



# City of Belleville 2016 CAPITAL BUDGET

Finance Department

October 27, 2015

- # Credit Rating
- ## AA-, Stable Outlook
- + Exceptional Liquidity
  - + Very Low Contingent Liabilities
  - + Average Budgetary Performance
  - Moderate and Rising Debt Burden
  - Muted Growth Prospects

# Municipal Debt – end of 2014

- Tax Supported \$ 36.3 million
- Self Liquidating \$ 14.1 million  
\$50.4 million
- End of 2014 there is \$114.1 million of debt approved by Council but not issued
- Includes entire Build Belleville Debt \$ 87.0 million

# Annual Debt Costs

## (\$50.4 million of Debt)

	2015	2016	2017	2018
Principal	3.5	3.5	3.5	2.7
Interest	1.9	1.7	1.6	1.5
<b>Total</b>	<b>5.4</b>	<b>5.2</b>	<b>5.1</b>	<b>4.2</b>
TAX SUPPORTED				
Principal	1.8	1.8	1.9	1.7
Interest	1.3	1.3	1.2	1.1
<b>Total</b>	<b>3.1</b>	<b>3.1</b>	<b>3.1</b>	<b>2.8</b>

	2015	2016	2017	2018
WATER				
Principal	1.6	1.5	1.6	0.9
Interest	0.4	0.4	0.3	0.2
<b>Total</b>	<b>2.0</b>	<b>1.9</b>	<b>1.9</b>	<b>1.1</b>
WASTEWATER				
Principal	0.1	0.1	0.1	0.1
Interest	0.1	0.1	0.1	0.1
<b>Total</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>

# 2015 Debenture Issue

- Not finalized yet ~ probably mid November
- \$33.2 million (\$2.3 million annual debt costs)
  - \$1.5 million Wastewater (\$99,000)
  - \$11.8 million Water (\$778,000)
  - \$19.9 million Tax Supported (\$1.4 million)
- 3.24 % Current 20 Year Rate
- 2015 Municipal Taxes \$84.3 million

# Future Debt Issues

- 2016      \$29.9 million
- 2017      \$44.9 million

# 2016 Capital Budget - DRAFT

- 92 Projects Totaling \$27.5 million
- \$25.0 million allocated to Asset Maintenance and Replacement
- Gross Costs = \$27.5 million
- Funded by:

Taxes	=	\$ 7.4 million
Water Users	=	\$ 3.8 million
Wastewater Users	=	\$ 2.4 million
Reserve Funds	=	\$ 1.6 million
Potential Grants	=	\$ 5.7 million
Federal Gas Tax	=	\$ 2.7 million
Provincial Gas Tax	=	\$ 1.0 million
Long Term Debt	=	\$ 2.9 million
- \$2.0 million contribution to Asset Management Reserve Fund



## HIGHLIGHTS:

- \$7.1 million for Roads/Bridges
- Ashley Street Reconstruction
- Sidney Street Watermain Project
- SCF Application
- Rural/Urban Resurfacing Program
- “Shave and Pave” Program
- 2 Major Cost Savings Initiatives – split over 2 years
  - LED Street Lighting Program
  - QSWC Energy Savings Upgrades

# HIGHLIGHTS: Cont'd



- Bell Creek Bridge Rehabilitation
- Thurlow Landfill Recycling Centre
- Vehicle/Equipment Replacements
- Facilities Capital Maintenance
- Parks Upgrades

- As presented, 2016 DRAFT Capital Budget shows a \$2.4 million increase in taxes which translates to a preliminary 2.89 % Municipal Tax increase
- 2 major cost savings initiatives could be financed through the issuance of Long Term Debt
- Resulting Operating Budget reductions will offset the incremental Debt costs
- Debt not required until 2018

# Additional Information Provided

- Preliminary Reserve Fund Continuity Schedule
- Corporate Business Plan



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**CITY OF BELLEVILLE**  
**Matt Coffey, MCIP, RPP, Manager/Planner of Transit Services**  
**Department of Environmental & Operational Services**  
**Report No. M/PTS-2015-11**  
**October 27, 2015**

**To: Mayor and Members of Council**

**Subject: Transit Bus Purchase**

**Recommendation:**

**“THAT Capital Issue No. \_\_\_\_\_ (Purchase of Transit Bus) be approved in the amount of \$500,000.”**

**Strategic Plan Alignment:**

The City of Belleville’s Strategic Plan identifies nine strategic themes. This report aligns with the “Transportation and Mobility” strategic theme to “Develop a viable, affordable and accessible public transit system that addresses the needs of our citizens”.

**Background**

Belleville Transit is currently operating nine permanent bus routes and one temporary bus route within the City of Belleville. In order to operate these 10 routes 12 buses are required to be on the road during peak times (weekdays). The number of buses on the road versus the number of buses in the fleet is important in determining the spare ratio.

The Spare Ratio refers to the percentage of total vehicles that are not needed in peak service compared to the vehicles that are used in peak service. With its current fleet of 15 buses there are 12 on the road which provides a spare ratio of 20%. Belleville also offers charter services which draw from spare buses further reducing the ratio.

While it is our intent to have the lowest ratio possible, not having enough spares can result in some bus routes not being operated because there are no vehicles available. Buses can become unavailable for a variety of reasons including routine maintenance, MTO inspections, and repairs that require the bus to be out of service for a specified length of time.

The table below compares the Belleville’s spare ratio with those of other municipalities of similar size. Based on this comparison we can see that Belleville has the lowest

spare ratio. The addition of a bus would boost the ratio to 25% which is closer to the average.

Peak Buses	Belleville	Cornwall	N. Bay	Sarnia	Timmins	Welland
Spare Ratio	20%	27%	28%	35%	37%	25%

Belleville currently runs a fleet of buses manufactured by Nova Bus Inc. (a division of Volvo). These buses are of stainless steel construction; they are durable and designed to last 20 years with a reverb program at the 10 year mark. The reverb program has been in progress for the past two years. Comparable transit buses typically have a much lower lifespan due to the lack of stainless steel construction which leads to corrosion.

Smaller buses such as the ARBOC (cut-away style) are normally used in the para transit industry but can also be found on conventional transit routes. These buses are typically used in low density residential areas, new subdivisions, and within new service areas. If Belleville is to expand transit into new areas these buses could be considered a viable alternative to a conventional transit bus. However the typical lifecycle replacement of a para transit vehicle is approximately 5 years.

### Financial/Analysis

The cost of purchasing a transit bus is approximately \$500,000 while the cost to add an ARBOC (cut-away style) is approximately 170,000. Although the cut-away style of bus is considerably lower in up-front costs, the Nova transit bus has a much greater life cycle. Fuel and maintenance costs are similar while the cost of adding a second vehicle type increases tooling and personnel training requirements. Additional items such as fareboxes, stop announcement systems, and destination signs are not included, hence why the budget figure is the same between the cut-away and the transit bus.

