1. MOTION TO GO INTO CLOSED SESSION

THAT a closed meeting of the Planning and Works and Administration and Finance Committees be held on Tuesday, June 19, 2012 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) receiving of legal advice and opinion that is subject to solicitor-client privilege related to an agreement and legislation
b) personal matters about identifiable individuals
c) labour relations and employee negotiations

2. MOTION TO RECONVENE IN OPEN SESSION

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

4. PRESENTATION

a) Bill Allison, Dillon Consulting Limited, Re: Report P-12-078, Notification of Upcoming East Side Lands Master Environmental Servicing Plan and Community Plan Public Information Centre 2

5. DELEGATIONS

a) Mary Margaret Taborek, Re: Roundabout on Franklin Boulevard near St. Benedict Catholic Secondary School

6. REPORTS – PLANNING, HOUSING AND COMMUNITY SERVICES

COMMUNITY PLANNING

a) P-12-078, Notification of Upcoming East Side Lands Master Environmental Servicing Plan and Community Plan Public Information Centre 2

b) P-12-074, Monthly Report of Development Activity for May 2012

c) P-12-075, Councillor’s Request for Response Regarding the Town of Halton Hills’ Resolution Concerning Provincial Regulations for Commercial Fill Operations
d) P-12-077, King and Victoria Multimodal Hub – Real Property Market Scope and Feasibility Study

30

e) P-12-065, Regional Reurbanization Toolbox

Deferred from May 29, 2012

Combined staff presentation for items e) and f)

35

COMMUNITY SERVICES

f) P-12-066, Regional Heritage Conservation Toolbox

Deferred from May 29, 2012

Combined staff presentation for items e) and f)

59

TRANSPORTATION PLANNING

g) P-12-080, Grand River Transit 2012 High School Term Pass

69

h) P-12-081, Grand River Transit – Route 11 Minor Route Adjustment

72

REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES

DESIGN AND CONSTRUCTION

i) E-12-063, Consultant Selection – Detailed Design and Services During Construction, Fountain Street Bridge Rehabilitation over the Grand River, City of Cambridge

76

j) Bishop Street Improvements, Conestoga Boulevard to Concession Road - Information Package in Advance of Public Consultation Centre

83

k) Northfield Drive Corridor Class Environmental Assessment Study, King Street to Davenport Road, City of Waterloo and Township of Woolwich - Information Package in Advance of Public Consultation Centre

102

TRANSIT

l) E-12-065, Alternate Fuel Technology for Transit Buses

136

RAPID TRANSIT

m) CR-RS-12-040, Authorization to Expropriate (1st Report) Lands Supplementary to Phase 1 of Stage 1 for Rapid Transit Project Representing a Further Partial Taking from the Property Municipally Known as 750-760 King Street West, Kitchener

139

n) E-12-064, Stage 1 Light Rail Transit: Vehicle Procurement

145

TRANSPORTATION

o) E-12-069, Revised 2012 Transportation Base, System Expansion, and Airport Capital Budget

152

p) E-12-071, Renewal of Red Light Camera Agreement between the Ministry of Transportation of Ontario and the Regional Municipality of Waterloo

176
q) **E-12-072**, AVL/GPS and Salt Management Application

### WASTE MANAGEMENT

r) **E-12-040**, Waste Management Division Update
   - Deferred from May 29, 2012
   - Staff presentation

s) **E-12-070**, Shingle Diversion – Pilot Program Update

7. **INFORMATION/CORRESPONDENCE**

   a) **Memo**, Response to Councillor’s Request for Information about Unrehabilitated Sand and Gravel Pits in Waterloo Region

   b) **Memo**, 2014 Canadian Institute of Transportation Engineers – Region of Waterloo

8. **OTHER BUSINESS**

   a) Council Enquiries and Requests for Information Tracking List

9. **NEXT MEETING** – August 14, 2012 at 1:00 P.M.

10. **ADJOURN**
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning and Works Committee</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 14, 2012</td>
<td>1:00 P.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
</tr>
<tr>
<td>September 11, 2012</td>
<td>1:00 P.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
</tr>
<tr>
<td><strong>Planning, Housing and Community Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tue., June 26, 2012</td>
<td>5:00 P.M. – 9:00 P.M.</td>
<td>East Side Lands Public Information Centre #2</td>
<td>Catholic High School Father-René-de-Galinée 450 Maple Grove Road Cambridge, Ontario</td>
</tr>
<tr>
<td><strong>Transportation and Environmental Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thu., June 21, 2012</td>
<td>4:30 P.M.</td>
<td>Bishop Street, Conestoga Boulevard to Concession Road - Information Package in Advance of PCC</td>
<td>Langs Main Floor, Health Promotion Room (E105 &amp; E106), 1145 Concession Road, Cambridge</td>
</tr>
<tr>
<td>Thu., June 28, 2012</td>
<td>5:00 P.M.</td>
<td>Northfield Drive, Davenport Road to University Avenue - Information Package in Advance of PCC</td>
<td>St. Luke Catholic School, 550 Chesapeake Drive, Waterloo</td>
</tr>
</tbody>
</table>
REPORT NO. P-12-078

REGION OF WATERLOO
PLANNING, HOUSING AND COMMUNITY SERVICES
Community Planning

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

DATE: June 19, 2012

FILE CODE: D07-01

SUBJECT: NOTIFICATION OF UPCOMING EAST SIDE LANDS MASTER ENVIRONMENTAL SERVICING PLAN AND COMMUNITY PLAN PUBLIC INFORMATION CENTRE 2

RECOMMENDATION:

For information.

SUMMARY:

On November 24, 2010 Regional Council retained Dillon Consulting Limited (Dillon) to provide consulting services for the East Side Lands Master Environmental Servicing Plan (MESP) and Community Plan. The MESP is being co-managed by the City of Cambridge and the Grand River Conservation Authority (GRCA). The primary focus of the MESP is on the Stage 1 lands (see Attachment 1) which includes the lands designated in the new Regional Official Plan as Prime Industrial Strategic Reserve (PISR). This work will advance the lands through the Environmental Assessment (EA) process towards development readiness for new employment opportunities. The lands strategically lie north of Highway 401 and near the Region of Waterloo Airport.

The first Public Information Centre (PIC) was held in June 2011 to introduce the project, present background information and identify next steps. Since that time, the Project Team (which includes representatives from the Region, GRCA, City of Cambridge, City of Kitchener, Township of Woolwich and Region of Waterloo International Airport) has worked with Dillon to understand the high level financial feasibility of developing the East Side lands, prepared a background report, advanced the Freeport Creek subwatershed study and developed servicing and transportation options.

The second PIC is scheduled for Tuesday June 26, 2012, 6:30 p.m. to 9 p.m., at Ecole Secondaire Pere-Rene-de-Galinee on Maple Grove Road in Cambridge. The PIC will be an open house format with a presentation starting at 7 p.m. The purpose of the meeting is to respond to issues identified at the first PIC, seek public input on the servicing and transportation options and the evaluation criteria. Draft mapping will also be presented for comment.

Landowners within the Prime Industrial Strategic Reserve area and the Creekside/Intermarket Cambridge Inc. landowner at 245 Riverbank Drive will be invited to a special meeting with the consultants from 5 p.m. to 6 p.m. to give them an opportunity to review the panels and ask questions. The PIC will be advertised in the local papers and individual notice will be sent to all landowners within the Stage 1 Study Area and to anyone who has requested notice. A copy of the PIC handout is included as Attachment 2.

It is anticipated the MESP will be finalized in the fall of 2012 and will ultimately include transportation, environmental, servicing, subwatershed and community planning information. At a minimum, the MESP will fulfill the first two phases (i.e. up to selecting the preferred solution) in the Planning and Design Process of the Class Environmental Assessment for all non-major road, water and wastewater projects. This will answer the broader questions about the necessary servicing and infrastructure required for the East Side lands to inform specific development proposals. An implementation plan will be included to accompany the recommendations.
of the study and identify the timing and responsibility for the final phases of the EA process. The MESP will also include a financial impact analysis to understand the fiscal impacts and financial feasibility of developing the East Side lands as well as identifying partnership opportunities, cost-sharing scenarios and specific tools to off-set costs.

**REPORT:**

The East Side Lands are generally defined by the planned alignment for Highway 7 to the north, the Grand River to the west, Shantz Station Road to the east (with a portion south of Kossuth extending to Hespeler Road), and the existing City of Cambridge Urban Area to the south. The boundary is consistent with the Countryside Line in the new Regional Official Plan. The area is strategically located in close proximity to Highway 401, the Fairway Road extension and bridge and the Region of Waterloo International Airport.

In June 2007, Regional Council approved Regional Official Policies Plan Amendment (ROPP) No. 28 to designate approximately 150 net hectares of land for large lot employment uses. In 2009, as a result of an Ontario Municipal Board Settlement (OMB) approximately an additional 50 net hectares west of Fountain Street and south of Allendale Road were included in the ROPP. In June 2009, Council adopted the new Regional Official Plan (ROP) which designates additional employment land west of Fountain Street between Allendale Road and Middleblock Road (approximately 100 ha), for a total of approximately 300 net hectares designated as Prime Industrial Strategic Reserve (PISR).

In addition to designating the land, a number of other related Regional initiatives have been completed that will assist in advancing the development of the East Side, including completion of the Wastewater Treatment Master Plan and associated AECOM East Side Servicing Review, environmental monitoring of the East Side Subwatersheds, and completion of the Regional Transportation Master Plan. The MESP will focus on advancing the Environmental Assessments and community planning processes, moving the lands toward development readiness. The MESP will be coordinated with the Environmental Assessment for the East Side Pumping Station expected to start early next year.

On November 24, 2010 Regional Council retained Dillon Consulting Limited (Dillon) to provide consulting services for the East Side Lands Master Environmental Servicing Plan (MESP) and Community Plan. The MESP is being co-managed by the City of Cambridge and the Grand River Conservation Authority. The primary focus of the MESP is on the Stage 1 lands which includes the PISR lands. A key map is included as Attachment 1.

It is anticipated the MESP will be finalized in the fall of 2012 and will ultimately include transportation, environmental, servicing, subwatershed and community planning information. At a minimum, the MESP will fulfill the first two phases (i.e. up to selecting the preferred solution) in the Planning and Design Process of the Class Environmental Assessment for all non-major road, water and wastewater projects. This will answer the broader questions about the necessary servicing and infrastructure required for the East Side lands to inform specific development proposals. An implementation plan will be included to accompany the recommendations of the study and identify the timing and responsibility for the final phases of the EA process. The MESP will also include a financial impact analysis to understand the fiscal impacts and financial feasibility of developing the East Side lands as well as identifying partnership opportunities, cost-sharing scenarios and specific tools to off-set costs.

The first Public Information Centre (PIC) was held in June 2011 to introduce the project, present background information and identify next steps. Approximately 100 people attended the first PIC. A number of issues were identified including: servicing considerations, stormwater management, impacts to private wells, heritage impacts, land use compatibility, timing of development, traffic and the need for employment land. Since that time, the Project Team (which includes representatives from the Region, GRCA, City of Cambridge, City of Kitchener, Township of Woolwich and the Region of Waterloo International Airport) has worked with Dillon to understand the high level financial feasibility of developing the East Side lands, prepared a background report, advanced the Freeport Creek subwatershed study and developed servicing and transportation options.
The second PIC is scheduled for Tuesday, June 26, 2012, 6:30 p.m. to 9 p.m., at Ecole Secondaire Père-Rene-de-Galinee on Maple Grove Road in Cambridge. The PIC will be an open house format with a presentation starting at 7 p.m. The purpose of the meeting is to seek public input on the options and the associated advantages and disadvantages as well as the evaluation criteria. Draft mapping will also be presented for comment.

Landowners within the Prime Industrial Strategic Reserve area and the Creekside/Intermarket Cambridge Inc. landowner at 245 Riverbank Drive will be invited to a special meeting with the consultants from 5 p.m. to 6 p.m. to give them an opportunity to review the panels and ask questions. The PIC will be advertised in the local papers and individual notice will be sent to all landowners within the Stage 1 Study Area and to anyone who has requested notice. A copy of the PIC handout is included as Attachment 2.

Area Municipal Consultation/Coordination

This project is being co-managed by the City of Cambridge and the Grand River Conservation Authority. The PIC materials were prepared in consultation with the Project Team which includes representatives from the Region, Grand River Conservation Authority, City of Cambridge, City of Kitchener, Township of Woolwich, and Region of Waterloo International Airport. Representatives from the Project Team will be in attendance at the PIC.

CORPORATE STRATEGIC PLAN:

The East Side Public Information Centre supports the implementation of Region of Waterloo 2011-2014 Strategic Focus Objective 2.3: Support a diverse, innovative and globally competitive economy. The PIC is consistent with Action 2.3.1: Advance New East Side Employment Lands toward Development Readiness.

FINANCIAL IMPLICATIONS:

Any costs associated with the Public Information Centre will be covered through the existing approved budget related to this project.

As previously noted in this report, the MESP will also include a financial impact analysis to understand the fiscal impacts and financial feasibility of developing the East Side lands as well as identifying partnership opportunities, cost-sharing scenarios and specific tools to off-set costs.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation and Environmental Services have a representative on the Project Team and have reviewed the PIC materials. Staff from the airport have also been consulted and will continue to be involved in this process.

ATTACHMENTS:

Attachment 1 – Key Map
Attachment 2 – Public Information Centre Handout

PREPARED BY: Amanda Kutler, Acting Director Community Planning

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
East Side Lands (Stage 1)  
Master Environmental Servicing Plan and Community Plan

PUBLIC INFORMATION CENTRE #2  
INFORMATION PACKAGE

June 26, 2012

Open House Format  
6:30 p.m. – 9 p.m.  
Presentation at 7 p.m.

École Secondaire Père-René-de-Galinée  
(Cafeteria)  
450 Maple Grove Rd.  
Cambridge

There is a comment sheet at the back of this package. If you wish, please fill it out and deposit it in the designated box provided at this Information Centre.
Today’s Public Information Centre will:

- Reintroduce the project
- Provide background information
- Explain the process
- Provide an overview of the infrastructure options being considered
- Provide the opportunity for discussion with the project team
- Give you the chance to provide your input on this important project

What we heard at the first Public Information Centre

The first Public Information Centre (PIC) for this project was held on June 14, 2011. This PIC provided background information and described the process that was going to be undertaken to complete the MESP and Community Plan. Nearly 100 people attended this event.

At PIC#1 you told us:
- Traffic impacts are a concern;
- Potential impacts on wells are a concern;
- There is a need to consider stormwater as part of the study;
- There is a need to consider impacts on heritage;
- There is a need to consider impacts on adjacent land uses; and
- A confirmation of the need for this land was required.

Your input is important to us and has been, and will continue to be considered in the work undertaken as part of the MESP and Community Plan.
Where are the East Side Lands?

In June 2003, the Regional Growth Management Strategy (RGMS) was approved by Regional Council. The RGMS is a long-term strategic framework which identifies where, when and how future residential and employment growth will be accommodated. One of the goals of the RGMS is to “foster a strong economy”. The RGMS identified the lands around the Regional airport (known as the East Side Lands) as a future development area intended primarily for employment purposes.

Work to support the Regional Growth Management Strategy and the East Side Lands has been ongoing since 2004 and includes:

- **East Side Scoping Study (2004)** – Identified the studies and approvals required for the development of the East Side Lands.

- **East Side Community Structure Plan (2006)** – Recommended a staging of development for the East Side Lands from the City of Cambridge north towards the Township of Woolwich.

- **Industrial and Business Park Vacant Land Inventory and Demand Analysis (2006 and 2007)** – Recommended expansion of the City Urban Area designation and provision of 300 net hectares of fully serviced large industrial lots (8 ha and greater).


- **Regional Official Plan (ROP) 2009** – Adds additional employment land to the Urban Area and designates the land as Prime Industrial/Strategic Reserve to accommodate approximately 300 net hectares of large lot employment lands.

- **City of Cambridge Adopted Official Plan (2012)** Designates the Stage 1 Lands as mainly Future Urban Reserve.
The MESP and Community Plan Process

The MESP and Community Plan is being completed in three phases:

- **Phase 1**: Includes a background assessment of existing conditions, relevant plans, studies and policies and identifies any gaps or issues for the project. **Status – Completed**
- **Phase 2**: Identifies issues and options related to the development of the East Side Lands Stage 1, develop servicing options. **Status – Underway**
- **Phase 3**: Identifies the recommended option and finalizes the required planning and master planning documents. **Status – June through October 2012**

### MESP and Community Plan Process

#### Phase 1
**Dec. 2010 - Jun. 2011**

- Background data collection

#### Phase 2
**Jun. 2011 - June 2012**

- Key issues identification, confirmation of financial viability, identification of options
- Evaluation of servicing options

#### Phase 3
**July 2012 - Fall 2012**

- Identification of preferred option
- MESP and Community Plan
- Water and Wastewater Master Plan
- Transportation Master Plan
- Subwatershed Study and Master Drainage Plan

The water, wastewater, stormwater and transportation infrastructure required to implement the ultimate community plan for the East Side Lands (Stage 1) must be planned to meet Phases 1 and 2 of the Municipal Class Environmental Assessment process (October 2000 as amended in 2007).

- **Phase 1: Define the Problem/Opportunity** – the problem/opportunity is the need to provide water, wastewater, stormwater and transportation infrastructure to accommodate the planned development of East Side Lands Stage 1.
- **Phase 2: Consider Alternative Solutions** – Different ways to provide the servicing are incorporated into the options that have been developed. We are looking for feedback on the options and the criteria to evaluate options at PIC #2.

### Since PIC#1 we have been working on the following:

- Background report
- Freeport Creek and Tributary to the Grand Subwatershed Study
- Master Environmental Servicing Report (MESP), including the identification of water, wastewater, transportation and stormwater options
Background Report

The purpose of the Background Report was to document the findings from the Phase 1 background information review, identify any information gaps and provide general recommendations for Phases 2 and 3 of the MESP and Community Plan. This report was not intended to be an exhaustive review of all materials concerning the East Side Lands, rather it was prepared to consolidate key background information which will support future analysis and reports prepared for the MESP and Community Plan.

Draft Freeport Creek and Tributary to the Grand Subwatershed Study

The purpose of the Subwatershed Study is to provide comprehensive understanding on how surface water, groundwater, terrestrial and aquatic ecosystems function in a subwatershed, and recommend how land use changes can take place in a sustainable manner.

As part of the Subwatershed Study, the Greenlands Network has been identified. The Greenlands Network is based on the definitions and guidelines provided in the Regional Official Plan, the City of Cambridge Official Plan, GRCA Policies, the Greenlands Network Implementation Guideline, and the Natural Heritage Reference Manual. Lands outside of the Greenlands Network have development potential, and are shown in the draft map below. This map will be refined as this study proceeds.

The study findings may result in amendments to the Grand River Conservation Authority’s regulated area mapping of Ontario Regulation 150/06 made under the Conservation Authorities Act.

Subwatershed Study objectives:
- Identify, protect, enhance and restore, environmental features and ecological functions
- Identify and protect existing and future vulnerable areas where municipal drinking water sources may be at risk,
- Provide guidance as to how, where, and when urban development can occur within the subwatersheds;
- Develop a Master Drainage Plan (MDP); and
- Include a monitoring and adaptive management strategy to guide the ongoing stewardship of the subwatersheds

Potential Development Areas

Features under review and subject to change

* Development areas are approximate and subject to change.
* Environmental consideration are under review and subject to change, and will have ecological buffers applied, which will be recommended through the conclusion of this study.
The Master Environmental Servicing Plan (MESP)

The MESP and Community Plan provides the framework to guide development of the East Side Stage 1 Lands (Stage 1 Lands) and provides site-specific servicing implementation recommendations and associated servicing cost estimates.

Development of Options
The development of the options for servicing the Stage 1 lands was undertaken in three main steps:

- **Step 1: Review existing natural features and systems**
- **Step 2: Review existing infrastructure conditions**
- **Step 3: Identify servicing options**

An integrated process was used to develop and evaluate the servicing solutions. Three servicing options (with variations) were identified to provide efficient and effective servicing for the Stage 1 lands.

### Evaluation Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development and Sustainability Criterion</td>
<td>Considers efficiency in staging of development, optimization of existing infrastructure and ability to support a complete community</td>
</tr>
<tr>
<td>Cost Criterion</td>
<td>Considers cost over the life of the infrastructure</td>
</tr>
<tr>
<td>Land Use Criterion</td>
<td>Considers ability to maximize developable area</td>
</tr>
<tr>
<td>Socio-Economic and Cultural Environment Criterion</td>
<td>Considers potential impact on existing businesses and residents and opportunity to maximize community benefits</td>
</tr>
<tr>
<td>Natural Environment Criterion</td>
<td>Considers potential impacts to terrestrial and aquatic features, wetlands, groundwater and surface water</td>
</tr>
<tr>
<td>Transportation Network Criterion</td>
<td>Considers transportation network efficiency, compatibility with transit and active transportation and accessibility</td>
</tr>
</tbody>
</table>

**Option 1** avoids additional transportation crossings of Freeport Creek

**Option 2** avoids additional transportation crossing of Freeport Creek and provides an east/west connection from King Street to Maple Grove Road for the lands south of Freeport Creek

**Option 3** provides an internal connection from the north to the lands south of Freeport Creek with an east/west connection to King Street and/or Maple Grove Road
We want your input

This Public Information Centre is being held to present the completed background work and the options being considered for water, wastewater and transportation servicing for the Stage 1 lands.

At this point we are looking for your feedback. Please use the attached comment form to provide your input on the following:

1) Evaluation Criteria - Is there any additional criteria that should be considered in the evaluation of the options?

2) Servicing Options – Are there any other ways to provide water, wastewater and transportation servicing to the Stage 1 lands? Are there any additional advantages or disadvantages that were not identified for any of the options?

3) Selection of a Preferred Option – What criteria do you think is the most important to consider while evaluating the options?

4) Are there any other thoughts or comments you may have?

NEXT STEPS
1. Review and consider public input
2. Complete the evaluation of options
3. Present final draft reports and recommendations to the public at PIC #3 (anticipated in September 2012)

Contact Us

If you have any questions or comments:

Amanda Kutler, MBA, MCIP, RPP
Acting Director, Community Planning
Region of Waterloo
8th Floor, 150 Frederick Street
Kitchener ON, N2G 4J3
Tel: (519) 575-4818
Fax: (519) 575-4449
E-mail: akutler@regionofwaterloo.ca

Elaine Brunn Shaw, MCIP, RPP
Director of Policy Planning
City of Cambridge
50 Dickson Street, 3rd Floor, P.O. Box 669
Cambridge ON, N1R 5W8
Tel: (519) 740-4650 x 4574
Fax: (519) 622-6184
E-mail: brunnshawe@cambridge.ca
COMMENT SHEET

(Please use back if you require more space)

Name:
Address:
Postal Code:
Phone:
Email:

All comments and information received from individuals, stakeholder groups and agencies regarding these projects and meetings are being collected for consideration. 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 above should be forwarded to the staff noted on this page.

Thank you for your valuable input. Please send your comments by July 24, 2012 to:

Amanda Kutler, MBA, MCIP, RPP
Acting Director, Community Planning
Region of Waterloo
8th Floor, 150 Frederick Street
Kitchener ON, N2G 4J3
Tel: (519) 575-4818
Fax: (519) 575-4449
E-mail: AKutler@regionofwaterloo.ca
(please use this page for comments if you need more space)
**Consistent Features**

All of these features are consistent for all options

- Mitigation options will include the review of an option with this road being discontinuous.
- Development and servicing on either side of this line can occur independent of one another.
- Location to be determined through separate EA process.*
- Forcemain to Kitchener Wastewater Treatment Plan, subject to separate EA process.*
- Alternative sewer route through Hunt Club should be considered at time of implementation.

* Requires Cross Boarder Servicing Agreement

To Preston WWTP

Boxwood PS
Option 1: No Freeport Creek Crossing

**Advantages:**
- Least impact to natural environment
- Least amount of new infrastructure
- No impact to the wetland adjacent to the Regional Operations Centre and Freeport Creek
- No impact to the Regional Operations Centre facility
- Temporary forcemain provides development advantages in short term while waiting for forcemain to the Kitchener WWTP
- Temporary forcemain permits development in short term

**Disadvantages:**
- Access for development limited to Middle Block Road and Allendale Road
- Does not provide for community connectivity, in the form of continuous capacity for transit and other non-auto modes
- Does not provide the transportation network access or municipal servicing to the area south of Allendale Road and the Creekside Lands
- Water and sewer will be located outside of road right-of-ways
- Increased potential for traffic on Riverbanks Drive
- Temporary forcemain throw away costs when forcemain is no longer needed

*Requires Cross Border Servicing Agreements*

Location to be determined through separate EA process*

Forcemain to Kitchener Wastewater Treatment Plan, subject to separate EA process*
Option 2: Access to the Creekside Lands with No Freeport Creek Crossing

Advantages:
- Provides good east/west road network connections for access to/from development to King Street and Maple Grove Road
- Provides good network connections for transit service and alternative modes for the Creekside Lands
- Provides good transportation access and full servicing to the Creekside Lands
- Option to cul-de-sac Riverbank Dr. at the rail tracks

Disadvantages:
- Access for the PISR lands is limited to Middle Block Road and Allendale Road
- Impacts to the wetland adjacent to the Regional Operations Centre
- Impacts to the Regional Operations Centre facility
- Major transportation infrastructure required, including potential for grade separation at CPR crossing

* Requires Cross Border Servicing Agreement
Option 3a: Access Through the Creekside Lands with Connections to King Street and Maple Grove Road

Option to cul-de-sac Riverbank Dr. at the rail tracks
Alternative alignment to the north at rear of properties, see alignment on Option 1

Location to be determined through separate EA process*
Forcemain to Kitchener Wastewater Treatment Plan, subject to separate EA process*

Advantages:
- Provides maximum access potential for PISR lands to Fountain Street, King Street and Maple Grove Road. Results in minimal impact to Middle Block, Allendale and Riverbank
- Allows closure of Riverbank Drive at CP Rail crossing
- Provides maximum network connectivity for transit and other non-auto modes
- Allows for full transportation access and servicing to the Creekside Lands

Disadvantages:
- Major transportation infrastructure required, including potential for grade separation at CPR crossing
- Negative impacts to Regional Operations Centre wetland resulting from the proposed road
- Potential natural environment impact associated with new major crossing of Freeport Creek
- Impacts to potential environmental linkages
- Impacts to Regional Operations Centre facility

* Requires Cross Border Servicing Agreement
Option 3b: Access Through the Creekside Lands with Connection to King Street

Advantages:
- Provides very good access potential for the PISR lands to Fountain Street and King Street. Results in reduced impact to Middle Block Road, Allendale Road and Riverbank Drive
- Allows closure of Riverbank Drive at CP Rail crossing
- Provides very good network connectivity for transit and other non-auto modes
- Allows for good transportation access and servicing to the Creekside Lands
- No impact to wetland adjacent to the Regional Operations Centre
- No impacts to Regional Operations Centre facility

Disadvantages:
- Major transportation infrastructure required, including potential for grade separation at CPR crossing
- Potential natural environment impact associated with new major crossing of Freeport Creek
- Impacts to potential environmental linkages

* Requires Cross Border Servicing Agreement
Option 3c: Access Through the Creekside Lands with Connection to Maple Grove Road

Advantages:
- Provides very good access potential for PISR lands to Fountain Street and Maple Grove Road. Results in reduced impact to Middle Block Road, Allendale Road and Riverbank Drive
- Provides very good network connectivity for transit and other non-auto modes
- Allows for good transportation access and full servicing to the Creekside Lands
- Grade separated CPR crossing not required

Disadvantages:
- Negative impacts to wetland adjacent to the Regional Operations Centre resulting from the proposed road
- Potential natural environment impact associated with new major crossing of Freeport Creek
- Impacts to Regional Operations Centre facility
- Impacts to potential environmental linkages
- Does not allow closure of Riverbank Drive at CPR crossing

* Requires Cross Border Servicing Agreement
REPORT:

City of Cambridge

1. Registration of Draft Plan of Condominium 30CDM-10106
   Draft Approval Date: December 3, 2010
   Phase: Phase 4
   Applicant: Preston Meadows
   Location: 505, 535 and 565 Margaret Street
   Proposal: To permit the development of 16 townhouse units.
   Processing Fee: Paid May 15, 2012
   Commissioner's Release: May 15, 2012

2. Official Plan Amendment No. 37
   Applicant: Grand River Conservation Authority
   Location: 360 Clyde Road
   Proposal: To amend Map 15 of the General Land Use Map of the City Official Plan from Class 1 'Significant Natural Features Open Space District' to Class 1 'Urban Residential District' to recognize the existing dwelling and residential use for a small portion of the site.
   Processing Fee: May 22, 2012
   Commissioner's Approval: May 22, 2012
   Came Into Effect: June 12, 2012
City of Kitchener

1. **Registration of Draft Plan of Subdivision 30T-11201**
   - Draft Approval Date: September 20, 2011
   - Phase: Entire Plan
   - Applicant: Branthaven Mill Street Inc.
   - Location: 342 Mill Street
   - Proposal: To permit the development of 77 freehold townhouse units.
   - Processing Fee: Paid May 3, 2012
   - Commissioner’s Release: May 4, 2012

2. **Registration of Draft Plan of Condominium 30CDM-11207**
   - Draft Approval Date: September 20, 2012
   - Phase: Entire Plan
   - Applicant: Branthaven Development Corp.
   - Location: 342 Mill Street
   - Proposal: To create a common element plan of condominium.
   - Processing Fee: Not applicable.

3. **Registration of Draft Plan of Condominium 30CDM-11218**
   - Draft Approval Date: April 30, 2012
   - Phase: Entire Plan
   - Applicant: The Tricar Group/Canvest Properties Ltd.
   - Location: 539 Belmont Avenue
   - Proposal: To permit the development of 114 residential condominium units.
   - Processing Fee: Not applicable

4. **Official Plan Amendment No. 91**
   - Applicant: Mennonite Central Committee of Ontario
   - Location: 50 and 56 Kent Avenue
   - Proposal: To expand Special Policy Area 3 to include 56 Kent Avenue and the parking area, to permit the same range of uses currently permitted in a new building. The lands are currently designated ‘Community Institutional’ in the Mill Courtland Woodside Park Secondary Plan which permits uses including institutional, residential, community service and social service establishments. Special Policy Area 3 applies to 50 Kent Avenue and permits an office, a financial establishment, warehousing and accessory retail within the existing building.
   - Processing Fee: Paid May 3, 2012
   - Commissioner’s Approval: May 25, 2012
   - Came Into Effect: June 15, 2012
City of Waterloo

1. **Registration of Draft Plan of Subdivision 30T-05401**
   Draft Approval Date: July 29, 2010
   Phase: Entire Plan
   Applicant: Woolwich Estates Limited
   Location: Woolwich Street
   Proposal: To permit the development of 136 single detached, 47 multiple residential and mixed used commercial/residential units (8 residential).
   Processing Fee: Paid May 22, 2012
   Commissioner’s Release: May 28, 2012

2. **Registration of Draft Plan of Condominium 30CDM-09402**
   Draft Approval Date: December 18, 2009
   Phase: Entire Plan
   Applicant: COB GP Inc.
   Location: 187 King Street South
   Proposal: To permit the development of 22 commercial units.
   Processing Fee: Paid May 4, 2012
   Commissioner’s Release: May 7, 2012

Township of Woolwich

3. **Official Plan Amendment No. 18**
   Applicant: Township of Woolwich
   Location: Vicinity of West Montrose
   Proposal: To designate the lands in and around the rural settlement area of West Montrose as a Cultural Heritage Landscape. The area is approximately bounded by Katherine Street South to the east, Northfield Drive to the west, Line 86 to the north and south to Canagagigue Creek and along Letson Drive.
   Processing Fee: Paid December 14, 2011
   Commissioner’s Approval: May 24, 2012
   Came Into Effect: June 15, 2012

Residential Subdivision Activity January 2012 to May 31, 2012

<table>
<thead>
<tr>
<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
<th>Pending Plans (Units Submitted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Kitchener</td>
<td>194</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Waterloo</td>
<td>389</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cambridge</td>
<td>55</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>Woolwich</td>
<td>0</td>
<td>0</td>
<td>154</td>
</tr>
<tr>
<td>Wilmot</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>North Dumfries</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wellesley</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Region of Waterloo</td>
<td>638</td>
<td>0</td>
<td>180</td>
</tr>
</tbody>
</table>

*The acceptance and/or draft approval of plans of subdivision and condominium processed by the City of Kitchener under delegated approval authority are not included in this table.*
For comparison, the following table has also been included:

<table>
<thead>
<tr>
<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
<th>Pending Plans (Units Submitted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Kitchener</td>
<td>33</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Waterloo</td>
<td>16</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Cambridge</td>
<td>76</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Woolwich</td>
<td>64</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wilmot</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>North Dumfries</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wellesley</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Region of Waterloo</td>
<td>189</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

*The acceptance and/or draft approval of plans of subdivision and condominium processed by the City of Kitchener under delegated approval authority are not included in this table.

**Area Municipal Consultation/Coordination**

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

**CORPORATE STRATEGIC PLAN:**

This report reflects actions taken by the Commissioner in accordance with the Delegation By-law adopted by Council. The activities described in this report are operational activities with the objective of Focus Area 1: Growth Management and Prosperity.

**FINANCIAL IMPLICATIONS:**

NIL

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

NIL

**ATTACHMENTS:**

NIL

**PREPARED BY:** Andrea Banks, Program Assistant

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

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

DATE: June 19, 2012

FILE CODE: D07-01

SUBJECT: COUNCILLOR’S REQUEST FOR RESPONSE REGARDING THE TOWN OF HALTON HILLS’ RESOLUTION CONCERNING PROVINCIAL REGULATIONS FOR COMMERCIAL FILL OPERATIONS

RECOMMENDATION:

THAT the Regional Municipality of Waterloo support in principle the concerns of the Town of Halton Hills regarding commercial fill operations and take the following action with respect to the issue of commercial fill operations in Ontario, as described in Report No. P-12-075, dated June 19, 2012:

a) Request the Province, through the Ministry of the Environment, to work with municipalities to consider guidelines, regulations and a Provincially regulated approval process to govern the quality of fill imported to a receiving site other than for the purposes of Brownfield redevelopment; and

b) Forward a copy of this report to the Provincial Minister of the Environment, local Members of Provincial Parliament and Area Municipalities.

SUMMARY:

At the Regional Council meeting on March 7, 2012, Councillor Millar requested that the correspondence received from the Town of Halton Hills regarding commercial fill operations be reviewed by staff with a report back to Planning and Works Committee. The resolution passed by Halton Hills is one of many similar resolutions adopted by municipalities across the Greater Toronto Area (GTA) requesting the Province to establish regulations for the disposal of surplus fill (i.e., soil, bricks, concrete, asphalt, etc) from construction sites in Ontario. A copy of Halton Hills’ resolution is included in Appendix A.

Commercial fill operations are private companies that charge haulers tipping fees to unload clean fill excavated from various construction sites. Recently, many of these operations have been setting up in former pits and quarries, and other rural areas across the GTA to deal with the growing volume of surplus fill from construction sites.

In October 2010, contaminated soil was discovered at a commercial fill site in the Region of Durham, prompting several GTA municipalities to take action on this issue. Some of the key issues of concern to municipalities include:

- Unclear definitions of what constitutes “clean” fill;
- Risk of groundwater contamination and expensive remediation costs;
- Reduction of groundwater recharge functions through application of less permeable soils;
- Lack of resources, staff and expertise required to monitor the movement of fill; and
- Truck traffic and associated dust, road wear-and-tear, congestion and air pollution
At present, Waterloo Region does not have any commercial fill operations. The Region’s current approach to soil management generally consists of transporting surplus fill to waste management facilities located outside the region. While this approach has been effective to date, it is costly, results in the disposal of fill that could be re-used, and is not environmentally sustainable over the long-term. The introduction of new Provincial regulations could help address these challenges by establishing clear rules on how and where surplus fill may be disposed in Ontario. Ultimately, these new rules could also help facilitate reurbanization in Waterloo Region.

REPORT:

On February 6, 2012, the Town of Halton Hills passed a resolution in response to the issue of commercial fill operations in Ontario. This resolution, which was one of many similarly worded resolutions passed by municipalities across the Greater Toronto Area (GTA), seeks action from Province to establish regulations regarding the movement of disposal of fill from construction sites in Ontario.

What are commercial fill operations?

Commercial fill operations are private companies that charge haulers tipping fees to dump clean fill excavated from various construction sites. Recently, many of these operations have been setting up in former pits and quarries, and other rural areas across the GTA to deal with the growing volume of surplus fill from construction sites. Record building activity in the GTA has generated large quantities of excess fill that must be moved outside the city.

What are the main issues?

Ontario has strict rules governing the disposal of contaminated materials. However, there are no Provincial regulations that track, assess and enforce the disposal of clean fill. The current system is largely self-regulating, and there is no guarantee that excavated soil is being appropriately remediated before it is moved elsewhere. In October 2010, contaminated soil was discovered at a commercial fill site in the Region of Durham, prompting several GTA municipalities to take action on this issue. Some of the key issues of concern to municipalities include:

- Unclear definitions of what constitutes “clean” fill;
- Risk of groundwater contamination and expensive remediation costs;
- Reduction of groundwater recharge functions through application of less permeable soils;
- Lack of resources, staff and expertise required to monitor the movement of fill; and
- Truck traffic and associated dust, road wear-and-tear, congestion and air pollution

How do these issues relate to the Aggregate Resource Act?

In the past, the Ministry of Natural Resources (MNR) has allowed the practice of importing soil to licensed sand and gravel pits for rehabilitation purposes. However, new rules recently introduced by the MNR now restrict the quality of soil that aggregate operators can accept. Only fill that meets Table 1 criteria of the Ministry of Environment’s Soil, Groundwater and Sediments Standards under the Environmental Protection Act can be taken to a pit or quarry. The new rules have made it more difficult for pit operators to receive surplus soils from building sites.

How do these issues relate to the Region of Waterloo?

At present, Waterloo Region does not have any commercial fill operations. The Region’s current approach to soil management generally consists of transporting surplus fill waste management facilities located outside the region. While this approach has been effective to date, it is costly,
results in the disposal of fill that is not impacted and could be re-used and is not environmentally sustainable over the long-term.

The management of surplus fill, particularly from Brownfield sites, will be a challenge in the future as the region continues to grow and intensify. Over the past few years, approximately 215,000 tonnes of material has been disposed per year and this figure is anticipated to increase in the future. Soil management represents one of the largest costs of development within existing built-up areas.

Since the implementation of the Region’s Brownfields Financial Incentives Pilot Program in 2006, Regional staff has gained insight into soil management issues associated with remediating brownfield sites throughout the region. The Region is currently exploring the concept of a Soil Remediation and Aggregate Recycling Facility (Soil Recycling Facility), which was presented to Regional Council through Report P-12-011/E-12-020 in February 2012. Such a facility would encompass sustainable solutions for the collection, sorting, treatment, stockpiling and re-use of surplus soil. Staff intend to undertake a more detailed feasibility study of the Soil Recycling Facility, and associated consultation, as part of the upcoming Regional Waste Management Master Planning Project process.

Conclusion

Regional staff supports the resolution passed by the Town of Halton Hills in principle, and recommends that Regional Council request the Provincial Government to work with municipalities to consider guidelines, regulations and a Provincially-regulated approval process to govern the quality of fill imported to a receiving site other than for the purposes of Brownfield redevelopment. Such regulations could benefit the Region and the Area Municipalities by establishing clear rules on how and where surplus soil may be disposed. Ultimately, these new rules could also help reduce development costs and facilitate reurbanization in Waterloo Region.

Regional staff will be exploring this and related issues further as part of the feasibility study for the Soil Recycling Facility described above. As part of this process, staff will continue to consult with the Area Municipalities, the development industry and other stakeholders to ensure that any new Provincial soil management regulations address local needs, and do not result in additional costs and delays to the development approval process.

Area Municipal Consultation/Coordination

Regional staff has consulted with planning staff at the Area Municipalities during the preparation of this report.

CORPORATE STRATEGIC PLAN:

The recommendations of this report support the Region’s priorities with respect to Focus Area 1 (Environmental Sustainability) and Focus Area 2 (Growth Management and Prosperity) of the Corporate Strategic Plan. In particular, the recommendations will help implement Action Items 2.1.1 2.1.2, which seek to promote reurbanization and the redevelopment of contaminated sites.

FINANCIAL IMPLICATIONS:

NIL
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Waste Management Division has been consulted during the preparation of this report and will be actively involved in the feasibility study for the Region’s Soil Recycling Facility.

ATTACHMENTS:

Appendix A - Copy of the resolution passed by the Town of Halton Hills.

PREPARED BY:  John Lubczynski, Principal Planner  
                 Kevin Curtis, Manager, Strategic Policy Development

APPROVED BY:  Rob Horne, Commissioner of Planning, Housing and Community Services
February 9, 2012

Mr. Ted Arnott, M.P.P.
Wellington-Halton Hills
181 St. Andrew Street East
2nd Floor
Fergus, ON N1M 1P9

Dear Mr. Arnott,

Re: Council Resolution regarding Provincial Regulations Regarding Commercial Fill Operations.

Please be advised that Council for the Town of Halton Hills at its meeting of Monday, February 6, 2012, adopted the following:

Resolution No. 2012-0046

WHEREAS municipalities are faced with requests from Commercial Fill Operators to place fill in, for example, either previously undisturbed areas or expired gravel extraction pits;

AND WHEREAS municipalities have limited resources and ability to regulate this type of operation other than through zoning restrictions and agreements associated predominantly with operational protocol;

AND WHEREAS the issue of soil quality of fill imported to a receiving site potentially has a significant cross jurisdictional environmental impact that should be elevated to the Provincial level through the Ministry of the Environment;

AND WHEREAS the Ministry of the Environment has established criteria for quality of fill for Brownfield redevelopment but not for the importation and placement of fill within, as an example, undisturbed areas or expired gravel extraction pits;

NOW THEREFORE BE IT RESOLVED:

...2

1 Halton Hills Drive, Halton Hills, Ontario L7G 5G2
THAT the Town of Halton Hills requests that the Province, through the Ministry of the Environment, establish guidelines, regulations and a Provincially regulated approval process to govern the quality of fill imported to a receiving site other than for the purpose of Brownfield redevelopment;

AND FURTHER THAT the Clerk forward copies of this resolution to Mr. Ted Arnott, MPP for Wellington-Halton Hills, Mr. Jim Bradley, Minister of the Environment, AMO, and all Ontario Municipalities for their consideration.

Yours truly,

Ashley Mancuso
Council and Committee Services Coordinator

c The Honourable Jim Bradley, Minister of the Environment
Association of Municipalities of Ontario (AMO)
Ontario Municipalities
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: June 19, 2012

FILE CODE: D10-20(A)

SUBJECT: KING AND VICTORIA MULTIMODAL HUB – REAL PROPERTY MARKET SCOPE AND FEASIBILITY STUDY

RECOMMENDATION:

For information.

SUMMARY:

The new Region of Waterloo Multimodal Hub site, located on the north-east quadrant of the intersection of King and Victoria Streets, is a prominent property in downtown Kitchener. Presently, the Region is nearing completion of acquisition of all the component land parcels. The Hub site is being planned to simultaneously function as a focal transportation node that integrates various local and inter-regional transportation modes as well as an attractive higher-density, mixed-use land development.

The planning activities are progressing along two main themes, namely, the transportation infrastructure planning—which focuses on transportation connectivity—and land development planning—which focuses on identifying and enabling ways to leverage the land development potential. The latter ensures that the Hub site is developed in a manner that it becomes an iconic landmark and gateway to downtown Kitchener, acts as a catalyst for future developments in the area, and maximizes the equity and return on the Region’s investments.

In this context, staff has identified a need to hire external experts to undertake the Multimodal Hub Real Property Market Scope and Feasibility Study (or Market Scope Study).

The Market Scope Study consulting assignment will be executed through the following three phases.

1. *Phase 1* will assess the market demand for various land use types possible at the Hub site based on historical trends, nearby existing and planned inventories, and future projections for economic growth.

2. *Phase 2*, through a market sounding exercise, will consult with representative land developers, potential tenants and industry experts for acquiring market intelligence and their creative ideas and advice as well as for an early identification of issues and risks that could affect success.

3. *Phase 3* will evaluate and shortlist up to four to six number of, site-wide plus individual building asset-specific, most feasible site development options. Potential risk profiles and the suitability of various procurement methods will also be analyzed.

