



# AGENDA

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## GENERAL COMMITTEE

THE CORPORATION OF THE CITY OF MISSISSAUGA  
[www.mississauga.ca](http://www.mississauga.ca)

**WEDNESDAY, DECEMBER 5, 2012 – 9:00 A.M.**

COUNCIL CHAMBER – 2<sup>nd</sup> FLOOR – CIVIC CENTRE  
300 CITY CENTRE DRIVE, MISSISSAUGA, ONTARIO, L5B 3C1

### Members

Mayor Hazel McCallion	
Councillor Jim Tovey	Ward 1
Councillor Pat Mullin	Ward 2
Councillor Chris Fonseca	Ward 3
Councillor Frank Dale	Ward 4
Councillor Bonnie Crombie	Ward 5
Councillor Ron Starr	Ward 6
Councillor Nando Iannicca	Ward 7
Councillor Katie Mahoney	Ward 8
Councillor Pat Saito	Ward 9 (Chair)
Councillor Sue McFadden	Ward 10
Councillor George Carlson	Ward 11

Contact:

Sacha Smith, Legislative Coordinator, Office of the City Clerk  
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INDEX – GENERAL COMMITTEE – DECEMBER 5, 2012CALL TO ORDERDECLARATIONS OF DIRECT (OR INDIRECT) PECUNIARY INTERESTAPPROVAL OF THE AGENDAPRESENTATIONSDEPUTATIONS

- A. Item 1 Lincoln Kan, Manager, Environmental Services
- B. Item 1 Christine Zimmer, Manager, Protection and Restoration, Credit Valley
- C. Item 1 Ryan J. Eickmeier, Manager Government Relations & Policy,  
Real Property Association of Canada
- D. Item 1 Jean-Marc Rouleau, Director, Retail, Oxford Properties Group
- E. Item 1 Bri-Ann Stuart, General Manager, Dixie Outlet Mall
- F. Item 1 Bob Langlois, Managing Director, Operation, AEC International
- G. Item 1 Anila Roopnarine, Steve Stevens, Gord Brady, Property Managers,  
RioCan
- H. Item 1 Normand Leduc, Director Property Tax, Ivanhoé Cambridge
- I. Item 1 Glen Broll, Glen Schnarr & Associates Inc. on behalf of the Archdiocese  
of Toronto
- J. Item 1 Paul Wartman, We Are What We Eat – Mississauga Permaculture
- K. Item 1 Kiruthiha Kulendiren, President, Lisgar Residents Association
- L. Item 3 Mary P. Bracken, Environmental Specialist, Community Services

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INDEX – GENERAL COMMITTEE – DECEMBER 5, 2012  
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MATTERS TO BE CONSIDERED

1. Stormwater Financing Study (Phase 1) – Funding Recommendations
2. Cooksville Creek Flood Evaluation Study Update (Ward 1, 3, 4, 5, 6 & 7)
3. New Revised Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program
4. Prohibition of Nuisance Lighting within the City of Mississauga
5. Request for an Exemption to Section 22 (2) of the Animal Care and Control By-law 0098-04, as amended, to permit an existing Pigeon Enclosure at 3292 Oakglade Crescent, (Ward 6)
6. Contract Upset Limit Increase, The Hauling of Waste from City Facilities, Procurement FA.49.372-11
7. Permit Parking – Industrial Permit Parking Pilot (Ward 5 and 9)
8. 15- hour Parking - Novo Star Drive (Ward 11)
9. Proposed Prohibited Pedestrian Crossing - Royal Windsor Drive and Avonhead Road/Private Access (Ward 2)
10. Assumption of Municipal Services (Wards 3, 7 and 11)
11. Corporate Policy and Procedure - Accessibility Policy
12. 2012 Year-End Operating Financial Forecast as of September 30, 2012, 3<sup>rd</sup> Quarter
13. Port Credit BIA Levy Adjustment – Extended Repayment Terms (Ward 1)
14. City Standards for IT Systems and Acquisition of Support and Maintenance Services for Standard Systems (File Ref: FA.49.0002-13)
15. Request for Extension of Developement Charges Deferral Agreement for Building Permit 10-1690 and Agricultural Exemption and Amendment to the Mississauga Development Charges By-law 0342-2009

INDEX – GENERAL COMMITTEE – DECEMBER 5, 2012  
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16. **(Unfinished Business)** - Recommendation GOV-0029-2012  
That Council consider a motion regarding the use of communication devices by Members of Council during meetings that incorporates the comments from the Governance Committee.

**This item was considered at Council on November 28, 2012 and was deferred for discussion at the December 5, 2012 General Committee meeting.**

ADVISORY COMMITTEE REPORTS

Mississauga Accessibility Advisory Committee Report 4-2012 - November 19, 2012

Road Safety Mississauga Advisory Committee Report 5-2012 - November 20, 2012

Museums of Mississauga Advisory Committee Report 5-2012 – November 26, 2012

Traffic Safety Council Report 9-2012 – November 28, 2012

COUNCILLORS' ENQUIRIES

CLOSED SESSION

(Pursuant to Subsection 239 (2) of the *Municipal Act, 2001*)

- A. A proposed or pending acquisition or disposition of land by the municipality or local board – Dedication to the City of the Stonebrook Sales Office and Lands Revised Recommendations - Lakeshore Road West (Ward 2)
- B. A proposed or pending acquisition or disposition of land by the municipality or local board – Sheridan College Hazel McCallion Campus Phase II Update (Ward 4)

ADJOURNMENT

CALL TO ORDERDECLARATIONS OF DIRECT (OR INDIRECT) PECUNIARY INTERESTAPPROVAL OF THE AGENDAPRESENTATIONSDEPUTATIONS

- A. Item 1 Lincoln Kan, Manager, Environmental Services
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- K. Item 1 Kiruthiha Kulendiren, President, Lisgar Residents Association
- L. Item 3 Mary P. Bracken, Environmental Specialist, Community Services

MATTERS TO BE CONSIDERED1. Stormwater Financing Study (Phase 1) – Funding Recommendations

Corporate Report dated November 23, 2012 from the Commissioner of Transportation and Works with respect to the Stormwater Financing Study.

RECOMMENDATION

1. That the City's stormwater program move from a property tax supported program to a stormwater rate funded program, using a tiered single family unit rate structure, as described in the report dated November 23, 2012 from the Commissioner of Transportation and Works titled *Stormwater Financing Study (Phase 1) – Funding Recommendations*.
2. That staff report back to General Committee with a detailed implementation plan addressing the establishment and administration of a credit system, cost to implement and maintain the stormwater rate based program, billing mechanism and related policy and business process considerations.

2. Cooksville Creek Flood Evaluation Study Update (Wards 1, 3, 4, 5, 6 & 7)

Corporate Report dated November 19, 2012 from the Commissioner of Transportation and Works with respect to the Cooksville Creek Flood Evaluation Study Update.

RECOMMENDATION

That the report dated November 19, 2012 from the Commissioner of Transportation and Works titled *Cooksville Creek Flood Evaluation Study Update* be received for information.

3. New Revised Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program

Corporate Report dated November 21, 2012 from the Commissioner of Community Services with respect to the New Revised Council Resolution in Support of Rooftop Solar Application Under the Provincial Feed-in Tarriff Program.

RECOMMENDATION

1. That Council pass a resolution supporting rooftop solar projects in Mississauga as outlined in the Corporate Report titled "New Revised Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program dated November 21, 2012 from the Commissioner of Community Services.
2. That a resolution repealing Resolutions 0170-2012 and 0219-2012 be passed by Council.

4. Prohibition of Nuisance Lighting within the City of Mississauga

Corporate Report dated November 21, 2012 from the Commissioner of Transportation and Works with respect to the prohibition of nuisance lighting within the City of Mississauga.

RECOMMENDATION

1. That the report to General Committee, dated November 21, 2012, from the Commissioner of Transportation and Works titled "Prohibition of Nuisance Lighting within the City of Mississauga" be received for information.
  2. That a By-law (Appendix 1) to prohibit Nuisance Lighting within the City of Mississauga be enacted.
  3. That Compliance and Licensing Enforcement staff enforce the Nuisance Lighting By-law on a reactive basis to complaints received in the manner set out in the Enforcement Action Plan outlined in the report dated November 21, 2012, from the Commissioner of Transportation and Works titled "Prohibition of Nuisance Lighting within the City of Mississauga".
5. Request for an Exemption to Section 22 (2) of the Animal Care and Control By-law 0098-04, as amended, to permit an existing Pigeon Enclosure at 3292 Oakglade Crescent, (Ward 6)

Corporate Report dated October 19, 2012 from the Commissioner of Transportation and Works with respect to a request for an exemption to section 22(2) of the Animal Care and Control By-law 0098-04, as amended, to permit an existing pigeon enclosure at 3292 Oakglade Crescent.

RECOMMENDATION

That a By-law (Appendix 1) to grant an exemption to the Animal Care and Control By-law 0098-2004, as amended, be enacted exempting the existing pigeon enclosure located in the rear yard at 3292 Oakglade Crescent, being a detached residential property owned by Mr. Leszek Chrusciak, from Section 22 (2) of the Animal Care and Control By-law 0098-04, as amended.

6. Contract Upset Limit Increase, The Hauling of Waste from City Facilities, Procurement FA.49.372-11

Corporate Report dated November 19, 2012 from the Commissioner of Transportation and Works with respect to the hauling of waste from City facilities contract.

RECOMMENDATION

That the Purchasing Agent be authorized to increase the upset limit of the existing Purchase Order No. 4600013458 from \$470,584.00 (excluding tax) to \$570,584.00 (excluding tax) to enable Rexdale Disposal Ltd., under the Hauling of Waste from City Facilities (Procurement No. FA.49.372-11) to complete the services at the various City of Mississauga facilities to the end of 2012.

7. Permit Parking – Industrial Permit Parking Pilot (Ward 5 and 9)

Corporate Report dated November 19, 2012 from the Commissioner of Transportation and Works with respect to an Industrial Permit Parking Pilot.

RECOMMENDATION

That a by-law be enacted to amend By-law 555-2000, as amended, to implement on-street permit parking anytime at the following locations:

- thereof on the west side of Century Avenue, from a point 315 meters (1033 feet) east of the north leg of Argentia Road, to a point 75 meters (246 feet) southerly thereof;
- on the south side of Explorer Drive, from a point 70 meters (246 feet) east of Satellite Drive, to a point 175 meters (574 feet) easterly thereof;
- on the north side of Skymark Avenue, from a point 115 meters (377 feet) east of Orbitor Drive, to a point 100 meters (328 feet) easterly thereof;
- on the east side of Commerce Boulevard, from a point 25 meters (82 feet) north of Citation Place, to a point 75 meters (246 feet) northerly.

8. 15- hour Parking, Novo Star Drive (Ward 11)

Corporate Report dated November 9, 2012 from the Commissioner of Transportation and Works with respect to 15-hour parking on Novo Star Drive.

RECOMMENDATION

That a by-law be enacted to amend By-law 555-2000, as amended, to implement 15-hour parking on the south side of Novo Star Drive between Western Skies Way/Amour Terrace to a point 92 metres (301 feet) easterly thereof.

9. Proposed Prohibited Pedestrian Crossing - Royal Windsor Drive and Avonhead Road/Private Access (Ward 2)

Corporate Report dated November 15, 2012 from the Commissioner of Transportation and Works with respect to a proposed prohibited pedestrian crossing at Royal Windsor Drive and Avonhead Road/Private Access.

RECOMMENDATION

That a by-law be enacted to amend By-law 555-2000, as amended, to implement a north/south pedestrian crossing prohibition on the east side of Royal Windsor Drive and Avonhead Road/Private Access.

10. Assumption of Municipal Services (Ward 3, 7 and 11)

Corporate Report dated November 16, 2012 from the Commissioner of Transportation and Works with respect to the assumption of municipal services.

RECOMMENDATION

1. That the City of Mississauga assume the municipal works as constructed by the developer under the terms of the Municipal Works Agreement for City File CD.21.ROL, MCAP Financial Corporation (on behalf of Heritage Walk Phase II Limited and Bellasio Developments Limited (also known as, Rollinsford Development Corporation and Philmor Developments Limited)), (lands located north of Carding Mill Place, east of The Credit River, west of Second Line West and south of Old Derry Road, in Z-45E, known as Heritage Walk) and that the Letter of Credit in the amount of \$161,201.09 be returned to the developer.

CD.21.ROL (Ward 11)

2. That the City of Mississauga assume the municipal works as constructed by the developer under the terms of the Municipal Works Agreement for H-OZ 002/05, Amacon Development (Huronario) Corporation, (lands located north of Central Parkway West, east of Confederation Parkway, west of Hurontario Street and south of Burnhamthorpe Road West, in Z-22, known as Kariya Drive Development) and that the Letter of Credit in the amount of \$113,399.64 be returned to the developer.

H-OZ 002/05 (Ward 7)

3. That the City of Mississauga assume the municipal works as constructed by the developer under the terms of the Municipal Works Agreement for H-OZ 002/08, Gemini Urban Design Corp., (lands located north of Bonneymede Drive, east of Southdown Road, west of Inverhouse Drive and south of Lakeshore Road, in Z-03, known as Lushes Avenue Development) and that the Letter of Credit in the amount of \$66,861.20 be returned to the developer.

H-OZ 002/08 (Ward 03)

11. Corporate Policy and Procedure - Accessibility Policy

Corporate Report dated November 23, 2012 from the Commissioner of Corporate Services and Treasurer with respect to the proposed Accessibility Policy.

RECOMMENDATION

1. That the proposed Corporate Policy and Procedure – Accessibility Policy attached as Appendix 1 to the report dated November 23, 2012 from the Commissioner of Corporate Services and Treasurer, be approved.
2. That the attached Policy for Corporate Administration, Provision of Services to Persons with Disabilities – 03-08-03, be rescinded.

12. 2012 Year-End Operating Financial Forecast as of September 30, 2012, 3<sup>rd</sup> Quarter

Corporate Report dated November 22, 2012 from the Commissioner of Corporate Services and Treasurer with respect to the 2012 Year-End Operating Financial Forecast as of September 30, 2012, 3<sup>rd</sup> Quarter.

RECOMMENDATION

1. That the 2012 Year-End Operating Financial Forecast and Adjustments as of September 30, 2012, as outlined in the Corporate Report dated November 22, 2012 from the Commissioner of Corporate Services and Treasurer entitled "2012 Year-End Operating Financial Forecast as of September 30, 2012, 3<sup>rd</sup> Quarter," be received.
  2. That up to \$3.0 million of the year-end surplus be approved for transfer to the General Contingency Reserve (Account #305125) to increase the Reserve to approximately 1% of the City's gross operating expenditures, and any remaining surplus above \$3.0 million be approved for transfer to the Capital Reserve Fund (Account #33121) to provide for future capital infrastructure requirements;
  3. That up to \$442,300 be approved for transfer to the Operating Budget Reserve (Account #305145);
  4. That the budget adjustments listed in Appendix 4 attached to the Corporate Report dated November 22, 2012 from the Commissioner of Corporate Services and Treasurer be approved; and
  5. That normal year-end program transfers to and from reserves and reserve funds, based on actual 2012 performance, be authorized as required.
13. Port Credit BIA Levy Adjustment – Extended Repayment Terms (Ward 1)

Corporate Report dated November 20, 2012 from the Commissioner of Corporate Services and Treasurer with respect to the Port Credit BIA Levy Adjustment.

RECOMMENDATION

That \$96,676.37 due from the Port Credit Business Improvement Area resulting from successful assessment appeals by commercial property owners in the area be repaid by withholding \$19,335.27 each year from 2013 to 2017 from the annual Port Credit Business Improvement Area levy requisition.

14. City Standards for IT Systems and Acquisition of Support and Maintenance Services for Standard Systems (File Ref: FA.49.0002-13)

Corporate Report dated November 20, 2012 from the Commissioner of Corporate Services and Treasurer with respect to City Standards for IT Systems and Acquisition of Support and Maintenance Services for Standard Systems.

RECOMMENDATION

1. That the updated City Standards for IT Systems as listed in Appendix 1 of the report dated November 20, 2012 from the Commissioner of Corporate Services and Treasurer, be approved.
  2. That the Purchasing Agent be authorized to negotiate and execute agreements to cover 2013 annual support and maintenance for City Standard IT Systems, where the estimated cost will exceed \$100,000.
  3. That the Purchasing Agent be authorized to issue blanket purchase orders to Bell Mobility, Rogers Wireless Inc. and Telus Mobility for 2013 wireless communications services in the estimated amount of \$704,500.
15. Request for Extension of Development Charges Deferral Agreement for Building Permit 10-1690 and Agricultural Exemption and Amendment to the Mississauga Development Charges By-law 0342-2009

Corporate Report dated November 16, 2012 from the City Solicitor with respect to a request for the extension of Development Charges Deferral Agreement for Building Permit 10-1690 and Agricultural Exemption and Amendment to the Mississauga Development Charges By-law 0342-2009.

RECOMMENDATION

1. That the report of the City Solicitor dated November 16, 2012 entitled Request for Extension of Development Charges Deferral Agreement for Building Permit 10-1690, and the Agricultural Exemption Amendment to the Mississauga Development Charges By-law 0342-2009 be received for information;
2. That Council approve an extension of time to December 31, 2014 to the Development Charges Deferral Agreement executed on September 15, 2010 between the City of Mississauga, Albert Francis Hustler and Theresa Rose Hustler, for the payment of the development charges under Building Permit 10-1690 with respect to the land located at 7564 Tenth Line West, in the City of Mississauga.

**16. (Unfinished Business) - Recommendation GOV-0029-2012**

Recommendation GOV-0029-2012

That Council consider a motion regarding the use of communication devices by Members of Council during meetings that incorporates the comments from the Governance Committee.

**This item was considered at Council on November 28, 2012 and was deferred for discussion at the December 5, 2012 General Committee meeting.**

**ADVISORY COMMITTEE REPORTS**

Mississauga Accessibility Advisory Committee Report 4-2012 - November 19, 2012  
(Recommendation AAC-0028-2012 to AAC-0039-2012)

Road Safety Mississauga Advisory Committee Report 5-2012 - November 20, 2012  
(Recommendation RSM-0023-2012 to RSM-0025-2012)

Museums of Mississauga Advisory Committee Report 5-2012 – November 26, 2012  
(Recommendation MOMAC-0039-2012 to MOMAC-0045-2012)

Traffic Safety Council Report 9-2012 – November 28, 2012  
(Recommendation TSC-0192-2012 to TSC-0224-2012)

**COUNCILLORS' ENQUIRIES****CLOSED SESSION**

(Pursuant to Subsection 239 (2) of the *Municipal Act, 2001*)

- A. A proposed or pending acquisition or disposition of land by the municipality or local board – Dedication to the City of the Stonebrook Sales Office and Lands Revised Recommendations - Lakeshore Road West (Ward 2)
  
- B. A proposed or pending acquisition or disposition of land by the municipality or local board – Sheridan College Hazel McCallion Campus Phase II Update (Ward 4)

**ADJOURNMENT**



# Corporate Report

Clerk's Files

Originator's  
Files

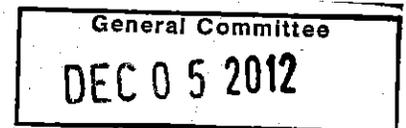
MG.23.REP

**DATE:** November 23, 2012

**TO:** Chair and Members of General Committee  
Meeting Date: December 5, 2012

**FROM:** Martin Powell, P. Eng.  
Commissioner of Transportation and Works

**SUBJECT:** **Stormwater Financing Study (Phase 1) – Funding  
Recommendations**



- RECOMMENDATION:**
1. That the City's stormwater program move from a property tax supported program to a stormwater rate funded program, using a tiered single family unit rate structure, as described in the report dated November 23, 2012 from the Commissioner of Transportation and Works titled *Stormwater Financing Study (Phase 1) – Funding Recommendations*.
  2. That staff report back to General Committee with a detailed implementation plan addressing the establishment and administration of a credit system, cost to implement and maintain the stormwater rate based program, billing mechanism and related policy and business process considerations.

**REPORT  
HIGHLIGHTS:**

- The current stormwater program does not meet all of the City's needs and a program which can address much of the identified pressures is necessary
- Staff identified that a stormwater rate based on a user pay model would best fund the City's stormwater program
- A credit and incentive program will be developed
- Properties that are exempt by statute from municipal fees and charges are identified

**BACKGROUND:**

The City's stormwater management system comprises infrastructure assets valued at \$1.6 billion in current replacement value, including storm sewers, catchbasins, inlets and outlets, bridges and culverts, watercourses and ponds. The management of these assets includes the design and construction of capital infrastructure such as stormwater management ponds, stream rehabilitation and flood mitigation works, operations, maintenance and rehabilitation of existing infrastructure, environmental compliance, emergency response and clean-up, street sweeping and the enforcement of by-laws, among other activities. By controlling the quality and quantity of stormwater reaching our streams and rivers, stormwater management systems protect the health and safety of the public and the natural environment.

Despite investments in the City's stormwater infrastructure, stormwater related issues such as flooding, water quality and stream erosion continue to exist. As this infrastructure continues to age it will incur additional operation, maintenance and capital improvement costs over time to sustain sufficient levels of service. Further, regulatory requirements and design standards continue to evolve and become more rigorous in addressing environmental impacts of stormwater. In addition, adaptation to the inherent uncertainties and variabilities with extreme weather events (e.g. climate change) are expected to add pressures in the future that will have to compete for limited public funds.

*Toronto's Future Weather & Climate Drive Study* released by the Toronto Environment Office in October of this year projects that by 2049, the maximum amount of rainfall expected in any single day and in any single hour will more than double. This expectation of future extreme rainfall events indicates a critical need on the part of the City to ensure that its stormwater infrastructure is developed and maintained over time.

In order to support current and future stormwater management programs, alternative funding options beyond property taxes and development charges need to be explored.

On September 14, 2011, Council approved a report dated August 16, 2011 from the Commissioner of Transportation and Works titled *Stormwater Financing Study (Phase 1)* to commence a study to determine the appropriate funding approach in support of its stormwater management program.

In February of 2012, a consulting team led by AECOM was retained by the City to undertake a Stormwater Financing Study. This team was tasked to identify, review and evaluate alternative funding mechanisms to support the City's stormwater management program and to recommend the preferred funding approach. To achieve this goal, the following steps were undertaken by the project team:

- compile and quantify the cost of the City's existing stormwater management program, including operations and maintenance, asset management, planning and monitoring activities and capital plans
- develop and evaluate various stormwater management program options based on varying levels of service and recommend a program that will meet the desired levels of service, targets for compliance with regulations and other future pressures
- review available stormwater financing options
- recommend the preferred option that offers the most fair and equitable method for allocating the costs of the stormwater management program

The Stormwater Financing Study (Phase 1) is near completion. This report provides a summary of the work and consultation undertaken to arrive at the funding approach recommendations for Council consideration.

**COMMENTS:**

A significant level of effort has been undertaken in determining the preferred funding approach for the City's stormwater management program. The following identifies and highlights the major tasks undertaken to achieve this goal.

Consultation

An integral component of this study has been consultation with the public and private sectors. Input received through this process has contributed to the direction and development of the many facets of this study. The following summarizes the public engagement process undertaken as part of this study.

*Stormwater Financing Stakeholder Group*

Approximately 35 invitations were sent out by Mayor McCallion at the beginning of this study to solicit membership on a Stormwater

Financing Stakeholder Group (SFSG). Invitees included representatives from residential ratepayer groups, the business and development communities, tax-exempt properties and others such as conservation authorities. They were asked to represent the views of their organizations or sector and provide input on issues such as priorities of the City's stormwater management program and setting an appropriate level of service and expenditure to meet these needs.

Over the course of the study, six planned SFSG meetings were held with an average of 15 well engaged representatives attending each meeting.

#### *Public Information Meetings*

Two public information meetings were held on June 27, 2012 and November 20, 2012, with poster board displays and presentations given at both meetings. Written comments received have been included as Appendix 1.

#### *Other Engagements*

Individual meetings were held with numerous organizations and stakeholder group members, including the Mississauga Board of Trade, Orlando Corporation, a joint meeting with representatives from the Building Owners and Managers Association Toronto (BOMA), the International Council of Shopping Centers (ICSC), the Commercial Real Estate Development Association Greater Toronto (NAIOP) and the Real Property Association of Canada (REALpac) and individual residential ratepayer representatives.

Written comments and submissions were also received from interested parties, including Orlando Corporation, the Greater Toronto Airport Authority (GTAA), an Environmental Advisory Committee member, the Credit River Anglers Association and a joint submission from BOMA Toronto, ICSC, NAIOP and REALpac (industrial and commercial sector). These are included in Appendix 1.