### Conclusion

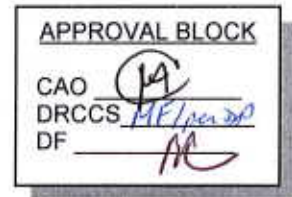
It is recommended that one additional Nova transit bus be added to the fleet bringing the total from 15 to 16. Our aim is to improve the spare bus ratio to ensure that all transit buses are fully maintained and MTO compliant to the Commercial Vehicle Operator's Registration (CVOR) and to ensure all bus routes remain operational.

Respectfully Submitted,



Matt Coffey, MCIP, RPP  
Manager/Planner, Transit Services  
Environmental & Operational Services Department





**CITY OF BELLEVILLE**  
**Joel Carr-Braint, Property Manager**  
**Recreation, Culture & Community Services**  
**Report No. PM 2015-05**  
**October 27, 2015**

**To: Mayor and Members of Council**

**Subject: Emergency Power at the Quinte Sports & Wellness Centre**

**Recommendation:**

“THAT pursuant to the Property Manager’s Report No. PM 2015-05 re Emergency Power at the Quinte Sports and Wellness Centre, that options be explored with Veridian for an emergency generator and/or a Combined Heat and Power form of emergency power and report back to Council with a proposal for consideration in 2016.”

**Strategic Plan Alignment**

The City of Belleville’s Strategic Plan identifies nine strategic themes. The recommendation within this report aligns with the City’s strategic themes Infrastructure, Culture and Recreation as well as Community Health, Safety and Security.

**Background:**

The main and currently utilized location to send citizens in the event of an occurrence whether as a comfort station or an emergency evacuation location is to the Quinte Sports & Wellness Centre. This was evidenced by our summer’s heat waves and the latest incident involving a gas main rupture.

By accepting these citizens, we are also taking on the liabilities associated with these people (and sometimes pets, etc.). If someone needs medical care we forward them to the hospital as soon as possible and/or provide an on-site Emergency Services Paramedic. Others may be mobility challenged or challenged in many ways. Our qualified staff assist as best they can to make everyone comfortable.

The QSWC Safety Procedure (Code Grey – Loss of Essential Services attached as Schedule A) in the event of a power outage greater than 20 minutes is to evacuate the building. If an emergency happens during a power outage the building would be without power (i.e. no lights and no heating/cooling). We will have to turn them away to another location. To allow hundreds (possibly thousands) into a building with no power or heating/cooling could be disastrous and potentially very dangerous.

We presently have auxiliary generators at several locations including, City Hall, Fire Stations, Police Station, Water plants, etc.; however, these are not emergency generators capable of providing long term life safety power, nor do they have enough space.

I was asked by Council to investigate the possibility and cost of providing emergency power to the facility and my comments are below.

The facility currently has two main electrical sources entering the two main electrical rooms at opposite ends of the facility. During the recent construction, the main concourse is powered from each location as is some of the equipment. This makes it very difficult for one generator and therefore requires a generator for each electrical room location (i.e. two generators) or very costly alternative cabling.

The facility's state of the art energy system receives its main heating from the waste heat provided by running the ice making machinery. There is a backup heating system in place however, it is not ideal for long periods if all areas of the facility were to be used. The loss of revenue, reduction in function of the facility (in some cases not being able to meet the needs as an evacuation centre or reception centre) is something that we need to compensate for.

We met with Kirkland Engineering on site and asked for a preliminary costing for both design engineering and an installation budget.

Engineering will cost \$40,000 and for generators capable of providing the amount of power and heat will be approximately \$2,000,000.

During our investigations we have developed an appreciation for a system called CHP or Combined Heat and Power (additional information attached as Schedule B), which was commonly referred to in the past as 'Co-gen'.

These units provide electrical power and provide heat as a by-product. This will enable us to investigate smaller units because of the heat by-product.

CHP units are more costly but may provide several incentives as they qualify for the Save ON Energy Program. We are investigating these incentives. There are design incentives as well as installation incentives available.

An interesting item is that we can run one or both of these units continually and provide all or most of the power the site requires. The operating and generating cost is approximately 50% of the cost of electricity and may provide a great operational savings as well as provide a safe evacuation centre.

Veridian is excited with this new technology and are willing to lead us for the entire project. They will consider several options including investing all the capital and running the site removing all responsibility from the City. They could also partner with us at any ratio we choose enabling some pay back possibilities.



**Financial/Analysis:**

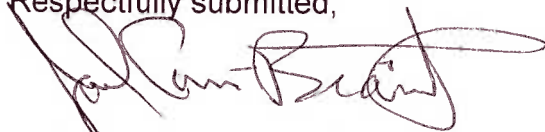
If we purchase and install emergency generators the costs could be approximately \$2,000,000. If we develop a CHP system our capital investment could be as low as zero with Veridian taking the lead on this project. Veridian would also be responsible for the ongoing maintenance and operation.

If costs are associated and recommended, they will be reflected in our 2017 Capital Budget process.

**Conclusion:**

We are asking Council for direction to investigate and work with Veridian to explore an emergency generator and/or a Combined Heat and Power form of emergency power for the Quinte Sports & Wellness Centre and report back to Council in 2016.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Joel Carr-Braint', written over a horizontal line.

Joel Carr-Braint

Attachments: Schedule A - QSWC Code Grey – Loss of Essential Services  
Schedule B - Union Gas Information Sheets on CHP