This consulting assignment is estimated to cost in the range of $150,000 to $200,000, plus taxes and disbursements.
Staff expects to initiate the consulting assignment by September 2012, and substantially complete it by early 2013. A risk remains in terms of the length of the Phase 2 (market sounding exercise) which is driven by the completeness and adequacy of the feedback response obtained from the market sounding clients. As a parallel endeavour and potentially a measure to mitigate this schedule risk, staff is also coordinating with the City of Kitchener’s Economic Development team and the local business community with an objective to promote the site in order to attract new economic development opportunities to the region.

This Market Scope Study will enable the Region to understand and establish the most prudent set of premises, criteria, scope and procurement strategies for development of the Hub lands. It will thus provide the Region with the degree of due diligence and procedural rigour that could be generally expected of an entity undertaking commercial land developments.

The Market Scope Study will be followed by intensive business case analysis for the preferred investment option(s). Whereas the Market Scope Study assesses financial performance at a level that is sound enough to make comparisons between high-level candidate options, the business case will examine it at a level of detail that is appropriate for making investment decisions.

REPORT:

Project Background and Context

The new Region of Waterloo Multimodal Hub site is located on the north-east quadrant of the intersection of King Street and Victoria Street in downtown Kitchener. Following authorization by Regional Council in August 2007, the Region has acquired all component parcels of the subject 1.6 hectares (3.95 acres) lands bounded by King Street West, Victoria Street North, Duke Street West and the CN Railway corridor – except for the parcel at 520 King Street West, the acquisition of which is expected to be substantially completed by the end of 2012.

In its final built-out form, the Hub will be a combination of a central transportation facility seamlessly integrating various convergent local as well as inter-regional travel modes together with a higher density, mixed-use land development that will also serve as a catalyst for redevelopment in this part of the City of Kitchener known as the Innovation District.

As a transportation facility, the Hub will be a focal node on the new Regional Rapid Transit (RT) line. New intensive transportation infrastructure to be developed includes platforms and interface elements for the RT line; platforms to serve inter-city GO train and VIA Rail services; bus bays and loops to support the Grand River Transit (GRT) and intercity bus services operated by GO Bus, Greyhound, Coach Canada and other carriers; and underground and at-grade connections to and from the facilities enabling the modes of pedestrians, cyclists, taxis and the Grand River Car Share. Similarly, network improvement works including grade-separation (underpass) of the Weber Street and King Street road alignments have been planned to be completed in conjunction with the construction of the Hub site’s transportation infrastructure.

In terms of land development and place-making, the Hub is expected to become an iconic catalyst to further attract high-quality, high-density, mixed-use development in the downtown Kitchener area. The Hub is poised to become a centre of activity in downtown Kitchener. It is within walking distance of existing commercial, retail and residential areas; and extensive opportunities for intensification have been identified in and around the area. Subsequently, a safe, comfortable and vibrant public realm will foster walking and cycling and will make transit more attractive to potential users. As such, the Hub will, both directly and inductively, support the growth management and reurbanization goals in the Regional Official Plan, the City of Kitchener’s Official Plan as well as the Province’s Places to Grow: Growth Plan for the Greater Golden Horseshoe.
To realize this vision of successful development of the Hub site, Regional staff is undertaking a number of planning projects. On the whole, the planning process is proceeding along two broad themes – (i) transportation infrastructure planning and (ii) land development planning.

As part of the land development planning, the Region is seeking to analyze potential real property development scenarios for the most appropriate mix and sizes of the various land use types and their respective phase-in timelines such that the value for money (VFM) and return on equity (ROE) of the Region and, by extension, the public are maximized.

In this context, Regional staff has identified a need to hire external experts to undertake the Multimodal Hub Real Property Market Scope and Feasibility Study (or Market Scope Study).

Further details on the structure and management of the Market Scope Study consulting assignment, including its statement of work, procurement, schedule, identified risks, stakeholder relationships, future value and impact, and concurrence with the Regional policies and departments, are presented below.

**Statement of Work**

The Market Scope Study consulting assignment will be executed through the following three phases.

- **Phase 1: Market Demand and Development Concepts** – will assess the market demand for future land uses at the Hub site based on historical trends and future projections for economic growth and competition as well as existing inventories in the surrounding areas and communities. The outcome of this module will be a set of six to eight Development Concept options, each of which represents a combination of land-use/space types and sizes that could sustain commercially in the future.

- **Phase 2: Market Sounding** – will consult with the development industry to solicit their perspective upon viability of the candidate Development Concept options; and also serve to provide an early identification of issues and an early understanding of the risks that could affect success. The outcome of this module will be a refined set of six to eight Development Concept options with further qualifying information including architecture and constructability, development cost, return on investment, potential procurement options and associated risks.

- **Phase 3: Evaluation of Options** – will first develop the criteria and then evaluate the candidate Development Concept options based on their financial performance (return on investment, equity maximization etc.) as well as the Region’s responsibilities for public policy and local government. The outcome of this module will be a shortlist consisting of four to six number of, site-wide plus individual building asset-specific, most feasible development options.

**Cost**

The cost of the Market Scope Study consulting assignment is expected to be in the range of $150,000 to 200,000, plus taxes and disbursements.

**Procurement**

In accordance with the Region’s Purchasing Guidelines: Consultant Selection Process, the procurement method leading to the selection of the consultant follows a Two-Stage Three Envelope format to evaluate their proposals received upon the Request for Proposal (RFP) issued by the Region.

Under Stage 1 submissions, interested proponents submit technical information describing their team’s capacity, strength and approach to the work enclosed in Envelope No. 1 – Expression of Interest (EOI) Technical Proposal. Proponents will be shortlisted based on the merits presented in their EOI Technical Proposals against a pre-published evaluation scheme.
Next, under Stage 2 submissions, only the shortlisted proponents are then asked to submit a detailed work plan enclosed in a separate Envelope No. 2 – Work Plan Proposal, and the information regarding fees and cost estimates enclosed in a separate Envelope No. 3 – Cost Proposal. Stage 2 submissions are re-evaluated against the pre-published evaluation scheme. The Region will negotiate as necessary and enter into a contract agreement with the highest scoring proponent.

Key target dates in the RFP process this year are as follows.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request For Proposal (RFP) issued</td>
<td>June 20</td>
</tr>
<tr>
<td>Bidder’s questions due</td>
<td>July 6</td>
</tr>
<tr>
<td>Responses to bidder’s questions published</td>
<td>July 10</td>
</tr>
<tr>
<td>Guided tour of the site (optional) and bidder’s conference (optional)</td>
<td>July 11</td>
</tr>
<tr>
<td>Stage 1 submissions due (Expressions of Interest, Technical Proposal deadline)</td>
<td>July 27</td>
</tr>
<tr>
<td>Shortlisted bidders notified</td>
<td>August 3</td>
</tr>
<tr>
<td>Stage 2 submissions due (Work Plan Proposal and Cost Proposal deadline)</td>
<td>August 24</td>
</tr>
<tr>
<td>Presentations and interviews with shortlisted bidders</td>
<td>August 28</td>
</tr>
<tr>
<td>Result of consultant selection announced</td>
<td>August 31</td>
</tr>
</tbody>
</table>

**Schedule**

The Market Scope Study is expected to commence by September 2012, and is to be substantially complete by early 2013.

A risk remains in terms of the length of the Phase 2 (market sounding exercise) which is driven by the completeness and adequacy of the feedback response obtained from the market sounding clients. More exact and detailed project schedule will be sought from the consultant in their proposal; however, the date of completion may need to be extended for another two to three months in order to achieve the best quality of the work and the products. This risk could impact the Study project schedule only and is not likely to impact the costs beyond the upset budget.

**Post-completion Value, Impact, and Future Steps**

With an economic analysis of the local and neighbouring real-estate market, the Market Scope Study first compiles a rational proposition of viable real-estate development concepts (scenarios) at the Hub site. These development concepts are later vetted through the development industry practitioners that helps to further refine them on not only the objectives of economic performance but also on the issues of practicality. The result from this Study, therefore, is a set of ambitious but realistic site development options that best reflect the Region’s vision for development of the Hub lands while having the best potential for maximum return on investment. In course of the market sounding exercise, this Study will also help provide an early promotion (“heads-up”) of the Hub site to the prospective bidders.

As such, the Market Scope Study will enable the Region to understand and establish the most prudent set of premises, criteria, scope and procurement strategies. Given the development of the Hub lands and the ability to influence its contribution towards achieving the Region’s growth management objectives is a one-time opportunity, the awareness and guidance to be acquired through the Market Scope Study will be quite valuable.

The Market Scope Study, thus, furnishes the degree of due diligence and procedural rigour that could be generally expected of a responsible entity undertaking commercial land developments of such a magnitude. The work activities accomplished during this Study will also satisfy, in general, the requirements of preparatory work expected by PPP Canada (P3 Canada) should the Region seek to pursue funding opportunities from them in the future. P3 Canada is a federal crown corporation which champions and facilitates the P3 mode in the delivery of public infrastructure projects through promoting best practices, providing expertise, and– often– partially funding the public infrastructure project.
In terms of next steps, the Market Scope Study will be followed through a separate consulting assignment to develop intensive business case analysis for the most promising and approved site development option(s). The business case analysis will focus in-depth on the financial/economic performance, associated risks and mitigation measures, as well as procurement modes and phase-in options. It will examine the financial performance at a level of precision that is appropriate for making investment decisions. Depending on the conclusions from the Market Scope Study, any or all of the individual building assets or the entire site build-out could make the subject of the business case analysis.

**Area Municipal Consultation/Coordination**

As a parallel endeavour and as a measure to mitigate the schedule risks of the market sounding exercise, staff is coordinating with the City of Kitchener’s Economic Development team and the local business community with an objective to promote the site in order to attract new external tenants to the effect of importing net new, additional jobs and economic development opportunities into the region.

The results of this initiative to jointly promote the site will also be used to compare to the real-estate economic/demand analysis.

**CORPORATE STRATEGIC PLAN:**

The Market Scope Study will contribute, both directly and inductively, towards accomplishing the following Action Items of the *Region of Waterloo Strategic Focus 2011–2014*.

- **3.4.1** Implement the multimodal transportation hub at Victoria and King Streets.
- **2.3.2** Continue to identify and support partnership opportunities that foster innovation and economic development (e.g. post secondary institutions, technology, manufacturing, food processing, etc.).
- **2.1.2** Work with area municipalities to develop and implement a comprehensive strategy to promote intensification and reurbanization within existing urban areas.

**FINANCIAL IMPLICATIONS:**

Funding for land acquisitions and project preparation costs for the King and Victoria Multimodal Hub was provided from the approved budget for property acquisitions and other project development expenditures for the RT project. Funding for this Multimodal Hub Market Scope Study consulting assignment is also provided in this project budget.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

Staff from the Rapid Transit, Transportation and Environmental Services was consulted during preparation of the RFP Terms of Reference for this Study. Membership of the Steering Committee for this Study draws participation of staff from Planning, Housing and Community Services and Transportation and Environmental Services. The procurement of the Study is being processed with assistance from Finance.

**ATTACHMENTS:**

NIL

**PREPARED BY:** *Shiva Tiwari*, Transportation Planning Engineer

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

DATE: May 29, 2012  FILE CODE: D23-20/RR/Strategy

SUBJECT: REGIONAL REURBANIZATION TOOLBOX

RECOMMENDATION:

For Information.

SUMMARY:

Over the past decade, a new planning framework and associated market trends have changed the nature of the urban form in Waterloo Region. Reurbanization activity has increased along with the focus on the integration of land use and transportation planning. Regional Building Permit statistics demonstrate the trends – for example:

- The number of reurbanization units as a percentage of total new units constructed in Waterloo Region has grown from approximately 15% in 2003 to approximately 50% in 2010 and 55% in 2011.
- While 78% of all residential units constructed in 1998 were single detached homes, in 2011 this had decreased to 40% - suggesting a shift in the types of units being constructed.
- There have been approximately 5000 residential units and almost $1.34 billion in non-residential development building permits issued within proposed RT station areas since 2003.
- Almost 30% of all residential building permits were issued for development within the proposed RT station areas in 2011.
- Interest in the consumer market for reurbanization remains strong – with a recent study suggesting approximately 74% of those asked stating that they would consider moving to a reurbanization development (up from previous years).

This report presents the current toolbox for reurbanization activity within the Region (Attachment 1) which will continue to be updated and refined over time. The reurbanization toolbox is a source of information and resources that can be accessed by the Area Municipalities, the Region, Stakeholders and the Public (www.regionofwaterloo.ca/reurbanization). Further, the toolbox highlights several key themes that provide a common focus for many of the initiatives underway in the Planning, Housing and Community Services Department. These themes include:

- Creating a Business Supportive Culture
  Continuing to provide timely, high-quality, customer focused service, while at the same time balancing the responsibility to uphold Corporate Interests and other development review functions as delegated by the province.

- Integrating Development and Transportation
  Fostering transit-supportive development through the completion of several key initiatives that highlight the connection and importance of integrated planning, such as the Community Building Strategy and Transit Hub.
### Promoting Active Forms of Transportation

Adopting a more inclusive approach to transportation planning that balances all forms of transportation and provides increased support for cycling, walking and public transportation.

### Consideration of Cultural and Built Heritage

Ensuring that as change to the urban areas occurs, cultural heritage resources are considered and conserved where appropriate, reurbanization of key areas should respect the scale, physical and character and context of established neighbourhoods.

### Implementation Through Collaboration

Recognizing that implementation of many of the framework elements occurs within a highly collaborative environment. Partnerships are key to each of these initiatives and consultation is frequent, regular and two-way.

### Coordination and Integration

Focusing on the coordination and integration of information, processes and outcomes. Ensuring that the activities of the department are consistent and aligned with the broader regional objectives identified in the Corporate Strategic Plan is a key priority.

Building on the toolbox already in place, Staff is developing a comprehensive Reurbanization Strategy for Waterloo Region, as identified in action 2.1 of the 2011-2014 Region of Waterloo Corporate Strategic Plan. This Strategy will also assist in the implementation of several key policy directives, including the Growth Plan for the Greater Golden Horseshoe (2007) and the new Regional Official Plan (2009).

There are several immediate next steps that will be undertaken to further the development of the more comprehensive reurbanization strategy. For example, a review of the Joint Tax Increment Grant Program (TIG) program and the Regional Development Charge Exemptions for Brownfields is already underway (please see Report P-12-009/F-12-016). Consultation with Area Municipal partners is ongoing, with a follow-up report for Council consideration anticipated by early 2013.

### REPORT:

Over the past decade, Waterloo Region has experienced several significant transitions that will have far reaching implications for the form and function of our community. During this period, the community has seen a shift in the traditional economic base, changes in the cultural and demographic mix of the population as well as a new focus on a more sustainable and environmentally friendly approach to community building. Waterloo Region is widely recognized as a vibrant, innovative, growing community – one in which the opportunities and challenges related to growth have been carefully considered and planned for as part of the overall policy framework. This framework has been developed through several key initiatives at the Provincial, Regional and Area Municipal level.

A major step in planning for growth in Waterloo Region was taken with the identification of a common vision for the future as outlined in the Regional Growth Management Strategy (RGMS), adopted by Regional Council in June 2003. The key elements of the RGMS include: big picture environmental planning, a firm urban boundary, reurbanization, transportation choice, target greenfield development and quality of life initiatives.

In 2005 and 2006, the vision outlined by the RGMS was complemented by the direction provided by the Province through the Provincial Policy Statement (PPS) and the Places to Grow: Growth Plan for the Greater Golden Horseshoe (the Growth Plan), respectively. Together, these documents emphasized the need for a coordinated approach to creating a more compact, transit-supportive
urban form through reurbanization\(^1\) while at the same time protecting valuable environmental resources, encouraging economic prosperity and enhancing the public’s health.

The Growth Plan states that the Region and Area Municipalities must plan for 729,000 people and 366,000 jobs by 2031. Further, it outlines specific targets for development, requiring that at least 40% of all residential development must occur within the Built-Up Area by 2015.

While in 2003, the term reurbanization was a relatively new concept – the development trend towards it over the past several years has been unmistakable. For example:

- The number of reurbanization units as a percentage of total new units constructed in Waterloo Region has grown from approximately 15% in 2003 to approximately 50% in 2010\(^2\) and 55% in 2011.\(^3\)
- While 78% of all residential units constructed in 1998 were single detached homes, in 2011 this had decreased to only 40% - suggesting a shift in the types of units being constructed.
- There have been approximately 5000 residential units and almost $1.34 billion in non-residential development building permits issued within proposed RT station areas since 2003.
- Almost 30% of all residential unit building permits were issued for development within the proposed RT station areas in 2011.\(^4\)
- Interest in the consumer market for reurbanization remains strong – with a recent study suggesting approximately 74% of those asked stating that the would consider moving to a reurbanization development (up from previous years).\(^5\)

In June 2009, Council took a key step in the realization of the objectives noted above with the adoption of the new Regional Official Plan (ROP). Approved by the Province in December 2010, this document represents the Region’s interpretation of how conformity with both the PPS and Growth Plan can be achieved. It also translates the vision outlined in the RGMS and the Growth Plan in order to provide the policy framework required to guide growth and change for the next 20 years.

One of the key elements of the ROP is the transition to more sustainable modes of transportation supported by the implementation of a rapid transit system along the primary reurbanization corridor (also known as the central transit corridor) that connects the cities of Cambridge, Kitchener and Waterloo. In June 2011, Regional Council affirmed this strategy by approving a light rail transit (LRT) to be implemented through a staged approach. Stage one of the project will include LRT from Conestoga Mall in Waterloo to Fairview Park Mall in Kitchener as well as an adapted bus rapid system (aBRT) from Fairview Park Mall to the Ainslie Street Bus Terminal in Cambridge. Stage two will include the implementation of a full LRT corridor from Waterloo to Cambridge.

Region of Waterloo Reurbanization Strategy

In the fall of 2011, Regional Council approved the **2011-2014 Strategic Plan**. This document provides a common focus and sense of direction, by which staff can prioritize, implement and measure their core responsibilities.

**Focus Area 2: Growth Management and Prosperity** seeks to “Manage growth to foster thriving and productive urban and rural communities.” Related to this is **Strategic Objective 2.1** “Encourage

\(^1\) Defined in the ROP as “four distinct types of activity, all of which serve to increase the residential or employment density on sites located within the exiting, built-up area.” The four types of activity consist of infill, intensification, adaptive reuse and redevelopment and may include sites with environmental impacts (brownfields).

\(^2\) Based on the building permits issued within the Region’s “Reurbanization Monitoring Line”. Within the Province’s Built Up Area (or within the Built Boundary) the number of units as a percentage of total new units constructed in 2010, was 56%.

\(^3\) Based on statistics provided as part of the year-end 2011 Building Permit Activity and Growth Monitoring Report (P-12-029).

\(^4\) Based on statistics provided as part of the year-end 2011 Building Permit Activity and Growth Monitoring Report (P-12-029).

\(^5\) Reurbanization Marketing Study (2010). MKI.
compact, livable urban and rural settlement form”. This strategic objective is further developed through the related action item 2.1.2:

“Work with area municipalities to develop and implement a comprehensive strategy to promote intensification and reurbanization within existing urban areas.”

Significant progress has been made towards reurbanization in Waterloo Region over the last several years. The Region of Waterloo and the seven Area Municipalities all play important roles in facilitating the ongoing change - and have many tools and resources in place to do so. At the regional level, there are several key initiatives within Planning, Housing and Community Services that together form the basis of the Region’s more comprehensive approach to planning for Reurbanization. The current Regional Reurbanization “Toolbox” is attached as Attachment 1. The Toolbox includes key tools, initiatives and resources falling under five main categories; policy, implementation, facilitation, assistance and research. A more detailed overview of each resource in the Toolbox is included in Attachment 2.

While each of initiatives in this toolbox may differ in terms of their focus on particular elements of the built environment, the ability to impact the nature of reurbanization in Waterloo Region is an underlying principal. Some approaches noted in this toolbox provide guidance at the macro level – while others provide detailed direction more suitable at the individual project scale. Further, it is evident that many of these initiatives are “intersecting” or tied together in the sense that they each play an important role in the ongoing efforts to further integrate the planning of land use and transportation.

Reurbanization Toolbox – Key Themes

The suite of existing reurbanization tools reflect themes that have been the focus of Planning, Housing and Community Services over the last several years.

These themes include:

a) Creating a Business Supportive Culture

Regional staff recognize that maintaining and enhancing economic strength in a globally competitive knowledge-based economy requires fostering a business-supportive culture. Many of the initiatives in the toolbox reflect the Region’s supportive role in economic development - either by providing additional information, clarity to development processes or direct financial assistance. The various partnerships that have been created also reflect the importance of working together with the business community in order to achieve mutual objectives. To this end, as the comprehensive reurbanization strategy evolves, Planning, Housing and Community Services will continue to provide timely, high-quality, customer focused service, while at the same time balancing the responsibility to uphold Corporate Interests and other development review functions as delegated by the Province.

b) Integrating Development and Transportation

Reurbanization, specifically in the form of transit-supportive development (generally defined as compact, mixed use neighbourhoods containing a range of housing types and other uses) within walking distance of transit services (both rapid transit and conventional) has and will continue to provide focus to the work of Planning, Housing and Community Services. While laying the foundations for more active forms of transportation is important, the nature of new development in the Region can play a critical role in achieving the overall objectives.

---

6 The built environment includes buildings, transportation networks, public spaces, parks, natural systems and all other spaces that collectively shape the form, pattern and function of the community.
Many of the initiatives in the toolbox relate to this overall theme. The new ROP, specialized development application review, various stakeholders partnerships, research, incentive programs and regional projects all aim to provide a comprehensive approach to support this objective. Moving forward, funding for the Transit-Supportive Strategy in Cambridge and the completion of the Central Transit Corridor Community Building Strategy have the potential to greatly influence this development. The Regional Reurbanization Community Improvement Plan is also a key tool that provides opportunity for Council to play a more proactive role if desired.

c) Promoting Active Forms of Transportation

Many of the initiatives underway include shifting the transportation-planning focus to a multi-modal and “active” transportation approach. This more inclusive approach balances all forms of transportation and provides increased choice by supporting cycling, walking and public transportation. The RTMP, Transportation Corridor Design Guidelines, Active Transportation Master Plan, and various Transportation Demand Management Initiatives (TravelWise, TDM and Parking Strategy) and the development of the new Multi-Modal Transportation Hub are all key parts of this multi-faceted approach. While some initiatives relate to the physical infrastructure needs (such as roads, rapid transit, cycling lanes, pedestrian amenities and the hub), others address key issues that affect the users of various modes. As the comprehensive Reurbanization Strategy is further developed, providing greater transportation choice will continue to be a major priority that will help the Region create a more sustainable future.

d) Consideration of Cultural and Built Heritage

Staff recognize that it is not solely the quantity of reurbanization that occurs, but the quality of that new development which is important. The ROP states that cultural heritage resources should be conserved and that reurbanization of key areas should respect the scale, physical and character and context of established neighbourhoods. In addition, the development of the Regional Heritage Conservation Toolbox will play a key role in this respect and will be a valuable resource in the overall reurbanization strategy. Further there are many legislative planning and financial tools that could be further explored by staff and HPAC to this end (please see Report P-12-066, dated May 29, 2012 for more information).

e) Implementation Through Collaboration

The implementation of many of the toolbox elements occurs within a highly collaborative environment. Partnerships are key to each of these initiatives and consultation is frequent, regular and two-way. There are many means by which these partnerships are formed – on a project by project basis or as part of an ongoing body. Project teams consistently include representation from different regional departments and area municipal staff. Further, some of the more formal partnership include the various working groups (Reurbanization Working Group, Brownfields Working Group, the Home Builders Liaison Committee) that meet on a regular basis with Regional Staff to discuss challenges, opportunities and work on joint projects of interest. The Heritage Public Advisory Committee is one example of a formal opportunity to get input from members of the Community. In addition, as part of the more comprehensive reurbanization strategy, the Region continues to look for opportunities to form Public-Private Partnerships (P3s) where appropriate. There may be many such opportunities related to development around rapid transit stations, brownfields, and transportation demand management initiatives.

f) Coordination and Integration

While the toolbox contains many different elements, staff continue to focus on the coordination and integration of information, processes and outcomes. Ensuring that the activities of the department are
consistent and aligned with the broader regional objectives identified in the Corporate Strategic Plan is a key priority.

Further, as the Region works together with the Area Municipalities to continue the development of a more comprehensive strategy, there will be many complementary elements that must also be considered. This includes issues such as affordable housing, heritage conservation, human services, sustainable development, and transportation choice that will all serve to support the objective of a thriving and productive community. It is also recognized that both public and private stakeholders will need to work together and continue to coordinate initiatives within their various spheres of influence.

Reurbanization Challenges and Opportunities

The Region is in the midst of a very exciting period of transition with respect to reurbanization. With this come many challenges that must be carefully considered and proactively addressed. While much has been accomplished, it is recognized that there many additional opportunities with respect to the further development and implementation of a comprehensive reurbanization strategy.

The following discussion highlights some of the key considerations staff have identified.

Pace of Change

Over the course of the past 10 years, levels of reurbanization activity have increased at a substantial rate – in many instances much faster than would have been anticipated when it became a more recognizable trend in the early 2000s. Since the first Regional Reurbanization Conference in 2005, Waterloo Region has seen an impressive range of high quality projects (many award winning\(^8\)) that have changed the urban landscape and contributed to a new vitality.

The result of this is that all stakeholders (political leaders, municipal staff, the private sector and members of the community) have been required to very quickly recognize that reurbanization is not “business as usual”. For example, reurbanization has necessitated new dialogue around the issues of density, urban design, heritage conservation and adaptive reuse, environmental impacts, infrastructure, parking requirements and many other debates that were not part of the traditional development equation when most new construction took place in greenfield areas. Reurbanization can be complex and there is often a need to approach each project with an individualized perspective – there is no “one size fits all” in reurbanization.

Consequently, it must be recognized that the issues and challenges for reurbanization will continue to evolve – especially in light of the transitions that are anticipated in the next several years. With greenfield areas more constrained in certain municipalities, the implementation of the rapid transit system (both LRT and aBRT) as well as more widespread market and demographic shifts, there is much to consider. As a result, those involved in facilitating this transition must continue to identify and prioritize key issues, be flexible in their approach and continue to work together to support each other.

Resources

As the level of reurbanization increases or eventually stabilizes as higher levels than typically has been experienced in the Region, it is anticipated that there will be new resource issues that will have to be addressed. This will occur on many different levels; from the municipal perspective, from the private sector and from the broader community.

At the municipal level, understanding the relationships between reurbanization and property taxes, development charges, various long-term master plans and the resulting capital budgets

---

\(^8\) Such as the CUI Brownie Award winning Tannery District (Kitchener) and Waterscape on the Grand (Cambridge) and the widely acclaimed King St. reconstruction by the City of Kitchener (with IBI Group).
(transportation and other infrastructure) and planning exercises will all play an important role in the management and prioritization of the financial resources available. Further, the coordination of staff resources at the Area Municipal and Regional level may also become more challenging given the number of initiatives that require involvement from both levels of government.

The private sector will continue to face challenges with respect to the development of reurbanization projects. Those issues related to the creation of additional uncertainty (environmental impacts, financing, review process, market conditions) impact each of the critical resources required in the development industry (i.e. time and money). Thus if the trend of successful reurbanization is to continue, efforts should be made to look for appropriate opportunities to improve the business climate – ensuring Waterloo Region will remain a place of choice for those who want to invest.

Residents of Waterloo Region will also be faced with new choices as to how to allocate their own personal and community resources. As reurbanization continues, new “places” to live, work and play will be created. This could have a significant impact of the lifestyles of individuals, as well as the social infrastructure that is provided by the community including; education, recreation, healthcare, transportation.

**Transition Period – Implementation of Rapid Transit**

The implementation of Rapid Transit, specifically LRT and aBrt will be a significant undertaking in the history of Waterloo Region. It is anticipated to have an important impact on the future shape and development of the community. As was noted earlier, there is already substantial amounts of development (both residential and non-residential) occurring near future RT stations. However, part of the challenge associated with this, is that Waterloo Region is still in the midst of a transitioning policy framework. While the new ROP outlines specific policies for reurbanization and specifically Transit Oriented Development, it is currently under appeal before the Ontario Municipal Board (OMB). Further, the local official plans have not yet been brought into conformity with the ROP, nor have many of the local zoning by-laws been updated to reflect current policy approaches. This means that there are still many examples of key sites in close proximity to future rapid transit stations where redevelopment has been proposed that may not be “transit-supportive” in form or use. Given the importance of the land-uses around rapid transit as a potential trip generator, this is an issue that should be addressed more comprehensively by all the involved stakeholders in the short term.

**Refinement of Existing Tools**

While some of the tools noted as part of the “toolbox” are employed on a regular basis as part of the ongoing operations of the department (for example development review or the various partnerships that have been formed), two of the tools have the potential for more in depth exploration in the future. The Regional Reurbanization Community Improvement Plan (RRCIP) currently includes one program designed in order to provide Regional Council with the ability to take a more proactive role in the development process if desired. For example, it would allow Council to address some of the obstacles related to reurbanization by purchasing, holding, improving and selling lands within the Central Transit Corridor (CTC). There is also the potential that additional programs could be added depending on future needs.

In addition, there are currently several financial tools that may need to be refined further in order to allow for the integration of multiple regional objectives pertaining to reurbanization. There is also the potential that additional programs could be developed to provide for, or realigned in a way that ensures priority is given to the forms and location of reurbanization activity in such a manner that supports provincial, regional and area municipal objectives. The integration of multiple objectives (such as affordable housing, brownfield remediation, adaptive-reuse and sustainable development) within a more comprehensive program can be examined – thus streamlining certain processes and allowing for a very clear statement in terms of the quality of reurbanization projects that are desired in the Region. As part of the 2012 Brownfields Program Update (please see report P-12-009/F-12-016),
Council directed staff to begin this evaluation and to develop a framework to prioritize financial incentives within key reurbanization areas and to ensure alignment with other strategic Regional objectives.

Monitoring

The ongoing monitoring of reurbanization activity will be an important focus over the next several years. This is both mandated by the province and will provide a key input into future decision making processes related to many of the issues above. With respect to the implementation of the Rapid Transit system, there should be a consistent effort made to measure both the impacts of the system on development as well as transit ridership and changes in mode share. Similar monitoring will take place associated with some of the changes occurring with respect to new parking management strategies.

Education and Communication

Ongoing education and communication around reurbanization continues to be a focus. The dialogue around this topic is important for all those concerned – residents, policy makers and the private sector. Developing strategies to communicate key information, successes, lessons learned and process will assist stakeholders to make informed decisions.

Moving Forward - Next Steps

The continued development and implementation of a comprehensive reurbanization strategy in partnership with the Area Municipalities represents an exciting opportunity for the Region. An integral element of this exercise will be to build upon the existing reurbanization toolbox in place and ensure communication and coordination with key partners moving forward.

There are several immediate next steps that will be undertaken to further the development of the more comprehensive reurbanization strategy. For example, a review of the Joint Tax Increment Grant Program (TIG) program and the Regional Development Charge Exemptions for Brownfields is already underway (please see Report P-12-009/F-12-016). Consultation with Area Municipal partners is ongoing with a follow-up report for Council consideration anticipated by early 2013.

Area Municipal Consultation/Coordination

Staff of the Area Municipalities will continue to be consulted during the course of the overall strategy development and as part of the individual project implementation. Area Municipal staff is represented on several of the Working Groups and are members of the project teams for several of these initiatives. Efforts to streamline Area Municipal participation will also be made in order to ensure efficient use of staff resources.

CORPORATE STRATEGIC PLAN:

The Reurbanization Toolbox and development of a Reurbanization Strategy is consistent with Focus Area 2: Growth Management and Prosperity: Manage growth to foster thriving and productive urban and rural communities. Relevant Strategic Objectives include: 2.1. Encourage compact, livable urban and rural settlement form; and 2.4. Promote and enhance arts, culture and heritage.

It is also consistent with Focus Area 3: Sustainable Transportation: Develop greater, more sustainable and safe transportation choices. Relevant Strategic Objectives include: 3.1 Implement a Light Rail Transit System in the Central Transit Corridor fully integrated with an expanded conventional transit system; 3.2 Develop, promote and integrate active forms of transportation (cycling and walking); and 3.4 Encourage improvements to inter-city transportation services to and from Waterloo Region.
Focus Area 4: Healthy and Inclusive Communities: Foster healthy, safe, inclusive and caring communities. Relevant Strategic Objectives include 4.5 Work collaboratively to increase the supply and range of affordable housing and reduce homelessness.

FINANCIAL IMPLICATIONS:

The development of the Regional Reurbanization Strategy and Toolbox is funded through the 2012 program budget approved for Collaborative Implementation of Reurbanization with Area Municipalities.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Transportation and Environmental Services (Rapid Transit), and Finance have been consulted in the preparation of this report.

ATTACHMENTS:

Attachment 1 – Reurbanization Toolbox
Attachment 2 – Detailed Reurbanization Toolbox Overview
Attachment 3 – The Reurbanization Working Group

PREPARED BY: Brooke Lambert, Interim Manager, Reurbanization

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
Attachment 1
Reurbanization Toolbox

<table>
<thead>
<tr>
<th>Category</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy</strong></td>
<td>• The Provincial Policy Statement (2005);</td>
</tr>
<tr>
<td></td>
<td>• Places to Grow: Growth Plan for the Greater Golden Horseshoe (2006);</td>
</tr>
<tr>
<td></td>
<td>• Regional Official Plan (2009)</td>
</tr>
<tr>
<td></td>
<td>• ROP Official Plan Amendments – Transportation Focus (2012);</td>
</tr>
<tr>
<td></td>
<td>• Implementation Guideline for the Review of Development Applications on or Adjacent to Known and Potentially Contaminated Sites (2009);</td>
</tr>
<tr>
<td></td>
<td>• Implementation Guideline for Road Allowance Dedications Adjacent to Known and Potentially Contaminated Sites (2012);</td>
</tr>
<tr>
<td></td>
<td>• Context Sensitive Regional Transportation Corridor Design Guidelines (2010); and</td>
</tr>
<tr>
<td></td>
<td>• Area Municipal Official Plan ROP Conformity.</td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td>• Region of Waterloo Corporate Strategic Plan (2011-2014);</td>
</tr>
<tr>
<td></td>
<td>• Regional Transportation Master Plan (2010);</td>
</tr>
<tr>
<td></td>
<td>• Region of Waterloo Transit Hub (King/Victoria St. Kitchener);</td>
</tr>
<tr>
<td></td>
<td>• Affordable Housing Strategy (2008-2013);</td>
</tr>
<tr>
<td></td>
<td>• Community Action Plan for Housing Update (2013);</td>
</tr>
<tr>
<td></td>
<td>• Central Transit Corridor Community Building Strategy;</td>
</tr>
<tr>
<td></td>
<td>• GRT Business Plan;</td>
</tr>
<tr>
<td></td>
<td>• GRT Service Expansion and Realignment;</td>
</tr>
<tr>
<td></td>
<td>• Transit Service Improvements for Cambridge;</td>
</tr>
<tr>
<td></td>
<td>• TDM Parking and Trip Generation Reduction Strategy;</td>
</tr>
<tr>
<td></td>
<td>• Regional Parking Management Strategy;</td>
</tr>
<tr>
<td></td>
<td>• Regional Forest Management Plan Implementation;</td>
</tr>
<tr>
<td></td>
<td>• Active Transportation Master Plan;</td>
</tr>
<tr>
<td></td>
<td>• Urban Greenlands Strategy.</td>
</tr>
<tr>
<td><strong>Facilitation</strong></td>
<td>• Specialized Development Application Review;</td>
</tr>
<tr>
<td></td>
<td>• Reurbanization Working Group;</td>
</tr>
<tr>
<td></td>
<td>• Brownfields Working Group;</td>
</tr>
<tr>
<td></td>
<td>• Home Builders Liaison Committee;</td>
</tr>
<tr>
<td></td>
<td>• Reurbanization Community Advisory Panel;</td>
</tr>
<tr>
<td></td>
<td>• Heritage Planning Advisory Committee;</td>
</tr>
<tr>
<td></td>
<td>• Ecological and Environmental Advisory Committee;</td>
</tr>
<tr>
<td></td>
<td>• Active Transportation Advisory Committee;</td>
</tr>
<tr>
<td></td>
<td>• Regional Reurbanization Community Improvement Plan (2008);</td>
</tr>
<tr>
<td></td>
<td>• Waterloo Region Parking Coordinating Committee;</td>
</tr>
<tr>
<td></td>
<td>• TravelWise Transportation Management Association;</td>
</tr>
<tr>
<td></td>
<td>• Regional Heritage Conservation Toolbox.</td>
</tr>
<tr>
<td><strong>Assistance</strong></td>
<td>• Brownfield Financial Incentive Pilot Program (2006);</td>
</tr>
<tr>
<td></td>
<td>• Environmental Stewardship Fund (2008);</td>
</tr>
<tr>
<td></td>
<td>• Transit Supportive Strategy for Cambridge (RT);</td>
</tr>
<tr>
<td></td>
<td>• Housing Incentives &amp; Funding Resource Guide; and</td>
</tr>
<tr>
<td></td>
<td>• TravelWise Marketing, Promotion and Education.</td>
</tr>
<tr>
<td><strong>Research</strong></td>
<td>• Visualizing Densities (2006 and 2007);</td>
</tr>
<tr>
<td></td>
<td>• A Blueprint for Shaping Growth in Waterloo Region (2007);</td>
</tr>
<tr>
<td></td>
<td>• Reurbanization Market Study (2010);</td>
</tr>
<tr>
<td></td>
<td>• Workplace Count (2011);</td>
</tr>
<tr>
<td></td>
<td>• Soil/Sediment Rehabilitation and Aggregate Recycling;</td>
</tr>
<tr>
<td></td>
<td>• Commuter Parking Lot Feasibility Study (2012);</td>
</tr>
<tr>
<td></td>
<td>• Schneider Creek Floodplain Technical Update and Policy Review;</td>
</tr>
<tr>
<td></td>
<td>• Revitalizing Regionally-Owned Community Housing; and</td>
</tr>
<tr>
<td></td>
<td>• Housing/Demographic Research.</td>
</tr>
</tbody>
</table>
## Attachment 2

### Detailed Reurbanization Toolbox Overview

<table>
<thead>
<tr>
<th>Policy</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provincial Policy Statement (2005)</strong></td>
<td>In Effect</td>
</tr>
<tr>
<td>The Provincial Policy Statement (PPS) is issued under the authority of Section 3 of the Planning Act. It provides direction on matters of provincial interest related to land use planning and development, and promotes the provincial “policy-led” planning system. The PPS came into effect on March 1, 2005. Further, the Planning Act requires that all decisions affecting land use planning matters “shall be consistent with” the Provincial Policy Statement. The Provincial Policy Statement recognizes the complex inter-relationships among economic, environmental and social factors in planning and embodies good planning principles. It provides strong, clear policy direction on land use planning to promote strong communities, a clean and healthy environment and a strong economy. It includes policies on key issues that affect our communities, such as: the efficient use and management of land and infrastructure; protection of the environment and resources; and ensuring appropriate opportunities for employment and residential development, including support for a mix of uses.</td>
<td></td>
</tr>
</tbody>
</table>

| On June 16, 2006, the Province of Ontario approved the Places to Grow: Growth Plan for the Greater Golden Horseshoe (the Growth Plan). Prepared under the Places to Grow Act, 2005, it is part of the Places to Grow initiative to “plan for healthy and prosperous growth throughout Ontario.” The Growth Plan aims to: |
| - Revitalize downtowns to become vibrant and convenient centres; |
| - Create complete communities that offer more options for living, working, shopping and playing; |
| - Provide greater choice in housing types to meet the needs of people at all stages of life; |
| - Curb sprawl and protect farmland and green spaces; and |
| - Reduce traffic gridlock by improving access to a greater range of transportation choices. |

| Regional Official Plan (2009) | Under Appeal at the Ontario Municipal Board (OMB) |
| The Regional Official Plan (ROP), was adopted by Council in June 2009, and approved by the Province in December 2010. It represents a fundamental shift in planning for the Region by providing a more balanced community structure. This structure emphasizes the principals of sustainability on all fronts – cultural, economic, environmental and social. The concept of “livability” is also ingrained in the plan and ensures that Waterloo Region will be a desirable home for people at all stages of life – recognizing the importance the distinct local urban and rural communities play in providing residents with choice in where they live, work and play. |
| The ROP document represents the Region’s interpretation of what conformity with both the PPS and Growth Plan. Further, the ROP is a legal document that contains goals, objectives and policies to |
manage and direct physical (land use) change and its effects on the community. Once approved, the Planning Act requires that all Regional and Area Municipal public works, Area Municipal official plans and land use related by-laws, must conform to the ROP. As of January 24, 2011 the ROP in its entirety came under appeal before the Ontario Municipal Board (OMB). Despite this status, the policies of this plan represent the direction in which the Region intends to work towards.

The vision set out in the ROP is as follows:
Waterloo Region will be an inclusive, thriving, and sustainable community committed to maintaining harmony between rural and urban areas and fostering opportunities for current and future generations.

| Regional Official Plan Amendments – Transportation Focus. | In 2012 Regional staff will initiate processing of several ROP/ROPP amendments. The amendments will relate to implementation of the Regional Transportation Master Plan, the Rapid Transit Environmental Assessment and a Housekeeping amendment that addresses required minor wording and mapping revisions. Lastly, following the upcoming Provincial election, the Strategic Policy Development team will participate in the review of the Provincial Policy Statement and the Places to Grow Growth Plan for the Greater Golden Horseshoe. | Future Initiative |
| Implementation Guideline for the Review of Development Applications on or Adjacent to Known and Potentially Contaminated Sites (2009) | The Implementation Guideline for the Review of Development Applications on or Adjacent to Known and Potentially Contaminated Sites is used to prescribe when the filing of a Record of Site Condition (RSC) is to be required by the Region of Waterloo as part of the review of development applications. This Guideline replaces the 1997 Protocol for the Review of Development Applications on or Adjacent to Lands Which are Known, Suspected or Potentially Contaminated. Key improvements to this Guideline include a reduction in the number of instances where a RSC is required, greater flexibility in the development approvals process relative to when a required RSC may be submitted and implementation of an environmental site screening questionnaire. | In Place |
| Implementation Guideline for Road Allowance Dedications Adjacent to Known and Potentially Contaminated Sites (2012) | The Implementation Guideline for Road Allowance Dedications Adjacent to Known and Potentially Contaminated Sites outlines the Region's planning requirements and provides a consistent procedure for obtaining road dedications on or adjacent to known and potentially contaminated land. Two key objectives of this Guideline are first to restore contaminated land to an environmental condition suitable for its proposed use as a public right-of-way without creating a barrier to development, and second to mitigate the Regional risk of acquiring road allowance dedications. | In Place |
| Context Sensitive Regional Transportation Corridor Design Guidelines (2010) | The Implementation Guidelines for Regional Transportation Corridor Design provides context sensitive guidelines and design standards for Regional transportation corridors which clarify the relative priority and treatment for the various travel modes and community uses. The objective is to create greater transportation choice by providing space and the environment within the transportation corridor for all modes. These guidelines are organized in three sections:
  - Street Elements (curb to curb); | In Place |
Boulevard Elements (curb to property line); and
General Elements such as transition areas, public art, fencing.

It is recognized that the function of transportation corridors is shifting from being a pure capacity conduit for motor vehicles to serving as part of the community identity and fabric. The right-of-way should be considered as a “place” that better reflects all of the activities that occur within and adjacent to the right-of-way area. There are many competing goals and objectives for uses and space within the right-of-way including providing adequate capacity to move people and goods and addressing operating and maintenance needs.

**Area Municipal Official Plan ROP Conformity**
The Strategic Policy Development team is currently collaborating with the Area Municipalities to bring their Official Plans into conformity with the Regional Official Plan (ROP) and new applicable Provincial policies and legislation. It is anticipated that most or all of the seven Area Municipal Official Plans will be forwarded to Regional staff in 2012 for consideration of approval.

---

## Implementation

### Region of Waterloo Corporate Strategic Plan (2011-2014)
In 2011, Regional Council developed the Region of Waterloo Strategic Focus (or Strategic Plan) that provides a common focus for Council and staff over the 2011-2014 period. This strategy has five focus areas:
- Environmental Sustainability;
- Growth Management and Prosperity;
- Sustainable Transportation;
- Healthy and Inclusive Communities; and
- Service Excellence.

Within each of the focus areas, Strategic Objectives have also been articulated. Further the strategic plan outlines a number of actions that will further the realization of the various objectives.

