

COMMITTEE AGENDA



TO **Infrastructure, Development & Enterprise Committee**

DATE Tuesday, November 3, 2015

LOCATION Council Chambers, Guelph City Hall, 1 Carden Street

TIME 5:00 p.m.

DISCLOSURE OF PECUNIARY INTEREST AND GENERAL NATURE THEREOF

CONFIRMATION OF MINUTES – October 6, 2015 Open Meeting Minutes

PRESENTATIONS (Items with no accompanying report)

a) None

CONSENT AGENDA

The following resolutions have been prepared to facilitate the Committee's consideration of the various matters and are suggested for consideration. If the Committee wishes to address a specific report in isolation of the Consent Agenda, please identify the item. The item will be extracted and dealt with separately. The balance of the Infrastructure, Development & Enterprise Committee Consent Agenda will be approved in one resolution.

| ITEM | CITY PRESENTATION | DELEGATIONS | TO BE EXTRACTED |
|--|---|-------------|-----------------|
| IDE-2015.38 Frozen Water Pipe Policy | <ul style="list-style-type: none">Wayne Galliher, Manager, Technical Services | | ✓ |
| IDE-2105.39 2015 Building By-law Update | | | |
| IDE-2015.40 Intersections Warranted for Traffic Signal Installation | | | |
| IDE-2015.41 Municipal Council Support Resolution (blanket): Notice to Proceed (NTP) for Projects Previously Supported by Council Under Feed-In-Tariff Program 3.1 | | | |

Resolution to adopt the balance of the Infrastructure, Development & Enterprise Committee Consent Agenda.

ITEMS EXTRACTED FROM CONSENT AGENDA

Once extracted items are identified, they will be dealt with in the following order:

- 1) delegations (may include presentations)
- 2) staff presentations only
- 3) all others.

CLOSED MEETING

THAT the Infrastructure, Development & Enterprise Committee now hold a meeting that is closed to the public with respect to:

**IDE-C-2015.2 Citizen Appointments to Various Committees
(Accessibility Advisory Committee, Downtown Advisory Committee, Economic Development Advisory Committee, Environmental Advisory Committee, Heritage Guelph, River Systems Advisory Committee, Waste Innovation Centre Public Liaison Committee and the Water Conservation & Efficiency Public Liaison Committee)**

S. 239 (2) (b) personal matters about identifiable individuals.

OPEN MEETING

STAFF UPDATES AND ANNOUNCEMENTS

ADJOURNMENT

NEXT MEETING - December 8, 2015

**Infrastructure, Development & Enterprise Committee
Held in the Council Chambers, Guelph City Hall
Tuesday, October 6, 2015 at 5:40 p.m.**

Attendance

Members: Chair B. Bell
Mayor C. Guthrie (*arrived at 5:43 p.m.*)
Councillor D. Gibson
Councillor M. Salisbury

Absent: Councillor L. Piper

Councillors: Councillor C. Downer
Councillor J. Hofland
Councillor M. MacKinnon

Staff: Ms. A. Pappert, CAO
Mr. D. Thomson, Deputy CAO – Public Services/Acting Deputy CAO –
Infrastructure, Development & Enterprise
Mr. T. Salter, General Manager, Planning Services
Ms. K. Dedman, General Manager/City Engineer
Ms. M. Aldunate, Manager of Policy Planning and Urban Design
Mr. D. Kudo, Deputy City Engineer
Ms. D. Black, Council Committee Coordinator

Call to Order (*5:40 p.m.*)

Chair Bell called the meeting to order.

Disclosure of Pecuniary Interest and General Nature Thereof

There were no disclosures.

Confirmation of Minutes

1. Moved by Councillor Gibson
Seconded by Councillor Salisbury

That the open meeting minutes of the Infrastructure, Development & Enterprise Committee held on September 8, 2015 be confirmed as recorded.

VOTING IN FAVOUR: Councillors Bell, Gibson and Salisbury (3)

VOTING AGAINST: (0)

CARRIED

Consent Agenda

The following items were extracted from the October 6, 2015 Consent Agenda to be voted on separately:

IDE-2015.35 Affordable Housing Strategy: State of Housing Report
IDE-2015.36 Proposed Funding Alternatives for Stormwater Infrastructure

2. Moved by Councillor Gibson
Seconded by Councillor Salisbury

That the balance of the October 6, 2015 Infrastructure, Development & Enterprise Committee Consent Agenda, as identified below, be adopted:

IDE-2015.37 Water Services Operational Plan Endorsement and 2015 Annual & Summary Report Update

1. That Guelph City Council endorse the Water Services' Operational Plan.
2. That Guelph City Council receive the 2015 Annual and Summary Water Services Report Update (compliance) for the period of January 1 to June 30, 2015.

VOTING IN FAVOUR: Councillors Bell, Gibson and Salisbury (3)

VOTING AGAINST: (0)

CARRIED

Extracted Consent Items

IDE-2015.35 Affordable Housing Strategy: State of Housing Report

The Mayor arrived at the meeting.

Joan Jylanne, Senior Policy Planner addressed affordability issues, the status of housing targets and the key issues being: not enough small units to rent or buy, a lack of available primary rental supply, and the secondary rental market units supply not being as secure as the primary market. She explained the next steps of the Affordable Housing Strategy which includes community feedback. She noted tiny homes (container houses) will be given consideration and management of potential obstacles will be addressed.

Discussion ensued regarding controls within the housing market, mitigating crowding issues, the correlation between next steps and affordable housing reserve funds and available resources, community engagement plans and the data source used to determine the figures within the report.

Ms. Suzanne Swanton, Co-Chair of Wellington Guelph Housing Committee and a member of the Guelph & Wellington Task Force for Poverty Elimination, advised they support the Affordable Housing Strategy and see value in the information for many organizations in Guelph.

3. Moved by Mayor Guthrie
Seconded by Councillor Gibson

That Report 15-37 from Infrastructure, Development and Enterprise regarding the Affordable Housing Strategy: State of Housing Report dated October 6, 2015 be received.

VOTING IN FAVOUR: Mayor Guthrie, Councillors Bell, Gibson and Salisbury (4)

VOTING AGAINST: (0)

CARRIED

Councillor Bell left the Chair and Councillor Gibson assumed the Chair. (6:32 p.m.)

IDE-2015.36 Proposed Funding Alternatives for Stormwater Infrastructure

Kealy Dedman, General Manager of Engineering Services/City Engineer highlighted the key messages of the funding study and advised the consultants were also present to answer questions.

Don Kudo, Deputy City Engineer provided an explanation of the stormwater and urban drainage system including the volume and types of infrastructure. He outlined typical causes of stormwater issues, the effects of extreme weather, capital projects undertaken, issues regarding operations and maintenance and he gave a summary of the facility inspection, inventory and maintenance planning conducted. He described the regulatory monitoring and legal responsibilities, and the financial requirements and proposed options to meet the City's needs.

Councillor Bell left the meeting. (6:50 p.m.)

Arun Hindupur, Infrastructure Planning Engineer provided a summary of the stormwater funding study to date, explained the purpose and objectives, the level of service required and the funding needed. He outlined the options of a tax based funding option versus a user fee based funding option to address the funding gap. He listed the communications and community consultation to date and outlined next steps.

Discussion ensued regarding capacity and size of infrastructure for both new developments and replacement of infrastructure, the potential use of ICLEI Canada – Building Adaptive and Resilient Communities (BARC) Program, available conservation tools, potential use of the Guelph Energy Efficiency Retrofit Strategy (GEERS), and stormwater management requirements for new developments and feasibility of including commercial properties.

Staff advised they will provide clarification of the financial impact per household to close the gap, how municipalities are managing the financial demand if other than a user fee model, how Development Charges could be applied, the establishment of user fees and billing details.

4. Moved by Mayor Guthrie
Seconded by Councillor Salisbury

1. That the October 6, 2015 Stormwater Funding Study presentation be received.
2. That the Stormwater Funding Study presentation be given at the October 26, 2015 Council meeting.

VOTING IN FAVOUR: Mayor Guthrie, Councillors Gibson and Salisbury (3)

VOTING AGAINST: (0)

CARRIED

Staff Updates and Announcements

There were no staff updates or announcements.

Adjournment (7:35 p.m.)

6. Moved by Mayor Guthrie
Seconded by Councillor Salisbury

That the meeting be adjourned.

CARRIED

Dolores Black
Council Committee Coordinator

**INFRASTRUCTURE, DEVELOPMENT & ENTERPRISE COMMITTEE
CONSENT AGENDA**

November 3, 2015

Members of the Infrastructure, Development & Enterprise Committee.

SUMMARY OF REPORTS:

The following resolutions have been prepared to facilitate the Committee's consideration of the various matters and are suggested for consideration. If the Committee wishes to address a specific report in isolation of the Consent Agenda, please identify the item. The item will be extracted and dealt with immediately. The balance of the Infrastructure, Development & Enterprise Committee Consent Agenda will be approved in one resolution.

A Reports from Administrative Staff

| REPORT | DIRECTION |
|---|------------------|
| <p>IDE-2015.38 FROZEN WATER PIPE POLICY</p> <ol style="list-style-type: none">1. That Guelph City Council endorses the program components and customer service levels detailed in the Frozen Water Pipe Policy.2. That Water Services develops a program to replace municipal water piping vulnerable to freezing as part of the Engineering Services Linear Asset Replacement program for consideration as part of the 2017 Non-Tax Supported Budget deliberations.3. That Water Services develop a pilot program to encourage the replacement of privately owned piping that is vulnerable to freezing for consideration as part of the 2017 Non-Tax Supported Budget deliberations. | Approve |
| <p>IDE-2015.39 2015 BUILDING BY-LAW UPDATE</p> <ol style="list-style-type: none">1. That report 15-90 regarding the 2015 Building By-law Update, dated November 3, 2015 be received.2. That a new Building By-law, shown as Attachment 1, being a by-law to repeal and replace By-laws (2012)-19356, as amended, and (1987)-12602, as amended, be enacted. | Approve |

IDE-2015.40 INTERSECTIONS WARRANTED FOR TRAFFIC SIGNAL INSTALLATION

Approve

1. That the report from Infrastructure , Development and Enterprise dated November 3, 2015, titled "Intersections Warranted for Traffic Signal Installation" be received.
2. That traffic signals be installed at the intersection of Victoria Road South at Clair Road East in 2016, funded through capital account TF0014 of the 2016 Capital Budget.

IDE-2015.41 MUNICIPAL COUNCIL SUPPORT RESOLUTION (BLANKET): NOTICE TO PROCEED (NTP) FOR PROJECTS PREVIOUSLY SUPPORTED BY COUNCIL UNDER FEED-IN-TARIFF PROGRAM 3.1 (FIT)

Approve

WHEREAS the Province's FIT Program encourages the construction and operation of rooftop solar photovoltaic and ground mount solar photovoltaic projects (the "Projects");

AND WHEREAS certain projects approved under the Province's FIT Program 3.1 will be constructed and operated in the City of Guelph;

AND WHEREAS, pursuant to the FIT Rules, Version 3.1, successful applicants whose Projects have been approved require Municipal Council resolutions, referred to as "Notice to Proceed" in order to complete their contract obligations with the Independent Electricity System Operator

NOW THEREFORE BE IT RESOLVED:

1. That Report IDE-BDE-1511 from Infrastructure, Development and Enterprise, dated November 3, 2015 be received.
2. That Council of the City of Guelph supports without reservation the construction and operation of the Projects anywhere in the City of Guelph.
3. That Council direct the City Clerk to sign the attached "Municipal Council Support Resolution (Blanket) - Notice to Proceed" (Attachment #1).
4. That Council direct the Manager, Community Energy to provide a completed and signed "Municipal Council Support Resolution (Blanket) - Notice to Proceed" (Attachment #1) to applicants requesting same for the purposes of completing their contract obligations to the Independent Electricity System Operator's Feed-In-Tariff 3.1 Program.

5. That the Municipal Council Blanket Support Resolution remain in effect for one year from the date of adoption.

attach.

WATER SERVICES FROZEN WATER PIPE POLICY

Infrastructure, Development and Enterprise
Committee
November 3, 2015



BACKGROUND

- First reports of frozen services began February 13, 2015 and quickly escalated.
- Due to the volume of service requests Water Services initiated an EOCG on February 27th.
- EOCG worked to promptly develop and implement new customer support programs with core focus of providing affected customers with restored or alternative sources of potable water.



BACKGROUND

- In total 376 properties were impacted by frozen services through the incident.
- City distribution crews also responded to 49 main breaks as extreme conditions persisted.
- Emergency response efforts continued until May 1, 2015 with overall incident response costs totalling \$545k as well as \$80k in lost revenues due to freeze prevention activities.



BACKGROUND

- In May 2015 Water Services initiated formal incident response debrief with action plan formed to decrease future impact of frozen service issues.
- Core recommendation: development of Frozen Water Pipe Policy to define response actions, customer service levels, and resourcing to prevent and manage service interruptions to customer and City-owned water distribution piping.



POLICY GOALS

Core goals of the Frozen Water Pipe Policy Include:

1. To implement proactive first priority measures to prevent service freezing.
2. To provide impacted customers with timely access to continuous, reliable, safe, Potable water.
3. To recognize the special needs of Vulnerable Customers and expedite response where possible.
4. To implement the Policy in an effective and efficient manner with available resources.
5. To improve response impact through the engagement, of other City departments, public agencies, and third parties.
6. To maintain regulatory compliance, public health guidelines, and best managing the City's water resources.



POLICY PROGRAMS

The Frozen Water Pipe Policy is comprised of specific programs implemented to achieve the policy purpose and goals. Specific programs including the:

- Freeze Prevention Program
- Frozen Water Pipe Thawing Program
- Temporary Water Service Program
- Temporary Water Access Program
- Special Assistance Program.



PROGRAM ENHANCEMENTS

Based on 2015 incident debrief a number of program improvements have brought forward through the policy, including the following:

- Expanding customer # under Freeze Prevention Program
- Introduction of environmental triggers to inform freeze prevention program and operational actions
- Extension of Temporary Water Access Program resources to include Bulk Water Filling Stations
- The ability to extend water for all potable uses through the Temporary Line Installation Program provided water quality standards are met.



PROGRAM COST RECOVERY

- To date customers running water have paid daily basic charges only.
- Policy recommends that billing practices be extended to include volumetric charges based on historic customer consumption for similar periods.
- Approach reinforces the value of the service, is consistent with other industry practice and supports the council approved user pay basis focus of the City's Water and Wastewater utilities



PROGRAM COST RECOVERY

- With important role which donors of temporary water service lines play in restoring water servicing to neighbouring properties, policy recommends that a credit for all water and wastewater volumetric use be extended to service donor properties
- Policy also defines opportunities for cost sharing with property owners for mutually beneficial thawing activities and formalizes billable rates where City assistance is requested to address private property based issues.