# Code Grey - Loss of Essential Services

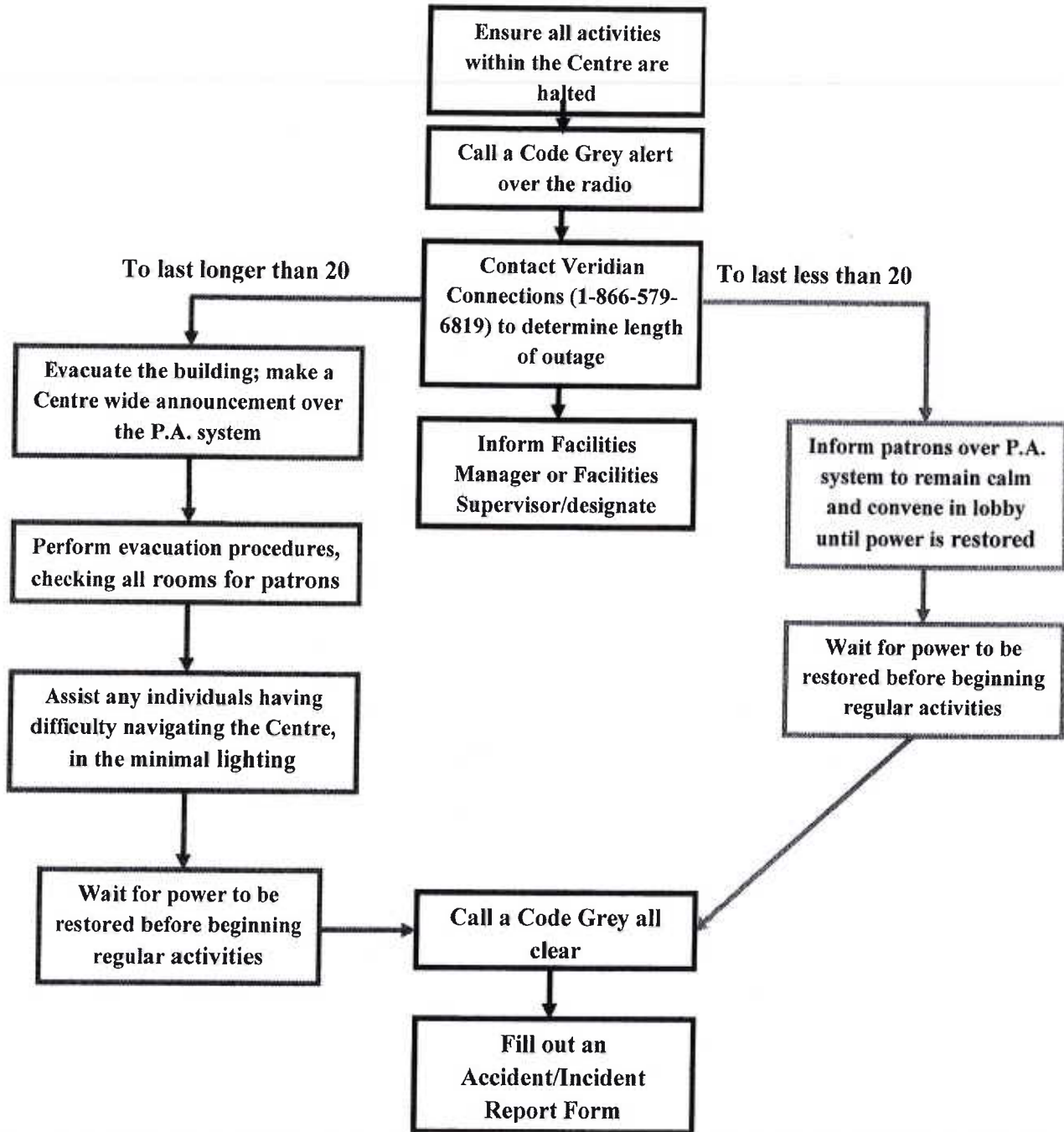
## Power Failure

If a power failure occurs within throughout the Quinte Sports & Wellness Centre the following actions should be taken:

- Stop what you are doing immediately, but remain calm. Ensure that all activities within the facility are halted, regardless of the activity, until the power is restored.
- Call out a Code Grey alert over the radio.
- Emergency lights will come on immediately, to assist in finding the exit if an evacuation is required.
- Over the PA advise clients to come to the main lobby. Begin moving patrons to the main lobby by clearing all rooms of people.
- Inform patrons not to use the elevator and direct anyone with special needs to the Assembly Area – Points of Refuge on the second floor.
- Contact Veridian Connections at 1-866-579-6819 to inquire about the nature of the power failure and the estimated time that the failure will last.
- If a power failure is expected to last no longer than 20 minutes inform patrons to remain calm and remain in the main lobby, as the power will be restored shortly.
- If the power failure is expected to last longer than 20 minutes then the building must be evacuated as life safety systems have limited battery power.
- A notice should be made over the P.A system for everyone to evacuate the building.
- When performing an evacuation of the building do not engage the fire alarm.
- Follow the Code Green - Evacuation Procedures.
- Contact the Facilities Manager or Facilities Supervisor/designate and inform them of the situation.
- Provide help to any individual who may require assistance navigating the minimally lit facility.
- If the power is going to be out longer than 20 minutes call the fire department to evacuate persons with disabilities on the second floor.

- Do not allow anyone other than trained staff back inside the building until the power has been restored.
- Call out a Code Grey all clear once the power has been restored.
- Fill out Accident/Incident Report Form.
- Consult the Post Incident Checklist.

## Power Failure Flow Chart



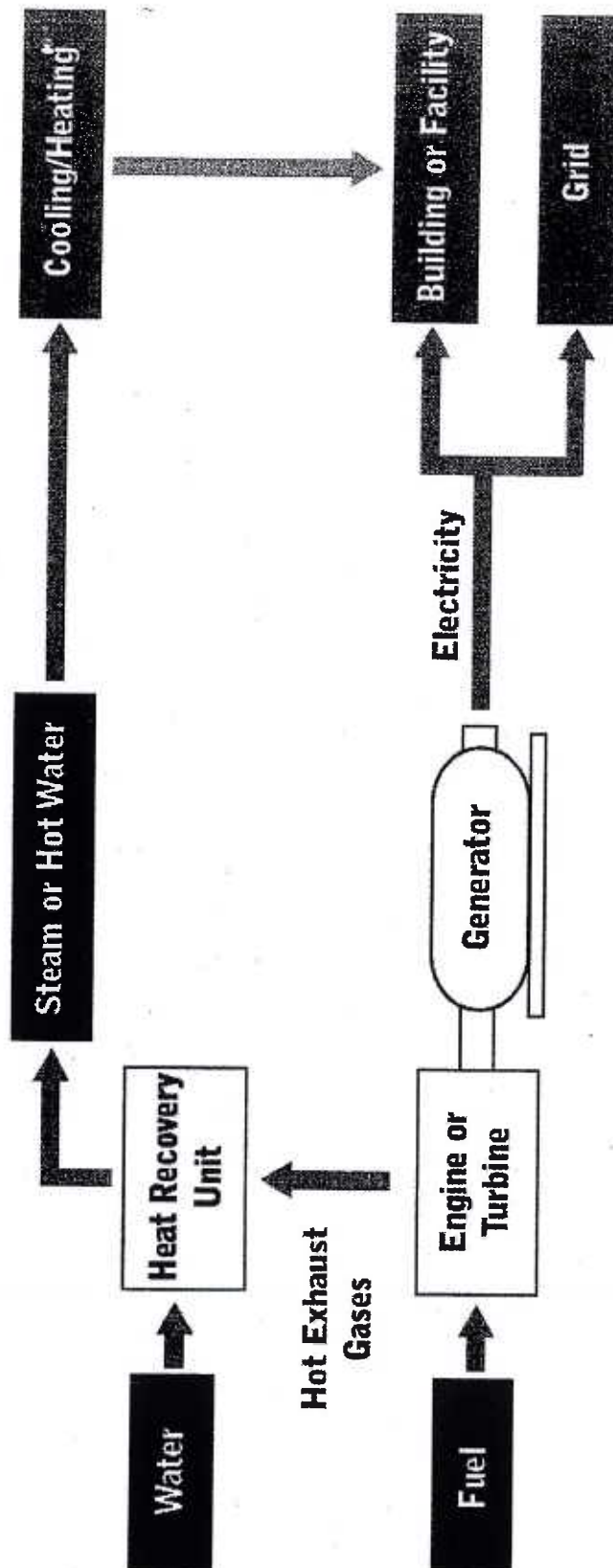
# What is CHP ?

- Combined Heat and Power (CHP) is the sequential / simultaneous production of two different forms of useful energy from a single input energy
  - Single primary fuel source – natural gas
  - Fully integrated system – produces usable heat as well as power (either electricity or shaft power)



# How it works

Combined Heat and Power systems provide power independence with up to **80% overall energy efficiency**.