#### Service Levels

As noted earlier, stormwater related pressures continue to exist despite investments in the City's stormwater infrastructure. These pressures include the following and are summarized in detail in Appendix 2:

- Minimize storm related flood risks
- Enhance water quality treatment initiatives
- Enhance by-law enforcement
- Enhance monitoring and maintenance activities
- Climate change adaptation
- Regulatory requirements
- Infrastructure life-cycle renewal costs

It should be noted that some of these pressures are relatively new to the City and other municipalities such as the uncertainties related to climate change and the need to adapt to the impact of severe weather. This issue is highlighted by the fact that the Insurance Bureau of Canada has indicated that the majority of claim payouts are now related to severe weather and water damage.

Another pressure that is of significance is infrastructure life-cycle renewal. All components of stormwater infrastructure have a useful service life and will ultimately fail if these assets are not renewed, replaced or rehabilitated over the long term. Stormwater management ponds and watercourses in Mississauga are nearing the end of their useful service life and require rehabilitation (e.g. dredging of ponds). The City has been taking steps within its budget allocation to reinvest through prioritized capital projects. However, given the relatively young age of the City's stormwater pipe assets (average of 30 years into a 100-year service life), representing approximately \$1.6 billion in current replacement value, there has not been any significant immediate pressure to reinvest in this storm sewer/collection system. However, pipe assets cannot be ignored indefinitely and the City needs to be practical and consider raising funds for their inevitable renewal or replacement.

The current funding of the City's stormwater program is through a combination of development charge and tax levy. Development charges are used to finance the construction of new growth related capital infrastructure and are applied to all new developments. Tax revenue is used to construct and maintain capital infrastructure such as dredging of stormwater management ponds, watercourse rehabilitation and storm sewer replacement. It should be noted that this stormwater financing study is only considering financing options related to the tax component of the stormwater program.

Three stormwater program service levels were developed in consideration of the pressures discussed above. These service levels are called "Status Quo", "Interim" and "Sustainable", as described below.

*Status Quo Service Level*

- Based on the 2012 Capital and Operating Budgets and maintains the current level of service
- Unfunded Capital Program needs identified in the 2012 to 2021 Capital Budget and Forecast (primarily the Cooksville Creek Flood Remediation facilities and land costs) would remain unfunded
- Unfunded Operations and Maintenance pressures (such as enhancing watercourse maintenance, by-law enforcement and foundation drain collector (FDC) monitoring/maintenance) would remain unfunded
- No money would be put aside for future storm infrastructure (storm pipe system) renewal needs
- Estimated annual cost (tax component) = \$14,650,000

*Interim Service Level*

- Based on all Capital Program needs identified in the 2013 to 2022 Capital Budget and Forecast
- Includes currently unfunded Operations and Maintenance pressures
- Introduces a "Pipe Renewal" reserve fund, starting with a modest initial collection rate of 0.15% of the storm pipe system replacement cost (\$1.6 billion in 2012), or \$2.4 million, which would be increased by 0.01%, or \$0.16 million annually (not including inflation)
- Estimated annual cost (tax component) = \$26,610,000

*Sustainable Service Level*

- Based on all Capital Program needs identified in the 2013 to 2022 Capital Budget and Forecast
- Includes currently unfunded Operations and Maintenance pressures
- Introduces a "Pipe Renewal" reserve fund with an annual collection rate of 1% of the storm pipe system replacement

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cost (\$1.6 billion in 2012), or \$16 million (not including inflation) based on the expected life-cycle for this infrastructure of 100 years

- If this service level is chosen, all of the currently identified Capital, Operations and Maintenance and pipe renewal needs would be funded
- Estimated annual cost (tax component) = \$39,490,000

The cost breakdown of the stormwater program items is shown in Table 1. These figures reflect the tax component of the programs only.

Table 1: Breakdown of Average Annual Program Cost

Stormwater Program Item	Existing (2012)	Future (Average Annual Program)		
		Status Quo	Interim	Sustainable
Capital	\$8,030,000	\$8,030,000	\$15,540,000	\$15,540,000
Operations & Maintenance	\$6,620,000	\$6,620,000	\$7,950,000	\$7,950,000
Pipe Renewal Reserve	\$0	\$0	\$3,120,000	\$16,000,000
<b>Program Total</b>	<b>\$14,650,000</b>	<b>\$14,650,000</b>	<b>\$26,610,000</b>	<b>\$39,490,000</b>

After analysis of the various service levels by the project team and through internal and external consultation, the Interim service level was chosen as the most appropriate service level at this time. This approach balances cost and capital and operating pressures along with a modest step towards setting aside funds for future infrastructure renewal cost. Over time, gradual steps towards a Sustainable service level should be taken.

#### Stormwater Financing Model

As described earlier, traditional funding sources for the City's stormwater program are through development charges and property tax. Allocations from property tax are an unreliable means of generating revenue for stormwater related purposes as there are competing interests from the various business areas within the City for the same funds. Stormwater is considered to be a critical program that should not be underfunded. To address the need for more program funding, it is appropriate to consider a funding model that dedicates money for this service in a more predictable and transparent manner.

A number of Ontario municipalities have already transitioned to alternative financing. Over the last few years, the Town of Aurora and the Cities of London, St. Thomas, Kitchener and Waterloo have implemented stormwater user fees of various types. Most notably, the City of Kitchener has implemented a stormwater rate that charges property owners in accordance with their individual stormwater runoff contribution based on the amount of impervious area on their property. The Cities of Markham and Toronto and the Town of Richmond Hill are also investigating alternative stormwater financing.

The major advantages of dedicated stormwater user fees over funds generated through property tax revenues are: (1) increased stability and predictability, (2) greater fairness and equity in calculating charges to individual properties, and (3) the opportunity for incorporating incentives for implementation of on-site stormwater management (e.g. through a credit program as described in further detail below).

In determining the most equitable approach to fund the City's stormwater program, the project team mainly focused on two stormwater user fee approaches, namely a flat fee (based on property size) and a stormwater rate (based on the amount of impervious area).

While a flat fee approach has certain advantages, such as lower administration costs and fewer database management requirements as compared to an impervious area based stormwater rate, this funding mechanism was not favoured as there is less correlation with runoff contribution from each property and therefore, it is less equitable than an impervious area based approach.

The approach preferred by the project team is a stormwater rate which allocates charges to properties based on the measured area of impervious surface. This method measures the hard surface areas of properties such as roofs, driveways and walkways and parking lots to determine their relative contribution of stormwater runoff. This is much more equitable than the current funding approach through property tax, which is based on the assessed value of a home, and it allows for greater ability to encourage environmental responsibility in the form of a credit to property owners for implementing on-site stormwater management measures. However, there are additional costs associated with administration, database management and billing implementation with the impervious area approach.

### Credit Program

A credit program allows property owners the opportunity to receive a reduction in their stormwater rate. Property owners who reduce stormwater runoff or who improve the quality of the stormwater runoff from their property to the City's stormwater system and/or the surrounding water bodies may qualify for a credit.

While the development of a credit program was not intended to be a part of the Stormwater Financing Study, many Stormwater Financing Stakeholder Group members have requested that a review be included. Suggestions were raised that an evaluation of the credit programs offered by the Cities of Kitchener and Waterloo would be of benefit to the study.

Through a preliminary review of the credit programs offered by the Cities of Kitchener and Waterloo, who have jointly developed their respective stormwater rate credit policies, it was determined that, in general, a maximum of 45 percent credit is offered to non-residential and residential properties based on varying criteria. This percentage is based on the portion of the Cities' respective stormwater program costs which can potentially be influenced by stormwater measures on individual properties.

When Mississauga staff compared the City's stormwater program based on the same approach, the findings were similar to that of Kitchener and Waterloo in that approximately 45 percent of the City's stormwater program costs can potentially be influenced by stormwater measures or activities on private and publicly owned properties.

While the development of a credit program has not commenced, it is reasonable to assume that credits given will likely be in the range of 45 percent, with credits above the maximum eligible amount being considered on a case-by-case basis.

Although the City recognizes the importance of on-site stormwater management measures on residential properties, the anticipated high administration cost for a credit application, approval and processing program may outweigh the net savings in the City's stormwater program resulting from this initiative. As such, staff recommends that an incentive program be explored which offers a one-time discount on the capital cost of implementing stormwater controls such as rain

barrels.

### Legal Considerations

Sections 9 and 11, and Part XII of the *Municipal Act, 2001* (the "Act") authorize the City to impose, by by-law, a fee or charge on persons in respect of services provided by a municipality, including stormwater management services. This authority is limited in two respects:

1. Section 2 of Ontario Reg. 584/06 provides that a fee or charge cannot be used for capital costs that could otherwise have been raised through the development charges process; and
2. Where provisions exist in other legislation that expressly exempt entities from paying these charges, then the City cannot legally impose these fees.

The Supreme Court of Canada has clearly stated that there must be a reasonable nexus between fees and charges imposed and services received, failing which a charge could be construed as an unauthorized tax. Accordingly, a reasonable connection must be established between the amount of the stormwater management fee and the cost of the service being provided. This test is met by the work undertaken by City staff in matching fee revenue with the cost of providing a stormwater management service and stormwater management infrastructure. In certain cases, where stormwater management infrastructure has been installed on chargeable property, it will be necessary to establish a credit system to create a reasonable connection between the amount of the service charge and the service being provided.

In respect of entities that may be exempt from paying fees and charges under the Act, it is important to note that an exemption from property tax does not provide an exemption from the payment of fees and charges. For example, land owned by a religious organization and used as a place of worship, a hospital or a university will be exempt from property taxation but will not necessarily be exempt from user fees or charges under the Act. Legislation establishing the Greater Toronto Airports Authority, Ontario Power Generation Inc., University of Toronto, Region of Peel and City of Mississauga, for example, does not provide an exemption from municipal user fees and charges. Ontario Reg. 584/06 establishes that the federal and provincial Crown are not liable to pay municipal fees and charges.

Legislation establishing the Canada Lands Company Ltd, Sheridan College, the Dufferin-Peel Catholic District School Board, the Peel District School Board, Metrolinx and Canada Post Corporation are examples where legislation provides that these entities are exempted from municipal fees and charges.

#### Stormwater Financing Approach

After consideration of the different service levels and funding mechanisms, internal and external consultation and legal advice, the following stormwater financing approach is recommended:

- Target the funding level for the stormwater program based on the Interim service level
- Implement a stormwater rate based on a tiered single family unit (SFU) rate structure
- Charge the stormwater rate to all properties except those exempted from payment of municipal fees and charges through legislation
- Recover the exempted properties' share of the stormwater program cost from the stormwater rate
- Develop a credit program for non-residential properties and an incentive program for residential properties, and that the cost of these credits and incentives be recovered by the stormwater rate

#### *Property Tax Funding*

Before delving into the recommended approach, it is important to first set a benchmark by identifying what the impact would be on tax payers if the funding for the various service levels were to remain on the property tax levy. The table in Appendix 3 presents the annual stormwater cost for various properties under the three service levels previously discussed compared to current cost. Table 2 below is an abbreviated version of the table in Appendix 3 to aid discussion on property tax funding.

Table 2: Funding of Stormwater Program Through Property Tax  
(present value)

Stormwater Program Item	Existing (2012)	Tax Financing of Future Stormwater Management Program		
		Status Quo	Interim	Sustainable
Program Cost	\$14,650,000	\$14,650,000	\$26,610,000	\$39,490,000
Property Tax & PILT Allocation	2.36%	3.96%	7.19%	10.67%
Single-Family Detached Home (Annual Cost)				
Average assessed value	\$28.58	\$48.01	\$87.21	\$129.42
Condominium (Annual Cost) - Example				
Sherobee Road	\$15.86	\$26.64	\$48.39	\$71.82
Multi-Family (7+ Units) (Annual Cost)				
Goreway Drive (per unit)	\$10.54	\$17.71	\$32.18	\$47.75
Commercial (Annual Cost) - Example				
Mall	\$10,445	\$17,548	\$31,875	\$47,303

As shown under the *Existing (2012)* column, approximately 2.4 percent of the revenues generated from property taxes and payments in lieu of taxes in 2012 were allocated to fund the City's stormwater program. It is important to note that this only accounts for \$8.7 million of the total program cost, with the remaining \$5.9 million coming primarily from reserves (taxes and revenue collected from other years). While recognizing that using reserves to fund the stormwater program is no longer sustainable, the *Status Quo* column shows that to fully fund the existing stormwater program of \$14.65 million from the current tax levy, approximately 4 percent of the total property tax and payment in lieu of tax collected would be necessary. On the same note, it would require 7.2 percent and 10.7 percent to fund the Interim and Sustainable service levels respectively. As an example, for a single-family home assessed at the average value in Mississauga (based on a sample size of 600 single family detached homes), the homeowner is currently paying \$29 annually into the City's stormwater program. If the property tax allocation was increased to fund the Status Quo \$14.65 million program (instead of \$8.7 million currently), that same homeowner would pay \$48 annually for stormwater. The cost would increase to \$87 and \$130 annually to support the stormwater program based on the Interim and Sustainable service levels.

### *Stormwater Rate Option*

Appendix 4 presents a breakdown of the estimated stormwater rates under the recommended Interim service level approach, with the Status Quo and Sustainable service levels shown for comparison purposes.

Results from the statistical analysis of single-family detached homes suggest that a Tiered Single-Family Unit (SFU) is appropriate as the preferred billing unit for Mississauga as it best accounts for the variability in impervious area without requiring that all residential properties be measured. There is a dramatic difference in the impervious area of the smallest and largest 10 percent of single-family homes when compared to the average value, and establishing distinct SFU values for each tier (0.7 SFU for small homes, 1.4 SFU for large homes) is consistent with the fairness and equity principles. Single-family homes would be assigned to one of three tiers: small (the lowest 10-percentile impervious area size), medium (between 10- and 90-percentile), and large (90-percentile and above).

In developing the estimated stormwater rates, several assumptions were made. An annual rate administration cost estimate of \$770,000 has been included in the base rate. This estimate is founded on the assumption that the stormwater bill would be added to an existing utility billing system. However, if a new billing system needs to be developed, the costs would be higher. Therefore, this amount is subject to change once the appropriate billing system is defined. Further, allowances for credits (5-7%) and non-payments (1-3%) have also been built into the base rate. These allowances will require adjustment once a credit program and policy have been developed.

The estimated base rates representing the annual cost per single family unit (SFU), which 80 percent of single family detached homes fall under, are shown for the three service levels:

- Status Quo: \$52.68 per year
- Interim: \$93.60 per year
- Sustainable: \$137.64 per year

This means that the average single family residential homeowner will pay \$7.80 monthly to fund the Interim Service Level.

Comparison of Tax versus Estimated Stormwater Rate

The table in Appendix 5 provides a comparison of representative charges based on tax and estimated stormwater rates under the Interim service level based on the recommended approach described above. Table 3 summarises Appendix 5 with a breakdown of the costs. It should be noted that these figures are in present day values (no inflation).

Table 3: Comparison (Tax versus Estimated Stormwater Rate)

Stormwater Program Item	Existing (2012)	Status Quo	Interim Service Level	
		Tax	Tax	Rate
<b>Single-Family Detached Home (Annual Charge)</b>				
10-percentile (Small Tier)	\$22.10	\$37.13	\$67.44	\$64.52
Average assessed value (Medium Tier)	\$28.58	\$48.01	\$87.21	\$93.60
90-percentile (Large Tier)	\$40.69	\$68.36	\$24.16	\$127.84
Brooks Drive	\$28.37	\$47.66	\$86.57	\$93.60
Robin Drive	\$42.69	\$71.72	\$130.28	\$93.60
Homelands Drive	\$27.39	\$46.01	\$83.58	\$93.60
Beacham Street	\$31.08	\$52.22	\$94.85	\$93.60
King Richard's Place	\$40.14	\$67.44	\$122.50	\$93.60
<b>Condominium – Example (Annual Charge)</b>				
Sherobee Road	\$15.86	\$26.26	\$48.39	\$21.45
<b>Multi-Family (7+ Units) – Example (Annual Charge)</b>				
Goreway Drive (per unit)	\$10.54	\$17.71	\$32.18	\$17.10
<b>Commercial – Example (Annual Charge)</b>				
Mall	\$10,445	\$17,548	\$31,875	\$48,587
<b>Tax Exempt – Example (Annual Charge)</b>				
Church (Dundas Street)	\$0	%0	\$0	\$1,399

As shown above, property owners will see a significant cost increase across the board under the proposed financing approach when compared to the existing (2012) scenario. However, as noted previously, the existing 2012 portion of tax levy accounts for only \$8.7 million of the total \$14.65 million program cost with the remainder made up through reserves. The *Status Quo* column reflects the cost if the full \$14.65 million program is fully funded through tax

levy. Further, the service level being funded under the proposed scenario is a \$26.6 million program. When a comparison is made between tax and stormwater rate based on the full \$26.6 million under the Interim service level, there is a shift in revenue distribution from residential to non-residential. While moving from the tax levy to a stormwater rate will see differences in charge ranging between -25 percent to +39 percent for single family detached homes, the condominiums and multi-family units will see a significant decrease, while the non-residential properties with large impervious area will generally be impacted the most. Also, tax-exempt properties that are not exempt from municipal fees and charges will now need to pay a stormwater rate.

#### Issues and Concerns

The public and stakeholders generally agree with the importance of addressing capital investment and operation/maintenance program deficiencies for the City's stormwater program. However, issues have been raised during the study process as highlighted below:

- The process is moving too quickly (insufficient consultation time)
- Concerns from the commercial and industrial sectors with shifting the cost of the stormwater program from the residential sector to non-residential sector
- Concerns from tax-exempt properties who traditionally did not have to pay for the City's stormwater program
- The need to look into a credit program as part of this study
- Concerns that staff is not recommending credits to residential homeowners but instead is looking into incentives/rebates

#### Billing Implementation

Staff is currently investigating available billing system options and information on these options will be provided in a separate memorandum.

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**STRATEGIC PLAN:** The undertaking of a Stormwater Financing Study falls under the Living Green Strategic Pillar and all of its strategic goals to *Lead and Encourage Environmentally Responsible Approaches, Conserve, Enhance and Connect Natural Environments and Promote a Green Culture.*

By controlling the quality and quantity of stormwater reaching our streams and rivers, stormwater management systems protect the health and safety of the public and the natural environment.

**FINANCIAL IMPACT:** The overall revenue generated through a stormwater rate will provide a dedicated and reliable funding source to address the many stormwater related pressures. It should be noted that \$900,000 has been approved in the 2012 Capital Plan to undertake the implementation phase; however, this was based on best estimates and may be insufficient. Staff will bring back a further report to General Committee with an implementation plan and related cost.

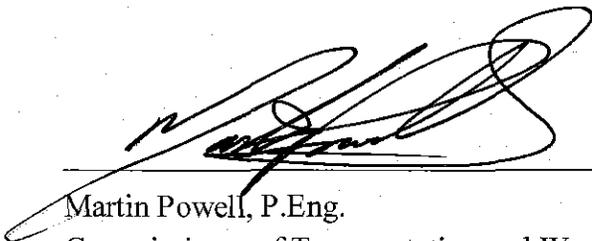
**CONCLUSION:**

1. The work undertaken by the project team has determined that the most appropriate stormwater financing option that is dedicated and more equitable is a stormwater rate based on a tiered single family unit (SFU) rate structure.
2. A stormwater program based on the Interim Service Level is the most appropriate as it provides the capital and operating funding needed to address the current pressures that the City is facing, with a modest step toward setting aside funds for future infrastructure renewal cost.
3. A number of entities are exempted from payment of municipal fees and charges through legislation and that these exempted properties' share of the stormwater program cost should be spread across the user base.
4. A credit program will need to be developed which will provide credits to non-residential properties that provide on-site stormwater management measures and incentives to residential properties and spread these costs across the user base. This credit program will coincide with billing implementation.

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**ATTACHMENTS:**

- Appendix 1: Public Comments
- Appendix 2: Pressures on Stormwater Program
- Appendix 3: Property Tax Option
- Appendix 4: Estimated Stormwater Rate (Tiered SFU, with Fee Exemptions)
- Appendix 5: Comparison: Tax versus Estimated Stormwater Rate



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Martin Powell, P.Eng.  
Commissioner of Transportation and Works

*Prepared By: Lincoln Kan, P.Eng.  
Manager, Environmental Services*

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# PUBLIC INFORMATION MEETING No. 1

June 27, 2012

## Stormwater Financing Study

### Record of Attendance & Additional Comments Form

Please print your name and mailing address clearly. We regret that if your name and address are not legible we will be unable to contact you.

Name: <u>Robert Coste</u>	Address: <u>one five</u>	Phone #: <u>905-615-1868</u>
Email: <u>the costes @ bell.net</u>		

Additional Comments/Questions:

Please drop-off sheet in Comments Box or mail/fax it by July 18th, 2012 to:

City of Mississauga  
 Transportation and Works Department  
 Environmental Services  
 201 City Centre Drive, Suite 800  
 Mississauga, ON L5B 2T4  
 Fax: 905-615-3173

The personal information on this form is collected under authority of Section 11 of the Municipal Act, 2001, and will be used to inform you of any future meetings regarding the Stormwater Financing Study, to respond to your comments/concerns if necessary and to maintain a record of attendance at the public meeting. Questions about the collection of this personal information should be directed to: Mr. Lincoln Kan, Manager, Environmental Services by phone (905-615-3200 ext. 4086) or by mail to the above address.



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# PUBLIC INFORMATION MEETING No. 1

June 27, 2012

## Stormwater Financing Study

The City of Mississauga is interested in hearing the community's comments, questions, concerns and suggestions regarding the current Stormwater Financing Study. Please take a few minutes to complete this brief comment sheet. All comments will be carefully considered as part of this project.

1. Did the information presented tonight provide a clear understanding of the stormwater management issues facing the City?

YES

2. What do you believe are Mississauga's most critical stormwater issues (e.g., flood protection, erosion control, operations/maintenance, pollution prevention, environmental impacts, etc.)?

WE ALL KNOW NOW THAT WE HAVE WHOLESTED / AGING CAG  
① FLOOD PROTECTION ; ② OPERATIONS / MAINTENANCE  
SO #1 IS PRIORITY AND #2 CRITICAL MAINTENANCE

3. How should the City address aging stormwater infrastructure? (select one)

- Repair only when structural failure occurs or is imminent (i.e., let future generations deal with problems as they arise);
- Collect money now to renew and rehabilitate infrastructure in the highest priority areas (i.e., proactively reinvest in consideration of future generations); or
- Other/Comment: \_\_\_\_\_

4. How should the City's stormwater management costs be allocated? (select one)

- Based on each property's taxable value;
- Based on each property's stormwater runoff contribution; or
- Other/Comment: \_\_\_\_\_

FOR THE IDENTICAL  
APPLY CREDITS ON LOWER AREAS  
THROUGH CITY & STATE TO ENCOURAGE  
THE GROWING OF PROTECTED HOMES

5. The main funding options presented tonight included: property taxes, development charges, and a stormwater user fee. Are there any other funding options that should be considered?

TO REDUCE STORM WATER FLOWS WE NEEDED  
MORE SERIOUS FINANCIAL INCENTIVES TO HELP  
INDUSTRY & COMMERCIAL OPERATIONS USE STUR  
PERMEABLE SURFACES

1(s)

**Gregory, Mike (Canada)**

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**From:** Lincoln Kan <Lincoln.Kan@mississauga.ca>  
**Sent:** Wednesday, July 11, 2012 8:10 AM  
**To:** Gregory, Mike (Canada); Jeremy Blair  
**Subject:** FW: Stormwater Financing Committee - Public Comments

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**From:** John Kendell [mailto:johnkendell@rogers.com]  
**Sent:** July 10, 2012 10:04 PM  
**To:** Lincoln Kan  
**Subject:** Stormwater Financing Committee - Public Comments

Hi Lincoln,

It has been a couple years since we met. I hope you are well. I continue to manage CRAA with a substantially growing membership and active executive. Mike Ewaschuk, a volunteer with CRAA will be our lead member working with the city on this project and I will assist where needed. He attended the meeting several weeks ago.

However I thought I would take a moment to share my knowledge, input and experience how it relates to the Credit River watershed and more importantly the fish within and the related values, benefits and needs.

Storm water management, improvement and reduction are top priorities to CRAA and our membership (which is running close to 5,500 now). The impacts on the river and tributaries such as habitat loss, sediment, erosion, etc are well known and an issue that must be dealt with to ensure this recourse is available for the future.

I have noted my comments below for the public meeting 1 and related documents...sorry it is so long!

John Kendell  
416-704-8896 mobile  
905-821-0891 fax  
President, CRAA  
[www.craa.on.ca](http://www.craa.on.ca)

**PUBLIC INFORMATION MEETING No. 1**  
**June 27, 2012**  
**Stormwater Financing Study**

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The City of Mississauga is interested in hearing the community's comments, questions, concerns and suggestions regarding the current Stormwater Financing Study. Please take a few minutes to complete this brief comment sheet. All comments will be carefully considered as part of this project.