NEXT STEPS

- Vulnerability assessment of public servicing infrastructure
- Evaluation of City design standards to mitigate extreme cold weather impacts of Climate Change
- Feasibility assessment of program to encourage and assist property owners to replace substandard private infrastructure concurrently with public infrastructure upgrades



NEXT STEPS

- Implementation of Water system operational improvements and strategies:
 - Distribution bleeder trails in areas of past issue
 - Increased cycling of City water towers to manage distribution water temperature
- Implementation of Frozen Services Emergency Preparedness Public Engagement Campaign



THANK YOU

QUESTIONS/COMMENTS?

Wayne Galliher, C.E.T.
Manager of Technical Services
City of Guelph Water Services
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Phone: 519-822-1260 x2106



STAFF REPORT



TO Infrastructure, Development and Enterprise Committee

SERVICE AREA Infrastructure, Development and Enterprise

DATE November 3, 2015

SUBJECT Frozen Water Pipe Policy

REPORT NUMBER

EXECUTIVE SUMMARY

PURPOSE OF REPORT

To present the staff recommended Frozen Water Pipe Policy for consideration by Council and share future actions being undertaken by staff.

KEY FINDINGS

With severe winter temperatures experienced through the winter of 2015, Water Services received a significant number of customer service requests to restore water servicing in response to frozen City and privately owned water piping. To support impacted customers, Water Services suspended non-core operational activities in February and convened an Emergency Operations Control Group (EOCG) to address emerging issues and steer response activities. With hundreds of customers reporting frozen pipes within days, the EOCG developed and implemented new customer support programs to provide affected customers with a restored or alternative source of potable water for personal consumption, food preparation, and sanitation.

Emergency response efforts continued until May 1, 2015. Overall incident response costs totalled approximately \$545,000 which included both budgeted and unbudgeted work. Additionally, requirements for customers to continually run water to prevent service freezing under the Freeze Prevention and Temporary Water Service Programs resulted in approximately \$80,000 in lost anticipated water and wastewater volumetric revenues.

In May 2015 incident response debrief sessions were conducted to identify opportunities for improvement and develop an action plan to decrease the impact of frozen service issues moving forward. As a key recommendation of the debrief action plan, staff developed a comprehensive Frozen Water Pipe Policy to define response actions, customer service levels, and resourcing to prevent and manage interruptions to the supply of municipal water caused by the temporary freezing of City-owned and customer-owned water distribution piping.

STAFF REPORT

The detailed Frozen Water Pipe Policy is provided (see Attachment 1) and is comprised of sub-programs to support Water Services customers impacted by frozen water services. Specific Programs defined through the Policy include:

- Freeze Prevention Program;
- Frozen Water Pipe Thawing Program;
- Temporary Water Service Program;
- Temporary Water Access Program, and;
- Special Assistance Program.

The following core service improvements are recommended:

- Introduction of Freeze Prevention Triggers to inform conditions under which properties with previous frozen service issues would be instructed to run water to prevent service freezing, thus reducing non-revenue water volumes and impacts to our finite groundwater resources;
- Transition of the Temporary Water Access Program to offer bulk water filling stations at designated City facilities;
- Ability to extend Temporary Water Services for all potable uses where water quality standards are met;
- Implementation of the Special Assistance Program to support the needs of vulnerable populations and critical customers, and;
- Introduction of formal customer billing practices for Freeze Prevention Program participants and other program cost recovery models.

FINANCIAL IMPLICATIONS

The total cost of Frozen Service Emergency Response equaled \$625,000 in 2015. To date \$200,000 of response costs have been funded through the Water Services emergency contingency reserve approved by City Council as part of the 2015 Non-Tax Operating Budget. To address remaining unbudgeted expenses staff have amended 2015 work programs to mitigate a year end negative operating variance. Should a remaining negative variance be realized at year end staff will seek Council approval to access the Water and Wastewater Rate Stabilization Reserve to offset the variance present, where applicable.

ACTION REQUIRED

That Council endorse the Frozen Water Pipe Policy and that staff be directed to develop programs to replace linear infrastructure and encourage the replacement of privately owned piping which are vulnerable to freezing for consideration as part of the 2017 Non-Tax Supported Budget deliberations.

RECOMMENDATION

1. That Guelph City Council endorses the program components and customer service levels detailed in the Frozen Water Pipe Policy.

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2. That Water Services develops a program to replace municipal water piping vulnerable to freezing as part of the Engineering Services Linear Asset Replacement program for consideration as part of the 2017 Non-Tax Supported Budget deliberations.
3. That Water Services develop a pilot program to encourage the replacement of privately owned piping that is vulnerable to freezing for consideration as part of the 2017 Non-Tax Supported Budget deliberations.

BACKGROUND

With severe winter temperatures experienced through the winter of 2015, Water Services received a significant number of customer service requests to restore water servicing in response to frozen City and privately owned water piping. These requests were received despite the City's efforts to prevent frozen piping through the Freeze Prevention Program implemented in November 2014. This successful program instructed customers affected by frozen piping in past years to run water to prevent the piping from freezing. During the record setting cold winter of 2015, 145 of 148 participating customers were able to prevent their pipes from freezing.

To support impacted customers, Water Services suspended non-core operational activities in February and convened an Emergency Operations Control Group (EOCG) to address emerging issues and steer response activities. With hundreds of customers reporting frozen pipes within days, the EOCG worked to develop and implement new customer support programs to provide affected customers with a restored or alternative source of potable water for personal consumption, food preparation, and sanitation. These new programs included the following:

- **Temporary Water Access Program**, which provided:
 - bottled water and vouchers for potable water purchase at local grocers for personal consumption and food preparation,
 - access to shower facilities at City recreation centres, and
 - access to retail laundry facilities;
- **Frozen Water Pipe Thawing Program** where, circumstances permitting, staff would attempt to thaw frozen City and customer owned piping with the use of hot water thawing machines; and
- **Temporary Water Service Program**, where food-grade hoses were connected to the plumbing of adjacent homes to provide frozen customers with an alternative, continuous supply of water (in some cases for up to two months).

With close to 400 Freeze Prevention and Temporary Line customers running water to prevent frozen pipes, and close to 50 watermain and service leaks driven by the severely cold weather, the City's water production volumes increased significantly, with the peak production day (59,737 cubic meters per day) occurring on March 12, 2015 (peak production normally is experienced in mid-summer).

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Managing a large number of watermain breaks and leaks as well as the programs described above created additional staffing challenges. The EOCG obtained support from other City departments including Emergency Services, Engineering Services, Public Works, Wastewater Services, Solid Waste Resources, Community Services, Service Guelph, By-law and Security Services, Legal Services, Purchasing, Corporate Communications, Human Resources, Building Services, and Finance. Where required, local contractors and temporary staffing agencies were also employed and priority support was also given to businesses reliant on municipal water supply. Both Wellington Dufferin Guelph Public Health (WDGHU) and Wellington County Social Services provided support as needed to vulnerable customers (elderly, infirm, pregnant women, those with infants) to address their unique needs, including access to alternative accommodations and personal care support in some circumstances.

Emergency response efforts continued until May 1, 2015. Overall incident response costs totalled approximately \$545,000 and included both budgeted and unbudgeted work. Additionally, requirements for customers to run water to prevent service freezing under the Freeze Prevention and Temporary Water Service Programs resulted in approximately \$80,000 in lost water and wastewater volumetric revenues. In response to these unplanned expenses, Water Services has reprioritized and delayed 2015 work plans and maintenance programs to mitigate in-year cost (approximately \$80,000 in reductions). With Council support in May 2015, staff also applied for Ontario Disaster Relief Assistance Program (ODRAP) funding. Unfortunately, the ODRAP application was denied by the Ontario Ministry of Municipal Affairs and Housing. During the 2015 budget closure process, staff will recommend that Council approve the use of the Rate Stabilization Reserve to offset this projected year-end variance.

In May 2015, incident response debrief sessions were conducted to identify opportunities for improvement and develop an action plan to decrease the impact of frozen service issues moving forward. To assist with action planning, staff conducted a survey of Council approved comparator communities to identify the scope, programs, and service levels provided for frozen services response.

As the main recommendation of the debrief action plan, staff began development of a comprehensive Frozen Water Pipe Policy aiming to define response actions, customer service levels, and resourcing to prevent and manage interruptions to the supply of municipal water caused by the temporary freezing of City-owned and customer-owned water distribution piping. This report presents the recommended Frozen Water Pipe Policy for Council approval and identifies future actions to address frozen service related issues moving forward.

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REPORT

The purpose of the Frozen Water Pipe Policy is to prevent and manage interruptions to the City's supply of water, caused by the temporary freezing of City and/or Customer Water Pipes, to ensure that Customers maintain reliable, continuous access to water.

Core Goals of the Policy include:

1. To implement proactive, first priority measures to prevent the freezing of Water Pipes.
2. To provide Customers who have frozen Water Pipes with timely access to continuous, reliable, safe, Potable water.
3. To recognize the special needs of Vulnerable Customers and implement processes to expedite resources required to restore their access to continuous, reliable, safe, and Potable water in frozen Water Pipe events.
4. To implement the elements of this Policy in an effective and efficient manner with available resources.
5. To improve the impact and value of this Policy through the engagement, beyond Water Services, of other City departments, public agencies, and third parties as part of response efforts.
6. To maintain compliance with utility regulations and health guidelines, while best managing the City's water resources during responses to frozen Water Pipe events.

The Frozen Water Pipe Policy is comprised of Programs that are implemented to achieve the above purpose and goals. Often the programs overlap and work in tandem.

Specific Programs include the following:

- a) **Freeze Prevention Program:** Requires customers to take specific actions to prevent the freezing of Water Pipes.
- b) **Frozen Water Pipe Thawing Program:** Water Services may, based on available technology, and where resources allow, attempt to thaw frozen Water Pipes which are readily accessible.
- c) **Temporary Water Service Program:** Includes the installation of temporary water service lines providing temporary water supplies to customers who are without water due to frozen Water Pipes.
- d) **Temporary Water Access Program:** Provides eligible customers with access, for domestic use, to temporary water supplies, other than by means of temporary water service.
- e) **Special Assistance Program:** May be available in special circumstances to vulnerable/critical customers.

The following sections of this Report highlight core changes to response actions undertaken in 2015 as presented through the Policy.

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Freeze Prevention Program Triggers:

Through survey of comparator municipalities, the presence of environmental and others triggers were identified as an area of opportunity for continuous improvement of the City's preventative program elements. To date, the County of Wellington has adopted a trigger system which has been implemented with a good degree of success in protecting customers historically experiencing frozen service issues and severe weather-related elements of its water operations. This approach, adopted by Water Services through its policy, sees the monitoring and cumulative addition of experienced daily mean temperatures to a total of -400°C following the first frost of the fall season, as well as monitoring of treated water temperature to a threshold of 4°C at City water towers and other source monitoring locations. Should either of these thresholds be met, customers experiencing past issues would be instructed to start running water to prevent freezing, while other operational strategies would be enacted by the City such as increased cycling of water stored in water towers. This approach is anticipated to significantly reduce excess production volumes stemming from customers starting to run water as of a defined start date, and it maintains a level of prudence in forecasting the point of potential customer issues.

Through implementation of this new Policy component, staff plan to weigh these triggers against other field indicators such as frost level and will enact necessary freeze prevention activities should customer impacts be realized or other threats to servicing be anticipated prior to trigger thresholds being met.

Temporary Water Access Program:

Further to the resources offered through the Temporary Water Access Program (TWAP) in 2015, the scope of program resources has been expanded to offer formal filling stations for impacted customers seeking bulk water for non-potable purposes such a toilet flushing. Filling stations are to be established at City recreation centres and other feasible City facilities in order to ensure local access to bulk water various locations across the City. Furthermore, through changes in the administration of all sub-programs under TWAP, the allocation of resources will be transitioning to a customer request-based model. This administration approach best aligns with customer service experiences of the 2015 emergency response where customers sought access to some sub-programs but not others, and reduces program costs and administrative staff time investments of program delivery.

Temporary Line Installation Program:

As part of 2015 incident response, 257 temporary water services lines were installed to provide an alternate running water supply to impacted customers from neighbouring properties unaffected by frozen services. Due to the overall call for response and the need for expediency of temporary line installations, water provided via temporary lines was deemed to be non-potable and alternate resources for potable water were provided to affected customers for drinking and cooking needs. Through consultation with WDGPH, a procedure has been developed through which staged chlorine residuals and other distribution system samples will be taken during temporary line installations to provide delivery of potable water

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through temporary services lines where water quality standards are met. If water leaving the hose bib of a donor home is determined to be softened, or does not have an adequate chlorine residual, temporary servicing will be provided under notice that the water is non-potable. Under such circumstances, the customer would be registered under TWAP to receive alternate resources for access to potable water.

With residential households commonly having an untreated, hard water line to exterior hose bibs, it is anticipated that this new procedure will greatly aid impacted customers by allowing the water provided via temporary lines to be used for all potable and non-potable end uses in the home just as regular water service would be. Furthermore, with potable water servicing restored to properties under alternate servicing models, staff anticipate a significant decrease in administrative expenditures previously experienced for the supply of alternate sources of potable water.

Special Assistance Program:

In recognition of unanticipated circumstances which may be required to assist vulnerable and critical customers during future frozen service issue response, a Special Assistance Program has been defined through the Policy for the provision of further support services as required. Guided by the City's Procurement By-law, this program provides the opportunity to leverage additional support services in consultation with the City's Community Emergency Management Coordinator, WDGPH, and Wellington County Social Services.

Program Cost Recovery:

To date in 2014 and 2015, customers who have received temporary water servicing and/or who have been instructed to run water to prevent freezing have been required to pay only basic water and wastewater charges (these are the daily, flat-rate charges as opposed to the volumetric charges based on use). In the absence of active cost recovery for volumetric water use in 2015 it is estimated that \$80,000 in lost revenues was incurred through incident response. Staff acknowledges that excess water use from running water to prevent service freezing is an economical response tool and should not be focused on cost recovery policies. However, with properties under such directives still receiving potable, municipal water servicing for all water needs, the Policy recommends that water and wastewater volumetric billing based on average demands of the customer account for similar historic billing periods be introduced. This approach is consistent with the City's water and wastewater billing practices for temporary water servicing provided to customers during other water main or pipe construction projects. Furthermore, through the survey of Council-approved comparator municipalities, this proposed billing and collection procedure was found to be used by the majority of comparators (53.8 per cent of respondents), followed by billing water and wastewater volumes based on actual premise metered consumption at (23.1 per cent).

Further to the billing practices proposed above for customers instructed to run water, the policy does recognize the important role which donors of temporary

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water service lines play in restoring water servicing to neighbouring properties. In recognition of such benefit and service provided by these customers, the policy further recommends that a credit for all water and wastewater volumetric use be extended to service donor properties throughout the duration of service provided. This too is consistent with the practice of many comparator municipalities as found through the survey.

