved by Regional Council or have budget estimate changes of less than $500,000 are included in the project details (Appendix A) but are not addressed in this report.

1. Revised 2015 Transportation Base Capital Budget

The 2015 Transportation Base Capital Budget includes project improvements relating to ensuring the safe, efficient operation and maintenance of the existing road transportation infrastructure and is primarily funded from the Roads Rehabilitation Reserve Fund and Federal Gas Tax funding. These projects include resurfacing, reconstruction, bridge and drainage works, traffic signal modernizations, non-growth related intersection improvements, infill sidewalk and cycling facilities and system management.

a) Regional Road 5 (Nafziger Road), Hwy 7/8 to Waterloo Street (RR1), Wilmot (-$1,260,000);

A culvert replacement within this resurfacing project limits was scheduled to be completed in the Fall of 2014, but had to be deferred to 2015 due to inclement weather. This rural resurfacing project has been deferred to 2016 to allow for proper compaction and settlement of this culvert prior to resurfacing.

b) Regional Road 6 (Frederick Street), Lancaster Street to Duke Street (RR63), Kitchener (+$2,135,000)

This reconstruction project has been advanced to be completed in conjunction with the ION Light Rail Transit construction to minimize future traffic disruptions on Frederick Street.
c) Regional Road 6 (Benton Street), Charles Street (RR64) to Courtland Avenue (RR53), Kitchener (-$630,000);

This reconstruction project has been deferred to 2018 in order to avoid conflict with the ION Light Rail Transit construction project.

d) Regional Road 50 (Westmount Road) at University Avenue (RR57), Waterloo (-$800,000);

This project includes the replacement of the retaining wall which has been deferred to 2016 in order to avoid additional road closures in 2015 during the adjacent ION Light Rail Transit construction project road and lane closures.

e) Regional Road 86 (Line 86), Conestogo River Bridge (#8605), Wellesley (-$570,000);

This bridge rehabilitation project being led by the County of Wellington will need to be deferred to 2016 to allow additional time to consider various design and construction options.

2. Revised 2014 Transportation System Expansion Capital Budget

The Transportation System Expansion Capital Budget includes project improvements related to the population and employment growth within the Region of Waterloo and is funded from the Roads Capital Levy and Regional Development Charge Reserve Funds. These projects include intersection improvements, traffic signal installations, road widening and road system expansions (new roads and bridges).

a) Regional Road 9 (Erb Street), 100 m East of Caroline Street (RR9) to Menno Street, Waterloo (-$1,000,000);

The intersection improvement of Erb Street and Caroline Street will be included as part of ION Light Rail Transit construction project and the section from west of Caroline Street to Menno Street has been deferred to a later date in order to avoid conflict with the ION Light Rail Transit construction project.

b) Regional Road 70 (Erbsville Road) at Columbia Street (-$660,000), Regional Road 58 (Fischer-Hallman Road) at Columbia Street, Waterloo (-$240,000);

These intersection improvement projects has been deferred to 2016 as a result of the City of Waterloo deferring the Columbia Street reconstruction project from Fischer-Hallman Road to Erbsville Road until 2016.
c) Regional Road 9 (Erb Street), Ira Needles Boulevard to Wilmot Line, Waterloo (-1,785,000);

This road widening and roundabout installation has been deferred to coincide with the timing of the developer works in this area.

d) Regional Road 55 (Victoria Street), Highway 7 bridge to Edna Street (RR62), Kitchener (-$1,345,000);

This road widening project has been deferred to 2016 to coincide with the Ministry of Transportation bridge rehabilitation works on Victoria Street over the Conestoga Parkway.

e) Regional Road 56 (River Road Extension), King Street (RR8) to Manitou Drive (RR69), Kitchener (-$3,735,000);

These projects involve property acquisitions and based on the progress to date these properties will be acquired in 2016 instead of 2015 and hence the associated costs will be incurred in 2016.

f) South Boundary Road, Water Street (RR24) to Franklin Boulevard (RR36), Cambridge (-$1,540,000);

This project involves property acquisitions and based on the progress to date these properties will be acquired in 2016 instead of 2015 and hence the associated costs will be incurred in 2016.

Corporate Strategic Plan:

This report addresses the Region’s Strategic Focus Area 2: Manage growth to foster thriving and productive urban and rural communities and Focus Area 3: Develop greater, more Sustainable Transportation and the following Corporate Strategic Objectives.

- 2.2 – Develop, optimize and maintain infrastructure to meet current and projected needs; and

- 3.3 – Optimize existing road capacity to safely manage traffic throughout Waterloo Region.