***1. Did the information presented tonight provide a clear understanding of the stormwater management issues facing the City?***

Based on my knowledge of the river and urban storm flow the information was very general, but suitable for the broader public except it did lack one important component. While the impacts of erosion and flooding

were shown, there was no information on how that impacts fish and their habitat. How erosion destroys spawning areas, fills in pools, high sediment (especially from new development) smothers eggs and suffocates fish. A photo of a dead fish in the muddy water or fish gasping for air in sediment laden water would illustrate the issue of 'how and why' the fish are impacted.

Comment on slide 4 Water cycle – the photo of row crops as “Low Runoff” is false. You should use a photo of a forest. Row crops have much higher runoff and lower evaporation rates (sort of a half way point between forest and urban). (Fallow agricultural fields also transmit enormous quantities of deleterious sediments to watercourses. Runoff is promoted via rain impact on the exposed soil, which destroys soil aggregates with fine particles clogging interstitial spaces, resulting in decreased infiltration. So the point being made is that agriculture that does not employ best management practices also generates stormwater runoff, albeit this is not much of a concern in Mississauga.)

Comment on slide 6 – The photo of the Credit Valley Golf Club Ice Jam flooding. This flooding was caused by an ice jam that has more to do with the deforestation of the valley between Dundas and the QEW which results in high anchor ice, ice building and thus flooding. The water flow in the river is primarily snow melt from the entire watershed and local urban runoff from Mississauga was a small portion of the cause.

General comments – Wood debris jams and natural (pre colonization level) erosion are natural and essential components of dynamic channel equilibrium. Wood debris jams are only an issue at road crossings where insufficiently small crossings have been installed. Erosion is an issue where it interferes with poorly selected locations for infrastructure and buildings. Erosion is also an issue when its rate is higher than the historic normal, via impervious cover or some other activity (i.e. row-crop agriculture) which has decreased the historic infiltration to runoff ratio.

**2. What do you believe are Mississauga’s most critical stormwater issues (e.g., flood protection, erosion control, operations/maintenance, pollution prevention, environmental impacts, etc.)?**

All of the above.

First step is to select priority areas (this must be a fast process, not a 3 year study but rather your teams knowledge of what to is needed, working with CVC staff and community partners such as CRAA. I strongly suggest the bulk of efforts towards subwatersheds/storm systems on the Credit watershed as a priority given the fishery, endangered species and visibility. An example might be Loyalist Creek as noted below as a priority. Other safety priorities and opportunities (i.e. large benefit sites that want to have work done (i.e. Square One Parking Lot) need to be addressed simultaneously as needed. By putting say 50-75% of effort to one watershed you can make substantial, measurable gains in a short period of time (1-2 years). Once a target area is substantially updated move to the next one. It might take 20 years, but step by step you and your team will have made a huge, measurable improvement to the river, habitat and water quality.

I’d like to point out stormwater impacts to the Credit River and tributaries: In summer in Loyalist Creek, I’ve measured spikes in water temperature from 19°C to over 30°C in a couple of minutes from thunderstorms running off extremely hot pavement, which is more than sufficient to kill all salmonids. Retro-fitting with stormwater ponds must always be bottom drawn and checked to ensure they are releasing cold water with reduced sediment. This creek was historically a coldwater creek, and is still used by salmonid smolts and fry in the summer when the river temps exceed their thermal thresholds. It is critical that we manage it, and other tribs, back towards coldwater streams by reducing impervious cover and promoting infiltration. The high impervious cover in the Loyalist Creek watershed has resulted in wide and shallow channels, or expensive

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armour stoning or engineered stabilized channels. Some portions of the creek are also buried in pipe (Erin Mills Parkway area). Similarly, the main stem of the Credit River tends to be wider and shallower than it should be because of a combination of artificially high stormwater runoff in the watershed and lack of riparian forest. The result is a lack of heterogeneity in fish habitat, and conditions that are conducive to river-warming which are deleterious to the coldwater fishery and many native and endangered species. Again, minimizing artificial stormwater runoff will help remediate this.

In winter, judging by the amount of salt used by residents in my neighbourhood alone, we are likely impacting all Mississauga tributaries (such as Carolyn, Mullet, Loyalist Creeks) and possibly the main river. In a study on Laurel Creek in Waterloo, salt concentrations in the creek via runoff were occasionally recorded at acute levels of toxicity (i.e. instant effects). On the main Credit River there appears to be weaker and weaker formation of winter ice. This is likely a function of warmer winters, but may be exacerbated by salt runoff. Flow of winter ice through the main river channel scours new pools and recruits new wood to the channel (where the riparian zone is forested). The lack of these normal spring freshets must be regarded as deleterious given that this is a historic condition that drives the physical formation of fish habitat. We need this process to continue and would like to see the amount of salt reaching the river and its tributaries decrease through use of Low Impact Development, and general incentives to reduce impervious cover.

The general intent of the above two paragraphs is that both direct runoff and poorly designed/maintained stormwater ponds are having a massive impact on river productivity/sustainability and its tributaries. Reducing impervious cover will help reduce the above noted impacts and potentially re-establish some natural shallow-groundwater inputs to the river and tribs, which are critical to salmonid smolts and fry that require coldwater refuge through the summer.

**3. How should the City address aging stormwater infrastructure? (select one)**

- Repair only when structural failure occurs or is imminent (i.e., let future generations deal with problems as they arise);
- Collect money now to renew and rehabilitate infrastructure in the highest priority areas (i.e., proactively reinvest in consideration of future generations); or
- Other/Comment:

The city is partially on the right course (retrofitting older systems), however the work is far too slow and not concentrated enough to show tangible benefits to the natural stream/watershed systems pertaining to the Credit River. While the city has 31 streams (per the slides), the Credit River is the only system with a major sport fishery and home to several endangered and threatened species such as American eel, lake sturgeon, Redside dace and Atlantic salmon.

However a broad, well coordinated (watershed or sub watershed basis) and legislated approach is mandatory to succeed:

- Mandatory disconnection of downspouts where possible (change existing development regulations as well – they simply do not make sense as I have brought up in the past (more info below)
- Mandatory inclusion of swales, bio filters and other at or near source storm water control and infiltration at new sites and build them into existing systems where possible (everywhere possible). Any new developments, with only Low Impact technologies being acceptable.
- Tax based on impervious cover (as outlined) is great with incentives for people to solve stormwater on their property
- Would also like to see a program where we disconnect downspouts for free and provide a free rain barrel. City and other agencies (CVC, TRCA, NGO's like CRAA, TU, Sierra Club, etc).

- Public education will be necessary through ward newsletters, Mayor update newsletters and direct newsletters from the works department or region of peel notices or some combination. Education about rain barrels, disconnected downspouts, success stories!

**4. How should the City's stormwater management costs be allocated? (select one)**

- Based on each property's taxable value;
- Based on each property's stormwater runoff contribution; or
- Other/Comment:

This is the only fair option. Would also like to see costs downloaded to the developer for new developments: Why should the municipality and its taxpayers have to pay for stormwater impacts caused by developers trying to maximize profit by squeezing as many homes into a space as possible!

**5. The main funding options presented tonight included: property taxes, development charges, and a stormwater user fee. Are there any other funding options that should be considered?**

The charges are too low based on \$4.40 per month for a single house. That is \$53.00 per year. My residential taxes are \$6,000. \$53 is less than 1%. I suggest rates 1.5 to 2 times higher. It costs about \$10-15 to disconnect a downspout, for the cost of one years charges any house in the city could be disconnected. Creating the financial incentive to encourage change is one good option. Legislation with a slight tax to pay for the disconnection to cover city costs would work better.

**6. Additional comments:**

The value of the sport fishery and other recreational use (boating, hiking, park use) and costs associated with sediment and flooding (erosion control, harbour dredging, fish stocking) should also be shown as the cost/benefit analysis. The costs of not solving the urban storm water problem are far greater than you have shown and the costs to fix the short term issues is also much higher than shown. Jim Tovey (Ward 1) said to me the other week the Port Credit fishery was estimated to be worth 2.5 million dollars per year. In 2007 CVC estimated the lower Credit fishery in Mississauga worth \$650,000 in direct spending. Fishing activity/participation has jumped 300-400% in the past 5 years suggesting the lower river fishery is now worth 1.5-2 million and growing. The steelhead run this year was up 600% from 8 years ago and 86% of the fish are wild. This is drawing thousands of anglers from Ontario. Every time it rains and the river floods people cannot fish...this is a huge economic loss for the city.

There will be some public backlash because people generally have no idea about the costs required for the infrastructure on which they depend. It must be clearly elaborated to the public the costs associated stormwater management, as you've done nicely on one of your slides.

**Scenario 1:**

You also need to present a clear message on how impervious cover is charged to land owners/business. For example (my house):

- My driveway is 2,000 sf and slopes to the road so it should be charged
- My front porch 300 sf drains to the road and should be charged
- My roof is disconnected and drains to the lawn – there should be no charge
- my walkway and patio in the rear yard drain to the grass and infiltrate so they should not be charged
- my pool is drained to the yard always so there should be no charge

Being clear with these and other scenarios is key to implement this.

1(W)

Also dealing with commercial/institutional properties is vital. Working with them to implement projects funded in part or whole by storm water tax revenue to stop runoff at the source.

Example 2:

**Scenario 2:**

One of my schools in Streetsville with roof, parking lot and playground is 95% impervious cover. When I installed the play area and sidewalk I wanted to install bio retention areas. The city development/building office would not allow me to. The only way I could was to also install a catch basin in the lot at a cost of \$20,000. The irony is my design would have stopped 50% of the runoff and held/infiltrated it. Instead all 95% goes straight to the storm sewer as a result of city building codes/requirements. Therefore part of the funding needs to address inconsistent planning/design rules in the city itself.

1(x)

PUBLIC INFORMATION MEETING No. 2  
November 20, 2012  
Stormwater Financing Study

**Record of Attendance & Additional Comments Form**

The City of Mississauga is interested in hearing the community's comments, questions, concerns and suggestions regarding this study. Please print your name and mailing address clearly. We regret that if your name and address are not legible we will be unable to contact you.

Name: JOE SILVA	Address: 1684 SAUTOENE TERRACE	Phone #: 905 629-4567
Email: JOE.SILVA@Bell.Net		

Additional Comments/Questions:  
 I would like to receive a copy of  
 Tonight's Presentation. Or be able to download  
 a PDF copy.  
 Thank you

Please drop-off sheet in Comments Box or email by November 30<sup>th</sup>, 2012 to:

Mr. Lincoln Kan  
 Manager, Environmental Services  
 City of Mississauga – Transportation and Works Department  
 Email: [Lincoln.Kan@mississauga.ca](mailto:Lincoln.Kan@mississauga.ca)  
 Mail: 201 City Centre Drive, Suite 800, Mississauga ON L5B 2T4

The personal information on this form is collected under authority of Section 11 of the Municipal Act, 2001, and will be used to inform you of any future meetings regarding the Stormwater Financing Study, to respond to your comments/concerns if necessary and to maintain a record of attendance at the public meeting. Questions about the collection of this personal information should be directed to: Mr. Lincoln Kan, Manager, Environmental Services by phone (905-615-3200 ext. 4086) or by mail to the above address.



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# PUBLIC INFORMATION MEETING No. 2

November 20, 2012

## Stormwater Financing Study

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Name: SUSANNE THISTLE	Address: 6427 ALDERWOOD 6427 TRAIL	Phone #: 9058244994
Email: david-thistle@sympatico.ca		

Additional Comments/Questions:

① DPIS. PUT PRESENTATION (REG. Q&A) ON WEBSITE

② APPEAL PROCESS FOR CREDIT (REG. Q&A)

③ WHAT IS THE COST OF THIS STUDY?

Please drop-off sheet in Comments Box or email by November 30<sup>th</sup>, 2012 to:

Mr. Lincoln Kan  
 Manager, Environmental Services  
 City of Mississauga – Transportation and Works Department  
 Email: [Lincoln.Kan@mississauga.ca](mailto:Lincoln.Kan@mississauga.ca)  
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# PUBLIC INFORMATION MEETING No. 2

November 20, 2012

## Stormwater Financing Study

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Name:	Address: GLEN SCHWANN & ASSOC.	Phone #:
GLEN BROW	700-10 KINGSBRIDGE GARDEN	9-568-8888
Email:	CIRCLE	

Additional Comments/Questions: ON BEHALF OF THE ARCHDIOCESE OF TORONTO:

FUNDING SHOULD BE THROUGH TAXATION OR CHURCHES SHOULD EXEMPT FROM ANY STORMWATER RATE CHARGE. CHURCHES ARE CHARITABLE ORGANIZATIONS. ANY ADDITIONAL FEES CHARGED TO A CHURCH WILL TAKE MONEY AWAY FROM SOCIAL OUTREACH PROGRAMS PROVIDED BY CHURCH COMMUNITIES TO THOSE IN NEED, THAT ARE NOT PROVIDED BY MUNICIPALITIES.

Please drop-off sheet in Comments Box or email by November 30<sup>th</sup>, 2012 to:

Mr. Lincoln Kan  
 Manager, Environmental Services  
 City of Mississauga – Transportation and Works Department  
 Email: [Lincoln.Kan@mississauga.ca](mailto:Lincoln.Kan@mississauga.ca)  
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## PUBLIC INFORMATION MEETING No. 2

November 20, 2012

### Stormwater Financing Study

#### Record of Attendance & Additional Comments Form

The City of Mississauga is interested in hearing the community's comments, questions, concerns and suggestions regarding this study. Please print your name and mailing address clearly. We regret that if your name and address are not legible we will be unable to contact you.

Name: <i>James Craig</i>	Address: <i>5534 Millbrook Ln. Miss L6M 3Z1</i>	Phone #: <i>416-529-8223</i>
Email: <i>James.craig@sympatico.ca</i>		

#### Additional Comments/Questions:

*I am very concerned re the impact of this necessary levy on faith communities + non-profits. These organizations serve a huge number of people in our city and are usually funded by donations. In these times of huge pressure on non-profits an additional cost will have a collective impact on the level of service they can deliver. These organizations are already doing so much to serve those in need as well as valuable preventative work with youth, seniors + families. I believe it will be socially and financially counter-productive to impose this levy on these organizations therefore I appeal to the city to grant an exemption to these organizations.*

Please drop-off sheet in Comments Box or email by November 30<sup>th</sup>, 2012 to:

Mr. Lincoln Kan  
 Manager, Environmental Services  
 City of Mississauga – Transportation and Works Department  
 Email: [Lincoln.Kan@mississauga.ca](mailto:Lincoln.Kan@mississauga.ca)  
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(b)(b)

PUBLIC INFORMATION MEETING No. 2  
November 20, 2012  
Stormwater Financing Study

**Record of Attendance & Additional Comments Form**

The City of Mississauga is interested in hearing the community's comments, questions, concerns and suggestions regarding this study. Please print your name and mailing address clearly. We regret that if your name and address are not legible we will be unable to contact you.

Name: Paul Wartman	Address: 2901 Coulson Court Mississauga, ON	Phone #: 905 302 0408
Email:		

Additional Comments/Questions:

- Facilitator/presenter tip: Create a bike rack at the back of the room, facilitate participants to put their questions/comments on so presentation is not interrupted. Followed by question periods at end.
- Open up other opportunities/avenues for giving feedback. Not everyone is comfortable with asking a public question: Ex. Open up a website poll/survey to allow 24 hour access to info and to send questions
- Contact me if you want a grad student to work on a pilot project for residential incentives. (seriously, I'll get funding)  
wartmanpaul@gmail.com.

Thank you for holding this

Please drop-off sheet in Comments Box or email by November 30<sup>th</sup>, 2012 to:

Mr. Lincoln Kan  
Manager, Environmental Services  
City of Mississauga – Transportation and Works Department  
Email: [Lincoln.Kan@mississauga.ca](mailto:Lincoln.Kan@mississauga.ca)  
Mail: 201 City Centre Drive, Suite 800, Mississauga ON L5B 2T4

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1(c)(c)

PUBLIC INFORMATION MEETING No. 2  
November 20, 2012  
Stormwater Financing Study

**Record of Attendance & Additional Comments Form**

The City of Mississauga is interested in hearing the community's comments, questions, concerns and suggestions regarding this study. Please print your name and mailing address clearly. We regret that if your name and address are not legible we will be unable to contact you.

Name: CHARLES BROWN	Address: 382 MOONFLOW CRT.	Phone #: 905-279-9534
Email: cabrown382@aol.com		

Additional Comments/Questions:

PLEASE SEE MATERIAL ENFOLDED,  
CAB.

Please drop-off sheet in Comments Box or email by November 30<sup>th</sup>, 2012 to:

Mr. Lincoln Kan  
Manager, Environmental Services  
City of Mississauga – Transportation and Works Department  
Email: [Lincoln.Kan@mississauga.ca](mailto:Lincoln.Kan@mississauga.ca)  
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## **THE STORMWATER INFRASTRUCTURE PROPOSAL**

My name is Charles Brown. I have been a resident of Mississauga since 1967, living several blocks from the Cooksville Creek in Cooksville. I am very familiar with the flooding situation of the creek and am aware of the damage done by flooding to residences along Sherobee Drive. I sympathize with the residents who have suffered property damage and I agree action to avoid a recurrence is called for. In fact, effective action should have been undertaken before properties were affected when the problem was first identified almost 30 or so years ago. Had it been we would not be faced with this proposal and some of its unacceptable solutions and outrageous cost.

I speak specifically to the intention of measuring the asphalt surface for parking at my church and having the church assessed financially because of the stormwater that flows from it. When the church was built in 1957, an oversize dry well was installed to accept all the stormwater from its weeping tile. I had all downspouts disconnected to permit roof water to flow on to the church lawn. Water on the parking lot is channelled to a portion of church property that was lowered to store the runoff. The parking surface was sloped to permit this. This was done under my direction when the parking lot was surfaced two years ago. As well, the parking lot is at a level below that of the N. Service Road and water is more likely to flow towards us than away. We do not add to the stormwater problem. We are keeping our water on our property, but, interestingly, on several occasions have had water from the municipal roadway flow on to our lawn and on one occasion up to the edge of our Daycare play area. Clearly, our efforts to implement good environmental practices are to be ignored in this frantic rush to accumulate money to fix a problem that should have been dealt with 30 years ago. As a member of my church I cannot support this one size fits all style. We are not a contributor to the problem you are facing.

l(e)(e)

## Lincoln Kan

---

**From:** Lana Russell <lrussell@tmig.ca>  
**Sent:** 2012/10/02 7:55 PM  
**To:** Lincoln Kan  
**Cc:** David Ashfield; Kramer, Gary  
**Subject:** Meeting with the City of Mississauga on the Stormwater Financing Study  
**Attachments:** Mississauga 2012 Existing Land Use.pdf; Land Use & Imperviousness - Mississauga SWM Funding.pdf

Lincoln,

Thanks for hosting a meeting with Orlando Corporation on the above noted study. To start here are a few facts about Orlando's Mississauga operations:

- They own over 2000 acres of industrial lands in Mississauga;
- Orlando pays over \$62 million in taxes per year to Mississauga;
- They have owned and operated Business Parks for over 50 years in Mississauga; and
- They are good corporate citizens in the City.

Orlando Corporation also recognize the need for good Stormwater Management (SWM) and have been developing their Business Parks with appropriate on-site measures (roof top storage, parking lot storage and oversized pipes, as well as SWM ponds) to attenuate stormwater runoff to pre-development conditions, as specified by the City of Mississauga requirements for all development applications. These SWM improvements were made to each of Orlando's sites based on the assumption that the overall system would be sustainable. In addition, Orlando has made further storm drainage payments to the City of Mississauga in the amount of \$30-\$40 million over the past 30 years to supplement additional SWM improvements.

We would like to focus our questions in the following areas:

### 1) General Principles

There are a few principles that need to be applied for the financing to be fair:

- o The fee needs to apply to everyone (including the GTAA).
- o The fee needs to be used for the purposes it has been collected.
- o There needs to be open and clear accounting of the monies collected / spent and on what.
- o There needs to be continued efforts to improve the efficiencies of the accounting system.

### 2) Anticipated Costs

- o What is included in the \$16 billion SWM infrastructure figure?
  - Are the existing SWM Pond land costs included?
    - New land would not need to be obtained.
  - What is included in SWM pond costs?
    - Likely only one cleanout and a replacement of the outlet structures would be required rather than a full scale rebuild of the facility.
  - Can the current SWM fund estimate be broken down into components such as Water Quality, Quantity, Erosion, Water Balance, and Operation & Maintenance?
- o What does the \$16 million figure contain?
- o What happens to the \$10 million tax base now?
- o How was the previous reserve fund attained?

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- What has the \$30-\$40 million been used for that Orlando has funded the City over the last 30 years via storm drainage payments?
- Is the state of our desired stormwater beyond our ability to fund it?

### 3) Funding Formula

- The formula and administration need to be kept simple and efficient.
- Need to be based on the principle that everyone pays:
  - See attached 2012 City of Mississauga Land Use map and TMIG review of imperviousness.
  - The municipal roads would have a share attributed to them due to their high imperviousness.
  - Is this a City expense? How would the City portion be funded?

### 4) Credits

- For areas that drain to "Orlando Constructed" SWM ponds that drain directly to creeks, we feel that there should be a large credit in the range of 80%.
- How will the Cash-in-lieu that has been paid historically be credited?
- When credits are established how does the shortfall of funds get replaced?
- How are on-site controls to be accounted for since they are built, maintained and operated by Orlando?

### 5) Tax vs. SWM Fund

- We believe the tax system is the best for collecting the funds since there is a balance that must be maintained with all public costs.
- Elected officials need to make those tough decisions and develop the balance for public funding; increasing taxes; and the public good in a holistic manner.

I look forward to our conversation

Regards,  
Dave

Lana Russell on behalf of

David Ashfield, P.Eng.  
founding partner

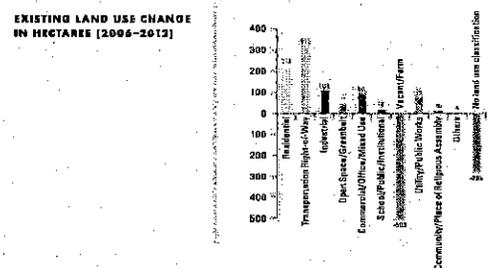
TMIG | THE MUNICIPAL INFRASTRUCTURE GROUP LTD  
8800 Dufferin Street Suite 200 | Vaughan Ontario Canada L4K 0C5 | office 905.738.5700 ext 232 | mobile 647.200.8780 | fax 905.738.0065  
EXPERIENCE | EFFICIENCY | COMMITMENT

149(9)

# 2012 EXISTING LAND USE

## EXISTING LAND USE OVERVIEW

<b>TOTAL AREA OF MISSISSAUGA (HECTARES/ACRES)</b>	<b>29,210 ha 72,180 acres</b>
<b>PERCENTAGE OF LAND IN DOWNTOWN MISSISSAUGA COMPRISING APARTMENTS</b>	<b>20.1%</b>
<b>PERCENTAGE OF LAND COMPRISING DETACHED HOMES IN NEIGHBOURHOODS</b>	<b>36.5%</b>
<b>PERCENTAGE OF OFFICE LAND LOCATED IN CORPORATE CENTRES</b>	<b>64.6%</b>



<b>29.2% RESIDENTIAL</b> 8,520 ha (21,068 acres)	<b>15.2% INDUSTRIAL</b> 4,430 ha (10,924 acres)	<b>11.0% OPEN SPACE/ RECREATION</b> 3,010 ha (7,440 acres)
<b>20.5% TRANSPORTATION RIGHT-OF-WAY</b> 5,090 ha (12,630 acres)	<b>9.3% SCHOOL/ PUBLIC/ INSTITUTIONAL</b> 2,710 ha (6,700 acres)	<b>6.0% COMMERCIAL/ OFFICE/MIXED USE</b> 1,750 ha (4,329 acres)
	<b>5.0% VACANT/FARM</b> 1,460 ha (3,610 acres)	<b>2.5% OTHER</b> 730 ha (1,810 acres)
	<b>0.9% COMMUNITY/PLACE OF RELIGIOUS ASSEMBLY</b> 260 ha (645 acres)	

Read more about the 2012 existing land use and view this map as a KML at [mississauga.ca/data](http://mississauga.ca/data)



## Breakdown of Land Uses and Imperviousness

City of Mississauga SWM Funding

Land Use	Total Land Area (acres)	Average Imperviousness (%)	Resultant Impervious Area (acres)	% Share of Impervious Area
Residential	21,080	40%	8,432	19.31%
Transportation Rights-of-Way	14,830	90%	13,347	30.57%
Industrial	11,000	90%	9,900	22.67%
Open Space / Greenbelt	7,950	20%	1,590	3.64%
School / Public / Institutional / GTAA	6,680	75%	5,010	11.47%
Commercial / Office / Mixed Use	4,320	90%	3,888	8.90%
Vacant / Farm	3,630	20%	726	1.66%
Utilities / Public Works	1,470	30%	441	1.01%
Community / Place of Religious Assembly	660	50%	330	0.76%
Other	220	0%	0	0.00%
<b>TOTAL</b>	<b>71,840</b>	<b>---</b>	<b>43,664</b>	<b>100.00%</b>

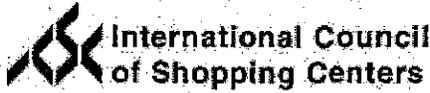
1(i)(i)



**City of Mississauga:  
Comments on Stormwater Financing Study**

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September 28<sup>th</sup>, 2012



1(g)(j)

**About BOMA Toronto:**

Over 800 of Toronto's most influential Property and Facility Managers, Developers, Leasing Agents, Service Providers, Industry Influencers and Commercial Real Estate Professionals in its membership roster, representing 80 per cent of all commercial and industrial real estate companies in the Greater Toronto Area and beyond.