Next Steps:

Following the infrastructure-based recommendations of the incident debrief, Water Services has initiated consultation with Engineering Services regarding linear water infrastructure (mains and pipes) which may continue to be vulnerable during extreme weather conditions due to design and construction standards in place at the time of installation, and other field conditions which may influence infrastructure integrity. In follow-up to this consultation, an assessment of infrastructure vulnerability, which aims to prioritize and phase future infrastructure upgrades, is planned, with supporting financial needs to be brought forward for Council's consideration as part of the 2017 Non-Tax Supported Capital Budget. Furthermore, to ensure that new infrastructure construction provides appropriate safeguards to mitigate severe weather servicing impacts, Building Services and Engineering Services will be reviewing new construction site plan approvals and field inspection processes. Opportunities for the integration of further controls to ensure that the depths of new property services defined through construction drawings meet such standards in the field, as well as other standards for service insulation in the field where site environmental conditions merit, will be of specific focus through this review. Although issues experienced in newer developments were minimal by comparison to those in older building stock, outcomes of this review are seen to best safeguard all property owners and the City against future unknown severe winter conditions resulting from climate change.

Looking to future City infrastructure replacement in susceptible areas of the city, there exists a great opportunity for properties with private infrastructure issues that contribute to susceptibility of frozen services, such as external water pipes buried at shallow depths, to replace private pipes in tandem with future City capital works. In recognition of the potential property owner cost barrier for replacing private infrastructure, Water Services will investigate the feasibility of a program to encourage and assist property owners in replacing private infrastructure concurrently with public infrastructure. This approach has been very successful in encouraging the replacement of lead pipes where present in the city, and it is anticipated that if these works are aligned it would minimize cost to both the City and private landowners when looking to field excavation and other labour costs. Water Services will assess the feasibility of this program in more detail over the winter of 2015/2016 with further updates and formal recommendations brought forward for Council consideration in advance of the 2017 Water Services Non-Tax Supported Budget deliberations.

To address potential infrastructure challenges in the interim, Water Services will pilot field-based automated flushing devices in areas of the water distribution

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system which experienced freezing infrastructure and/or contained clusters of frozen water services with hopes of sustaining servicing during prolonged, extreme cold winter temperatures. This would help mitigate costly and complicated infrastructure repair and replacement work during challenging winter construction conditions. To minimize water loss, these devices will work on an as-needed basis with annual operation to begin as per the triggers defined as part of the Frozen Pipe Policy. Furthermore, to maximize value of device installations, Water Services will also be assessing opportunities to maximize water circulation in the distribution system in order to reduce the time treated water spends in the distribution system prior to delivery to customers. Water Services will also evaluate other operational strategies to increase water circulation within the distribution system with the goal of avoiding water temperature decreases that contribute to freezing conditions. These strategies will begin once Frozen Pipe Policy triggers are met and will focus primarily on decreasing water holding times in the City's water towers (where possible) where stored water is most influenced by surrounding temperatures.

CORPORATE STRATEGIC PLAN:

- 1.2 Develop collaborative work teams and apply whole systems thinking to deliver creative solutions.
- 2.2 Deliver public services better.
- 2.3 Ensure accountability, transparency and engagement.
- 3.1 Ensure a well-designed, safe, inclusive, appealing and sustainable City.

FINANCIAL IMPLICATIONS:

In 2015 total costs of frozen service emergency response equaled \$625,000. To date \$200,000 of response costs have been funded through the Water Services emergency contingency reserve approved by Council as part of the 2015 Non-Tax Operating Budget. To address remaining unbudgeted expenses, staff have amended 2015 work programs to help mitigate a year-end negative operating variance. Should a remaining negative variance be realized at year-end, staff will seek Council approval to access the Water and Wastewater Rate Stabilization Reserve to offset the variance present, where applicable.

Contents of the Report focus specifically to operational elements of the Frozen Water Pipe Policy. Further funding implications of ongoing capital and operating programs will be brought forward to City Council for consideration in advance of the 2017 Water Services Non-Tax Supported Budget deliberations.

DEPARTMENTAL CONSULTATION:

Consultation completed in support of the Frozen Water Pipe Policy included the following City departments:

Building Services
Corporate Communications
Engineering Services

Emergency Services
Finance Services
Legal Services

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Further to City departmental stakeholders, consultation was also completed with representatives of the Wellington, Dufferin, Guelph Public Health and Guelph/Eramosa Township.

COMMUNICATIONS:

Water Services and Corporate Communications are developing a plan to communicate frozen plumbing prevention and general emergency preparedness. Communications will be aimed at informing private property owners and tenants of common issues which put indoor plumbing at risk during extreme winter weather, proactive steps they can take to help prevent frozen pipes, and being prepared in the case that pipes freeze and water service is interrupted. Communications will begin in November 2015 with supporting information available at guelph.ca/frozenwater.

In alignment with the terms of the Frozen Water Pipe Policy, Water Services will be communicating with customers who have previously experienced frozen services by November 1, 2015 to communicate terms and customer requirements of preventative programming. Further communication to these customers, including the instruction to begin running water, will be initiated once triggers of the Frozen Water Pipe Policy are met.

ATTACHMENTS

ATT-1 Frozen Water Pipe Policy

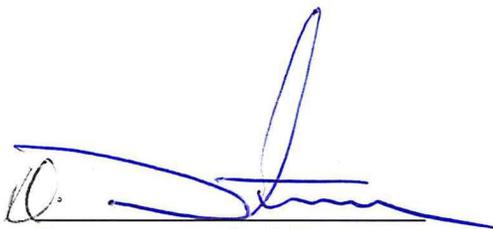
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CORPORATE POLICY AND PROCEDURE



| | |
|----------------|--|
| POLICY | Frozen Water Pipe Policy |
| CATEGORY | IDE – Environmental Services, Water Services |
| APPROVED BY | Guelph City Council (pending) |
| EFFECTIVE DATE | November 2015 |
| REVISION DATE | November 2018 |

POLICY PURPOSE AND GOALS

The overall purpose of this Frozen Water Pipe Policy is to prevent and manage interruptions to the City’s supply of water, caused by the temporary freezing of City and/or Customer Water Pipes, so that Customers maintain reliable, continuous access to water.

Core goals of this Policy include:

- 1) To implement proactive first priority measures to prevent the freezing of Water Pipes.
- 2) To provide Customers who have frozen Water Pipes with timely access to continuous, reliable, safe, Potable water.
- 3) To recognize the special needs of Vulnerable Customers and implement processes to expedite resources required to restore their access to continuous, reliable, safe, and Potable water in frozen Water Pipe events.
- 4) To implement the elements of this Policy in an effective and efficient manner with available resources.
- 5) To improve the impact and value of this Policy through the engagement, beyond Water Services, of other City departments, public agencies, and third parties as part of response efforts.
- 6) To maintain compliance with utility regulations and health guidelines, while best managing the City’s water resources during responses to frozen Water Pipe events.

POLICY DESCRIPTION

This Frozen Water Pipe Policy is comprised of programs that are implemented to achieve the above purpose and goals. Often the programs overlap and work in tandem.

The specific programs comprising this Policy include the following:

- 1) Freeze Prevention Program: a program that requires Customers to take specific actions to prevent the freezing of Water Pipes.
- 2) Frozen Water Pipe Thawing Program: a program whereby Water Services may, based on available technology, and where resources allow, attempt to thaw frozen Water Pipes which are readily accessible.
- 3) Temporary Water Service Program: a program that includes the installation of Temporary Water Service Lines providing temporary water supplies to Customers who are without water due to frozen Water Pipes.
- 4) Temporary Water Access Program: a program to provide eligible Customers with access, for domestic use, to temporary water supplies, other than by means of Temporary Water Service.
- 5) Special Assistance Program: a program that may be available in special circumstances to Vulnerable Customers and Critical Customers.

These programs are more fully described below.

DEFINITIONS

Critical Customer: any Customer requiring water for direct product inputs or core operational processes which may be affected if changes in quantity are experienced. Critical Customers include the following service areas:

- Food handling and processing facilities
- Arenas, stadiums and other large venues
- Colleges and universities
- Correctional facilities
- High volume industrial Customers
- Hotels
- Ice production facilities.

Customer: any person who has an active water and/or wastewater customer account, in good standing, with the City through Guelph Hydro Electric Systems Inc.

Non-potable: usable for non-consumptive uses (for example, water which can be used for toilet flushing, but not for drinking or cooking).

Potable: usable for all consumptive uses (for example, water which can be used for drinking or cooking).

Temporary Water Service: a temporary supply of water to a Customer who is without water due to frozen Water Pipes.

Temporary Water Service Donor: a Customer with an active water supply who provides a Temporary Water Service to a neighbour through a Temporary Water Service Line connected to the donating Customer's own Water Pipes.

Temporary Water Service Line: a Water Pipe used to provide a Temporary Water Service.

Vulnerable Customer: any Customer with a water-dependent medical condition or similar vulnerability; Vulnerable Customers include:

- Elderly residents
- Health care facilities such as hospitals, clinics, dialysis centres and other medical facilities
- Nursing homes
- Pregnant customers or those with infants
- Schools and day care centres
- Veterinary clinics.

Water Pipe: any pipe, main, plumbing, hose or appurtenance through which water from the City is provided to Customers.

Water Services: the City's Water Services Department, including all applicable directors, officers, employees and contractors.

RESPONSIBILITIES

Water Services will:

- Respond to Customer frozen Water Pipe issues in accordance with this Policy and provide timely service and communication to Customers.

Each applicable Customer will:

- Comply with this Policy.
- Ensure that the Customer's own Water Pipes meet the Building Code standards in place to prevent freezing.
- Take proactive actions to maintain the Customer's own Water Pipes to prevent freezing.

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- Maintain adequate heat to the Customer's own Water Pipes to reduce the threat of internal freezing.
 - Pay all home-based energy costs incurred when the Customer applies heat to exposed Water Pipes on the Customer's property to cure or prevent Water Pipe freezing, whether instructed to do so by Water Services or voluntarily doing so.
 - Permit safe access to the Customer's property by Water Services if the Customer has requested assistance in addressing frozen Water Pipes.
 - Follow the provisions of this Policy and any instructions provided by Water Services.
 - Operate and maintain the Water Pipes on the Customer's property.
 - Contribute to the costs of these programs as set out in this Policy.

Each applicable Temporary Water Service Donor will:

- Allow Water Services safe entry to the Donor's property to install Temporary Water Services.

CUSTOMER SERVICE

In frozen Water Pipe events, Water Services will provide the following special customer service functions:

1. Customer Service Desk

- Water Services will maintain an open customer service desk accessible by telephone, email and walk-in on Monday to Friday between 8:00 am and 4:00 pm.
- In emergency situations, Water Services may offer extended customer service centre hours with hours of operation posted on the City's Frozen Water Pipe Policy webpage.

2. After Hours On-call Operator Support

- Customers impacted by frozen Water Pipes from 4:00 pm to 8:00 am may contact the Water Pipe On-call Operator at 1-888-630-9242.

3. Service Request Response Priorities

- Water Services will address Customer service requests on a "first come, first served" basis. Upon receipt of a service request regarding a frozen Water Pipe, Water Services will aim, wherever feasible, to initiate a response within twenty-four hours.
- Water Services may accelerate its response efforts to a service request from a Vulnerable Customer. Upon receipt of a service request from a Vulnerable

Customer regarding a frozen Water Pipe, Water Services will aim to initiate a response within twelve hours.

- Water Services will place recurring Customer service requests regarding frozen Water Pipes into the “first come, first served” queue for response.

4. Communications

- Water Services will provide specific updates and timely communications to Customers with frozen Water Pipes for the duration of the frozen Water Pipe event (for example, via e-mail or delivered hard copy letter).
- Water Services will provide general updates through appropriate media (for example, social media, City’s website, radio, and newspaper) as appropriate for the scale of the event and where capacity exists.

SPECIFIC PROGRAMS

1. Freeze Prevention Program

The Freeze Prevention Program requires Customers to take specific actions to prevent the freezing of Water Pipes.

In the late fall of each year, Water Services will provide advance communication to Customers regarding this program, including Customer obligations.

FREEZE PREVENTION PROGRAM TRIGGERS

Water Services will activate the Freeze Prevention Program under either of the following conditions:

- If the cumulative mean daily temperature reaches -400°C following the first confirmed fall frost event, or
- If the treated water temperature reaches 4°C , as measured at City water towers and distribution system temperature monitoring locations.

Once a Freeze Prevention Program trigger has been reached, Water Services will communicate with Customers, particularly those Customers whose properties have historically experienced interruptions in water supply as a result of frozen Water Pipes, requesting them to take the actions set out in this program.

Once a Freeze Prevention Program trigger has been reached, each applicable Customer will:

- i. Ensure that the Customer has plumbing and drains that will accommodate continuous, unattended running of water.

-
- ii. Begin running water at the Customer's property when instructed by Water Services in order to prevent Water Pipe freezing, as well as take meter readings and/or provide other information as requested to support administration of the Freeze Prevention Program.
 - iii. Notify Water Services at the earliest opportunity when an interruption in water supply occurs at the Customer's property.

2. Frozen Water Pipe Thawing Program

Under the Frozen Water Pipe Thawing Program, Water Services may, based on available technology, and where resources allow, attempt to thaw frozen Water Pipes which are readily accessible.

Water Services:

- i. Will receive each Customer request for thawing and assess whether thawing is feasible in the particular circumstances, and if so, provide the thawing service.
- ii. If conditions do not continue to support the safe use of existing thawing technology or if thawing stops being technically feasible, cease the thawing activities.
- iii. If notified by a Customer that the Customer has had a third party undertake thawing before Water Services was able to do so, may close the Customer's pending service request and/or determine what (if any) further field actions should be undertaken to address frozen Water Pipe issues at the Customer's property.

Each applicable Customer with frozen Water Pipes:

- i. Will ensure that the Customer's property is safe and accessible for Water Services to carry-out the thawing activity.
- ii. May, in accordance with the Program Costs set out in this Policy, initiate third party thawing of Water Pipes.
- iii. Will notify Water Services of any third party thawing of Water Pipes.

3. Temporary Water Service Program

The Temporary Water Service Program includes the installation of Temporary Water Service Lines providing temporary water supplies to Customers who are without water due to frozen Water Pipes.

Water Services will consider field conditions and technical constraints and may decide not to install a Temporary Water Service if field conditions or technical feasibility are unsatisfactory.

Out of concern for public health, Water Services does not condone or endorse the private installation of temporary water supplies. Any Customer who installs or operates a private temporary water supply does so at that Customer's own sole risk and expense.