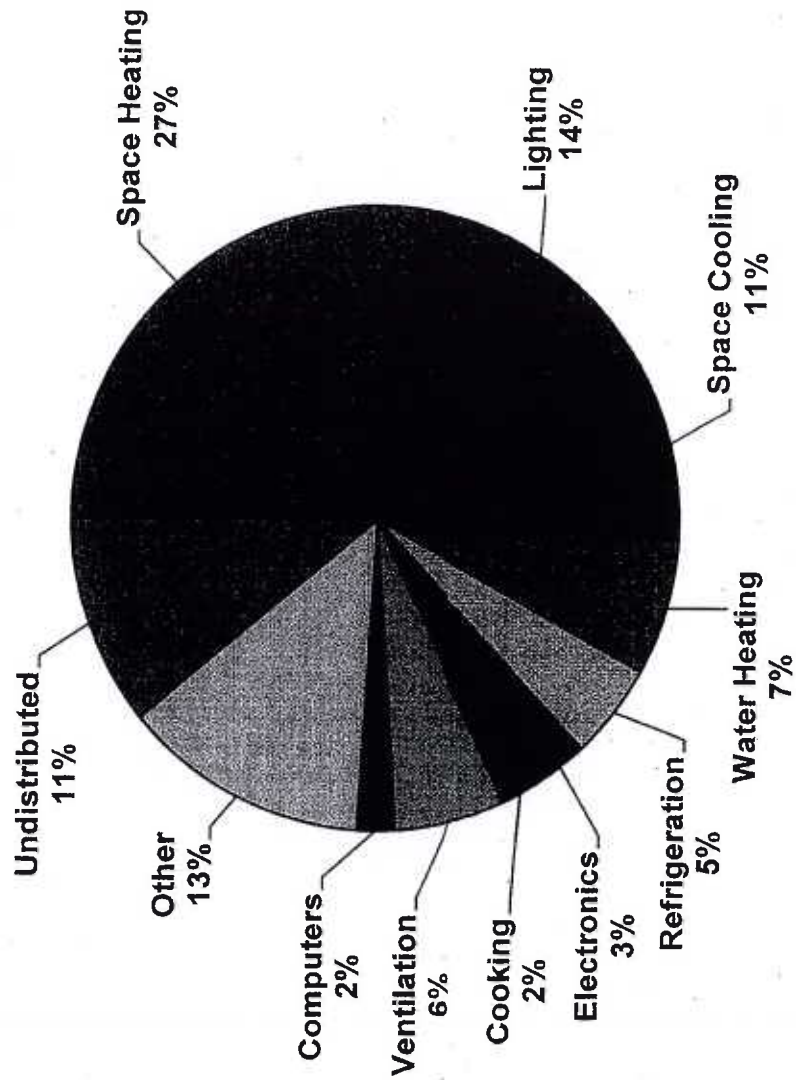
# CHP - many names over the years

- BCHP (CHP for Buildings)
- CCHP (Combined Cooling, Heating & Power)
- Cogen (Cogeneration)
- DER (Distributed Energy Resources)
- DG (Distributed Generation)
- IES (Integrated Energy Systems)
- TES (Total Energy Systems)
- Trigen (Trigeneration)

Today we will use **CHP** (Combined Heat and Power) to reinforce the importance of recovering the waste heat!

# Combined Heat & Power (CHP)

## Typical Energy Use in Commercial Buildings ( Can be supplied through CHP )



Source: U. S. Department of Energy, 2011 Buildings Energy Data Book <http://buildingsdatabook.eren.doe.gov/ChapterIntro1.aspx>



# Combined Heat & Power

- CHP is good for business - Economical
  - Improves overall energy efficiency and fuel utilization - thereby lowering electric and overall energy costs
  - Offers reliability during outages – less downtime
  - Enhances power quality
  - Equipment to meet virtually every need – size to fit your need

# Combined Heat & Power

- **Quality Power**
  - Very consistent power quality
  - Avoids outages from transmission and distribution problems
  - Alleviates electric grid congestion & constraints
  - Decentralized CHP locations less vulnerable to major system problems
- **Environmentally Sound**
  - Produces lower emissions compared to separate power and heat production
  - Conserves natural resources