Financial Implications

A mid-year review of the Transportation Base and System Expansion Capital Budgets is carried out each year so that major variations caused by actual tender results, revised project estimates based on detailed design and changes in project scheduling can be reported.
The revised 2015 Base Capital Budget is proposed to be reduced by $2,525,000 (total revised budget $57.435 million) which is primarily attributable to construction deferrals and revised project phasing. These revisions will reduce the amount required from the Roads Rehabilitation and Development Charge Reserve Funds in 2015.

The revised 2015 System Expansion Capital Budget is proposed to be reduced by $9,275,000 (total revised budget $90.475 million) which is primarily attributable to competitive contract pricing and project deferrals. These revisions will reduce the amount required from the Development Charge and Roads Capital Levy Reserve Funds in 2015.

Overall, the revised 2015 Transportation Base and Capital System Expansion Capital Budgets are proposed to be reduced by $11,800,000 (total revised budget $147.910 million).

Other Department Consultations/Concurrence:

Staff from Design and Construction, Finance and Transportation Planning have been directly involved in the preparation of this report.

Attachments

Appendix A – Revisions to the 2015 Transportation Base and System Capital Budgets

Prepared By: Sharon Daniel, Supervisor, Transportation Capital Program

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
### REVISIONS TO THE 2015 TRANSPORTATION BASE AND SYSTEM EXPANSION CAPITAL BUDGETS

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<tr>
<th>($000’s)</th>
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<th>2015 REVISED BUDGET</th>
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**LEGEND:**
- AG = ABOVE GROUND
- BG = BELOW GROUND
- CF = CYCLING FACILITY
- CG = CURB & GUTTER
- CIP = COLD-IN-PLACE RESURFACING
- D = DRAINAGE IMPROVEMENTS
- DE = DESIGN
- DK = BRIDGE DECK REPAIR
- DSA = DEEP STRENGTH ASPHALT
- EA = ENVIRONMENTAL ASSESSMENT
- EXP = EXPANDED ASPHALT
- IPS = PEDESTRIAN SIGNAL INSTALLATION
- L = LAND PURCHASE
- LA = LANDSCAPING
- MOD = TRAFFIC SIGNAL MODERNIZATION
- NC = CONSTRUCTION
- PAD = PAADING
- PL = PLANNING
- REC = RECONSTRUCTION
- RH = REHABILITATION
- RSL = RECONSTRUCTION WITH STORM SEWERS
- RW = ROAD WIDENING
- R1 = RESURFACE-SINGLE LIFT
- R2 = RESURFACE-DOUBLE LIFT
- RM = RESURFACE-MAJOR
- SA = SURFACE ASPHALT
- SI = INTERSECTION IMPROVEMENT
- SIG = TRAFFIC SIGNAL INSTALLATION
- SL = STREET LIGHTING
- ST = STORM SEWER INSTALLATION
- SW = SIDEWALK INSTALLATION
- U = UTILITY RELOCATION
REVISIONS TO THE 2015 TRANSPORTATION BASE CAPITAL BUDGET

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<th>2015 TOTAL BUDGET</th>
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<td>5,280</td>
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<td><strong>TOTAL</strong></td>
<td>10,245</td>
<td>49,715</td>
<td>59,960</td>
<td>57,435</td>
<td>-2,525</td>
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| **REVENUES**      |       |             |                   |                     |          |
| SUBSIDY (FEDERAL GAS TAX) | 0 | 14,683 | 14,683 | 14,683 | 0 |
| DEVELOPMENT CHARGE RESERVE FUND (TRANSPORTATION) | 1,072 | 10,695 | 11,767 | 11,312 | -455 |
| ROADS REHABILITATION CAPITAL RESERVE FUND | 9,153 | 23,708 | 32,861 | 30,791 | -2,070 |
| CYCLING FACILITY CAPITAL RESERVE FUND | 0 | 603 | 603 | 603 | 0 |
| MUNICIPAL COST SHARING | 20 | 26 | 46 | 46 | 0 |
| **TOTAL**         | 10,245 | 49,715 | 59,960 | 57,435 | -2,525 |

**LEGEND:**
AG = ABOVE GROUND; BG = BELOW GROUND; CF = CYCLING FACILITY; CG = CURB & GUTTER; CIP = COLD-IN-PLACE RESURFACING; D = DRAINAGE IMPROVEMENTS; DE = DESIGN; DK = BRIDGE DECK REPAIR; DSA = DEEP STRENGTH ASPHALT; EA = ENVIRONMENTAL ASSESSMENT; EXP = EXPANDED ASPHALT; IPS = PEDESTRIAN SIGNAL INSTALLATION; L = LAND PURCHASE; LA = LANDSCAPING; MOD = TRAFFIC SIGNAL MODERNIZATION; NC = CONSTRUCTION; PAD = PADDED; PL = PLANNING; REC = RECONSTRUCTION; RH = REHABILITATION; RSS = RECONSTRUCTION WITH STORM SEWERS; RW = ROAD WIDENING; RY = RESURFACE SINGLE LIFT; AD = RESURFACE DOUBLE LIFT; RM = RESURFACE MAJOR; SA = SURFACE ASPHALT; SI = INTERSECTION IMPROVEMENT; SIG = TRAFFIC SIGNAL INSTALLATION; SL = STREET LIGHTING; ST = STORM SEWER INSTALLATION; SW = SIDEWALK INSTALLATION; U = UTILITY RELOCATION
## REVISIONS TO THE 2015 TRANSPORTATION CAPITAL BASE BUDGET