Water Services will:

- i. If field conditions are appropriate and the installation is technically feasible, install a Temporary Water Service Line for a Customer with frozen Water Pipes, and provide the following at no cost to the Customer or the Temporary Water Service Donor:
 - o Materials, labour, Temporary Water Service Line installation, chlorine residual measurement, water quality sampling and meter readings;
 - o A Temporary Water Service Program information package; and
 - o If the Customer with the frozen Water Pipes receives a Temporary Water Service Line supplying Non-potable water, information regarding the Temporary Water Access Program.
- ii. Provide and install a hose bib backflow prevention device in any instance where a backflow prevention device was removed by the City to accommodate a Temporary Water Service Line installation.
- iii. At the end of the frozen Water Pipe event, remove the Temporary Water Service Line and take water meter readings.

Customers receiving the Temporary Water Service will:

- i. Provide written authorization to Water Services to install a Temporary Water Service Line.
- ii. Identify and obtain approval from the Temporary Water Service Donor and the owners and/or occupants of all other properties (if any) impacted by the installation or routing of the Temporary Water Service Line and provide this information to Water Services in a timely fashion.
- iii. Prepare for Water Services' installation of a Temporary Water Service Line by:

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- Providing clear walkways and clear access to exterior unfrozen and undamaged hose bibs for the installation;
 - Turning off the internal water supply; and
 - Coordinating necessary plumbing modifications to support water servicing through a Temporary Water Service Line, including, but not limited to, removal of backflow prevention devices at outdoor hose bibs.
- iv. Run water continuously to prevent freezing of the Temporary Water Service Line as instructed by Water Services.
- v. Retain or de-install the Temporary Water Service Line as instructed by Water Services.

Temporary Water Service Donors providing water to a Customer will:

- i. Provide written authorization to Water Services to install a Temporary Water Service Line.
- ii. Prepare for Water Services' installation of a Temporary Water Service Line by:
 - Providing clear walkways and clear access to exterior unfrozen and undamaged hose bibs for the installation;
 - Turning on the internal water supply to external hose bibs upon instruction by Water Services; and
 - Coordinating necessary plumbing modifications to support water servicing through a Temporary Water Service Line, where appropriate.
- iii. Continue to maintain active supply of water to the Temporary Water Service Line as instructed by Water Services to prevent freezing.

4. Temporary Water Access Program

The Temporary Water Access Program provides eligible Customers with access, for domestic use, to temporary water supplies other than by means of Temporary Water Service.

To be eligible for this program, the Customer must have:

- A water servicing issue that cannot be verified by Water Services as limited to the Customer's own Water Pipes,
- A frozen Water Pipe, and
- No Temporary Water Service supplying Potable water.

Water Services will:

- i. After initial notification by a Customer of a frozen Water Pipe, and if the Customer is eligible under this program, register the Customer under this program.
- ii. Provide each eligible Customer with an overview package that outlines resources available under this program and includes the first water voucher and instructions on how to access resources (for example, future water vouchers, shower facilities, filling stations and laundry). Water Services will provide the overview package by e-mail for each Customer with e-mail access, and make it available for pick-up at Water Services by each Customer without e-mail access.

Each eligible Customer will:

- i. Notify Water Services at the earliest opportunity when an interruption in water supply occurs at the Customer's property.
- ii. Provide notice to Water Services within 48 hours after normal water supply has been restored to the Customer's property. Upon such notice, Water Services will terminate that Customer's access to the resources under this program.

Various resources are available to Customers eligible for this program. Instructions on how, when and where to access these resources are included in the overview package. The resources include:

Fill stations (for Non-potable water only) –available at designated facilities during designated time periods.

Grocery Store Vouchers for Potable water purchase – provided by e-mail or in-person.

- Water Services will provide only the initial water voucher with the overview package, and will provide subsequent vouchers only upon Customer request.
- The conditions of voucher distribution are as follows:
 - They can only be used for the purchase of Potable water,
 - They can be provided on a weekly basis, upon Customer request,
 - They cannot be issued retroactively,
 - They will not surpass a weekly maximum value of \$50 per household, and
 - They will expire on the next April 30th.

Laundry Facilities for household washing

-
- Upon Customer request, Water Services will provide access to laundry facilities for household washing.
 - Laundry services will be limited to six (6) laundry loads per week per household.

Shower Facilities – will be available at Customer request at the City’s community centres.

- Water Services will sponsor showering facilities only to a maximum of one (1) shower per person per day.

Water Services will:

- i. Make the resources available to eligible Customers only as set out above and in the overview package.

Each applicable Customer will:

- i. Obtain and transport suitable, personal use water containers for filling at City Fill Stations.
- ii. Obtain the Customer’s own transportation to and from all locations where the resources under this program are available.

5. Special Assistance Program

The Plant Manager of Water Services may, in special circumstances, approve the use of additional resources, beyond those available in the foregoing programs, for Vulnerable Customers and Critical Customers. Any such special assistance will be consistent with provisions of the City’s Procurement By-law and in consultation with the City’s Community Emergency Management Coordinator, the Wellington Dufferin Guelph Public Health Unit, and Wellington County Social Services.

PROGRAM COSTS

Customers who participate in the frozen Water Pipe programs will share in the costs as set out below.

If a Customer is not eligible under any program under this Policy, yet submits service requests for assistance with frozen Water Pipes on the Customer’s property or for access to the resources of any program under this Policy, then Water Services will seek full cost recovery from such Customer.

If a Customer has chosen not to participate in the programs under this Policy or to follow the direction of Water Services, Water Services will bill to that Customer any

recurring service request calls, at call-out rates set out in the City's Water and Wastewater Rate By-law.

The costs of Water Services are based on actual labour costs, payroll burden costs, overhead and administration costs, vehicle, equipment, materials and all property restoration costs.

1. Freeze Prevention Program

A Customer instructed by Water Services to run water is responsible for the payment of water and wastewater basic charges and the payment of volumetric charges, as defined in the City's Water and Wastewater Rate By-law, but based on the Customer's average historical account consumption for similar annual periods.

A Customer who runs water to prevent freezing, without the direct instruction of Water Services, will be responsible for the full payment of water and wastewater basic charges and volumetric charges, as defined in the City's Water and Wastewater Rate By-law.

2. Frozen Water Pipe Thawing Program

If Water Services thaws a frozen Customer Water Pipe that had been supplied with water by a City Water Pipe that froze, then Water Services will pay the costs of the thawing. If Water Services thaws a frozen Customer Water Pipe that had been supplied with water by a City Water Pipe that did not freeze, then the Customer will pay the costs of the thawing.

If a Customer wishes a more immediate thawing of only the Customer's Water Pipes, than Water Services can provide, then the Customer may retain a third party to thaw the Customer's Water Pipes at the Customer's own cost.

If a Customer wishes a more immediate thawing of both the Customer's Water Pipes and the City's Water Pipes supplying them, than Water Services can provide, then the Customer may retain a third party to thaw the Customer's Water Pipes and the City's Water Pipes, with the costs shared equally between Water Services and the Customer, as long as:

- The Customer provides, in advance, the particulars of the proposed thawing;
- Water Services approves the particulars of the proposed thawing;
- The Customer proceeds with the thawing as proposed; and
- The Customer reports the outcome of the thawing to Water Services.

3. Temporary Water Service Program

Each Temporary Water Service Donor is responsible for the payment of water and wastewater basic charges and the payment of volumetric charges, as defined in the City's Water and Wastewater Rate By-law, but based on the Donor's average historical account consumption for similar annual periods. In remuneration for extending water servicing to a neighbour, the Temporary Water Service Donor will receive a full volumetric credit for all water and wastewater used during the service period. This credit will be applied to the Donor's water and wastewater Customer accounts by May 30th of the year in which the frozen Water Pipe event ends.

4. Temporary Water Access Program

Use of the resources under the Temporary Water Access Program is, as long as such use is within the limitations set out in this Policy, free to qualifying Customers.

STAFF REPORT



TO Infrastructure, Development and Enterprise Services Committee

SERVICE AREA Infrastructure, Development and Enterprise Services

DATE November 3, 2015

SUBJECT 2015 Building By-law update

REPORT NUMBER 15-90

EXECUTIVE SUMMARY

PURPOSE OF REPORT

To create an updated Building By-law, to repeal Building By-law number (2012)-19356, as amended, and to repeal Plumbing By-law number (1987)-12602, as amended.

KEY FINDINGS

The updated Building By-law includes the addition of occupancy permits, additional and increased administration fees, the requirement to submit surveys upon the completion of new buildings, a new sewage system maintenance inspection program, and additional permit drawing submission requirements.

FINANCIAL IMPLICATIONS

The implementation of new administration fees and increases to existing administration fees will compensate the City for additional work that staff perform.

ACTION REQUIRED

Infrastructure, Development and Enterprise Services Committee to approve the recommended updated Building By-law and to repeal the existing Building By-law and Plumbing By-law.

RECOMMENDATION

1. That report 15-90 regarding the 2015 Building By-law update, dated November 3, 2015 be received.
2. That a new Building By-law, shown as Attachment 1, being a by-law to repeal and replace by-laws (2012)-19356, as amended and (1987)-12602 as amended, be enacted.

STAFF REPORT



BACKGROUND

Under the Building Code Act, 1992, the council of a municipality may pass a Building By-law for the enforcement of the act. The Building By-law prescribes classes of permits, fees, inspections and the appointment of inspectors. The Building By-law needs to be periodically updated to include changes to current practices, to reflect existing practices currently in place and to include regulatory changes.

Proposed changes to the Building By-law include the addition of occupancy permits, additional and increased administration fees, the requirement to submit surveys upon the completion of new buildings, a new sewage system maintenance inspection program, additional permit drawing submission requirements and editorial changes.

In addition to creating an updated Building By-law, an outdated plumbing by-law is also being repealed, which is no longer relevant.

REPORT

Plumbing By-law (1987)-12602:

The requirements of the Plumbing Code were added to the Building Code in 1993. Previous to this, the Plumbing Code was a stand-alone document.

All aspects of plumbing on private property are now regulated by the Building Code. Other requirements in this Plumbing By-law are now captured by subdivision agreements, development agreements, development standards and the Wastewater By-law. The requirement to licence plumbers and drainlayers was added to the Business Licence By-law, but were subsequently removed.

After consultation with Legal Services and Engineering Services, it was agreed that this Plumbing By-law can be repealed since it is now deemed redundant.

Building By-law (2012)-19356:

Numerous amendments to this Building By-law have resulted in various items being relocated, and subsequently renumbered. With the addition of the recommended new items to the Building By-law, further renumbering would be required.

Due to the numerous additions and amendments to the current Building By-law, this by-law should be repealed in favour of an updated Building By-law in order to establish a new numbering system.

Building By-law (2015)-XXXXX: (Attachment 1)

A number of editorial changes are proposed for the updated Building By-law which do not impact the intent of the by-law, but rather provide greater clarity. The following paragraphs provide background and rationale for the substantive changes being recommended to the Building By-law.

STAFF REPORT

Section 3.5 - Occupancy Permit

Changes to the Building Code in 2012 require occupancy permits to be issued for low-rise residential dwelling units even if the provisions were not contained in a building by-law.

The addition of this section will allow the City to require occupancy permits for all other building types in order to ensure the health and safety requirements are met for building occupants.

Section 6.3 - Administration Fee: Occupancy without a Permit

The Building By-law was amended in 2012 to allow the City to collect an administration fee when low-rise residential dwellings were occupied prior to an occupancy permit being issued. This revised section will allow the City to collect an administration fee for all other building types where occupancy has occurred without the requisite permit being issued.

The administration fee is to compensate the City for the additional work incurred due to the unauthorized occupancy of a building. It is proposed to increase this fee from \$300 to \$500 for all building types. Staff intend to implement the increased administration fee in the first quarter of 2016. Appropriate advance notice will be provided to customers affected by the increased fee.

Section 6.4 - Administration Fee: Additional Occupancy Inspections

Construction projects are often incomplete at the time of the first occupancy inspection. The City is being requested to conduct additional occupancy inspections for varying parts of the building which results in significant additional work compared to a building that is granted occupancy on a single inspection.

The administration fee is to compensate the City for the work incurred by these additional inspections. It is proposed to create a \$300 fee for each additional occupancy inspection requested. Staff intend to implement the new administration fee in the first quarter of 2016. Appropriate advance notice will be provided to customers affected by the new fee.

Section 8.3 - Submission of Surveys

Permit applications for new buildings are required to be accompanied by a drawing of the proposed building location prior to construction, however a survey of the as-constructed building location is not currently required to be submitted.

After the original construction is complete, subsequent construction often takes place. For example, home owners building a deck or shed, or installing a swimming pool. In order to review these building permit applications, a site plan is required to be submitted to verify compliance with certain applicable laws, such as the Zoning By-law. A building location survey illustrates the actual boundaries of a given lot, as well as any buildings or structures located on the lot. A survey is a more accurate

document and will assist staff in ensuring any subsequent construction meets by-law requirements.

Upon consultation with the Guelph and District Home Builders Association, it appears as though surveys are completed for the vast majority of new buildings. Therefore the requirement to submit a survey for new buildings should come at no additional cost to the City's customers. The process of submitting a survey to Building Services is similar to the submission of foundation certificates as required by Subsection 8.2 of the Building By-law, and quite possibly could be done in tandem. Staff intend to commence with survey submission requirements in the first quarter of 2016.

Section 10.1 - Sewage System Maintenance Inspection Program: Mandatory

Changes to the Building Code Act require properties that contain a private sewage system to undergo a maintenance inspection when these properties are located in the highest vulnerable areas within a source protection area. These inspections are considered mandatory and there is no discretion permitted by the municipality.

These vulnerable areas have been identified in the City's source water protection plan. Staff are working to identify the number of properties with private sewage systems in these areas. Staff estimate that approximately 50 properties may be affected, however further research is required. The Building Code requires these properties to have the initial maintenance inspections completed by September of 2017 and will require follow-up inspections every 5 years thereafter.

Building Services will implement this program in 2016. The proposed wording in the by-law will allow the City to accept an inspection certificate by a qualified person in lieu of having City staff conduct these inspections.

Section 10.2 - Sewage System Maintenance Inspection Program: Discretionary

Changes to the Building Code Act allow the City to require properties containing a private sewage system to undergo a maintenance inspection. These inspections are not required to be completed unless the municipality decides to establish a discretionary inspection program.

City staff believe that all private sewage systems within the City should undergo a maintenance inspection. This will ensure these systems are functioning properly and are not contaminating private wells, surface water, ground water or adjacent properties. Malfunctioning sewage systems are deemed to be an unsafe condition in the Building Code Act and this program will enable the City to ensure any unsafe conditions are rectified.

STAFF REPORT



Staff are working to identify the number of properties with private sewage systems that would be affected by a discretionary program. Staff estimate that approximately 200 properties may be affected, however further research is required.

Building Services would implement this program in 2017 after the mandatory inspections are completed. There is no deadline established in the Building Code for these inspections to be completed. It is the intent of staff to have them complete by the end of 2018 with follow up inspections done every 5 years thereafter. The proposed wording in the by-law will allow the City to accept an inspection certificate by a qualified person in lieu of having City staff conduct these inspections.