### Regional Transportation Master Plan (2010)
Approved by Regional Council June 2010, the RTMP defines how the Region’s transportation system will grow and change in the coming decades. It will help the Region offer more travel choices to residents, and make sure the future transportation system is affordable and environmentally sustainable. The goal of the plan is to create:
- A transportation network that centres on transit, with a rapid transit system connecting Waterloo, Kitchener and Cambridge;
- More cycling lanes and pedestrian-friendly routes
- An expanded bus network, including more express bus service to feed rapid transit stations and better serve the busy residential and commercial centres beyond the rapid transit corridor;
- Strategic road improvements to ensure movement of goods, relieve traffic problems or support transit policies to help the Region encourage transit ridership, cycling and walking, manage congestion and promote vibrant urban places.
The plan predicts that by 2031, 15 per cent of all trips in Waterloo Region will be by transit and 12 per cent of all trips will be by cycling or walking. Further, this plan has important implications on where and how new development will be planned.

| Region of Waterloo Transit Hub (King and Victoria Street, Kitchener) | The Region of Waterloo purchased the properties at the northeast corner of the intersection of King and Victoria Streets in the City of Kitchener. The site will be home to a new multi-modal transit facility or “transit hub” that will bring GRT service, rapid transit, GO buses and trains and VIA Rail together in one location. The site may also include:  
  - Pedestrian and cycling facilities;  
  - Underground parking; and  
  - Retail/Restaurant/Office Space.  

The Transit Hub is a pivotal component of the overall transportation network that the Region plans to complete over the next several decades. The integration of the various modes of transportation in a central hub that will serve not only the region but the larger community represents an unprecedented opportunity to shape the travel behaviour of both current and future residents in the community.

Planning for the Transit Hub is currently underway, including an Official Plan Amendment and Zone Change through the City of Kitchener. Further, several key planning studies including a Heritage Impact Assessment and Preliminary Site Design and Station Area Access Plan have been commenced. Staff will also be initiating an Environmental Assessment for the site in early 2012.

| Affordable Housing Strategy (2008-2013) | On October 29, 2008, Regional Council endorsed a new Affordable Housing Strategy (AHS) to create at least 500 new units of sustainable affordable housing, between 2008 and the end of 2013 (P-08-105). By the end of 2011, the Region has developed 382 units towards the 500-unit goal (76%).

| Community Action Plan for Housing Update | The Action Plan provides an overview of the state of housing across the full range of housing in Waterloo Region, and provides a community-based strategy to address housing program needs and gaps. The Action Plan will form part of the Provincially-mandated Housing and Homelessness Plan (together with Social Service’s Homelessness to Housing Stability Strategy) due by January 1, 2014.

| Central Transit Corridor Community Building Strategy | The construction of the new rapid transit system, connecting Cambridge, Kitchener, and Waterloo presents an incredible opportunity to not only move people but to also shape the urban landscape. Along this corridor will be major investment – from both the public and private sectors - in both transportation infrastructure and new development that presents great potential for place making.

In February 2012, Regional Council approved the commencement of the Central Transit Corridor Community Building Strategy. This strategy will include the following deliverables:  
  - The vision, principles, objectives and implementation...
<table>
<thead>
<tr>
<th><strong>strategies for the Region’s Rapid Transit Corridor:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• The purpose for each station area in relationship to each other and the context of the overall corridor;</td>
<td></td>
</tr>
<tr>
<td>• A methodology for the identification of key near-term redevelopment sites within the corridor;</td>
<td></td>
</tr>
<tr>
<td>• Potential strategies to guide new development in terms of use and built form during the interim period before other planning measures are in place;</td>
<td></td>
</tr>
<tr>
<td>• An implementation work plan, coordinating corridor and station area planning efforts of both the Region and the Area Municipalities; and</td>
<td></td>
</tr>
<tr>
<td>• A suite of visual tools that will help stakeholders conceptualize the anticipated transition of the corridor over the long-term.</td>
<td></td>
</tr>
</tbody>
</table>

| **GRT Business Plan** | The 2011 – 2014 Grand River Transit (GRT) Business Plan, approved by Regional Council on February 6, 2012 will guide the implementation of transit service improvements and fare strategies to help achieve the goals of the Regional Transportation Master Plan (RTMP). | In Place |

| **GRT Service Expansion and Realignment** | Regional Council’s approved Regional Transportation Master Plan (RTMP) recommends significant increases to transit services in the Region in order to provide greater transportation choice. The service improvement plan will increase the competitiveness of Grand River Transit’s (GRT) service and encourage transit use, supporting the Region’s goal of being a thriving and sustainable community. In order to deal with passenger crowding and to improve schedule reliability, and as part of the steps to realign the transit network in preparation for rapid transit, Council has approved a reserve fund for new service beginning in 2011. This service would begin to implement the cross-corridor routes as part of the Rapid Transit integration. | In Progress |

| **Transit Service Improvements for Cambridge** | Providing additional service in the Cambridge Area, focusing on upgrading Route 75 Saginaw BusPLUS with conventional service, reviewing service to the LG Lovell Industrial Park and expanding service on Sundays. The service review may also include restructuring of routes in east Cambridge, pending resource availability. A long term route structure will be developed in consultation with the community that will help guide service planning decisions in the future. Initial service improvements are planned for September 2012 implementation. | In Progress |

| **TDM Parking and Trip Generation Reduction Strategy** | Free and abundant parking generates car trips and is responsible for low urban densities and poor walking environments. In January 2010, the Region of Waterloo and the Cities of Cambridge, Kitchener and Waterloo began working with BA Group to develop an incentive for developers to use Transportation Demand Management (TDM) initiatives and Transit Oriented Development (TOD) features to reduce the oversupply of parking. Between January and May 2011 two draft checklists were tested by the Cities. The testing period for the checklists has ended and comments have been received. A final report and recommendation is expected in Fall 2012. | In Progress |
| **Regional Parking Management Strategy** | As identified and recommended by the Regional Parking Strategy, the Region is undertaking a number of initiatives in order to position parking to be better supportive of modal shifts towards transit and active transportation. The availability and pricing of parking greatly affects modal choices which is a topic of central focus to the Region. However, parking falls under the jurisdiction of Area Municipalities who are responsible for the policies and regulations on parking. In addition, the Area Municipalities are also the largest owners and operators of the public parking stock. | In Progress |
| **Regional Forest Management Plan Implementation** | Implementation of the Regional Forest Management Plan (RFMP). The RFMP was approved by Regional Council in July 2006 as a high-level overview and forest management philosophy for Regional Forests and Woodlands. Since that time, Annual Operating and Management Plans are being developed to guide management activities on a property-by-property basis. These short term plans have much greater detail than the RFMP and include specifics of tree harvesting, tree planting and other forest tending activities. In addition to the Annual Operating plans, there also is an ongoing program of hazard tree management, trail and infrastructure maintenance, and other property maintenance items such as sign and gate installation. | In Progress |
| **Active Transportation Master Plan** | The Region of Waterloo has initiated the development of a new Active Transportation Master Plan (ATMP). This Plan will update the Region’s Cycling Master Plan, 2004, while integrating a new regionally significant transportation network for pedestrians. It will integrate and expand existing and planned Regional and Area Municipal active transportation routes for health, recreation, tourism and commuting purposes. The system envisioned in this plan should take walking and cycling beyond the exclusive domain of avid cyclists and the courageous to become the practical and preferred option for average residents. The new Regional Transportation Master Plan (RTMP) identifies active transportation as a critical component of a balanced transportation system that will play a much larger role in urban areas as they build-out and begin to achieve higher land use densities. The target is to increase the walking and cycling mode share, from 8% of pm peak period trips today to 12% of pm peak hour trips by 2031. Achieving this increase will require investment in active transportation infrastructure. | In Progress |
| **Urban Greenlands Strategy** | As part of a larger Greenlands Strategy for Waterloo Region, the Urban Greenlands Strategy complements the reurbanization and intensification efforts throughout the main urban areas and particularly along the Central Transportation Corridor. Urban Greenlands, while typically much smaller in area and lower in natural heritage values than most natural areas, play a substantial role in terms of enhancing quality of life and the liveability of larger urban centres, improving urban air quality, creating venues for social interaction, and promoting walking and physical activity. An urban greenlands strategy must be implemented primarily by Area Municipalities with input from the business community, neighbourhood associations, recreationists, Grand River Transit, Public Health, and Crime Prevention. Ideally, such a strategy | Future Initiative |
should embody adaptive co-management which is described as a flexible community-based system of resource management and sharing which is tailored to specific places and situations and supported by, and working with, various organisations at different levels.

### Facilitation

<table>
<thead>
<tr>
<th>Specialized Development Review – Reurbanization Team</th>
<th>In 2007/2008, the Community Planning Division was reorganized to reflect the changing nature of development review in the Region. As a result of the new planning context, it became evident that there was a need to have dedicated staff well versed in the specific issues pertaining to both greenfield developments and the new trend towards reurbanization within existing built up areas. The Reurbanization Team reviews development applications primarily within the built up area of the cities of Cambridge, Kitchener and Waterloo. The Brownfields and Rapid Transit land-use planning portfolio also resides within this group. The team meets regularly with each other and staff within other divisions and departments to identify and overcome challenges with respect to reurbanization.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>In Place</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Reurbanization Working Group</th>
<th>The Reurbanization Working Group (RWG) established in 2004, meets with the focus of increasing the number of reurbanization projects that occur throughout Waterloo Region. The RWG also provides a forum for the discussion and resolution of identified obstacles to successful reurbanization activity and to identify and share success stories, skill-sets, techniques, incentives, and opportunities among its members. Furthermore, the RWG hopes to generate increased investor and homebuilder interest in the development of lands within Waterloo Region’s existing urban areas and enhance political and public awareness, support, and demand for reurbanization. See more information in Attachment 2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

| The Brownfields Working Group | The Brownfields Working Group comprised of staff from each of the seven area municipalities and the Region meets to further the growth management goals of the local, regional and provincial governments by the promotion and facilitation of brownfield remediation and redevelopment. The BWG allows for a more coordinated approach between all the partners and provides a forum to discuss the opportunities to discuss the shared challenges and potential solutions. This group has also undertaken several joint initiatives, including:  
- Development of a Brownfields Community Improvement Plan Template for the implementation of a joint tax increment grant program;  
- The development of a region-wide brownfield marketing and branding package;  
- Delivery of joint brownfield presentations; and  
- The hosting of a local forum as part of the National Brownfield Workshop series presented by Bloom (formerly OCETA) and FCM. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Committee Name</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>The Home Builders Liaison Committee</td>
<td>The Home Builders’s Liaison Committee provides a forum for the discussion and exchange of ideas with respect to land-development issues in Waterloo Region.</td>
</tr>
<tr>
<td>Reurbanization Community Advisory Panel</td>
<td>The Reurbanization Community Advisory Panel advises the Commissioner of Planning, Housing and Community Services or reurbanization related matters and serves as a forum for stakeholders to raise their viewpoints and have discussion.</td>
</tr>
<tr>
<td>Heritage Planning Advisory Committee</td>
<td>The Heritage Planning Advisory Committee (HPAC) advises and monitors the implementation and the impact of heritage issues in accordance with applicable policy. The Committee also assists the Region in developing heritage policies and strategies.</td>
</tr>
<tr>
<td>Ecological and Environmental Advisory Committee</td>
<td>The Ecological and Environmental Advisory Committee (EEAC) advises Planning, Housing and Community Services staff on development applications and Environmental Assessments which potentially affect the Region’s most significant natural features. It also advises on other environmental issues of interest to the Region. EEAC consists of fifteen citizen appointees with specialized environmental expertise and two Regional Councillors.</td>
</tr>
<tr>
<td>Active Transportation Advisory Committee</td>
<td>The Active Transportation Advisory Committee (ATAC) serves as a forum for the public to raise their viewpoints on particular active transportation issues and to advise Regional Council and staff on cycling and pedestrian issues. The Committee will facilitate the Region’s goal of developing an Active Transportation Master Plan to encourage higher rates of walking and cycling and to integrate active transportation as part of a balanced transportation network.</td>
</tr>
<tr>
<td>Regional Reurbanization Community Improvement Plan (2008)</td>
<td>On July 2, 2008, Regional Council adopted a Regional Reurbanization Community Improvement Plan (RRCIP) as a tool to help the Region facilitate reurbanization within the CTC. The RRCIP allows Regional Council to buy key properties in the CTC and prepare them to a point where they become more attractive to prospective developers. With this ability, Regional Council can take a leadership role in developing more compact, mixed-use, transit supportive projects that may not occur otherwise. While this tool has not yet been employed, it provides Council with additional flexibility moving forward. It is also important because the designated community improvement plan area relates directly to the future rapid transit corridor. This could provide an opportunity for Council to focus future community improvement programs (ie. incentives or other assistance) to priority areas as well as a desire to further shape the nature of that development.</td>
</tr>
<tr>
<td>Waterloo Region Parking Coordinating Committee</td>
<td>Parking falls under the jurisdiction of Area Municipalities who are responsible for its policies and regulations. In addition, the Area Municipalities are also the largest owners and operators of the public parking stock. On the other hand, the availability and pricing of parking greatly affects modal choices, which is a topic of central focus to the Region. As such, the Region is helping to mobilize the Waterloo Region Parking Coordinating Committee (PCC) with its primary goals being (a) develop a region-wide common understanding and approach in the management of parking resources; (b) harmonize parking policies, programs and services to support non-SOV modal shares; and (c) research best practices on parking from other jurisdictions, adapt and help implement them.</td>
</tr>
</tbody>
</table>
The PCC membership consist of senior staff representatives from the Region and the Area Municipalities.

| TravelWise Transportation Management Association | In January 2012, the Region of Waterloo launched the TravelWise Transportation Management Association (TMA) with fifteen employers including the three Cities, the University of Waterloo, Wilfrid Laurier University and Research In Motion. The mission of the TravelWise TMA is to “bring together public and private interests to support and promote alternatives to single occupancy vehicle travel.” The willingness of our private sector partners to dedicate resources to the TravelWise TMA demonstrates the extensive community support that exists to build transit ridership and provide residents with greater transportation choice. | Ongoing |

| Regional Heritage Conservation Toolbox | As part of achieving the objectives outlined in the Strategic Plan (specifically to promote and enhance arts, culture and heritage), staff has committed to investigating and developing a suite of tools that could both practically and sustainably conserve heritage resources across the Region. Action items to this end include:  
- Completing ROP Implementation Guidelines for Cultural Heritage Landscapes, Regionally Significant Heritage Resources, and Archaeological Resources;  
- Identifying an initial group of Regionally Significant Heritage Resources;  
- Identifying funding tools that could directly assist in conserving heritage in consultation with Area Municipalities; and  
- Recommending policy changes to senior government levels (such as tax-policy) for heritage conservation. | Ongoing |

<table>
<thead>
<tr>
<th>Assistance</th>
<th>Status</th>
</tr>
</thead>
</table>
| **Brownfield Financial Incentive Pilot Program (2006)** | In October 2006, Regional Council approved the framework for a Regional Brownfields Financial Incentive Pilot Program - now referred to as the Brownfields Financial Incentive Program (BFIP) as per Report P-08-084. The goals of this Program are to encourage the remediation and redevelopment of brownfield sites, to promote reurbanization, and to reduce the outward movement of the urban area. The BFIP consists of four components:  
1. Phase II Environmental Site Assessment (ESA) Grants;  
2. Regional Development Charge (RDC) Exemptions;  
3. Joint Tax Increment Grant (TIG) Program; and  
4. Funding for Area Municipalities to assist in amending or developing Community Improvement Plans (CIPs) to provide for the implementation of the joint TIG program. | Pilot Project (Under Review) |
<p>| <strong>Environmental Stewardship Fund (2008)</strong> | The Environmental Stewardship Fund was established by Council in the 2008 budget to fund environmental projects throughout the Region with special emphasis on enhancing natural areas and Environmentally Sensitive Landscapes (ESLs). An interim framework for administering the fund was endorsed by Regional Council on April 29, 2009, and amended in 2010 to accommodate an unexpected number of schoolyard greening projects in the initial batch of applications. On February 23, 2010, Council approved the allocation of approximately $182,000 to fund 25 projects. In April 12, 2012, Council approved the allocation of | In Place |</p>
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Details</th>
<th>Status</th>
</tr>
</thead>
</table>
| **Transit Supportive Strategy for Cambridge**  | As part of the approval of Phase 1 of the Rapid Transit project on June 11, 2011, staff was directed to undertake measures to encourage transit supportive development, to enhance transit ridership, and to expedite the development of LRT in Cambridge. Further, Regional Council approved an allocation of $1,000,000 annually, for an initial 10-year period to implement a transit supportive strategy in Cambridge. Details of the program were to be developed in conjunction with the City of Cambridge and presented to Regional Council for approval. City of Cambridge and Region of Waterloo staff has collectively developed a strategy consisting of both short and longer-term initiatives. Led by staff within the PHCS department, this strategy considered a range of options to meet to the overall objectives as outlined by Council. On March 7, 2012, Regional Council approved the 2012 Implementation Plan, which outlined the four key areas of focus, including:  
- Funding for the City of Cambridge Core Areas Parking Master Plan;  
- Funding to expand the TravelWise TMA and TDM Program in the L.G Lovell Industrial Park in Cambridge;  
- Funding for Strategic Pedestrian and Transit Infrastructure Investments within the City of Cambridge, including new transit shelters and improvements to the Ainslie Street Terminal; and  
- Funding for a TDM Coordinator/Station Area Planner in the City of Cambridge. | In Progress |
| **Housing Incentives & Funding Resource Guide** | This guide provides a compilation of funding programs offered not only by the Region, but by other community partners, including the Government of Canada, Province of Ontario, Local Municipalities, non-profit agencies and private organizations. | In Place |
| **TravelWise Marketing, Promotion and Education** | Even the best-designed transportation systems do not market themselves. New transit routes and traditional marketing approaches can have some impact, but individualized marketing campaigns in Waterloo Region and around the world have demonstrated that personalized messages are more effective at growing transit ridership. Individualized Marketing (IM) encourages travel behaviour change by empowering people with information and knowledge, motivating them through incentives and supporting them with activities and resources. The Region has completed seven IM initiatives over the last 6 years and several more are currently underway. The most recent campaign in Uptown Waterloo increased sustainable transportation use by 21% and reduced vehicle based travel by 16% among program participants. The Region’s ongoing IM projects include neighbourhoods adjacent to the new number 12 route on Westmount Road and 201 iXpress station areas in Kitchener. | Ongoing |
## Research

<table>
<thead>
<tr>
<th>Study</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visualizing Densities (2006 and 2007)</td>
<td>Completed</td>
</tr>
<tr>
<td>The Province’s Growth Plan for the Greater Golden Horseshoe provided targets for higher numbers of people and jobs per hectare in downtowns as well as in new greenfield developments. Visualizing Densities is a two-part study which describes the current urban form and sets the stage for an examination of various development options that could help the Region meet the Province’s prescribed targets. Part 1 looks at densities and development patterns in existing urban and Greenfield neighbourhoods. Part 2 was designed to demonstrate the potential options for developing communities with higher population density. It examines six study areas in Waterloo Region and shows development possibilities that could help us elevate the existing density in order to meet the targets set by the Province. The booklet uses illustrations and 3D modelling to present design ideas of how the communities could look at different densities. It also describes and emphasizes the design features of the streetscapes and buildings that could be used to make our downtowns and future neighbourhoods attractive places to live and work.</td>
<td></td>
</tr>
<tr>
<td>In 2007, the Region published “A Blueprint for Shaping Growth” highlighting areas within Waterloo Region where future growth and reurbanization was identified to be focused. This document was one piece of the larger framework that brought together the RGMS and the Growth Plan into one comprehensive vision.</td>
<td></td>
</tr>
<tr>
<td>Reurbanization Market Study (2010)</td>
<td>Completed</td>
</tr>
<tr>
<td>In 2010, the Region updated the Reurbanization Market Study (originally completed in 2005) in partnership with the Reurbanization Working Group. The purpose of this study was to gain a better understanding of the opportunities for reurbanization within Waterloo Region. The results indicated that interest in reurbanization from a market perspective remains strong. In fact, 74% of respondents said that they would consider moving to a reurbanization development (an increase from 70% in 2005). Further, almost 40% of respondents indicated they were considering moving within the next two years (an increase of one third from 2005).</td>
<td></td>
</tr>
<tr>
<td>The Workplace Count (2011)</td>
<td>In Progress</td>
</tr>
<tr>
<td>The Workplace Count, a partnership between the Region of Waterloo and the Area Municipalities, is a survey of almost every place of employment – excluding home-based businesses and farms - in Waterloo Region. The information provided by businesses will help the Region and Area Municipalities to better plan for future business growth and development in Waterloo Region by:</td>
<td></td>
</tr>
<tr>
<td>• Ensuring adequate land is available for businesses to locate here or expand;</td>
<td></td>
</tr>
<tr>
<td>• Ensuring sufficient services and infrastructure are available for businesses, i.e. transit service for employees, roads, etc.</td>
<td></td>
</tr>
<tr>
<td>• Helping businesses that are relocating from within the region to select a new location to meet their needs;</td>
<td></td>
</tr>
</tbody>
</table>
| **Soil/Sediment Rehabilitation and Aggregate Recycling** | It is anticipated that many of the key development opportunities along the RT corridor may be impacted by environmental issues. Further, the remediation and redevelopment of these sites is often costly, challenging and time-consuming. One of the largest costs associated with these sites is the remediation/disposal of impacted or contaminated soil. As a result, this issue is likely to be one of the key impediments to the redevelopment of this corridor. In an effort to mitigate some of these costs, the Region and its partners are exploring the potential for a more sustainable approach for the management of impacted and contaminated soils as well as other materials. One alternative being considered by staff is the concept of a Regional Soil Rehabilitation and Aggregate Recycling Campus that would allow for the treatment and productive re-use of soil and other materials throughout Waterloo Region (and possibly beyond).

On May 17, 2012 the Region held a forum with key stakeholders to discuss the opportunities and challenges related to this concept. Feedback from this session will help inform a more detailed feasibility study to be conducted in conjunction with the Region’s Waste Management Master Planning Process, currently underway. |

| **Commuter Parking Lot Feasibility Study (2012)** | GO Transit received a Build Canada grant to construct park and ride facilities in the Region of Waterloo. This study is identifying and reviewing potential park and ride sites for Go Transit service in Waterloo and Cambridge. Construction on the Sportsworld park and ride facility will begin this summer. |

| **Schneider Creek Floodplain Technical Update and Policy Review** | This study, conducted in partnership with the Grand River Conservation Authority, will update to floodplain mapping for portion of Schneider creek, include modeling of scenarios of changes to built form, and a strategic policy review. The key question is how reurbanization can be accommodated safely in this area. |

| **Revitalizing Regionally-Owned Community Housing Properties** | The Region has initiated a study to investigate the potential for intensification and/or redevelopment at selected Regionally-owned community Housing sites, in order to plan for and accommodate additional community housing needs in a rapidly growing community. The purpose of the study is to:
- Improve efficiencies (financial, energy, unit yield) at selected sites;
- Increase the number of units where possible; and
- Enhance the quality of life for residents through the replacement, intensification, sale and or redevelopment of sites.

The project will include several phases in which a preliminary screening of all 62 sites will be done as well as the categorization and ranking of the sites based on redevelopment/intensification potential. Detailed redevelopment and business plans for the top 6 sites will also be completed which will form the basis for a strategic investment plan for Regional Council consideration. |
### Housing/Demographic Research

Understanding the nature of the housing market is an important part of the Reurbanization Toolbox. Over the past several years the Region has hosted several events engaging industry professionals and other stakeholders to explore some of the key questions around consumer preferences and demographic shifts.

- Future Shape of Housing in Waterloo Region - Workshop (2009);
- Aging in Place Realtor Focus Groups (2010); and
- The Past is NOT the Future: Housing Choice and Demographic Change (2010).

<table>
<thead>
<tr>
<th>Housing/Demographic Research</th>
<th>Ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding the nature of the housing market is an important part of the Reurbanization Toolbox. Over the past several years the Region has hosted several events engaging industry professionals and other stakeholders to explore some of the key questions around consumer preferences and demographic shifts.</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>
Attachment 3
The Reurbanization Working Group (RWG)

One of the key partnerships that has played an integral role in the implementation of several reurbanization initiatives at both the Regional and Area Municipal level is the Reurbanization Working Group (RWG). The RWG has been active since 2004 and includes representatives from the Region, the Area Municipalities and the development community. The group meets with the focus of increasing the number of reurbanization projects that occur throughout Waterloo Region. The RWG also provides a forum for the discussion and resolution of identified obstacles to successful reurbanization activity and to identify and share success stories, skill-sets, techniques, incentives, and opportunities among its members. Furthermore, the RWG hopes to generate increased investor and homebuilder interest in the development of lands within Waterloo Region’s existing urban areas and enhance political and public awareness, support, and demand for reurbanization.

Over the past several years, this group has been actively promoting and facilitating key reurbanization initiatives. Some of these initiatives include:

- The 2005 Reurbanization Market Study;
- The Station Area Plan Pilot Project (2008);
- The 2008 Seizing Opportunity in Transit-Oriented Development Forum;
- The Station Area Plan Pilot Project – Infrastructure Analysis (2009); and
- The 2010 Reurbanization Market Study.

Overall, the RWG has been very successful in leveraging the collective resources of all partners in order to achieve results. Most recently, the group has developed a potential work plan focussing on developing resources and a communication strategy for three key stakeholder groups.

- General Public
- Municipal Staff and Councillors
- Development Industry

This communication strategy was initiated in the fall of 2011 with an introductory presentation entitled “Reurbanization in our Community” delivered to members of Regional and Area Municipal Council. Dates of each of these presentations were as follows:

- Waterloo Council - September 26, 2011
- Kitchener Planning and Strategic Initiatives - October 12, 2011
- Cambridge General Committee – November 7, 2011
- Region of Waterloo Planning and Works Committee - February 28, 2012

The final work plan related to the communication strategy has yet to be determined, but the Regional staff continue to view this group as a key partnership that will help deliver on the development and implementation of a comprehensive reurbanization strategy in the future.
REGION OF WATERLOO
PLANNING, HOUSING AND COMMUNITY SERVICES
Community Services

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

DATE: May 29, 2012

FILE CODE: D25-01

SUBJECT: REGIONAL HERITAGE CONSERVATION TOOLBOX

RECOMMENDATION:

For information.

SUMMARY:

The Region of Waterloo has established and is continuing to refine a Regional Heritage Conservation Toolbox to support heritage property owners, municipal staff and the public in their common effort to conserve cultural heritage resources in the Region. Developing this toolbox is a Strategic Action in the Region of Waterloo Corporate Strategic Plan (2011-2014).

The Regional Heritage Conservation Toolbox is a source for information, policies and guidelines related to cultural heritage resource conservation, including: cultural heritage conservation policies and planning documents; heritage conservation funding sources; resources for heritage property owners; and resources for municipal staff. The toolbox is a work in progress and will evolve over time as new resources and information become available and/or are developed. As many of the Region’s cultural heritage resources are located in areas planned for intensification, the toolbox is being developed in conjunction with ongoing reurbanization initiatives. The web content layout for the Regional Heritage Conservation Toolbox has been attached in Appendix A.

The toolbox can be accessed on the Region of Waterloo website through the website’s Heritage section, the Reurbanization section or directly at http://regionofwaterloo.ca/heritagetoolbox. Information on the establishment of the toolbox as well as regular updates as it continues to evolve will be circulated to the appropriate Regional staff and to a broad range of community partners including Area Municipal staff, Municipal Heritage Planning Advisory Committees and other heritage organizations, and the Home Builders’ Association.

REPORT:

Cultural heritage resources are natural and cultural assets that provide people with a sense of place, and support the development of community and personal identities. The region has a rich and diverse heritage including, distinctive cultures, traditions, festivals, artisans and craftspeople, landmarks, landscapes, properties, structures, burial sites, cemeteries, natural features and archaeological resources.

These resources are valuable assets that provide an important means of defining and confirming a regional identity, enhancing quality of life of the community, enabling social development and promoting economic prosperity. The Region supports the conservation of significant cultural heritage resources, and shares this responsibility with the Federal and Provincial governments, Area Municipalities, other government agencies, the private sector, property owners and the community.
The Region of Waterloo Corporate Strategic Plan (2011-2014) includes Strategic Action 2.4.3 – Establish a Regional Heritage Conservation Toolbox. This strategic action is one way in which the Region plans to support heritage property owners, municipal staff and the public in their common effort to conserve the region’s cultural heritage resources. The toolbox is an accessible collection of information, policies and guidelines related to cultural heritage resource conservation in the Region. The on-line digital resource can be accessed on the Regions’ website through the website’s Heritage section, the Reurbanization section or directly at http://regionofwaterloo.ca/heritagetoolbox.

Heritage Conservation and Reurbanization

As many of the Region’s cultural heritage resources are located in areas planned for intensification, the toolbox is being developed in conjunction with ongoing reurbanization initiatives. Integrating efforts to conserve cultural heritage resources within reurbanization initiatives will result in creative, multi-layered redevelopment that showcases the evolution of the Region, while preserving important heritage resources. Regional reurbanization initiatives that have the potential to impact cultural heritage resources include initiatives such as the Brownfields Financial Incentive Program and the Central Transit Corridor Community Building Strategy. The Regional Heritage Conservation Toolbox is referenced under the theme Consideration of Cultural and Built Heritage within the Region’s Reurbanization Strategy and under Implementation in the Reurbanization Toolbox (see Report P-12-063, A Regional Reurbanization Strategy and Toolbox, May 29, 2012).

Toolbox Contents

The Regional Heritage Conservation Toolbox includes information on and access to: cultural heritage conservation policies and planning documents; heritage conservation funding sources; resources for heritage property owners; and resources for municipal Staff. The Regional Heritage Conservation Toolbox is a work in progress and will evolve over time as new resources and information become available and/or are developed. The current web content layout for the toolbox has been attached in Appendix A. The following paragraphs provide more detail on the main components of the toolbox.

Cultural Heritage Conservation Policies and Planning Documents

The Province of Ontario has provided municipalities with a wide variety of legislative planning and financial tools that can be used to conserve heritage resources. The Ontario Heritage Act is the most obvious legislation that comes to mind, which provides tools such as Part IV and V designations, heritage easements and demolition control through listing on the municipal heritage register, but there are many other legislative tools that can be used to conserve cultural heritage resources. The Regional Heritage Conservation Toolbox includes a list of planning and financial tools available to Area Municipalities to assist with the conservation of heritage resources (see Appendix B). The list was circulated to Municipal Heritage Advisory Committees (MHACs) and heritage planning staff in 2011.

The toolbox also provides links to Regional policy, Implementation Guidelines and Master Plans. The Regional Official Plan (2009) refers to two Master Plans and three Implementation Guidelines that will support the conservation of cultural heritage resources. These include the Arts, Culture and Heritage Master Plan, the Archaeological Master Plan, and Implementation Guidelines for the conservation of Cultural Heritage Landscapes, Regionally Significant Heritage Resources, and Archaeological Resources. The three Implementation Guidelines are under development, and will outline the existing policy context and conservation processes for the particular form of cultural heritage resource and provide further detail for the implementation of the related Regional Official Plan policies.

Heritage Conservation Funding Sources

Financial incentives for the promotion, preservation, restoration and rehabilitation of cultural heritage resources are an important tool in the ongoing efforts to conserve cultural heritage resources. The
toolbox will provide a link to the Waterloo Regional Heritage Foundation (WRHF) the Regionally supported organization which promotes and encourages interest in the heritage and culture of Waterloo Region. Through application to the WRHF, owners of properties designated under the Ontario Heritage Act may receive grants in support of restoring the heritage resource.

The Regional Heritage Conservation Toolbox will also include information about other available sources of financial support, such as Area Municipal, Provincial and community grants. The toolbox will not include information on the Heritage Property Tax Rebate Program (HPTRP) offered by the Province until more information is available on the implementation of the HPTRP in other municipalities and the interest of local heritage property owners in such a program. The City of Kitchener is currently the only local Area Municipality offering this program.

**Resources for Heritage Property Owners**

The Heritage Planning Advisory Committee has undertaken preliminary discussions on how best the Region can assist heritage property owners in maintaining, restoring and/or adaptively reusing their heritage buildings. The Regional Heritage Conservation Toolbox will provide access to educational information and resources on topics such as: Repairing Wood Windows; Applying for Heritage Permits; Parks Canada Standards & Guidelines for the Conservation of Historic Places in Canada; Designing Additions and Infill to Complement Your Neighbourhood; and Energy Efficiency and Older Homes.

**Resources for Municipal Staff**

Area Municipal and Regional staff routinely consider the conservation of cultural heritage resources in their day to day work. Resource documents, guides and inventories, such as the *Scenic Roads and Special Character Streets Resource Document*, the *Guide to Cultural Heritage Impact Assessment* and *Spanning the Generations: A Study of Old Bridges in Waterloo Region* will assist Regional staff during the undertaking of public works projects. The resource documents, inventories and guides consolidate existing practice and research related to the conservation of specific cultural heritage resources, and through their implementation result in increased staff efficiency. Through the toolbox, Area Municipal staff may access these tools to better understand Regional processes and/or to assist with the development of similar resources for their municipality. The general public may also be interested in the information contained in these resources.

**Regional Heritage Links**

In addition to the heritage conservation resources listed above, the toolbox will provide linkages to information on Regional initiatives that interpret, promote and celebrate our Region’s heritage, including: special projects and educational materials (i.e. the Eby Book and the Historic Place Names map); Regional heritage sites and resources (i.e. the Waterloo Region Museum, the Regional Archives, the Regional Curatorial Centre and the Regional Hall of Fame); and heritage events (i.e. Doors Open and Heritage Showcase). The toolbox will also provide links to local, regional, provincial and national heritage organizations.

**Conclusion**

In summary, the Regional Heritage Conservation Toolbox consolidates the information and resources used to conserve cultural heritage resources into one accessible and visible place; enabling the efforts of heritage property owners, Regional staff and the public to better conserve the valuable cultural heritage assets of our Region. The Heritage Planning Advisory Committee has supported the development of the Regional Heritage Conservation Toolbox and will continue to assist in its ongoing refinement and promotion. Information on the establishment of the toolbox as well as regular updates as it continues to evolve will be circulated to the appropriate Regional staff and to a broad range of
community partners including Area Municipal staff, Municipal Heritage Planning Advisory Committees and other heritage organizations, and the Home Builders’ Association.

**Area Municipal Consultation/Coordination**

Area Municipal Cultural Heritage Staff and Municipal Heritage Committees provide support to heritage property owners, other municipal staff and the public for conserving cultural heritage resources. As the Regional Heritage Conservation Toolbox may assist them in their work, ongoing consultation has taken and will continue to take place in conjunction with the development of the individual components, format and accessibility of the toolbox to ensure that the information and resources are both appropriate and effective. The toolbox provides digital links between many shared resources and information sources.

**CORPORATE STRATEGIC PLAN:**

Creating a Regional Heritage Conservation Toolbox is Strategic Action 2.4.3 under Strategic Objective 2.4 - Promoting and enhancing the region’s arts, culture and heritage. The related strategic actions ensure that the Region has a role in strengthening the local arts and cultures sector, providing opportunities for cultural exploration, and nurturing our Region’s sense of place.

**FINANCIAL IMPLICATIONS:**

The development of the Regional Heritage Conservation Toolbox is funded through the program budget for Cultural Heritage.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

Regional departments will be consulted in conjunction with the development of the individual components, format and accessibility of the toolbox to ensure that the information and resources are both appropriate and effective.

**ATTACHMENTS:**

Appendix A – Regional Heritage Conservation Toolbox (Web Content Layout)
Appendix B – Legislative Planning and Financial Elements of Toolbox

**PREPARED BY:** *Kate Hagerman*, Cultural Heritage Specialist

**APPROVED BY:** *Rob Horne*, Commissioner of Planning Housing and Community Services
Appendix A – Regional Heritage Conservation Toolbox (Web Content Layout)

Regional Heritage Conservation Toolbox (Web Content Layout)

Welcome to the Regional Heritage Conservation Toolbox – your source for information, policies and guidelines related to cultural heritage resource conservation in the Region of Waterloo.

Cultural Heritage Conservation Policies and Planning Documents

Legislative Planning and Financial Tools
This document outlines Provincially Legislated Planning and Financial Tools that can be used to conserve cultural heritage resources.

Heritage policies in the Regional Official Plan
The Regional Official Plan will guide the Regional Municipality of Waterloo in directing growth and change over the next 20 years. Cultural heritage policies are included in Chapter 3: Liveability in Waterloo Region.

Archaeological Master Plan and Implementation Guideline
This report includes an assessment of local archaeological resources, a summary of planning policies for known archaeological resources, maps detailing the locations of known resources, and an investigation into the creation of an archaeological facility. The plan was accepted by Regional Council in 1989.

Arts, Culture & Heritage Master Plan
This report includes recommendations and implementation strategies for identifying, protecting, promoting, and investing in arts, culture and heritage resources in Waterloo Region. This plan was accepted by Regional Council in October 2002.

Content under Development
- Implementation Guideline for Cultural Heritage Landscape Conservation
- Implementation Guideline for Regionally Significant Heritage Resource Conservation

Heritage Conservation Funding Sources

Waterloo Regional Heritage Foundation
The Waterloo Regional Heritage Foundation funding program is the primary Regional tool for financially supporting the conservation on cultural heritage in the Region. Through application to the WRHF, owners of properties designated under the Ontario Heritage Act may receive grants in support of restoring the heritage resource.

Web Links under Development
- Area Municipal Granting Programs
- Provincial Funding

Resources for Municipal Staff

Spanning the Generations: A Study of Old Bridges
The Region’s Heritage Planning Advisory Committee has published three phases of Spanning the Generations: A Study of Old Bridges in Waterloo Region.
- Phase 1: an inventory and ranking of more than 100 bridges based on their heritage attributes
  - Pages 1-100
  - Pages 101-244
Phase 2: a report on the 10 most historically significant bridges
Phase 3: a focus on steel truss bridges

Scenic Roads and Special Character Streets Resource Document
This document is a supplement to the Context Sensitive Regional Transportation Design Guidelines providing additional guidance and support to Regional staff when planning, designing, constructing and maintaining sections of Regional transportation corridors that have been identified as Special Character Streets or Scenic Roads.

Content under Development
- Guide to Cultural Heritage Impact Assessment
- Public Building Inventory

Resources for Heritage Property Owners
Parks Canada Standards and Guidelines for the Conservation of Historic Places in Canada

Content under Development
- Applying for Heritage Permits
- Repairing Wood Windows
- Energy Efficiency and Older Homes
- Designing Additions and Infill to Complement Your Neighbourhood

Regional Heritage Links

Special Projects and Initiatives
- A Research Guide to Churches Established Before 1900
- Historic Driving Tour Interactive Map
- Historic Place Names Map
- Memoriam: War Honour Roll
- The Eby Book Pennsylvania German Pioneer Family History

Heritage Events
- Doors Open Waterloo Region
- Heritage Showcase
- Heritage Day Workshop
- History on the Grand Symposium

Regional Heritage Sites & Resources
- Doon Heritage Village
- Joseph Schneider Haus & Online Artifact Collection
- McDougall Cottage
- Region of Waterloo Archives
- Waterloo Region Museum
- Waterloo Region Hall of Fame
- Waterloo Region Curatorial Centre
- West Montrose Covered Bridge

Heritage Organizations
- Links to local, regional, provincial and national heritage organizations
## Legislative Planning and Financial Tools that can be used to Conserve Cultural Heritage Resources

<table>
<thead>
<tr>
<th><strong>Official Plans</strong></th>
<th>A municipality’s official plan (OP) reflects the community’s vision for change and growth, and sets out goals and policies for land use and development. OP policies can be used to conserve cultural heritage resources by enabling the municipality to implement many of the tools listed in the remainder of this chart. OPs can also be used to define and identify, through OP designation, cultural heritage resources such as Cultural Heritage Landscapes.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Secondary Plans</strong></td>
<td>Municipalities can amend their Official Plan to create a Secondary (Community or District) Plan for an area. A Secondary Plan can recognize and protect unique heritage features or archaeologically sensitive areas.</td>
</tr>
<tr>
<td><strong>Design Guidelines</strong></td>
<td>Municipalities can create detailed design guidelines to provide direction for infill development in areas with heritage character (stable neighbourhoods, main streets, rural villages, etc.). Design guidelines promote compatible development by addressing the treatment of building facades (materials, window and door detail, porch style, fencing, garages, etc.), the design of pedestrian areas, streetscaping, lighting, and the connection of the public realm with private development.</td>
</tr>
</tbody>
</table>
| **Zoning By-Laws** | Zoning by-laws are used by municipalities to regulate density, uses of land, parking requirements and form-related standards – including building heights, lot coverage, setbacks, minimum lot sizes, and other building envelope specifications. Context-relevant standards can be implemented to support heritage conservation goals. For example, a municipality may require:  
- Minimum or maximum building heights and densities within a stable neighbourhood;  
- a range and mix of land uses that recreate the traditional land use patterns of a community; and/or  
- building massing (form and bulk) that creates vistas, gateways and visually attractive streets and neighbourhoods, in order to retain community character. Zone change applications are subject to the development review process. A Heritage Impact Assessment, Cultural Heritage Conservation Plan and/or Archaeological Assessment may be required to support the zone change application. |
| **Interim Control** | An interim control by-law puts a temporary freeze on some land uses in a specific area to give municipalities time to assess or study an area. The freeze can be imposed for a year with a maximum extension of a second year. |
| **Height and Density Exchange**  
| (s. 37 of the Planning Act) | An increase in building height and/or density can be granted to a developer by a municipality in exchange for preservation and/or interpretation of a cultural heritage resource. The added height and/or density may be able to be transferred to an alternative property. |
| **Site Plan Control**  
| (s. 41 of the Planning Act) | Municipalities can identify areas where they will review the Site Plans for new development. Site Plan Control allows the municipality to influence the layout of development including the compatibility of the planned development with neighbouring structures. |
| **Subdivision Review and Approval**  
| (s. 51 of the Planning Act) | Municipal review and approval powers provide opportunities to assess the sustainability of proposed plans of subdivision at the lot, street and neighbourhood level, including review of impacts to cultural heritage resources. A Heritage Impact Assessment, Cultural Heritage Conservation Plan and/or Archaeological Assessment may be required by municipal staff to support the development application. |
| **Demolition Control**  
| (s.27 of the Ontario Heritage Act and s. 33 of the Planning Act) | Municipalities are required to list heritage properties protected under the Ontario Heritage Act, and may list additional properties of cultural heritage value or interest, on a Municipal Register. The owner of a listed property must provide 60 days notice to the municipality prior to demolition of a building or structure on the listed property. In addition, a municipality may require a demolition permit prior to the demolition of the whole or any part of any residential property in an area identified for demolition control. |
| **Designation**  
| (s. 29 and 41 of the Ontario Heritage Act) | Municipalities can pass by-laws designating individual properties and/or groupings of properties that are of cultural heritage value or interest. Designation requires the owner to seek council’s approval for property alterations or new construction that is likely to affect the heritage attributes of the property described in the designation by-law. Council can also prevent the demolition of a building or structure on a designated heritage property. |
| **Easements**  
| (s. 37 of the Ontario Heritage Act) | Municipalities can pass by-laws entering into easements or covenants - voluntary legal agreements – with heritage property owners. The agreement sets out the requirements for maintaining the property and is registered on title to the property. |
| **Purchase or Lease**  
| (s. 36 of the Ontario Heritage Act) | Municipalities can pass by-laws to buy, lease or expropriate designated heritage properties. |
| **Municipal Cultural Planning**  
| (s. 2 of the Planning Act and s. 2 the Ontario Heritage Act) | Municipalities can develop and implement Cultural Heritage Master Plans and/or undertaking Cultural Mapping Projects which allow the community to take stock of existing cultural heritage resources and express a long-term vision and goals for cultural heritage conservation. |
| **Building Code Flexibility** | Enforcing the Building Code is a municipal responsibility. The 2006 Building Code is written in an objective-based format. The objective- |
(Part 11 of the Building Code Act) | Based Code contains prescriptive requirements known as “acceptable solutions” that serve as benchmarks for evaluation. This new approach allows for some flexibility for repairing or altering heritage buildings by allowing building code officials to approve alternate requirements that still meet safety standards.

**Property Standards**
(s. 35.3 of the Ontario Heritage Act and s. 15.1 of the Building Code Act) | Municipalities may require heritage property owners to maintain and repair their property as necessary to protect and prevent deterioration of its heritage attributes.

**Environmental Assessment**
(Environmental Assessment Act) | The Environmental Assessment Act provides for the protection, conservation and wise management of the environment in Ontario during the planning and implementation of public works projects. "Environment is broadly defined, and includes cultural heritage. A Built Heritage Assessment, Heritage Impact Study and/or Archaeological Assessment may be required during the project planning and approvals process.