**About ICSC:**

Founded in 1957, ICSC is the premier global trade association of the shopping center industry. Its more than 55,000 members in over 90 countries include shopping center owners, developers, managers, marketing specialists, investors, retailers and brokers, as well as academics and public officials. As the global industry trade association, ICSC links with more than 25 national and regional shopping center councils throughout the world.

**About NAIOP Greater Toronto:**

NAIOP Greater Toronto Chapter represents commercial real estate developers, owners and investors of office, industrial, retail and mixed-use properties. It provides strong advocacy, education, and business opportunities, and connects its members through a powerful local and North American network.

By fostering the right business climate where members can share ideas, cultivate new relationships and stay on top of the most current industry information and trends, NAIOP strives to be the leading association for the commercial real estate industry in the Greater Toronto Area.

**About REALpac:**

REALpac is Canada's senior national industry association for owners and managers of investment real estate. Our members include publicly traded real estate companies, real estate investment trusts (REITs), private companies, pension funds, banks and life insurance companies with investment real estate assets each in excess of \$100 million. The association is further supported by large owner/occupiers and pension fund advisors as well as individually selected investment dealers and real estate brokerages.

1(k)(k)



International Council  
of Shopping Centers



**Subject:** Comments on City of Mississauga Stormwater Financing Study

On behalf of the *Building Owners and Managers Association Toronto* ('BOMA'), the *International Council of Shopping Centers* ('ICSC'), the *Commercial Real Estate Development Association Greater Toronto* ('NAIOP'), and the *Real Property Association of Canada* ('REALpac'), we would first like to thank the City of Mississauga for engaging stakeholders in a topic that is of crucial importance to our industry.

By way of background, *BOMA Toronto*, *ICSC*, *NAIOP Greater Toronto*, and *REALpac* have been very active on stormwater related consultations in the past, and recognize the importance of addressing capital funding and reinvestment deficiencies for any major municipality.

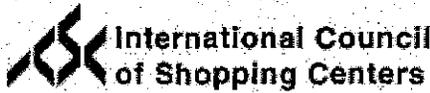
Principally, this coalition seeks to ensure that funding is fairly and evenly distributed amongst the commercial and residential sector alike.

As a result of materials presented during stakeholder meetings and the clear direction as to where the City of Mississauga is heading, we believe it is imperative that the city understand the negative externalities that come with certain financing mechanisms.

#### **Stormwater User Fee:**

*BOMA Toronto*, *ICSC*, *NAIOP Greater Toronto*, and *REALpac* are **strongly opposed** to a stormwater user fee being applied in the City of Mississauga and see the following as issues related to it:

- Change in billing methodology to impervious area shifts stormwater costs between classes of property and between properties within each class;
  - **shifts liability from residential property to non-residential property; and**
  - **shifts liability to horizontal properties with large parking areas (ie shopping centres/box stores and industrial facilities);**
- A major source of stormwater runoff is from common municipal roads, sidewalks, municipal buildings and municipal parking facilities. A shift in funding responsibility to non-residential property through the use of impervious area will allocate a disproportionate share of these common use facilities to non-residential owners;
- Advocates of stormwater charges based on impervious area state that the area measure is more equitable as it quantifies the relative contribution of stormwater runoff as a function of land use practices and development decisions of property owners. In reality, many of these decisions were established many years ago based on municipal zoning requirements, particularly respecting off street parking requirements;
- Off street parking design standards requiring impermeable surfaces were previously mandated. Only recently has technology allowed for hard surface permeable parking areas, however, at a significant cost premium;
- Businesses such as shopping centres, industrial facilities, car dealers, vehicle repair shops and gas stations require large impervious sites to operate their businesses and will be heavily impacted;



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- Commercial properties requiring off street parking are disadvantaged when compared to street front business which only utilize exempted street parking;
- The shifting of stormwater costs from residential to non-residential will result in an effective increase in fixed costs to business that are already overtaxed relative to residential. Advocates of using impervious area based on fairness and equity are promoting a selective user pay system based on run-off. In fact, large commercial properties pay more to municipalities than the value of services they get in return. Perhaps Mississauga should also be considering a change to user fees from property taxes for such municipal services as libraries, community centres, roadways and parks not used by business. Large properties also provide their own fire protection, security, waste and snow removal reducing the need for additional municipal fire, police, waste and snow removal services.
- The increase in fixed costs to commercial properties would translate to a reduction in commercial property values and a corresponding decrease in assessed values.
- Tenants compete for business on a regional level and the switch to a stormwater charge in Mississauga will place tenants at a disadvantage relative to their competition in neighbouring municipalities;
- A change to impervious area will require the creation of a new costly administration to measure and calculate charges based on impervious area including the creation of an impartial dispute resolution process to handle area disagreements. The database will have to be maintained and constantly updated to reflect physical changes; and,
- Switch to an impervious area calculation will shift the burden to commercial property owners, the economic engine for the city of Mississauga and will result in loss of employment within the city of Mississauga.

#### **Recommendations for the City of Mississauga:**

*BOMA Toronto, ICSC, NAIOP Greater Toronto, and REALpac* support that the increase in level of service for stormwater management, however we recommend that the level of service increases for stormwater should be funded through increased property taxes together with appropriate development charges or impact fees (new development), and cash-in-lieu charges (infill/redevelopment). Property taxes are allocated based on current property values and, therefore, are an indirect proxy of ability to pay. As with most other public services, we believe that property assessment is the most equitable basis for distributing the cost of stormwater services within a municipality.

We would be pleased to make a deputation before City Council to outline our concerns with some of the financing mechanisms presented in the stakeholder consultation process. We believe that we have not been given enough timely information and even at this late date have yet to receive any financial data on how this will affect our properties. We are recommending that this process includes direct consultation with our membership following the release of the financial information. In line with the principles outlined earlier in this submission, our goal is to work with the City of Mississauga to ensure that any stormwater financing option is fair, equally distributed amongst the commercial and residential sector. Please feel free to contact any of us below should you have any questions regarding the information presented in this submission.

1(m)(m)



International Council  
of Shopping Centers



Sincerely,

Paul Morse  
Chief Executive Officer  
REALpac  
[pmorse@realpac.ca](mailto:pmorse@realpac.ca)

Ryan J. Eickmeier  
Manager, Government  
Relations & Policy  
REALpac  
[reickmeier@realpac.ca](mailto:reickmeier@realpac.ca)

Craig Smith  
Chair, Government Relations  
Committee  
NAIOP Toronto  
[cmith@ashlarurban.com](mailto:cmith@ashlarurban.com)

Ted Williams  
Chair, Government Relations  
Committee  
ICSC  
[Ted.Williams@ivanhoecambridge.com](mailto:Ted.Williams@ivanhoecambridge.com)

Chris Conway  
President & Chief Staff Officer  
BOMA Toronto  
[cconway@boma.ca](mailto:cconway@boma.ca)

1(n)(n)

**Lincoln Kan**

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**From:** Gray , Derek <Derek.Gray@gtaa.com>  
**Sent:** 2012/09/28 3:36 PM  
**To:** Lincoln Kan  
**Subject:** RE: Stormwater Financing Stakeholder Group - Additional Meeting (GTAA)

Lincoln:

I will not be able to make it to the proposed date as I'm returning from a conference in the US at that time.

Items for discussion I believe should include at least the following:

- Credit/rebate system
  - As you are aware GTAA has spent over \$120million on stormwater capital since assuming the operation of Pearson Airport in addition to the associated O+M costs for these facilities.
- Exempt status and PILT
  - I think there needs to be some clarity to the group for the exempt status and those paying PILT.
- Rational Nexus
  - Almost all of the Toronto Pearson lands are go through some sort of stormwater facility/pond prior to leaving our property and directly outlet into the creeks.
- Storage for others
  - We provide some storage for other properties on our property.

If you have any questions or concerns, I am available at your earliest convenience.

Regards,

**Derek R. Gray P.Eng., A.A.E.,  
Manager Environmental Management Systems**

---

**From:** Lincoln Kan [<mailto:Lincoln.Kan@mississauga.ca>]  
**Sent:** Friday, September 28, 2012 2:42 PM  
**To:** Bri-Ann Stuart (Dixie Outlet Mall); Celina Wrobel (THC - May Chang); Christine Capewell (UTM); Christine Zimmer (CVC); Dan Labrecque (ROP); Darren O'Neil (Sheridan); Gray , Derek; DPCDSB; Gary Kramer (Orlando); Jeff O'Leary (Friends of Lake Wabukayne Stewardship); Jennifer Reid (St. Peter's Anglican Church); J-M Rouleau(Oxford); Kiruthiha Kulendiren (Lisgar); Linda Pinizzotto (COA); Matthew Coleridge (RJB - Square One); May Chang (THC); Michael Dewit (EAC); Michael Ewaschuk (CRAA); Paul Mountford (PDSB); Richard Dundas (GWHA); Roger Coote (Cooksville Task Force); Sameer Dhalla (TRCA); Sheldon Leiba (MBOT); Steve Blaney (Sherwood Forest RA)  
**Cc:** John Murphy; Zubair Ahmed; Michael Masliwec; Kimberly Hicks; Gregory, Mike ; Brenda Breault; Joe Pitushka; Martin Powell; Mary Ellen Bench; Patti Elliott-Spencer; Wendy Alexander  
**Subject:** Stormwater Financing Stakeholder Group - Additional Meeting

Good afternoon:

As discussed at Stormwater Financing Stakeholder Group meeting #5, an additional meeting has been scheduled for **Wednesday, October 17, 2012 at 6:30 pm**. The meeting location is **Committee Room 'A'** at the Mississauga Civic Centre (300 City Centre Drive, 2nd floor).

This meeting is intended to provide an opportunity for open discussions on the stormwater financing options presented by the City. As noted at our last meeting, please email me with questions that you would like to discuss at this meeting.

Regards,

1(0)(0)

**Lincoln Kan, P.Eng.** | Manager, Environmental Services | Transportation & Works  
t 905-615-3200 ext. 4086 | f 905-615-3173 | [lincoln.kan@mississauga.ca](mailto:lincoln.kan@mississauga.ca)



**Please consider the environment before printing**

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**Lincoln Kan**

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**From:** Gray , Derek <Derek.Gray@gtaa.com>  
**Sent:** 2012/11/16 10:25 AM  
**To:** Lincoln Kan  
**Cc:** Gregory, Mike (Mike.Gregory@aecom.com)  
**Subject:** RE: Stormwater Financing Stakeholder Group meeting #6 (GTAA)

Lincoln:

Further to the meeting on Wednesday I'd like to reiterate the concerns I raised during the meeting and one additional item.

1. The City's Legal opinion including the GTAA as an entity subject to user fees and charges. I noticed that Metrolinx, and Canada Post are listed as exempt.
2. The rational nexus of stormwater fees remaining fair and equitable considering the ability for the City to implement any stormwater management at the airport or on stormwater from the airport.
3. The PILT that the GTAA already provides to the City and the component that would be currently allocated to stormwater management by the City.
4. Since assuming the operation of Toronto Pearson International Airport the GTAA has made capital investment of over \$120 million capital investment in stormwater management plus the annual maintenance cost associated with these facilities and the stormwater infrastructure assumed from Transport Canada.
5. The Credit Program did not make reference to the City's stormwater that the GTAA manages and conveys on airport property.

If you have any questions or concerns, I am available at your earliest convenience.

Regards,

**Derek R. Gray P.Eng., A.A.E.,**  
Manager, Environmental Services  
**Greater Toronto Airports Authority**  
Operations and Customer Experience  
P.O. Box 6031, 3111 Convairst Drive, Toronto AMF, Ontario, L5P 1B2  
**Phone (416) 776-3049 | Fax (416) 776-7358 | Mobile (416) 573 - 7268**  
**www.TorontoPearson.com**

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**From:** Lincoln Kan [<mailto:Lincoln.Kan@mississauga.ca>]  
**Sent:** Monday, November 12, 2012 3:01 PM  
**To:** Bri-Ann Stuart (Dixie Outlet Mall); Celina Wrobel (THC - May Chang); Christine Capewell (UTM); Christine Zimmer (CVC); Dan Labrecque (ROP); Gray , Derek; DPCDSB; Fred Theiss; Gary Kramer (Orlando); Jeff O'Leary (Friends of Lake Wabukayne Stewardship); Jennifer Reid (St. Peter's Anglican Church); J-M Rouleau(Oxford); Kiruthiha Kulendiren (Lisgar); Linda Pinizzotto (COA); Matthew Coleridge (RJB - Square One); May Chang (THC); Michael Dewit (EAC); Michael

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Ewaschuk (CRAA); Paul Mountford (PDSB); Richard Dundas (GWHA); Roger Coote (Cookeville Task Force); Sameer Dhalla (TRCA); Sheldon Leiba (MBOT); Steve Blaney (Sherwood Forest RA)

**Cc:** Martin Powell; Brenda Breault; Patti Elliott-Spencer; John Murphy; Zubair Ahmed; Wendy Alexander; Steve Dickson; Mary Ellen Bench; Jeremy Blair; Gregory, Mike ; Arseneau, David ([David.Arseneau@aecom.com](mailto:David.Arseneau@aecom.com)); Kimberly Hicks

**Subject:** Stormwater Financing Stakeholder Group meeting #6

Good afternoon:

The Stormwater Financing Stakeholder Group meeting #6 is scheduled for **Wednesday, November 14, 2012** at **City Hall** in **Committee Room 'A'** from **6:00 pm to 8:00**.

Please find attached the following items:

- Proposed agenda for meeting #6
- Minutes from Meeting #5
- Presentation from meeting #5
- Sign-in sheet from meeting #5

It would be appreciated if you can please review the minutes from the previous Stakeholder Group meeting and advise of any errors or omissions.

Thank you,

**Lincoln Kan, P.Eng.** | Manager, Environmental Services | Transportation & Works  
t 905-615-3200 ext. 4086 | f 905-615-3173 | [lincoln.kan@mississauga.ca](mailto:lincoln.kan@mississauga.ca)



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**Lincoln Kan**

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**From:** mikeyrogers <mdewit@rogers.com>  
**Sent:** 2012/05/09 8:58 AM  
**To:** Lincoln Kan; mike.gregory@aecom.com  
**Subject:** RE: Stormwater Financing Stakehold Group (SFSG #1 EAC comments)

Good meeting last night... my notes below are intended to help you move ahead and build on the excellent start you have made on this

A few thoughts for you to ponder

- For the possible methods of financing that you have already effectively excluded .. for example PPPs you may want to provide the group with back ground on why ... in the PPP example, I understand why they are not in the table effectively (I think of a PPP as a mechanism when you need to act and cannot raise the funds, recognizing that a PPP actually has a net higher cost to the customer base – which is why I would not go with a PPP here) but even if this group does not ask the questions about why the other financing methods are not on the table, you should expect that others will ask, for example at a PIC
- As I noted last night, not every one will have currently understand the split of roles and responsibilities / regulatory domain and authority between Peel Region and the City, not to mention CVC / the province etc... this drives the need for stormwater management as well as who the City has to work with and it was good to see that the group was talking about the complexities that will affect what is possible / the development of an approach ... the more you can provide in a backgrounder to the group to help all of the group members are up to speed on the many players and drivers behind both why more \$ will need to spent and the complexity ...ahead of time ...then you can focus on details with the group having a more common starting point when we meet
- The point above really feeds into and is needed to get a clear scope description laid out ... ie what is it that the funding will be there for ... and as a professional doing environmental management for over 25 years I am very big on the need to define in detail what it is that you working to manage and also defining the limits of the tools you have in your tool box
- I realize that is all part of what you are planning to dive deeper into as you go and as the meetings go ... as you can see from last night the group will push you to be very clear as to what "it" is
- When the presentation last night went over slide 53 (one the important ones!) I was expecting to then not just hear about how ERUs work in the scheme (part of the red box on the slide – which was well presented by the way), but also what is different if the scheme goes to a " tiered residential rate" style for example... I did not really get the impression that was covered ... in order to move the discussion ahead to a logical resolution and recommendation in the fall the effect the step function subtleties of options at least slightly less detailed than the ERU style and slightly more than the ERU style will need to be covered to some degree so that the group can see what is gained and lost with shifts in complexity / accuracy

Regards ...

Until June or I think of other items .....

Michael DeWit  
905 274 0391  
Vice Chair EAC (for this email at least that is the hat I have on ☺)

My professional life is noted below

1 (S)(S)

Michael DeWit  
Technical Director, ICF International  
905 274 0391  
m 416 807 0391  
<http://www.icfi.com/about/our-people/icf/dewit-mike>

Connect with us on [social media](#).

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Lincoln Kan  
Manager, Environmental Services  
Transportation and Works Department  
201 City Centre Drive, Suite 800  
Mississauga, ON L5B 2T4

November 22, 2012

Dear Mr. Kan,

Thank you for giving the Credit Valley Conservation an opportunity to participate in the City of Mississauga Stormwater Financing Stakeholder Group and comment on the proposed stormwater utility fee recommendations. **CVC would like to state our ardent support for the recommendations that are being proposed by the Mississauga Stormwater Finance Project Team.** The stormwater utility fee recommendations are in line with those made in the 2010 *Credit River Water Management Strategy Update – Municipal Stormwater Financing Study*. A stormwater utility fee approach is not only a more equitable finance system but will also make Mississauga and CVC stormwater programs tremendously more effective at achieving the goals of the *Mississauga Stormwater Quality Control Strategy*, *The Living Green Master Plan* and *CVC's Credit River Watershed Management Strategy*.

A stormwater utility fee and credit system has the power to mobilize more public and private resources to address stormwater issues (erosion, flooding, water quality, climate change adaptation) than any other public incentive program alone. The advantages of the stormwater utility fee include:

- A stable dedicated funding source for the stormwater program allows for long-range planning, large-scale capital improvements, and leverage for debentures.
- The user fee is a fair and equitable finance method that is based on runoff contribution rather than property value and that can also be applied to tax-exempt properties.
- Presenting stormwater services as a utility fee apart from the tax bill provides a vehicle for educating Mississauga residents on stormwater issues and infrastructure and how to limit their own impacts.
- The non-residential credit program will motivate property owners to reduce stormwater runoff and pollutant discharge.

Over the past five years, CVC and the City of Mississauga have had a productive partnership in implementing sustainable stormwater management or Low Impact Development (LID) in the city. Through our various partnership efforts, we have implemented a network of real time in-stream gauge stations for flood warning and forecasting and water quality monitoring, pollution prevention demonstration projects with local businesses, monitoring to optimize road and parking lot winter maintenance practices to reduce impact on the environment and the first green

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LID streets in Ontario, Elm Drive near City Centre and 1st and 3rd streets in the Lakeview Neighbourhood.

CVC programs and expertise are well positioned to assist the City and property owners with the transition to a stormwater utility fee system:

- **Leaders for Clean Water - Offers LID and pollution prevention services for municipalities and property owners.** Through various LID guidance documents, peer review of engineering designs, onsite construction assistance, and focused performance monitoring, CVC can assist property owners in retrofitting their properties with LID to take advantage of the utility fee credits and incentive programs.
- **Making it Work: Professional Training - Provides municipal staff, the development community, and planning professionals the training and guidance tools they need to promote and deliver LID.** The training programs CVC offers help to build capacity of stormwater professionals to meet demand for re fit stormwater management services. The guidance documents CVC has developed guide professionals through all aspects of LID, planning, engineering, landscaping and construction. Through the Ministry of Environment Showcasing Water Innovation Fund, CVC in partnership with the City of Mississauga is developing step by step guidance on how to retrofit different landuse sectors with LID, Industrial/Commercial, Residential and Institutional and Public Lands.
- **Community Engagement Program - We help watershed residents and community based organizations understand and use LID techniques through demonstration projects, pollution prevention programs and our [bealeader.ca](http://bealeader.ca) website.** CVC is educating the community through a variety of outreach approaches and marketing (environmental school curriculum, educational signage, demonstration projects in public spaces, public meetings) to understand the value of our water resources and the important functions of the stormwater infrastructure that the utility fees will improve and maintain.

The City of Mississauga has demonstrated their leadership in innovative water resource management and protection. CVC hopes the city will continue to show its leadership by approving the stormwater utility fee. The shift to a stormwater utility fee structure would be a significant step toward ensuring that our communities have safe, abundant, clean drinking water.

A handwritten signature in black ink that reads 'Rae Horst'.

Rae Horst  
Chief Administrative Office  
Credit Valley Conservation

cc: Patricia Mullin, CVC Chair

**Pressures on Stormwater Program**

- 1) Minimize storm related flood risks to all buildings/structures in the City:
  - a) Cooksville Flood Evaluation Study – flood storage facilities
  - b) Estimated cost - \$150 million (\$79 million in 2013 to 2022 capital program needs)
  - c) Flood evaluation studies of other flood prone areas still need to be done
  
- 2) Enhance water quality treatment initiatives:
  - a) Increase water quality treatment from current coverage of 15%
  - b) Construct, operate and maintain low impact development measures
  - c) Naturalization programs, social marketing
  
- 3) Enhance By-law Enforcement:
  - a) Additional staff resources for outreach, inspections and enforcement efforts
  - b) Storm Sewer Use By-law, Erosion and Sediment Control By-law
  - c) Encroachments into Storm Drainage Easements
  
- 4) Enhance monitoring and maintenance activities:
  - a) Improvements to sewer inspection and cleaning programs
  - b) Enhance stormwater management facility monitoring efforts
  - c) Expand Woody Debris Management program city-wide
  
- 5) Climate change adaptation:
  - a) Storm drainage network model
  - b) Infrastructure vulnerability assessments and upgrades
  
- 6) Regulatory requirements:
  - a) Increase in monitoring requirements
  - b) Legislation such as Ontario's Water Opportunities Act
  
- 7) Infrastructure life-cycle renewal costs:
  - a) Stormwater management pond dredging and rehabilitation
  - b) Watercourse rehabilitation and works renewal
  - c) Storm pipe infrastructure replacement

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## Stormwater Program Through Property Tax

Stormwater Program Item	Existing (2012) <sup>1</sup>	Tax Financing of Future Stormwater Management Program								
		Status Quo			Interim			Sustainable		
Program Cost <sup>2,3</sup>	\$14,650,000	\$14,650,000			\$26,610,000			\$39,490,000		
Property Tax & PILT Allocation	2.36%	3.96%			7.19%			10.67%		
<b>Single-Family Detached Home</b>		Charge	Δ	%	Charge	Δ	%	Charge	Δ	%
Average assessed value	\$28.58	\$48.01	\$19.43	68%	\$87.21	\$58.63	205%	\$129.42	\$100.85	353%
<i>Examples</i>										
Brooks Drive	\$28.37	\$47.66	\$19.29	68%	\$86.57	\$58.20	205%	\$128.47	\$100.10	353%
Robin Drive	\$42.69	\$71.72	\$29.03	68%	\$130.28	\$87.59	205%	\$193.34	\$150.65	353%
Homelands Drive	\$27.39	\$46.01	\$18.62	68%	\$83.58	\$56.19	205%	\$124.03	\$96.64	353%
Beacham Street	\$31.08	\$52.22	\$21.14	68%	\$94.85	\$63.77	205%	\$140.76	\$109.67	353%
King Richard's Place	\$40.14	\$67.44	\$27.30	68%	\$122.50	\$82.35	205%	\$181.79	\$141.65	353%
<b>Condominium</b>										
Sherobee Road (example)	\$15.86	\$26.64	\$10.78	68%	\$48.39	\$32.54	205%	\$71.82	\$55.96	353%
<b>Multi-Family (7+ Units)</b>										
Goreway Drive-per unit (example)	\$10.54	\$17.71	\$7.17	68%	\$32.18	\$21.63	205%	\$47.75	\$37.21	353%
<b>Commercial</b>										
Mall (example)	\$10,445	\$17,548	\$7,103	68%	\$31,875	\$21,429	205%	\$47,303	\$36,858	353%
<b>Tax Exempt</b>										
Church-Dundas Street (example)	\$0	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A

**Note:**

1. Current program includes \$8.7M (Tax & Payment In-Lieu-Of Taxes) plus \$5.9M (Reserves). As such, the 2.36% shown is based only on \$8.7M. Due to declining reserves, the program will ultimately need to be fully funded by tax.
2. Numbers are in present day value (no inflation).
3. The program cost represents the capital and operation cost (tax component).