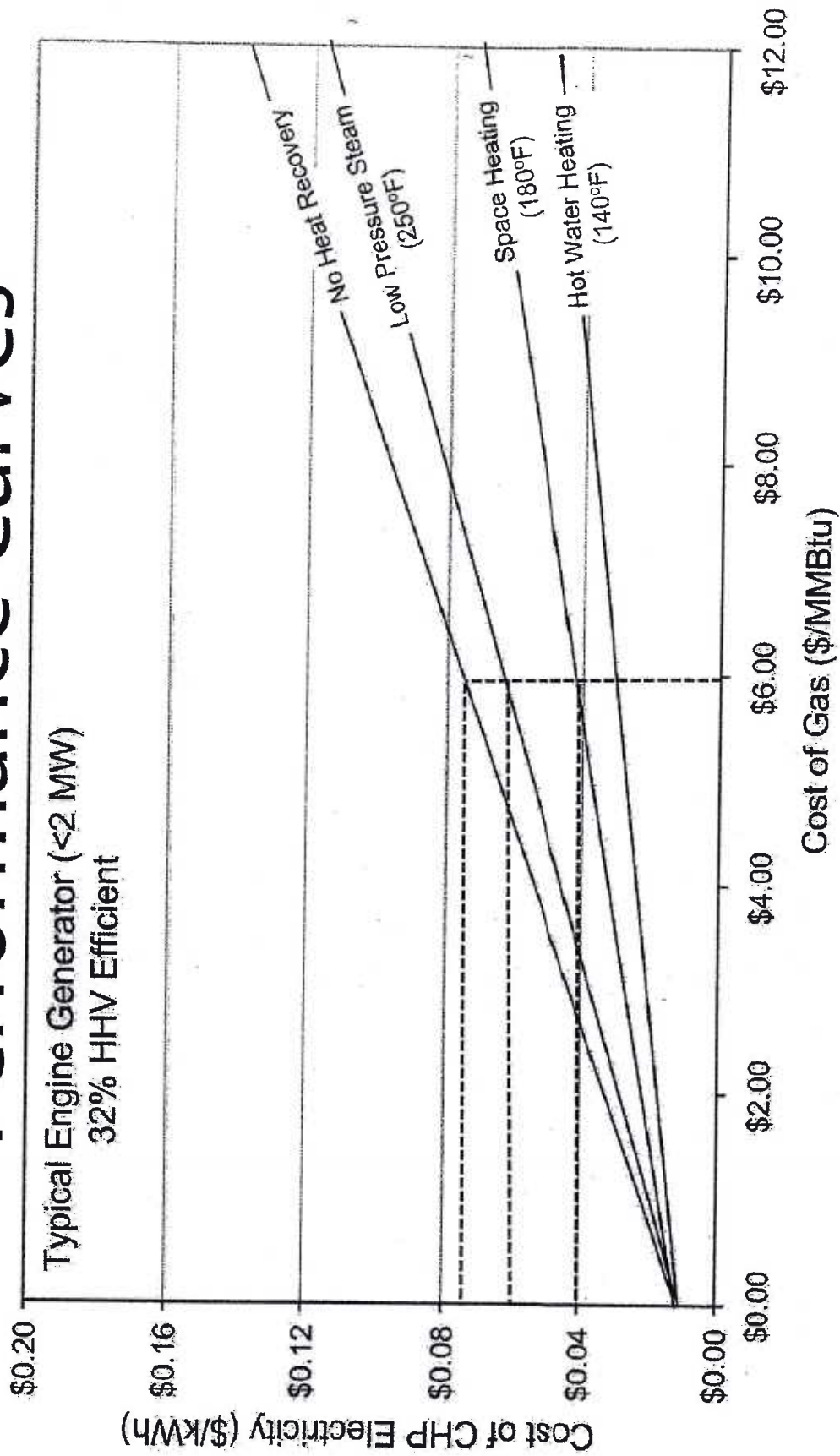


A detailed Life Cycle Cost Analysis is essential for evaluating a CHP project at any facility.

- Average Ontario Gas Price = \$5.50/GJ = \$5.80/MMBTU
- Electric averages \$.13/KWH for retail customers and \$.11/KWH for large C&I customers.



# Performance Curves





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**CITY OF BELLEVILLE**  
**Deanna O'Leary, Senior Project Manager**  
**Engineering and Development Services**  
**Report No. ENG-2015-30**  
**October 27, 2015**

**To: Mayor and Members of Council**

**Subject: Cycling Network Implementation Plan**

**Recommendation:**

**"THAT the Council of the Corporation of the City of Belleville endorses the Cycling Network Implementation Project Plan as appended to Senior Project Managers Report No. ENG-2015-30 dated October 27, 2015 as Attachments 2a and 2b with final approval of each project subject to annual Capital Budget approvals."**

**Strategic Plan Alignment:**

The City of Belleville's Strategic Plan identifies nine (9) strategic themes. The recommendation within this Report aligns the City's strategic theme, "Transportation and Mobility" and the strategic objective to "Plan and develop transportation networks for cyclists and pedestrians".

**Background:**

**Cycling Network**

The City of Belleville Transportation Master Plan was endorsed at the May 26, 2014 Council meeting. This Plan will guide the development of the City's transportation network over the next 20 years.

The preparation of the Transportation Master Plan followed the Municipal Class Environmental Assessment Process which is an approved process under the Environmental Assessment Act. Public consultation was a key component of the study. A need for cycling infrastructure was identified and a cycling network was developed at a series of three Open Houses.

A phased Recommended Cycling Network is included in the Transportation Master Plan. The Ultimate Network is estimated to cost between \$41 and \$47 million to implement, with the first "Phase A" estimated at \$18 to \$20 million. The Plan notes, however, "the cost of implementing cycling infrastructure is generally lower when undertaken in conjunction with other infrastructure projects".

### Cycling Network Implementation Plan

The 2014 Capital Budget included a project to retrofit Bridge Street East with on-street bicycle lanes. In July 2014, a public meeting was held regarding proposed bicycle lanes on Bridge Street East. Bridge Street East is included in "Phase A" of the Cycling Network, along with about 20 other City streets and a few off-road facilities. From public feedback received at the July 2014 meeting, the existence of a Cycling Network was news to a lot of participants. Concerns were expressed by attendees that they were not aware of the Transportation Master Plan nor the previous Open Houses held during the development of the Transportation Master Plan. Many in attendance suggested alternate streets be designated as part of the Cycling Network and recommended phasing revisions. Ultimately, the project to retrofit bike lanes on Bridge Street East was cancelled and the focus was redirected to construct bike lanes on Bridge Street West to Loyalist College.

Based on the Bridge Street East experience, we could see there was a need for more consultation not only regarding individual projects but in the implementation planning strategy for the overall Cycling Network.

\$10,000 was approved in the 2015 Capital Budget to consult with the public and seek input on what cycling projects are short-term priorities. City staff developed a consultation process (discussed below) and have used this input to develop an Implementation Plan showing how portions of the "Phase A" cycling facilities could be constructed over the next four years either as part of planned road reconstructions or as stand-alone projects.

### Online Survey and Public Open House

An Online Survey was launched and a Public Open House was held to gain feedback on cycling priorities. Both the Online Survey and Open House were advertised in a newspaper advertisement placed in the Belleville Intelligencer on Friday, September 4, 2015. The advertisement and an information page was also posted on the City's web page, at the Quinte Sports and Wellness Centre and shared on social media.

The Open House took place on Thursday, September 10, 2015 at the Quinte Sports and Wellness Centre from 6:00 p.m. to 8:00 p.m. The Open House was structured as an informal drop-in session. Attendees were invited to review the material on display which presented the background on the overall cycling network, an overview of cycling facilities and requested feedback on short-term priorities.



Attendees could speak with City staff members and ask questions. Computers with the Online Survey were set up at the Open House for attendees to provide feedback. In total, 35 individuals signed-in at the event though an estimated 50 people were in attendance.

The Online Survey ran for the month of September. The survey included both structured questions and opportunities for participants to provide their own comments. In total, 211 responses were received.

## **Financial / Analysis:**

### Public Input

The complete Online Survey results were reviewed by City staff. To briefly summarize the general responses received:

- The bulk of respondents were City of Belleville residents describing themselves as recreational or commuter/recreational cyclists.
- There was an almost even split between respondents with a regular cycling route within the City and without. Of those with a regular route, almost 65% described their route as involving existing trails.
- Most respondents provided their own comments in addition to the structured survey questions.
- In their comments, respondents indicated the lack of links between existing recreational trails (specifically between Zwick's Trails and the Kiwanis Bayshore Trail), the lack of formal on-street bike lanes, and the lack of a safe crossing over Highway 401 as the greatest deficiencies on existing cycling routes.

Two questions asked respondents were what and where the City should focus on first. General priorities based on responses included:

- East-West and North-South connectivity
- Expanding the recreational trail system, and
- Crossings over the 401 and the Moira River

With regard to the North-South and East-West connectivity, there were three top routes identified by the public as short-term priorities. Routes and the number of survey respondents that selected each route as a priority are shown on the "Public Input on Priority Routes" map in Attachment 1:

Route	Streets Included
Central North-South Route West of the Moira River	North Park Street, College Street East, Geddes Street, Strachan Street, St. Charles Street, Moira Street East, Coleman Street, Dundas Street West, and South Front Street (“Orange Route” from Public Input Survey)
Central North-South Route East of the Moira River	Centre Street, College Street East, Cannifton Road, Reid Street, Station Street, Albion Street, Pine Street and Foster Avenue (“Red Route” from Public Input Survey)
Bridge Street East	from Front Street to Haig Road (“Yellow Route” from Public Input Survey)

There was a fourth route selected that was not as high a priority as the top three routes above but still well above the remainder of the routes:

North-South Route West end	Completes linkages between the existing path on Heartwood Trail, the new bike lanes on Yeomans Street, and the proposed multi-use path to be constructed with the Bay Bridge project. (“Dark Red Route” from Public Input Survey)
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Based on the public feedback regarding prioritization, existing capital projects under construction or being designed, and staff’s vision for a four year capital plan, a proposed Cycling Implementation Project Plan has been developed with preliminary costs identified. A map and project plan detail summary are appended as Attachments 2a and 2b respectively.