**Community Improvement Plans**
(s. 28 of Planning Act) | Community Improvement Plans (CIPs) are a tool by which municipalities can provide financial incentives, in order to achieve planning objectives that are for the broader public good, such as improving streetscapes, revitalizing core areas, or adaptive reuse of industrial, commercial and historic buildings. Municipalities can designate specific areas or the whole of their jurisdiction as a community improvement project area. A community-improvement plan (CIP) can be developed to include provisions to acquire, clear and hold land; construct, repair, rehabilitate or improve land and buildings; sell, lease or dispose of land; and provide grants and loans, such as Tax Increment Grants (TIGs).

**General Power to Make Grants**
(s. 107 of Municipal Act, 2001) | Municipalities have the general power to provide grants and loans. Some municipalities have provided funding:
- to owners of designated heritage properties to help them cover the costs of repair and restoration;
- to property owners in Community Improvement Areas to assist with rehabilitation projects;
- to foundations or other not-for profit organizations to set up a revolving fund to support heritage conservation;
- to help foundations establish endowment funds; and
- for public works projects that conserve heritage resources or enhance the special character of an area.

**Heritage Property Tax Relief Program**
(s. 365.2 of Municipal Act, 2001) | Through a by-law, municipalities can establish a Heritage Property Tax Relief Program which may encourage good stewardship, maintenance, and conservation of designated heritage properties. This program provides tax relief (10 to 40 per cent) to owners of eligible properties to protect heritage features. Municipalities contribute through their portion of the tax relief while the Province shares through the education portion of the tax relief.

**Business Improvement** | A municipality can designate a Business Improvement Area (BIA) and establish a management board to:
### Areas
(s. 204 to s. 215 of Municipal Act, 2001)
- oversee the improvement, beautification and maintenance of municipally-owned land, buildings and structures; and
- promote the area as a business or shopping area.

Designating a BIA could assist with the regeneration of an historic commercial area.

### Municipal Capital Facilities Agreements
(s. 110 of Municipal Act, 2001)
These agreements are commonly used by municipalities to create partnerships with other public bodies, the private sector, not-for-profit organizations, and First Nations to deliver municipal facilities. For example, a municipality may consider a partnership with and provide the financial incentives to a not-for-profit organization to provide a local history museum or archives. Assistance from a municipality can include: giving or lending money; giving, leasing or lending property; guaranteeing borrowing; and development charges exemptions.
TO: Chair Jim Wideman and Members of the Planning and Works Committee  
DATE: June 19, 2012  
FILE CODE: D28-60(A)  
SUBJECT: GRAND RIVER TRANSIT 2012 HIGH SCHOOL TERM PASS

RECOMMENDATION:
THAT the Regional Municipality of Waterloo approve the following regarding implementation of the Grand River Transit (GRT) high school term pass as described in Report No. P-12-080, dated June 19, 2012:

a) Implement a fare increase from $230.00 to $235.00 per 5 month term (from $46 to $47 per month) for the 2012-13 academic year beginning in September 2012 and reduce the time of use to weekdays before 6 p.m;

b) Introduce an upgraded student pass for use after 6 p.m. weekdays, weekends and holidays at a cost to the student of $45.00 per term ($9 per month);

c) Jointly promote the upgraded student pass with the school boards; and

d) Amend the Region’s Fees and Charges By-law No. 12-001 with respect to the approved 2012 GRT high school term pass.

SUMMARY:
Regional Council approved changes to the GRT fare structure as outlined in Report # P-12-055 on May 16, 2012. In that report, discussion on the school board funded five-month term pass noted that School Board transportation staff had concerns with their ability to absorb the proposed new rate for the pass. As a result, Regional staff continued to negotiate with the Student Transportation Services of Waterloo (STSWR) staff representing the School Boards to develop a new pass rate.

Following negotiations, staff representing the STSWR and Region are proposing a 2% fare increase from $230.00 to $235.00 for the five month term pass for the 2012-13 academic year along with the joint promotion of an upgraded pass for use after 6 p.m. weekdays, weekends and holidays. The upgraded pass would cost a student $45.00 for the term. While a 2% increase to the five-month term pass is less than budgeted, additional revenue would be generated by the introduction of the upgraded student pass and staff would continue to work with STSWR staff to explore further efficiencies between GRT and other school bus operators for transporting high school students prior to next budget year. The Board of Directors for STSWR has approved the fare increase and the implementation of the upgraded pass.

The new term pass fare would go into effect for the 2012-13 academic year starting in September 2012. At the same time the upgraded pass option would become available for purchase by students. GRT Marketing staff will work with School Board staff developing promotional plans and the sales administration process. As there will be new time of day restrictions on its use, internal information for transit staff, including bus operators, will also be developed.
REPORT:

Regional Council approved the changes to the GRT fare structure as outlined in Report # P-12-055 on May 16, 2012. In that report, discussion on the School Board funded five-month term pass noted that school board transportation staff had concerns with their ability to absorb the proposed new rate for the pass. As a result, Regional staff continued to negotiate with School Board officials to develop a new pass rate.

Proposed Term Pass Change

Currently, the GRT school board funded term pass is valid any time Monday to Friday except on statutory holidays and Christmas and March breaks. Regional staff has met with the Student Transportation Services of Waterloo Region (STSWR) staff to discuss the proposed term pass price increase. STSWR is the co-operative organization that oversees the delivery of student transportation in the Region of Waterloo for the two school boards.

Originally, the price for school board funded five-month term passes was proposed to increase by 8.7% from $230.00 to $250.00. The approved 2012 Regional Budget included an average 9% GRT fare increase which was reflected in the initial proposal for the 8.7% increase in the term pass price. STSWR staff has indicated that their funding is set at 2% by the Ministry of Education and are concerned that they cannot absorb the proposed 8.7% rate increase in the school term pass.

Following negotiations, the STSWR staff and Regional staff are proposing a 2% fare increase for the 2012-13 academic year along with limiting the pass use to before 6 p.m. on weekdays. In addition, there would be joint promotion of an upgraded pass being introduced for use after 6 p.m. weekdays, weekends and holidays. While a 2% increase to the five-month term pass is less than budgeted, additional revenue would be generated by the introduction of the upgraded student pass and staff would continue to work with school board staff to explore further efficiencies for transporting high school students prior to next budget year. The Board of Directors for STSWR has approved the fare increase and the implementation of the upgraded pass.

The new term pass fare would go into effect for the 2012-13 academic year, starting in September 2012. At the same time the upgraded pass option would become available for purchase by students. GRT Marketing staff will work with School Board staff developing promotional plans and the sales administration process. As there will be new time of day restrictions on its use, internal information for transit staff, including bus operators, will also be developed.

Future Steps

The current term pass is used by about 4000 high school students each term. The pass is provided to all students at the two Boards who are outside of the maximum walk distance standard for students and who do not receive bussing via school bus operators (“yellow school buses”). In many cases, school “specials” – trips connecting specific neighbourhoods to specific schools are used for
much of this service. Servicing the students who use term passes tends to occur at one of the highest cost times for transit such as around 8 a.m. on weekdays meaning that additional buses need to be purchased to provide this service. However because the service is highly targeted, the buses are well utilized. Over the next year, Regional and STSWR staff will work to evaluate the optimal service mix for transporting high school students. The determination of the most efficient approach could mean adjustments to bell times, adjusting the travel patterns of school specials or shifting students between GRT vehicles and yellow school buses.

Area Municipal Consultation/Coordination

Area Municipalities were circulated the 2011-2014 GRT Business Plan for information and comment. This document outlined the general fare strategy being proposed. The municipalities were also circulated a copy of this report for information.

CORPORATE STRATEGIC PLAN:

The 2012 transit fare changes help sustain ongoing service improvements and therefore support the implementation of the Council’s Strategic Focus, identified under Focus Area 3: Sustainable Transportation: Develop greater, more sustainable and safe transportation choices. The plan will aid with Strategic Objective Action 3.1.2: Expand the bus network and begin to integrate it with the future Light Rail.

FINANCIAL IMPLICATIONS:

Due to the lower term pass price, the anticipated 2012 revenue increase would be $16,340 rather than $65,760. The sales of the upgraded term pass would be used to offset the revenue impact. In order to completely offset the revenue impact, approximately 1,360 upgraded passes, or about 33% of all term passes, would need to be sold. With the previous “Big Deal” program about 400, or about 15% of eligible term passes, were sold each term. The lower term pass price should not have a noticeable impact on the revenue/cost ratio for 2012. In 2011, the revenue from the term pass was $1,828,784.

In addition to the upgraded term pass, the continued discussions between Regional staff and STSWR staff would look at other efficiency gains that would offset the revenue impact. Future estimated impacts of the lower term price would be included in the development of the 2013 GRT budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Planning, Housing and Community Services, Finance and Transportation and Environmental Services worked together to develop the transit fare options.

ATTACHMENTS:

NIL

PREPARED BY: Blair Allen, Supervisor Transit Development

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

DATE: June 19, 2012

FILE CODE: D28-50

SUBJECT: GRAND RIVER TRANSIT – ROUTE 11 MINOR ROUTE ADJUSTMENT

RECOMMENDATION:

THAT Route 11 COUNTRY HILLS be modified effective Monday September 3, 2012, as described in Report No. P-12-081, dated June 19, 2012.

SUMMARY:

In order to improve schedule adherence, it is proposed that the inbound alignment of Route 11 COUNTRY HILLS be modified to travel along Charles Street instead of King Street between Stirling Avenue and Ontario Street. The outbound alignment already travels along Charles Street. The recommended change would result in more reliable connections to other GRT routes at Charles Street Terminal; however, some passengers may have to walk an additional 100 metres to reach their final destination. Transit service along King Street would continue to be provided by Route 7 MAINLINE.

Customer feedback was collected through an online survey and via telephone. Notices of the proposed change were posted along affected stops and at Charles Street Terminal, on the GRT website, and through GRT’s Rider Alert program, Facebook, and Twitter. A total of 32 responses were received. Of these 25 were in favour of the proposed change and 7 were opposed. The main reasons stated for supporting the change were faster service to Charles Street Terminal and the consolidation of the inbound and outbound routings. The main concerns for moving the route off of King Street were the loss of service options along King Street to reach the Charles Street Terminal, and a longer walk for destinations along King Street.

REPORT:

Grand River Transit operators and data generated from onboard AVL (automatic vehicle location) equipment report that Route 11 COUNTRY HILLS is currently experiencing schedule adherence issues during morning and afternoon rush hour periods and evening periods. This has resulted in reduced reliability of connections to additional GRT routes, and compounded schedule adherence issues when the Route 11 continues through the terminal as either Route 19 – VICTORIA SOUTH or Route 20 VICTORIA HILLS.

On average, Route 11 buses arrive two minutes late to the Charles Street Terminal during all time periods with the exception of mid day service. A minor adjustment to the inbound route alignment from King Street to Charles Street, as detailed in Figure 1, is proposed. This routing change would provide an estimated two to three minutes of additional time to ensure that connections are met and to improve the reliability of the service for customers who must transfer. The change would also result in two-way Route 11 service along Charles Street.

Conversely, passengers who use Route 11 to reach destinations along King Street could have a longer walk of approximately 100 metres if service is moved to Charles Street. Approximately 190
Route 11 passengers get off on King Street between Pandora and Ontario on a daily basis, while some 240 passengers get off at the Charles Street Terminal.

If Route 11 is realigned to Charles Street, transit service along King Street would continue to be provided by Route 7 – MAINLINE.

Community Feedback

An online survey was posted on the GRT Website between June 6, 2012 and June 12, 2012. A total of 32 comments were received. Feedback was generally supportive of the proposed routing change, with 25 in favour of the realignment and 7 opposed.

The main reasons for supporting the change were faster service to the Charles Street Terminal and the consolidation of the inbound and outbound routings. The main concerns for moving the route off King Street were the loss of additional service along King Street to the Charles Street Terminal, and a longer walk to reach destinations along King Street.

When asked what destination customers were using Route 11 to travel to, the majority of respondents (14 people) stated that they rode Route 11 to Charles Street Terminal where they transferred to other GRT routes. Four people answered that they travelled to destinations along King Street, and two stated that they travelled to destinations along Charles Street. Two of the respondents were not Route 11 riders and the remaining ten customers did not specify a destination.

Area Municipal Consultation/Coordination

The City of Kitchener has been circulated a copy of this report.

CORPORATE STRATEGIC PLAN:

The proposed Route11 modification supports the implementation of Council’s Strategic Focus, identified under Focus Area 5: Service Excellence. The change will contribute to Strategic Objective 5.2 Improve satisfaction with Regional programs and services.

FINANCIAL IMPLICATIONS:

There would be no change in operating costs as a result of the revised routing.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Planning, Housing and Community Services and Transportation and Environmental Services worked together to develop this transit service improvement plan.

ATTACHMENTS:

Attachment 1 - Proposed Change to Route 11 Country Hills
Attachment 2 - Public Feedback on Route 11 Service Change Proposal

PREPARED BY: Erica Springate, Principal Planner, Transit

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
By operating in both directions on Charles Street instead of using King Street for the inbound direction, buses would arrive at the Charles Street Terminal 2-3 minutes earlier which improves connections to other GRT routes.

Legend

Route 11 COUNTRY HILLS
- one-way operation on King Street proposed to be removed
- Route 11 COUNTRY HILLS proposed for two-way operation
- Route 7 MAINLINE
- Stops that would no longer be served by Route 11
- Charles Street stops currently served by Route 11
- Charles Street stops that would be served by proposed two-way Route 11 service
Attachment 2 - Public Feedback on Route 11 Service Change Proposal

### Reason Opposed to Route 11 Change

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further walk to reach destinations on King St</td>
<td>3</td>
</tr>
<tr>
<td>Fewer trip options to Charles Street Terminal</td>
<td>3</td>
</tr>
<tr>
<td>No Reason provided</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

### Reason In Favour of the Route 11 Change

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve Transfers</td>
<td>2</td>
</tr>
<tr>
<td>Consolidate inbound/outbound routing</td>
<td>3</td>
</tr>
<tr>
<td>Faster trip to Charles Street Terminal</td>
<td>3</td>
</tr>
<tr>
<td>Better service to Cameron Heights C.I.</td>
<td>2</td>
</tr>
<tr>
<td>No reason provided</td>
<td>16</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

### Destinations for Route 11 Riders

<table>
<thead>
<tr>
<th>Destination</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destinations along King Street</td>
<td>4</td>
</tr>
<tr>
<td>Destinations along Charles Street</td>
<td>2</td>
</tr>
<tr>
<td>Transfer at Charles Street Terminal</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
</tbody>
</table>
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Design and Construction

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

DATE: June 19, 2012

FILE CODE: 5590

SUBJECT: CONSULTANT SELECTION – DETAILED DESIGN AND SERVICES DURING CONSTRUCTION, FOUNTAIN STREET BRIDGE REHABILITATION OVER THE GRAND RIVER, CITY OF CAMBRIDGE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into a Consultant Services Agreement with Delcan Corporation of Kitchener, Ontario to provide consulting engineering services for the detailed design, contract administration and construction inspection for the rehabilitation of the Fountain Street Bridge over the Grand River at an upset fee limit of $425,455.00 plus applicable taxes for the detailed design phase, with contract administration and construction inspection to be paid on a time basis.

SUMMARY:

The Region of Waterloo wishes to proceed with the rehabilitation of the Fountain Street Bridge in the City of Cambridge in 2015. In order to meet this timeline, an engineering consultant must be hired now to undertake the detailed design and construction administration. Staff has determined that it is necessary to commence the engineering for this project now in order to provide sufficient time to complete the design and obtain all necessary approvals in advance of construction.

An invitation for Letters-of-Interest to provide engineering services was advertised in the Waterloo Region Record. Eight (8) firms submitted proposals and three (3) firms were short-listed and invited to submit detailed work plans and fee estimates.

Based on the evaluation criteria, review of the detailed work plans, schedules and upset fees provided, the Evaluation Team recommends that Delcan Corporation be retained to undertake this assignment at an upset fee limit of $425,455.00 plus applicable taxes for the detailed design phase with contract administration and construction inspection to be paid on a time basis.

Delcan Corporation’s fees of $425,455.00 plus applicable taxes for the detailed design phase are within the consulting fee allowance provided for in the total project budget of $12,275,000. The Region’s approved 2012 Ten Year Transportation Capital Program includes funds of $475,000 in 2012 for this project which is sufficient to fund the projected 2012 expenditures for this project.
REPORT:

1. Background

The Fountain Street Bridge over the Grand River in the City of Cambridge is identified in the Region’s approved 2012 Ten Year Transportation Capital Program for rehabilitation in 2015. Please refer to Appendix ‘A’ for a Key Plan of the Fountain Street Bridge. In 2010, the Region retained Delcan Corporation to provide engineering services for what was expected to be a routine rehabilitation of the Fountain Street Bridge. During the early stages of completing their assignment, Delcan found that the Fountain Street Bridge superstructure, including the bridge deck, barrier walls, sidewalk and driving surface, was in generally poor condition and that it would be more cost effective to replace the entire bridge superstructure than to rehabilitate it. Delcan also advised that the existing abutments and piers can remain with minor rehabilitation. The engineering services required for a complete bridge superstructure replacement are much greater in scope than for routine bridge rehabilitation. Based on the Region’s Purchasing Bylaw and the anticipated value of the engineering services required for the bridge superstructure replacement, staff assessed that Delcan’s assignment could not be extended and that a competitive consultant selection process was now required for engineering services for the Fountain Street Bridge superstructure replacement.

The Region’s approved 2012 Ten Year Transportation Capital Program includes funding in the amount of $12,275,000 in years 2012-2015 for the detailed design and construction of the Fountain Street Bridge rehabilitation in the City of Cambridge. Regional staff does not have the structural expertise to undertake this type of project. For this reason, staff recommends that an external consultant be hired to complete this project now in order to provide sufficient time to consider various alternatives for rehabilitation, obtain the necessary approvals, co-ordinate any utility relocations and complete the detailed design in advance of the scheduled 2015 construction.

Based on a preliminary assessment completed by staff, the Fountain Street Bridge is not considered to be a bridge of heritage interest. As the bridge is located adjacent to the Blair Village Heritage Conservation District (HCD), a Heritage Impact Assessment is being completed that will be limited to assessing the potential impacts of the new bridge superstructure on the Blair HCD. It is anticipated that the detailed design for the new bridge superstructure will include consideration of a minor widening to provide for cycling and pedestrian facilities on each side of the bridge, and open-handrail type barriers on each side of the bridge. Additionally, options for maintaining or detouring traffic during construction will be developed and assessed as part of this consulting assignment.

2. Consultant Selection

An invitation to submit Letters-of-Interest to provide engineering services for this project was advertised in the Waterloo Region Record on March 9, 2012. Eight (8) consultants submitted a Letter-of-Interest. From a review of the submissions, three (3) firms were short listed based on their qualifications and these consultants were asked to submit a detailed work plan and upset fee for the detailed design phase. The short-listed consultants were also requested to submit an estimate of fees for contract administration and construction inspection services.

The three (3) short-listed consultants were:

- AECOM Canada Ltd.;
- Delcan Corporation; and
- McCormick Rankin Corporation
The Evaluation Team involved with the consultant selection consisted of:

- Dave Weiler, Head, Transportation Capital Projects, Design and Construction Division
- Don Pletch, Senior Project Manager, Design and Construction Division
- John Stephenson, Senior Project Manager, Design and Construction Division
- Robert Gallivan, Manager, Transportation Program Development

The evaluation criteria used for selecting the successful consultant were consistent with the Region’s Purchasing Bylaw which includes price as a factor in the selection process. These evaluation criteria and their respective weightings were as follows:

**Quality Factors**

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

**Equity Factors**

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

**Price Factor**

- Upset Limit Fee: 15%

The Letters-of-Interest submitted by all three short-listed consultants demonstrated a good understanding of the project with capable project teams and experience on numerous similar projects. When considering the combination of quality, equity and price factors described above, Delcan Corporation scored the highest of the three short-listed consultants. Delcan Corporation’s upset fee of $425,455.00 plus applicable taxes for the detailed design component was 5.4% below the mean of the prices submitted.

Based on the above evaluation criteria, including review of the detailed work plans, schedules and upset fees provided, the Evaluation Team recommends that Delcan Corporation be retained to undertake the detailed design, contract administration and construction inspection of this project.

3. **Scope of Work**

For this engineering assignment, the consultant will complete the following tasks: review the previous bridge investigations and complete any further investigations required, complete a cultural heritage impact assessment, identify and evaluate bridge superstructure replacement alternatives, complete preliminary and final design of the bridge rehabilitation improvements, develop construction staging plans, prepare contract drawings, specifications and tender documents, obtain all necessary agency approvals, assist during the tendering period, provide contract administration and site inspection services during construction, prepare record drawings, and provide post-construction services during the warranty period. A breakdown of the successful consultant’s upset fee is included in Appendix B attached to this report.
4. Schedule

Subject to Council’s approval of this consultant assignment, the proposed project schedule is outlined below.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Design</td>
<td>June 2012 to October 2012</td>
</tr>
<tr>
<td>Detailed Design and Approvals</td>
<td>October 2012 to October 2014</td>
</tr>
<tr>
<td>Construction</td>
<td>May 2015 to November 2015</td>
</tr>
</tbody>
</table>

5. Consultant’s Upset Fee

The short-listed consultants were each requested to submit an upset fee for professional services to complete the detailed design and were also requested to submit an estimate for contract administration and construction inspection fees. For road and bridge projects, the time required for contract administration and construction inspection can vary significantly depending on weather conditions, the actual contractor hired for construction and other unknown variables. Because an upset fee does not lend itself well to these types of services, it has been the Region’s practice on road and bridge projects to pay for contract administration and construction inspection fees on a time basis. It is recommended that this same practice be followed for this project. For budgetary purposes, staff has estimated the cost of contract administration and construction inspection services to be $298,000.00 plus applicable taxes, which is based on the preliminary estimate of fees submitted by Delcan Corporation and a review of costs on similar projects. The upset limit for Delcan Corporation to undertake the detailed design phase for this assignment is $425,455.00 plus applicable taxes.

The Region’s total budget for the Fountain Street Bridge Rehabilitation in the City of Cambridge is $12,275,000. Based on this total value of $12,275,000, the consultant’s upset fee limit for the detailed design services of $425,455.00 plus applicable taxes represents approximately 3.5% of the estimated total cost for this project which is a competitive fee for a project of this type and complexity.

CORPORATE STRATEGIC PLAN:

This project is in harmony with the Region’s Corporate Strategic Plan in that implementation of the Fountain Street Bridge Rehabilitation achieves Focus Area #2.2 (“Develop, Optimize and Maintain Infrastructure to Meet Current and Projected Needs”) and specifically Strategic Objective 2.2.1 which is to ensure all Regional programs and services continue to prioritize and implement capital program projects required to meet community needs and ensure sustainability.

FINANCIAL IMPLICATIONS:

Based on the upset fee schedule received from Delcan Corporation, the total cost for the detailed design phase is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upset Consulting Fee</td>
<td>$425,455.00</td>
</tr>
<tr>
<td>HST (13%)</td>
<td>$55,309.15</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>$480,764.15</td>
</tr>
<tr>
<td>Less Municipal HST Rebate of 86.46%</td>
<td>$47,820.29</td>
</tr>
<tr>
<td>Net Cost of Consulting Assignment</td>
<td>$432,943.86</td>
</tr>
</tbody>
</table>
The Region’s approved 2012 Ten Year Transportation Capital Program includes $12,275,000 in 2012-2015 inclusive for this project to be funded from the Roads Rehabilitation Reserve Fund.

Delcan Corporation’s fees for the detailed design phase of this consulting assignment in the amount of $425,455.00 plus applicable taxes are within the consulting fee allowance provided for the in the total budget of $12,275,000 for this project. The Region’s approved 2012 Ten Year Transportation Capital Program includes funds of $475,000.00 in 2012 for this project which is sufficient to fund the projected 2012 expenditures for this project.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

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

PREPARED BY: Don Pletch, Senior Project Manager, Design and Construction

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

**Delcan Corporation - Upset Fee Breakdown**
Fountain Street Bridge Rehabilitation over the Grand River
City of Cambridge

<table>
<thead>
<tr>
<th>Task</th>
<th>Upset Fee (excluding HST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Data Collection, Preparation of Base Plans</td>
<td>$93,165.00</td>
</tr>
<tr>
<td>2 Preliminary Design</td>
<td>$64,586.00</td>
</tr>
<tr>
<td>3 Detailed Design</td>
<td>$120,982.00</td>
</tr>
<tr>
<td>4 Project Management</td>
<td>$71,117.00</td>
</tr>
<tr>
<td>5 Contract Documents, Specifications and Tendering</td>
<td>$75,605.00</td>
</tr>
<tr>
<td><strong>Total Upset Fee (Excluding HST)</strong></td>
<td><strong>$425,455.00</strong></td>
</tr>
</tbody>
</table>
Regional Municipality of Waterloo

BISHOP STREET IMPROVEMENTS
CONESTOGA BOULEVARD TO CONCESSION ROAD
City of Cambridge

INFORMATION PACKAGE

Public Consultation Centre
Thursday, June 21, 2012
4:30 p.m. – 8:00 p.m.

at

Langs
Main Floor, Health Promotion Room (E105 & E106)
1145 Concession Road, Cambridge

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

The Region of Waterloo is currently considering improvements to Bishop Street from Concession Road to Conestoga Boulevard in the City of Cambridge. (Please refer to Appendix ‘A’ for a Key Plan.) This project has been initiated to address deteriorated roadway and underground infrastructure on Bishop Street between Concession Road and Conestoga Boulevard.

Improvements currently under consideration include:

- Full reconstruction of the deteriorated pavement structure on Bishop Street from Concession Road to Conestoga Boulevard;
- Replacement of watermain and storm sewers within the project limits; and
- Construction of on-road cycling lanes and enhanced pedestrian facilities on Bishop Street from Concession Road to Conestoga Boulevard.

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

2. Who is Directing the Planning of These Improvements?

The planning for these infrastructure improvements is being undertaken by a “Project Team” consisting of staff from the Region of Waterloo, the City of Cambridge and City of Cambridge Ward 3 Councillor Karl Kiefer.

3. What Improvements are being Considered?

Based on technical studies completed for this project, relevant Regional planning documents, including the Cycling Master Plan and Context Sensitive Corridor Design Guidelines, and other applicable Regional policies and practices, the Project Team has identified a preliminary preferred design concept for the improvements to Bishop Street from Conestoga Boulevard to Concession Road described as follows:

- Complete replacement of the pavement structure on Bishop Street;
- Construction of concrete curb and gutter on each side of Bishop Street within the project limits;
- Construction of new 1.80 metre wide sidewalk where none currently exists on Bishop Street and replacement of some sections of the existing 1.20 metre wide sidewalk with 1.80 metre wide sidewalk;
- Construction of 1.25 metre wide reserved on-road cycling lanes on each side of Bishop Street;
- Wider boulevards and enhanced boulevard landscaping where feasible;
- Replacement of the City of Cambridge watermain between Mary Avenue and Industrial Road including replacement of services to abutting properties within the road allowance;
• Replacement of some sections of the existing storm sewer system on Bishop Street;
• Construction of new designated left-turn lanes on Bishop Street at the east and west leg of Industrial Road;
• Improvements to transit stops along Bishop Street;
• Rehabilitation of the Groff Mill Creek Culvert;
• Street lighting upgrades within the project limits; and
• Installation of new underground traffic control signal infrastructure at the intersection of Bishop Street and east leg of Industrial Road in order to facilitate new traffic control signals at this intersection when recommended.

Please refer to Appendix ‘B’ for drawings of the Project Team’s Preferred Design Concept for Bishop Street.

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

The Project Team’s proposed improvements are being made to address both the deteriorated roadway and underground infrastructure as well as to include enhancements to the roadway corridor consistent with Regional Bylaws, policies, plans and practices. The Regional Official Plan gives direction to balance new and retrofitted roads for all modes of transportation including walking, cycling, autos and transit. In addition, Regional Council also approved the Regional Transportation Master Plan and the Regional Transportation Corridor Design Guidelines in 2010 that support the integration of active and sustainable transportation on all Regional Roads. This project supports the Regional Transportation Master Plan (RTMP) goals of optimizing our transportation system, promoting transportation choice, supporting sustainable development and fostering a strong economy. This project will improve the walking environment by providing continuous sidewalks throughout the project limits and increasing the separation between pedestrians and vehicles where feasible. This project also includes provision of on-road cycling lanes on each side of Bishop Street from Conestoga Boulevard to Concession Road, as well as transit stop improvements.

5. Were Roundabouts Considered for this Project?

The implementation of modern roundabouts was considered by the Project Team to replace the existing traffic control signals at the intersection of Bishop Street and Conestoga Boulevard and at the intersection of Bishop Street and the east leg of Industrial Road, where traffic control signals may become recommended in the future. The completed evaluations found that taking into account the estimated capital and operating costs of traffic control signals and roundabouts, collision histories at these intersections and property constraints, roundabouts are not recommended over traffic control signals at these intersections.

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

The Project Team’s Preferred Design Concept incorporates a minimum 1.0m wide grassed boulevard in most areas between the curb and gutter and sidewalk on both sides of Bishop Street from Conestoga Boulevard to Concession Road. This wider boulevard area will
provide more space for enhanced boulevard landscaping on Bishop Street to improve the pedestrian environment.

A 1.20 metre wide sidewalk currently exists on some sections of Bishop Street within the project limits. These existing sidewalks will require removal in some locations in order to accommodate the road reconstruction; however, any sections removed will be fully reinstated with 1.80 metre wide sidewalk. Additionally, new 1.80 metre wide sidewalk will be constructed where none currently exists in order to provide continuous pedestrian facilities on both sides of Bishop Street within the project limits.

7. Who is Responsible for Clearing Snow from Sidewalks on Bishop Street?

In the City of Cambridge, the City removes all snow from sidewalks on Regional Roads fronting commercial and industrial properties. For sidewalk abutting residential properties, the abutting property owner is responsible for snow removal in accordance with the City’s By-law.

8. How Will On-Road Parking be Affected on Bishop Street?

On-road parking is currently permitted on Bishop Street from Concession Road to Hespeler Road. The construction of reserved on-road cycling lanes on Bishop Street will require that on-road parking be prohibited on both sides of Bishop Street from Concession Road to Hespeler Road. On-road parking is currently prohibited on Bishop Street from Hespeler Road to Conestoga Boulevard and no change is planned for this section as part of this project.

9. Will the Improvements Impact Heritage Features?

There are no properties with identified heritage interest within the project limits.

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

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

Two-way traffic will be maintained at all times during construction. Traffic will be diverted onto paved shoulder areas in order to provide sufficient room to maintain traffic in each direction.

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

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

As is customary through Regional Road construction zones, the public will be advised of the construction timing and traffic restrictions through advance signage, the Region’s web site, and radio and newspaper notices.
11. How will Access be Maintained to Properties during Construction?

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

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

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

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

12. Will Property Acquisition be Required for this Project?

The Region will not require additional property for this project.

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

There is one coniferous tree located on the north side of Bishop Street in front of the Frito Lay property that will need to be removed to accommodate the proposed improvements. In some areas existing shrubs that encroach into the road allowance may also require relocation or replacement due to conflicts with new sidewalks and utilities installed at or near the property line.

New boulevard trees will be planted along Bishop Street where space permits as part of this project.

Driveways will be regraded, extending onto private property if necessary, in order to blend smoothly with the newly constructed roadway.

Lawns disturbed during construction will be repaired to equal or better condition with topsoil and sod.
14. Will there be Water Service Shutdowns during Construction?

As part of this project, the City of Cambridge watermain on Bishop Street will be replaced from Mary Avenue to Industrial Road. To ensure that a water supply is available to all abutting properties during construction, a temporary water distribution system will be installed in this location prior to the replacement of underground water utilities. The temporary water supply system will be installed as per the Region’s standards and tested at frequent intervals to ensure a safe water supply is provided.

The City of Cambridge has advised that there will be no consumption charges for water usage for abutting properties supplied from a temporary water supply distribution system during construction.

Temporary water service interruptions to your property will be required during construction. Water service interruptions will likely be less than ½ a day in duration and will likely occur between 9:00 am and 2:30 pm Monday to Friday unless other arrangements have been made. "Notices of Water Service Interruption" will be delivered to your front door a minimum of 24 hours before any required water service shutdown.

15. Can my Existing Water Service be Upgraded?

As part of the watermain replacement work on Bishop Street from Mary Avenue to Industrial Road, all water services will be replaced from the watermain to the property line with a service of the same size.

If property owners on Bishop Street wish to upgrade their water service from the watermain to the property line with a larger diameter service, they are encouraged to have this work included in this project. Undertaking these improvements in conjunction with the proposed construction typically results in cost savings to the property owner as compared to undertaking the work independently at another time in the future. Subject to a mutual agreement between the City of Cambridge and the property owner, existing water services may be upgraded from the main under the road to the property line at the property owner’s expense.

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

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

16. Can my Existing Sanitary Service be Upgraded?

If property owners wish to replace their sanitary service from the sewer main to the property line with a larger diameter service, they are encouraged to have this work included in this project. Undertaking these improvements in conjunction with the proposed construction
typically results in cost savings to the property owner as compared to undertaking the work independently at another time in the future. Subject to a mutual agreement between the City of Cambridge and the property owner, existing sanitary services may be upgraded in size from the sanitary sewer under the road to the property line at the property owner’s expense.

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

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

17. How has Existing TCE Contamination been Considered?

There is existing trichloroethylene (commonly known as TCE) contamination of the groundwater in the vicinity of Bishop Street, including portions of the Bishop Street right-of-way. TCE is a hydrocarbon commonly used as an industrial solvent. The existing TCE contamination of the groundwater is being addressed through remedial measures that have been installed underground. The TCE contamination is located at depths greater than six (6) metres. As part of the Bishop Street Improvements, excavation for watermain and storm sewers will be limited to depths of not more than five (5) metres. Accordingly, the proposed improvements to Bishop Street are not expected to disturb any TCE contaminated soils or groundwater, or any existing remedial measures that have been put in place. However, regular soil sampling and monitoring of the ground water and soil vapours will be conducted during construction. In the unlikely event that any TCE is encountered in soils, groundwater or vapours during construction, all appropriate documentation and remedial measures will be undertaken in accordance with legislated requirements.

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

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

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

19. What about Dust During Construction?

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

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

The total estimated cost of this project is $5,810,000. The Region of Waterloo will be funding the road improvements (i.e. asphalt roadway, cycling lanes, driveway and boulevard restoration and landscaping), the sidewalk and the major portion of the storm sewer replacement costs through its approved 2012 Ten Year Transportation Capital Program. The Region’s share of the estimated cost is $5,460,000. The City of Cambridge will be funding the replacement costs for the City’s watermain and a portion of the storm sewer replacement costs. The City’s share of the estimated cost is $350,000.

22. What are the Next Steps?

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

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

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

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

In order to assist us in addressing any comments or concerns you might have regarding this project, we ask that you please fill out the attached Comment Sheet and leave it in the box provided at the registration table. Alternatively, you can mail, fax or e-mail your comments to the Region of Waterloo not later than July 6, 2012.
We thank you for your involvement and should you have any questions or concerns, please contact either:

**Mr. Samer Inchasi, P. Eng., PMP**
Senior Project Manager
Regional Municipality of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3
Phone: 519-575-4757 Ext. 3696
Fax: 519-575-4430
Email: SInchasi@regionofwaterloo.ca

**Mr. Peter Jefford, P. Eng.**
Senior Project Manager
Delcan Corporation (Consultant)
675 Queen Street South, Suite 201
Kitchener, ON N2M 1A1
Phone: 519-744-4509
Fax: 519-744-2822
Email: p.jefford@delcan.com
APPENDIX A

BISHOP STREET IMPROVEMENTS
Conestoga Boulevard to Concession Road

Region of Waterloo

BISHOP STREET IMPROVEMENTS
CONESTOGA BOULEVARD TO
CONCESSION ROAD
CITY OF CAMBRIDGE
BISHOP STREET IMPROVEMENTS
Conestoga Boulevard to Concession Road

APPENDIX B-5
BISHOP STREET IMPROVEMENTS
Conestoga Boulevard to Concession Road

APPENDIX B-6
COMMENT SHEET

REGIONAL MUNICIPALITY OF WATERLOO

BISHOP STREET IMPROVEMENTS
City of Cambridge

PUBLIC CONSULTATION CENTRE

Please complete and hand in this sheet so that your views can be considered for this project. If you cannot complete your comments today, please take this home and mail, fax or e-mail your comments by July 6, 2012 to:

Mr. Samer Inchasi, P. Eng., PMP
Senior Project Manager
Regional Municipality of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3
Phone: 519-575-4757 Ext. 3696
Fax: 519-575-4430
Email: sinchasi@regionofwaterloo.ca

Mr. Peter Jefford, P. Eng.
Senior Project Manager
Delcan Corporation (Consultant)
675 Queen Street South, Suite 201
Kitchener, ON N2M 1A1
Phone: 519-744-4509
Fax: 519-744-2822
Email: p.jefford@delcan.com

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

Comments or concerns regarding this project:

__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

Name: ____________________________
Address: ________________________________
Postal Code: __________________________

COLLECTION NOTICE

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

NORTHFIELD DRIVE CORRIDOR

CLASS ENVIRONMENTAL ASSESSMENT STUDY

KING STREET TO DAVENPORT ROAD

City of Waterloo / Township of Woolwich

INFORMATION PACKAGE

Public Consultation Centre
Thursday, June 28th, 2012
5:00 p.m. – 8:00 p.m.
at
St. Luke Catholic School
550 Chesapeake Drive, Waterloo, ON

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

The Region of Waterloo is currently undertaking a Class Environmental Assessment (Class EA) Study to consider transportation improvements to Northfield Drive from King Street to University Avenue in the City of Waterloo. As part of this Class EA Study, the Region is also assessing the need for improvements to the Bridge Street/University Avenue corridor from Northfield Drive to King Street. Please refer to Appendix ‘A’ for a Key Plan of the Study Area. Northfield Drive is an arterial roadway under the jurisdiction of the Regional Municipality of Waterloo. Bridge Street and University Avenue from King Street to Northfield Drive are under the joint jurisdiction of the City of Waterloo and Township of Woolwich.

Alternative transportation solutions being considered in this Class EA Study include:

- Improvements to Northfield Drive from King Street to University Avenue including road reconstruction, widening and/or intersection improvements;
- Improvements to the Bridge Street/University Avenue corridor from King Street to Northfield Drive, including pavement rehabilitation, intersection improvements and/or realignment of Bridge Street to the Highway 85/Regional Road No. 15 interchange or a new alignment of University Avenue from Northfield Drive to the Highway 85/Regional Road No. 15 interchange; and,
- A combination of improvements to both Northfield Drive and the Bridge Street/University Avenue corridor.

This Public Consultation Centre is a forum for you to:

- Become informed of the current and future traffic operational issues;
- Review the alternative solutions that have been developed;
- Learn how these alternatives solutions are being evaluated by the Project Team; and review the identified preliminarily preferred alternative solution.
- Ask questions of Regional staff; and
- Provide comments on the alternative solutions under consideration and indicate which alternative solution you prefer.

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

The Class Environmental Assessment Process is a formal planning process approved under the *Ontario Environmental Assessment Act* for the planning of municipal infrastructure projects. Under the Class EA process, consultation with the public and stakeholders is a key component. Please refer to Appendix ‘B’ for more information about the Class EA process. This planning study is being carried out in accordance with Schedule “C” requirements under the Municipal Class Environmental Assessment. Under the Class EA process, alternative planning solutions are first developed and assessed. Upon selecting a recommended alternative solution, the Class EA process then involves the development and assessment of alternative design options for the recommended solution.

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

This Class EA Study is being directed by a “Project Team” consisting of staff from the Region of Waterloo, the City of Waterloo, the Township of Woolwich, Regional Councillor Sean Strickland, and City of Waterloo Councillor Diane Freeman. The engineering consulting firm of HDR Corporation has been retained by the Region to assist with the Class EA Study.

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

The Region’s Transportation Master Plan (RTMP) is a comprehensive plan spanning several areas of transportation besides roadways including enhancement to the walking and cycling network, transit and transportation demand management. Even with the achievement of significant increases in these forms of transportation, the RTMP identified the need to widen Northfield Drive from Davenport Road to University Avenue within the five (5) to ten (10) year timeframe in order to provide adequate capacity for the forecasted traffic volumes along this corridor. The Region’s RTMP also identifies the potential need for capacity improvements to the Bridge Street/University Avenue corridor from Northfield Drive to King Street in the 10 to 20 year timeframe. Additionally, the Region’s Cycling Master Plan identifies the section of Northfield Drive from King Street to University Avenue as a candidate for on-road cycling lanes. Currently, there are limited pedestrian facilities along Northfield Drive within the Study limits. The existing roadway asphalt on Northfield Drive from King Street to University Avenue is in fair to poor condition and in need of rehabilitation or replacement.
5. **What Alternative Solutions are Being Considered?**

A detailed Transportation Study has been completed as part of this Class EA Study. The purpose of the Transportation Study was to examine existing traffic operations within the study area, forecast future traffic volumes, and identify and evaluate alternative transportation solutions for accommodating forecasted traffic volumes and improving traffic operations. Current and forecasted traffic volumes on Northfield Drive and on the Bridge Street/University Avenue corridor are summarized in Appendix 'C' of this Information Package.

The following nine (9) alternative solutions were developed and are being considered by the Project Team. These alternative solutions are described as follows:

**Northfield Drive Improvements Only**

**Alternative 1A** - ‘Do Nothing’ – Rehabilitation of Northfield Drive in its current configuration.

**Alternative 1B** - Reconstruction of Northfield Drive including the following intersection improvements:
- Install underground traffic control plant for traffic control signals at the intersection of Toman Drive and Northfield Drive with the traffic control signals being installed when warranted in the future;
- Construction of new westbound designated dual left-turn lanes on Northfield Drive at King Street; and,
- Extension of the existing left-turn and right-turn lanes on Northfield Drive at Kraus Drive, Davenport Road, Wissler Road, Bridge Street, Toman Drive and University Avenue to accommodate forecasted traffic volumes.

**Alternative 1C** – Reconstruct and widen Northfield Drive to provide for two (2) through lanes of traffic in each direction, intersection improvements as per Alternative 1B, pedestrian and cycling facilities, transit stop improvements and new boulevard trees where feasible.

**Bridge Street/University Avenue Corridor Improvements Only**

**Alternative 2A** – Rehabilitate the existing Bridge Street/University Avenue corridor in its current configuration and construct new turn lanes at the intersection of King Street and Bridge Street.

**Alternative 2B** – Construct a minor realignment of a section of Bridge Street (King Street to University Avenue) to connect to the Highway 85/Regional Road
No.15 interchange and rehabilitate the remaining sections of Bridge Street/University Avenue.

**Alternative 2C** - Construct a new University Avenue road alignment from Highway 85/Regional Road No. 15 interchange to the intersection of University Avenue and Northfield Drive.

Please refer to Appendix ‘D’ for drawings of Alternative Solutions 2B and 2C.

**Improvements to both Northfield Drive and the Bridge Street/University Avenue Corridor**

**Alternative 3A** - Reconstruct and widen Northfield Drive as per Alternative 1C and
Rehabilitate the existing Bridge Street/University Avenue corridor as per Alternative 2A.

**Alternative 3B** - Reconstruct and widen Northfield Drive as per Alternative 1C and
Construct a minor realignment of Bridge Street as per Alternative 2B.

**Alternative 3C** - Reconstruct and widen Northfield Drive as per Alternative 1C and
Construct a new University Avenue road alignment as per Alternative 2C.

**6. How are the Alternative Solutions Being Evaluated?**

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

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

**Socio-Economic Environment:** How does the alternative affect the residential and commercial properties abutting the road (driveway access, land fragmentation, property impacts, noise, neighbourhood impacts, archaeological, and cultural heritage)?

**Natural Environment:** How does the alternative affect watercourse impacts, existing trees, stormwater management, floodplain impacts, aquatic species and habitat, vegetation and wildlife?

**Cost:** What is the total capital cost of the alternative including the cost for road construction, utility and streetlighting, property acquisitions, intersection control improvements and landscaping?
Each alternative solution has been preliminarily evaluated by the Project Team using the aforementioned criteria. Note that all alternative solutions remain under consideration and are being presented for public comment at this Public Consultation Centre. Upon receiving input from the public and technical agencies, the Project Team will re-assess the alternatives before confirming the Project Team’s Recommended Alternative Solution and proceeding forward with this Class EA Study.