Estimated Stormwater Rate (Tiered SFU, with Fee Exemptions)

Billing Units (SFU)	Service Level:	Status Quo	Interim	Sustainable
	Program Cost	\$14,650,000	\$26,610,000	\$39,490,000
	Base Rate (\$/SFU/month)	\$4.39	\$7.80	\$11.47
<b>Single-Family Detached Home</b>				
0.7	10-percentile (Small Tier)	\$36.31	\$64.52	\$94.87
1.0	10-percentile assessed value	\$52.68	\$93.60	\$137.64
1.0	50-percentile assessed value	\$52.68	\$93.60	\$137.64
1.0	90-percentile assessed value	\$52.68	\$93.60	\$137.64
1.4	90-percentile (Large Tier)	\$71.95	\$127.84	\$187.99
1.0	Brooks Drive	\$52.68	\$93.60	\$137.64
1.0	Robin Drive	\$52.68	\$93.60	\$137.64
1.0	Homelands Drive	\$52.68	\$93.60	\$137.64
1.0	Beacham Street	\$52.68	\$93.60	\$137.64
1.0	King Richard's Place	\$52.68	\$93.60	\$137.64
<b>Condominium</b>				
0.2	Sherobee Road	\$12.07	\$21.45	\$31.54
<b>Multi-Family (7+ Units)</b>				
0.2	Goreway Drive (per unit)	\$9.63	\$17.10	\$25.15
<b>Commercial</b>				
519.1	Mall	\$27,346	\$48,587	\$71,448
<b>Tax-Exempt</b>				
14.9	Church (Dundas Street)	\$787	\$1,399	\$2,057

Notes:

1. Rate assumes 92% collection with annual administration estimate of \$770,000 (subject to refinement) - not reflected in the Program Cost above.
2. Figures in present day value (no inflation).
3. Numbers shown as estimates only.
4. The program cost represents the capital and operation cost (tax component).

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Comparison: Tax versus Estimated Stormwater Rate

Stormwater Program Item	Existing (2012) <sup>1</sup>	Interim Service Level							
		Tax (Program fully funded by tax)			Rate (Tiered SFU, with Exemptions)			Difference	
		Annual Charge	$\Delta_{\text{Existing}}$	%	Annual Charge	$\Delta_{\text{Existing}}$	%	$\Delta_{\text{Tax}}$	%
<b>Single-Family Detached Home</b>									
10-percentile (Small Tier)	\$22.10	\$67.44	\$45.34	205%	\$64.52	\$42.42	192%	-\$2.93	-4%
10-percentile assessed value	\$22.10	\$67.44	\$45.34	205%	\$93.60	\$71.50	324%	\$26.16	39%
50-percentile assessed value	\$28.58	\$87.21	\$58.63	205%	\$93.60	\$65.02	228%	\$6.39	7%
90-percentile assessed value	\$40.69	\$124.16	\$83.47	205%	\$93.60	\$52.91	130%	-\$30.56	-25%
90-percentile (Large Tier)	\$40.69	\$124.16	\$83.47	205%	\$127.84	\$87.15	214%	\$3.68	3%
Brooks Drive	\$28.37	\$86.57	\$58.20	205%	\$93.60	\$65.23	230%	\$7.03	8%
Robin Drive	\$42.69	\$130.28	\$87.59	205%	\$93.60	\$50.91	119%	-\$36.68	-28%
Homelands Drive	\$27.39	\$83.58	\$56.19	205%	\$93.60	\$66.21	242%	\$10.02	12%
Beacham Street	\$31.08	\$94.85	\$63.77	205%	\$93.60	\$62.52	201%	-\$1.25	-1%
King Richard's Place	\$40.14	\$122.50	\$82.35	205%	\$93.60	\$53.46	133%	-\$28.90	-24%
<b>Condominium (Example)</b>									
Sherobee Road	\$15.86	\$48.39	\$32.54	205%	\$21.45	\$5.59	35%	-\$26.95	-56%
<b>Multi-Family (7+ Units) (Example)</b>									
Goreway Drive (per unit)	\$10.54	\$32.18	\$21.63	205%	\$17.10	\$6.56	62%	-\$15.07	-47%
<b>Commercial (Example)</b>									
Mall	\$10,445	\$31,875	\$21,429	205%	\$48,587	\$38,142	365%	\$16,713	52%
<b>Tax Exempt (Example)</b>									
Church (Dundas Street)	\$0	\$0	\$0	N/A	\$1,399	\$1,399	N/A	\$1,399	N/A

Notes:

- Existing program includes \$8.7M (Tax & Payment In-Lieu-Of Taxes) and \$5.9M (Reserves). The cost shown under Existing (2012) reflects only the cost based only on \$8.7M.
- Rate assumes 92% collection with annual administration estimate of \$770,000 (subject to refinement).
- All values in present value (no inflation) and are estimates only.



# Corporate Report

Clerk's Files

Originator's Files MG.23.REP

**DATE:** November 19, 2012

**TO:** Chair and Members of General Committee  
Meeting Date: December 5, 2012

**FROM:** Martin Powell, P.Eng.  
Commissioner of Transportation and Works

**SUBJECT:** **Cooksville Creek Flood Evaluation Study Update  
(Wards 1, 3, 4, 5, 6 & 7)**

<p>General Committee</p> <p><b>DEC 05 2012</b></p>
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**RECOMMENDATION:** That the report dated November 19, 2012 from the Commissioner of Transportation and Works titled *Cooksville Creek Flood Evaluation Study Update* be received for information.

**BACKGROUND:** The Cooksville Creek Flood Evaluation Study Master Plan Environmental Assessment (CFES) was undertaken following the August 4, 2009 storm which caused significant flooding in the Cooksville Creek watershed. City staff has been partnering with the Region of Peel and Credit Valley Conservation (CVC) to mitigate and reduce the risk of flooding in this area. While work with Regional staff has focused primarily on basement flooding mitigation due to sanitary sewer surcharging, the goal of the CFES was to find solutions to reduce the occurrence of riverine flooding of dwellings and properties adjacent to Cooksville Creek.

**COMMENTS:** Past experience with riverine issues across the Cooksville Creek watershed suggests that it is prudent to pursue a modern and implementable approach that would reduce flooding potential along the creek. The CFES examined and proposed solutions that could be implemented to lessen the risk of flooding should a similar event

occur as that of August 4, 2009 which was comparable to a 100-year storm.

The study process was completed in accordance with the Municipal Class Environmental Assessment (EA) process. Following an EA Master Plan approach has satisfied the EA requirements for all of the projects recommended for implementation by the study. This means that they may proceed to detailed design and construction.

The consultation element of the CFES included a public meeting, consultation with staff from Transportation and Works, Community Services and CVC, the Leadership Team, the Mayor and affected Ward Councillors as well as the Cooksville Flooding Task Force. The study has been formally completed, and CVC and Regional staff have provided comments to assist in the specific projects going forward. It should be highlighted that the City will consult again with local stakeholders at the time of implementation for each specific project.

The study recommendations to reduce the risk of flooding to homes and other buildings from storms up to the 100-year event are as follows:

- Construction of detention storage facilities in the upper part of the watershed located north of Highway 403 to reduce the 100-year peak flow through the major flood affected areas. There was limited opportunity within the watershed for conventional above ground ponds, so a number of underground detention storage facilities are proposed. An overview of the proposed site locations for the detention facilities, as well as a sample of an underground detention facility, is included in Appendix 1
- Improving downstream culvert and bridge crossings, namely at King Street East and Paisley Boulevard East, to safely convey the 100-year peak flow. A concept for the King Street East bridge improvement is included in Appendix 2
- Encouragement of Low Impact Development (LID) techniques on existing developed lands throughout the watershed to reduce storm runoff volumes

- Construction of a dyke south of Central Parkway East immediately behind the townhouses on Rhonda Valley Boulevard. A concept for the Rhonda Valley dyke is included in Appendix 3

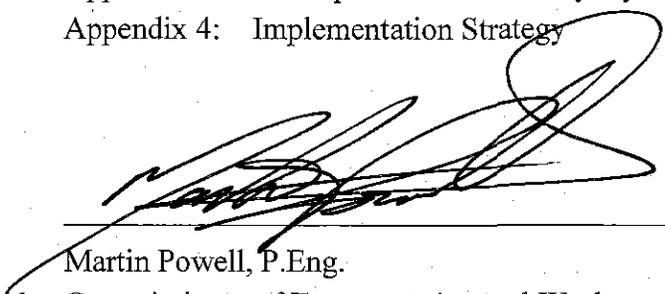
The estimated construction cost for these works, excluding land costs and any LID measures undertaken by private land owners, is \$90 million. It is expected that the entire plan would be implemented over the next 20 years, subject to available funding. A summary of the Implementation Strategy is included as Appendix 4.

**FINANCIAL IMPACT:** Funding requirements to implement the recommendations of the Cooksville Creek Flood Evaluation Study will be dealt with through annual capital budget processes.

**CONCLUSION:** The Cooksville Creek Flood Evaluation Study has laid out a recommended plan for implementation that would benefit in mitigating riverine flood risk. The first three priority projects recommended from the Study, which are the King Street East and Paisley Boulevard East crossing improvements, the Rhonda Valley Boulevard dyke and a large stormwater management facility in the upper reaches of the Cooksville Creek, will be moving to the design phase in the winter of 2013.

**ATTACHMENTS:**

- Appendix 1: Locations and Sample of Underground Detention
- Appendix 2: Concept for King Street Crossing Upgrade
- Appendix 3: Concept of Rhonda Valley Dyke
- Appendix 4: Implementation Strategy



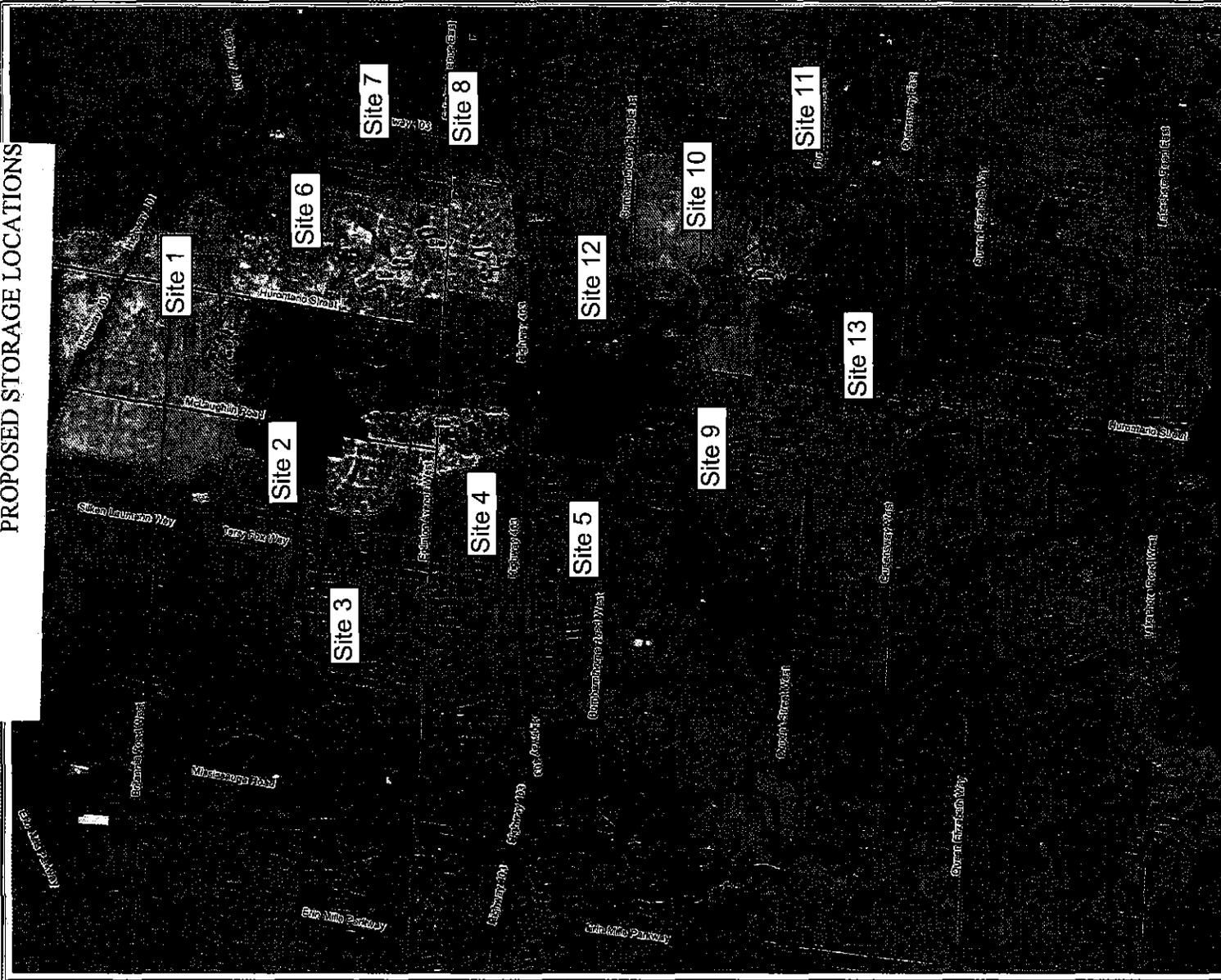
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Martin Powell, P.Eng.  
Commissioner of Transportation and Works

*Prepared By: Muneef Ahmad, Water Resources Engineer,  
Transportation and Infrastructure Planning*



APPENDIX 1A: REPORT EXCERPT SHOWING  
PROPOSED STORAGE LOCATIONS



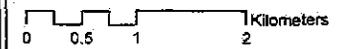
KEY MAP

LEGEND:

- Subwatershed Boundary
- Site Location
- Streams
- Area Draining to Park
- Area Draining to Hydro R.O.W
- Area Draining to Private Lands

NOTES:

Base Mapping was provided by City of Mississauga



2800 Skymark Avenue  
Mississauga, ON L4W 5B2  
Phone: 905-623-0299  
Fax: 905-623-0288



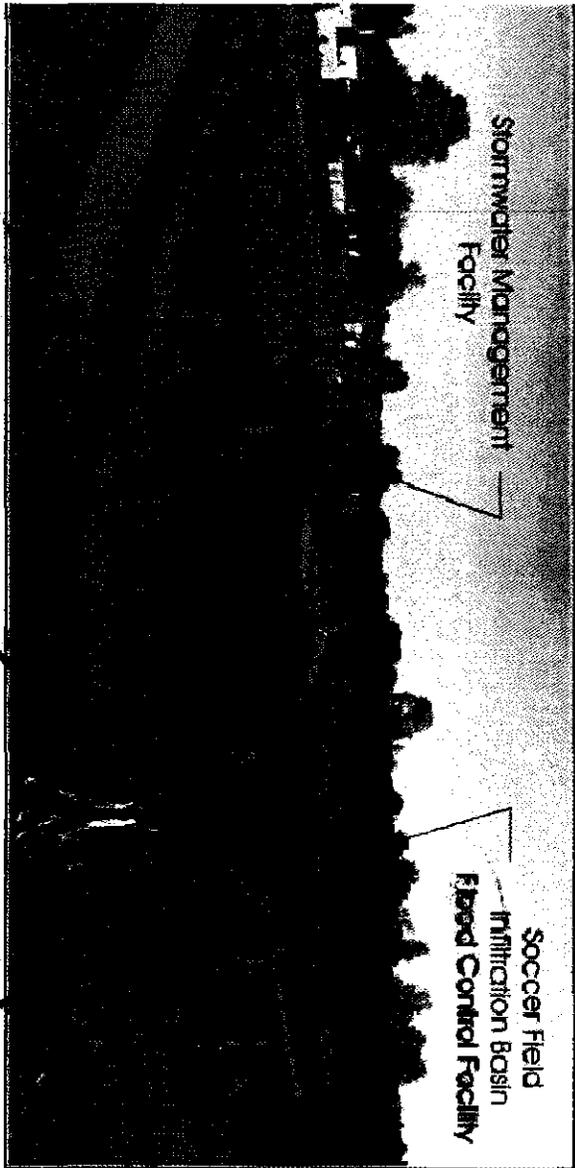
COOKSVILLE CREEK FLOOD EVALUATION  
MASTER PLAN EA

Proposed Flood Storage Within  
the Cooksville Creek Watershed

FIGURE No. 6.5

DATE: May 2012

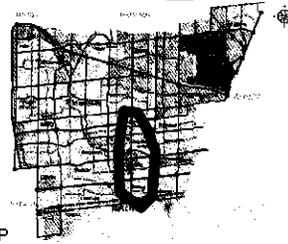
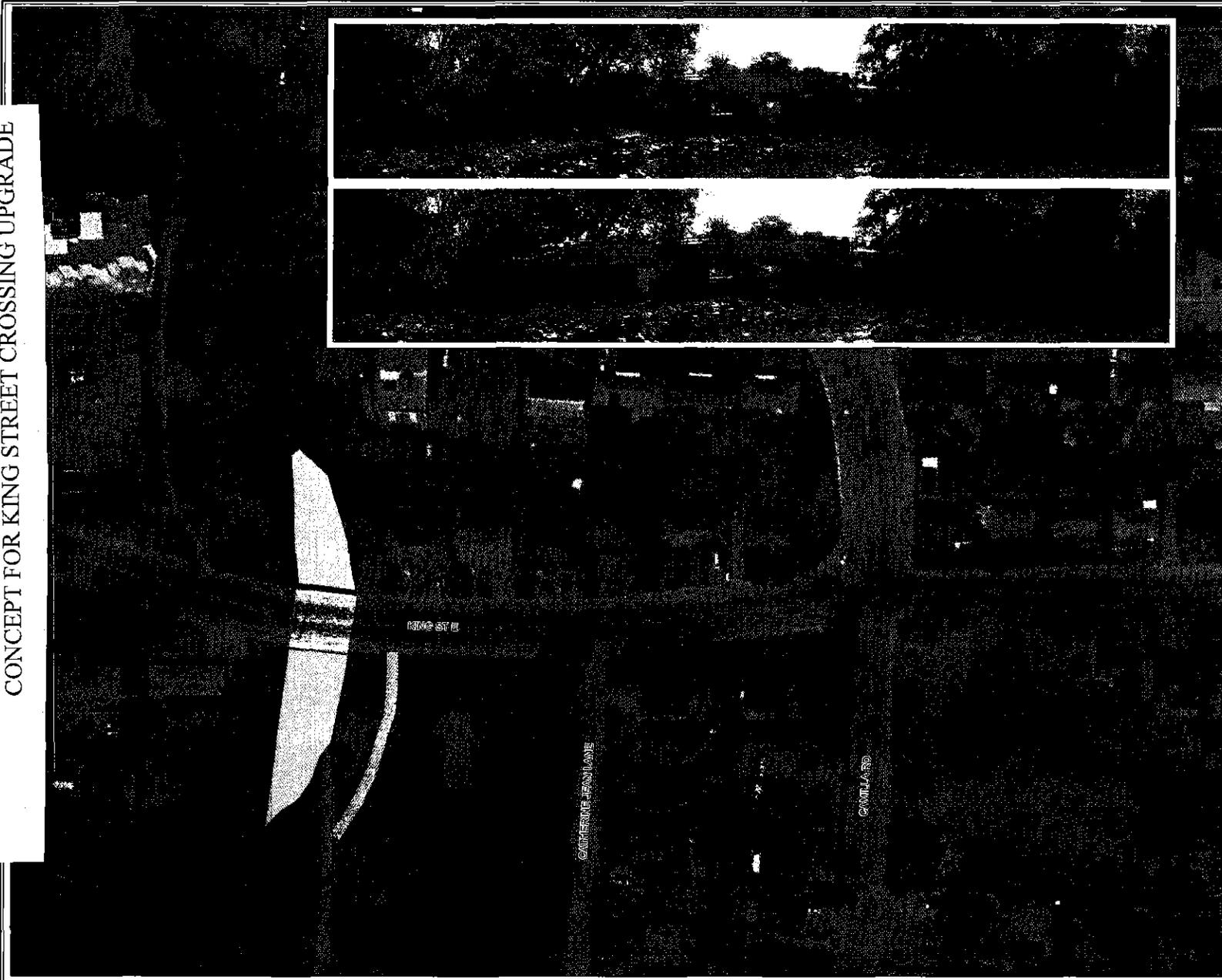
# UNDERGROUND STORAGE SAMPLE (TORONTO)



Terraview  
Park



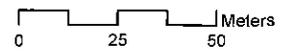
APPENDIX 2: REPORT EXCERPT SHOWING  
CONCEPT FOR KING STREET CROSSING UPGRADE



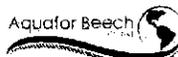
LEGEND:  
KEY MAP

-  Proposed Channel Realignment
-  Proposed Bridge Extension
-  Proposed Trail Realignment

NOTES:  
Base Mapping was provided by City of Mississauga



2600 Skymark Avenue  
Mississauga, ON L4W 5B2  
Phone: 905-629-0099  
Fax: 905-629-0089





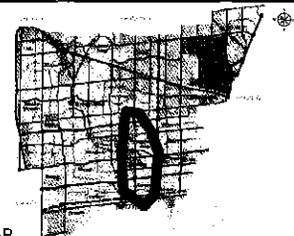
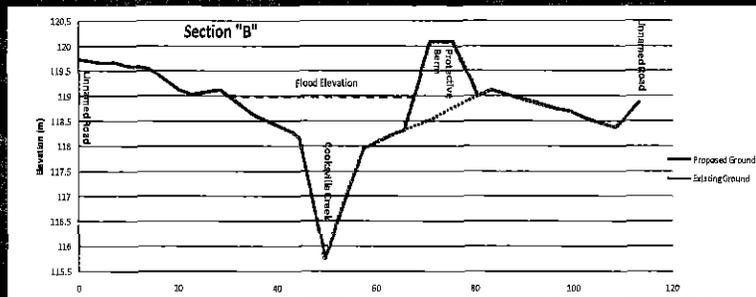
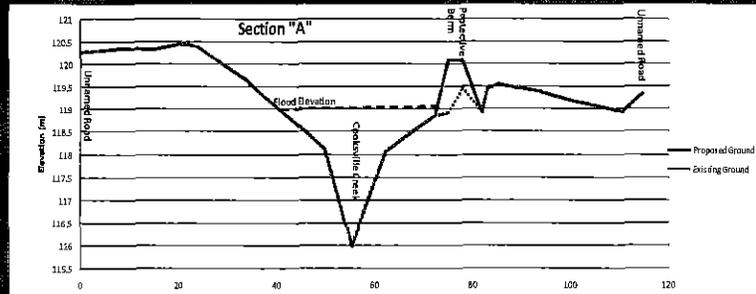
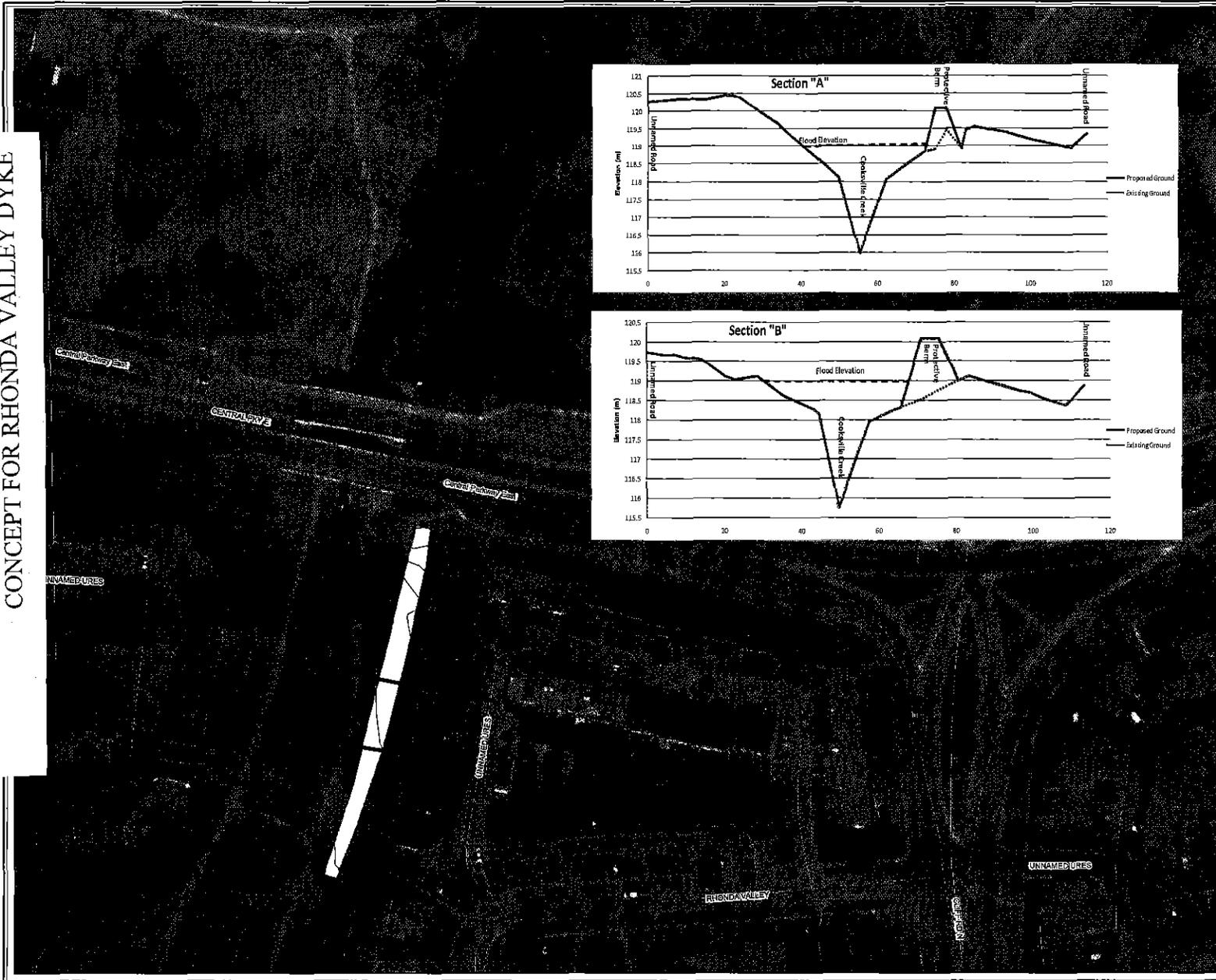
COOKSVILLE CREEK FLOOD EVALUATION  
MASTER PLAN EA