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1870785 Page 8 of 26
### REVISIONS TO THE 2015 TRANSPORTATION CAPITAL BASE BUDGET

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#### RECONSTRUCTION AND MAJOR REHABILITATION

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## REVISIONS TO THE 2015 TRANSPORTATION CAPITAL BASE BUDGET

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## REVISIONS TO THE 2015 TRANSPORTATION CAPITAL BASE BUDGET

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# REVISIONS TO THE 2015 TRANSPORTATION CAPITAL BASE BUDGET

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<td>REG. RD. 52 (BRIDGE STREET), KIT/WOOL BDRY. TO BRIDGEPORT BRIDGE</td>
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## REVISIONS TO THE 2015 TRANSPORTATION CAPITAL BASE BUDGET

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<th>REMARKS</th>
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<tr>
<td>5636</td>
<td>REG. RD. 58 (SWAN STREET), HILLTOP DR. TO STANLEY ST., AND REG. RD. 58 (NORTHUMBERLAND STREET/STANLEY STREET), ST. ANDREWS ST. TO CP RAILWAY CROSSING</td>
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<td>REG. RD. 75 (SPRAGUES ROAD), BRANT/WATERLOO BDY. TO WRIGLEY RD.</td>
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| TOTAL RECONSTRUCTION AND MAJOR REHABILITATION | 78.79 | 6,985 | 30,905 | 37,890 | 38,585 | 695         |

### INTERSECTION IMPROVEMENTS (NON-GROWTH)

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<tr>
<th>PROJ. NO.</th>
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<th>2015 TOTAL BUDGET</th>
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<th>VARIANCE</th>
<th>REMARKS</th>
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<tr>
<td>6829</td>
<td>REG. RD. 8 (WEBER STREET), AT NORTHFIELD DRIVE (RR50)</td>
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<td>60</td>
<td>60</td>
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<td>6481</td>
<td>REG. RD. 8 (WEBER STREET) AT GOLDEN EAGLE RD.</td>
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<td>6283</td>
<td>REG. RD. 15 (KING STREET) AT UNIVERSITY AVE. (RR57)</td>
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<td>5505</td>
<td>REG. RDS. 17 AND 23 SAWMILL WOOL RD. AT KATHERINE ST.</td>
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<td>150</td>
<td>230</td>
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<td>350</td>
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| TOTAL INTERSECTION IMPROVEMENTS (NON-GROWTH) | 0.00 | 580 | 210 | 790 | 640 | -150 |

**BRIDGE AND DRAINAGE WORKS**

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<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
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**TOTAL BRIDGE AND DRAINAGE WORKS**

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**SYSTEM MANAGEMENT / OTHER**

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<td>9359</td>
<td>STREET LIGHTING MODERNIZATIONS / INSTALLATIONS</td>
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<td>475</td>
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#### TRAFFIC SIGNAL MODERNIZATIONS

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<tr>
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<th>PROJECT DESCRIPTION</th>
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<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2015 BUDGET</th>
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<th>REMARKS</th>
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<tr>
<td>9630</td>
<td>REG. RD. 9, ERB STREET AT ERSVILLE CT.</td>
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#### TRAFFIC ENGINEERING GENERAL

<table>
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<td>CENTRAL TRAFFIC CONTROL SYSTEM</td>
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### REVISIONS TO THE 2015 TRANSPORTATION CAPITAL BASE BUDGET

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#### TOTAL TRAFFIC ENGINEERING GENERAL