The Cycling Implementation Project Plan focuses on:

- The top four priority routes as selected by the public.
- Connecting existing trails.
- Connecting approved projects currently under design or construction (such as Bridge Street West and Yeomans Street cycling facilities).

**The appended Cycling Implementation Project Plan requires \$500,000 over the next four years to construct.**

To briefly summarize the Cycling Implementation Project Plan:

Year	Route	Cost
2016	North-South Route West end	\$150,000
2017	Central North-South Route East of the Moira River	\$150,000
2018	Central North-South Route West of the Moira River	\$100,000
2019	Bridge Street East	\$100,000



Though preliminary cycling facilities (shared lane, on-street bicycle lanes, in-boulevard path, or off-road trail) have been proposed for budgetary consideration, final selection of the appropriate solution will follow the Ontario Traffic Manual Book 18 – Cycling Facilities guidelines.

The intent is to hold public meetings when new bicycle facilities are proposed to ensure that the public is fully aware of how roads will be affected.

Respectfully submitted,

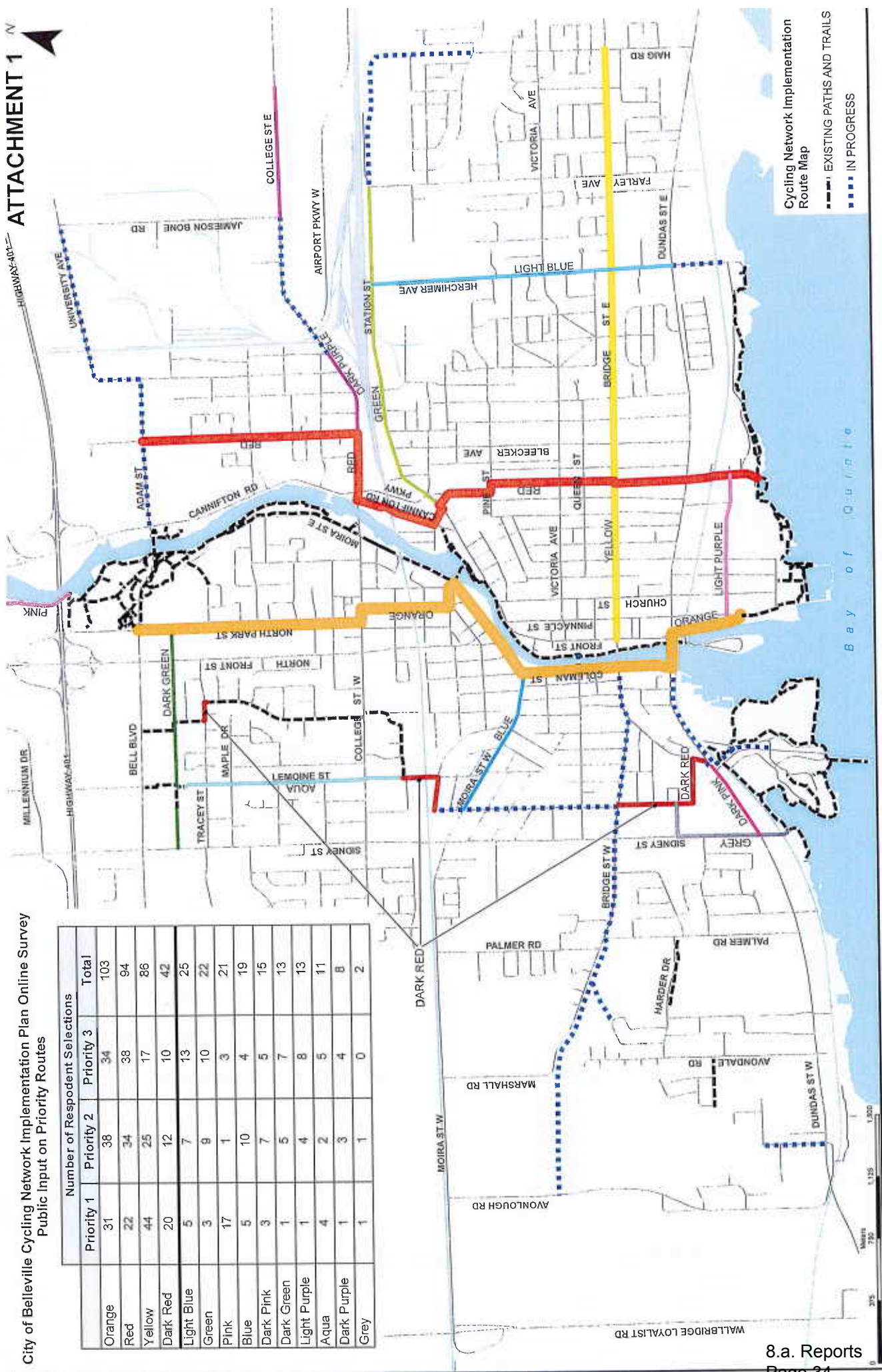


**Deanna O'Leary, Senior Project Manager**  
**Engineering and Development Services**

Attachments:

1. City of Belleville Cycling Network Implementation Plan Online Survey - Public Input on Priority Routes
- 2a. Cycling Implementation Project Plan - Map
- 2b. Cycling Implementation Project Plan - Details