Schedule "B" – 1. Plans and Working Drawings

Roof Truss Layout Plan

Obtaining roof truss layouts at time of permit application submission will allow staff to identify framing deficiencies before the building is constructed. This will save both the customer and staff time. Past practice has required the submission of the roof truss layout on site at time of framing inspection.

All building permit application submissions shall be accompanied by a roof truss layout plan. This is consistent with practices in adjacent municipalities.

Air Barrier Details

Enhanced air barrier requirements were introduced into the Building Code in 2012. In addition to these requirements, the air barrier system was added to the list of mandatory inspections to be carried out. All buildings now require a separate inspection of all required air barrier systems.

In order to ensure that the complete air barrier system has been designed in accordance with the Building Code, separate air barrier drawings and/or details are required to be submitted. The requirement to include air barrier drawings with permit application submissions commenced in 2012.

Soil Gas Control Details

Building Services launched a Radon Gas Mitigation Program on September 1, 2015. This program was the result of recent cross-country surveys carried out by Health Canada. The result of the surveys indicated that 18% of the randomly tested buildings in Guelph exceed the national guideline for radon exposure.

Most building permit applications submitted after August 31, 2015 are required to include certain measures to address the potential for elevated levels of radon gas in the building. The design of specific radon mitigation elements shall be indicated on the building permit application drawings.

STAFF REPORT

CORPORATE STRATEGIC PLAN

- 1.3 Build robust systems, structures and frameworks aligned to strategy.
- 3.1 Ensure a well-designed, safe, inclusive, appealing and sustainable City.

DEPARTMENTAL CONSULTATION

City Clerk's Office
Legal, Realty & Risk Services
Engineering and Capital Infrastructure Services

FINANCIAL IMPLICATIONS

The implementation of new administration fees and increases to existing administration fees will compensate the City for additional work that staff perform.

COMMUNICATIONS

Information notices will be sent to relevant industry stakeholders which will allow sufficient time to adapt to the changes included in the updated Building By-law. Existing practices which are currently in place do not need to be communicated to stakeholders.

ATTACHMENTS

Attachment 1 – Building By-law (2015) - XXXXX

Report Author

Rob Reynen
Acting Chief Building Official
Building Services

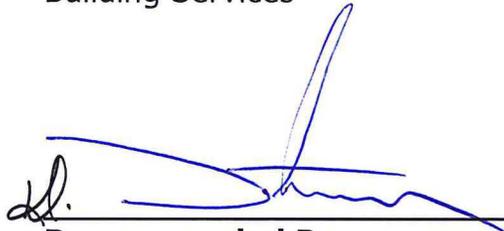


Approved By

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THE CORPORATION OF THE CITY OF GUELPH

By-law Number (2015) – XXXXX

A by-law respecting Building, Demolition, Conditional, Change of Use and Occupancy Permits, Payment of Fees, Inspections, Appointment of Inspectors and a Code of Conduct which repeals By-law number (2012) – 19356, as amended and By-law number (1987) – 12602, as amended.

WHEREAS Subsection 7.(1) of the *Building Code Act*, S.O. 1992, Chapter 23, as amended, authorizes Council to pass certain by-laws respecting Building, Demolition and Change of Use Permits and Inspections;

AND WHEREAS Subsection 3.(2) of the *Building Code Act*, S.O. 1992, Chapter 23, as amended, requires Council to appoint a Chief Building Official and Inspectors for the enforcement of the *Building Code Act*;

AND WHEREAS Subsection 7.1(1) of the *Building Code Act*, S.O. 1992, Chapter 23, as amended, requires Council to establish and enforce a Code of Conduct for the Chief Building Official and Inspectors;

NOW THEREFORE THE CORPORATION OF THE CITY OF GUELPH ENACTS AS FOLLOWS:

1. **Short Title**

This By-law may be cited as the "Building By-law".

2. **Definitions**

In this By-law,

"Act" means the *Building Code Act*, S.O. 1992, Chapter 23, as amended.

"Applicant" means the Owner of a property or Building who applies for a Permit or any person authorized by the Owner to apply for a Permit on the Owner's behalf, as defined in Division C, Article 1.3.1.2. of the Building Code.

"Architect" means an Architect as defined in Division A, Article 1.4.1.2. of the Building Code.

"As Constructed Plans" means As Constructed Plans as defined in Division A, Article 1.4.1.2. of the Building Code.

"Building" means a Building as defined in Subsection 1.(1) of the Act.

"Building Code" means the regulations made under Subsection 34.(1) of the Act.

"Change of Use" means a Change of Use as referenced in Subsection 10.(1) of the Act.

"Chief Building Official" means the Chief Building Official or his or her designate, appointed by a by-law of the City for the purposes of enforcement of the Act.

"Construct" means Construct as defined in Subsection 1.(1) of the Act and Construction shall have the same meaning.

"City" means the Corporation of the City of Guelph.

"Demolish" means Demolish as defined in Subsection 1.(1) of the Act and Demolition shall have the same meaning.

"Designated Structure" means structures designated for the purposes of clause (d) of the definition of Building in Subsection 1.(1) of the Act.

"Farm Building" means a Farm Building as defined in Division A, Article 1.4.1.2. of the Building Code.

"Inspector" means an Inspector appointed by this by-law, as described in Schedule "C", for the purposes of enforcement of the Act.

"Owner" means an Owner as referenced in Division C, Sentence 1.3.1.2.(3) of the Building Code.

"Permit" means written permission from the Chief Building Official to perform work regulated by this by-law and the Act, or to change the use of a Building, or part of it, as regulated by the Act.

"Plumbing" means Plumbing as defined in Subsection 1.(1) of the Act.

"Professional Engineer" means a Professional Engineer as defined in Division A, Article 1.4.1.2. of the Building Code.

"Sewage System" means a Sewage System as defined in Division A, Article 1.4.1.2. of the Building Code.

Any word or term not defined in this by-law, which is defined in the Act or Building Code, shall have the meaning ascribed to it in the Act or the Building Code. Any word or term not defined in this by-law, the Act or the Building Code, shall have the meaning commonly assigned to it in the context in which it is used.

3. **Classes of Permits**

Classes of Permits with respect to the Construction, Demolition, Change of Use and Occupancy of a Building, or part of it, and the associated Permit fees shall be as set out in Schedule "A" of this by-law and include the following:

3.1 Building Permit

This Permit is required under Subsection 8.(1) of the Act and may include Plumbing, heating, ventilation and air conditioning systems, Sewage Systems, Farm Buildings and Designated Structures as set out in Division A, Sentence 1.3.1.1.(1) of the Building Code and signs as set out in Division B, Section 3.15. of the Building Code.

3.2 Demolition Permit

This Permit is required under Subsection 8.(1) of the Act.

3.3 Conditional Permit

This Permit may be issued by the Chief Building Official in accordance with Subsection 8.(3) of the Act to authorize any stage of Construction, even though all of the requirements under Subsection 8.(2) of the Act have not been met.

3.4 Change of Use Permit

This Permit is required under Subsection 10.(1) of the Act when a change in use of a Building or part of it will result in an increase in hazard as determined under the Building Code even though no Construction is proposed.

3.5 Occupancy Permit

This Permit is required under Division C, Subsection 1.3.3. of the Building Code where all or part of a building will be occupied.

4. **Administrative Procedures Relating to Permits**

4.1 Revisions to Permits

After the issuance of a Permit under the Act, notice of any material change to a plan, specification, document or other information on the basis of which the Permit was issued, must be provided by the Applicant in writing to the Chief Building Official together with the details of such change. The change shall not be made without obtaining written authorization of the Chief Building Official as required under Subsection 8.(12) of the Act.

4.2 Transfer of Permit Applications and Permits

Where the ownership of land changes after a Permit application has been submitted and fees paid or where a Permit has been issued, the Applicant for the Permit or the person to whom the Permit was issued, may submit a request to the Chief Building Official requesting a transfer of the Permit application and fees or the Permit as identified in Clause 7.(1)(h) of the Act by submitting the following information:

- a) the name and address of the person to whom the Permit application and fees or the Permit are to be transferred;
- b) the name and address of any contractors that have changed from those listed on the Permit application or the Permit;
- c) the name and address of Architect(s) and Professional Engineer(s) responsible for the design and field review of the Construction that have changed from those listed on the Permit application or the Permit; and,
- d) name and address of the person who paid the Permit fees.

4.3 Revocation of Permits

The Chief Building Official, subject to provisions outlined in Subsection 8.(10) of the Act, has the authority to revoke a Permit issued under the Act.

5. **Requirements for Applications**

5.1 Building, Demolition, Conditional and Change of Use Permits

Where an application is made for a Building or Demolition Permit under Subsection 8.(1) of the Act, a Conditional Permit under Subsection 8.(3) of the Act, or a Change of Use Permit under Subsection 10.(1) of the Act, the application shall comply with Division C, Sentence 1.3.1.3.(5) of the Building Code and be complete with documents and other information as required in this by-law.

5.2 Prescribing Forms

The forms required for an application for a Permit, unless otherwise specified by the Chief Building Official, shall be those forms as set out in Schedule "B" of this by-law.

5.3 Plans and Specifications

Sufficient information shall be submitted with each application for a Permit to enable the Chief Building Official to determine whether or not the proposed Construction, Demolition or Change of Use will conform with the Act, the Building Code and any other applicable law.

Each application shall, unless otherwise specified by the Chief Building Official, be accompanied by two complete sets of working drawings and information as set out in Schedule "B" of this by-law.

5.4 Alternative Solutions

Where a person proposes the use of an Alternative Solution as defined in Division A, Article 1.4.1.2. of the Building Code, the proposal shall:

- a) Include all documentation requirements as set out in Division C, Subsection 2.1.1. of the Building Code, and
- b) Be submitted on the application form as set out in Schedule "B" of this by-law.

5.5 Inactive Permit Applications

Where an application for a Permit remains inactive for six months after it is submitted, the application may be deemed by the Chief Building Official to have been abandoned and notice thereof shall be given to the Applicant. Once an application is deemed to be abandoned, it may be cancelled and a new application will be required for the proposed work.

6. **Payment of Fees**

- 6.1 Fees for a required Permit shall be as set out in Schedule "A" of this by-law and are due and payable upon submission of an application for a Permit.
- 6.2 Administration fees for an Application for an Alternative Solution shall be as set out in Schedule "A" of this by-law and are due and payable upon submission of an Application for an Alternative Solution.
- 6.3 An administration fee, where occupancy of a Building, or part of it, has occurred without an occupancy permit being issued as required by Division C, Articles 1.3.3.1., 1.3.3.4. and 1.3.3.5. of the Building Code, shall be as set out in Schedule "A" of this by-law and is due and payable by the Permit Applicant upon issuance of the occupancy permit. This administration fee is in addition to any other penalty under the Act, Building Code or this by-law, and is to compensate the City for the additional work incurred due to the unauthorized occupancy of the Building.
- 6.4 An administration fee, where more than one occupancy inspection is required for a Building, or part of it, shall be as set out in Schedule "A" this by-law and is due and payable upon issuance of each additional occupancy permit. This administration fee is intended to compensate the City for additional work incurred due to additional occupancy inspections.
- 6.5 An administration fee, where any person has commenced Construction or Demolition, or has caused the Change of Use of a Building prior to receiving a Permit, shall be as set out in Schedule "A" of this by-law and is due and payable by the Permit Applicant prior to the issuance of the Permit. This administration fee will be charged if an order has been issued under Subsections 12.(2) or 14.(1) of the Act. This administration fee is in addition to any other penalty under the Act, Building Code or this by-law and is to compensate the City for the additional work incurred due to the premature commencement of the Construction or Demolition, or the Change of Use of a Building.

7. **Refund of Permit Fees**

In the case of withdrawal or abandonment of an application for a Permit or abandonment of all or a portion of the work or the non-commencement of any project, the Chief Building Official shall, upon written request of the Owner or Applicant, determine the amount of paid Permit fees that may be refunded to the Owner or Applicant, if any, in accordance with Schedule "A" of this by-law.

8. **As Constructed Plans**

- 8.1 The Chief Building Official may require that a set of As Constructed Plans of a Building be filed with the Chief Building Official on completion of Construction under such conditions as may be prescribed in the Building Code.
- 8.2 Upon completion of Construction of the foundation for single detached dwellings, semi-detached dwellings, duplexes or townhouses, a certificate from an Ontario Land Surveyor, Professional Engineer or Architect shall be submitted to the Chief Building Official confirming that the elevation of the foundation conforms to the Ontario Building Code and to the subdivision grading plan or lot grading plan approved by the City.
- 8.3 Upon completion of Construction of all new buildings, a survey from an Ontario Land Surveyor shall be submitted to the Chief Building Official confirming that the location of the building conforms to the Guelph Zoning By-law.

9. **Notice Requirement for Inspections**

The Applicant or an authorized agent shall notify the Chief Building Official of the prescribed notices under Division C, Article 1.3.5.1. of the Building Code and every additional notice under Division C, Article 1.3.5.2. of the Building Code, at least one business day prior to each stage of Construction.

10. **Sewage System Maintenance Inspection Program**

- 10.1 In respect of the mandatory maintenance inspection program described in Division C, Subsection 1.10.2 of the Building Code:
- (a) Pursuant to paragraph 7(1)(b.2) of the Building Code Act, 1992, Council shall administer the said mandatory maintenance inspection program; and
 - (b) Council may, as an alternative to conducting an inspection, accept an inspection certificate from a property owner under Division C, Article 1.10.2.5 of the Building Code.
- 10.2 In respect of the discretionary maintenance inspection programs described in Division C, Subsection 1.10.1 of the Building Code:
- (a) Pursuant to paragraph 7(1)(b.1) of the Building Code Act, 1992, Council hereby establishes a discretionary maintenance inspection program for all sewage systems in the City not included in the mandatory maintenance inspection program;
 - (b) Subject to Division C, Subsection 1.10.1 of the Building Code, Council shall administer its discretionary maintenance inspection program; and
 - (c) Inspectors shall inspect all sewage systems affected by the discretionary maintenance inspection program for compliance with the applicable standards prescribed under paragraph 34(2)(b) of the Building Code Act, 1992, provided that Council may, as an alternative to conducting an inspection, accept an inspection certificate from a property owner under Division C, Article 1.10.1.3 of the Building Code.

11. **Appointment of Inspectors**

The persons listed in Schedule "C" of this By-law are appointed to enforce the Act.

12. **Code of Conduct**

The Code of Conduct for the Chief Building Official and Inspectors, as required under Subsection 7.1(1) of the Act, is set out in Schedule "D" of this by-law.

13. **Severability**

Where a court of competent jurisdiction declares any section or part of a section of this by-law to be invalid, or to be of no force and effect, it is the intention of City Council in enacting this by-law that the remainder of this by-law shall continue in force and be applied and enforced in accordance with its terms to the fullest extent possible according to law.