King Street East Proposed Upgrade

FIGURE No. 6.11

DATE: May 2012

APPENDIX 3: REPORT EXCERPT SHOWING  
CONCEPT FOR RHONDA VALLEY DYKE



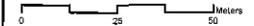
KEY MAP

LEGEND:

- Cross-Section
- Protective Berm

NOTES:

Base Mapping was provided by City of Mississauga



2600 Skymark Avenue  
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COOKVILLE CREEK FLOOD EVALUATION  
MASTER PLAN EA

Rhonda Valley Upgrades

FIGURE No. 6.12

DATE: May 2012

**Table 7.1 Implementation Strategy**

Recommended Plan component	Capital cost (\$)	Funding alternatives	Policy or Design Standard Implications	Timeframe for Implementation/Prioritization	Expected Environmental Benefit	Coordination with Existing Programs and Projects	Future Study Requirements
<b>Storage in the Upstream Locations</b>	93,600,000	Capital Funding	<ul style="list-style-type: none"> <li>Coordination with the Community Services Department re: parks programs and policies</li> <li>Purchase of two properties</li> </ul>	Park 317 (Site # 1) : 1 – 3 Years  The remainder of sites (3 – 20 Years)	<ul style="list-style-type: none"> <li>Reduction of flood frequency along Cooksville Creek</li> <li>Reduction in erosion problems</li> <li>Improvement in water quality and aquatic habitat</li> </ul>	Integration with the Community Services Department Parks programs and policies	Preliminary and detailed design
<b>Watercourse and Channel Capacity Upgrades</b>	7,500,000	Capital Funding	Purchase of vacant lot within floodplain at Paisley Boulevard	1 – 3 Years	Reduction of flood frequency at King St. and Paisley Boulevard	<ul style="list-style-type: none"> <li>Purchase of vacant lot at Paisley</li> <li>Relocation of walkway in Cooksville Park</li> </ul>	Preliminary and detailed design
<b>Berm Construction at Rhonda Valley</b>	300,000	Capital Funding	None	1 – 3 Years	Reduction of flood frequency at Rhonda Valley	Confirmation of existing trail/recreational requirements	Preliminary and detailed design
<b>Implementation of Source and Conveyance Control Program</b>	Priced as part of the Stormwater Quality Strategy Update (Aquafor, 2011)	As shown in the Stormwater Quality Strategy Update (Aquafor, 2011)	updating by-laws and policies to accommodate source and conveyance controls (Aquafor, 2011)	1 – 25 Years	Provide many environmental benefits due to their capacity to infiltrate, store, or increase evapotranspiration thereby reducing stormwater runoff volume and flow rate	Aquafor (2011) sets up a framework for the implementation of source and conveyance control measures	<ul style="list-style-type: none"> <li>Depends on specifics of site</li> <li>Geotechnical assessment</li> <li>Hydraulic conductivity test</li> </ul>



# Corporate Report

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Files

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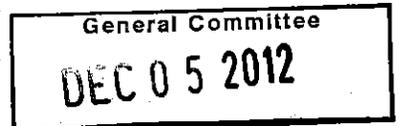
**DATE:** November 21, 2012

**TO:** Chair and Members of General Committee  
Meeting Date: December 5, 2012

**FROM:** Paul A. Mitcham, P.Eng., MBA  
Commissioner of Community Services

**SUBJECT:** **New Revised Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program**

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**RECOMMENDATION:**

1. That Council pass a resolution supporting rooftop solar projects in Mississauga as outlined in the Corporate Report titled "New Revised Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program" dated November 21, 2012 from the Commissioner of Community Services.
2. That a resolution repealing Resolutions 0170-2012 and 0219-2012 be passed by Council.

**REPORT  
HIGHLIGHTS:**

- On August 10, 2012, the Province of Ontario released the new Feed-in Tariff (FIT) 2.0 Program, which included the requirements for municipal council support resolutions to qualify applicants of the FIT 2.0 Program for priority points.
- On November 12, 2012, the Ontario Power Authority (OPA) revised the requirements for the wording of the municipal support resolutions.
- Council passed two support resolutions for rooftop solar applications: the first on July 4, 2012 supporting, in principle,

rooftop solar applications under the FIT Program subject to three conditions; and the second on September 26, 2012 supporting, without reservation, rooftop solar applications with no conditions.

- The July 4, 2012 resolution does not meet the OPA's current requirements for priority points and the September 26, 2012 resolution expires December 26, 2012.
- In order for applications to the FIT 2.0 Program to qualify for priority points based on municipal council support, Council must pass the new resolution.
- The new revised Council support resolution will be provided to applicants who fulfill the criteria contained in a checklist.

**BACKGROUND:**

On July 4, 2012, Mississauga Council passed Resolution 0170-2012 to support, in principle, solar rooftop projects in Mississauga subject to conditions relating to glare and fire safety. The resolution was based on the requirements of the draft Feed-in Tariff (FIT) 2.0 Program, and passed in anticipation of the new Feed-in Tariff (FIT) 2.0 Program being released and the application window being opened.

On August 10, 2012, the Ontario Power Authority (OPA) released the new FIT 2.0 Program which clarified the requirements for municipal council support resolutions to qualify applicants of the FIT 2.0 Program for priority points. The requirements specified:

- a) wording for the municipal council support resolutions that included "support, without reservation"; and
- b) that resolutions cannot be subject to conditions.

As such, the July 4, 2012 Council resolution did not meet the OPA's requirements for priority points. On September 26, 2012, Council considered a motion for a revised resolution with no conditions and with wording prescribed by the OPA including the words "support, without reservation". Concerns were raised regarding the prescribed wording, as well as potential impacts of rooftop solar projects on adjacent residential areas. The August 29, 2012 Corporate Report to General Committee is contained in Appendix 1.

Although Council had reservations about the wording of the resolution, to avoid jeopardizing applicants applying to the FIT Program for rooftop solar projects in Mississauga, the resolution was passed, but it was stipulated that it would lapse three months after adoption by Council. At the time of the September 26, 2012 Council meeting, the OPA had announced an October 1, 2012 opening of the FIT Program application window for small renewable energy projects ( $>10$  kilowatt (kW)  $\leq 500$  kW). Subsequently, on September 28, 2012 the OPA announced that the application window would be delayed until further notice. At the time of writing this report, no new dates with respect to the application window have been announced.

Several municipalities, including Mississauga, have repeatedly expressed concern to the OPA about the wording requirements for the municipal support resolutions. In response, on November 12, 2012, the OPA revised the required wording to exclude the words "without reservation".

**PRESENT STATUS:** Resolution 0170-2012 adopted by Council on July 4, 2012 does not meet the OPA's requirements for municipal support resolutions qualifying for priority points. In addition, Resolution 0219-2012 adopted by Council on September 26, 2012 expires on December 26, 2012.

Presently, staff are aware of 21 companies who are preparing to apply for 184 rooftop solar installations in Mississauga. The applications are for small FIT projects ( $>10$  kilowatt (kW)  $\leq 500$  kW). Of the 184 locations:

- 113 are Peel District School Board sites;
- Seven are City of Mississauga facilities;
- Two are GO parking garages;
- One is a hospital;
- One is a Region of Peel Social Housing project;

- One is an apartment building;
- One is a place of worship; and
- 58 are industrial or commercial buildings.

Appendix 2 is a map showing the locations of the proposed rooftop solar projects in Mississauga applying to the FIT Program. Appendix 3 contains 11 maps showing the same locations by individual ward.

**COMMENTS:**

Seeing as the July 4, 2012 resolution does not comply with the OPA's requirements and the September 26, 2012 resolution expires on December 26, 2012, Council must pass a new resolution in order to provide support for rooftop solar applications applying to the FIT Program. The new revised resolution, as proposed in Appendix 4, states that Council supports rooftop solar projects. The words "without reservation" have been removed.

In addition, in order to address Council's concerns regarding potential impacts of rooftop solar projects adjacent to residents, a checklist has been developed (see Appendix 5). The checklist addresses issues relating to visibility, noise, glare, ice, safety and emergencies. The Council support resolution will only be provided to applicants who satisfy the items on the checklist. Keeping in mind that renewable energy projects are exempt from planning approvals, but are required to obtain a building permit, the checklist covers aspects that would not be addressed through the building permit process. If an applicant cannot satisfy the items on the checklist, the Council support resolution will not be provided.

**FINANCIAL IMPACT:** There are no financial impacts of the new revised blanket Council resolution in support of rooftop solar installations in Mississauga.

Where the rooftop solar installation is on a City-owned building, there will be revenue generated from the lease. The amount generated for each building will vary depending on the type and size of the installation.

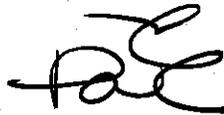
**CONCLUSION:**

Passing the new revised resolution shows Council's support of rooftop solar projects in Mississauga, while ensuring impacts on residents will be addressed. It is unlikely that this new revised resolution will undermine any of the consents or permits that are required by the City or any other authority as the wording of the prescribed resolution provides that the sole purpose of the resolution is to enable FIT applicants to gain priority points and is not to be used for any other purpose.

The new revised Council support resolution will increase FIT 2.0 Program applicants' chances of being awarded the opportunity to build rooftop solar projects in Mississauga by enabling such applicants to qualify for priority points.

**ATTACHMENTS:**

- Appendix 1: August 29, 2012 General Committee Corporate Report titled "Revised Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program".
- Appendix 2: Mississauga Locations of Rooftop Solar Projects Applying to the Feed-in Tariff Program.
- Appendix 3: Locations of Rooftop Solar Projects Applying to the Feed-in Tariff Program by Ward.
- Appendix 4: New Revised Council Support Resolution for Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) 2.0 Program.
- Appendix 5: Mississauga Rooftop Solar Applications Checklist.



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Paul A. Mitcham, P.Eng., MBA  
Commissioner of Community Services

*Prepared By: Mary Bracken, Environmental Specialist*

3(e)



# Corporate Report

Clerk's Files

Originator's Files

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**DATE:** August 29, 2012

**TO:** Chair and Members of General Committee  
Meeting Date: September 19, 2012

**FROM:** Paul A. Mitcham, P.Eng., MBA  
Commissioner of Community Services

**SUBJECT:** **Revised Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program**

<p>General Committee</p> <p><b>SEP 19 2012</b></p>
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**RECOMMENDATION:** That Council pass a resolution supporting, without reservation, rooftop solar projects in Mississauga as outlined in the Corporate Report titled "Revised Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program" dated August 29, 2012 from the Commissioner of Community Services and that a resolution repealing Resolution 0170-2012 be passed by Council.

**REPORT HIGHLIGHTS:**

- Based on the requirements of the draft Feed-in Tariff (FIT) 2.0 Program, on July 4, 2012 Council passed Resolution 0170-2012 supporting, in principle, rooftop solar applications under the FIT Program subject to certain conditions.
- On August 10, 2012, the Province of Ontario released the new Feed-in Tariff (FIT) 2.0 Program, which clarified the requirements for municipal council support resolutions to qualify applicants of the FIT 2.0 Program for priority points.
- The wording in the July 4, 2012 Council resolution does not meet the new FIT 2.0 Program requirements to enable applicants to qualify for priority points.

- A revised blanket Council resolution, which excludes the conditions listed in the July 4, 2012 Council resolution, is proposed for the purpose of enabling applicants to qualify for priority points.
- In order for applicants to the FIT 2.0 Program to qualify for priority points based on municipal council support, Council must pass the revised resolution in its prescribed form.
- The application window for small FIT projects (>10 kilowatt (kW) ≤ 500 kW) is anticipated to open October 1, 2012 and remain open until November 30, 2012.

**BACKGROUND:**

On July 4, 2012, Mississauga Council passed Resolution 0170-2012 to support, in principle, solar rooftop projects in Mississauga. The resolution was based on the requirements of the draft Feed-in Tariff (FIT) 2.0 Program and passed in anticipation of the new Feed-in Tariff (FIT) Program being released. The June 14, 2012 Corporate Report to General Committee is contained in Appendix 1.

On August 10, 2012, the Ontario Power Authority (OPA) released the new FIT 2.0 Program which clarified the requirements for municipal council support resolutions to qualify applicants of the FIT 2.0 Program for priority points. The application window for small FIT projects (>10 kW ≤ 500 kW) is anticipated to extend from October 1, 2012 to November 30, 2012. All applications received during the application window will be reviewed according to the new FIT 2.0 Program Rules for compliance and for the prioritization of applications. Where projects have the same number of priority points, the time stamp will be used to determine the order in which projects will be tested for available transmission and distribution capacity. The OPA anticipates awarding 200 megawatts of small FIT contracts.

The new FIT 2.0 rules stipulate that, in the application for the FIT Program, priority points will be awarded for certain factors. Two of the priority points will be given for a municipal council support resolution. A prescribed form/template for a municipal council blanket support resolution is provided under the FIT 2.0 Program. The wording in the template stipulates that a council support, without reservation, renewable energy projects. In addition, a confirming by-law demonstrating the support of the local municipality is required.

**PRESENT STATUS:** There are two aspects of the July 4, 2012 Council resolution that do not comply with the new FIT 2.0 Program:

1. The words support "in principle" do not meet the intent of the OPA's prescribed forms which state support "without reservation"; and
2. The three conditions do not meet the intent of supporting "without reservation".

**COMMENTS:** City staff has consulted with the OPA to ensure that the revised resolution (Appendix 2) will be acceptable for the priority points.

In order to enable applicants to the FIT 2.0 Program to qualify for the priority points tied to municipal council support, Council must pass a resolution in the form prescribed by the OPA. The following outlines the differences between the July 4, 2012 resolution and the proposed resolution:

1. Change the wording to: "The Council of the City of Mississauga supports without reservation the construction and operation of Rooftop Solar Projects", thereby removing the words "in principle" and adding the words "without reservation".
2. Remove the three conditions relating to anti-reflective surfaces, fire safety and all applicable laws and regulations. Although the conditions would be removed, staff would ensure that, when providing copies of the Council resolution to applicants, information would be provided notifying applicants of these issues.

The requirement for a confirming by-law can be met with the confirmatory by-law which is passed after each Council meeting.

Passing the new resolution in its prescribed form shows Council's support of rooftop solar projects in Mississauga without reservations or conditions. It is unlikely that this new resolution will undermine any of the consents or permits that are required by the City or any other authority as the wording of the prescribed resolution provides

that the sole purpose of the resolution is to enable FIT applicants to gain priority points and that the resolution is not to be used for any other purpose.

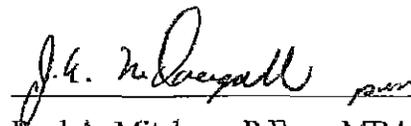
**FINANCIAL IMPACT:** There are no financial impacts of the revised blanket Council resolution in support of rooftop solar installations.

Where the rooftop solar installation is on a City-owned building, there will be revenue generated from the lease. The amount generated for each building will vary depending on the type and size of the installation.

**CONCLUSION:** The revised Council support resolution will increase FIT 2.0 Program applicants' chances of being awarded the opportunity to build rooftop solar projects in Mississauga by enabling such applicants to qualify for priority points.

**ATTACHMENTS:**

- Appendix 1: June 14, 2012 General Committee Corporate Report titled "Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program".
- Appendix 2: Revised Council Support Resolution for Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) 2.0 Program.



Paul A. Mitcham, P.Eng., MBA  
Commissioner of Community Services

*Prepared By: Mary Bracken, Environmental Specialist*

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# Corporate Report

Clerk's Files

Originator's Files

**DATE:** June 14, 2012

**TO:** Chair and Members of General Committee  
Meeting Date: June 27, 2012

**FROM:** Paul A. Mitcham, P.Eng., MBA  
Commissioner of Community Services

**SUBJECT:** Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program

General Committee  
**JUN 27 2012**

**RECOMMENDATION:** That Council pass a motion which supports, in principle, rooftop solar projects in Mississauga as outlined in the Corporate Report titled "Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program" dated June 14, 2012 from the Commissioner of Community Services.

<b>REPORT HIGHLIGHTS:</b>	<ul style="list-style-type: none"> <li>• The Province of Ontario will be releasing a new Feed-in Tariff (FIT) program.</li> <li>• The draft FIT 2.0 program provides municipalities the opportunity to show their support for renewable energy projects by issuing a council support resolution.</li> <li>• Mississauga has received numerous requests for Council resolutions supporting rooftop solar projects.</li> <li>• The City has entered into an agreement with a solar photovoltaic company where the City will lease the roof space at selected City facilities and the company installs, owns, and operates the rooftop solar systems. Applications will be submitted to the FIT program for installation of solar photovoltaic systems on selected City</li> </ul>
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buildings. A Council resolution will be required to qualify for two priority points under the FIT application process.

- *Planning Act* approvals do not apply to renewable energy projects.
- The *Building Code Act* applies to renewable energy projects.
- A blanket Council resolution is proposed that supports rooftop solar projects, in principle, subject to a number of issues being addressed, such as those relating to: glare, safe access during emergencies, and heritage buildings.
- Supporting renewable energy projects is consistent with goals in the Strategic Plan, Living Green Master Plan, Official Plan, Economic Development Strategy and the City's Corporate Energy Management Plan.

**BACKGROUND:****Province of Ontario Renewable Energy Initiatives**

The *Green Energy Act* (the "Act") came into effect in 2009. The Act addresses energy efficiency, energy conservation and demand management, and the promotion of renewable energy technologies. Renewable energy sources include: wind, waterpower, biomass, biogas, landfill gas, solar photovoltaic, and geothermal. The Act removes *Planning Act* authority over renewable energy projects. The *Building Code Act* remains applicable law and, as such, building permits are required depending on the size of the project.

In 2009, the Ontario Power Authority (OPA) released a Feed-in Tariff (FIT) program which included two purchase agreement programs for renewable energy projects:

- FIT program – Applies to renewable energy projects over 10 kilowatts (kW);
- microFIT program – Projects 10 kW or less, focussed on homeowners and small businesses.

The purpose of the FIT program was to encourage renewable power generation through a guaranteed pricing structure for renewable electricity production. It included standardized program rules, prices

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and contracts for those interested in developing a qualifying renewable energy project.

This report focuses on the FIT program and does not discuss the details of the microFIT program.

In 2011, the Ontario Ministry of Energy undertook a review of the FIT program. The feedback received from municipalities included concern relating to the lack of municipal authority over renewable energy projects. In April 2012, a draft of the revised FIT program (FIT 2.0) was released for comment. At the time of writing this report, the final FIT 2.0 program had not been released, but is anticipated any time.

The draft FIT 2.0 program includes revised rules for applications and a revised FIT price schedule.

The 2009 FIT program pricing was designed to kick-start the development of a domestic renewable energy industry. Prices for solar rooftop projects ranged from 53.9 cents per kilowatt hour ( $\phi/kWh$ ) to 71.3  $\phi/kWh$ , depending on the size of the project (higher prices for smaller projects). The present domestic renewable energy sector is now of sufficient size to drive economies of scale and lower prices. The draft FIT 2.0 price schedule proposes a 10% to 25% reduction for rooftop solar installations. Prices in the draft FIT 2.0 program price schedule range from 48.7  $\phi/kWh$  to 54.9  $\phi/kWh$ , depending on the size of the project. A 15% price reduction for wind generation is proposed and no price changes are proposed for biomass, biogas and landfill gas projects. The OPA intends to review the FIT price schedule annually or as necessary based on changes in market conditions.

The draft FIT 2.0 program also introduces a point system for evaluating renewable energy projects. Of these priority points, there is the opportunity to submit support from the municipality in the form of a council support resolution. In the context of Mississauga, for rooftop solar projects, there would be a total of seven priority points available, two of which are attributed to an applicant having a supporting municipal council resolution.

The draft FIT 2.0 process has a number of stages. Initially, when an applicant submits a FIT application to the OPA for a renewable energy project they need to provide information such as proof of leasing or ownership of the building rooftop and general details of the project. It is at this stage that the council support resolution is requested for submission as part of the FIT application. The application is then reviewed by the OPA and successful applicants are selected and contracts awarded. This allows the applicant to pursue financing and further details of the project. The applicant has 18 months to install the project. During this time, the applicant must submit a notice to proceed, which includes a financing plan, impact assessment, domestic content, etc. The applicant must apply to the municipality for a building permit and the building permit must be issued prior to installation of the project. During the review of the building permit application, the municipality ensures that the solar installation is safe and abides by the Building Code. Structural implications such as the roof's structural integrity, the additional loading from the solar panels and how they are fastened are some of the factors that are examined.

**City of Mississauga Renewable Energy Projects**

In 2007, the City installed a 25 kW solar photovoltaic generation plant on the roof of the Hershey Centre as a pilot program. Originally, the City entered into an agreement under the Renewable Energy Standard Offer Program, which was upgraded to a FIT agreement in 2010. The pilot installation has been successful and has generated revenue for the City.

In 2011, the City issued a Request for Proposal to qualified photovoltaic power generation developers for leasing rooftop space at selected City facilities. The City completed a procurement process and has entered into an agreement with a solar photovoltaic company where the City will lease the roof space and the company installs, owns, and operates the rooftop solar systems. Once the FIT 2.0 program is released and the window for applications is open for rooftop solar projects, the company will submit applications to the OPA. Although the installations will be on City-owned buildings, the solar photovoltaic company will still require a Council resolution to qualify for the two priority points under the FIT application process.

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### **Rooftop Solar Installations in Mississauga**

There are many rooftop solar installations in the City of Mississauga. The majority are small installations on residential dwellings. Some are larger installations on industrial or institutional buildings. Building permits have been issued for rooftop solar installations that have a surface area greater than or equal to 5 square meters (53.8 square feet) or if it constitutes a material alteration to the building. To date, no issues have been noted relating to rooftop solar installations.

### **City of Mississauga Plans**

The Living Green Master Plan recognizes the importance of Mississauga's energy future and directs Mississauga to: assess energy efficiency and renewable fuel strategies; and continue to identify, invest in and implement renewable energy actions identified in the City's Corporate Energy Management Plan.

The Economic Development Strategy: Building on Success highlights the City's positive position through its economic base and skilled workforce to capitalize on the opportunities that lie in the emergence of the green economy, and the increasing importance of the use and development of clean technologies and their implications for sustainable growth. These opportunities will advance the City's economic future, both in terms of environmental stewardship and in its support for the incubation and production of new green technologies and services.