7. **Which Alternative Solution is Preferred by the Project Team?**

Prior to this Public Consultation Centre, the Project Team identified a preliminarily preferred alternative solution. The Project Team has identified *Alternative Solution No. 1C* as the preliminarily Preferred Alternative Solution. Alternative No. 1C includes the following improvements:

- Reconstruct and widen Northfield Drive to provide for two (2) through lanes of traffic in each direction;
- Construct intersection improvements as follows:
  - Install underground traffic control plant for traffic control signals at the intersection of Toman Drive and Northfield Drive with the traffic control signals being installed when warranted in the future;
  - Construction of new westbound dual left-turn lanes on Northfield Drive at King Street; and,
  - Extension of existing left-turn and right-turn lanes on Northfield Drive at Kraus Drive, Davenport Road, Wissler Road, Bridge Street, Toman Drive and University Avenue to accommodate forecasted traffic volumes.
- Urbanize Northfield Drive with concrete curb & gutter and install a new storm sewer collection system with quality and/or quantity storm water control measures as appropriate;
- Provide pedestrian and cycling facilities on Northfield Drive consisting of some combination of concrete sidewalks, multi-use asphalt trails and reserved on-road cycling lanes;
- Provide streetlighting on each side of Northfield Drive; and,
- Provide transit stop improvements and boulevard tree planting where feasible.

Based on the Project Team’s evaluation, Alternative 1C is the only solution that adequately addresses the transportation needs along the Northfield Drive corridor in the short-to-medium term for a reasonable cost. Alternative 1C has acceptable environmental and socio-economic impacts which can be mitigated during construction, and includes enhanced facilities for cyclists and pedestrians.

Improvements to the Bridge Street/University Avenue corridor (Alternatives 2A – 2C) provide only a marginal benefit from a transportation standpoint and do not address the traffic needs without widening Northfield Drive. The new roadway alignments
considered for the Bridge Street/University Avenue corridor (Alternatives 2B and 2C) have significant environmental impacts associated with the construction at creeks and within the floodplain and would involve significant property impacts.

Alternatives which consider improvements to both Northfield Drive and Bridge Street/University Avenue (Alternatives 3A – 3C) provide only marginal additional transportation benefits compared to Alternative 1C – Reconstruct and Widen Northfield Drive at a significantly higher cost than Alternative 1C. The Project Team recommends that the need for transportation improvements to the Bridge Street/University Avenue corridor be reviewed within the 10-year timeframe.

Please refer to Appendix ‘E1’ for the Project Team’s Summary of the Preliminary Evaluation of the Alternative Solutions and Appendix ‘E2’ for the Project Team’s Detailed Preliminary Evaluation of the Alternative Solutions.

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

Currently there are 1.50 metre wide concrete sidewalks on both sides of Northfield Drive from King Street to Davenport Road and a 1.50 metre wide concrete sidewalk on the south side of Northfield Drive from Davenport Road to Wissler Road. There are currently no cycling facilities on Northfield Drive within the Study Area. Additionally, there are no cycling or pedestrian facilities on the Bridge Street/University Avenue corridor. Enhanced cycling and pedestrian facilities in the form of concrete sidewalks, multi-use asphalt trail and on-road cycling lanes are being considered as part of this Class EA Study in accordance with the Region’s Context Sensitive Corridor Design Guidelines.

Included with the alternative solutions presented at this Public Consultation Centre are drawings illustrating typical examples of cycling and pedestrian facilities that are commonly used within the Region of Waterloo. Please refer to Appendix ‘F’ for drawings illustrating typical examples of roadways with on-road cycling lanes, sidewalks and multi-use trails. The Project Team is now requesting input from the public regarding preferences for on-road cycling facilities, multi-use trail and/or sidewalk facilities as part of this project. Your comments will be reviewed by the Project Team during the next phase of this Class EA Study in developing a preferred alternative design for the proposed improvements.

Under Alternative 1C, the Project Team is proposing that new trees be planted in boulevard areas along Northfield Drive where space permits. Additionally, where boulevard room is limited at intersections, the use of enhanced hard surface features, such as coloured impressed concrete, will be considered in order to improve the aesthetics of the roadway corridor.
9. **Were Roundabouts Considered for this Project?**

The implementation of modern roundabouts were considered by the Project Team to replace the existing traffic control signals on Northfield Drive at its intersections with King Street, Kraus Drive, Davenport Road, Wissler Road, Bridge Street and University Avenue as well as the intersection of Northfield Drive and Toman Drive where traffic control signals are expected to become warranted in the near future. The Project Team’s completed evaluation found that taking into account the estimated capital and operating costs of traffic control signals and roundabouts, collision histories at each intersection and property constraints, roundabouts were not recommended over traffic control signals at these intersections.

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

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

11. **Will Property be Required from Abutting Property Owners?**

Implementation of the Project Team’s preliminarily Preferred Alternative Solution 1C to reconstruct and widen Northfield Drive to provide for two (2) through lanes of traffic in each direction with intersection improvements, and pedestrian and cycling facilities will require that the Region acquire property from a small number of abutting property owners, primarily at intersections. Under Alternatives 2B and 2C, the realignment of the Bridge Street/University Avenue Corridor or a new alignment of University Avenue, significant amounts of property will be required. In areas where property is required, the property owner will be contacted directly by the Region of Waterloo’s Land Property Agent. Compensation will be provided at fair market rates based on recent similar area sales.
Please refer to Appendix ‘G’ for the list of potentially impacted property locations for the Project Team’s Preferred Alternative Solution No. 1C.

12. Will the Posted Speed Limit or Parking Restrictions be Changed?

Within the Study limits, Northfield Drive is currently posted at 60 km/hr and Bridge Street/University Avenue is posted at 50 km/hr. Parking is currently prohibited on Northfield Drive but is not currently prohibited on Bridge Street/University Avenue. No change to the posted speed limits or existing parking by-laws are proposed under any of the proposed alternative solutions.

13. How will Traffic and Property Access be Maintained During Construction?

Under the Project Team’s Preferred Alternative Solution 1C, it is anticipated that two-way traffic on Northfield Drive will be maintained at most times during construction. Access to private driveways will be maintained during construction, with the exception of possible limited short-term periods when access may not be feasible, in which case arrangements for alternate access will be made.

14. Who is Responsible for Clearing Snow from Sidewalks on Northfield Drive?

Should new additional sidewalk ultimately be included as part of these improvements, properties fronting Northfield Drive are responsible for clearing the snow from sidewalks.

15. How Has the Region’s Rapid Transit Project Been Considered?

The Region of Waterloo is in the process of implementing Phase 1 of the Rapid Transit Initiative. The proposed light rail transit line (LRT) is to be located on Northfield Drive between the existing railway crossing (west of Highway 85) and King Street and on King Street from Northfield Drive to the Conestoga Mall. The intersection of King Street and Northfield Drive will be designed to accommodate the needs of both the LRT and the transportation improvements identified for Northfield Drive. Additionally, the construction timing of any improvements to Northfield Drive will need to be scheduled to avoid any conflicts with construction of the LRT.

16. When will Construction Occur?

Subject to completion of this Class EA Study and receipt of all technical and financial approvals, property acquisition and utility relocation, construction is tentatively scheduled for 2017 in the Region’s Transportation Capital Program. Depending on the alternative solution ultimately approved, it may be possible to advance construction to as early as 2015.
17. **How will this Project be Funded?**

Funding for road improvements to Northfield Drive is included in years 2012 – 2018 of the Region’s approved 2012 Ten Year Transportation Capital Program. The source of the project funding is the Region’s Roads Capital Levy and the Development Charge Reserve Funds.

The estimated project cost for Alternative 1C, Reconstruction and Widening of Northfield Drive is $7.5 Million.

18. **What are the Next Steps for This Project?**

Prior to making a final decision on the preferred alternative solution, the Project Team is asking for the public’s input. This Public Consultation Centre is your opportunity to ask questions, provide suggestions, and indicate which alternative solution you prefer. Any public input received by the Region will be given careful consideration and will be documented as part of the Class EA Process. The Project Team is also seeking input from the public at this time regarding preferences for cycling and pedestrian facilities in order to assist the Project Team in developing the Preferred Alternative Design.

Once your input is received, it will be used by the Project Team, in conjunction with the other relevant information, to establish a Recommended Alternative Solution for this project and in developing a preferred alternative design.

We will advise all those members of the public who registered at this Public Consultation Centre as well as adjacent property owners and tenants by mail of future opportunities for the public to provide input on this project.

19. **When Will Final Decisions be Made for this Project?**

The Project Team will seek further public input on this project in the Fall of 2012. Once a final design concept has been developed by the Project Team, the Final Recommendation will be presented to the Regional Planning & Works Committee in late 2012 for approval. In advance of this meeting, letters will be sent to all adjacent property owners and tenants (as well as those members of the public specifically registering at this Public Consultation Centre) so that anyone wishing to speak to Committee or Council about this project can do so before final approval.
20. **How can I Voice my Comments at this Stage?**

In order to assist us in addressing any comments or concerns you might have regarding this project, we ask that you please fill out the attached Comment Sheet and leave it in the box provided at the registration table. Alternatively, you can mail, fax or email your comments to the Region of Waterloo, not later than July 6, 2012.

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

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

Mr. Stephen Keen, P.Eng.  
Senior Project Manager  
HDR Corporation  
231 Shearson Crescent  
Cambridge, ON N1T 1J5  
Tel: (519) 621-7886 ext. 5951  
Fax: (519) 621-7334  
Email: stephen.keen@hdrinc.com
APPENDIX A
KEY PLAN

NORTHFIELD DRIVE CORRIDOR STUDY
(REGIONAL ROAD No. 22)
KING STREET TO UNIVERSITY AVENUE
CITY OF WATERLOO / TOWNSHIP OF WOOLWICH
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT PROCESS

ONTARIO ENVIRONMENTAL ASSESSMENT ACT

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

The key principles of successful environmental assessment planning include:

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

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT (EA)

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

Schedule “A” - Includes routine maintenance, operation and emergency activities.

- The Municipality can proceed with this work without further approval or public consultation.

Schedule “B” - Includes projects with the potential for some adverse environmental effects.

- These projects are subject to a screening process that includes consultation with directly affected public and agencies.

Schedule “C” - Includes larger, more complex projects with the potential for significant environmental affects.

- These projects are subject to all phases of the Class EA and require a minimum of 3 points of public contact.

PUBLIC INVOLVEMENT

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

Change in Project Status – Appeal Provision

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

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

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

To request a Part II Order, a person must send a written request to:

Minister of the Environment

135 St. Clair Avenue West

12th Floor

Toronto, ON M4V 1P5

The request must address the following with respect to the identified concerns:

- Environmental Impacts and specific concerns;
- Adequacy of the planning and public consultation process;
- Involvement of the person in the planning process; and
- Details of discussions held between the person and the proponent.
APPENDIX D
DRAWINGS OF ALTERNATIVE SOLUTIONS 2C

DOCS #1146234

Municipal Engineers Association

## Northfield Drive Current and Forecasted Traffic Volumes

<table>
<thead>
<tr>
<th>Road Section</th>
<th>Current (2010) AADT</th>
<th>Forecasted (2027) AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>West of King Street</td>
<td>25,600</td>
<td>30,300</td>
</tr>
<tr>
<td>King Street to Kraus Drive</td>
<td>21,200</td>
<td>40,000</td>
</tr>
<tr>
<td>Kraus Drive to Davenport Road</td>
<td>20,600</td>
<td>41,200</td>
</tr>
<tr>
<td>Davenport Road to Wissler Road</td>
<td>19,600</td>
<td>37,400</td>
</tr>
<tr>
<td>Wissler Road to Bridge Street</td>
<td>17,800</td>
<td>36,000</td>
</tr>
<tr>
<td>Bridge Street to Toman Drive</td>
<td>12,500</td>
<td>30,600</td>
</tr>
<tr>
<td>Toman Drive to University Avenue</td>
<td>12,000</td>
<td>25,000</td>
</tr>
<tr>
<td>East of University Avenue</td>
<td>9,000</td>
<td>14,200</td>
</tr>
</tbody>
</table>

Note: AADT – Average Annual Daily Traffic

## Bridge Street/University Avenue Corridor Current and Forecasted Traffic Volumes

<table>
<thead>
<tr>
<th>Road Section</th>
<th>Current (2010) AADT</th>
<th>Forecasted (2027) AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt. 2A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt. 2B &amp; 2C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridge Street from (King Street to University Avenue)</td>
<td>3,500</td>
<td>10,300</td>
</tr>
<tr>
<td>University Avenue from (Bridge Street to Northfield Drive)</td>
<td>2,300</td>
<td>9,600</td>
</tr>
</tbody>
</table>
REALIGN A SECTION OF BRIDGE ST. CORRIDOR (KING TO UNIVERSITY) TO CONNECT TO HIGHWAY 85/R.R. NO. 15 INTERCHANGE.

ALTERNATIVE 2B
Minor Realignment of Bridge St. to Connect Directly with Hwy 85 / RR-15 Interchange

May 2012
ESTABLISH NEW UNIVERSITY AVENUE ROAD ALIGNMENT FROM HIGHWAY 85/R.R. No. 15 INTERCHANGE TO INTERSECTION OF UNIVERSITY AVE. AND NORTHFIELD DR.

LEGEND:
- New Road Alignment Center Line
- New Road Corridor

ALTERNATIVE 2C
New Road Alignment from Hwy. 85/R.R. No. 15 Interchange to Intersection of Northfield Dr. and University Ave.

May 2012

HDR CORPORATION
Project # 6607
### Summary of Preliminary Evaluation of Alternative Planning Solutions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTFIELD DRIVE IMPROVEMENTS ONLY</td>
<td>![Transportation Evaluation Icon]</td>
<td>![Socio-Environmental Evaluation Icon]</td>
<td>![Natural Environment Evaluation Icon]</td>
<td>![Project Costs Evaluation Icon]</td>
<td>![Overall Evaluation Icon]</td>
</tr>
<tr>
<td>BRIDGE STREET/UNIVERSITY AVENUE IMPROVEMENTS ONLY</td>
<td>![Transportation Evaluation Icon]</td>
<td>![Socio-Environmental Evaluation Icon]</td>
<td>![Natural Environment Evaluation Icon]</td>
<td>![Project Costs Evaluation Icon]</td>
<td>![Overall Evaluation Icon]</td>
</tr>
<tr>
<td>WIDEN NORTHFIELD DRIVE (ALT. No. 1C) AND IMPROVE BRIDGE STREET/UNIVERSITY AVENUE COMBINED ALTERNATIVE SOLUTIONS</td>
<td>![Transportation Evaluation Icon]</td>
<td>![Socio-Environmental Evaluation Icon]</td>
<td>![Natural Environment Evaluation Icon]</td>
<td>![Project Costs Evaluation Icon]</td>
<td>![Overall Evaluation Icon]</td>
</tr>
</tbody>
</table>
# Preliminary Detailed Evaluation of Alternative Planning Solutions

## Alternative Planning Concepts

<table>
<thead>
<tr>
<th></th>
<th>NORTHFIELD DRIVE IMPROVEMENTS ONLY</th>
<th>BRIDGE STREET/UNIVERSITY AVENUE IMPROVEMENTS ONLY</th>
<th>WIDEN NORTHFIELD DRIVE (ALT. No. 1C) AND IMPROVE BRIDGE STREET/UNIVERSITY AVENUE COMBINED ALTERNATIVE SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALTERNATIVE 1A</strong></td>
<td>'Do Nothing'</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ALTERNATIVE 1B</strong></td>
<td>Northfield Drive Intersection</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improvements with one lane in each</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>direction</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ALTERNATIVE 1C</strong></td>
<td>Northfield Drive with two narrow</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>lanes in each direction</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ALTERNATIVE 2A</strong></td>
<td>Rehabilitate existing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bridge Street/University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avenue corridor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ALTERNATIVE 2B</strong></td>
<td>Minor Realignment of Bridge Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>to connect directly with Hwy 85/R/R-15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intersection and University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ALTERNATIVE 2C</strong></td>
<td>Widen Northfield (Alt. 1C) &amp;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rehabilitate existing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bridge/University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ALTERNATIVE 3A</strong></td>
<td>Widen Northfield (Alt. 1C) &amp;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construct Minor Realignment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of Bridge/University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ALTERNATIVE 3B</strong></td>
<td>Widen Northfield (Alt. 1C) &amp;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construct Minor Realignment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of Bridge/University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ALTERNATIVE 3C</strong></td>
<td>Widen Northfield (Alt. 1C) &amp;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construct New University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alignment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Alt. 2C)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Criteria Group

**1. TRANSPORTATION**

### Corridor Capacity
- Does not address capacity needs. Existing congestion continues to increase on Northfield Drive over the long-term to an unacceptable level.

### Traffic Safety
- No significant differences.

### Cycling and Pedestrian Facilities
- No cycling or pedestrian facilities provided.

### Emergency Services
- No improvements to Emergency response times.

### Transit Operations
- Does not improve transit operations. No improvement to waiting area at transit stops.

## TRANSPORTATION EVALUATION

- [ ] Lowest
- [ ] Lower
- [ ] Medium
- [ ] Higher
- [ ] Highest

Lowest has the poorest scoring evaluation, with Highest being the best scoring evaluation.
## Preliminary Detailed Evaluation of Alternative Planning Solutions

### APPENDIX E2

#### DETAILED PRELIMINARY EVALUATION OF ALTERNATIVE SOLUTIONS

<table>
<thead>
<tr>
<th>Criteria Group</th>
<th>NORTHEFIELD DRIVE IMPROVEMENTS ONLY</th>
<th>BRIDGE STREET/UNIVERSITY AVENUE IMPROVEMENTS ONLY</th>
<th>WIDEN NORTHFIELD DRIVE (ALT. No. 1C) AND IMPROVE BRIDGE STREET/UNIVERSITY AVENUE COMBINED ALTERNATIVE SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Impacts</td>
<td>What impact will the alternative have on traffic access to properties fronting on Northfield, Bridge, and University?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbourhood Impacts</td>
<td>How does the alternative impact the adjacent neighbourhood and enhance Northfield for pedestrians and cyclists?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Impacts</td>
<td>How does the alternative impact the properties along the corridor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noise Impacts</td>
<td>What effect does the alternative have on noise within the study area?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Access Impacts**
- No change to driveway entrance grades.
- Access to and from properties may improve in difficulty due to longer traffic queues lengths.

**Neighbourhood Impacts**
- Increased traffic congestion may encourage traffic infiltration into local neighbourhoods and may result in fewer users of active transportation facilities.

**Property Impacts**
- No impacts to private property.

**Noise Impacts**
- Noise may marginally increase due to additional traffic volumes.
### Preliminary Detailed Evaluation of Alternative Planning Solutions

#### Criteria Group

<table>
<thead>
<tr>
<th>Alternative Planning Concepts</th>
<th>NORTHFIELD DRIVE IMPROVEMENTS ONLY</th>
<th>BRIDGE STREET/UNIVERSITY AVENUE IMPROVEMENTS ONLY</th>
<th>WIDEN NORTHFIELD DRIVE (ALT. No. 1C) AND IMPROVE BRIDGE STREET/UNIVERSITY AVENUE COMBINED ALTERNATIVE SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALTERNATIVE 1A</strong></td>
<td>• ‘Do Nothing’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>ALTERNATIVE 1B</strong></td>
<td>• Widening Northfield Drive</td>
<td>• Rehabilitation Existing Bridge Street/University Avenue Corridor</td>
<td>• Widen Northfield to two (2) lanes in each direction (Wissler to University) &amp; Realignment of existing road (King to Northfield) in its current configuration (Includes cycling, pedestrian and transit stop facility improvements on Northfield from King Street to University Avenue)</td>
</tr>
<tr>
<td><strong>ALTERNATIVE 1C</strong></td>
<td>• Northfield Drive with Two Lanes in Each Direction</td>
<td>• Rehabilitation of existing road in its current configuration (No cycling or pedestrian facilities)</td>
<td>• Widen Northfield Drive to two (2) lanes in each direction (Wissler to University) &amp; Realignment of existing road (King to Northfield) in its current configuration (Includes cycling, pedestrian and transit stop facility improvements on Northfield from King Street to University Avenue)</td>
</tr>
<tr>
<td><strong>ALTERNATIVE 2A</strong></td>
<td>• Rehabilitation Existing Bridge Street/University Avenue Corridor</td>
<td>• Construct a Minor Realignment of a section of Bridge Street (corridor King to University) to connect to Highway 85/R.R. No. 15 Interchange &amp; Rehabilitate the remaining section of Bridge Street/University Ave.</td>
<td>• Widen Northfield Drive to two (2) lanes in each direction (Wissler to University) &amp; Realign a section of Bridge Street (corridor King to University) to connect to Highway 85/R.R. No. 15 Interchange &amp; Rehabilitate existing road (King to Northfield) in its current configuration (Includes cycling, pedestrian and transit stop facility improvements on Northfield from King Street to University Avenue)</td>
</tr>
<tr>
<td><strong>ALTERNATIVE 2B</strong></td>
<td>• Minor Realignment of Bridge Street to connect directly with Hwy 30/KH 15 Interchange</td>
<td>–</td>
<td>• Widen Northfield Drive to two (2) lanes in each direction (Wissler to University) &amp; Realignment of existing road (King to Northfield) in its current configuration (Includes cycling, pedestrian and transit stop facility improvements on Northfield from King Street to University Avenue)</td>
</tr>
<tr>
<td><strong>ALTERNATIVE 2C</strong></td>
<td>• New University Ave. Alignment from Highway 85/R.R. No. 15 Interchange and intersection of Northfield University</td>
<td>–</td>
<td>• Widen Northfield Drive to two (2) lanes in each direction (Wissler to University) &amp; Realign a section of Bridge Street (corridor King to University) to connect to Highway 85/R.R. No. 15 Interchange &amp; Rehabilitate existing road (King to Northfield) in its current configuration (Includes cycling, pedestrian and transit stop facility improvements on Northfield from King Street to University Avenue)</td>
</tr>
<tr>
<td><strong>ALTERNATIVE 3A</strong></td>
<td>• Widening Northfield (Alt. 1C) &amp; Rehabilitate Existing Bridge/University (Alt. 2A) Combined</td>
<td>–</td>
<td>• Widen Northfield Drive to two (2) lanes in each direction (Wissler to University) &amp; Realignment of existing road (King to Northfield) in its current configuration (Includes cycling, pedestrian and transit stop facility improvements on Northfield from King Street to University Avenue)</td>
</tr>
<tr>
<td><strong>ALTERNATIVE 3B</strong></td>
<td>• Construct Minor Realignment of Bridge Street (King to University) &amp; Rehabilitate existing road (King to Northfield) in its current configuration (Includes cycling, pedestrian and transit stop facility improvements on Northfield from King Street to University Avenue)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>ALTERNATIVE 3C</strong></td>
<td>• Widen Northfield (Alt. 1C) &amp; Construct New University Alignment (Alt. 2B) Combined</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

#### Archaeological / Cultural Heritage Impacts

What impact does the alternative have on the following: Built Heritage resources and features, Cultural Heritage landscape, and Archaeological impacts?

#### Socio-Economic Evaluation

<table>
<thead>
<tr>
<th>Archaeological / Cultural Heritage Impacts</th>
<th>No impacts to existing Built Heritage features.</th>
<th>No impacts to Built Heritage structures.</th>
<th>No impacts to Built Heritage structures.</th>
<th>No impacts to Built Heritage structures.</th>
<th>No impacts to Built Heritage structures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No impacts to Archaeological or Cultural Heritage features.</td>
<td>No impacts to Built Heritage structures.</td>
<td>No impacts to Built Heritage structures.</td>
<td>No impacts to Built Heritage structures.</td>
<td>No impacts to Built Heritage structures.</td>
<td>No impacts to Built Heritage structures.</td>
</tr>
<tr>
<td>Archaeological impacts with minor road widening for designated turn lanes to be assessed.</td>
<td>No archaeological impacts with minor road widening to be assessed.</td>
<td>No archaeological impacts with minor road widening to be assessed.</td>
<td>No archaeological impacts with minor road widening to be assessed.</td>
<td>No archaeological impacts with minor road widening to be assessed.</td>
<td>No archaeological impacts with minor road widening to be assessed.</td>
</tr>
</tbody>
</table>

#### Natural Environment

<table>
<thead>
<tr>
<th>Watercourse Impacts</th>
<th>No watercourses are impacted.</th>
<th>No watercourses impacted.</th>
<th>No watercourses impacted.</th>
<th>No watercourses impacted.</th>
<th>No watercourses impacted.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What impact will the alternative have on any watercourse crossings?</td>
<td>Possible alterations at two existing watercourse crossings required adjacent to Bridge Street and University.</td>
<td>Possible alterations at two existing watercourse crossings required adjacent to Bridge Street and University.</td>
<td>Two new watercourse crossings required adjacent to Bridge Street and University.</td>
<td>Possible alterations at two existing watercourse crossings required adjacent to Bridge Street and University.</td>
<td>Two new watercourse crossings required adjacent to Bridge Street and University.</td>
</tr>
<tr>
<td>Aquatic Habitat</td>
<td>No aquatic habitat or fisheries are affected.</td>
<td>No aquatic habitat or fisheries are affected.</td>
<td>No aquatic habitat or fisheries are affected.</td>
<td>No aquatic habitat or fisheries are affected.</td>
<td>No aquatic habitat or fisheries are affected.</td>
</tr>
<tr>
<td>How does the alternative affect aquatic life and aquatic habitats contained within the study area?</td>
<td>Possible alterations at two existing watercourse crossings may impact fish and aquatic habitat.</td>
<td>Possible alterations at two existing watercourse crossings may impact fish and aquatic habitat.</td>
<td>Two new crossings at two existing watercourse crossings may impact fish and aquatic habitat.</td>
<td>Possible alterations at two existing watercourse crossings may impact fish and aquatic habitat.</td>
<td>Two new crossings at two existing watercourse crossings may impact fish and aquatic habitat.</td>
</tr>
<tr>
<td>Floodplain Impacts</td>
<td>No impacts to existing floodplain features.</td>
<td>No impacts to existing floodplain features.</td>
<td>Possible impact to one watercourse floodplain due to alteration or the installation of a new water crossing.</td>
<td>Possible impact to one watercourse floodplain due to alteration or the installation of a new water crossing.</td>
<td>Possible impact to one watercourse floodplain due to alteration or the installation of a new water crossing.</td>
</tr>
<tr>
<td>What effect would the alternative have on the flood plain in the study area?</td>
<td>Possible impact to one watercourse floodplain due to alteration or the installation of a new water crossing.</td>
<td>Possible impact to one watercourse floodplain due to alteration or the installation of a new water crossing.</td>
<td>Possible impact to one floodplain due to alteration or the installation of a new water crossing.</td>
<td>Possible impact to one floodplain due to alteration or the installation of a new water crossing.</td>
<td>Possible impact to one floodplain due to alteration or the installation of a new water crossing.</td>
</tr>
</tbody>
</table>
## Preliminary Detailed Evaluation of Alternative Planning Solutions

### Alternative Planning Concepts

<table>
<thead>
<tr>
<th>Criteria Group</th>
<th>Alternative 1A: &quot;Do Nothing&quot;</th>
<th>Alternative 1B: Northfield Drive Intersection Improvements</th>
<th>Alternative 1C: Widen Northfield Drive with Two Lanes in Each Direction</th>
<th>Alternative 2A: Rehabilitate Existing Bridge Street/University Avenue Corridor</th>
<th>Alternative 2B: Minor Realignment of Bridge Street to connect directly with Hwy 85/R. R. No. 15 Interchange</th>
<th>Alternative 2C: New University Ave.</th>
<th>Alternative 3A: Widen Northfield (Alt. 1C) &amp; Rehabilitate Existing Bridge/University (Alt. 2A) Interchange &amp; Intersection of Northfield/University Drive</th>
<th>Alternative 3B: Widen Northfield (Alt. 1C) &amp; Construct Minor Realignment of Bridge/University (Alt. 2B) Combined</th>
<th>Alternative 3C: Widen Northfield (Alt. 1C) &amp; Construct New University Alignment (Alt. 2C) Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stormwater Management Impacts</td>
<td>No increase in surface runoff.</td>
<td>Slight increase in surface runoff due to addition of auxiliary lanes.</td>
<td>Increase in surface runoff due to widening and auxiliary lanes.</td>
<td>Some increase in surface runoff due to Bridge Street realignment.</td>
<td>Increase in surface runoff due to new road alignment and auxiliary lanes.</td>
<td>Increase in surface runoff due to widening and auxiliary lanes.</td>
<td>Increase in surface runoff due to widening and auxiliary lanes.</td>
<td>Increase in surface runoff due to widening and auxiliary lanes.</td>
<td>Increase in surface runoff due to new road alignment and auxiliary lanes.</td>
</tr>
<tr>
<td>Terrestrial Habitat</td>
<td>No impact on terrestrial habitat.</td>
<td>Minimal impact on terrestrial habitat.</td>
<td>Minimal impact on terrestrial habitat.</td>
<td>Limited encroachment on naturalized vegetation communities and potentially on wetlands regulated by GRCA.</td>
<td>Limited encroachment on naturalized vegetation communities and potentially on wetlands regulated by GRCA.</td>
<td>Possible impacts on wetlands regulated by the GRCA, naturalized vegetation communities and a potential wildlife corridor.</td>
<td>Limited encroachment on naturalized vegetation communities and potentially on wetlands regulated by GRCA.</td>
<td>Possible impacts on wetlands regulated by the GRCA, naturalized vegetation communities and a potential wildlife corridor.</td>
<td>Possible impacts on wetlands regulated by the GRCA, naturalized vegetation communities and a potential wildlife corridor.</td>
</tr>
<tr>
<td>Individual Trees</td>
<td>No trees are affected.</td>
<td>Removal of approximately 3 to 10 trees may be required at intersections.</td>
<td>Removal of approximately 45 to 60 trees may be required.</td>
<td>Removal of approximately 15 to 30 trees may be required.</td>
<td>Removal of approximately 7 to 15 trees may be required.</td>
<td>Removal of approximately 10 to 20 trees may be required.</td>
<td>Removal of approximately 60 to 80 trees may be required.</td>
<td>Removal of approximately 52 to 75 trees may be required.</td>
<td>Removal of approximately 55 to 80 trees may be required.</td>
</tr>
</tbody>
</table>

### NATURAL ENVIRONMENT EVALUATION

- **NORTHFIELD DRIVE IMPROVEMENTS ONLY**
- **BRIDGE STREET/UNIVERSITY AVENUE IMPROVEMENTS ONLY**
- **WIDEN NORTHFIELD DRIVE (ALT. NO. 1C) AND IMPROVE BRIDGE STREET/UNIVERSITY AVENUE COMBINED ALTERNATIVE SOLUTIONS**

### 4. PROJECT COSTS

| Initial Capital Costs | $1.5 Million | $2.85 Million | $5.0 to $7.5 Million | $1.6 Million | $5.0 to $12.5 Million | $11.5 to $17.5 Million | $6.6 to $9.1 Million | $10.0 to $20.0 Million | $16.5 to $25 Million |

### COST EVALUATION

- **LOWEST**
- **LOWER**
- **MEDIUM**
- **HIGHER**
- **HIGHEST**

### 5. OVERALL

| OVERALL PROJECT EVALUATION |  |  |  |  |  |  |  |  |  |

**APPENDIX E2**

**DETAILED PRELIMINARY EVALUATION OF ALTERNATIVE SOLUTIONS**

**DOC# #146234**

**HDR**
ILLUSTRATIONS OF EXAMPLE CYCLING LANES,
APPENDIX F

SIDEWALK AND MULTIPURPOSE TRAIL
APPENDIX F
ILLUSTRATIONS OF EXAMPLE CYCLING LANES, SIDEWALK AND MULTI-USE TRAIL
Cycling and Pedestrian Facilities

Example No. 1

On-Road and Off-Road Cycling Facilities with Pedestrian Facilities

Scale: 0 5 10 15 20

May 2012

HDR CORPORATION
Project # 6607

APPENDIX G
LIST OF POTENTIALLY IMPACTED PROPERTY LOCATIONS

DOC #146234

Region of Waterloo
Northfield Drive Corridor Class EA
Cycling and Pedestrian Facilities

Example No. 2

On-Road Cycling Facilities with Pedestrian Facilities
Cycling and Pedestrian Facilities

Example No. 3

Shared Off-Road Cycling and Pedestrian Facilities
<table>
<thead>
<tr>
<th>Address</th>
<th>Survey P.I.N. #</th>
<th>Length (m)</th>
<th>Width (m)</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>612 King St. N</td>
<td>22282-0157 (LT)</td>
<td>108</td>
<td>0.3 - 3.5</td>
<td>198</td>
</tr>
<tr>
<td>20 Northfield Drive E</td>
<td>22282-0060 (LT)</td>
<td>61</td>
<td>0.4</td>
<td>24</td>
</tr>
<tr>
<td>576 King St. N</td>
<td>22283-0006 (LT)</td>
<td>146</td>
<td>3.5 - 5.6</td>
<td>780</td>
</tr>
<tr>
<td>Davenport Apartments</td>
<td>22283-0260 (LT)</td>
<td>69</td>
<td>0.1 - 2.4</td>
<td>86</td>
</tr>
<tr>
<td>30,36 Northfield Drive E</td>
<td>22282-0061 (LT)</td>
<td>13</td>
<td>0.1 - 0.32</td>
<td>3</td>
</tr>
<tr>
<td>42 Northfield Drive E</td>
<td>22282-0062 (LT)</td>
<td>66</td>
<td>0.3 - 1.9</td>
<td>74</td>
</tr>
<tr>
<td>615 Davenport Road</td>
<td>22282-0063 (LT)</td>
<td>100</td>
<td>1.9 - 3.7</td>
<td>280</td>
</tr>
<tr>
<td>620 Davenport Road</td>
<td>22284-0097 (LT)</td>
<td>105</td>
<td>0.5 - 2.7</td>
<td>208</td>
</tr>
<tr>
<td>City of Waterloo - Pond</td>
<td>22282-0099 (LT)</td>
<td>59</td>
<td>0.1 - 0.6</td>
<td>23</td>
</tr>
<tr>
<td>150 Wissler Road</td>
<td>22706-0187 (LT)</td>
<td>65</td>
<td>0.1 - 2.5</td>
<td>67</td>
</tr>
<tr>
<td>255 Northfield Drive E</td>
<td>22706-0120 (LT)</td>
<td>151</td>
<td>0.1 - 6.4</td>
<td>630</td>
</tr>
<tr>
<td>725 Bridge St. W</td>
<td>22282-0141 (LT)</td>
<td>60</td>
<td>0.2 - 0.7</td>
<td>27</td>
</tr>
<tr>
<td>730 Bridge St W</td>
<td>22282-0142 (LT)</td>
<td>70</td>
<td>0.1 - 0.6</td>
<td>25</td>
</tr>
<tr>
<td>265 Frobisher Drive</td>
<td>22282-0143 (LT)</td>
<td>25</td>
<td>0.1 - 0.3</td>
<td>5</td>
</tr>
<tr>
<td>275 Frobisher Drive</td>
<td>22282-0144 (LT)</td>
<td>22</td>
<td>0.1 - 0.5</td>
<td>7</td>
</tr>
<tr>
<td>295 Frobisher Drive</td>
<td>22282-0145 (LT)</td>
<td>42</td>
<td>0.5 - 1.3</td>
<td>38</td>
</tr>
<tr>
<td>300 Northfield Drive E</td>
<td>22282-0171 (LT)</td>
<td>122</td>
<td>0.1 - 1.4</td>
<td>118</td>
</tr>
<tr>
<td>299 Northfield Drive E</td>
<td>22707-1509 (LT)</td>
<td>80</td>
<td>0.1 - 2.6</td>
<td>83</td>
</tr>
<tr>
<td>305 Northfield Drive E</td>
<td>22707-1508 (LT)</td>
<td>80</td>
<td>0.1 - 1.5</td>
<td>117</td>
</tr>
</tbody>
</table>

**Total**                  |                |            |           | **2793**  |
Property Acquisition Process Information Sheet

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

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

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

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

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

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

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

Please complete and hand in this sheet so that your views can be considered for this project. If you cannot complete your comments today, please take this home and mail, fax or e-mail your comments by July 6th, 2012 to:

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

Mr. Stephen Keen, P.Eng.  
Senior Project Manager  
HDR Corporation  
231 Shearson Crescent  
Cambridge, ON N1T 1J5  
Tel: (519) 621-7886 ext. 5951  
Fax: (519) 621-7334  
Email: stephen.keen@hdrinc.com

Comments or concerns regarding this project, alternative solutions, or preferred options for pedestrian and cycling facilities:

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

Name: _________________________________________________________________
Address: __________________________________________________________________
Postal Code: ____________________________

COLLECTION NOTICE

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

DATE: June 19, 2012

FILE CODE: V03-01

SUBJECT: ALTERNATE FUEL TECHNOLOGY FOR TRANSIT BUSES

RECOMMENDATION:

For information.

SUMMARY:

This report outlines the current GRT engine propulsion systems and emission control technologies being used to reduce greenhouse gas emissions. This is followed by a review of both Compressed Natural Gas buses and the emerging Electric bus technology.

REPORT:

Current GRT Fuel Technologies

1) Clean Diesel Technology

There are currently 238 buses in the GRT fleet, including twelve (12) diesel-hybrid electric vehicles. Since 2003 all GRT buses have been operating on ultra low sulfur diesel fuel, which paved the way for the introduction of advanced emission control devises known as Clean Diesel Technology. These clean diesel devices reduce emissions to levels comparable to compressed natural gas engines and have been installed on the 134 transit buses purchased since 2003. Twenty-one (21) of these buses also inject an aqueous urea solution into the muffler exhaust to further reduce emissions to comply with recent Environment Canada requirements. On an annual basis these clean diesel buses reduce approximately 59 tons of emissions from non-methane hydrocarbons, particulate matter, carbon monoxide and sulphur dioxide.

2) Diesel-Electric Hybrid Buses

GRT currently has twelve diesel-hybrid electric transit buses. When this technology was introduced, on a test basis in 2009, it was concluded that to ensure the desired emission reductions are achieved and fuel cost savings generated these buses should be assigned to routes with a daytime stop frequency of four or more stops every kilometer (Report E-10-030 March 9, 2010). In this operating environment the electronic propulsion and regenerative braking systems are regularly relied upon which decreases vehicle emissions and fuel consumption. Annually each diesel electric hybrid bus consumes approximately 4,600 fewer liters of fuel and their emissions are reduced by 12,000 kg. This reduction is in addition to the emission reductions achieved through the use of Clean Diesel Technology as outlined above. Hybrid buses cost about $200,000 more than a conventional diesel bus to purchase and are as reliable and cost comparable to maintain. Going forward diesel hybrid electric buses will continue to be recommended for purchase where they can be operated on low-speed, high-stop frequency bus routes such as the Route 7 - Mainline.
3) Other Emission Reduction Initiatives

Other GRT initiatives which contribute to reduced fuel usage and greenhouse gas emissions include the “Smart-Driver” training program for bus operators, optimizing the programming of transmissions and the electrification of vehicle accessories which previously were powered by the engine.

The following is a comparative summary of the GRT Litres/Km information for 2010 and 2011.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litres of Diesel</td>
<td>8,158,913</td>
<td>8,534,413</td>
</tr>
<tr>
<td>Kilometers</td>
<td>12,278,140</td>
<td>13,004,750</td>
</tr>
<tr>
<td>Litres/ Km</td>
<td>.665</td>
<td>.656</td>
</tr>
</tbody>
</table>

In 2011, the reduction in Litres/Km use from 2010 contributed to approximately 100,000 fewer litres of fuel being required to operate GRT services.

Alternate Fuel Technologies

The two alternate fuel technologies reviewed for this report are Compressed Natural Gas (CNG) and the emerging fully Electric engine propulsion system. While both of these technologies are available for heavy duty vehicles there are currently few Canadian examples of their use in either commercial or public transit fleets.

1) Compressed Natural Gas (CNG)

Over the past decade many Canadian municipalities who were experimenting with CNG propulsion buses moved away from this technology because it proved to be unreliable and costly to maintain. Also, the advances in Clean Diesel Technology, as outlined above, offered an effective comparable alternative to CNG.

GRT operated a fleet of twenty-three CNG buses and a large natural gas fuelling plant on Strasburg Rd., until 2008. At the time this equipment was 12 years old and becoming increasingly unreliable and expensive to maintain. These buses experienced 20% more in service breakdowns, 25% more reported defects and were 50% more costly to maintain when compared to the GRT fleet average. The maintenance issues were further pronounced in extreme hot and cold weather conditions. This level of increased maintenance resulted in the need for additional spare buses and staff to ensure transit service reliability. The CNG fuelling station, built in 1996, also presented operating challenges and was expensive to maintain to ensure compliance with the standards set by the Technical Standards and Safety Association of Ontario. Both the CNG buses and the fuelling station were sold in 2008. (Report E-08-053 June 24, 2008).

With the recent price decrease in natural gas there has been renewed interest in this technology. While natural gas is currently cheaper than diesel fuel, some of the ongoing challenges associated with this technology include;

- Higher maintenance and bus servicing costs
- More frequent fuelling (CNG buses do not have the operating range of a diesel bus)
- Requires a natural gas fuelling station
- Certifying staff to operate and maintain the fuelling station

In late 2011 the City of Calgary began purchasing CNG transit buses. The results of their CNG vehicle performance will be monitored by Regional staff over the next couple of years to determine if this technology has advanced to a more reliable alternative than earlier generations.
2) Electric Buses

An emerging technology in the evolution toward a zero emission bus is the recent announcements to introduce a fully Electric transit vehicle into the Canadian marketplace.

Canadian bus manufacturer NovaBus have partnered with the Province of Quebec and Chinese bus manufacturer Shanghai Sunwin Bus Corporation (Sunwin) to produce a fast charging electric bus. While currently in the R&D phase in Canada this bus is expected to offer up to 100% fuel savings and produce zero emissions.

Another bus manufacturer from China, known as BYD Co. Ltd (a division of China Buses) have signed an exclusive arrangement with the City of Windsor to introduce 10 electric buses on a pilot bases into their transit fleet. These will be their first buses tested in a colder northern environment.

While the electric buses have obvious fuel savings and emission reduction advantages they remain an untested technology in the Canadian marketplace. Some of the challenges associated with the fully Electric Bus technology include:

- Buses need to be modified to meet Canadian vehicle standards
- Untested in Canadian winter climate
- Capital costs of electric buses are high
- Requires Electric Charging Stations
- Operating Range is shorter than diesel buses (120 Km between charges)

This technology will also be monitored by Regional staff over the next few years as a potential alternative for transit buses to further reduce fuel consumption and greenhouse gas emissions.

CORPORATE STRATEGIC PLAN:

Focus Area 1 – Environmental Sustainability

The operation of buses using ultra low sulphur diesel and Clean Diesel Technology, supplemented by buses with diesel electric engine propulsion systems operating on low-speed, high-stop bus routes, assists with the goal of the Strategic Plan to reduce greenhouse gas emissions and improve air quality.

FINANCIAL IMPLICATIONS:

This report was provided for information only. The financial impacts of purchasing ultra low sulphur diesel fuel along with the purchase of buses with clean diesel technology or diesel electric propulsion systems have historically been included in the Region’s operating and capital budgets.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

N/A

PREPARED BY: Eric Gillespie, Director, Transit Services

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

DATE: June 19, 2012  FILE CODE: L07-90

SUBJECT: AUTHORIZATION TO EXPROPRIATE (1st REPORT) LANDS SUPPLEMENTARY TO PHASE 1 OF STAGE 1 FOR RAPID TRANSIT PROJECT REPRESENTING A FURTHER PARTIAL TAKING FROM THE PROPERTY MUNICIPALLY KNOWN AS 750-760 KING STREET WEST, KITCHENER

RECOMMENDATION:

THAT The Regional Municipality of Waterloo direct and authorize the Regional Solicitor to take the following actions with respect to the expropriation of further lands required for the construction of Stage 1 of the Rapid Transit Project on King Street West, at the City of Kitchener, in the Regional Municipality of Waterloo as detailed in Report CR-RS-12-040 dated June 19, 2012:

1. Complete application(s) to the Council of The Regional Municipality of Waterloo, as may be required from time to time, for approval to expropriate land, which is required for the Rapid Transit Project Stage 1 and described as follows:

   Fee Simple Partial Taking

   a) Part of Lot 21 Plan 413 and Part of Lot 29 Subdivision of Lot 15 German Company Tract designated as Part 1 Plan 58R-17451, City of Kitchener, Regional Municipality of Waterloo

2. Serve notice of the above application as required by the Expropriations Act;

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

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

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

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

SUMMARY: NIL

REPORT:

On June 15, 2011 the Regional Council approved light rail transit (“LRT”) as the preferred transit technology from Conestoga Mall in the City of Waterloo to the Ainslie Street Terminal in the City of Cambridge. The approved Stage 1 of the project will include LRT service from Conestoga Mall in the City of Waterloo to Fairview Park Mall in the City of Kitchener (“Stage 1”).
In accordance with the recommendations of Report E-11-072 dated June 15, 2011, the Region of Waterloo initiated the Transit Project Assessment in November of 2011, which has been completed and has provided results that are permissive of the construction and operation of LRT along the corridor proposed in the Report.