14. **Repeal and Replacement of Previous By-laws**

By-law number (2012)-19356 and all its amending by-laws are hereby repealed and replaced by this by-law as of the date and time of this by-law coming into effect.

By-law number (1987)-12602 and all its amending by-laws are hereby repealed and replaced by this by-law as of the date and time of this by-law coming into effect.

PASSED this THIRD day of NOVEMBER, 2015.

- Mayor

- City Clerk

SCHEDULE "A"
of By-law Number (2015)- XXXXX

Fees for a required Permit are set out in this Schedule and are due and payable upon submission of an application for a Permit.

| Classes of Permits | Permit Fee (\$ per ft²) | Flat Fee (\$) |
|---|---|--------------------------|
| NEW BUILDINGS, ADDITIONS, MEZZANINES | | |
| Group A: Assembly Buildings | | |
| (Shell) | 2.04 | |
| (Finished) | 2.35 | |
| Outdoor Patio/Picnic Shelter | | 190.00 |
| Outdoor Public Pool | | 760.00 |
| Group B: Detention, Care & Treatment and Care Buildings | | |
| (Shell) | 2.21 | |
| (Finished) | 2.53 | |
| Group C: Residential | | |
| Single Detached Dwelling, Semi Detached Dwelling, Duplex Dwelling and Townhouses | 1.25 | |
| Garage/Carport (per bay), Shed, Deck, Porch, Ext. Stairs, Ext. Ramps | | 95.00 |
| Hot Tubs, Low-Rise Residential Solar Collectors (per application) | | 95.00 |
| Other Residential Solar Collectors (per application) | | 380.00 |
| Swimming Pools | | 190.00 |
| Apartment Building | 1.19 | |
| Hotels/Motels | 1.97 | |
| Residential Care Facility | 1.62 | |
| Group D: Business and Personal Services Buildings | | |
| Office Buildings (Shell) | 1.67 | |
| Office Buildings (Finished) | 1.97 | |
| Group E: Mercantile Buildings | | |
| Retail Stores (Shell) | 1.11 | |
| Retail Stores (Finished) | 1.39 | |
| Group F: Industrial Buildings | | |
| Warehouse, Factories | 0.87 | |
| Parking Garage | 0.74 | |
| Farm Building | 0.42 | |
| Foundation, Conditional Permit | 0.12 | |
| INTERIOR FINISHES: All Classifications | | |
| Interior finishes to previously unfinished areas (including finishing of residential basements and major renovations) | 0.39 | |
| ALTERATIONS/RENOVATIONS: All Classifications | | |
| Alterations and renovations to existing finished areas, new roof structures, rack storage | 0.35 | |
| MINOR ALTERATIONS: | | |
| Partitions, Washrooms, New Entry, Minor Demolitions (500 sq. ft. or less) | | 95.00 |
| SPECIAL CATEGORIES: | | |
| Accessory Apartments / Lodging Houses | 0.35/190.00 min. | |
| Air Supported Structures | 0.44 | |
| Temporary Tents - per application | | 190.00 |
| Temporary Buildings | | 380.00 |
| Portables - per application (excludes port-a-pak) | | 190.00 |
| Major Demolitions (more than 500 sq. ft.) | 0.03/190.00 min. | |
| Change of Use Permit (with no renovations) | | 190.00 |
| MISCELLANEOUS: | | |
| Fireplace / Woodstove (each) | | 95.00 |
| Elevator, Escalator, Lift | | 380.00 |
| Demising Wall/Firewall | | 95.00 |
| Ceiling (new or replace per square foot) | 0.06 | |
| Exterior Ramps (excluding Low-Rise Residential Ramps) | | 190.00 |
| Balcony Guard (replace per linear foot) | 0.72 | |
| Window Replacement (each) | | 15.00 |
| Storefront Replacement | | 190.00 |
| Reclad Exterior Wall (per square foot) | 0.06 | |
| Retaining Wall (per linear foot) | 3.61 | |
| All Designated Structures - including Non-Residential Solar Collectors (per application) except Retaining Walls, Public Pools, Signs & Residential Solar Collectors | | 380.00 |
| MECHANICAL WORK: (independent of Building Permit) | | |
| HVAC Permit (residential per suite) | | 95.00 |
| HVAC Permit (non-residential) | 0.12 | |
| New Sprinkler System or New Standpipe System | 0.05/190.00 min. | |
| Alterations to existing Sprinkler System or existing Standpipe System | 0.03/190.00 min. | |
| Commercial Kitchen Exhaust Systems, Spray Booths, Dust Collectors | | 190.00 |
| ELECTRICAL WORK: (independent of Building Permit) | | |
| New Fire Alarm System | 0.05/190.00 min. | |
| Alterations to existing Fire Alarm System or existing Electrical Work | | 190.00 |
| Electromagnetic Locks (each) and Hold Open Devices (each) | | 45.00 |
| PLUMBING WORK: (independent of Building Permit) | | |
| Plumbing Permit (per fixture) | | 15.00 |
| Hot Water Heaters (each) | | 45.00 |
| Testable Backflow Prevention Devices (each) | | 95.00 |
| Catchbasins/Manholes/Roof drains (each) | | 15.00 |
| Building Services (per group) -SDD, Semi-Detached, Duplex | | 95.00 |
| Building/Site Services (per linear foot), excluding SDD, Semi-Detached, Duplex | 0.75 | |
| SEWAGE SYSTEMS: | | |
| New Installations | | 570.00 |
| Replacement or Alteration | | 285.00 |

(SCHEDULE "A" – continued)

| Administration Fees | Flat Fee (\$) |
|---|--|
| Alternative Solutions (as per Subsection 6.2 of this by-law) | |
| All Buildings/systems within the scope of Division B, Part 9 of the Building Code | 500.00 |
| All other Buildings/systems | 1,000.00 |
| Note: Fifty percent (50%) of the Administration Fee for an approved Alternative Solution will be refunded, where in the opinion of the Chief Building Official, the proposal has supported the Community Energy Initiative. | |
| Occupancy without a Permit (as per Subsection 6.3 of this by-law) | |
| Occupancy of a building, or part of it, without the required occupancy permit | 500.00 |
| Additional Occupancy Inspections (as per Subsection 6.4 of this by-law) | |
| | 300.00 |
| Work without a Permit (as per Subsection 6.5 of this By-law) | |
| Building, Demolition or Change of Use without the required Permit | 50% of the required Permit fee, to a maximum of \$5,000.00 |

Rules for Determining Permit Fees:

- A minimum Permit fee of \$95.00 shall be charged for all work where the calculated Permit fee is less than \$95.00.
- For classes of Permits not described in this Schedule, a reasonable Permit fee shall be determined by the Chief Building Official.
- Floor area of the proposed work is to be measured to the outer face of exterior walls (excluding residential attached garages) and to the centre line of party walls, firewalls or demising walls.
- In the case of interior finishes, alterations or renovations, area of proposed work is the actual space receiving the work, e.g. tenant suite.
- Mechanical penthouses and floors, mezzanines, lofts, habitable attics and interior balconies are to be included in all floor area calculations.
- Except for interconnected floor spaces, no deductions are made for openings within the floor area (e.g. stairs, elevators, escalators, shafts, ducts, etc.).
- Unfinished basements for single detached dwellings, semi-detached dwellings, duplex dwellings and townhouses are not included in the floor area.
- Attached garages and fireplaces are included in the Permit fee for single detached dwellings, semi-detached dwellings, duplex dwellings and townhouses.
- Where interior alterations and renovations require relocation of sprinkler heads, standpipe components or fire alarm components, no additional charge is applicable.
- Ceilings are included in both new shell and finished (partitioned) Buildings. The Permit fees for ceilings only apply when alterations occur in existing Buildings. Minor alterations to existing ceilings to accommodate lighting or HVAC improvements are not chargeable.
- Where Demolition of partitions or alterations to existing ceilings are part of an alteration or renovation Permit, no additional charge is applicable.
- Corridors, lobbies, washrooms, lounges, etc. are to be included and classified according to the major occupancy for the floor area on which they are located.
- The occupancy categories in this Schedule correspond with the major occupancy classifications in the Ontario Building Code. For multiple occupancy floor areas, the Permit fees for each of the applicable occupancy categories may be used, except where an occupancy category is less than 10% of the floor area.
- For rack storage use, with platforms or mezzanines, apply the square footage charge that was used for the Building.
- A temporary Building is considered to be a Building that will be erected for not more than three years.
- Additional Permit fees are not required when the Sewage System is included with the original Building Permit.

Refund of Permit Fees:

In the case of withdrawal or abandonment of an application for a Permit or abandonment of all or a portion of the work or the non-commencement of any project, the Chief Building Official shall, upon written request of the Owner or Applicant, determine the amount of paid Permit fees that may be refunded to the Owner or Applicant, if any, as follows:

- a) 80 percent (80%) if administrative functions only have been performed;
- b) 70 percent (70%) if administrative and zoning functions only have been performed;
- c) 50 percent (50%) if administrative, zoning and plans examination functions have been performed;
- d) 35 percent (35%) if the Permit has been issued and no field inspections have been performed subsequent to Permit issuance;
- e) 5 percent (5%) shall additionally be deducted for each field inspection that has been performed after the Permit has been issued;
- f) No refund shall be made of an amount that is less than the minimum Permit fee applicable to the work;
- g) No refund shall be made after two years following the date of Permit application where the Permit has not been issued or one year following the date of Permit issuance.

SCHEDULE "B"
of By-law Number (2015) - XXXXX

The following are list of plans, working drawings, information and forms that may be required to accompany applications for Permits according to the scope of work;

1. Plans and Working Drawings

- | | |
|----------------------------|-----------------------------|
| a) Site plan/Survey | l) Soil gas control details |
| b) Key plan | m) Building elevations |
| c) Lot grading plan | n) Structural drawings |
| d) Floor plans | o) Architectural drawings |
| e) Foundation plan | p) Electrical drawings |
| f) Framing plans | q) HVAC drawings |
| g) Roof truss layout plan | r) Plumbing drawings |
| h) Roof plan | s) Fire alarm drawings |
| i) Reflected ceiling plans | t) Sprinkler drawings |
| j) Sections and details | u) Travel distance plans |
| k) Air barrier details | v) Exit capacity plans |

Two sets of drawings shall be submitted on paper or other durable material. One full-sized set of drawings to a legible, recognized scale and one 11"x17" reduced set of drawings are required. Two sets of 11"x17" drawings may be submitted if to a legible, recognized scale. Electronic drawings may be submitted, or may be required to be submitted, at the discretion of the Chief Building Official.

If applicable, drawings must be sealed by an Architect and/or Professional Engineer and/or stamped by a qualified/registered designer.

All drawings shall be fully dimensioned, noting all sizes and types of construction materials to be used and their respective locations, all finishes to all walls, ceilings and floors and all existing and proposed fire separations. Alterations, renovations and additions must differentiate between the existing Building and new Construction being proposed.

2. Information

- a) Spatial separation calculations
- b) Fire protection reports
- c) Building Code related reports

3. Forms

- a) Application For An Alternative Solution
- b) City of Guelph Ontario Building Code Analysis
- c) Commitment To General Reviews By Architects And Engineers
- d) Demolition Permits Utility Sign-Off Sheet
- e) Energy Efficiency Form(s)
- f) Radon Mitigation Certification Form
- g) Information Sheet For Group Homes
- h) Information Sheet For A Sewage System

SCHEDULE "C"
of By-law Number (2015) – XXXXX

1. The Chief Building Official position is currently vacant.
2. The persons listed in this Schedule are hereby appointed to the positions identified therein and these persons shall be responsible to the Chief Building Official for the enforcement of the Act.
3. An appointment authorized under this by-law shall be deemed to be revoked if the individual ceases to be employed by the City of Guelph in the positions listed below.
4. The Manager of Inspection Services, Program Manager of Permit Services and Supervisor of Inspections are hereby appointed designates of the Chief Building Official and shall have the authority to carry out any duties of the Chief Building Official in his or her absence or as directed by him or her, including the authority to issue Permits and Stop Work Orders.
5. The HVAC Inspector III shall have the authority to issue Permits for the construction of heating, ventilating and air conditioning systems on behalf of the Chief Building Official.
6. The Plumbing Inspector III shall have the authority to issue Permits for the construction of plumbing and sewage systems and for the installation of backflow prevention devices on behalf of the Chief Building Official.
7. The Backflow Prevention Officer shall have the authority to issue Permits for the installation of backflow prevention devices on behalf of the Chief Building Official.

| Title of Position | Appointed Person |
|------------------------------------|---|
| Manager of Inspection Services | Rob Reynen |
| Program Manager of Permit Services | Jeremy Laur |
| Supervisor of Inspections | Adrian vanEck |
| HVAC Inspector III | John Bosyj |
| Plumbing Inspector III | David Auliffe |
| Backflow Prevention Officer | Jeff Crossman |
| Inspectors | Bruce Aubrey David Auliffe Bill Bond Ray Borthwick John Bosyj Chris Catteau Jeff Crossman David Gooch Henry Hess Tammy Hogg Stephen Jamieson Biljana Jovanov Jason Lapier Jeremy Laur Daewon Lee Greg Leskien Ian Malcolm Justin Masecar Gerald Moore Greg Pieczewski Peter Pieczewski Rob Reynen Nicholas Rosenberg Patrick Sheehy Mark Shody Adrian vanEck |

SCHEDULE "D"
of By-law Number (2015) – XXXXX

Code of Conduct for the Chief Building Official and Inspectors

1. **Purpose**

- a) To promote appropriate standards of behavior and enforcement actions by all Building Services staff in the exercise of a power or the performance of a duty.
- b) To prevent practices which may constitute an abuse of power, including unethical or illegal practices, by all Building Services staff in the exercise of a power or the performance of a duty.
- c) To promote appropriate standards of honesty and integrity in the exercise of a power or the performance of a duty by all Building Services staff.

2. **Scope**

This policy applies to all Building Services staff.

The Code of Conduct must provide for its enforcement and include policies or guidelines to be used when responding to allegations that the Code of Conduct has been breached and disciplinary actions that may be taken if the Code of Conduct is breached.

3. **Contents**

Conduct

- a) Always act in the public interest.
- b) Apply all relevant laws, codes and standards in an impartial, consistent, fair and professional manner, independent of any external influence and without regard to any personal interests.
- c) Maintain required legislated qualifications, discharging all duties in accordance with recognized areas of competency.
- d) Extend professional courtesy to all.
- e) Ensure interactions are in keeping with the City's Corporate Values and associated behaviours, particularly related to integrity and excellence.

4. **Breaches of the Code of Conduct**

Lodging a Complaint

A complaint must be in writing and must be signed by the person making the complaint. The complaint may be a letter, e-mail, facsimile or submitted via the form that is in Section 4.

Withdrawal of a Complaint

A complainant may withdraw his/her complaint at any time; although the City may continue to investigate the complaint if deemed appropriate to do so.