In addition, the new Mississauga Official Plan, which has been adopted by City of Mississauga Council and Region of Peel Council, but which is currently under appeal, highlights Mississauga's support for renewable energy systems by:

- promoting renewable energy systems; and
- working jointly with other levels of government and agencies to investigate the need, feasibility, implications and suitable locations for renewable energy projects and to promote local clean energy generation, where appropriate.

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**Other Municipalities**

The Municipality of Stratroy-Caradoc Council passed two Resolutions on May 7, 2012 supporting individual rooftop solar projects.

The City of Vaughan Committee of the Whole approved a Recommendation on June 5, 2012 that City of Vaughan Council:

- endorse a resolution to support individual solar rooftop projects making application under the FIT 2.0 program; and
- give staff the authority to provide applicants a copy of the resolutions where the application meets certain criteria.

This will involve staff reviewing each application and issuing individual resolutions. The criteria stipulate that the rooftop solar project be for industrial applications, public use buildings, or site plans with solar rooftop applications that have been approved by the City of Vaughan. At the time of writing this report, City of Vaughan Council had not considered the Recommendation.

The City of Brampton Committee of Council passed a Resolution on June 13, 2012 supporting eight rooftop solar photovoltaic projects that are subject to applications under the FIT program.

There are several other municipalities in Ontario that are considering council resolutions for applications under the FIT program, but, to date, have not passed a resolution.

**PRESENT STATUS:**

The City of Mississauga has received requests from three solar energy companies, involving approximately ten different locations, for Council to pass a resolution in support of their rooftop solar projects. It is anticipated that, once the Province's FIT 2.0 program is released and the application window is opened, the City will receive more requests for Council resolutions.

**COMMENTS:**

Presently, all of the requests received for a City of Mississauga Council support resolution have been for rooftop solar installations.

This is attributed to the fact that there are many large flat roofs in Mississauga, primarily in industrial areas, and there are no large tracks of land suitable for ground mounted solar farms. In addition, average wind speeds in Mississauga are relatively low and do not provide enough capacity to make wind generation profitable. This report therefore proposes that a Council support resolution for FIT applications only be applicable to rooftop solar projects.

The draft FIT 2.0 program provides municipalities the opportunity to provide a council support resolution for FIT applications. This gives municipalities the ability to let the OPA know whether they support the project.

City staff has consulted with all City departments, the Region of Peel, other municipalities, the Environmental Advisory Committee, the OPA, and the solar industry. Although certain structural requirements are addressed through the building permit application, there are two issues that are not covered under the Building Code and one issue that should be highlighted early in the project:

1. Glare: The types of rooftop solar applications under the FIT program generally use anti-reflective solar photovoltaic systems. However, Mississauga is in an area of influence for both Toronto Pearson International Airport and Billy Bishop Toronto City Airport. Glare from solar panels could pose a risk to airplanes taking off and landing. As such, it should be stipulated that anti-glare surfaces be used.
2. Fire safety: In an emergency situation, access to the roof may be necessary. During a fire, ventilation may be required and emergency services staff may need to create holes in the roof. Access on the roof may also be required with enough space for emergency services staff to move around. While accessing the roof, live electricity may pose a risk. A main cut-off or breaker, that is readily accessible to emergency services, will assist in reducing risk during an emergency situation. However, the solar system may be live as long as the solar panels are producing electricity. Emergency services staff are trained to take appropriate measures around live solar panels. However, there

should be signage at the main breaker advising that the solar panels may still be live even if the breaker is off.

3. Heritage buildings:- The types of rooftop solar applications received under the FIT program are generally on large buildings with flat roofs. Therefore, it is anticipated that few, if any, applications under the FIT program would be proposed on heritage buildings. However, should a situation arise where a rooftop solar installation is proposed on a heritage building, the applicant should be advised that the *Ontario Heritage Act* applies and therefore a permit is required for the alteration of the building prior to the building permit being issued.

There are two types of council resolutions proposed under the draft FIT 2.0 rules:

- a blanket support resolution which would cover all applications; and
- a project-specific support resolution.

In order to issue project-specific Council support resolutions, each application will have to be reviewed in advance of the building permit application. In order to review each application, criteria and a process for review would have to be established. This will have resource implications. Other than the factors noted above (glare, fire), the building permit process will ensure safety requirements are met and other applicable laws such as the *Ontario Heritage Act* are addressed. There have been several large rooftop solar projects installed in Mississauga and no issues have been noted to date. However, endorsing the proponent of a specific project could present some liability issues for the City should there be issues with the installation.

A blanket resolution supporting rooftop solar installations provides the opportunity for the City to provide support, in principle, for renewable energy production, while highlighting to the applicant and the OPA specific criteria that is important to Mississauga, but not covered as part of the building permit process. The proposed blanket Resolution, contained in Appendix 1, provides support for rooftop solar projects

3(c)

subject to the glare and fire issues being addressed and highlights the need to obtain a heritage permit, if required. These criteria have been vetted by all City departments to ensure that rooftop solar applications under the FIT program will be compatible in Mississauga.

**STRATEGIC PLAN:**

The Strategic Plan stipulates that renewable energy is important to ensure Mississauga's sustainability. Action 1 of the Green Pillar states that Mississauga "will pursue renewable energy production and use to reduce green house gas emissions, improve air quality and protect natural resources."

Support of renewable energy projects, specifically rooftop solar installations, helps to achieve the goals of the Strategic Plan.

**FINANCIAL IMPACT:**

There are no financial impacts of a blanket Council resolution in support of rooftop solar installations.

Where the rooftop solar installation is on a City-owned building, there will be revenue generated from the lease. The amount generated for each building will vary depending on the type and size of the installation.

**CONCLUSION:**

Council support of rooftop solar renewable energy projects supports the directions in the Strategic Plan, the Living Green Master Plan, the Economic Development Strategy and the Official Plan, and will clearly demonstrate the desire for Mississauga to be recognized for its innovation and leadership in an emerging and green economy.

Although the 2009 *Green Energy Act* removed *Planning Act* approvals from renewable energy projects, the draft FIT 2.0 program provides municipalities the opportunity to state whether they support renewable energy projects through council resolutions. Mississauga has received requests for Council resolutions only for rooftop solar installations. By providing a Council resolution supporting rooftop solar projects, in principle, Mississauga has the opportunity to show support for rooftop solar projects while highlighting factors that are not covered under the building permit process relating to glare, fire and heritage buildings.

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**ATTACHMENTS:** Appendix 1: Proposed Motion for City of Mississauga Council  
Blanket Support Resolution



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Paul A. Mitcham, P.Eng., MBA  
Commissioner of Community Services

*Prepared By: Mary Bracken, Environmental Specialist*

3(s)

**Proposed Motion for  
CITY OF MISSISSAUGA COUNCIL SUPPORT RESOLUTION  
FOR ROOFTOP SOLAR GENERATION PROJECTS**

RESOLUTION NO.: \_\_\_\_\_ DATE: \_\_\_\_\_

WHEREAS the Province's Feed-in Tariff (FIT) program encourages the construction and operation of rooftop solar generation projects ("Rooftop Solar Projects");

AND WHEREAS it is likely that one or more Rooftop Solar Projects will be considered for construction and operation in the City of Mississauga;

AND WHEREAS, pursuant to the rules governing the FIT program (the "FIT Rules"), applicants whose Rooftop Solar Projects receive the support of municipalities will be awarded priority points, which may result in these applicants being offered a FIT contract by the Province prior to other persons applying for FIT contracts;

AND WHEREAS the *Green Energy Act, 2009*, S.O. 2009, c.12, as amended, stipulates that a municipal Official Plan and Zoning By-law does not apply to a renewable energy undertaking;

AND WHEREAS the *Building Code Act, 1992*, S.O. 1992, c.23, as amended, applies to renewable energy projects and, as such, each Rooftop Solar Project will require a building permit issued by the City of Mississauga Building Division;

AND WHEREAS, pursuant to the *Ontario Heritage Act*, R.S.O. 1990, c.0.18, as amended, each Rooftop Solar Project that is proposed to be located on a property listed on the City of Mississauga's Heritage Register or designated as a heritage property will require a Heritage Permit from the City of Mississauga prior to work commencing on such properties;

NOW THEREFORE BE IT RESOLVED THAT:

The Council of the City of Mississauga supports, in principle, the construction and operation of Rooftop Solar Projects in the City of Mississauga, including but not limited to Rooftop Solar Projects on City-owned buildings, subject to the following:

1. That all solar panels have an anti-reflective surface;
2. That fire safety issues be addressed to the satisfaction of the City of Mississauga's Fire and Emergency Services division with respect to emergency situations; and
3. That each Rooftop Solar Project shall have complied with all applicable laws and regulations, including but not limited to applicable City of Mississauga policies and procedures.

And further, that this Resolution's sole purpose is to enable the participants in the FIT program to receive priority points under the FIT program, and that this Resolution may not be used for the

purpose of any other form of municipal approval in relation to a FIT application or a Rooftop Solar Project or any other FIT project or for any other purpose.

And further, that Council support in principle shall lapse twelve (12) months after its adoption by Council.

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3(u)

**Revised Motion for  
CITY OF MISSISSAUGA COUNCIL SUPPORT RESOLUTION  
FOR ROOFTOP SOLAR GENERATION PROJECTS**

RESOLUTION NO.: \_\_\_\_\_ DATE: \_\_\_\_\_

WHEREAS the Province's Feed-in Tariff (FIT) Program encourages the construction and operation of rooftop solar generation projects ("Rooftop Solar Projects");

AND WHEREAS it is likely that one or more Rooftop Solar Projects will be considered for construction and operation in the City of Mississauga;

AND WHEREAS, pursuant to the rules governing the FIT Program (the "FIT Rules"), applicants whose Rooftop Solar Projects receive the formal support of local municipalities will be awarded priority points, which may result in these applicants being offered a FIT contract by the Province prior to other persons applying for FIT contracts;

AND WHEREAS the *Green Energy Act, 2009*, S.O. 2009, c.12, as amended, stipulates that a municipal Official Plan and Zoning By-law does not apply to a renewable energy undertaking;

AND WHEREAS the *Building Code Act, 1992*, S.O. 1992, c.23, as amended, applies to renewable energy projects and, as such, each Rooftop Solar Project will require a building permit issued by the City of Mississauga Planning and Building Department;

AND WHEREAS, pursuant to the *Ontario Heritage Act*, R.S.O. 1990, c.0.18, as amended, each Rooftop Solar Project that is proposed to be located on a property listed on the City of Mississauga's Heritage Register or designated as a heritage property will require a Heritage Permit from the City of Mississauga prior to work commencing on such properties;

NOW THEREFORE BE IT RESOLVED THAT:

The Council of the City of Mississauga supports without reservation the construction and operation of Rooftop Solar Projects anywhere in the City of Mississauga, including but not limited to Rooftop Solar Projects on City-owned buildings.

And further, that this Resolution's sole purpose is to enable the participants in the FIT Program to receive priority points under the FIT Program, and that this Resolution may not be used for the purpose of any other form of municipal approval in relation to a FIT application or a Rooftop Solar Project or for any other purpose.

And further, that Council support shall lapse twelve (12) months after its adoption by Council.

\_\_\_\_\_  
\_\_\_\_\_

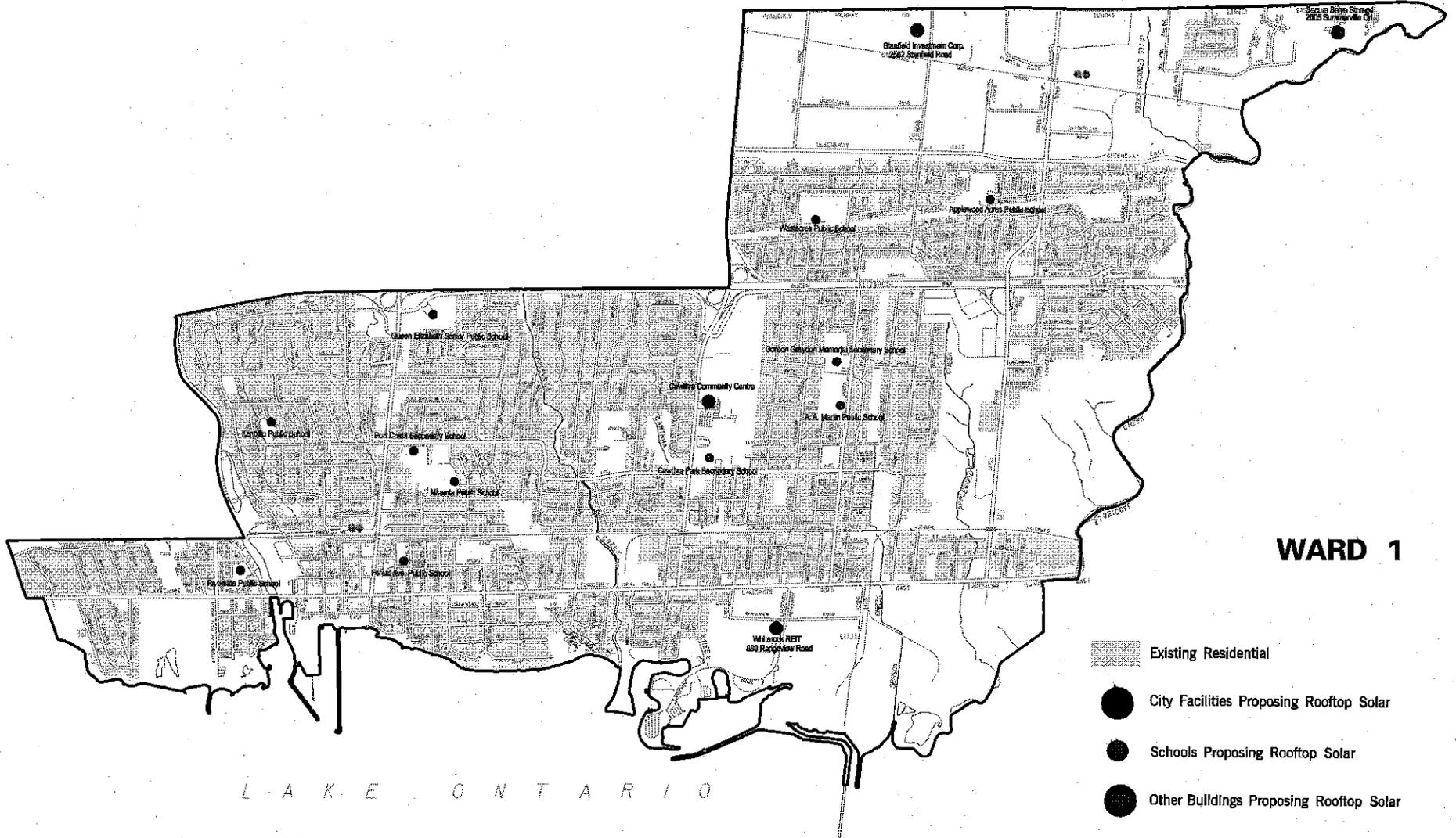


-  Existing Residential
-  City Facilities Proposing Rooftop Solar
-  Schools Proposing Rooftop Solar
-  Other Buildings Proposing Rooftop Solar

**PROPOSED ROOFTOP SOLAR PROJECTS**  
 APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM

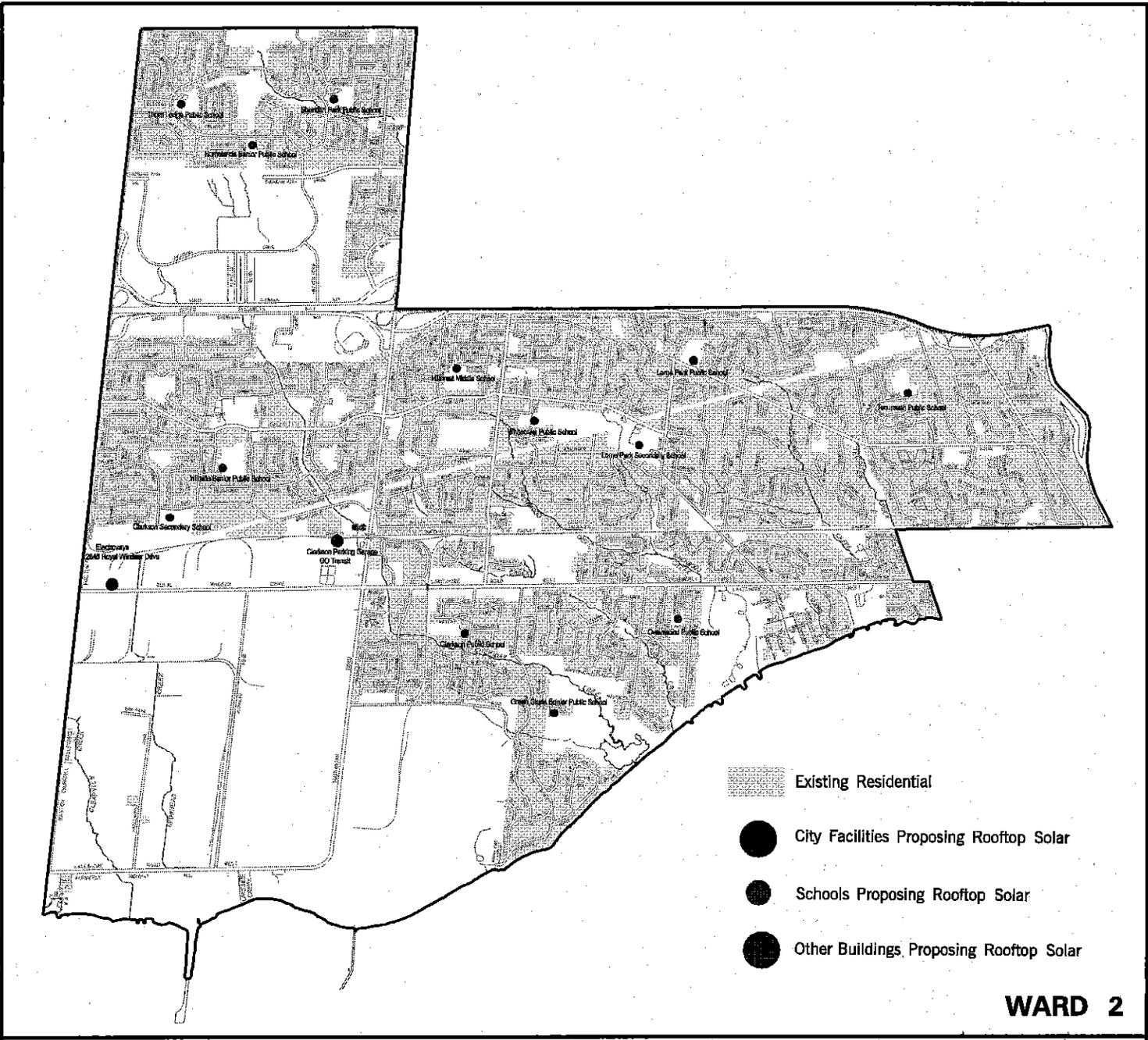


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# PROPOSED ROOFTOP SOLAR PROJECTS

APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM

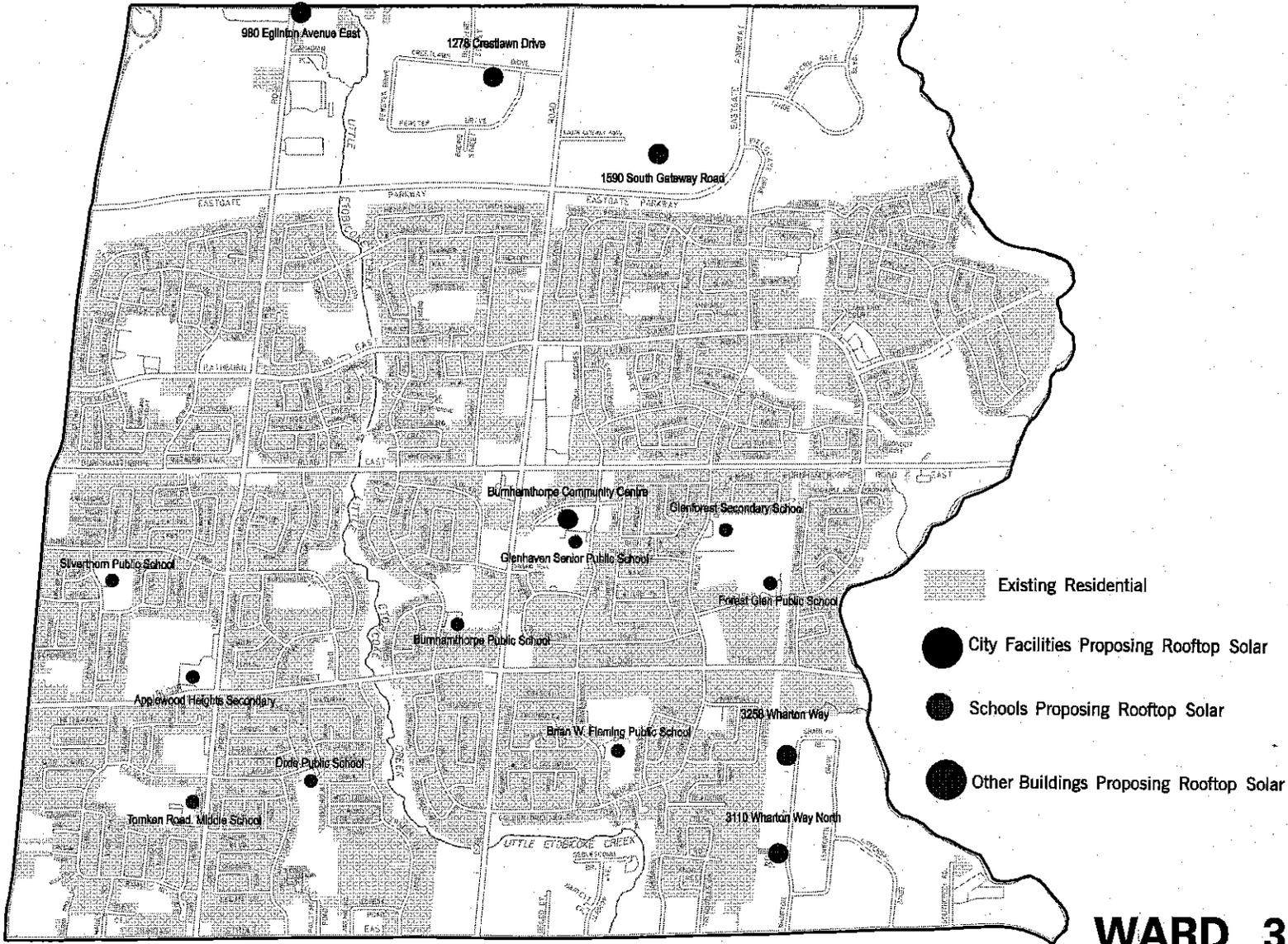


-  Existing Residential
-  City Facilities Proposing Rooftop Solar
-  Schools Proposing Rooftop Solar
-  Other Buildings Proposing Rooftop Solar