- **0.00**
- **465**
- **1,875**
- **2,340**
- **2,340**
- **0**

#### INFILL SIDEWALK AND CYCLING FACILITIES

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<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>CFWD</th>
<th>2015 BUDGET</th>
<th>2015 TOTAL BUDGET</th>
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<th>REMARKS</th>
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<tbody>
<tr>
<td>5715</td>
<td>REG. RD. 8 (WEBER STREET), WILFRED AVE. TO MONTGOMERY RD. KIT 0.51</td>
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<td>10</td>
<td>10</td>
<td>10</td>
<td>10 DE</td>
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<tr>
<td>6340</td>
<td>REG. RD. 17 (FOUNTAIN STREET), FOUNTAIN ST. BRIDGE CAM 0.06</td>
<td>0</td>
<td>300</td>
<td>300</td>
<td>300 SW</td>
<td>0</td>
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<tr>
<td>5726</td>
<td>REG. RD. 28 (FOUNTAIN STREET), PRESTON PKWY TO 250M EAST OF PRESTON PKWY CAM 0.25</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
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<td>6762</td>
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<td>REG. RD. 50 (WESTMOUNT ROAD), UNIVERSITY AVE. (RR57) TO COLUMBIA ST. WAT 1.59</td>
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<td>50 SW</td>
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<td>6753</td>
<td>REG. RD. 52 (BRIDGE STREET), WAT LEXINGTON RD. TO EASTBRIDGE BLVD. 0.70</td>
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<td>6745</td>
<td>REG. RD. 52 (BRIDGE STREET), WAT FROM 550M SOUTH OF NORTHFIELD DR. TO NORTHFIELD DR. (RR22) 0.55</td>
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<tr>
<td>6757</td>
<td>REG. RD. 53 (FAIRWAY ROAD), WILSON AVE. TO KING ST. DRAINAGE AND SIDEWALK STUDY KIT 1.29</td>
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<td>250</td>
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<td>75</td>
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<td>PROJECT DEFERRED</td>
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## Revisions to the 2015 Transportation Capital Base Budget

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<tr>
<td>6758</td>
<td>100%</td>
<td>REG. RD. 55 (VICTORIA STREET), FREDERICK ST. (RR8) TO SHIRLEY DR. DRAINAGE AND SIDEWALK STUDY</td>
<td>KIT</td>
<td>2.95</td>
<td>0</td>
<td>250</td>
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<td>-175</td>
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<td>6773</td>
<td>100%</td>
<td>REG. RD. 55 (VICTORIA STREET S.), FISHER-HALLMAN RD. (RR53) TO EASTFOREST TRAIL</td>
<td>KIT</td>
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<td>45</td>
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<td>3700</td>
<td>3595 MUT DE</td>
<td>3595 MUT DE</td>
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| TOTAL INFILL SIDEWALK AND CYCLING FACILITIES | 12.02 | 80 | 5,200 | 5,200 | 4,825 | -455 |
## REVISIONS TO THE 2015 TRANSPORTATION CAPITAL SYSTEM EXPANSION BUDGET

<table>
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<th></th>
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<td><strong>EXPENDITURES:</strong></td>
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<td>TRANSPORTATION CAPITAL SYSTEM EXPANSION BUDGET</td>
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<td>TRAFFIC SIGNAL INSTALLATIONS</td>
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<td>465</td>
<td>545</td>
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<td><strong>REVENUES:</strong></td>
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<td>77,105</td>
<td>99,750</td>
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**LEGEND:**
- AG = ABOVE GROUND; BG = BELOW GROUND; CF = CYCLING FACILITY; CG = CURB & GUTTER; CIP = COLD-IN-PLACE RESURFACING;
- D = DRAINAGE IMPROVEMENTS; DE = DESIGN; DX = BRIDGE DECK REPAIR; DSA = DEEP STRENGTH ASPHALT; EA = ENVIRONMENTAL ASSESSMENT;
- EXP = EXPANDED ASPHALT; IPS = PEDESTRIAN SIGNAL INSTALLATION; L = LAND PURCHASE; LA = LANDSCAPING; MOD = TRAFFIC SIGNAL MODERNIZATION; NC = CONSTRUCTION; PAO = PASSING; PL = PLANNING; RC = RECONSTRUCTION; RH = REHABILITATION; RSS = RECONSTRUCTION WITH STORM SEWERS; RW = ROAD WIDENING; R1 = RESURFACE-SINGLE LIFT; R2 = RESURFACE-DOUBLE LIFT; RM = RESURFACE-MAJOR;
- SA = SURFACE ASPHALT; SI = INTERSECTION IMPROVEMENT; SIG = TRAFFIC SIGNAL INSTALLATION; SL = STREET LIGHTING; ST = STORM SEWER INSTALLATION; SW = SIDEWALK INSTALLATION; U = UTILITY RELOCATION
### REVISIONS TO THE 2015 TRANSPORTATION CAPITAL SYSTEM EXPANSION BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>RDC%</th>
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<tr>
<td>7332</td>
<td>85%</td>
<td>REG. RD. 4 (OTTAWA STREET), KING ST. (RR15) TO CHARLES ST. (RR64)</td>
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<td>5389</td>
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<td>-1000</td>
<td>CONST. DEFERRED</td>
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<td>REG. RD. 15 (KING STREET) AT GEXR CROSSING - SUBWAY INSTALLATION</td>
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<td>7042</td>
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<td>REG. RD. 15 (KING STREET) AT WATERLOG INN SERVICE ROAD TO BLUEPRINTS DR.</td>
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<td>270 REC</td>
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<td>40</td>
<td>40 DE</td>
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<tr>
<td>7316</td>
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<td>2015</td>
<td>2015</td>
<td>0</td>
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<tr>
<td>7185</td>
<td>100%</td>
<td>REG. RD. 24 (HESPELER ROAD) AT BEAVERTAIL / QUEEN ST.</td>
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### Revisions to the 2015 Transportation Capital System Expansion Budget