Confidentiality

The entire investigation process will be handled in as confidential a manner as possible by all parties involved. All records are subject to the provisions of the *Municipal Freedom of Information and Protection of Privacy Act* and may be subject to disclosure under the Act or by a court of law.

Review of Allegations

The Chief Building Official will review any allegations of breaches of this Code of Conduct made against a Building Services staff member. Where the allegations are against the Chief Building Official, senior management of the City will review the allegations.

Disciplinary action arising from violations of this Code of Conduct is the responsibility of the City and will be based on the severity and frequency of the violation in accordance with relevant employment standards and the provisions of any collective agreement.

The Chief Building Official or senior management of the City will provide a written response to the complainant within 30 calendar days of receipt of the written complaint.

Review of Decision

If, upon receipt of the results of the review, the complainant is not satisfied, he/she may forward his/her concerns to senior management of the City.

STAFF REPORT



TO Infrastructure, Development and Enterprise Committee

SERVICE AREA Infrastructure, Development and Enterprise

DATE November 3, 2015

SUBJECT Intersections Warranted for Traffic Signal Installation

REPORT NUMBER

EXECUTIVE SUMMARY

PURPOSE OF REPORT

To report on the status of warranted traffic signals in the City of Guelph.

KEY FINDINGS

Staff regularly receive requests to install traffic signals at various locations throughout the City. In order to determine locations that would benefit from the installation of traffic signals, staff continually monitors the vehicle, cyclist and pedestrian volumes and collision occurrences at intersections. The City of Guelph follows the Ministry of Transportation of Ontario's warrants to determine if a traffic signal should be installed. Currently there are two (2) locations that satisfy the MTO warrant criteria for the installation of a traffic signal.

FINANCIAL IMPLICATIONS

There are no financial implications for the 2015 budget. Approved traffic signal installation(s) will be funded through capital account TF0014 in the 2016 budget (if approved). Routine maintenance and ongoing operational costs will be funded through the annual operating budget.

ACTION REQUIRED

Receive and approve recommendation to install traffic signals at the intersection of Victoria Road South at Clair Road East.

RECOMMENDATION

1. That the report from Infrastructure, Development and Enterprise dated November 3, 2015, titled "Intersections Warranted for Traffic Signal Installation" be received.
2. That traffic signals be installed at the intersection of Victoria Road South at Clair Road East in 2016, funded through capital account TF0014 of the 2016 Capital Budget.

STAFF REPORT

BACKGROUND

Properly located, designed, operated and maintained traffic signals provide for the orderly movement of traffic and reduce the frequency of certain types of collisions (i.e. right angle, pedestrian and left turn).

Improperly located, designed, operated and maintained traffic signals have proven to increase delay and fuel consumption, increase certain types of collisions (i.e. read-end, lane change), cause driver frustration and disrespect for traffic control devices.

It is, therefore, important that new traffic signals be installed after thorough analysis and careful consideration.

REPORT

The Ministry of Transportation of Ontario traffic signal warrant guidelines uses the following criteria to determine whether or not a traffic signal is justified:

- Justification 1 - Minimum Eight Hour Vehicle Volume
- Justification 2 - Delay to Cross Traffic
- Justification 3 - Combination Volume/Delay
- Justification 4 - Minimum Four Hour Volume
- Justification 5 - Collision Warrant
- Justification 6 - Pedestrian Volume and Delay Warrant
- Justification 7 - Projected Volumes

Justifications 4 and 7 are recent additions to the Ministry of Transportation of Ontario traffic signal warrant guidelines. Staff will report to Council in 2016 with a recommendation regarding the adoption of these two warrant justifications.

An intersection is considered justified for traffic signal installation when any one of the following criteria is met:

- Justification 1 - Minimum Eight Hour Vehicle Volume is satisfied 100%
- Justification 2 - Delay to Cross Traffic is satisfied 100%
- Justification 3 - Combination Volume/Delay; if justifications 1 and 2 both fulfilled to the extent 80% or greater
- Justification 5 - Collision Warrant is satisfied 100% (total of 15 collisions reported over 36 month period correctable by installation of a traffic signal)
- Justification 6 - Pedestrian Volume and Delay Warrant is satisfied 100%

The following intersections currently satisfy the warrant for the installation of a traffic signal when using justifications 1,2,3,5 and 6:

- Victoria Road South at Clair Road East. Justification 3 - Combination Volume/Delay is satisfied.

STAFF REPORT

- York Road at Elizabeth Street. Justification 2 - Delay to Cross Traffic is satisfied.

Staff recommend the installation of a traffic signal at the intersection of Victoria Road South at Clair Road East in 2016 for the following reasons:

- The intersection is located in an area of rapid development, and it is projected that both justifications 1 and 2 will be 100% satisfied by the end of 2016;
- Collisions at this intersection are likely to be serious in nature given the higher vehicle speeds on Victoria Road South.

Staff do not recommend installing a traffic signal at the intersection of York Road at Elizabeth Street in 2016 for the following reasons:

- No collision history over the previous 36 month period;
- Plans to reconstruct York Road, in the vicinity of Elizabeth Street in the future, may include intersection re-alignment;
- Elizabeth Street will be impacted by construction, reducing traffic volumes for the majority of 2016;
- No requests from the public to install a traffic signal at this intersection.

TRAFFIC SIGNAL PRIORITY RANKING

Staff maintain a priority list that ranks unsignalized intersections in the City that have been assessed for the installation of traffic signals. Intersections are ranked by summing the percentages from justifications 1, 2 and 5. The priority list is updated annually. The current Traffic Signal Priority Ranking list is included as Attachment A to this report.

CORPORATE STRATEGIC PLAN:

2.2 Deliver public services better

3.1 Ensure a well-designed, safe, inclusive, appealing and sustainable City

FINANCIAL IMPLICATIONS:

The estimated cost of a new traffic signal installation at the intersection of Victoria Road South at Clair Road East is \$100,000 to be funded through the 2016 Capital Budget, item TF0014 "New Traffic Signal Installation".

The annual cost to operate and maintain each traffic signal in the City is approximately \$4,000 per year, funded through the annual operating budget.

STAFF REPORT

DEPARTMENTAL CONSULTATION:

N/A

COMMUNICATIONS:

A public communication plan will be prepared in advance of traffic signal installations.

ATTACHMENTS

Appendix A – 2015 Traffic Signal Priority Guide

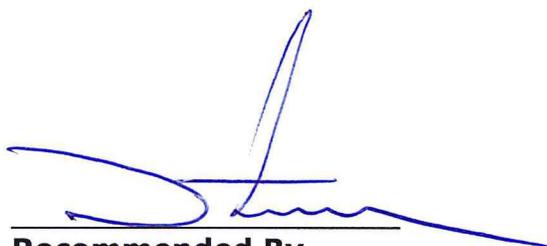
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Supervisor, Traffic Engineering



Approved By

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Engineering and Capital
Infrastructure Services
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Recommended By

Derrick Thomson
Interim Deputy CAO
Infrastructure, Development
and Enterprise
519-822-1260, ext. 2665
derrick.thomson@guelph.ca

Attachment A: 2015 Traffic Signal Priority Ranking

| Rank | Location | Year | Justification Pct | | | Collisions (Justification 5) | | | | Justified ? | Score |
|------|------------------------|----------------------|-------------------------------------|--------------------------------------|------------|------------------------------|------|------|----------|-------------|-------|
| | | | 1 | 2 | 3 | 2011 | 2012 | 2013 | Total | | |
| 1 | Victoria at Clair | 2014 2012 2008 | 98 90 70 | 95 90 64 | 100 | 1 | 2 | 0 | 3 20% | Yes | 213 |
| 2 | York at Elizabeth | 2012 2004 2001 | 55 74 57 | 100 98 95 | 0 | 0 | 0 | 0 | 0 | Yes | 155 |
| 3 | Imperial at Massey | 2014 2012 2008 | 95 94 95 | 77 77 74 | 0 | 4 | 3 | 0 | 7 47% | No | 219 |
| 4 | Stone at Watson | 2014 2009 2006 | 90 81 82 | 65 48 55 | 0 | 0 | 2 | 1 | 3 20% | No | 175 |
| 5 | Woodlawn at Arrow | 2014 2012 2008 | 61 62 60 | 56 79 44 | 0 | 0 | 3 | 2 | 5 33% | No | 174 |
| 6 | Gordon at Surrey | 2001 | 66 | 58 | 0 | 1 | 4 | 2 | 7 47% | No | 171 |
| 7 | Downey at Laird | 2014 2011 2008 | 84 87 82 | 78 76 68 | 0 | 1 | 0 | 0 | 1 7% | No | 169 |
| 8 | Goodwin at Farley | 2014 | 73 | 47 | 0 | 2 | 3 | 2 | 7 47% | No | 167 |
| 9 | Scottsdale at Ironwood | 2014 2012 2008 | 68 73 55 | 49 57 36 | 0 | 3 | 3 | 1 | 7 47% | No | 164 |
| 10 | Willow at Marksam | 2014 2007 2003 | 68 66 69 | 68 65 64 | 0 | 1 | 1 | 2 | 4 27% | No | 163 |
| 11 | Watson at Eastview | 2014 2012 | 81 71 | 62 53 | 0 | 3 | 0 | 0 | 3 20% | No | 163 |
| 12 | Elmira at Independence | 2013 | 64 | 72 | 0 | 2 | 1 | 1 | 4 27% | No | 163 |
| 13 | Downey at Niska | 2010 2008 2004 | 65 56 59 | 80 89 88 | 0 | 0 | 0 | 1 | 1 7% | No | 152 |
| 14 | Stevenson at Cassino | 2005 2000 | 75 68 | 59 56 | 0 | 2 | 0 | 0 | 2 14% | No | 148 |
| 15 | Norfolk at Cork | 2003 | 69 | 60 | 0 | 2 | 0 | 0 | 2 14% | No | 143 |
| 16 | Speedvale at Metcalfe | 2014 2012 2008 | 66 61 58 | 56 71 61 | 0 | 2 | 1 | 0 | 3 20% | No | 142 |
| 17 | Watson at Speedvale | 2014 2010 2009 | 73 86 92 | 40 56 54 | 0 | 0 | 2 | 2 | 4 27% | No | 140 |
| 18 | College at Caledonia | 2012 2006 | 58 57 | 79 81 | 0 | 0 | 0 | 0 | 0 | No | 137 |

Justification 1: Minimum Vehicle Volume (if 100% satisfied, traffic signal installation is justified)

Justification 2: Delay To Cross Traffic (if 100% satisfied, traffic signal installation is justified)

Justification 3: Combination Justification (if Justifications 1 and 2 are 80% satisfied, traffic signal installation is justified)

Justification 5: Motor Vehicle Collisions (total of 15 collisions over a 3 year period correctable by installation of a traffic signal. If 100%, traffic signal installation is justified)

(F) = fatal motor collision

| Rank | Location | Year | Justification Pct | | | Collisions (Justification 5) | | | | Justified ? | Score |
|------|--------------------------|----------------------|-------------------|-----------------------|---|------------------------------|------|------|----------|-------------|-------|
| | | | 1 | 2 | 3 | 2011 | 2012 | 2013 | Total | | |
| 19 | Edinburgh at Suffolk | 2012 2008 | 66 63 | 71 55 | 0 | 0 | 0 | 0 | 0 | No | 137 |
| 20 | Wyndham at Surrey | 2005 | 53 | 63 | 0 | 1 | 2 | 0 | 3 20% | No | 136 |
| 21 | Woodlawn at Regal | 2012 2003 | 69 47 | 51 35 | 0 | 1 | 0 | 1 | 2 14% | No | 134 |
| 22 | Scottsdale at Janefield | 2009 2005 | 83 58 | 50 50 | 0 | 0 | 0 | 0 | 0 | No | 133 |
| 23 | Paisley at Glasgow | 2014 | 47 | 57 | 0 | 2 | 1 | 1 | 4 27% | No | 131 |
| 24 | Downey at Woodland Glen | 2014 2008 2005 | 49 53 56 | 82 73 78 | 0 | 0 | 0 | 0 | 0 | No | 131 |
| 25 | Delhi at Emma | 2012 2002 | 68 76 | 51 58 | 0 | 0 | 0 | 1 | 1 7% | No | 126 |
| 26 | Silvercreek at Westwood | 2011 2007 2003 | 56 54 57 | 54 38 37 | 0 | 1 | 0 | 1 | 2 14% | No | 124 |
| 27 | Woodlawn at Michener | 2014 2007 2002 | 56 66 59 | 58 65 63 | 0 | 1 | 0 | 0 | 1 7% | No | 121 |
| 28 | Silvercreek at Curtis | 2007 2002 | 58 61 | 55 58 | 0 | 0 | 0 | 1 | 1 7% | No | 120 |
| 29 | Scottsdale at Cole | 2009 2008 2005 | 59 62 66 | 59 73 60 | 0 | 0 | 0 | 0 | 0 | No | 118 |
| 30 | London at Yorkshire | 2005 2001 | 53 65 | 63 81 | 0 | 0 | 0 | 0 | 0 | No | 116 |
| 31 | Stevenson at Emma | 2007 | 42 | 52 | 0 | 1 | 1 | 0 | 2 14% | No | 108 |
| 32 | Wyndham at Cork | 2003 | 52 | 54 | 0 | 0 | 0 | 0 | 0 | No | 106 |
| 33 | Grange at Auden | 2014 2012 2007 | 57 57 59 | 48 79 44 | 0 | 0 | 0 | 0 | 0 | No | 105 |
| 34 | Edinburgh at Rickson | 2008 2005 2004 | 32 36 31 | 64 70 62 | 0 | 0 | 1 | 0 | 1 7% | No | 103 |
| 35 | Stone at Evergreen | 2012 2007 2002 | 60 65 48 | 52 30 23 | 0 | 0 | 0 | 0 | 0 | No | 102 |
| 36 | Imperial at West Acres | 2007 2002 | 46 42 | 51 68 | 0 | 0 | 0 | 0 | 0 | No | 97 |
| 37 | Speedvale at Marlborough | 2014 | 22 | 28 | 0 | 2 | 3 | 2 | 7 47% | No | 97 |
| 38 | Eastview at Auden | 2004 | 33 | 62 | 0 | 0 | 0 | 0 | 0 | No | 95 |
| 39 | Edinburgh at Chancellors | 2014 | 30 | 49 | 0 | 1 | 0 | 1 | 2 14% | No | 93 |
| 40 | Starwood at Watson | 2013 2009 | 57 46 | 35 20 | 0 | 0 | 0 | 0 | 0 | No | 92 |
| 41 | Cassino at William | 2013 2005 | 52 50 | 32 33 | 0 | 1 | 0 | 0 | 1 7% | No | 91 |

Justification 1: Minimum Vehicle Volume (if 100% satisfied, traffic signal installation is justified)

Justification 2: Delay To Cross Traffic (if 100% satisfied, traffic signal installation is justified)