The functional design of the project is presently underway. Construction of the rapidway is proposed to commence in mid 2014 to be preceded by certain utility relocation work commencing as early as this year. Regional staff is presently in the process of acquiring certain lands collectively referred to as the first phase (“Phase 1”) of lands required for Stage 1 as more particularly described in the Staff Report to Council dated February 28, 2012 and identified as report number CR-RS-12-013 (the “Phase 1 Report”). The Phase 1 Report contemplates, among other things, a partial taking of land from the property municipally known as 750 - 760 King Street West, Kitchener which is owned by 1188042 Ontario Inc. and which premises are used to carry on a grocery store business known as “Central Fresh Market”. Upon further planning and consideration of functional design, the partial taking contemplated in the Phase 1 Report with respect to 750 - 760 King Street West, Kitchener (the “First Partial Taking”) is insufficient to meet the expected technical requirements of the construction of LRT and associated works. Regional staff have, therefore, determined that a further taking of land on the same property to the East of the First Partial Taking is necessary.

To date, productive dialogue and negotiations are underway with the property owner both with respect to the First Partial Taking and with respect to the supplementary partial taking contemplated herein. Should a negotiated settlement be reached with the said property owner in relation to the supplementary partial taking contemplated herein, and a conveyance of the said parcel is completed before the expropriation process is complete, the expropriation process will be discontinued by the Regional Solicitor in respect of such property.

The Commissioner of Transportation and Environmental Services has, in order to meet the Rapid Transit Project timelines, authorized the utilization of the revised land acquisition process for infrastructure projects regarding the prerequisites for commencement of the expropriation process. As mentioned above, the affected property owner has been contacted by Legal Services Real Estate staff in writing, as well as, via in-person meetings and telephone correspondence with respect to the First Partial Taking and via in-person meetings and telephone correspondence with respect to the supplementary partial taking contemplated herein. Specifically, the representative of the property owner is aware of the Region’s intention to proceed with the expropriation process, including this Report. The property owner has been provided with the Region’s Expropriation Information Sheet explaining the expropriation process. A copy of the Expropriation Information Sheet is attached as Appendix “A” and, as well, the property owner has been provided with a copy of the Property Acquisition Process Information Sheet and a Property Impact Plan illustrating the required taking(s) for its property. The property owner has been advised that it is the Region’s intent to seek a negotiated settlement prior to the completion of the Expropriation process and that the process has been commenced only to ensure possession of the required lands by the date set by Project staff in order to meet the project timeline.

The expropriation of the lands is on an “as is” basis and upon acquisition the Region assumes all responsibility for the lands.

The Project Area is shown attached as Appendix “B”.

CORPORATE STRATEGIC PLAN:

One of the focus areas of the Corporate Strategic Plan is to develop greater, more sustainable and safe transportation choices.
FINANCIAL IMPLICATIONS:

Funding for the property acquisitions related to the Rapid Transit project is included in the approved 2012 ten year capital program for Rapid Transit.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Rapid Transit staff have been consulted in the preparation of this Report.

ATTACHMENTS:

Appendix “A” – Copy of Expropriation Information Sheet

Appendix “B” – Project Area

PREPARED BY: Liviu Cananau, Solicitor, Property (Rapid Transit)

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

Region of Waterloo

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 “B”

Subject Lands:
750-760 King St W
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Rapid Transit

TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: June 19, 2012
FILE CODE: A02-30/PW
SUBJECT: STAGE 1 LIGHT RAIL TRANSIT: VEHICLE PROCUREMENT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo take the following actions regarding the procurement of light rail vehicles for the rapid transit project, pursuant to report E-12-064, dated June 19, 2012.

a) authorize staff to negotiate with Metrolinx to use their existing contract with Bombardier for the delivery of light rail vehicles; and

b) direct staff to report back to Council following the completion of negotiations and prior to executing the light rail vehicle procurement contract.

SUMMARY:

As part of the staged implementation plan for the Region of Waterloo rapid transit system, Light Rail technology will initially serve the 19 kilometre transit corridor from Conestoga Mall in Waterloo to Fairview Park Mall in Kitchener. Based on light rail ridership forecast, 14 light rail vehicles (LRVs) will be required to provide service in early 2017. In order for this in-service date to be achieved, the Region must, as soon as possible, determine an effective procurement process that would allow the vehicles to be delivered in time and within budget.

To support the procurement decision-making process, staff evaluated three reasonable options:

- Option A: Initiate a vehicle procurement process through the Council approved Design Build Finance Operate Maintain (DBFOM) delivery model.
- Option B: Initiate a vehicle procurement process independently; and
- Option C: Secure the LRVs through a contract assignment from another transit agency.

For each of these options, staff considered the relative advantages and disadvantages including commercial issues and the ability to obtain competitive pricing.

Given the fleet size required for the Region of Waterloo rapid transit system, the number of potential railcar manufacturers capable of delivering cost effective and proven low floor LRVs compliant with current provincial Canadian domestic content requirements will be very small. This will potentially limit the competitive field for DBFOM contractors. In addition, by combining the LRV scope with the DBFOM contractor scope the procurement process may result in a compromise situation in which the Region does not select the preferred LRV or the preferred contractor but rather the proposal which has the best overall score. For these reasons, Option A is not recommended.
Additionally, there are no significant civil or vehicle performance requirements that would
necessitate a unique LRV design for this project. Therefore, the development of an independent
detailed design Request for Proposal is not prudent. Moreover, with the small fleet size
requirement, the Region may not be able to acquire the vehicles at a competitive price. The
adverse impacts to schedule and the procurement costs will be considerable under this approach
and therefore, Option B is not recommended.

The provincial crown agency responsible for developing and implementing an integrated
transportation system, Metrolinx, is currently procuring LRVs for transit system expansion in the
Greater Toronto and Hamilton Area and has a contract with Bombardier for a significant number of
low floor LRVs, which would be well suited for the requirements of the Region’s rapid transit system.
Under the Metrolinx Act, 2006, the objectives of this crown corporation include the responsibility “to
act as the central procurement agency for the procurement of local transit system vehicles,
equipment, technologies and facilities and related supplies and services on behalf of Ontario
municipalities.” Therefore, in order to maximize the level of competition for the DBFOM contract,
mitigate schedule risk and reduce cost to the overall project, it is recommended that the Region of
Waterloo proceed with Option C. Recognizing the potential benefits for future operations and
maintenance, the Region could achieve maximum value through direct negotiations with Metrolinx
and Bombardier team.

Staff recommend that the Region enter into commercial negotiations with Metrolinx to secure the
delivery of LRVs through their existing contract assigned to Bombardier. Staff will report back to
Council with recommendations subsequent to the completion of these negotiations.

REPORT:

1. Background

In June 2011, Council approved the technology, route, stations, staging and funding of Stage 1 of
the Region’s rapid transit project. As part of Stage 1, 19 kilometers of light rail will be constructed
from Conestoga Mall to Fairview Park Mall.

Based on ridership projections, operational parameters and initial service headways of 7.5 minutes,
14 LRVs will be required at the start of revenue service in 2017. With planned population and
employment growth over the next 20 years, the level of light rail service will need to be improved
resulting in an expansion of the vehicle fleet. It is anticipated that approximately 30 – 35 LRVs may
be required by 2031.

The approved project budget of $818 million accounts for the purchase of initial 14 vehicles and this
cost will be shared with the senior funding partners. However, as a requirement of the provincial
funding, the procurement of LRVs will need to comply with the Canadian content policy. Under this
policy, the overall Canadian content of a transit vehicle must match 25% of the total final costs of the
manufacturer, less any applicable taxes. Eligible costs include labour, subcomponents and
components, project management, engineering, manuals, special tools, test equipment, freight and
warranty.

2. Trends in North America

The market for LRVs in Canada has been relatively small in recent years. Both Calgary and
Edmonton opened new Light Rail Transit (LRT) systems in the late 1970s/early 1980s which have
expanded gradually over the years. The LRVs designed and built for both of these cities were of the
high floor type. This required the construction of high level platforms. More recent North American LRT projects, due to advances in LRV design, use a low floor design which is more conducive to the urban landscape in the Region of Waterloo.

Portland, Oregon led the way with the successful introduction of low floor LRVs in 1997 and every new start light rail transit system built since this time has utilized low floor LRV technology. The benefits of this technology are significant: faster boarding times, limited civil impacts in downtown areas and improved accessibility for people utilizing mobility devices.

In evaluating these new systems and other recent developments in the transit industry, a number of clear trends have emerged:

- The initial fleet sizes for new start light rail systems tends to be rather small – on average between 15 to 25 LRVs.
- With few exceptions, transit agencies have opted for “off the shelf” LRV technology because the design costs associated with new LRV developments are prohibitive.
- Railcar manufacturers have moved towards modular, flexible and adaptable base designs to reduce design costs and offer a base design to as many customers as possible.
- While there are a number of LRV manufacturers active in the North American market, there are only few that have been successful in securing recent orders for low floor LRVs in the United States (Bombardier, Siemens and Kinki-Sharyo). Only three rail car manufacturers, Alstom, Bombardier and Siemens have expressed interest in recent Canadian LRV procurements.

Based on the above noted factors, there is a definite trend towards “piggybacking” where one transit agency assigns the contractual rights of option LRVs to another transit agency to reduce procurement, design and manufacturing costs. Some examples of “piggybacking” are:

- Salt Lake City exercised options under a contract with San Diego Trolley, Inc. for their initial fleet of LRVs;
- City of Atlanta assumed an option for low floor LRVs from the Utah Transit Authority for the Atlanta Streetcar Project; and
- Hampton Roads secured their initial fleet of LRVs based on an option under an existing contract held by the City of Charlotte.

3. **Vehicle Procurement Options for the Region of Waterloo**

To support the vehicle procurement decision-making process, staff evaluated three reasonable options:

- **Option A:** Initiate a vehicle procurement process through the Council approved Design Build Finance Operate Maintain (DBFOM) delivery model.
- **Option B:** Initiate a vehicle procurement process independently; and
- **Option C:** Secure the LRVs through contract assignment from another transit agency

For each of these options, staff considered the relative advantages and disadvantages based on the following criteria:

- The competitive environment for rolling stock in Canada
- Project budget and market prices
- LRV Features
The findings of the evaluation are summarized below.

**Option A:** Procure the LRVs through the DBFOM Contract

Under this approach, the DBFOM contractor would pre-select an LRV supplier as part of their overall proposal to the Region of Waterloo. The advantage of this approach is that it leads to improved overall coordination between the DBFOM contractor and the railcar manufacturer. However, it should be stated that although the interfaces between the vehicle and other system/civil elements are not overly complicated, the LRV typically drives the design of the other systems. The primary disadvantage of this approach is that it could limit competition. While there are a significant number of national and international general contractors that would compete for this project, there is likely to be very few railcar manufacturers that have an applicable vehicle and business interest in what is considered a small fleet.

In addition, LRVs have long delivery lead times and have typically been problematic for project schedules. This factor, coupled with the competition limitations noted above, are the most significant disadvantages associated with this approach.

Also, when combining the LRV scope with the contractor scope the procurement process may result in a compromise situation and additional cost (due to compressed LRV delivery schedule) in which the Region does not select the preferred LRV or the preferred contractor but rather the proposal which has the best overall score. When a project has two separate and equally critical components, such as the LRV and the contractor, the risk of having to manage the interface between two separate contracts is often outweighed by the benefit of selecting the best LRV provider and the best contractor.

**Option B:** Procure the new LRVs utilizing a separate RFP

Under this approach, the Region of Waterloo would develop a detailed performance specifications and RFP to procure its fleet of LRVs and this procurement process would have to be completed before the DBFOM RFP is finalized.

Separating the LRV from the DBFOM contract will not adversely impact future operations and maintenance assumptions of the DBFOM contractor. Railcar manufacturers typically utilize sub-suppliers for most sub-systems and there is very little variation in the life cycle of the individual systems (doors, couplers, braking systems, etc.). As part of a separate procurement, the LRV supplier would provide critical life cycle data to the Region of Waterloo that would become part of the DBFOM procurement documents. Knowing the LRV selected would also enable the Region to provide critical civil and systems data to the proposing contractors in the DBFOM procurement documents and reduce risk significantly.

However, the costs associated with developing a detailed design RFP and procurement effort will be significant. These procurements tend to be rather lengthy and could adversely impact the project schedule. In this approach the successful LRV supplier is often determined by price rather than technical approaches or other factors.
Option C: Secure the LRVs through contract assignment from another transit agency

Under this approach, the Region of Waterloo would seek the right of contractual assignment from another transit authority for LRVs that have been designed and possibly in production and which meets its civil and performance requirements. This approach has been employed successfully in the United States market where there has been a greater proliferation of light rail vehicles and new systems and where initial fleet requirements have been considered small (less than 25 vehicles). This approach significantly reduces time and costs for transit agencies and provides other benefits.

The advantages noted earlier in Option B also apply here as it relates to improving and refining the DBFOM procurement documents. In addition, there is significant opportunity for cost reduction for design review and inspection services during the LRV manufacturing process. Because the selection of an existing LRV will require consideration on technical issues between the different existing LRVs, the preferred LRV supplier would be selected after the consideration of technical approach and price. For the size of the Waterloo LRT project, this is the preferred approach.

Under the premise that another transit authority has existing vehicles, which have been procured through a competitive process, the Region could negotiate directly with the transit agency holding the contract to secure the desired number of LRVs. As noted earlier, there is significant precedence in the transit industry for new start LRV contractual assignments (e.g. Atlanta, Utah, Hampton Roads).

The Regional Purchasing By-law under section 24 also allows for cooperative purchasing agreements with other government organizations. For instance, in 2010, the Procurement & Supply Services participated in a similar joint procurement with a number of other major transit services in southern Ontario and Metrolinx for bus parts that resulted in reduced overall costs and risks, and improved management of inventory.

Given the status of the current procurement in Toronto and the potential benefits for future operations and maintenance, the Region could achieve maximum value through direct negotiations with Metrolinx on their existing contract with Bombardier. The Bombardier vehicle was selected by Metrolinx in a competitive procurement process run by Toronto Transit Commission in 2008 and has a lengthy track record of performance throughout Europe. It is important to note that the procurement process was approved by the Metrolinx Board of Directors in 2009 and was also independently reviewed and approved by the Province of Ontario.

This joint procurement approach could provide a number of significant benefits, including:

- **Reduced Non-Recurring Costs**: These costs are typically independent of the procurement size and are associated with the procurement process, design engineering, project management, design qualification, testing, manuals and training, and would be significantly reduced for the Region under this approach. Metrolinx has already invested significant dollars towards these processes and therefore, the Regional contribution is expected to be nominal.

- **Decreased Recurring Costs**: The economy of scale associated with the total LRV quantity for a joint procurement could yield significant cost savings to both the Region and Metrolinx.

- **Compliance with Canadian Regulations**: Metrolinx LRVs are being designed to comply with all Canadian regulations and requirements with respect to procurement guidelines, e.g., Canadian content, environmental regulations and standards plus accessibility for the
physically challenged (Ontario Disability Act).

- **Sharing of Heavy Maintenance Facility and Commonality of Spare Parts**: Metrolinx will have facilities where all forms of heavy maintenance, overhauls and non-routine repairs will be conducted. Use of the same vehicle will allow the Region local access to these facilities. In addition, the economy of scale associated with the total quantities of spare parts required for a joint procurement could yield cost savings to both parties.

- **Schedule Confidence**: At this time the Metrolinx vehicle project is entering the Final Design Review Phase that is anticipated to be completed by the end of 2012. The Metrolinx schedule ensures vehicle deliveries as needed by the Region of Waterloo Project schedule.

- **Joint Pilot Test Program**: The Region can accommodate pilot testing of the vehicles on portions of the Waterloo Spur already designated for the light rail system and that will otherwise need to be modernized in the desired timeframe as part of Stage 1 of the Project. Having the testing occur on the approved rapid transit route will inherently progress qualification and verification of track alignment and vehicle integration. In addition, the joint pilot test program will also reveal and resolve any vehicle issues prior to the start of series production. This will be beneficial to both Metrolinx and the Region.

In light of the above benefits, it is recommended that the Region of Waterloo proceed with Option C.

Subject to Council approval and if the parties reach an agreement on the terms and conditions for a joint procurement, staff will report back prior to executing a contract.

4. **Next Steps in the Rapid Transit Project**

Staff anticipate that the next steps in the rapid transit project will include:

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

**CORPORATE STRATEGIC PLAN:**

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

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

The project budget includes approximately $100 million for the initial purchase of LRVs required at start of service in 2017.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

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

ATTACHMENTS:

Nil

PREPARED BY: Darshpreet Bhatti, Acting Director, Rapid Transit

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

DATE: June 19, 2012

FILE CODE: T02-04

SUBJECT: REVISED 2012 TRANSPORTATION BASE, SYSTEM EXPANSION, AND AIRPORT CAPITAL BUDGET

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the revised 2012 Transportation Base, System Expansion, and Airport Capital Budgets as per Report E-12-069 dated June 19, 2012.

SUMMARY:

A mid-year review of the Transportation Base, System Expansion, and Airport 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 2012 Base Capital Budget has a funding decrease of $6,795,000 (total revised budget $47,212 million) which is primarily attributable to competitive contract pricing. These funds will reduce the amount required from the Roads Rehabilitation Reserve Fund.

The revised 2012 System Expansion Capital Budget has a funding decrease of $4,073,000 (total revised budget $70.645 million) which is primarily attributable to project deferrals. These funds will reduce the amount required from the Development Charge and Roads Capital Levy Reserve Funds.

The revised 2012 Airport Capital Budget has a net funding decrease of $2,192,000 (total revised budget $13.264 million) which is primarily attributable to competitive contract pricing. These funds will reduce the amount required from debentures, grants and subsides.

Overall, the revised 2012 Transportation Capital Base, Capital System Expansion, and Airport Capital Budgets have a funding decrease of $13,060,000 (total revised budget $131.121 million).

To date, the cost savings in the 2012 Transportation Capital Budget from tendered projects through the competitive bidding process is $8.8 million (6.6%).

REPORT:

Background

Each year a mid-year review of the Transportation Base, System Expansion, and Airport Capital Budgets is carried out so that 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 2012 Transportation Base, System Expansion, and Airport Capital Budgets.

Project Variations

The following are projects that have been added, deferred or projects that have had their budget revised to a value greater than $100,000 and a summary of the reasons are provided below. Projects in which tenders or Council reports have been approved by Regional Council are included in the project details (Appendix A) but are not addressed in this report.

1. Revised 2012 Transportation Base Capital Budget

   The 2012 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 installations and system management.

   a) Regional Road #15 (King Street) at CPR Crossing East of Regional Road #53 (Fairway Road), Kitchener (+110,000);

      This railway crossing structural improvement has been added based on the deteriorated condition and poor ride over this crossing.

   b) Regional Road #21 (Arthur Street) - South Street to Arthur Street Bridge (Canagagigue Creek), Woolwich (-$690,000);

      This reconstruction project has been deferred until 2016 at the request of the Township due to delaying repairs to the watermain and sanitary sewers within the project limits.

   c) Regional Road #57 (University Avenue) at Laurel Creek, Waterloo (-$150,000);

      This drainage improvements project has been deferred to 2013 due to complications in design, longer approval requirements and property discussions with the University of Waterloo.

   d) Culvert Replacements in Advance of 2013 Road Rehabilitation Projects (+$140,000);

      In order to optimize the rural resurfacing contract, a separate contract is issued one year in advance of the resurfacing to address deficient culverts. The inspection process has identified/estimated more culvert replacements than was anticipated in the 2012 budget.

2. Revised 2012 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 widenings and road system expansions (new roads and bridges).
a) Regional Road #24 (Hespeler Road) at Beaverdale Road / Queen Street, Cambridge, Woolwich (-$2,230,000);

This project has been deferred to 2013 due to three issues: construction staging and detour routing for Contract 2012-005 (Regional Road #24 resurfacing) has the potential to back into this construction zone during peak traffic periods in contradiction of Ministry of Labour contract separation regulations; the tender was delayed until concerns regarding multi-lane roundabouts could be addressed; and the scope of the project was increased to include work on the adjacent bridge structures that likely would have pushed final paving into November, for which Region paving standards may not have been met due to potential weather issues.

b) Regional Road #86 (Church Street), East of Raising Mill Gate to Barnswallow Drive (-$635,000);

This intersection improvement and rehabilitation project has been deferred to coincide with the adjacent planned development works in 2013.

c) Regional Road #4 (Ottawa Street), Regional Road #15 (King Street) to Mill Street (-$1,300,000);

This project has been deferred to a later date due to scheduling conflicts with the Rapid Transit project. Local intersection improvements will be considered at key locations along Ottawa Street as part of the Rapid Transit project. The future timing of the full four-lane widening will be determined as part of a future Municipal Class Environmental Assessment.

d) South Boundary Road, Regional Road #36 (Franklin Boulevard) to Regional Road #8 (Dundas Street) (+$300,000);

Additional funds are required to purchase property that has come available which will be required for the new South Boundary Road project in Cambridge.

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: Sustainable Transportation and the following Corporate Strategic Objectives.

- 2.2 – Develop, optimize and maintain infrastructure to meet current and projected needs
- 3.3 – Optimize the use of existing infrastructure and ensure it is adequately maintained

FINANCIAL IMPLICATIONS:

A mid-year review of the Transportation Base, System Expansion, and Airport 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 2012 Base Capital Budget has a funding decrease of $6,795,000 (total revised budget $47,212 million) which is primarily attributable to competitive contract pricing as identified in Appendix A. This will reduce the amount required from the Roads Rehabilitation Reserve Fund.
The revised 2012 System Expansion Capital Budget has a funding decrease of $4,073,000 (total revised budget $70.645 million) which is primarily attributable to project deferrals as identified in Appendix A. This will reduce the amount required from the Development Charge and Roads Capital Levy Reserve Funds.

The revised 2012 Airport Capital Budget has a net funding decrease of $2,192,000 (total revised budget $13.264 million) which is primarily attributable to competitive contract pricing as identified in Appendix A. This will reduce the amount required from debentures, grants and subsides.

Overall the revised 2012 Transportation Capital Base, Capital System Expansion, and Airport Capital Budgets have a funding decrease of $13,060,000 (total revised budget $131.121 million) as identified in Appendix A.

To date, the cost savings in the 2012 Transportation Capital Budget from tendered projects through the competitive bidding process is $8.8 million (6.6%).

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Design and Construction, Finance and Transportation Planning has been directly involved in the preparation of this report.

ATTACHMENTS:

Appendix A – Revisions to the 2012 Transportation Base, System Expansion and Airport Capital Budget.

PREPARED BY: Kelly Walsh, Supervisor, Transportation Capital Program

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Service
## APPENDIX A

Report: E-12-069

### REVISIONS TO THE 2012 TRANSPORTATION BASE, SYSTEM EXPANSION, AND AIRPORT CAPITAL BUDGETS

<table>
<thead>
<tr>
<th>($000's)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2013 REVISED BUDGET</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPENDITURES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TRANSPORTATION BASE CAPITAL BUDGET</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>URBAN RESURFACING</td>
<td>115</td>
<td>2,315</td>
<td>2,430</td>
<td>2,081</td>
<td>-349</td>
</tr>
<tr>
<td>RURAL RESURFACING</td>
<td>507</td>
<td>7,335</td>
<td>7,906</td>
<td>6,408</td>
<td>-1,498</td>
</tr>
<tr>
<td>RECONSTRUCTION AND MAJOR REHABILITATION</td>
<td>12,087</td>
<td>19,080</td>
<td>31,167</td>
<td>29,335</td>
<td>-4,832</td>
</tr>
<tr>
<td>INTERSECTION IMPROVEMENTS (NON-GROWTH)</td>
<td>31</td>
<td>0</td>
<td>31</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>BRIDGE AND DRAINAGE WORKS</td>
<td>547</td>
<td>2,210</td>
<td>2,757</td>
<td>2,868</td>
<td>111</td>
</tr>
<tr>
<td>SYSTEM MANAGEMENT / OTHER</td>
<td>1,363</td>
<td>4,180</td>
<td>5,543</td>
<td>5,638</td>
<td>95</td>
</tr>
<tr>
<td>TRAFFIC SIGNAL MODERNIZATIONS</td>
<td>363</td>
<td>760</td>
<td>1,113</td>
<td>923</td>
<td>-190</td>
</tr>
<tr>
<td>TRAFFIC ENGINEERING GENERAL</td>
<td>1,407</td>
<td>820</td>
<td>2,227</td>
<td>2,227</td>
<td>0</td>
</tr>
<tr>
<td>SIDEWALK FACILITIES</td>
<td>293</td>
<td>540</td>
<td>833</td>
<td>701</td>
<td>-132</td>
</tr>
<tr>
<td><strong>TRANSPORTATION SYSTEM EXPANSION CAPITAL BUDGET</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTERSECTION IMPROVEMENTS (GROWTH-RELATED)</td>
<td>16,200</td>
<td>4,115</td>
<td>20,335</td>
<td>17,278</td>
<td>-3,057</td>
</tr>
<tr>
<td>DEVELOPMENT RELATED LEFT AND RIGHT TURN LANES</td>
<td>177</td>
<td>1,640</td>
<td>1,817</td>
<td>1,817</td>
<td>0</td>
</tr>
<tr>
<td>TRAFFIC SIGNAL INSTALLATIONS</td>
<td>117</td>
<td>455</td>
<td>572</td>
<td>597</td>
<td>65</td>
</tr>
<tr>
<td>ROAD WIDENINGS</td>
<td>8,789</td>
<td>16,685</td>
<td>25,474</td>
<td>24,174</td>
<td>-1,300</td>
</tr>
<tr>
<td>ROAD SYSTEM EXPANSION</td>
<td>15,710</td>
<td>10,810</td>
<td>26,520</td>
<td>26,869</td>
<td>349</td>
</tr>
<tr>
<td><strong>AIRPORT CAPITAL BUDGET</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIRPORT</td>
<td>13,369</td>
<td>2,087</td>
<td>15,456</td>
<td>13,284</td>
<td>-2,192</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>71,149</td>
<td>73,032</td>
<td>144,181</td>
<td>131,121</td>
<td>-13,060</td>
</tr>
</tbody>
</table>

### REVENUES:

<table>
<thead>
<tr>
<th></th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2013 REVISED BUDGET</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUBSIDY (FEDERAL GAS TAX)</strong></td>
<td>0</td>
<td>14,666</td>
<td>14,666</td>
<td>14,666</td>
<td>0</td>
</tr>
<tr>
<td>ROADS REHABILITATION CAPITAL RESERVE FUND</td>
<td>13,474</td>
<td>22,020</td>
<td>35,494</td>
<td>29,719</td>
<td>-5,775</td>
</tr>
<tr>
<td>DEVELOPMENT CHARGE RESERVE FUND (TRANSPORTATION)</td>
<td>26,857</td>
<td>29,770</td>
<td>56,627</td>
<td>52,846</td>
<td>-3,781</td>
</tr>
<tr>
<td>ROAD CAPITAL LEVY RESERVE FUND</td>
<td>1,597</td>
<td>2,374</td>
<td>3,971</td>
<td>3,459</td>
<td>-512</td>
</tr>
<tr>
<td>NOISE BARRIER RESERVE FUND</td>
<td>92</td>
<td>0</td>
<td>92</td>
<td>92</td>
<td>0</td>
</tr>
<tr>
<td>GRANTS AND SUBSIDIES</td>
<td>4,254</td>
<td>0</td>
<td>4,254</td>
<td>3,039</td>
<td>-1,215</td>
</tr>
<tr>
<td>CONTRIBUTIONS FROM RESERVE FUNDS</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>95</td>
<td>-5</td>
</tr>
<tr>
<td>AIRPORT CAPITAL RESERVE FUND</td>
<td>808</td>
<td>522</td>
<td>1,331</td>
<td>1,283</td>
<td>-48</td>
</tr>
<tr>
<td>AIRPORT VEHICLE/EQUIPMENT RESERVE FUND</td>
<td>540</td>
<td>577</td>
<td>1,117</td>
<td>1,117</td>
<td>0</td>
</tr>
<tr>
<td>DEVELOPMENT CHARGES RESERVE FUND (AIRPORT)</td>
<td>1,704</td>
<td>0</td>
<td>1,704</td>
<td>1,704</td>
<td>0</td>
</tr>
<tr>
<td>THIRD PARTY - CP RAIL</td>
<td>12,821</td>
<td>0</td>
<td>12,821</td>
<td>12,821</td>
<td>0</td>
</tr>
<tr>
<td>THIRD PARTY - OTHER</td>
<td>330</td>
<td>1,635</td>
<td>1,973</td>
<td>1,973</td>
<td>0</td>
</tr>
<tr>
<td>MUNICIPAL COST SHARING</td>
<td>1,804</td>
<td>170</td>
<td>1,974</td>
<td>1,974</td>
<td>0</td>
</tr>
<tr>
<td>DEBENTURES - RDC</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>DEBENTURES</td>
<td>7,159</td>
<td>1,298</td>
<td>8,457</td>
<td>7,531</td>
<td>-926</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>71,149</td>
<td>73,032</td>
<td>144,181</td>
<td>131,121</td>
<td>-13,060</td>
</tr>
</tbody>
</table>

### 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 STRENGTHEN ASPHALT
- EA = ENVIRONMENTAL ASSESSMENT
- EXP = EXPANDED ASPHALT
- IPS = PEDESTRIAN SIGNAL INSTALLATION
- L = LAND PURCHASE
- LA = LANDSCAPING
- MOD = TRAFFIC SIGNAL MODERNIZATION
- NC = CONSTRUCTION
- PAD = PADDING
- PL = PLANNING
- REC = RECONSTRUCTION
- RH = REHABILITATION
- RRS = RECONSTRUCTION WITH STORM SEWERS
- RW = ROAD WIDENING
- R1 = RESURFACE-SINGLE LIFT
- R2 = RESURFACE-DUO 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 2012 TRANSPORTATION BASE CAPITAL BUDGET

<table>
<thead>
<tr>
<th>($000's)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPENDITURES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSPORTATION BASE CAPITAL BUDGET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>URBAN RESURFACING</td>
<td>115</td>
<td>2,315</td>
<td>2,430</td>
<td>2,081</td>
<td>-349</td>
</tr>
<tr>
<td>RURAL RESURFACING</td>
<td>571</td>
<td>7,335</td>
<td>7,906</td>
<td>6,408</td>
<td>-1,498</td>
</tr>
<tr>
<td>RECONSTRUCTION AND MAJOR REHABILITATION</td>
<td>12,087</td>
<td>19,080</td>
<td>31,167</td>
<td>26,335</td>
<td>-4,832</td>
</tr>
<tr>
<td>INTERSECTION IMPROVEMENTS (NON-GROWTH)</td>
<td>31</td>
<td>0</td>
<td>31</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>BRIDGE AND DRAINAGE WORKS</td>
<td>547</td>
<td>2,210</td>
<td>2,757</td>
<td>2,668</td>
<td>111</td>
</tr>
<tr>
<td>SYSTEM MANAGEMENT / OTHER</td>
<td>1,363</td>
<td>4,180</td>
<td>5,543</td>
<td>5,638</td>
<td>95</td>
</tr>
<tr>
<td>TRAFFIC SIGNAL MODERNIZATIONS</td>
<td>353</td>
<td>760</td>
<td>1,113</td>
<td>923</td>
<td>-190</td>
</tr>
<tr>
<td>TRAFFIC ENGINEERING GENERAL</td>
<td>1,407</td>
<td>820</td>
<td>2,227</td>
<td>2,227</td>
<td>0</td>
</tr>
<tr>
<td>SIDEWALK FACILITIES</td>
<td>203</td>
<td>540</td>
<td>833</td>
<td>701</td>
<td>-132</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>16,767</td>
<td>37,240</td>
<td>54,007</td>
<td>47,212</td>
<td>-6,795</td>
</tr>
</tbody>
</table>

| **REVENUES:**                   |       |             |                    |                     |          |
| SUBSIDY (FEDERAL GAS TAX)       | 0     | 14,666      | 14,666             | 14,666              | 0        |
| DEVELOPMENT CHARGE RESERVE FUND (TRANSPORTATION) | 17 | 74         | 91                 | 71                  | -20      |
| ROADS REHABILITATION CAPITAL RESERVE FUND | 13,474 | 22,020 | 35,494 | 28,719 | -6,775 |
| NOISE BARRIER RESERVE FUND      | 92    | 0           | 92                 | 92                  | 0        |
| MUNICIPAL COST SHARING           | 1,804 | 170         | 1,974              | 1,974               | 0        |
| THIRD PARTY - OTHER              | 183   | 0           | 183                | 183                 | 0        |
| DEBENTURES                      | 1,197 | 310         | 1,507              | 1,507               | 0        |
| **TOTAL**                       | 16,767 | 37,240     | 54,007             | 47,212              | -6,795   |

### LEGEND:
- AG = ABOVE GROUND
- BG = BELOW GROUND
- CF = CYCLING FACILITY
- CG = CURBS & 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 = PAVING
- PL = PLANNING
- REC = 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 2012 TRANSPORTATION CAPITAL BASE BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5787</td>
<td>REG. RD. 1 (SNYDERS ROAD), NAIZGER RD. TO BADEN WATER TOWER</td>
<td>WIL</td>
<td>1.54</td>
<td>0</td>
<td>450</td>
<td>450</td>
<td>431 R1</td>
<td>-19</td>
<td>CONTRACT 2012-010</td>
</tr>
<tr>
<td>5542</td>
<td>REG. RD. 6 (FREDERICK STREET), EDNA ST. (RR62) TO LANCASTER ST.</td>
<td>KIT</td>
<td>0.89</td>
<td>60</td>
<td>1225</td>
<td>1225</td>
<td>835 DE DSA MOD</td>
<td>-450</td>
<td>CONTRACT 2012-068</td>
</tr>
<tr>
<td>5687</td>
<td>REG. RD. 9 (ERBS ROAD), NOTRE DAME DRIVE (RR12) TO WILMA STREET</td>
<td>WIL</td>
<td>0.39</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>70 PL R1</td>
<td>70</td>
<td>PROGRAM ADDITION</td>
</tr>
<tr>
<td>5809</td>
<td>REG. RD. 17 (FOUNTAIN STREET N), 250 M. NORTH OF MAPLE GROVE RD. (RR38) TO BANE RD.</td>
<td>CAM</td>
<td>0.44</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5524</td>
<td>REG. RD. 24 (HEGEBER ROAD), BISHOP ST. (RR41) TO EAGLE ST. N./PINEBUSH RD (RR39).</td>
<td>CAM</td>
<td>1.46</td>
<td>40</td>
<td>40</td>
<td>80</td>
<td>80 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5662</td>
<td>VARIOUS URBAN SPOT RESURFACING</td>
<td>WIL</td>
<td>0</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>650</td>
<td>50</td>
<td>REVISED ESTIMATE</td>
</tr>
</tbody>
</table>

**TOTAL URBAN RESURFACING** | 4.72 | 115 | 2,315 | 2,430 | 2,081 | -349 |

### RURAL RESURFACING

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5423</td>
<td>REG. RD. 4 (BLEAMS ROAD), QUEEN ST. (RR12) TO WILMOT CENTRE RD. (RR51)</td>
<td>WIL</td>
<td>4.98</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>20 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5425</td>
<td>REG. RD. 5 (NAIZGER ROAD), HWY 7/8 TO WATERLOO ST. (RR1)</td>
<td>WIL</td>
<td>1.93</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>20 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5432</td>
<td>REG. RD. 9 (ERBS ROAD), W. OF IRA NEEDLES BLVD. (RR70) TO E. LIMITS OF ST. AGATHA</td>
<td>WAT</td>
<td>4.21</td>
<td>46</td>
<td>2470</td>
<td>2516</td>
<td>1942 DE EXP</td>
<td>-574</td>
<td>CONTRACT 2012-065</td>
</tr>
<tr>
<td>5865</td>
<td>REG. RD. 14 (MOSER YOUNG ROAD), WEIMAR LN. (RR14) TO GERBER RD. (RR12)/ NOTRE DAME DR. (RR12)</td>
<td>WELL</td>
<td>1.58</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5440</td>
<td>REG. RD. 15 (LOBINGER LINE), 0.6KM W. OF KESSLER RD. (RR18) TO ANITA ST.</td>
<td>WELL</td>
<td>1.56</td>
<td>0</td>
<td>985</td>
<td>985</td>
<td>818 DE EXP</td>
<td>-167</td>
<td>CONTRACT 2012-065</td>
</tr>
<tr>
<td>5448</td>
<td>REG. RD. 17 (SAYMILL ROAD), SNYDER'S FLATS RD. TO KATHERINE ST. (RR23)</td>
<td>WOOL</td>
<td>2.57</td>
<td>29</td>
<td>0</td>
<td>29</td>
<td>29</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PROJ. NO.</td>
<td>PROJECT DESCRIPTION</td>
<td>AREA MUN</td>
<td>PROJ. LEN (KM)</td>
<td>CFWD</td>
<td>2012 BUDGET</td>
<td>2012 TOTAL BUDGET</td>
<td>2012 REVISED BUDGET</td>
<td>VARIANCE</td>
<td>REMARKS</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------</td>
<td>----------</td>
<td>---------------</td>
<td>------</td>
<td>-------------</td>
<td>--------------------</td>
<td>----------------------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>5450</td>
<td>REG. RD. 17 (AMENT LINE), HERRGOTT RD. (RR10) TO MOSER YOUNG RD.</td>
<td>WELL</td>
<td>2.46</td>
<td>29</td>
<td>0</td>
<td>29</td>
<td>29</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5451</td>
<td>REG. RD. 17 (AMENT LINE), MOSER YOUNG RD. TO 0.4 KM S. OF LAVERY RD.</td>
<td>WELL</td>
<td>2.96</td>
<td>29</td>
<td>0</td>
<td>29</td>
<td>29</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5668</td>
<td>REG. RD. 24 (HESPELER ROAD), BEAVERDALE RD. / QUEEN ST. W. TO WELLINGTON/WATERLOO BDRY.</td>
<td>CAM</td>
<td>6.26</td>
<td>52</td>
<td>3460</td>
<td>3512</td>
<td>2685 DE EXP</td>
<td>-847</td>
<td>CONTRACT 2012-065</td>
</tr>
<tr>
<td>5459</td>
<td>REG. RD. 28 (FOUNTAIN STREET), PRESTON PKWY. TO DICKIE SETTLEMENT RD. (RR71)</td>
<td>CAM</td>
<td>2.03</td>
<td>52</td>
<td>60</td>
<td>112</td>
<td>112 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5461</td>
<td>REG. RD. 31 (KOSSELT ROAD), COBER RD. TO E. OF FOUNTAIN ST. (RR17)</td>
<td>CAM</td>
<td>2.02</td>
<td>324</td>
<td>0</td>
<td>324</td>
<td>324</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5568</td>
<td>REG. RD. 46 (ROSEVILLE ROAD), EDWORTHY SD. RD. (RR71) TO DICKIE SETTLEMENT RD. (RR71)</td>
<td>ND</td>
<td>1.06</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>20 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5174</td>
<td>VARIOUS RURAL SPOT RESURFACINGS</td>
<td></td>
<td>0</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>390</td>
<td>90</td>
<td>REVISED ESTIMATE</td>
</tr>
</tbody>
</table>