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**Total Intersection Improvements (Growth-Related)**

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### Development Related Left and Right Turn Lanes

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**Total Development Related Left and Right Turn Lanes**

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### REVISIONS TO THE 2015 TRANSPORTATION CAPITAL SYSTEM EXPANSION BUDGET

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#### TOTAL TRAFFIC SIGNAL INSTALLATIONS

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### ROAD WIDENINGS

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### REVISIONS TO THE 2015 TRANSPORTATION CAPITAL SYSTEM EXPANSION BUDGET

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# REVISIONS TO THE 2015 TRANSPORTATION CAPITAL SYSTEM EXPANSION BUDGET

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## REVISIONS TO THE 2015 TRANSPORTATION CAPITAL SYSTEM EXPANSION BUDGET

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| TOTAL ROAD SYSTEM EXPANSION | 11.76 | 8,005 | 2,680 | 10,685 | 4,960 | -5,725 |


Region of Waterloo
Transportation and Environmental Services
Transportation

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 16, 2015  File Code: T02-05, T01-20/40 Waterloo Street

Subject: Permanent Closure of Waterloo Street, City of Kitchener

Recommendation:

That the Regional Municipality of Waterloo approve the following actions regarding Regional Road 40 (Waterloo Street) established by Registered Plan 374, lying between Victoria Street (Regional Road No. 55) and Breithaupt Street in the City of Kitchener, designated as Part 6 on Reference Plan 58R-17870, being PIN 22319-0002 (LT) and Part 1 on Reference Plan 58R-18101, being Part of PIN 22319-0001 (LT), effective June 26, 2015 at 12:01 a.m.

1. Pass a by-law to permanently close Regional Road 40 (Waterloo Street), between Victoria Street North and Breithaupt Street;

2. Pass a by-law to amend Road Consolidation By-law 01-059 (Regional Road System) to remove Regional Road 40 (Waterloo Street) between Victoria Street North and Breithaupt Street from the Regional Road System; and

3. Pass a by-law to amend Traffic parking By-law 06-072 to reflect the removal of existing traffic regulations on Regional Road 40 (Waterloo Street) between Victoria Street North and Breithaupt Street.

Summary:

Nil
Report:

To facilitate the development of the King Street/Victoria Street Multi-modal Transit Hub (the Transit Hub), Regional Council approved the assumption of a portion of Waterloo Street from Victoria Street North to Breithaupt Street from the City of Kitchener on May 7, 2014 (report E-14-026/P-14-035). At the time of the assumption, the report identified the eventual need to close the road to vehicle traffic in order to accommodate construction of the King-Street grade separation (part of the ION Light Rail Transit project). The portion of Waterloo Street, currently designated as Regional Road 40, is approximately 0.32 lane kilometres and runs through the Transit Hub development site. The corridor also contains a significant amount of underground utility infrastructure.

The Transit Hub will serve as the focal point of Waterloo Region’s higher order transit services, a result of the development of ION Light Rail Transit from north Waterloo to south Kitchener, and the extension of GO Transit rail service to the Region. In addition to its role in the transportation system, the Transit Hub will also serve as the key anchor along Waterloo Region’s Central Transit Corridor, with an opportunity to integrate transit station functions with a high-density mixed-use destination.

Grandlining has indicated it is now necessary to permanently close Regional Road 40 (Waterloo Street) to vehicle through traffic for the construction of the King Street grade separation. (The location of Regional Road 40 is shown below.)
To understand the impact of this closure a Traffic Impact Study was completed. The study concluded that the existing traffic volume on Waterloo Street is very low and this traffic would likely be diverted to the Duke Street and Victoria Street North intersection which has adequate capacity to accommodate the additional volume without affecting its existing levels of service.

Following this study, Regional staff completed the required Schedule A+ Environmental Assessment for the permanent closure of Waterloo Street to vehicular traffic. The public was notified through a Notice of Study Commencement first posted on September 25, 2012 and secondly on October 2, 2012 in the Record newspaper. Information was also provided to the public at a King-Victoria Transit Hub Open House held by the Region on September 28, 2012.