Justification 3: Combination Justification (if Justifications 1 and 2 are 80% satisfied, traffic signal installation is justified)

Justification 5: Motor Vehicle Collisions (total of 15 collisions over a 3 year period correctable by installation of a traffic signal. If 100%, traffic signal installation is justified)

(F) = fatal motor collision

| Rank | Location | Year | Justification Pct | | | Collisions (Justification 5) | | | | Justified ? | Score |
|------|--------------------------|------|-------------------|----|---|------------------------------|------|------|----------|-------------|-------|
| | | | 1 | 2 | 3 | 2011 | 2012 | 2013 | Total | | |
| 42 | Niska at Ptarmigan | 2008 | 39 | 41 | 0 | 0 | 0 | 0 | 0 | No | 90 |
| | | 2001 | 43 | 40 | | | | | | | |
| 43 | Victoria at Summerfield | 2008 | 38 | 48 | 0 | 0 | 0 | 0 | 0 | No | 86 |
| | | 2005 | 49 | 67 | | | | | | | |
| 44 | Gordon at Maltby | 2012 | 32 | 40 | 0 | 2 | 0 | 0 | 2 14% | No | 86 |
| 45 | Downey at Pheasant Run | 2010 | 32 | 52 | 0 | 0 | 0 | 0 | 0 | No | 84 |
| 46 | Speedvale at Lewis | 2006 | 28 | 42 | 0 | 0 | 0 | 1 | 1 | No | 77 |
| | | 2001 | 33 | 73 | | | | | 7% | | |
| 47 | Gordon at University | 2011 | 28 | 39 | 0 | 1 | 0 | 0 | 1 | No | 74 |
| | | 2008 | 23 | 27 | | | | | 7% | | |
| | | 2002 | 28 | 34 | | | | | | | |
| 48 | Eramosa at Arthur | 2009 | 32 | 32 | 0 | 1 | 0 | 0 | 1 | No | 71 |
| | | 2002 | 48 | 50 | | | | | 7% | | |
| 49 | Woodlawn at Country Club | 2004 | 43 | 26 | 0 | 0 | 0 | 0 | 0 | No | 69 |
| | | 2002 | 34 | 22 | | | | | | | |
| 50 | Victoria at Brant | 2009 | 34 | 35 | 0 | 0 | 0 | 0 | 0 | No | 69 |
| 51 | Speedvale at Marksam | 2008 | 40 | 25 | 0 | 0 | 0 | 0 | 0 | No | 65 |
| | | 2003 | 41 | 32 | | | | | | | |
| 52 | Paisley at Candlewood | 2009 | 31 | 33 | 0 | 0 | 0 | 0 | 0 | No | 64 |
| 53 | Watson at Fleming | 2013 | 24 | 32 | 0 | 0 | 0 | 0 | 0 | No | 56 |
| 54 | Edinburgh at Forest | 2014 | 11 | 19 | 0 | 2 | 0 | 1 | 3 20% | No | 50 |
| 55 | Stevenson at Balsam | 2014 | 4 | 37 | 0 | 0 | 0 | 0 | 0 | No | 41 |
| | | 2005 | 5 | 22 | | | | | | | |

Justification 1: Minimum Vehicle Volume (if 100% satisfied, traffic signal installation is justified)

Justification 2: Delay To Cross Traffic (if 100% satisfied, traffic signal installation is justified)

Justification 3: Combination Justification (if Justifications 1 and 2 are 80% satisfied, traffic signal installation is justified)

Justification 5: Motor Vehicle Collisions (total of 15 collisions over a 3 year period correctable by installation of a traffic signal. If 100%, traffic signal installation is justified)

(F) = fatal motor collision

STAFF REPORT



TO Infrastructure, Development and Enterprise Committee

SERVICE AREA Infrastructure, Development and Enterprise

DATE November 3, 2015

**SUBJECT MUNICIPAL COUNCIL SUPPORT RESOLUTION (BLANKET):
NOTICE TO PROCEED (NTP) FOR PROJECTS PREVIOUSLY
SUPPORTED BY COUNCIL UNDER FEED-IN-TARIFF
PROGRAM 3.1**

REPORT NUMBER IDE-BDE-1511

EXECUTIVE SUMMARY

PURPOSE OF REPORT

To seek Council's approval of a Municipal Council Support Resolution (Blanket) – Notice to Proceed (Attachment #1) in support of construction and operation of renewable energy projects within the City of Guelph that have been approved by Version 3.1 of the Independent Electricity System Operator's (IESO) Feed-In-Tariff (FIT) program.

KEY FINDINGS

A Municipal Council Support Resolution (Blanket) – Notice to Proceed (Attachment #1) will assist proponents of local renewable energy generation projects in obtaining final contracts from the IESO for projects previously approved under FIT 3.1. Where such projects are successful in obtaining final contracts with the IESO, they will in turn contribute to goals for renewable energy generation contained in the Community Energy Initiative.

FINANCIAL IMPLICATIONS

N/A

ACTION REQUIRED

With Council's support, through the recommendations below, renewable energy projects that contribute to the goals of the Community Energy Initiative will be supported.

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RECOMMENDATIONS

WHEREAS the Province's FIT Program encourages the construction and operation of rooftop solar photovoltaic and ground mount solar photovoltaic projects (the "Projects");

AND WHEREAS certain projects approved under the Province's FIT Program 3.1 will be constructed and operated in the City of Guelph;

AND WHEREAS, pursuant to the FIT Rules, Version 3.1, successful applicants whose Projects have been approved require Municipal Council resolutions, referred to as "Notice to Proceed" in order to complete their contract obligations with the Independent Electricity System Operator

NOW THEREFORE BE IT RESOLVED:

That Report IDE-BDE-1511 from Infrastructure, Development and Enterprise, dated November 3, 2015 be received.

That Council of the City of Guelph supports without reservation the construction and operation of the Projects anywhere in the City of Guelph.

That Council direct the City Clerk to sign the attached "Municipal Council Support Resolution (Blanket) – Notice to Proceed" (Attachment #1).

That Council direct the Manager, Community Energy to provide a completed and signed "Municipal Council Support Resolution (Blanket) – Notice to Proceed" (Attachment #1) to applicants requesting same for the purposes of completing their contract obligations to the Independent Electricity System Operator's Feed-In-Tariff 3.1 Program.

That the Municipal Council Blanket Support Resolution remain in effect for one year from the date of adoption.

BACKGROUND

Council endorsed the Guelph Community Energy Plan, now the Community Energy Initiative (CEI), in April 2007. Among its goals is a number of targets related to local renewable energy generation.

"Within fifteen years, at least a quarter of Guelph's total energy requirement will be competitively sourced from locally created renewable resources."

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“Renewable” energy sources, in the context of the CEI and the Independent Electricity System Operator (IESO) Municipal Council Blanket Support Resolution, means rooftop solar photovoltaic and ground mount solar photovoltaic generation.

At the time of the CEI endorsement, it was expected that renewable energy activities would start evolving sometime in the second half of the 15 year timeframe as market conditions became favourable to the development of projects.

However, in May 2009, the Province of Ontario passed Bill 150, The Green Energy and Economy Act, to expand renewable energy generation, encourage energy conservation and promote the creation of clean energy jobs.

In September, 2009, as directed by the Ontario Minister of Energy, the Ontario Power Authority (OPA) announced the Feed-In-Tariff Program that provided fixed pricing for electricity generated by renewable sources. In January of 2015, the OPA merged with the IESO and resumed operation under the latter name.

The Province continues to manage their Feed-In-Tariff program under three categories of solar photovoltaic system capacity:

1. MicroFIT (under 10 kW);
2. Small FIT (10 kW to 500 kW);
3. Large Renewables Procurement (500 kW to 10 MW).

This report is focused on the second category – Small FIT (10 kW to 500 kW).

Council has previously received a report recommending approval of a blanket support resolution for proposed solar projects under the initial **application** process under the Version 3.1 of the FIT program.

Guelph-based projects that were successful in their application under FIT 3.1 are subsequently required to obtain a second Council support resolution (Municipal Council Support Resolution (Blanket) – Notice to Proceed) prior to finalizing their solar electricity supply contracts with the IESO.

REPORT

The attached “Municipal Council Support Resolution (Blanket) – Notice to Proceed” (Attachment #1) is provided by the IESO. Municipalities who pass a resolution that reflects the wording in the Template can provide a copy to the successful applicants to Version 3.1 of the Feed-In-Tariff Program.

The Rules to the FIT 3.1 Program are rigorous in ensuring appropriate development of renewable energy projects, particularly in an urban environment. Projects that are on, or abut, residential property are not allowed. Projects that are on industrial employment lands are not allowed. Also projects on provincially-defined Agricultural

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Land, Levels 1, 2 or 3 (as is the case in some of the City's Urban Reserve lands) are not allowed.

Staff is confident that the FIT 3.1 rules are rigorous in ensuring appropriate renewable energy development. Because of this, the risk of the City inadvertently supporting, and providing a program advantage, to renewable energy projects that are inappropriate remains extremely low.

Under the FIT 3.1 rules, ground-mounted solar energy projects require an additional formal confirmation from the City of the proposed ground-based solar project site's zoning status, along with an opinion of a registered Land Use Planner. In such cases, the Manager, Community Energy will liaise with the City's Chief Building Official and General Manager of Planning, Urban Design and Building Services to complete the required forms.

At the time of writing this report, staff is aware of one solar developer with two specific projects, approved under FIT 3.1 located at:

- 367 Michener Rd.
- 32 Airpark Place

Further requests for the resolution may come from other successful FIT 3.1 applicants. This is the main reason for the request from a blanket resolution rather than a project(s) specific resolution.

Through this mechanism of formally indicating municipal support for renewable energy projects across the community, the City of Guelph has a significant opportunity to accelerate progress toward the renewable energy goals of the Community Energy Initiative.

CORPORATE STRATEGIC PLAN **Innovation in Local Government**

- Build an adaptive environment for government innovation to ensure fiscal and service sustainability.

City Building

- Be economically viable, resilient, diverse and attractive for business.
- Strengthen citizen and stakeholder engagement and communications.

STAFF REPORT

DEPARTMENTAL CONSULTATION

Community Energy
Legal and Realty Services
City Clerk's Office
Planning Services

FINANCIAL IMPLICATIONS

N/A

COMMUNICATIONS

N/A

ATTACHMENTS

Attachment 1: "Municipal Council Support Resolution (Blanket) – Notice to Proceed"

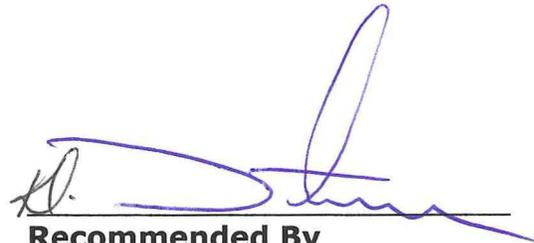
Report Author

Rob Kerr
Manager, Community Energy



Approved By

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Recommended By

Derrick Thomson
Deputy CAO
Infrastructure, Development
and Enterprise
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derrick.thomson@guelph.ca



TEMPLATE: MUNICIPAL COUNCIL SUPPORT RESOLUTION (BLANKET) - NOTICE TO PROCEED
(Section 2.4(d)(vii) of the FIT Contract, Version 3.1)

Resolution NO: _____

Date: _____

[WHEREAS] capitalized terms not defined herein have the meanings ascribed to them in the FIT Contract, Version 3.1;

[AND WHEREAS] the Province's FIT Program encourages the construction and operation of
_____ insert renewable fuel (e.g., rooftop solar PV and ground mount solar PV) _____ generation projects (the "Projects");

[AND WHEREAS] one or more Projects may be subject to FIT Contracts and may be constructed and operated in
_____ The City of Guelph _____ ("Local Municipality");

[AND WHEREAS] in accordance with the FIT Rules, Version 3.0, the Council of the Local Municipality ("Council") had previously indicated, by a resolution, its support for Projects in the Local Municipality (the "Prior Resolution");

[AND WHEREAS] Council now indicates, by a resolution dated no earlier than June 10, 2015, Council's continued support for the construction and operation of the Projects anywhere in the Local Municipality (the "New Resolution");

[AND WHEREAS], pursuant to the FIT Contract, where a New Resolution is received in respect of the Projects in the Local Municipality, Suppliers will be recognized as fulfilling the requirements under Section 2.4(d)(vii) of the FIT Contract, which may result in Suppliers being offered Notice to Proceed in accordance with the terms of their respective FIT Contract(s);

[NOW THEREFORE BE IT RESOLVED THAT]:

Council of the _____ The City of Guelph _____ supports the construction and operation of the Projects
anywhere in the _____ The City of Guelph _____ .

This resolution's sole purpose is to enable Suppliers to achieve Notice to Proceed under their FIT Contracts and may not be used for the purpose of any other form of municipal approval in relation to a FIT Contract or Project or for any other purpose.

This resolution shall expire twelve (12) months after its adoption by Council.

Title:

Title:

(signature lines for elected representatives.)

FIT Contract ID #: _____

INSTRUCTIONS: TEMPLATE: MUNICIPAL COUNCIL SUPPORT RESOLUTION (BLANKET) - NOTICE TO PROCEED
(Sections 2.4(d)(vii) of the FIT Contract, Version 3.1)

Capitalized terms not defined herein have the meanings ascribed to them in the FIT Contract.

INSTRUCTIONS SPECIFIC TO THE TEMPLATE: MUNICIPAL COUNCIL SUPPORT RESOLUTION (BLANKET) - NOTICE TO PROCEED
(THE "TEMPLATE")

1. Where a Prior Resolution (as defined in the Template) was passed in respect of a Project and a Municipal Council Support Resolution is required as per the FIT Contract Cover Page, a New Resolution must be provided to the IESO for the purposes of achieving Notice to Proceed ("NTP") under Section 2.4(d)(vii) of the FIT Contract, Version 3.1.
2. Local municipal councils have the option of drafting the New Resolution (as defined in the Template) on the council or equivalent governing body letterhead or submitting a completed Template.
3. Words in between square brackets (i.e. "[" and "]") are immaterial to the intent of the Template and may be modified to follow standard procedure of the issuing body. Wording not contained within square brackets must not be changed in order for the New Resolution to be acceptable for the purposes of achieving NTP. No additional wording (aside from completing the blanks) may be added.
4. All information provided in the New Resolution must be consistent with the information contained in the Prior Resolution. The Local Municipality named in the New Resolution must be the Local Municipality in which the Project is located. The Renewable Fuel type named in the New Resolution must be the same as that contained on the Supplier's FIT Contract Cover Page.
5. No Prior Resolution related to the Project will be accepted for the purposes of achieving NTP.
6. The entirety of the Template (all blanks) must be completed and it must be signed by authorized individual(s). There should be no delegation of authority contained in the New Resolution.
7. This instruction page is not required to be submitted to the IESO.