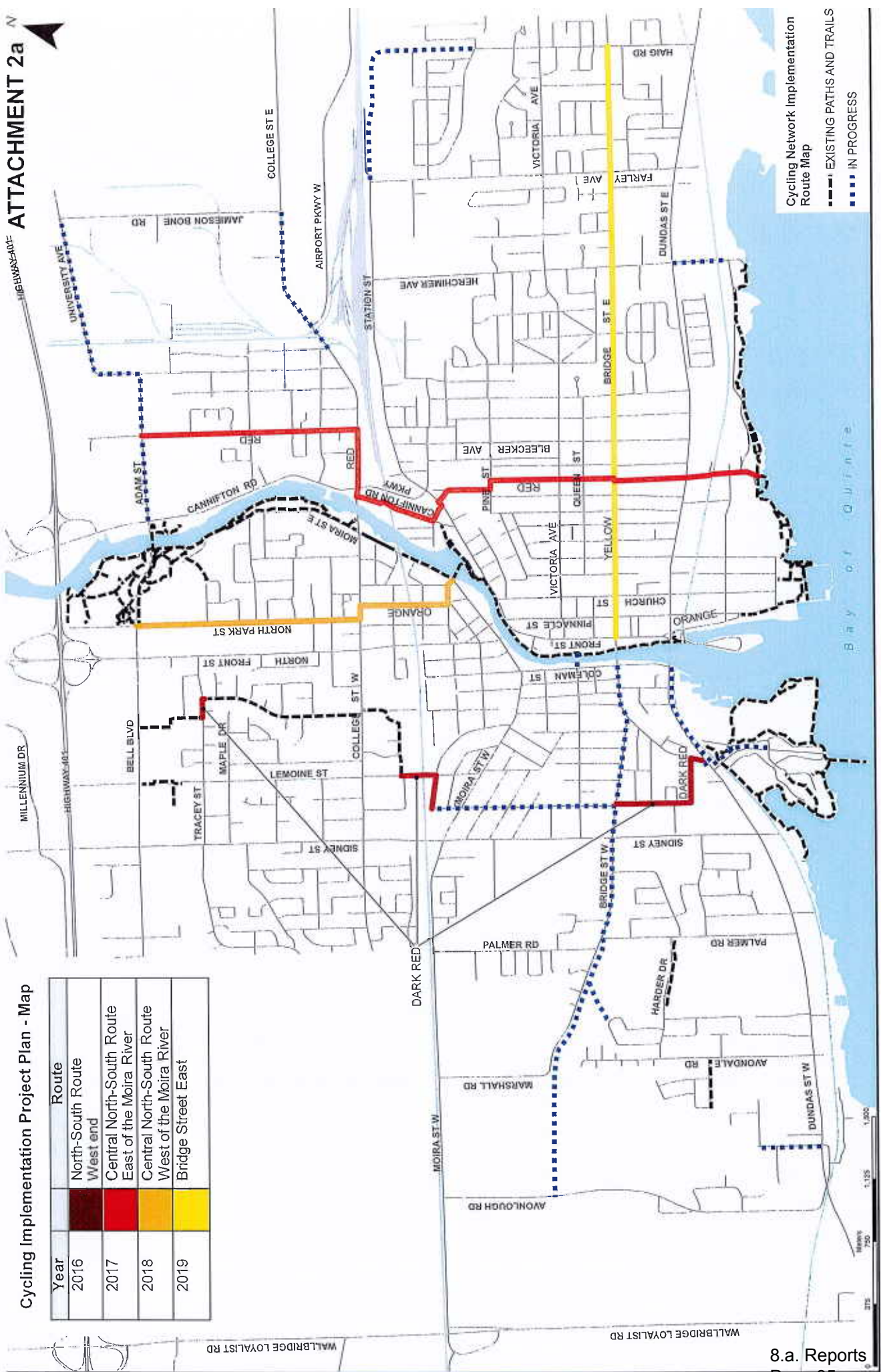
	Number of Respondent Selections					Total
	Priority 1	Priority 2	Priority 3			
Orange	31	38	34			103
Red	22	34	38			94
Yellow	44	25	17			86
Dark Red	20	12	10			42
Light Blue	5	7	13			25
Green	3	9	10			22
Pink	17	1	3			21
Blue	5	10	4			19
Dark Pink	3	7	5			15
Dark Green	1	5	7			13
Light Purple	1	4	8			13
Aqua	4	2	5			11
Dark Purple	1	3	4			8
Grey	1	1	0			2





Cycling Implementation Project Plan - Map

Year	Route
2016	North-South Route West end
2017	Central North-South Route East of the Moira River
2018	Central North-South Route West of the Moira River
2019	Bridge Street East



Cycling Network Implementation  
Route Map  
— EXISTING PATHS AND TRAILS  
--- IN PROGRESS

## CITY OF BELLEVILLE CYCLING NETWORK IMPLEMENTATION PROJECT PLAN - DETAILS

STREET		From	To	FACILITY	INFRASTRUCTURE
2016 \$150,000	North - South Corridor, West End Provides Connection with Yeomans, Heartwood and Bridge Street West cycling facilities End of Route Destinations: Bell Blvd Retailers in the North; Zwicks Park trails in the South				
	Dark Red	Path North of Tracey Street	Tracey Street	existing multi-use path	paving of existing path
		Tracey Street	Existing Path	on-street bike lanes	line painting, signage
		Heartwood Drive / Finch Drive		existing multi-use path	signage
		Sarah Court	Union St	existing multi-use path	signage
		Frank Street	Frank St	shared roadway	signage, improve approaches and lighting at Frank Street rail underpass
		Elmer Street	Elmer St	shared roadway	signage
		Yeomans Street	Yeomans St	existing on-street bike lanes	
		Wellington Street		shared roadway	signage
		Parker Street		shared roadway	signage
		Highland Avenue	Parker Street	shared roadway	signage
2017 \$150,000	Central North-South Corridor East of Moira River Provides Connection with planned Adam Street / University Avenue cycling facilities End of Route Destinations: Industrial Park in the North; Bayshore Trail in the South				
	Red	Centre Street	Centre St	shared roadway	signage
		College Street East	College St	on-street bike lanes	line painting, signage
		Cannifton Road	College St E	shared roadway	signage, improve approaches and lighting at rail underpass
		Reid Street	Cannifton Rd	shared roadway	signage
		Station St	Reid St	shared roadway	feasibility to be determined
		Albion St	Albion St	separated facility	
		Pine St	Albion St	shared roadway	signage
		Foster Ave / South Foster Ave	Foster Ave	shared roadway	signage
			Kiwanis Bayshore Trail	shared roadway	signage
	2018 \$100,000	Central North-South Corridor West of Moira River Provides Connection with Riverside Park / Veterans Bridge, Riverside Trail and Dundas Street cycling infrastructure End of Route Destinations: Riverside Park in the North; Downtown; Zwicks and Bayshore Trails in the South			
Orange (North portion only)		North Park Street	Bell Blvd	on-street bike lanes	line painting, signage
		College Street East	North Park St	separated facility	feasibility to be determined
		Geddes Street	Geddes St	shared roadway	signage
		Strachan Street	Geddes St	shared roadway	signage
		St. Charles Street	St. Charles St	shared roadway	signage
			Parrott Riverfront Trail	shared roadway	signage
		Note: The southern portion of selected "Orange" route is a route similar to the existing Riverfront Trail on the opposite side of the Moira River.			
		The southern portion of the "Orange" route has constraints including 6 signalized intersections and relatively high traffic volumes on Moira Street East, Coleman Street, and Dundas Street West requiring "separated facilities".			
		Most notably, the southern portion of the "orange" route includes the Dundas Street Bridge over the Moira River.			
2019 \$100,000		East-West Corridor Provides Connection with Bridge Street West cycling infrastructure and North-South Corridors above End of Route Destinations: Downtown in West			
	Yellow	Bridge Street East	Lower Bridge	on-street bike lanes	line painting, signage

## NOTES

Italics indicate existing or currently planned cycling route / trail

Colours noted correspond to the colours of routes in the Public Input Online Survey





APPROVAL BLOCK	
CAO	<input checked="" type="checkbox"/>
DE&DS	<i>RB.</i>
DCS	<i>W. H.</i>

## CITY OF BELLEVILLE

Ted J. Marecak, CET, Chief Building Official  
Engineering & Development Services  
Report No. CBO2015-05  
October 27, 2015

**To: Mayor and Members of Council**

**Subject: City Hall Accessibility Improvements**

### **Recommendation:**

*THAT pursuant to the Chief Building Official's report No. CBO2015-05 Council allocates an additional \$342,000.00 to the existing \$140,000.00 allocated for this project for a total budget of \$482,000.00 and that staff be directed to proceed with the installation of an exterior barrier free ramp to replace the existing lift in the foyer of City Hall.*

### **Strategic Plan Alignment**

The City of Belleville's Strategic Plan identifies nine strategic themes. The report aligns with the City Centre revitalization theme by ensuring independent pedestrian friendly access to City Hall for all residents of the City.