After closing the road, the portion of Waterloo Street south of the railway line would be integrated with the Transit Hub development site. The portion north of the railway would continue to provide commercial driveway access to the Breithaupt Block and Boehmer Box loading facilities. In addition, Waterloo Street is anticipated to be a primary access point for pedestrians and cyclists to the Transit Hub. A pedestrian underpass is currently planned for under the railway with entry points at either end.

After closing the road, the appropriate easements will be provided for the City of Kitchener to maintain their underground utilities and for Breithaupt Block and Boehmer Box to operate and maintain their commercial driveway access. Discussions are ongoing with these stakeholders and staff will report back to Council in due course for approval of the detailed terms and conditions of the easements.

In accordance with the Region’s Notice Policy, the following has been undertaken relating to the permanent closure of Regional Road 40 (Waterloo Street);

- Advertisement in The K-W Record;
- The adjacent property owners have received written notification;
- Appropriate display boards have been posted along the roadway; and
- Notice has been sent to City of Kitchener staff.

**Corporate Strategic Plan:**

This initiative directly supports Strategic Action 3.4.1, “Implement the multimodal transportation hub at Victoria and King Streets”.

**Financial Implications:**

The total mileage of the Regional Road System will be reduced by approximately 0.32 lane kilometers. As part of the 2016 budget review process there may be a slight adjustment to the Transportation Operations Maintenance budget.
Other Department Consultations/Concurrence:

Staff from Planning, Development and Legislative Services was consulted in the preparation of this report.

Attachments

Nil

Prepared By: Andrea Buckley, Sr. Project Manager, Transportation Infrastructure

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Region of Waterloo  
Transportation and Environmental Services  
Water Services  

To: Chair Tom Galloway and Members of the Planning and Works Committee  
Date: June 16, 2015  
File Code: E04-80  
Subject: Drinking Water Quality Management System Program Update  

Recommendation:  
That the Regional Municipality of Waterloo take the following actions, in accordance with Report TES-WAS-15-16 dated June 16, 2015:  

1. Re-endorse the Quality Management System (QMS),  
2. Re-endorse the Region’s 14 drinking water operational plans,  
3. Re-endorse of the QMS Policy and  
4. Re-appoint Top Management.  

Summary:  
Nil  

Report:  
This report fulfills the legislative requirement for the current Region Council to re-endorse the Water Services Quality Management System (QMS) and the Region’s 14 drinking water operational plans, to re-endorse the QMS Policy and to re-appoint Top Management based on the Ministry of the Environment Climate Control (MOECC) Drinking Water Quality Standard (Standard).  

The standard requires a drinking-water system owner create an operational plan based on 21 elements identifying roles and responsibilities at all levels within the organization that have input to the operation of its drinking-water system. The 21 elements in the Standard are summarized in Attachment A. For each element, a procedure is
documented describing the current process for meeting the requirements.

Background

All drinking water system operating authorities must be accredited to meet the Drinking Water Licensing Program (DWLP) requirements, as mandated by the MOECC, under the Safe Drinking Water Act 2002 Part IV.

DWLP identifies responsibilities for owners of municipal/residential drinking water systems and establishes a framework to obtain a municipal drinking water licence. This regulation impacts all owners and operators responsible or involved in the delivery of safe drinking water from a municipal/residential drinking water system. As both owner and operator of Water Supply Systems, the Region of Waterloo must comply with these requirements.

The key components of this Municipal DWLP are as follows:

1) Operational Plan must meet the provincial legislative requirements. Region staff submitted operational plans in December 2008, in accordance with O.Reg.188/07, and approved by MOECC Director May 25, 2011;
2) Accreditation, based on the legislative Standard, of operating authority. The initial full scope accreditation for the Region was obtained April 1, 2013;
3) Financial plans for the water system, in accordance with O.Reg. 453/07 were approved by Region council and were issued May 2011;
4) Drinking Water Works Permit (DWWP) for each water supply system were issued May 25, 2011, and replaced Certificate of Approvals;
5) Permits to Take Water (PTTW) requirements did not change for all water taking and have been issued by MOECC; and
6) Issuance of licence by MOECC Director occurred May 25, 2011.

Due to numerous drinking water systems in the Region of Waterloo, 14 Drinking Water Licences and 14 Drinking Water Work Permits have been issue by the MOECC. For each license and permit an operational plan has been developed, implemented and maintained, encompassing the 21 elements. The operational plans define key objectives required to achieve the QMS Policy commitments and establishes processes and controls to achieve these objectives and mitigate risks to the drinking water quality. There is one operational plan for each Drinking Water License.

QMS Policy

The Region has developed and implemented a QMS policy (Attachment B). The policy demonstrates the Region’s assurance that quality management is an important component to the management and operation of the drinking water systems. The QMS
policy was endorsed February 19, 2008, and needs to be re-endorsed by the current council.