| TOTAL RURAL RESURFACING | 33.62 | 571 | 7,335 | 7,906 | 6,408 | -1,498 |

**RECONSTRUCTION AND MAJOR REHABILITATION**

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5213</td>
<td>REG. RD. 1 (WATERLOO STREET), HURON ST. (RR1) TO 255M N. OF LASCHINGER BLVD.</td>
<td>WIL</td>
<td>2.02</td>
<td>30</td>
<td>0</td>
<td>30</td>
<td>30</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5376</td>
<td>REG. RD. 4 (OTTAWA STREET N), OLD CHICOPEE DR. TO EASTBOUND RAMP, HIGHWAY 7</td>
<td>KIT</td>
<td>1.64</td>
<td>0</td>
<td>120</td>
<td>120</td>
<td>120 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5377</td>
<td>REG. RD. 4 (OTTAWA STREET), MILL ST. TO IMPERIAL DR.</td>
<td>KIT</td>
<td>0.69</td>
<td>0</td>
<td>310</td>
<td>310</td>
<td>310 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5378</td>
<td>REG. RD. 5 (HUTCHISON ROAD), CROSSHILL S. LIMITS TO CROSSHILL W. LIMITS</td>
<td>WELL</td>
<td>1.16</td>
<td>0</td>
<td>300</td>
<td>300</td>
<td>300 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5483</td>
<td>REG. RD. 5 (MANSER ROAD) S. LINWOOD TOWN LIMITS TO 85M. N. OF ADELAIDE ST. AND REG. RD. 17 (AMENT LINE), MANSER RD. TO TOWN LIMITS</td>
<td>WELL</td>
<td>0.95</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>20 LA</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
## REVISIONS TO THE 2012 TRANSPORTATION CAPITAL BASE BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5250</td>
<td>REG. RD. 6 (FREDERICK STREET), BRUCE ST. (RR61) TO EDNA ST. (RR62)</td>
<td>KIT</td>
<td>0.43</td>
<td>15</td>
<td>1420</td>
<td>1435</td>
<td>750 DE REC</td>
<td>-685</td>
<td>CONTRACT 2012-068</td>
</tr>
<tr>
<td>5328</td>
<td>REG. RD. 6 (HIGHLAND ROAD), W. OF PATRICIA AVE. TO WESTMOUNT RD. (RR50)</td>
<td>KIT</td>
<td>0.84</td>
<td>12</td>
<td>100</td>
<td>112</td>
<td>112 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5428</td>
<td>REG. RD. 6 (SNYDER'S ROAD), 0.32KM E. OF NOTRE DAME DR. (RR12) TO 0.23KM W. OF NOTRE DAME DR. (RR12)</td>
<td>WIL</td>
<td>0.55</td>
<td>44</td>
<td>40</td>
<td>84</td>
<td>130 DE</td>
<td>46</td>
<td>REVISED ESTIMATE</td>
</tr>
<tr>
<td>5251</td>
<td>REG. RD. 8 (DUNDAS STREET), BRANCHTON RD. (RR83) TO FRANKLIN BLVD. (RR88)</td>
<td>CAM</td>
<td>1.46</td>
<td>3656</td>
<td>550</td>
<td>4516</td>
<td>4516 SW LA CG</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5367</td>
<td>REG. RD. 8 (DUNDAS STREET), ELGIN ST. TO HESPELER RD. (RR24)</td>
<td>CAM</td>
<td>2.13</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>20 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5962</td>
<td>REG. RD. 15 (KING STREET), AT CPR CROSSING E. FAIRWAY ROAD (RR 55)</td>
<td>KIT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>110 DE REC</td>
<td>110</td>
<td>PROGRAM ADDITION</td>
</tr>
<tr>
<td>6134</td>
<td>REG. RD. 8 (WEBER STREET), BORDEN AVE. TO QUEEN ST.</td>
<td>KIT</td>
<td>1.52</td>
<td>20</td>
<td>200</td>
<td>220</td>
<td>220 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5488</td>
<td>REG. RD. 8 (WEBER STREET), GUELPH ST. TO UNION ST</td>
<td>KIT</td>
<td>0.64</td>
<td>0</td>
<td>300</td>
<td>300</td>
<td>300 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5489</td>
<td>REG. RD. 8 (WEBER STREET), KING ST. (RR15) TO MILFORD AVE.</td>
<td>WAT</td>
<td>0.40</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5430</td>
<td>REG. RD. 8 (WEBER STREET), BENJAMIN RD. TO KING ST. (RR15)</td>
<td>WOOL</td>
<td>1.03</td>
<td>0</td>
<td>105</td>
<td>105</td>
<td>105 DE R1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5431</td>
<td>REG. RD. 8 (KING STREET), PRINTERY RD. TO SAWMILL RD. (RR17)</td>
<td>WOOL</td>
<td>1.91</td>
<td>18</td>
<td>90</td>
<td>108</td>
<td>135 DE</td>
<td>27</td>
<td>REVISED ESTIMATE</td>
</tr>
<tr>
<td>6510</td>
<td>REG. RD. 9 (BRIDGEPORT RD., CAROLINE ST.), KING ST. (RR15) TO ERB ST. (RR9)</td>
<td>WAT</td>
<td>0.53</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>20 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5490</td>
<td>REG. RD. 9 (ERB STREET), KING ST. (RR15) TO CAROLINE ST. (RR9)</td>
<td>WAT</td>
<td>0.25</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>40 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5184</td>
<td>REG. RD. 9 (ERB STREET), WESTMOUNT RD. (RR50) TO FISCHER-HALLMAN RD. (RR50)</td>
<td>WAT</td>
<td>1.53</td>
<td>42</td>
<td>0</td>
<td>42</td>
<td>42</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PROJ. NO.</td>
<td>PROJECT DESCRIPTION</td>
<td>AREA MUN</td>
<td>PROJ. LEN (KM)</td>
<td>CFWD 2012 BUDGET</td>
<td>2012 TOTAL BUDGET</td>
<td>2012 REVISED BUDGET</td>
<td>VARIANCE</td>
<td>REMARKS</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>---------------------</td>
<td>----------</td>
<td>----------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>5613</td>
<td>REG. RD. 9 (ERBS ROAD), E. LIMITS OF ST. AGATHA TO NOTRE DAME DR. (RR12) AND REG. RD. 12 (NOTRE DAME DR.) S. LIMITS OF ST. AGATHA TO ERBS RD. (RR9)</td>
<td>WIL</td>
<td>0.64</td>
<td>902</td>
<td>0</td>
<td>902</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5491</td>
<td>REG. RD. 12 (BRIDGE STREET / QUEEN STREET), NEW DUNDEE - EAST MAIN ST. TO WATER ST.</td>
<td>WIL</td>
<td>1.17</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5493</td>
<td>REG. RD. 12 (NOTRE DAME DRIVE), HWY. 7/8 TO CP RAIL - PETERSBURG</td>
<td>WIL</td>
<td>1.34</td>
<td>0</td>
<td>75</td>
<td>75</td>
<td>90 DE</td>
<td>15 REVISED ESTIMATE</td>
<td></td>
</tr>
<tr>
<td>5041</td>
<td>REG. RD. 15 (KING STREET), VICTORIA ST. (RR55) TO CENTRAL MARKET</td>
<td>KIT</td>
<td>0.86</td>
<td>40</td>
<td>20</td>
<td>60</td>
<td>80 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6206</td>
<td>REG. RD. 15 (KING STREET), CENTRAL MARKET TO UNION ST.</td>
<td>KIT</td>
<td>0.67</td>
<td>40</td>
<td>20</td>
<td>60</td>
<td>80 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5633</td>
<td>REG. RD. 15 (KING STREET), WEBER ST. (RR8) TO HWY 85 SB. RAMP</td>
<td>WAT</td>
<td>0.53</td>
<td>91</td>
<td>100</td>
<td>191</td>
<td>191 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5391</td>
<td>REG. RD. 15 (KING STREET), HWY 85 NB. RAMP (WATERLOO) TO HWY 85 NB. RAMP (WOOLWICH)</td>
<td>WAT</td>
<td>2.07</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5164</td>
<td>REG. RD. 15 (KING STREET), RAIL TRACKS TO LOBSINGER LN. (RR15)</td>
<td>WOOL</td>
<td>0.59</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>100 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5568</td>
<td>REG. RD. 16 (KRESSLER ROAD), LOBSINGER LINE (RR15) TO APOLLO DR.</td>
<td>WELL</td>
<td>0.38</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>20 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5393</td>
<td>REG. RD. 17 (FOUNTAIN STREET), KING ST. (RR8) TO CHERRY BLOSSOM RD.</td>
<td>CAM</td>
<td>1.49</td>
<td>59</td>
<td>100</td>
<td>159</td>
<td>159 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5392</td>
<td>REG. RD. 17 (SANMILL ROAD), CONESTOGO BRIDGE TO MUSSELMAN CR. AND REG. RD. 22 (NORTHFIELD DRIVE), S. LIMITS OF CONESTOGO TO COUNTRY SPRING WALK</td>
<td>WOOL</td>
<td>1.49</td>
<td>97</td>
<td>160</td>
<td>257</td>
<td>257 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5190</td>
<td>REG. RD. 20 (BLOOMINGDALE ROAD), KRAFT DR. TO BRIDGE ST. (RR52)</td>
<td>KIT</td>
<td>1.22</td>
<td>0</td>
<td>450</td>
<td>450</td>
<td>450 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5394</td>
<td>REG. RD. 21 (ARTHUR STREET), SOUTH ST. TO ARTHUR ST. BRIDGE</td>
<td>WOOL</td>
<td>0.75</td>
<td>0</td>
<td>690</td>
<td>690</td>
<td>0</td>
<td>-690 PROJECT DEFERRED</td>
<td></td>
</tr>
<tr>
<td>PROJ. NO.</td>
<td>PROJECT DESCRIPTION</td>
<td>AREA MUN</td>
<td>PROJ. LEN (KM)</td>
<td>CFWD</td>
<td>2012 BUDGET</td>
<td>2012 TOTAL BUDGET</td>
<td>2012 REVISED BUDGET</td>
<td>VARIANCE</td>
<td>REMARKS</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------</td>
<td>----------</td>
<td>----------------</td>
<td>------</td>
<td>-------------</td>
<td>------------------</td>
<td>---------------------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>5798</td>
<td>REG. RD. 22 (NORTHFIELD DRIVE), KING ST. (RR15) TO DAVENPORT RD.</td>
<td>WAT</td>
<td>0.44</td>
<td>20</td>
<td>200</td>
<td>220</td>
<td>220 DE</td>
<td>R1</td>
<td>0</td>
</tr>
<tr>
<td>5692</td>
<td>REG. RD. 24 (AINSILIE STREET S), WALNUT ST. TO PARKHILL RD. (RR77)</td>
<td>CAM</td>
<td>0.92</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>60 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5396</td>
<td>REG. RD. 24 (WATER STREET), AINSILE ST. TO CORONATION BLVD. (RR08)</td>
<td>CAM</td>
<td>0.82</td>
<td>0</td>
<td>30</td>
<td>30</td>
<td>30 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5786</td>
<td>REG. RD. 33 (TOWNLINE ROAD), AVENUE RD/GORE RD. TO SAGINAW PKWY.</td>
<td>CAM</td>
<td>0.98</td>
<td>3006</td>
<td>500</td>
<td>3506</td>
<td>3506 REC OF SW</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5403</td>
<td>REG. RD. 39 (PINEBUSH ROAD), WAYNE AVE. TO HESPELER RD. (RR24)</td>
<td>CAM</td>
<td>1.50</td>
<td>53</td>
<td>0</td>
<td>53</td>
<td>53</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5617</td>
<td>REG. RD. 39 (EAGLE STREET), HESPELER RD. (RR24) TO CONCESSION RD./SPEEDSVILLE RD.</td>
<td>CAM</td>
<td>1.60</td>
<td>100</td>
<td>80</td>
<td>180</td>
<td>180 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5404</td>
<td>REG. RD. 41 (BISHOP STREET), CONESTOGA BLVD. TO CONCESSION RD.</td>
<td>CAM</td>
<td>2.15</td>
<td>100</td>
<td>310</td>
<td>410</td>
<td>410 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5405</td>
<td>REG. RD. 42 (GEORGE STREET), ST. ANDREWS ST. (RR75) TO PARKHILL RD. (RR77)</td>
<td>CAM</td>
<td>0.69</td>
<td>56</td>
<td>1800</td>
<td>1856</td>
<td>1192 DE REC OF</td>
<td>-664</td>
<td>CONTRACT 2012-903</td>
</tr>
<tr>
<td>5017</td>
<td>REG. RD. 50 (WESTMOUNT ROAD), NOISE BARRIER REPLACEMENT FROM 75 M. SOUTH OF WILLIAMSBURG RD. TO WILLIAMSBURG RD.</td>
<td>KIT</td>
<td>0.09</td>
<td>95</td>
<td>0</td>
<td>95</td>
<td>95</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5574</td>
<td>REG. RD. 50 (WESTMOUNT ROAD), GREENBROOK DR. TO HIGHLAND ROAD (RR8)</td>
<td>KIT</td>
<td>1.09</td>
<td>83</td>
<td>120</td>
<td>203</td>
<td>203 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5627</td>
<td>REG. RD. 50 (WESTMOUNT ROAD), HIGHLAND RD. (RR6) TO VICTORIA ST. (RR55)</td>
<td>KIT</td>
<td>0.70</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>50 DE</td>
<td>0</td>
<td>REVISED ESTIMATE</td>
</tr>
<tr>
<td>5615</td>
<td>REG. RD. 50 (WESTMOUNT ROAD), ERB ST. (RR6) TO UNIVERSITY AVE. (RR57)</td>
<td>WAT</td>
<td>0.68</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5183</td>
<td>REG. RD. 52 (BRIDGE STREET), KITWOOI BDRY. TO BRIDGEPORT BRIDGE</td>
<td>KIT</td>
<td>2.18</td>
<td>278</td>
<td>210</td>
<td>488</td>
<td>488 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5576</td>
<td>REG. RD. 52 (BRIDGE STREET W.), WOOLWICH ST. TO UNIVERSITY AVE. E. (RR57)</td>
<td>KIT/WAT</td>
<td>1.05</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100 DE</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
### REVISIONS TO THE 2012 TRANSPORTATION CAPITAL BASE BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD 2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5194</td>
<td>REG. RD. 53 (COURTLAND AVENUE), HWY 78 TO QUEEN ST.</td>
<td>KIT</td>
<td>2.44</td>
<td>2015</td>
<td>220</td>
<td>2215 DE RSS MOD SW</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5501</td>
<td>REG. RD. 57, (UNIVERSITY AVENUE), LINCOLN RD. TO WEBER ST. (RR8)</td>
<td>WAT</td>
<td>1.15</td>
<td>204</td>
<td>940</td>
<td>1144 DE L U</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5585</td>
<td>REG. RD. 57 (UNIVERSITY AVENUE), AT BAKER ST. -COUNTRYSTONE DR.</td>
<td>WAT</td>
<td>0.20</td>
<td>0</td>
<td>0</td>
<td>70 DE REC</td>
<td>70 PROGRAM ADDITION</td>
<td></td>
</tr>
<tr>
<td>5538</td>
<td>REG. RD. 58 (SWAN STREET), HILLTOP DR. TO STANLEY ST.</td>
<td>ND</td>
<td>1.02</td>
<td>71</td>
<td>145</td>
<td>216 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5414</td>
<td>REG. RD. 58 (NORTHUMBERLAND STREET/STANLEY STREET), SWAN ST. (RR56) TO CP RAILWAY CROSSING</td>
<td>ND</td>
<td>0.81</td>
<td>0</td>
<td>20</td>
<td>20 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5559</td>
<td>REG. RD. 58 (FISCHER-HALLMAN ROAD), QUEENS BLVD. TO VICTORIA ST. S. (RR55)</td>
<td>KIT</td>
<td>1.04</td>
<td>60</td>
<td>0</td>
<td>60 80</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5579</td>
<td>REG. RD. 69 (MANITOUL DRIVE), HOMER WATSON BLVD. (RR28) TO BLEAMS RD. (RR66)</td>
<td>KIT</td>
<td>1.52</td>
<td>20</td>
<td>20</td>
<td>40 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5275</td>
<td>REG. RD. 70 (TRUSSLER ROAD), NEW DUNDEE RD. (RR12) TO BLEAMS RD. (RR56)</td>
<td>ND</td>
<td>5.42</td>
<td>245</td>
<td>8465</td>
<td>8710 DE REC SL</td>
<td>-3110 CONTRACT 2012-004</td>
<td></td>
</tr>
<tr>
<td>5508</td>
<td>REG. RD. 70 (IRA NEEDLES BOULEVARD), NOISE BARRIER INSTALLATION FROM N. OF UNIVERSITY AVE. (RR57) TO N. OF HEATHCLIFFE PL.</td>
<td>WAT</td>
<td>0.44</td>
<td>92</td>
<td>0</td>
<td>92 92</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5471</td>
<td>REG. RD. 75 (SPRAGUES ROAD), BRANT/WATERLOO BDY. TO SHOULDICE SIDE RD.</td>
<td>ND</td>
<td>4.53</td>
<td>0</td>
<td>20</td>
<td>20 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5416</td>
<td>REG. RD. 75 (ST. ANDREWS STREET), CAMBRIDGE BDY. TO GRAND AVE. (RR76)</td>
<td>CAM</td>
<td>2.77</td>
<td>0</td>
<td>120</td>
<td>120 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5582</td>
<td>REG. RD. 77 (PARKHILL ROAD), AINSJIE ST. (RR24) TO WATER ST. (RR24)</td>
<td>CAM</td>
<td>0.11</td>
<td>20</td>
<td>70</td>
<td>90 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5417</td>
<td>REG. RD. 86 (CHURCH STREET), SPRUCE LANE TO ARTHUR ST. (RR21)</td>
<td>WOOL</td>
<td>0.76</td>
<td>0</td>
<td>60</td>
<td>60 80 DE</td>
<td>20 REVISED ESTIMATE</td>
<td></td>
</tr>
</tbody>
</table>
### REVISIONS TO THE 2012 TRANSPORTATION CAPITAL BASE BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5583</td>
<td>REG. RD. 97 (CONCESSION STREET), CHISHOLM ST. TO WATER ST. (RR24)</td>
<td>CAM</td>
<td>0.60</td>
<td>18</td>
<td>150</td>
<td>168</td>
<td>168.0 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5420</td>
<td>REG. RD. 97 (CEDAR STREET), OSBORNE ST. TO CAMBRIDGE BDY.</td>
<td>CAM</td>
<td>1.18</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100.0 DE</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL RECONSTRUCTION AND MAJOR REHABILITATION**

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>71.72</td>
<td>12,087</td>
<td>19,080</td>
<td>31,167</td>
<td>26,336</td>
<td>-4,831</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**INTERSECTION IMPROVEMENTS (NON-GROWTH)**

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5630</td>
<td>REG. RD. 17 (FOUNTAIN STREET) AT CP RAIL</td>
<td>CAM</td>
<td>16</td>
<td>0</td>
<td>16</td>
<td>16</td>
<td>16.0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5710</td>
<td>REG. RD. 41 (BISHOP STREET) AT CP RAIL</td>
<td>CAM</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td>15.0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL INTERSECTION IMPROVEMENTS (NON-GROWTH)**

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00</td>
<td>31</td>
<td>0</td>
<td>31</td>
<td>31</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BRIDGE AND DRAINAGE WORKS**

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5618</td>
<td>REG. RD. 5 (NAFZIGER ROAD), AT NITH RIVER (S) (#0501)</td>
<td>WIL</td>
<td>51</td>
<td>750</td>
<td>801</td>
<td>829.0 DE RH</td>
<td>28 CONTRACT 2012-068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5774</td>
<td>REG. RD. 8 (KING STREET), GRAND RIVER BRIDGE (#0807)</td>
<td>KIT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>60.0 RH</td>
<td>60 PROGRAM ADDITION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5623</td>
<td>REG. RD. 19 (FLORADALE ROAD), AT CANGAGAIGUE CREEK (DAM) (#1902)</td>
<td>WOOL</td>
<td>48</td>
<td>40</td>
<td>88</td>
<td>88.0 DE</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5551</td>
<td>REG. RD. 27 (MAIN STREET), MAIN ST. BRIDGE AT GRAND RIVER (#2703)</td>
<td>CAM</td>
<td>57</td>
<td>0</td>
<td>57</td>
<td>75.0</td>
<td>18 REVISED ESTIMATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5590</td>
<td>REG. RD. 28 (FOUNTAIN STREET), BLAIR BRIDGE AT GRAND RIVER (#2801)</td>
<td>CAM</td>
<td>100</td>
<td>375</td>
<td>475</td>
<td>475.0 DE</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5767</td>
<td>REG. RD. 38 (SPORTSWORLD DRIVE) AT BAXTER PLACE</td>
<td>KIT</td>
<td>0</td>
<td>375</td>
<td>375</td>
<td>375.0 DE REC</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5409</td>
<td>REG. RD. 55 (VICTORIA STREET), GRAND RIVER/BRESLAU BRIDGE (#5501)</td>
<td>WOOL</td>
<td>55</td>
<td>80</td>
<td>135</td>
<td>135.0 DE</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5916</td>
<td>REG. RD. 57 (UNIVERSITY AVENUE), AT LAUREL CREEK (S) (#5702)</td>
<td>WAT</td>
<td>20</td>
<td>200</td>
<td>220</td>
<td>70.0 D</td>
<td>-150 PROJECT DEFERRED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5785</td>
<td>REG. RD. 69 (MANITOU DRIVE), AT SCHNEIDER CREEK (#6901)</td>
<td>KIT</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10.0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## REVISIONS TO THE 2012 TRANSPORTATION CAPITAL BASE BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7123</td>
<td>REG. RD. 97 (CONCESSION STREET), GRAND RIVER BRIDGE (#9701)</td>
<td>CAM</td>
<td>25</td>
<td>40</td>
<td>65</td>
<td>80 DE</td>
<td>15 REVISED ESTIMATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5517</td>
<td>REG. RD. 97 (CEDAR CREEK ROAD), AT CPR (#9702)</td>
<td>ND</td>
<td>61</td>
<td>0</td>
<td>61</td>
<td>61</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5914</td>
<td>BRIDGE 0091 WEST MONTROSE COVERED BRIDGE AT GRAND RIVER (#0091)</td>
<td>WOOL</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5178</td>
<td>CULVERT REPLACEMENT IN ADVANCE OF ROAD REHABILITATION PROJECTS</td>
<td></td>
<td>60</td>
<td>200</td>
<td>260</td>
<td>400</td>
<td>140 REVISED ESTIMATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5375</td>
<td>MINOR BRIDGE REPAIRS</td>
<td></td>
<td>0</td>
<td>150</td>
<td>150</td>
<td>90</td>
<td>-60 REVISED ESTIMATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7223</td>
<td>MONITORING PROGRAM - BRIDGEBORNT BRIDGE</td>
<td>KIT</td>
<td>50</td>
<td>0</td>
<td>50</td>
<td>110</td>
<td>60 REVISED ESTIMATE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TOTAL BRIDGE AND DRAINAGE WORKS

<table>
<thead>
<tr>
<th></th>
<th>0.00</th>
<th>547</th>
<th>2,210</th>
<th>2,757</th>
<th>2,868</th>
<th>111</th>
</tr>
</thead>
</table>

### SYSTEM MANAGEMENT / OTHER

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7053</td>
<td>ASSET MANAGEMENT PROGRAM</td>
<td></td>
<td>1037</td>
<td>2300</td>
<td>3337</td>
<td>3337</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5775</td>
<td>BRIDGE COATING RESEARCH PROGRAM</td>
<td></td>
<td>41</td>
<td>0</td>
<td>41</td>
<td>41</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5865</td>
<td>BRIDGE TESTING AND EVALUATION PROGRAM</td>
<td>0</td>
<td>0</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5299</td>
<td>DEVELOPER RELATED PROJECTS</td>
<td>0</td>
<td>0</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5647</td>
<td>DIGITAL PHOTO LOG</td>
<td>0</td>
<td>120</td>
<td>0</td>
<td>120</td>
<td>120</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5244</td>
<td>GEOTECHNICAL SURVEYS FOR RESURFACING PROJECTS</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6485</td>
<td>LAND DEDICATION SURVEYS AND PURCHASES</td>
<td>0</td>
<td>0</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5035</td>
<td>MUNICIPAL DRAINAGE WORKS AND STORM SEWER ASSESSMENTS</td>
<td>0</td>
<td>165</td>
<td>150</td>
<td>315</td>
<td>315</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5285</td>
<td>NOISE ATTENUATION WALL RETROFITS/REPAIRS</td>
<td>0</td>
<td>0</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5555</td>
<td>PRELIMINARY DESIGN AND POST CONSTRUCTION EXPENDITURES</td>
<td>0</td>
<td>0</td>
<td>200</td>
<td>200</td>
<td>295</td>
<td>95 REVISED ESTIMATE</td>
<td></td>
</tr>
<tr>
<td>5264</td>
<td>RAILWAY CROSSING ASSESSMENTS / IMPROVEMENTS</td>
<td>0</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## REVISIONS TO THE 2012 TRANSPORTATION CAPITAL BASE BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5778</td>
<td>RESEARCH AND DEVELOPMENT</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5528</td>
<td>RETAINING WALL REPAIRS</td>
<td>0</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5611</td>
<td>STORM WATER MANAGEMENT POND REHABILITATION</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9399</td>
<td>STREET LIGHTING MODERNIZATIONS / INSTALLATIONS</td>
<td>0</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5521</td>
<td>TRAFFIC COUNT PROGRAM</td>
<td>0</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL SYSTEM MANAGEMENT / OTHER</strong></td>
<td>0.00</td>
<td>1,363</td>
<td>4,180</td>
<td>5,543</td>
<td>5,638</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## TRAFFIC SIGNAL MODERNIZATIONS

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9617</td>
<td>REG. RD. 6, FREDERICK ST. AT BRUCE ST. (RR81) AND EDNA ST. (RR62)</td>
<td>KIT</td>
<td>0</td>
<td>170</td>
<td>170</td>
<td>170 MOD</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5966</td>
<td>REG. RD. 8, WEBER ST. AT PARKSIDE DRIVE</td>
<td>WAT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>80 MOD</td>
<td>80 TRANSFER FROM 9489</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9538</td>
<td>REG. RD. 9, ERB STREET AT ERBSVILLE CT.</td>
<td>WAT</td>
<td>80</td>
<td>0</td>
<td>80</td>
<td>80</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9623</td>
<td>REG. RD. 21, ARTHUR ST. AT NORTH OF PARK ST.</td>
<td>WOOL</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>-50 PROJECT DEFERRED</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9624</td>
<td>REG. RD. 21, ARTHUR ST. AT SOUTH OF MILL ST.</td>
<td>WOOL</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>-50 PROJECT DEFERRED</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9625</td>
<td>REG. RD. 21, ARTHUR ST. AT CHURCH ST.</td>
<td>WOOL</td>
<td>0</td>
<td>90</td>
<td>90</td>
<td>0</td>
<td>-90 PROJECT DEFERRED</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9561</td>
<td>MINOR TRAFFIC SIGNAL MODERNIZATIONS</td>
<td>24</td>
<td>235</td>
<td>259</td>
<td>259</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9635</td>
<td>PEDESTRIAN COUNTDOWN SIGNAL UPGRADES</td>
<td>29</td>
<td>50</td>
<td>79</td>
<td>79</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9489</td>
<td>TRAFFIC SIGNAL MODERNIZATIONS TO BE IDENTIFIED</td>
<td>220</td>
<td>80</td>
<td>300</td>
<td>220</td>
<td>-80 REVISED ESTIMATE</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9551</td>
<td>UPS INSTALLATIONS</td>
<td>0</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL TRAFFIC SIGNAL MODERNIZATIONS</strong></td>
<td>0.00</td>
<td>353</td>
<td>760</td>
<td>1,113</td>
<td>923</td>
<td>-190</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## TRAFFIC ENGINEERING GENERAL

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9415</td>
<td>BARRIER FREE SIGNAL REQUESTS</td>
<td>14</td>
<td>25</td>
<td>39</td>
<td>39</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

1181147  Page 15 of 24
## Revisions to the 2012 Transportation Capital Base Budget

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>Project Description</th>
<th>Area</th>
<th>MUN</th>
<th>CFWD</th>
<th>2012 Budget</th>
<th>2012 Total Budget</th>
<th>2012 Revised Budget</th>
<th>Variance</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>9582</td>
<td>Central Traffic Control System</td>
<td>1197</td>
<td>310</td>
<td>1507</td>
<td>1507</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9423</td>
<td>Countermeasures</td>
<td>0</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9256</td>
<td>MTCS System</td>
<td>179</td>
<td>210</td>
<td>389</td>
<td>389</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9614</td>
<td>Oversized Street Signs</td>
<td>17</td>
<td>0</td>
<td>17</td>
<td>17</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9598</td>
<td>Pedestrian Refuge Islands to be Determined</td>
<td>0</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9474</td>
<td>Traffic Controller Replacements</td>
<td>0</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Total Traffic Engineering General**

- **Reports:**
  - **Females:**
  - **Males:**
  - **TOTAL:**

**Infill Sidewalk Facilities**

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>% Complete</th>
<th>Street Name</th>
<th>City</th>
<th>MUN</th>
<th>CFWD</th>
<th>2012 Budget</th>
<th>2012 Total Budget</th>
<th>2012 Revised Budget</th>
<th>Variance</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>5787</td>
<td>16%</td>
<td>Reg. Rd. 1 (Snyder's Road), Nafziger Rd. To Baden Water Tower</td>
<td>Wil</td>
<td>0.88</td>
<td>0</td>
<td>255</td>
<td>255</td>
<td>244 SW</td>
<td>-11</td>
<td>Contract 2012-010</td>
</tr>
<tr>
<td>5507</td>
<td>16%</td>
<td>Reg. Rd. 43 (Myers Road), W. Of Branchton To Clover Ave.</td>
<td>Cam</td>
<td>0.82</td>
<td>100</td>
<td>130</td>
<td>230</td>
<td>174 SW</td>
<td>-56</td>
<td>Contract 2012-010</td>
</tr>
<tr>
<td>5505</td>
<td>16%</td>
<td>Reg. Rd. 55 (Victoria Street), Frederick St. (RR6) To Forfar Ave.</td>
<td>Kit</td>
<td>0.40</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5921</td>
<td>16%</td>
<td>Reg. Rd. 58 (Northumberland Street), 120M S. Of Greenfield Rd. To Greenfield Rd.</td>
<td>Nd</td>
<td>0.12</td>
<td>0</td>
<td>40</td>
<td>40</td>
<td>40 SW</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5906</td>
<td>16%</td>
<td>Reg. Rd. 86 (Church Street), Herbert St. To 70M E. Of Raising Mill Gate</td>
<td>Wool</td>
<td>0.25</td>
<td>0</td>
<td>115</td>
<td>115</td>
<td>50 SW</td>
<td>-65</td>
<td>Project Deferred</td>
</tr>
<tr>
<td>5779</td>
<td>16%</td>
<td>Waterloo Spur Multi-Use Trail</td>
<td></td>
<td></td>
<td>183</td>
<td>0</td>
<td>183</td>
<td>183</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Total Infill Sidewalk Facilities**

- **Reports:**
  - **Females:**
  - **Males:**
  - **TOTAL:**

---
# Revisions to the 2012 Transportation Capital System Expansion Budget

<table>
<thead>
<tr>
<th>Expenditures:</th>
<th>CFWD</th>
<th>2012 Budget</th>
<th>2012 Total Budget</th>
<th>2012 Revised Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation System Expansion Capital Budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection Improvements (Growth-Related)</td>
<td>16,320</td>
<td>4,115</td>
<td>20,335</td>
<td>17,278</td>
<td>-3,057</td>
</tr>
<tr>
<td>Development Related Left and Right Turn Lanes</td>
<td>177</td>
<td>1,640</td>
<td>1,817</td>
<td>1,817</td>
<td>0</td>
</tr>
<tr>
<td>Traffic Signal Installations</td>
<td>117</td>
<td>455</td>
<td>572</td>
<td>597</td>
<td>45</td>
</tr>
<tr>
<td>Road Widening</td>
<td>8,789</td>
<td>16,685</td>
<td>25,474</td>
<td>24,174</td>
<td>-1,300</td>
</tr>
<tr>
<td>Road System Expansion</td>
<td>15,710</td>
<td>10,810</td>
<td>26,520</td>
<td>26,869</td>
<td>349</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>41,013</strong></td>
<td><strong>33,705</strong></td>
<td><strong>74,718</strong></td>
<td><strong>70,845</strong></td>
<td><strong>-4,073</strong></td>
</tr>
</tbody>
</table>

## Revenues:

<table>
<thead>
<tr>
<th>Revenue Items</th>
<th>CFWD</th>
<th>2012 Budget</th>
<th>2012 Total Budget</th>
<th>2012 Revised Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Charge Reserve Fund</td>
<td>26,640</td>
<td>29,696</td>
<td>56,336</td>
<td>52,775</td>
<td>-3,561</td>
</tr>
<tr>
<td>Development Charge Reserve Fund (Transportation)</td>
<td>1,597</td>
<td>2,374</td>
<td>3,971</td>
<td>3,459</td>
<td>-512</td>
</tr>
<tr>
<td>Third Party - CP Rail</td>
<td>12,821</td>
<td>0</td>
<td>12,821</td>
<td>12,821</td>
<td>0</td>
</tr>
<tr>
<td>Third Party - Other</td>
<td>155</td>
<td>1,635</td>
<td>1,790</td>
<td>1,790</td>
<td>0</td>
</tr>
<tr>
<td>Debentures - RDC</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Debentures</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>41,013</strong></td>
<td><strong>33,705</strong></td>
<td><strong>74,718</strong></td>
<td><strong>70,845</strong></td>
<td><strong>-4,073</strong></td>
</tr>
</tbody>
</table>

### 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 = Paddling
- PL = Planing
- REC = 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
### INTERSECTION IMPROVEMENTS (GROWTH-RELATED)

<table>
<thead>
<tr>
<th>PROJ NO.</th>
<th>RD%</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7294</td>
<td>100</td>
<td>REG. RD. 4 (OTTAWA STREET), HOMER WATSON BLVD (RR28) TO ALPINE RD.</td>
<td>KIT</td>
<td>0.20</td>
<td>254</td>
<td>200</td>
<td>454</td>
<td>454 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7272</td>
<td>100</td>
<td>REG. RDS. 4 &amp; 70, OTTAWA ST. AT TRUSSLER RD.</td>
<td>KIT</td>
<td></td>
<td>97</td>
<td>160</td>
<td>257</td>
<td>100 DE L</td>
<td>-157</td>
<td>REPORT E-12-045</td>
</tr>
<tr>
<td>5602</td>
<td>100</td>
<td>REG. RD. 6 (HIGHLAND ROAD), AT LAWRENCE ST. AND BELMONT AVE.</td>
<td>KIT</td>
<td>0</td>
<td></td>
<td>20</td>
<td>20</td>
<td>20 DE L</td>
<td>-20</td>
<td>REVISED ESTIMATE</td>
</tr>
<tr>
<td>5389</td>
<td>85</td>
<td>REG. RD. 9 (ERB STREET), CAROLINE ST. (RR9) TO MENNO ST.</td>
<td>WAT</td>
<td>0.33</td>
<td>0</td>
<td>75</td>
<td>75</td>
<td>75 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7090</td>
<td>100</td>
<td>REG. RDS. 9 AND 50, ERB ST. AT WESTMOUNT RD.</td>
<td>WAT</td>
<td>45</td>
<td>75</td>
<td>120</td>
<td>45</td>
<td>-75 PROJECT DEFERRED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5284</td>
<td>100</td>
<td>REG. RDS. 12 &amp; 58, NEW DUNDEE RD. AT FISCHER-HALLMAN RD.</td>
<td>KIT</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5441</td>
<td>55</td>
<td>REG. RD. 15 (KING STREET) AT GEXR CROSSING - SUBWAY INSTALLATION</td>
<td>KIT</td>
<td>400</td>
<td>400</td>
<td>800</td>
<td>800</td>
<td>800 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7042</td>
<td>100</td>
<td>REG. RD. 15 (KING STREET) AT WATERLOO INN SERVICE ROAD TO BLUESPRINGS DR.</td>
<td>WAT</td>
<td>0</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7216</td>
<td>100</td>
<td>REG. RD. 15 (KING STREET) AT CONESTOGO RD.</td>
<td>WAT</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>20 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7248</td>
<td>100</td>
<td>REG. RD. 17 AND REG. RD. 26, SAWMILL RD. AT ST. CHARLES ST.</td>
<td>WOOL</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>60</td>
<td>60 DE L</td>
<td>60</td>
<td>PROJECT ADVANCED</td>
</tr>
<tr>
<td>5334</td>
<td>55</td>
<td>REG. RD. 24 (HESPELER ROAD) AT RAILWAY N. OF DUNDAS ST. (RR8) - GRADE SEPARATION</td>
<td>CAM</td>
<td>14848</td>
<td>0</td>
<td>14848</td>
<td>14848</td>
<td>14848</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7185</td>
<td>100</td>
<td>REG. RD. 24 (HESPELER ROAD) AT BEAVERDALE / QUEEN ST.</td>
<td>CAM</td>
<td>370</td>
<td>2230</td>
<td>2600</td>
<td>370 U</td>
<td>-2230 PROJECT DEFERRED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7250</td>
<td>100</td>
<td>REG. RD. 50 (WESTMOUNT ROAD) AT GREENBROOK DR.</td>
<td>KIT</td>
<td>100</td>
<td>100</td>
<td>200</td>
<td>200 DE L</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7251</td>
<td>100</td>
<td>REG. RD. 50 (WESTMOUNT ROAD) AT QUEEN ST.</td>
<td>KIT</td>
<td>50</td>
<td>100</td>
<td>150</td>
<td>150 DE L</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7186</td>
<td>59</td>
<td>REG. RD. 86 (CHURCH STREET), E. OF RAISING MILL GATE TO BARNSWALLOW DR.</td>
<td>WOOL</td>
<td>0.66</td>
<td>26</td>
<td>665</td>
<td>691</td>
<td>56 DE L</td>
<td>-635</td>
<td>PROJECT DEFERRED</td>
</tr>
<tr>
<td>PROJ. NO.</td>
<td>RDC%</td>
<td>PROJECT DESCRIPTION</td>
<td>AREA MUN</td>
<td>PROJ. LEN (KM)</td>
<td>CFWD</td>
<td>2012 TOTAL BUDGET</td>
<td>2012 REVISED BUDGET</td>
<td>VARIANCE</td>
<td>REMARKS</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>---------------------</td>
<td>----------</td>
<td>---------------</td>
<td>------</td>
<td>------------------</td>
<td>---------------------</td>
<td>-----------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>7178</td>
<td>100%</td>
<td>ROUNDBOUT EDUCATION PROGRAM</td>
<td></td>
<td>10</td>
<td>50</td>
<td>60</td>
<td>80</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOTAL INTERSECTION IMPROVEMENTS (GROWTH-RELATED)</td>
<td>1.19</td>
<td>16,220</td>
<td>4,115</td>
<td>20,335</td>
<td>17,278</td>
<td>-3,057</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DEVELOPMENT RELATED LEFT AND RIGHT TURN LANES**

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>RDC%</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7141</td>
<td>100%</td>
<td>REG. RD. 8 (DUNDAS STREET) AT FITZGERALD DR.</td>
<td>CAM</td>
<td>30</td>
<td>0</td>
<td>30</td>
<td>30</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7296</td>
<td>100%</td>
<td>REG. RD. 12 (NEW DUNDEE ROAD), AT ROBERT FERRIE DR. / REICHERT DR.</td>
<td>KIT</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>50 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7399</td>
<td>100%</td>
<td>REG. RD. 28 (FOUNTAIN STREET) AT LIMERICK DRIVE</td>
<td>CAM</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>40 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7270</td>
<td>25%</td>
<td>REG. RD. 28 &amp; 71, FOUNTAIN ST. AT DICKIE SETTLEMENT RD.</td>
<td>CAM</td>
<td>27</td>
<td>0</td>
<td>27</td>
<td>27</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7171</td>
<td>100%</td>
<td>REG. RD. 53 (COURTLAND AVENUE) AT BLOCKLINE RD.</td>
<td>KIT</td>
<td>100</td>
<td>20</td>
<td>120</td>
<td>120 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7225</td>
<td>100%</td>
<td>REG. RD. 56 (BLEAMS ROAD), AT NYLES RD.</td>
<td>KIT</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>50 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7173</td>
<td>100%</td>
<td>DEVELOPMENT RELATED BOULEVARD AND SHOULDER GRADINGS</td>
<td></td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7097</td>
<td>100%</td>
<td>DEVELOPMENT RELATED LEFT AND RIGHT TURN LANES TO BE IDENTIFIED</td>
<td></td>
<td>0</td>
<td>1200</td>
<td>1200</td>
<td>1200</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7180</td>
<td>100%</td>
<td>PRELIMINARY DESIGN AND POST CONSTRUCTION EXPENDITURES</td>
<td></td>
<td>0</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL DEVELOPMENT RELATED LEFT AND RIGHT TURN LANES**

|          | 0.00 | 177  | 1,640 | 1,817 | 1,817 | 0 |

**TRAFFIC SIGNAL INSTALLATIONS**

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>RDC%</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9609</td>
<td>100%</td>
<td>REG. RD. 4 (OTTAWA STREET) AT TRUSSLER RD. (RR70)</td>
<td>KIT</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9641</td>
<td>100%</td>
<td>REG.8 (KING STREET), AT LOBSINGER LN. (RR15)</td>
<td>WOOL</td>
<td>0</td>
<td>65</td>
<td>65</td>
<td>65 SIG</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9643</td>
<td>100%</td>
<td>REG. RD. 24 (HESPeler ROAD) AT GUELPH AVENUE</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>95 SIG</td>
<td>95 TRANSFER FROM 9024</td>
<td></td>
</tr>
<tr>
<td>9640</td>
<td>100%</td>
<td>REG. RD. 53 (COURTLAND AVENUE), AT BLOCKLINE RD.</td>
<td>KIT</td>
<td>0</td>
<td>65</td>
<td>65</td>
<td>0</td>
<td>-65 PROJECT DEFERRED</td>
<td></td>
</tr>
<tr>
<td>9025</td>
<td>100%</td>
<td>GROWTH RELATED TRAFFIC SIGNAL MODERNIZATIONS</td>
<td></td>
<td>0</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
# REVISIONS TO THE 2012 TRANSPORTATION CAPITAL SYSTEM EXPANSION BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>RD%-</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9024</td>
<td>100%</td>
<td>TRAFFIC SIGNAL</td>
<td></td>
<td></td>
<td>107</td>
<td>300</td>
<td>407</td>
<td>312</td>
<td>-.95</td>
<td>REVISIESTIMATE</td>
</tr>
</tbody>
</table>

**TOTAL TRAFFIC SIGNAL INSTALLATIONS**

|                      | 0.00 | 117 | 455 | 572 | 507 | -.95 |

## ROAD WIDENINGS

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>RD%-</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7098</td>
<td>85%</td>
<td>REG. RD. 4 (OTTAWA STREET), KING ST. (RR15) TO MILL ST.</td>
<td>KIT</td>
<td>1.01</td>
<td>100</td>
<td>1300</td>
<td>1400</td>
<td>100 DE</td>
<td>-1300</td>
<td>PROJECT DEFERRED</td>
</tr>
<tr>
<td>5337</td>
<td>85%</td>
<td>REG. RD. 8 (KING STREET), EAGLE ST. (RR39) TO FOUNTAIN ST. (RR8) AND FOUNTAIN ST.- KING ST. (RR8) TO SHANTZ HILL (RR8)</td>
<td>CAM</td>
<td>0.85</td>
<td>518</td>
<td>0</td>
<td>518</td>
<td>518</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7101</td>
<td>85%</td>
<td>REG. RD. 8 (WEBER STREET), COLLEGE AVE. TO QUELPH ST.</td>
<td>KIT</td>
<td>1.08</td>
<td>635</td>
<td>10500</td>
<td>11135</td>
<td>11135 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7257</td>
<td>100%</td>
<td>REG. RD. 22 (NORTHFIELD DRIVE), DAVIDPORT RD. TO UNIVERSITY AVE.</td>
<td>WAT</td>
<td>1.86</td>
<td>873</td>
<td>350</td>
<td>1223</td>
<td>1223 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7111</td>
<td>100%</td>
<td>REG. RD. 28 (HOMER WATSON BOULEVARD), DOON SOUTH DR. TO CONESTOGA COLLEGE BLVD.</td>
<td>KIT</td>
<td>0.84</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>50 EA</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5204</td>
<td>85%</td>
<td>REG. RD. 33 (TOWNLINE ROAD), SAGINAW PKWY. TO CAPANERA PKWY.</td>
<td>CAM</td>
<td>1.90</td>
<td>806</td>
<td>330</td>
<td>1136</td>
<td>1136 RW SW CF LA</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5549</td>
<td>100%</td>
<td>REG. RD. 36 (FRANKLIN BOULEVARD), MYERS RD. (RR43) TO HWY. 401</td>
<td>CAM</td>
<td>8.03</td>
<td>740</td>
<td>3545</td>
<td>4285</td>
<td>4285 DE L</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7116</td>
<td>100%</td>
<td>REG. RD. 38 (MAPLE GROVE ROAD), SPEEDSVILLE RD. TO FOUNTAIN ST. (RR17)</td>
<td>CAM</td>
<td>3.60</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7115</td>
<td>100%</td>
<td>REG. RD. 38 (MAPLE GROVE ROAD), FOUNTAIN ST. (RR17) TO CHERRY BLOSSOM RD.</td>
<td>CAM</td>
<td>1.15</td>
<td>80</td>
<td>0</td>
<td>80</td>
<td>80</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5110</td>
<td>100%</td>
<td>REG. RD. 55 (VICTORIA STREET), HWY 7 BRIDGE TO EDNA ST. (RR8)</td>
<td>KIT</td>
<td>0.37</td>
<td>60</td>
<td>60</td>
<td>120</td>
<td>120 DE L U</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7259</td>
<td>100%</td>
<td>REG. RD. 57 (UNIVERSITY AVENUE), KEATS WAY TO FISCHER HALLMAN RD. (RR58)</td>
<td>WAT</td>
<td>2.25</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>50 DE</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
# REVISIONS TO THE 2012 TRANSPORTATION CAPITAL SYSTEM EXPANSION BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>RD%</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7122</td>
<td>100%</td>
<td>REG. RD. 58 (FISCHER-HALLMAN ROAD), PLAINS RD. TO BLEAMS RD. (RR65)</td>
<td>KIT</td>
<td>3.14</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7121</td>
<td>100%</td>
<td>REG. RD. 58 (FISCHER-HALLMAN ROAD), BLEAMS RD. (RR66) TO OTTAWA ST.</td>
<td>KIT</td>
<td>2.09</td>
<td>258</td>
<td>100</td>
<td>358</td>
<td>358 DE</td>
<td>EA</td>
<td>0</td>
</tr>
<tr>
<td>5340</td>
<td>85%</td>
<td>REG. RD. 69 (MANITOUCOURE RD), BLEAMS RD. (RR66) TO FAIRWAY RD. (RR93)</td>
<td>KIT</td>
<td>0.86</td>
<td>406</td>
<td>200</td>
<td>606</td>
<td>606 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7282</td>
<td>100%</td>
<td>REG. RD. 70 (IRA NEEDLES BOULEVARD), HIGHVIEW DR. TO ERB ST. (RR9)</td>
<td>KIT</td>
<td>3.61</td>
<td>0</td>
<td>200</td>
<td>200</td>
<td>200 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7226</td>
<td>100%</td>
<td>HWY. 8 TRANSIT BYPASS LANE</td>
<td>KIT</td>
<td>4283</td>
<td>0</td>
<td>4283</td>
<td>4283</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL ROAD WIDENINGS**

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32.64</td>
<td>8.789</td>
<td>16.685</td>
<td>25,474</td>
<td>24,174</td>
<td>-1,300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ROAD SYSTEM EXPANSION

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>RD%</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN</th>
<th>PROJ. LEN (KM)</th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7130</td>
<td>100%</td>
<td>REG. RD. 4 (OTTAWA STREET EXTENSION), KEEWATIN AVE. TO FORWELL RD.</td>
<td>KIT</td>
<td>0.39</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>100 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7193</td>
<td>100%</td>
<td>REG. RD. 8 (CORONATION BOULEVARD), STORM WATER STUDY</td>
<td>CAM</td>
<td>2.45</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>60</td>
<td>49</td>
<td>REVISED ESTIMATE</td>
</tr>
<tr>
<td>6433</td>
<td>100%</td>
<td>REG. RD. 24 (AINSLEE STREET) EXTENSION</td>
<td>CAM</td>
<td>71</td>
<td>0</td>
<td>71</td>
<td>71</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7132</td>
<td>100%</td>
<td>REG. RD. 36 (FRANKLIN BOULEVARD), MYERS RD. (RR43) TO CAMBRIDGE S.E. BOUNDARY RD.</td>
<td>CAM</td>
<td>0.62</td>
<td>313</td>
<td>50</td>
<td>363</td>
<td>363 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5274</td>
<td>100%</td>
<td>REG. RD. 53 (FAIRWAY ROAD EXTENSION), W. OF ZELLER DR. TO FOUNTAIN ST. (RR17)</td>
<td>CAM</td>
<td>1.90</td>
<td>10142</td>
<td>8500</td>
<td>18642</td>
<td>18642 DE</td>
<td>NC</td>
<td>CF</td>
</tr>
<tr>
<td>7087</td>
<td>100%</td>
<td>REG. RD. 56 (RIVER ROAD EXTENSION), KING ST. (RR8) TO WILSON AVE.</td>
<td>KIT</td>
<td>1.70</td>
<td>0</td>
<td>700</td>
<td>700</td>
<td>700 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5350</td>
<td>100%</td>
<td>REG. RD. 70 (IRA NEEDLES BOULEVARD), HWY 7/8 TO VICTORIA ST. (RR55)</td>
<td>KIT</td>
<td>2.30</td>
<td>3796</td>
<td>0</td>
<td>3796</td>
<td>3796</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5349</td>
<td>100%</td>
<td>REG. RD. 70 (IRA NEEDLES BOULEVARD), VICTORIA ST. (RR55) TO S. OF ERB ST. (RR9)</td>
<td>KIT</td>
<td>2.07</td>
<td>374</td>
<td>0</td>
<td>374</td>
<td>374</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
## Revisions to the 2012 Transportation Capital System Expansion Budget