### **Background:**

The existing barrier free lift at the main front foyer of City Hall has outlived its useful life cycle and is in need of replacement. The existing installation is difficult to use and cannot be operated by the user. Council has allocated money in the capital budget to replace this device and has asked that the possibility of a ramp also be investigated as an option to replace the current lift.

### **Analysis:**

There were five options investigated for the replacement of the interior lift in the foyer of City Hall. These options included:

1. Replacement of the existing lift with a new lift in the same location;
2. Replacement of the existing lift with a user operated elevator in the same location as the existing lift;
3. Replacement of the existing lift with a user operated elevator in the centre of the foyer;
4. Construction of an exterior ramp; and

5. Lower the elevator lobby floor to match the foyer floor level and modify the existing main elevator to access the new foyer floor level (street level).

#### Option 1

Replacement of the existing lift with a similar device is not desirable for the following reasons:

- The existing lift is relatively small and can't accommodate some of the larger mobility devices available on the market today.
- The lift is not capable of being operated by the user. This results in a poor user experience and makes the user dependent on others for service.
- The existing location of the lift makes entering and exiting the device a challenge and user and operator safety are a concern given the limited space available at the top landing.

#### Option 2

Replacement of the existing lift with a user operated elevator in the same location as the current lift is not desirable for the following reasons:

- The elevator has a larger footprint than the existing lift and takes up much more of the foyer than the current lift;
- The available space in the foyer is such that the elevator would need to be configured with doors on adjacent walls. This would require users to make a 90 degree turn to enter / exit the elevator and results in the doors at the first floor level being in very close proximity to the top of the foyer stairs;
- Given the required configuration with elevator doors on adjacent walls TSSA regulations require the elevator floor to be square. This results in an elevator that is only 1" bigger than the current lift which will limit use of the elevator by users with larger mobility devices;
- The configuration with a user operated elevator at one side of the foyer destroys the symmetry of the foyer; and
- Construction to install the elevator would prevent the foyer from being used by the general public for the anticipated construction period of 3 – 4 months and there is no other viable public access to City Hall. The elevator lobby and foyer are also an integral part of one of the two main exits from the building and cannot be closed without providing an alternate fire separated means of egress to the exterior.

#### Option 3

Replacement of the existing lift with a user operated elevator centered in the foyer is not desirable for the following reasons:

- With the limited space available in the foyer between the inside face of the exterior doors and the door at the top of the stairs and the increased size

of a user operated elevator there is simply not enough room to accommodate a centrally located elevator;

- Construction to install the elevator would prevent the foyer from being used by the general public for the anticipated construction period of 3 – 4 months and there is no other viable public access to City Hall. The elevator lobby and foyer are also an integral part of one of the two main exits from the building and cannot be closed without providing an alternate fire separated means of egress to the exterior.

#### Option 4

Council requested staff to investigate the possibility of installing a ramp to provide barrier free access into City Hall. There is physically not enough space in the foyer to accommodate an interior ramp, leaving an exterior ramp as the only option.

City Hall is an award winning Heritage designated building pursuant to the Ontario Heritage Act. Given the Heritage designation, any exterior building alterations need to be approved through Ontario Heritage Trust. Preliminary discussions have taken place with Ontario Heritage Trust regarding the possibility of constructing an exterior ramp in front of City Hall. While they have advised that an exterior ramp would impact the heritage character of the building from an aesthetic perspective and that they would prefer an interior solution they noted that a ramp was not impossible provided it was appropriately designed and constructed to be sympathetic to the existing building.

Discussions have also been held with Heritage Belleville. Given the aesthetic impact on the main façade of the building the committee advised that an interior solution (elevator) was preferred to an exterior ramp. However the committee also recognized that an interior solution may not be the most feasible option.

Preliminary investigations have been conducted and it has been determined that there are some services under the sidewalk in front of City Hall in the area where the ramp would be constructed. Water and sewer services for City Hall are located in this area, although they are most likely below the level of excavation. It has also been noted that there is a significant Veridian hydro duct bank under the sidewalk in front of City Hall which would need to be taken into consideration in the design of a ramp structure.

Winter maintenance and the associated costs would need to be considered with an exterior ramp option. With the boiler replacement at City Hall also planned, heating loops could be included in the ramp surface to melt ice and snow and eliminate the need for shoveling; however this would add to the heating bills for the building.

With the majority of the work for an exterior ramp being outside the building, the disruption to public access into City Hall would be minimal. With careful scheduling of the work it is anticipated that the foyer of City Hall could remain open for use during the course of the ramp construction and the relatively minor foyer alterations required.

**Option 5**

Initial investigation has determined that the foyer floor level immediately inside the front doors of City Hall could be extended further into the building such that it would be possible to access the main elevator in the building. This approach would require relatively substantial structural and architectural modifications to the foyer, the elevator lobby, the main elevator and the basement area of the building.

This option does not impact the exterior aesthetics of the main façade of the building and would be preferred by the Ontario Heritage Trust and Heritage Belleville. This option also eliminates any concerns with exterior maintenance or vandalism that would be present with an exterior ramp option. Eliminating the existing lift in the foyer and modifying the existing main elevator would also reduce ongoing operational and maintenance costs as there would only be one elevating device in the building to maintain and no exterior ramp.

This option does however have serious implications for maintaining access into City Hall during the course of the renovations. The existing layout of the building is such that there is no other easy way to continue to provide an accessible entrance into the building for the public or staff. The elevator lobby and foyer are also an integral part of one of the two main exits from the building and cannot be closed without providing an alternate fire separated means of egress to the exterior. It is anticipated that this renovation would take 4 – 5 months to complete.

Of the options identified above the only option that does not disrupt access into and exiting from City Hall for an extended period of time is option 4, the exterior ramp.


**Financial Impact:**

Capital budget funding for the City Hall accessibility project is currently set at \$140,000.00. The current budget estimate for an acceptable exterior ramp is \$426,000.00 plus HST. To accommodate this project the current budget would need to be increased by \$342,000.00 for a total budget amount of \$482,000.00.

**Conclusion:**

The existing lift in the foyer of City Hall is outdated and does not provide equality of access into City Hall for all residents and visitors to the City. Based on the options identified in this report the preferred option would be the installation of an exterior ramp and additional budget allocation is required for this option.

Respectfully submitted,



Ted J. Marecak, CET, CBCO  
Chief Building Official