The QMS policy states the Region’s commitment to effectively:

- Manage potential risks, and provide safe drinking water to consumers
- Manage water operations and maintenance activities to comply with applicable legislation, regulations, guidelines, and standards
- Maintain and continually improve the QMS
- Communicate relevant policies and programs to internal and external stakeholders, as applicable
- Review this policy, at least annually, to ensure that it continues to be appropriate for the subject drinking water systems.

Accreditation

To obtain accreditation a third party accreditation authority audits the QMS annually to verify conformance with the standard and policies, and procedures identified in each operational plan. To obtain re-accreditation the Region must demonstrate conformance with the Standard, and address all identified non-conformities by developing and implementing corrective/preventative action plans. The corrective/preventative action plans must be accepted by the auditor before re-accreditation is recommended by the accreditation authority.

The Region was successful in obtaining full-scope accreditation on April 1, 2013. Subsequent successful off-site surveillance audits occurred in February 2014 and February 2015. Acquiring accreditation implies that the drinking water facilities operated by the Region meet the Standard documented processes, and policies. In early 2016, the Region will undergo a second full re-accreditation audit.

Top Management

To demonstrate conformance, Top Management and Regional Council must endorse the QMS, as stated in the Commitment and Endorsement Procedure (DOCS 981253) of the operational plan. Regional council needs to re-appoint Top Management. Top Management has been delegated to Transportation and Environmental Services Commissioner; Director, Water Services; and Manager, Water Operations and Maintenance. The QMS Representative is the Supervisor, Process and Compliance.

The procedure states that Top Management shall ensure:

Evidence of its commitment to an effective Quality Management System is provided by:

a) ensuring the QMS is in place and meets the requirements of the Standard
b) ensuring that Water Services – Operations and Maintenance personnel are aware of
all applicable legislative and regulatory requirements,
c) ensuring the QMS is communicated in accordance with Element 12 - Standard Procedure – Communications (DOCS 500135), and
d) to determine, obtain, and provide resources needed to maintain and continually improve the QMS.

The Operational Plans and documented policies and procedures are endorsed by Top Management. Initial endorsement by Top Management and Regional Council was obtained on February 19, 2008, (Minutes- DOCS 430450), and full scope accreditation update was provided by Top Management to Regional Council on September 10, 2013, (Minutes- DOCS 1377671). We are seeking re-endorsement of the QMS and the Region’s 14 drinking water operational plans prior to our next re-accreditation audit scheduled in early 2016.

Risk Assessments and Outcomes Summary

As part of the QMS, risk assessments are conducted to identify hazardous events and associated hazards that could potentially affect the Region’s drinking water. The goal is to manage risks to an acceptable level.

The risk assessment process involves a committee involving staff from the various groups in Water Services such as Engineering and Planning, Hydrogeology and Source Water, and Design and Construction. The committee reviews the sites and identifies events that could potentially affect the ability to deliver safe drinking water. Reliability and redundancy of equipment is considered in the process. Each possible hazardous event is ranked based on consequence and likelihood. If the ranking exceeds a predetermined value, the event is considered a critical control point (CCP). A CCP is an essential step or point in the system at which control can be applied to prevent or reduce a hazard to an acceptable level. For each identified CCP limit established, a critical control limit (CCL) is set. A CCL is the point at which a CCP response procedure is initiated. Regardless of the final ranking, it has been decided that primary disinfection is assigned as a mandatory CCP.

The currency of information and validity of the risk assumptions are verified at least annually and with major changes to the operations of a site. A detailed risk assessment is conducted at least every 36 months.

Corporate Strategic Plan:

Compliance with the Safe Drinking Water Act and the Standard supports Focus Area 5 Service Excellence: to deliver excellent and responsive services that inspire public trust.
Financial Implications:

The cost for the Full Scope accreditation site audit for all 14 Region systems will be $14,000 by the external auditor. The audit requires the auditors to conduct on site audits for each system which will be completed over a four day period. The cost of this audit includes travel time and time spent on site. Audits for 2017 and 2018 will be off-site surveillance audits which involve confirming that the non-conformances have been dealt with. The cost should be around $5,900 each year. The total cost for the three-year audit cycle is approximately $25,800.

All related costs to the Municipal Drinking Water License, including maintenance have been budgeted to the 2015 Water Supply Operating Budget.