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>RDC%</th>
<th>Project Description</th>
<th>Area MUN</th>
<th>Proj. Len (km)</th>
<th>CFWD</th>
<th>2012 Budget</th>
<th>2012 Total Budget</th>
<th>2012 Revised Budget</th>
<th>Variance</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>7129</td>
<td>100%</td>
<td>S. Boundary Road, Franklin Blvd. (RR36) to Dundas St. (RR8)</td>
<td>CAM</td>
<td>2.11</td>
<td>0</td>
<td>185</td>
<td>185</td>
<td>485 DE</td>
<td>300</td>
<td>Revised Estimate</td>
</tr>
<tr>
<td>7192</td>
<td>100%</td>
<td>S. Boundary Road, Water St. (RR24) to Franklin Blvd. (RR36)</td>
<td>CAM</td>
<td>2.37</td>
<td>255</td>
<td>200</td>
<td>455</td>
<td>455 DE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7127</td>
<td>50%</td>
<td>Active Transportation Master Plan</td>
<td>CAM</td>
<td>57</td>
<td>200</td>
<td>257</td>
<td>257</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7298</td>
<td>50%</td>
<td>Commuter Parking Lot Feasibility Study</td>
<td>CAM</td>
<td>0</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7299</td>
<td>50%</td>
<td>East Boundary Corridor Protection Study</td>
<td>CAM</td>
<td>48</td>
<td>150</td>
<td>198</td>
<td>198</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7304</td>
<td>50%</td>
<td>Goods Movement Study</td>
<td>CAM</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7253</td>
<td>100%</td>
<td>Growth Related Land Dedication Surveys and Purchases</td>
<td>CAM</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7074</td>
<td>100%</td>
<td>Growth Related Studies and Design</td>
<td>CAM</td>
<td>180</td>
<td>100</td>
<td>280</td>
<td>280</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7305</td>
<td>100%</td>
<td>Highway 401 Interchange</td>
<td>CAM</td>
<td>138</td>
<td>200</td>
<td>338</td>
<td>338 EA</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7066</td>
<td>100%</td>
<td>Regional Transportation Master Plan</td>
<td>CAM</td>
<td>175</td>
<td>0</td>
<td>175</td>
<td>175</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7301</td>
<td>100%</td>
<td>Road Improvement Transit Priority Strategy</td>
<td>CAM</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7302</td>
<td>100%</td>
<td>Transportation and Transit Forecasting Model Development</td>
<td>CAM</td>
<td>100</td>
<td>150</td>
<td>250</td>
<td>250</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Total Road System Expansion</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>15.91</strong></td>
<td><strong>15,710</strong></td>
<td><strong>10,810</strong></td>
<td><strong>26,520</strong></td>
<td><strong>26,869</strong></td>
<td><strong>340</strong></td>
<td></td>
</tr>
</tbody>
</table>
## REVISIONS TO THE 2012 AIRPORT CAPITAL BUDGET

<table>
<thead>
<tr>
<th></th>
<th>CFWD</th>
<th>2012 BUDGET</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPENDITURES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIRPORT CAPITAL BUDGET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIRPORT</td>
<td>13,369</td>
<td>2,087</td>
<td>15,456</td>
<td>13,264</td>
<td>-2,192</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>13,369</td>
<td>2,087</td>
<td>15,456</td>
<td>13,264</td>
<td>-2,192</td>
</tr>
<tr>
<td><strong>REVENUES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRANTS AND SUBSIDIES</td>
<td>4,254</td>
<td>0</td>
<td>4,254</td>
<td>3,039</td>
<td>-1,215</td>
</tr>
<tr>
<td>CONTRIBUTIONS FROM RESERVE FUNDS</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>95</td>
<td>-5</td>
</tr>
<tr>
<td>AIRPORT CAPITAL RESERVE FUND</td>
<td>869</td>
<td>522</td>
<td>1,391</td>
<td>1,283</td>
<td>-48</td>
</tr>
<tr>
<td>AIRPORT VEHICLE/EQUIPMENT RESERVE FUND</td>
<td>540</td>
<td>577</td>
<td>1,117</td>
<td>1,119</td>
<td>2</td>
</tr>
<tr>
<td>DEVELOPMENT CHARGES RESERVE FUND (AIRPORT)</td>
<td>1,704</td>
<td>0</td>
<td>1,704</td>
<td>1,704</td>
<td>0</td>
</tr>
<tr>
<td>DEBENTURES</td>
<td>5,902</td>
<td>968</td>
<td>6,850</td>
<td>6,024</td>
<td>-826</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>13,369</td>
<td>2,087</td>
<td>15,456</td>
<td>13,264</td>
<td>-2,192</td>
</tr>
</tbody>
</table>
## REVISIONS TO THE 2012 AIRPORT CAPITAL BUDGET

<table>
<thead>
<tr>
<th>PROJ. NO.</th>
<th>PROJECT DESCRIPTION</th>
<th>AREA MUN (KM)</th>
<th>2012 CFWD</th>
<th>2012 TOTAL BUDGET</th>
<th>2012 REVISED BUDGET</th>
<th>VARIANCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3513</td>
<td>NOISE MONITORING SYSTEM</td>
<td>191</td>
<td>0</td>
<td>191</td>
<td>100</td>
<td>-91</td>
<td>REVISED ESTIMATE</td>
</tr>
<tr>
<td>3515</td>
<td>ELECTRICAL STUDY</td>
<td>110</td>
<td>0</td>
<td>110</td>
<td>110</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3516</td>
<td>PAVEMENT CRACK SEALING</td>
<td>68</td>
<td>0</td>
<td>68</td>
<td>68</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3518</td>
<td>PROPERTY ACQUISITION/OBSTACLE REMOVAL</td>
<td>621</td>
<td>0</td>
<td>621</td>
<td>710</td>
<td>89</td>
<td>REVISED ESTIMATE</td>
</tr>
<tr>
<td>3519</td>
<td>INSTRUMENT LANDING SYSTEM RUNWAY 08</td>
<td>35</td>
<td>0</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3526</td>
<td>RUNWAY 14-32 RECONSTRUCTION</td>
<td>23</td>
<td>0</td>
<td>23</td>
<td>23</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3533</td>
<td>AIRPORT MINOR BUILDING MTCE</td>
<td>294</td>
<td>105</td>
<td>309</td>
<td>309</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3540</td>
<td>MINOR AIRSIDE CONSTRUCTION PROJECTS</td>
<td>200</td>
<td>105</td>
<td>305</td>
<td>305</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3541</td>
<td>RUNWAY 26 APPROACH LIGHTING</td>
<td>72</td>
<td>0</td>
<td>72</td>
<td>72</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3542</td>
<td>RUNWAY 08 APPROACH LIGHTING</td>
<td>76</td>
<td>0</td>
<td>76</td>
<td>76</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3544</td>
<td>SANITARY FORCE MAIN SERVICING</td>
<td>249</td>
<td>0</td>
<td>249</td>
<td>249</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3545</td>
<td>ROAD ACCESS UPGRADE</td>
<td>149</td>
<td>0</td>
<td>149</td>
<td>149</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3547</td>
<td>AIRPORT BUSINESS PLAN UPDATE</td>
<td>6</td>
<td>0</td>
<td>9</td>
<td>9</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3548</td>
<td>REHABILITATION 08/25</td>
<td>6,857</td>
<td>0</td>
<td>6,857</td>
<td>4,745</td>
<td>-2,112</td>
<td>CONTRACT 2012-002</td>
</tr>
<tr>
<td>3552</td>
<td>GLYCOL SYSTEM</td>
<td>229</td>
<td>0</td>
<td>229</td>
<td>229</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3555</td>
<td>FENCING</td>
<td>479</td>
<td>165</td>
<td>644</td>
<td>644</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3557</td>
<td>EQUIPMENT REPLACEMENTS</td>
<td>521</td>
<td>577</td>
<td>1,098</td>
<td>1,098</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3561</td>
<td>WRA TERMINAL BUILDING UPGRADES</td>
<td>636</td>
<td>410</td>
<td>1,046</td>
<td>1,046</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3562</td>
<td>LEASED LAND DEVELOPMENT - PHASE 4</td>
<td>800</td>
<td>0</td>
<td>800</td>
<td>800</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3563</td>
<td>COMBINED SERVICES FACILITY</td>
<td>355</td>
<td>0</td>
<td>355</td>
<td>355</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3564</td>
<td>RANDELL DRAIN/STORMWATER-UPGRADES</td>
<td>49</td>
<td>0</td>
<td>49</td>
<td>49</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3566</td>
<td>PARKING LOT RESURFACING</td>
<td>0</td>
<td>625</td>
<td>625</td>
<td>625</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3568</td>
<td>TERMINAL BUILDING PHASE 2</td>
<td>30</td>
<td>0</td>
<td>30</td>
<td>30</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3569</td>
<td>HYDRO PLANT UPGRADE</td>
<td>30</td>
<td>0</td>
<td>30</td>
<td>30</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3572</td>
<td>RUNWAY GUARD LIGHTS</td>
<td>700</td>
<td>0</td>
<td>700</td>
<td>580</td>
<td>-120</td>
<td>CONTRACT 2012-002</td>
</tr>
<tr>
<td>3577</td>
<td>AIRPORT BUSINESS PLAN PROGRAM REVIEW</td>
<td>108</td>
<td>0</td>
<td>108</td>
<td>150</td>
<td>42</td>
<td>REVISED ESTIMATE</td>
</tr>
<tr>
<td>3576</td>
<td>RUNWAY 08 SAFETY SYSTEM</td>
<td>59</td>
<td>0</td>
<td>59</td>
<td>59</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3578</td>
<td>AIRPORT FIRE EQUIPMENT</td>
<td>21</td>
<td>0</td>
<td>21</td>
<td>21</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3579</td>
<td>PARKING LOT EXPANSION</td>
<td>488</td>
<td>0</td>
<td>488</td>
<td>488</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3581</td>
<td>STORM SEWER UPGRADES</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL AIRPORT</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>13,399</strong></td>
<td><strong>15,454</strong></td>
<td><strong>13,264</strong></td>
<td><strong>-2,192</strong></td>
</tr>
</tbody>
</table>
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Transportation

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

DATE: June 19, 2012

FILE CODE: C04-30, T11-60/RLC/PROV

SUBJECT: RENEWAL OF RED LIGHT CAMERA AGREEMENT BETWEEN THE MINISTRY OF TRANSPORTATION OF ONTARIO AND THE REGIONAL MUNICIPALITY OF WATERLOO

RECOMMENDATION:

THAT the Regional Municipality of Waterloo authorize the Commissioner of Transportation and Environmental Services to execute an agreement ("the RLC Agreement") with Her Majesty the Queen in Right of Ontario as represented by the Minister of Transportation with respect to the administration of the red light camera program as described in Report E-12-071 dated June 19th, 2012 with the form and content of such agreement to be to the satisfaction of the Regional Solicitor;

AND THAT the Director, Transportation, of the Regional Municipality of Waterloo be authorized to sign such annual declarations as may be required to be submitted to the Ministry of Transportation in accordance with the RLC Agreement.

SUMMARY:

NIL

REPORT:

The current Red Light Camera (RLC) Agreement between the Ministry of Transportation of Ontario (MTO) and The Regional Municipality of Waterloo is set to expire on June 30, 2012. This agreement has been in effect for five (5) years. The RLC Agreement provides the authority for Provincial Ministry of Transportation ("MTO") to supply vehicle license plate registrant information. It also establishes criteria and requirements with which the Region must comply in setting up and implementing RLC programs and procedures. The new agreement is also for a five year overall term with an initial term of 12 months and 4 automatic 12-month renewal terms provided that neither the MTO or Region notifies the other in writing, to terminate the agreement in advance of any renewal. Currently the Region of Waterloo, Cities of Toronto, Hamilton and Ottawa, Peel Region and Halton Region have agreements with the MTO.

The new RLC Agreement is substantially in the form of the previous five (5) year agreement. In 2007, when the first RLC Agreement was implemented, Regional staff noted that there were a number of clauses in the agreement that were of concern and which the MTO was not prepared to amend. These clauses remain unchanged despite a request of the participating municipalities that they be altered to reflect a more favourable balance and include:

- MTO reserves the right in its absolute discretion to add to, withdraw from, or change the content or structure of, or subject matter covered by, or cease to make available, any or all of the Licensed Information at any time;
- MTO does not warrant or guarantee the accuracy of the Licensed Information;
- MTO is not liable for inaccurate, incomplete or out-of-date information contained in Licensed Information furnished to the Municipality by MTO;
- MTO is not liable for its failure or inability to supply the Licensed Information; and
- MTO may terminate this Agreement at any time, without cause.

One notable new addition is the inclusion of an annual declaration which must be submitted by a representative of each participating municipality. The declaration is intended to verify that each municipality has complied with its obligations under the RLC Agreement as they pertain mostly to the preservation of confidential and security of information that may be received by the Region during the term of the RLC Agreement. It is recommended that the Director, Transportation submit this annual declaration to the MTO on behalf of the Region of Waterloo.

**CORPORATE STRATEGIC PLAN:**

This report addresses the Region’s goal to implement proven roadway safety strategies and education to enhance the safety of our roadways (Strategic Objective 3.3.2)

**FINANCIAL IMPLICATIONS:**

With the new agreement, the Regional Municipality of Waterloo will continue to be responsible for paying a proportionate share of MTO’s and City of Toronto’s costs for the processing of tickets issued in relation to the cameras in the Region of Waterloo, based on the number of participating municipalities and the number of Licensed Information requests from the Region. The Region’s estimated costs are $130,000 per year (MTO cost of $20,000 is based on MTO administration fees proportioned by the Region’s share of Licensed Information Requests. City of Toronto cost of $110,000 is based on 11% (16 of 149 RLC in Ontario) of total costs to operate the RLC Joint Municipal Processing Centre at the City) and this cost is included in the Region’s Red Light Camera operating budget.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

This report was prepared in consultation with Legal Services.

**ATTACHMENTS:**

NIL

**PREPARED BY:** Bob Henderson, Manager, Transportation Engineering

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

DATE: June 19, 2012

FILE CODE: T06-30

SUBJECT: AVL/GPS AND SALT MANAGEMENT APPLICATION

RECOMMENDATION:

THAT the Regional Municipality of Waterloo accept the proposal of ESRI Canada for a 10-year Automated Vehicle Location/Global Positioning System (AVL/GPS) and Salt Management System, as detailed in Report E-12-072 dated June 19, 2012, subject to the proposal being approved by all other participating municipalities.

SUMMARY:

NIL

REPORT:

Background

In 2002 the Region of Waterloo and the Cities of Kitchener, Waterloo and Cambridge started using an Automated Vehicle Location (AVL) system based on Global Positioning Systems (GPS). This was a new technology at that time and the company Grey Island was the only vendor providing this service. Grey Island has been providing this service on an annual basis since 2002.

Since 2002 the AVL technology has undergone significant changes to hardware, software, and there are now several companies that provide this technology along with various applications for the use of the AVL technology.

The Region of Waterloo currently uses and requires the continued use of an AVL/GPS and salt management system that provides the following key features:

1. Salt management reporting needs. The recommended AVL solution will have the capability to report salt loading by any geographic area. These include reporting salt loadings in areas where threats can be significant as indicated in the Region’s Source Water Protection Plan, and other areas of interest as requested by the Water Services department, Environment Canada, academia, community stakeholders, and local municipalities. The new system will contain chargeback reports allowing the Region to pay the appropriate costs under the Maintenance Agreement with local municipalities.

2. Mapping capabilities. A real-time status map showing which roads have been salted will be used by patrol area supervisors. Immediate notification of unit failure to a Region technologist will be employed to minimize data loss. It is expected that the ESRI AVL solution will integrate seamlessly into our corporate ESRI-based GIS platform.

3. Legal matters. This solution will mitigate litigations from claims by showing that the Minimum Maintenance Standards have been met.

4. Customer service. Exemplary customer service will be delivered as per the Service Level Agreement.
In the fall of 2010, under the lead of City of Kitchener, a municipal co-operative purchasing group consisting of the Region of Waterloo, County of Brant, and the Cities of Kitchener, Waterloo and Brantford was organized. This group developed a set of required features for an AVL/GPS and Salt Management Application and issued a Request for Proposal (RFP). This included a written proposal, a presentation, and a pilot of the products. The City of Cambridge opted to review the outcome upon completion of the process and the possibility to later join the group.

Based on the written proposals received and subsequent presentations the evaluation group selected both Interfleet and ESRI Canada to proceed with a pilot phase demonstrating their AVL/GPS system from December 2011 to March 2012. The pilot phase included the testing of nine units which is approximately 8% of the total units.

Both vendors received consolidated scoring feedback at the end of the pilot planning phase (October and November, 2011) from the municipalities relating to project management, AVL unit installations, and the workshop training experiences. Vendors also received consolidated monthly scoring on the following criteria during the pilot:

- Functional Scorecard (items matched the RFP Functional and Interface Requirements).
- Service Logs: Any issues raised during the pilot were captured in different systems for each vendor—HEAT for Interfleet and OnTime for ESRI Canada. Vendor response time was based on the established priority. Both the quality of interaction and final results were evaluated.
- Project Management: The performance of each vendor project manager was evaluated.

**Recommendation**

As a result of the evaluation process, which included pricing, all the involved municipalities are recommending that the proposal from ESRI Canada for the AVL/GPS and Salt Management be selected. The proposal from ESRI was the lowest price submitted, and all the other municipalities in the purchasing group are bringing forward the recommendation to their respective councils to award this proposal to ESRI Canada. The proposal by ESRI is conditional on all the participating municipalities approving it.

**CORPORATE STRATEGIC PLAN:**

This proposed project aligns with Focus Area 1 (Environmental Sustainability) and Area 5 (Service Excellence) of the Region’s Strategic Plan:

Strategic Objective 1.4 refers to our goal to protect the quality and quantity of our water sources and applies to this project in terms of protecting our water quality by being able to manage how much salt is used to treat roads in salt vulnerable areas.

Strategic Objective 5.6 is to strengthen and enhance partnerships with area municipalities, academia, community stakeholders and other orders of government.

Strategic Objective 5.3 is to ensure Regional programs and services are efficient and effective and demonstrate accountability to the public by being able to track equipment usage and program progress.
FINANCIAL IMPLICATIONS:

The ESRI proposal is expected to cost the Region $667,000 over ten years (approximately $67K per year) and sufficient funding is provided in the Transportation operations maintenance budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from IT Services and purchasing was involved in the RFP process and evaluation and have provided input on this project.

ATTACHMENTS:

NIL

PREPARED BY: Dave Lukezich, Winter Maintenance Specialist, Transportation Operations

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

DATE: May 29, 2012

SUBJECT: WASTE MANAGEMENT DIVISION UPDATE

RECOMMENDATION: For Information.

SUMMARY:

The Waste Management Division is responsible for a wide variety of programs and services related to the collection, diversion, and disposal of waste from residential and industrial/commercial sources. Our collection contractors make over 1,500,000 stops per month to collect garbage, green bin organics, yard waste, large items and blue box recyclables. In addition, over 495,000 transactions were processed at the various Waste Management sites in 2011.

The programs and services offered by the Division are funded by revenue generated from landfill tipping fees, sale of recyclables, landfill gas utilization royalties, funding from Stewardship Ontario, and Regional property taxes. In 2012, the net property tax levy is approximately $109 per household (for a property valued at $269,000) or about $2.10 per week.

The Division currently has long-term landfill disposal capacity (20 to 25 years), enjoys one of the highest residential diversion rates in the province and low system operating costs.

The purpose of this report is to provide an update to Committee on the Waste Management Division’s programs and activities.

REPORT:

The Waste Management Division is responsible for a wide variety of programs and services related to the collection, diversion and disposal of waste. The following list summarizes the major programs and services offered by the Division:

- Curbside garbage, green bin, yard waste, large item and blue box collection;
- Multi-residential cart recycling collection;
- Processing and marketing of blue box materials;
- Chipping/composting of leaves and brush; backyard composting;
- Diversion programs for tires, scrap metal, E-waste, pallets, drywall, appliances, used oil, etc.;
- Reusable building materials, textiles and household item drop-off;
- Municipal Hazardous or Special Waste (MHSW) drop-off and paint exchange program;
- Operation of one engineered landfill (Waterloo) which is an ISO 14001 certified facility;
- Operation of a bulk transfer facility (Cambridge);
- Operation of six small vehicle transfer stations;
- Construction/operation of environmental controls systems (gas/leachate/stormwater);
Monitoring/maintenance of five closed landfills;
- Partnerships for gas utilization projects (Toromont/Gerdau Ameristeel); and,
- Promotion and education activities.

Typically, North American municipalities look at three key performance indicators to determine the overall health of their waste management system. Based on these indicators, the Region’s situation is favorable compared to many municipalities in that we have close to 20 to 25 years of landfill capacity, reasonable debt levels, and the environmental controls, roads, facilities and buildings are in good condition and operating efficiently.

Also, based on the most recent Ontario Municipal Benchmarking Initiative (OMBI) data for 2010, the Region’s waste diversion rate was one of the highest in the province at 51% in comparison to similar sized municipalities while costs were within the lower range. However, waste disposal is the only municipal operation or service that is subject to direct external competition for operating revenues and the Region’s ability to maintain existing and fund new diversion programs from landfill tipping fees is becoming increasingly difficult as the volume of waste remains constant or decreases. Depending on future external funding related to extended producer responsibility (EPR) programs, funding for these programs may have implications on the property tax levy as landfill tonnage decreases.

**Key Trends/Indicators:**

The following is an update on some of the key trends and indicators for 2011:

**Landfill Tipping Fees and Tonnage:** The amount of waste received for landfilling has declined from that received in the late 1980s when over 400,000 tonnes of waste were landfilled annually with forecasts of 500,000 tonnes by 2000. The actual amount landfilled in 2011 was 210,000 tonnes with approximately 60% from commercial customers and 40% from the residential sector. At the current tipping fee of $72 per tonne ($74 effective July 1st, 2012), commercial landfill customers contributed approximately $8.2 million through disposal fees in 2011. Despite the growth in the Region, there was a revenue shortfall of approximately $1.75 million in 2011 due to lower landfill tonnage received than budgeted. However, this shortfall was off-set by higher than anticipated revenues from the sale of recyclable material (strong market prices) and Stewardship Ontario funding.

Landfill tonnage has either remained constant or slightly declined over the last couple of years due to improved recycling efforts in all sectors, reduction of waste generation at source, increased waste exporting from the Region, and economic factors. The history of tonnage landfilled and tipping fees is provided in Appendix A, Figure 1.

**Landfill Gas Royalties:** In 2011, the total royalties received from both the Waterloo and Cambridge gas utilization projects totaled $768,000 and over $4.8 million has been received since these projects began in 1999.

**Funding from Stewardship Ontario:** Close to $3.17 million in funding was received for the Blue Box and Municipal Hazardous and Special Waste (MHSW) programs in 2011. Industry stewards are required to contribute up to 50% of the Blue Box program costs to municipalities. Similarly, funding is also provided for the MHSW program and an update and details on this funding can be found in report E-12-039 titled “Municipal Hazardous or Special Waste Update”.

**Recycling Revenue:** The revenue received from the sale of recyclables is another major source of funding for the Division. However, this revenue is subject to great volatility since the price received
is largely dependent on market conditions. For example, in 2009 the revenue from this source reached a low of $2.0 million and two years later, a high of $5.09 million in 2011.

A graph showing the volatility in blue box revenue over the last ten years is presented in Appendix A, Figure 2 along with the tonnage marketed. On Figures 3 and 4 in Appendix A, changes in material marketed and revenue received (based on a percentage of total revenue received) in 2007 versus 2011 is illustrated. While the tonnage marketed by material type has seen slight changes, the revenue shift for the various material types has been more significant. For example, in 2007, a significant percentage of the revenue was generated from fibres making up 57% of the total. In 2011, revenue from fibres decreased to 32%. However, revenue from the sale of metals and plastics has seen a dramatic increase based on the percentage of the total revenue received as presented in Figure 5.

**Waste Diversion:** The Region continues to improve the residential diversion rate while balancing costs to maintain efficient waste diversion programs. In 2010, the residential rate for the Region was 51%. This was one of the higher waste diversion rates in the Province amongst similar sized municipalities.

The 2011 diversion rate increased slightly to 52%. With the green bin organics program now available to all single-family households in the Region as of 2011, the Region is anticipating the rate to grow to close to 60% over time. However, it should be noted that up until recently, the diversion rate measured the amount of waste diverted by Regional programs only and did not account for privately run diversion programs that were typically limited or non-existent. As more programs are being offered by the private sector, capturing the results from these programs becomes more challenging and will result in the misperception that diversion rates of municipally operated programs are declining. Alternatively, another factor to measure the success of all diversion initiatives is the amount of waste landfilled per capita. In 2011, this rate was 168 kg per capita compared to 172 kg in 2010 and 178 kg in 2009. Over time, the trend indicates that the amount of waste being landfilled in the Region is declining as the amount being diverted is rising. Figure 6 in Appendix A summarizes the 2011 achievements in diversion and landfilling over the last several years.

**2011 Division Highlights:**

A summary of some of the highlights from 2011 is provided below:

- Tonnage landfilled from the residential and commercial sectors totaled approximately 210,000 tonnes;
- Close to 495,000 transactions were handled at all Waste Management sites and over 1.5 million stops per month were made for curbside collection;
- The Blue Box and Cart Recycling programs resulted in 36,310 tonnes of recyclables diverted from landfill;
- The Green Bin Program diverted 9,520 tonnes of organics from landfill;
- The “Don’t Waste Another Day” promotion campaign was introduced;
- Yard waste collected at the curb totaled 13,070 tonnes and an additional 18,570 tonnes were dropped off at the transfer stations;
- 1,275 tonnes of scrap metal and appliances were diverted from landfill;
- 212 tonnes of tires were diverted from landfill;
- An additional 1,300 composters were distributed in 2011, bringing the total number of composters distributed since the program began to over 85,000 units;
- Over 1,300 tonnes of reusable building material, toilets, clothing and household items were collected and diverted from landfill;
- Residents dropped off 906 tonnes of MHSW at the permanent depots and 11 event days.
• Compost and woodchip giveaway programs had 1,800 residents picking up over 600 tonnes and contributing $2,000 and 4,000 pounds of food in donations for the local food banks;
• The E-waste drop-off program diverted 311 tonnes from landfill;
• Televisions were banned from curbside collection and landfill;
• Over 37,250 calls were made to the Waste Management customer service center;
• 5,800 students participated in the Education Center Program, over 8,400 residents visited various waste management exhibits and over 770 attended public landfill tours; and,
• Commercial diversion programs kept 1,290 tonnes of pallets and 919 tonnes of drywall out of the landfill.

2012 Priority Initiatives:

Some of the priority initiatives or projects to be undertaken by the Division in 2012 are listed below:

Shingles Recycling Program: Council recently approved a shingles recycling program (Report E-12-021) which commenced on March 1\textsuperscript{st} and is anticipated to result in approximately 1,000 tonnes of shingles being diverted from landfill in 2012.

Construction of the North Expansion Area Cell Four (NE-4): Council recently approved T2012-001 for the construction of the NE-4 landfill cell including leachate and landfill gas collection system upgrades. A comprehensive communication plan has been developed including a notification to the nearby property owners as well as a section on the Division’s website dedicated to NE4 construction to provide regular updates as construction progresses.

Extended Producer Responsibility (EPR): Originally introduced to deal with Blue Box materials, the concept of Extended Producer Responsibility (EPR) now also exists for used tires, e-waste and municipal hazardous or special waste. However, specific provincial policy regarding EPR does not exist and therefore the service levels and cost recovery models associated with the Industry Funded Organizations (IFOs) that run these programs are inconsistent, not transparent and not easily understood. Waste Management staff, in association with AMO, the Regional Public Works Commissioners of Ontario, the Municipal Waste Association and the Ontario Waste Management Association will continue to advocate for waste management policies in the province that clearly identify incentives that reward waste reduction and shift costs to those that are responsible for creating the waste.

Waste Management Master Plan: The majority of the Waste Management program expansion and diversion initiatives recommended in the current Waste Management Master Plan have been implemented resulting in the Region having one of the higher diversion rates in the Province. The new Waste Management Master Plan initiative being embarked upon this year and scheduled for completion by the fall of 2013 will:
• further identify opportunities and direction for expansion of existing programs or implementation of new diversion programs and services;
• recommend post-diversion residual waste management strategies; and,
• assist in developing a sustainable financial plan to provide long term funding for the Division.

CORPORATE STRATEGIC PLAN:

This report has been prepared consistent with the Corporate Strategic Objective of Focus Area 1 “Environmental Sustainability: Protect and enhance the environment and particularly action 1.3 “Reducing the Amount of Waste Requiring Landfill.”
FINANCIAL IMPLICATIONS:

All costs associated with the Waste Management programs and services discussed in this report are provided for in the approved 2012 Operating and Capital budgets.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE: Nil

ATTACHMENTS:

Appendix A – Trends and Comparisons

PREPARED BY: Jon Arsenault, Director, Waste Management

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

Landfill Tonnage & Tipping Fee Trends

![Figure 1](image1)

Recyclable Tonnage & Revenue Trends

![Figure 2](image2)

Recycling Tonnage Comparison (2007 vs 2011)

![Figure 3](image3)
Appendix A

Recycling Revenue Comparison  
(2007 vs 2011)  

Percentage of Total Revenue Received

2011 Revenue  
2007 Revenue

Recycling Revenue Comparison  
(2007 to 2011)

% of Total Revenue Received

Year

Recycling Revenue Comparison  
(2007 to 2011)

Residential Waste Management Statistics  

Waste Landfilled  
Waste Diverted  
Percent Diverted

Residential Waste Management Statistics  

KG/Capita

Year

Waste Diversion Percentage

Fibres  
Plastics  
Metal

Percentage of Total Revenue Received

Recycling Revenue Comparison  
(2007 to 2011)

Recycling Revenue Comparison  
(2007 to 2011)

Appendix A

Figure 4

Figure 5

Figure 6
TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: June 19, 2012
FILE CODE: E21-40
SUBJECT: SHINGLE DIVERSION – PILOT PROGRAM UPDATE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo:

a) Increase the contract of TRY Recycling by 4,500 tonnes at $61.13 per tonne for a total of $275,085 plus applicable taxes for the pilot shingle diversion and recycling program for 2012, to be funded from the Waste Management Reserve Fund; and

b) Approve in principle the addition of a permanent shingle diversion and recycling program in 2013, subject to approval during the 2013 budget process.

SUMMARY: NIL

REPORT:

In May of 2011, Committee directed staff to investigate the possibility of a shingle diversion and recycling program (E-11-054) based on the success of the existing drywall diversion program. After drywall, shingles are one of the largest remaining portions of construction and demolition waste. At that time, staff estimated that 100 tonnes of shingles per month would be received, based on the drywall program.

On January 31, 2012, Proposal P2011-048 was approved with TRY Recycling for a one year term starting on March 1, 2012 at an estimated cost of $61,130.00 for an average of 100 tonnes a month for the duration of the pilot in 2012. The proposal covers services for the hauling, processing and recycling of shingles collected at both the Cambridge (201 Savage Drive) and Waterloo (925 Erb Street West) transfer stations for a one year period with the option to renew for two (2) additional one year periods.

The pilot shingle diversion and recycling program began on March 1, 2012. Waste Management staff at the Cambridge and Waterloo transfer stations identify dedicated loads of shingles at the scale and direct them to a designated diversion area of the transfer station. The material is then loaded into trailers, and transported to the TRY Recycling Inc. facility in London, Ontario for recycling into TRY Pave, a material used for road building. The TRY Pave end product is in great demand, and the increased amount of diverted material can easily be accommodated by TRY Recycling.
The pilot has been far more successful than anticipated. Since the program commenced in March, over 1,700 tonnes of shingles have been diverted from landfill for recycling. While a seasonal fluctuation in shingles received is still expected, staff now estimate closer to 5,500 tonnes of shingles will be diverted in the 10 months of operation in 2012. Staff further project 5,600 tonnes annually could be diverted from landfill with a permanent program. Staff had originally anticipated that this program would be aimed at the do-it-yourself homeowner and small-to-medium sized residential roofing companies, expecting that the larger roofing companies would dispose of their shingles through private waste disposal firms. However, the Regional program is also the drop off choice for these larger haulers, resulting in higher than anticipated tonnage.

**Based on the significant demand for this program, and the benefits it provides in terms of waste diversion and extending landfill capacity, staff recommend expanding the funding for this pilot program in 2012. As noted below, this additional funding can be accommodated from the Waste Management Reserve Fund.**

**CORPORATE STRATEGIC PLAN:**

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

**FINANCIAL IMPLICATIONS:**

The original cost of $61,130 plus applicable taxes for the hauling, processing and recycling of shingles at an estimated volume of 100 tonnes per month, or 1,000 tonnes in 2012 was approved on January 31, 2012. An increase of $275,085 is requested for an additional 4,500 tonnes to be recycled for a total estimate of 5,500 tonnes of shingles in 2012. The cost increase can be funded from the Waste Management Reserve Fund, however, staff will also attempt to identify savings in the existing Waste Management Operating Budget to off-set the increased shingle recycling costs. Based on the success of this program, staff also recommend converting the pilot program into a permanent program in 2013, as part of the budget process.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:** NIL

**ATTACHMENTS:** NIL

**PREPARED BY:** Cari Rastas Howard, Project Manager (Waste Management)

**APPROVED BY:** Thomas Schmidt, Commissioner, Transportation and Environmental Services
To: Chair Jim Wideman and Members of the Planning and Works Committee
From: John Lubczynski, Principal Planner
       Kevin Curtis, Manager, Strategic Policy Development
Subject: RESPONSE TO COUNCILLOR’S REQUEST FOR INFORMATION ABOUT UNREHABILITATED SAND AND GRAVEL PITS IN WATERLOO REGION

At the Planning and Works Committee meeting on August 6, 2011, Councilor Lorentz requested staff to report back to the Committee on how many sand and gravel pits in Waterloo Region have not been rehabilitated.

To date, approximately 17 sand and gravel pits previously under license in Waterloo Region have been closed. The closed pits span a period of over 20 years, with the most recent closure occurring in 2008. All 17 of the former pits have undergone final rehabilitation. These sites were naturalized, developed for urban uses and a new golf course, or returned to agriculture. Additional information regarding the rehabilitation of pits, including “abandoned” pits, is provided below.

Rehabilitation of Pits under the Aggregate Resources Act

Waterloo Region currently has 86 licensed sand and gravel pits. Most of the operations are located in the Townships of Woolwich and North Dumfries, which together account for about 64% of all operations. The operations have an average size of 42 hectares, and have been licensed for an average of 29 years.

The extraction of mineral aggregates is regulated by the Ministry of Natural Resources (MNR) pursuant to the Aggregate Resources Act (ARA). The MNR is responsible for granting licenses for pits, undertaking compliance and enforcement activities, and responding to complaints. Under the ARA, every aggregate operator in Ontario is required to perform progressive and final rehabilitation to the satisfaction of the MNR.

Progressive rehabilitation means rehabilitating depleted areas of a pit while extraction continues elsewhere on the site. Typically, this involves placing topsoil on the pit floor and reestablishing vegetation on it. This practice is intended to minimize the amount of disturbed area at any given time, and ensure that rehabilitation occurs in a reasonable timeframe.

As of 2011, the 86 pits currently under license in Waterloo Region have mined approximately 1,636 hectares of land. Of this area, an estimated 397 hectares or 24% has been progressively rehabilitated. The remaining 76% of the disturbed area (1,239 ha.) is still under extraction, or is being used to accommodate stockpiles, wash plants and associated buildings. Some pits also have more than one extraction area on the site to produce different grades of aggregates, thereby increasing the total disturbed area of the site.
Once aggregate extraction is complete, the ARA also requires aggregate operators to complete final rehabilitation prior to closing the pit. During final rehabilitation, all equipment, stockpiles and buildings (in most cases) are removed, and additional vegetation may be established on the areas that have already been progressively rehabilitated. Final rehabilitation may include restoring a site back to its original agricultural use, or changing the site to another use compatible with surrounding properties. As noted above, an estimated 17 pits under previously under license in the Region have been closed. All of these pits have undergone final rehabilitation.

Rehabilitation of Abandoned Pits Never Licensed under the ARA

Waterloo Region also has a number of “abandoned pits” that were never licensed under the ARA. These pits were typically less than 2.0 hectares in area, and were already closed when the ARA came into effect in 1990. The pits were used mainly for private purposes, municipal wayside pits, or intermittent commercial operations. In 1990, the Ontario Aggregate Resource Corporation, the Provincial agency responsible for managing the Abandoned Pits and Quarries Rehabilitation Fund, estimated that Waterloo Region had 64 “abandoned” sand and gravel pits. Twenty-seven of the 64 “abandoned” pits were rehabilitated for agriculture or other uses. The remaining 37 sites have not been surveyed by the Corporation since 1990 and it is unknown how many require rehabilitation.

Conclusion

The ARA requires pit operators to perform progressive and final rehabilitation on their site. To date, a total of 17 pits in Waterloo Region previously under license have been closed, and all of them have completed final rehabilitation. Despite this achievement, however, the rate of progressive rehabilitation in the region continues to be slow for many pits currently under license.

On April 30, 2008, Regional Council considered report P-08-044 that highlighted the need to improve pit rehabilitation. Council subsequently passed a resolution requesting the MNR to review its current system for achieving rehabilitation, and that the MNR reintroduce the former security deposit system to encourage more timely rehabilitation. The MNR has not taken any action on the issue of security deposits. In March 2012, the Provincial government formed an all-party committee of the Ontario legislature to review the ARA.
The Canadian Institute of Transportation Engineers (CITE) Board has awarded the Southwestern Ontario District of CITE the 2014 CITE Conference to be held in the Region of Waterloo. Paula Sawicki has been appointed the Local Arrangement Committee Chair. Other Regional staff (Garrett Donaher and Richard Parent) will form the Committee along with staff from the City of Kitchener and members from the private sector.

The major event of the Canadian Institute of Transportation Engineering (CITE) is its Annual Meeting. In 1977, the first Annual Meeting was held in Ottawa, and on an annual basis, meetings have been held at various locations throughout the country like Winnipeg, Halifax, Vancouver, and Victoria. Attendance will be between 150 to 200 Transportation Professional delegates.

The prime focus of the event is the exchange of technical information through the presentation of papers and roundtable discussions. The conference also provides an opportunity for CITE Executive and Board members to get together for the formal meetings of the Canadian District and for networking of delegates.

Events like this create excellent opportunities to demonstrate to transportation professionals from across the country what the Region of Waterloo has accomplished in community building including many of our progressive transportation initiatives. There will be transportation excursions planned to explore the transit system, roundabouts, LRT plans and the cycling network of on-road and off-road trails. The conference dates are June 1 – 4, 2014.

As part of the 2013 CITE conference, some of the local arrangement committee members will be required to attend to promote the conference at a booth as part of the tradeshow. As well, there may be requests for sponsorship by the Region of particular events at the 2014 conference. Staff time will be required for the organization of the conference and will be minimal except for the six-weeks leading up to the conference when more will be expected.
<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Requestor</th>
<th>Request</th>
<th>Assigned Department</th>
<th>Anticipated Response Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-Aug-11</td>
<td>P&amp;W</td>
<td>One year review of Report E-11-085 re: Parking on Bleams Road</td>
<td>Transportation and Environmental Services</td>
<td>14-Aug-2012</td>
</tr>
<tr>
<td>16-Aug-11</td>
<td>G. Lorentz</td>
<td>Staff report back to Committee regarding how many gravel pits in the Region have not been restored.</td>
<td>Planning, Housing &amp; Community Services</td>
<td>Memo 19-June-2012</td>
</tr>
<tr>
<td>18-Oct-11</td>
<td>P&amp;W</td>
<td>Staff report on the cost recovery ratios on Region recyclables</td>
<td>T&amp;ES Waste Management</td>
<td>Report E-12-040</td>
</tr>
<tr>
<td>18-Oct-11</td>
<td>C. Millar</td>
<td>Staff review the aesthetics of the bridge repairs to the Main Street, Cambridge</td>
<td>Transportation and Environmental Services</td>
<td>19-Jun-2012</td>
</tr>
<tr>
<td>10-Jan-12</td>
<td>P&amp;W</td>
<td>Update report on proposed Source Protection Policies after GRCA Source Protection Committee public consultation is completed</td>
<td>Transportation and Environmental Services</td>
<td>Summer 2012</td>
</tr>
<tr>
<td>31-Jan-12</td>
<td>P&amp;W</td>
<td>That staff meet with representatives of the Canadian National Institute for the Blind and the Grand River Accessibility Advisory Committee to develop solutions for the visually- and hearing-impaired at all roundabouts and intersections in the Region of Waterloo.</td>
<td>Transportation and Environmental Services</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>28-Feb-12</td>
<td>G. Lorentz</td>
<td>Staff review the safety of the intersection of Yellow Birch Drive and Ira Needles Boulevard</td>
<td>Transportation and Environmental Services</td>
<td>September 2012</td>
</tr>
<tr>
<td>28-Feb-12</td>
<td>P&amp;W</td>
<td>Report outlining consultant contracts, identifying the tender cost with upset limits and the final cost of the contract.</td>
<td>Transportation and Environmental Services</td>
<td>14-Aug-2012</td>
</tr>
<tr>
<td>28-Feb-12</td>
<td>J. Brewer</td>
<td>Report regarding reducing the speed limit from 70 kilometers per hour (70 kms) on Can-Amera Parkway approaching the Roundabout at Conestoga Boulevard.</td>
<td>Transportation and Environmental Services</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>Meeting date</td>
<td>Requestor</td>
<td>Request</td>
<td>Assigned Department</td>
<td>Anticipated Response Date</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
<td>---------</td>
<td>---------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>07-Mar-12</td>
<td>C. Millar</td>
<td>Town of Halton Hills Resolution regarding Provincial Regulations relating to Commercial Fill Operations referred to staff for review and report.</td>
<td>Planning, Housing &amp; Community Services</td>
<td>Report P-12-075</td>
</tr>
<tr>
<td>28-Mar-12</td>
<td>D. Craig</td>
<td>Report on possible enhancements similar to what is proposed for Weber Street in Kitchener at the railway overpass for the Delta construction in Cambridge.</td>
<td>Transportation and Environmental Services</td>
<td>14-Aug-2012</td>
</tr>
<tr>
<td>28-Mar-12</td>
<td>Council</td>
<td>Staff to review the operation of the Homer Watson Boulevard/Block Line Road roundabout and report back to Council in 2013.</td>
<td>Transportation and Environmental Services</td>
<td>2013</td>
</tr>
<tr>
<td>08-May-12</td>
<td>P&amp;W</td>
<td>Report detailing the rational for the Injury Crash Cost calculation used by staff in reports for roadway improvements.</td>
<td>Transportation and Environmental Services</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>08-May-12</td>
<td>P&amp;W</td>
<td>Staff to review options for signalized vehicle lights and signalized pedestrian crosswalks in Roundabouts in the detailed design report prepared later in 2012 for Franklin Boulevard Improvements.</td>
<td>Transportation and Environmental Services</td>
<td>2012</td>
</tr>
<tr>
<td>16-May-12</td>
<td>G. Lorentz</td>
<td>Through the Transportation Master Plan exercise, that staff review the feasibility of providing Grand River Transit for community events and festivals.</td>
<td>Transportation and Environmental Services</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>29-May-12</td>
<td>P&amp;W</td>
<td>That the Sawmill Road and Northfield Drive Improvements project be referred back to staff to look at alternatives which include the following: relocating parking off of Sawmill Road; alternative multi-use trails or alternate cycling infrastructure on Flaxmill Drive; traffic calming and truck diversion for Sawmill Road; minimizing property impacts; and preserving the history and culture of the village.</td>
<td>Transportation and Environmental Services</td>
<td>25-Sep-2012</td>
</tr>
</tbody>
</table>