Other Department Consultations/Concurrence:
Nil

Attachments
Attachment A - Drinking Water Quality Management Standard – 21 Elements
Attachment B – Quality Management System Policy

Prepared By: Olga Vrentzos, Manager, Water Operations and Maintenance, Water Services

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Table 1: Drinking Water Quality Management Standard - 21 Elements

1. Quality Management System
2. Quality Management System Policy
3. Commitment and Endorsement
4. QMS Representative
5. Document and Records Control
6. Drinking Water System
7. Risk Assessment
8. Risk Assessment Outcomes
9. Organizational Structure, Roles, Responsibilities and Authorities
10. Competencies
11. Personnel Coverage
12. Communication
13. Essential Supplies and Services
14. Review and Provision of Infrastructure
15. Infrastructure Maintenance, Rehabilitation and Renewal
16. Sampling, Testing and Monitoring
17. Measurement and Recording Equipment Calibration and Maintenance
18. Emergency Management
19. Internal Audits
20. Management Review
21. Continual Improvement
QUALITY MANAGEMENT SYSTEM POLICY

The Regional Municipality of Waterloo, Water Services has implemented a Quality Management System (QMS) for drinking water supply systems and distribution systems, under its authority, that supports the Region’s dedication to provide high quality drinking water to consumers.

The Region is committed to effectively:

- Managing potential risks, and providing safe drinking water to consumers
- Managing water operations and maintenance activities to comply with applicable legislation, regulations, guidelines, and standards
- Maintaining and continually improving the QMS
- Communicating relevant policies and programs to internal and external stakeholders, as applicable
- Reviewing this policy, at least annually, to ensure that it continues to be appropriate for the subject drinking water systems

“DOCUMENT UNCONTROLLED WHEN PRINTED”
Region of Waterloo
Transportation and Environmental Services
Water Services

To: Chair Tom Galloway and Members of the Planning and Works Committee
Date: June 16, 2015 File Code: E06-80
Subject: Summary of Chief Drinking Water Inspector Annual Report for 2013-2014

Recommendation:
For information

Summary:
The Region of Waterloo is responsible for the bulk delivery of drinking water to seven local Area Municipalities and the distribution systems in the Townships of North Dumfries and Wellesley. The drinking water systems are subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, “Drinking Water Systems” (O.Reg.170/03).

The Region’s water users should be confident that the drinking water supplied by the region of Waterloo meets the requirements of the SDWA.

Report:

The Ministry in response to O.Reg.170/03 implemented a rigorous and comprehensive approach to the inspection of drinking water systems that focuses on the source, treatment and distribution components of the system as well as management practices.
The objective of the inspections is to determine the compliance of the municipal drinking water system with requirements under the SDWA and associated regulations. Compliance is measured by an overall risk rating that is calculated by the inspector based on the inspection findings. The Chief Drinking Water Inspector’s Annual Report provides an in-depth summary of the MOECC inspections of municipal drinking water systems, including the Region’s twenty two (22) drinking water systems. The Region’s compliance ratings averaged 99.54% for the period and the individual ratings are as follows:

- In the integrated water supply system, the cities of Kitchener & Cambridge, including the Mannheim plant received 100% and the City of Waterloo received a rating of 99.09%
- In North Dumfries, the 4 drinking water systems (Ayr, Branchton Meadows, Lloyd Brown & Roseville) received an inspection rating of 100%
- In the Township of Wellesley, Linwood, St. Clements, Wellesley & Heidelberg all received a rating of 100%
- In the Township of Wilmot, Foxboro & New Dundee received a 100% rating; Mannheim Village’s, New Hamburg’s and Shingletown’s ratings were 96.24%, 99.32% and 95.12% respectively.
- In the Township of Woolwich, Conestogo Golf & Plains, Maryhill WTP & Village and West Montrose received a rating of 100%

The Region’s drinking water test results achieved 99.94 percent compliance with Ontario’s water quality standards for drinking water systems. To meet reporting requirements under the SDWA, an Annual Water Quality Report was presented to Council in February. (DOCS 1776134-TES-WAS-15-05 2014 Annual Water Quality Report).

In accordance with the SDWA, a Drinking Water Quality Management System was implemented, a management review of compliance and performance is conducted once during the year as part of this management system. All noncompliance issues are documented and addressed at this meeting to ensure compliance with the legislative requirements. All noncompliance issues are reported to Council in our annual Summary Report for Regional Municipality of Waterloo Integrated Urban and Rural Water Systems in March. (DOCS 1776137-TES-WAS-15-06 2014 Summary Report).

The Region’s water users should be confident that the drinking water supplied by the region of Waterloo meets the requirements of the Safe Drinking Water Act.

**Corporate Strategic Plan:**

Focus Area 1: Protect and enhance the environment.
Financial Implications:

Nil

Other Department Consultations/Concurrence:

Nil

Attachments


Prepared By:  Olga Vrentzos, Manager, Water Operations and Maintenance

Approved By:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
### Council Enquiries and Requests for Information

**Planning and Works Committee**

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