**WARD 2**

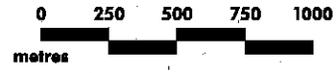
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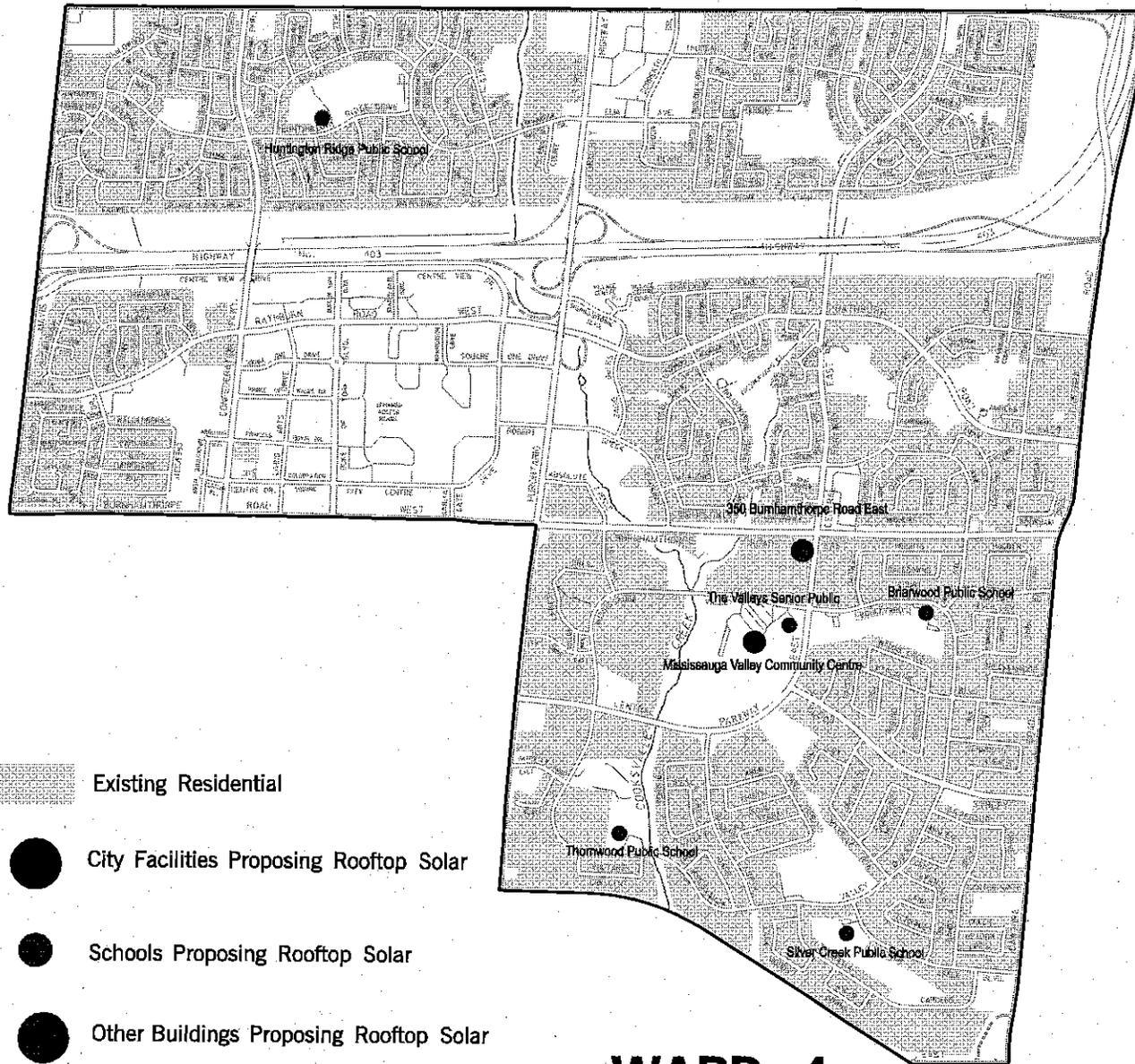
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**WARD 3**

**PROPOSED ROOFTOP SOLAR PROJECTS**  
 APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM





-  Existing Residential
-  City Facilities Proposing Rooftop Solar
-  Schools Proposing Rooftop Solar
-  Other Buildings Proposing Rooftop Solar

## WARD 4

NOVEMBER 20 2012

# PROPOSED ROOFTOP SOLAR PROJECTS

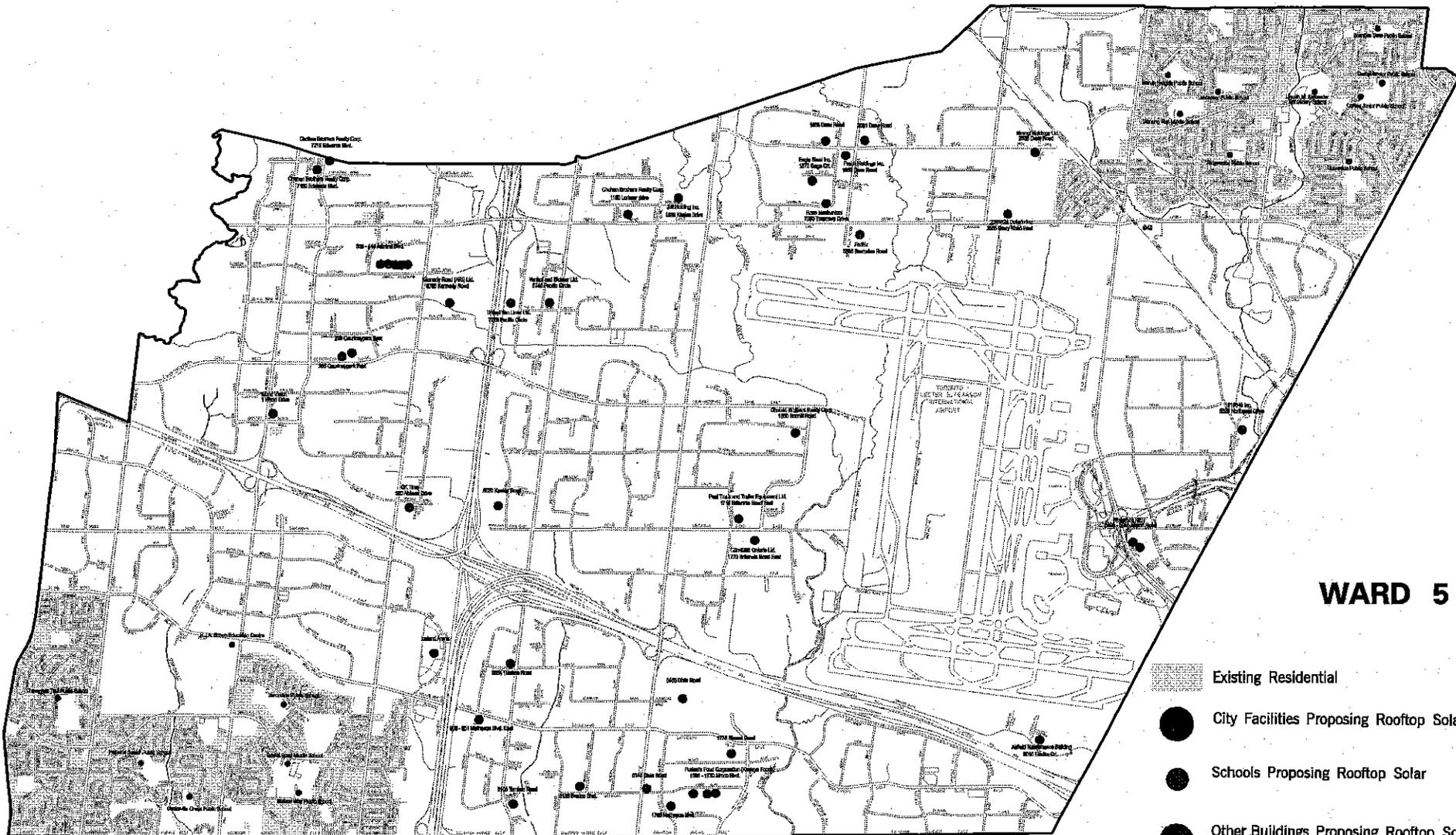
APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM



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T&W, Geomatics



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### WARD 5

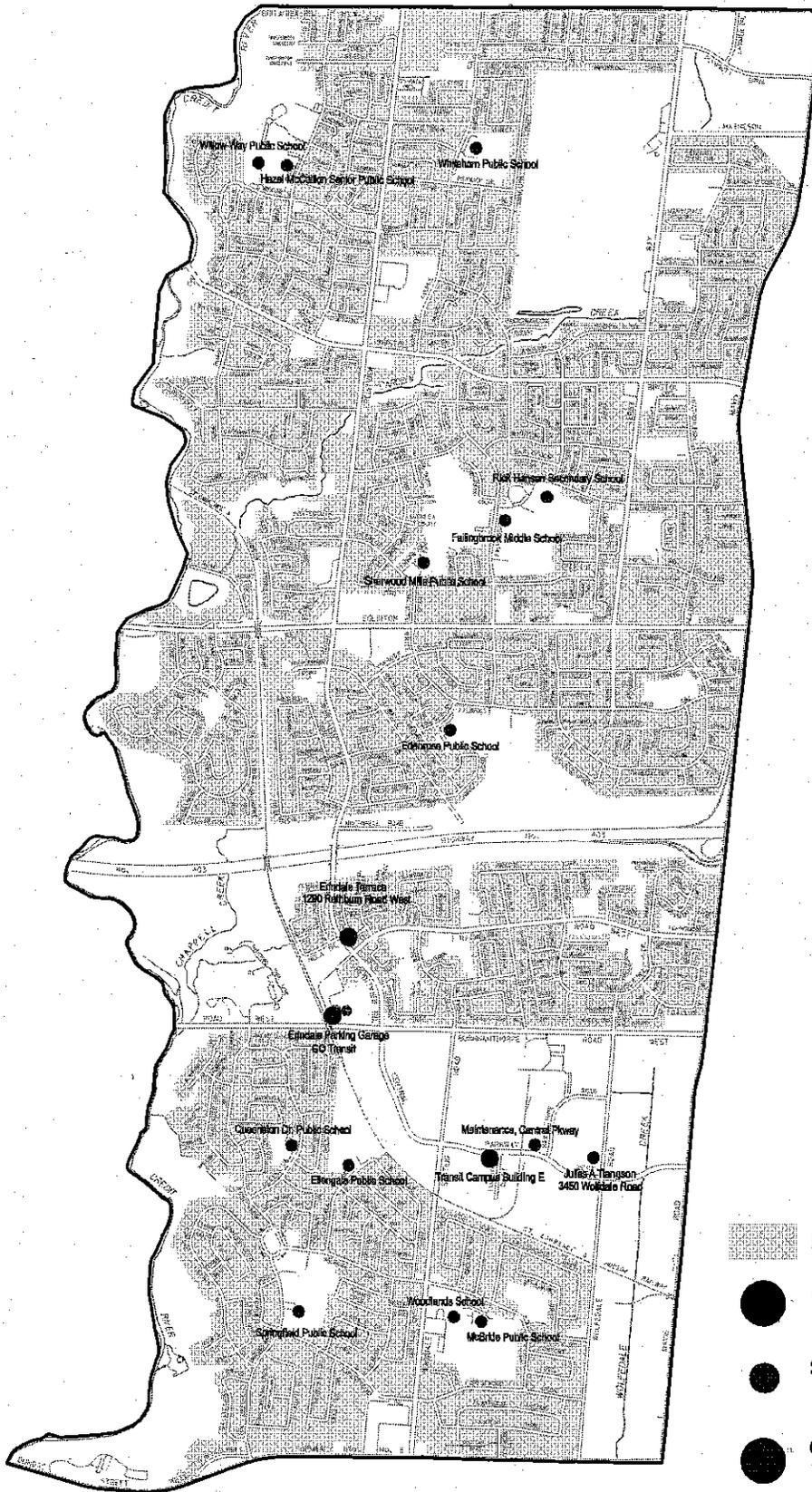
-  Existing Residential
-  City Facilities Proposing Rooftop Solar
-  Schools Proposing Rooftop Solar
-  Other Buildings Proposing Rooftop Solar

# PROPOSED ROOFTOP SOLAR PROJECTS

APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM



NOVEMBER 20 2012



### WARD 6

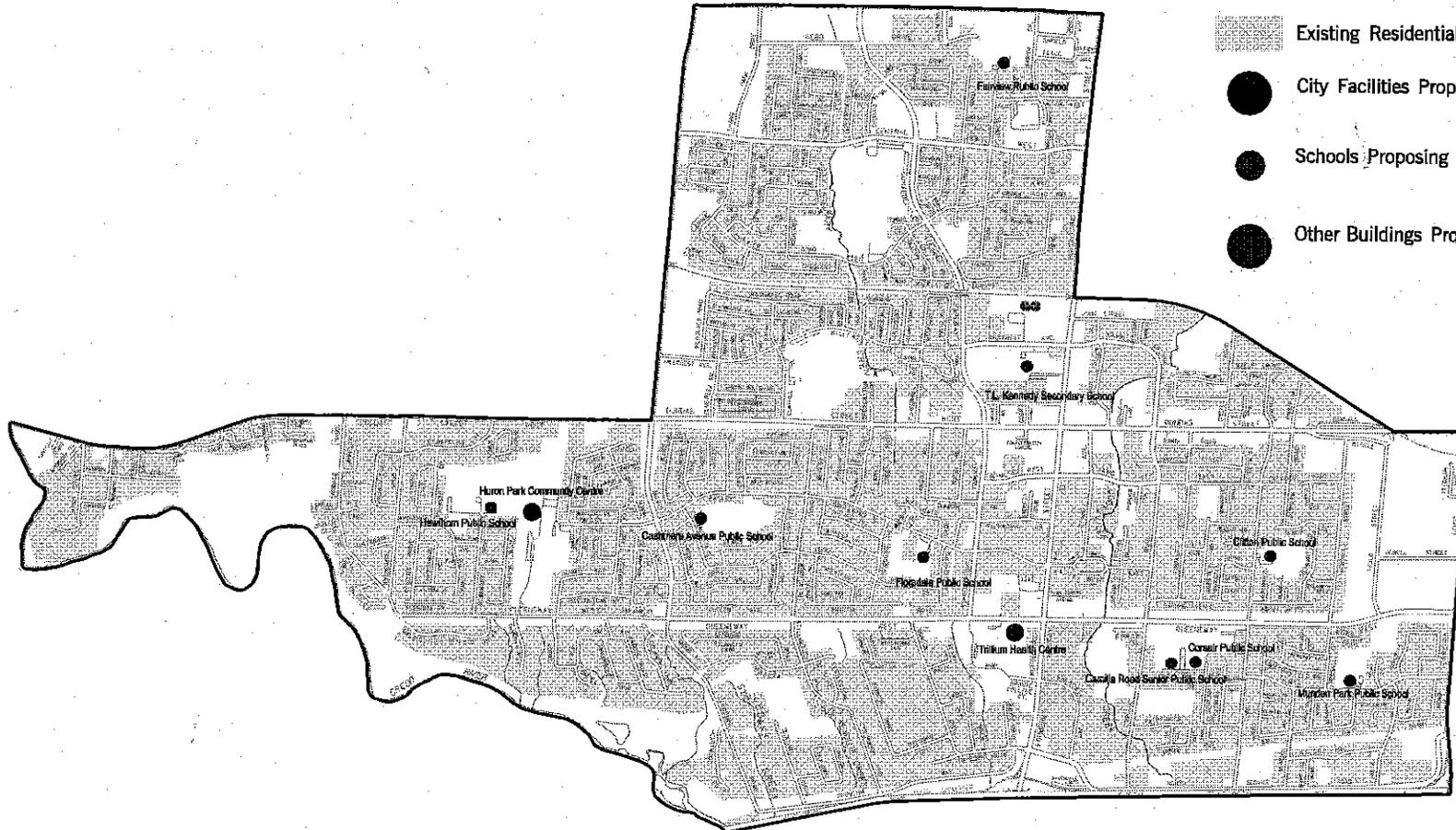
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-  City Facilities Proposing Rooftop Solar
-  Schools Proposing Rooftop Solar
-  Other Buildings Proposing Rooftop Solar

## PROPOSED ROOFTOP SOLAR PROJECTS

APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM



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-  Existing Residential
-  City Facilities Proposing Rooftop Solar
-  Schools Proposing Rooftop Solar
-  Other Buildings Proposing Rooftop Solar

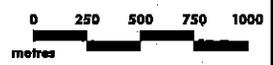
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# PROPOSED ROOFTOP SOLAR PROJECTS

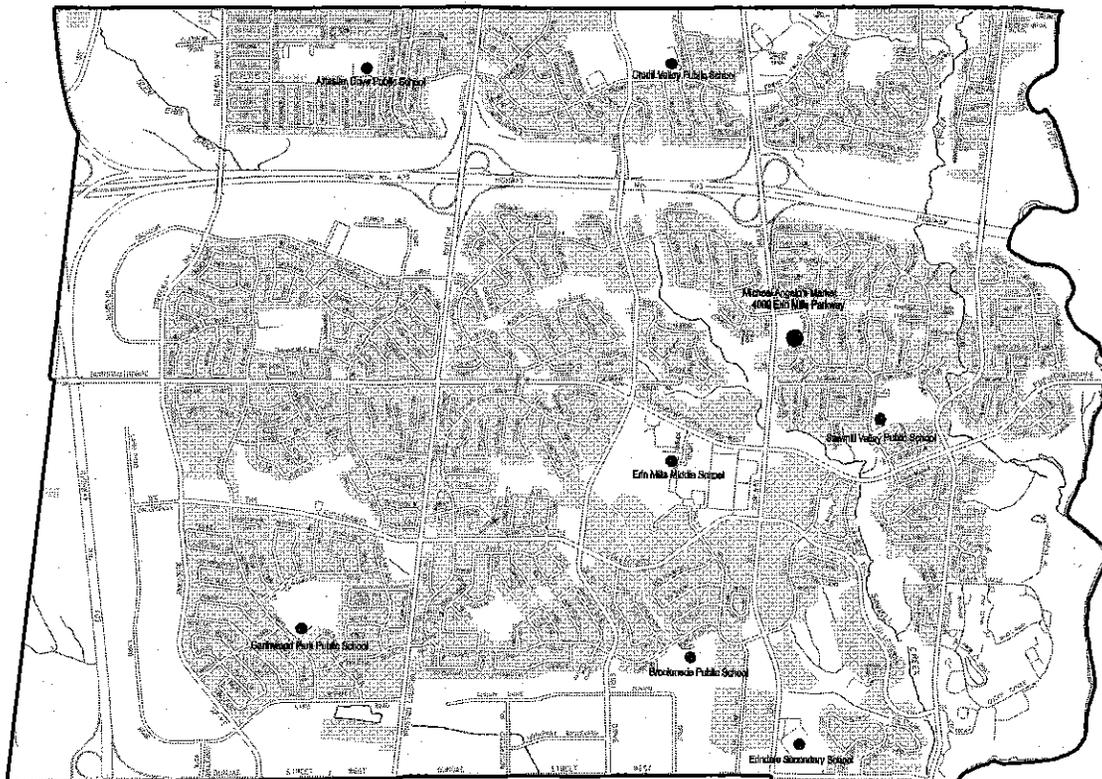
APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM



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NOVEMBER 20 2012



-  Existing Residential
-  City Facilities Proposing Rooftop Solar
-  Schools Proposing Rooftop Solar
-  Other Buildings Proposing Rooftop Solar

**WARD 8**

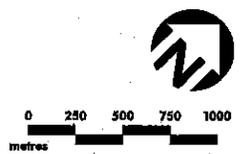
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**PROPOSED ROOFTOP SOLAR PROJECTS**

APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM

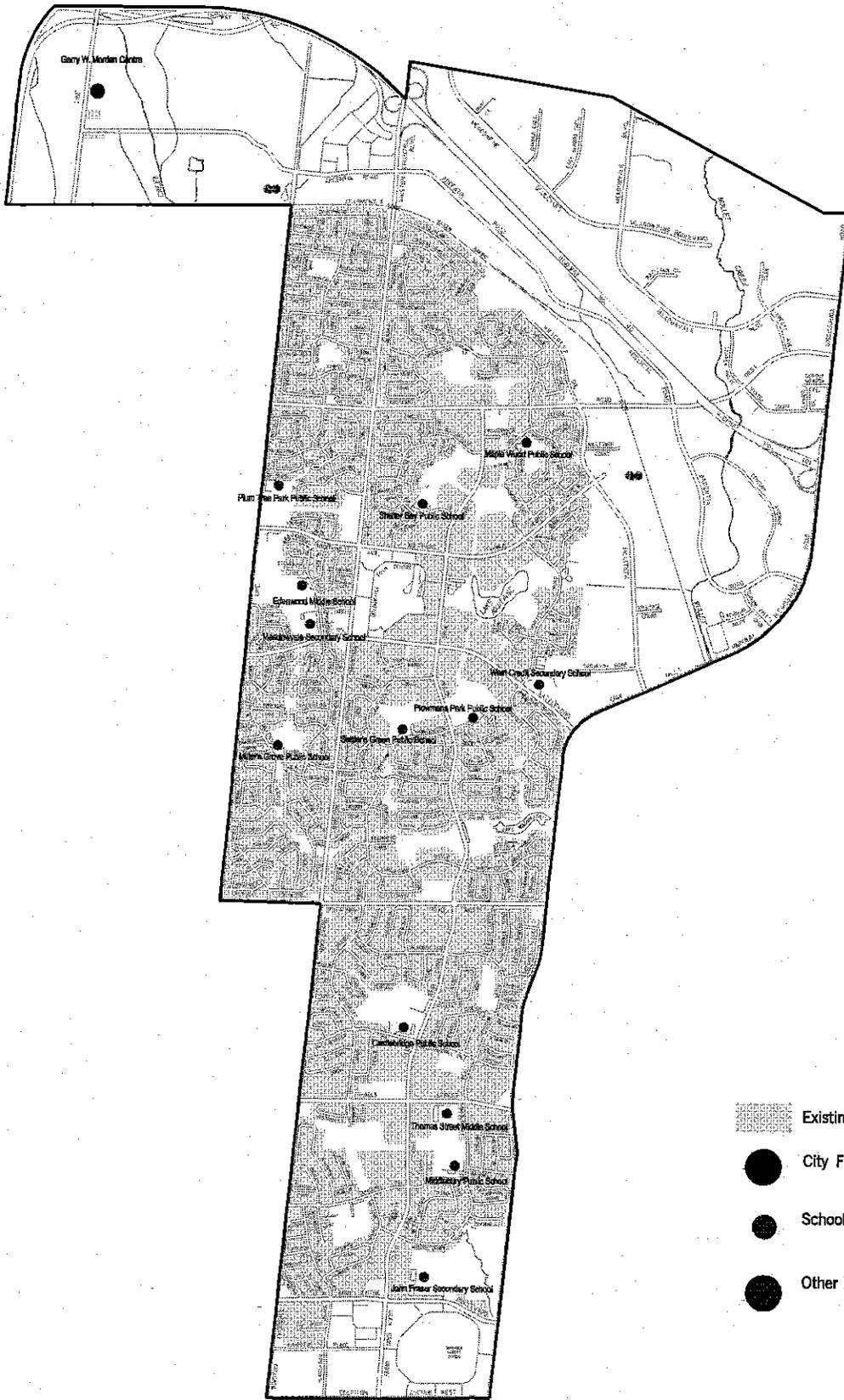


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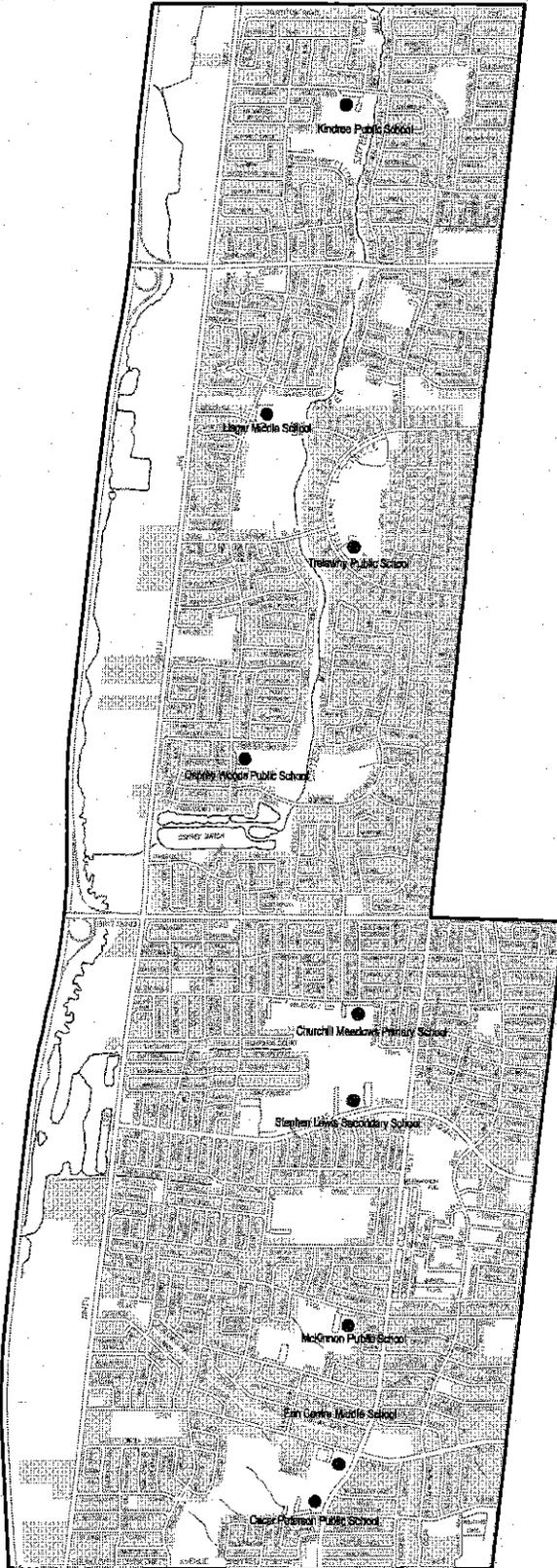
3(e)(e)



-  Existing Residential
-  City Facilities Proposing Rooftop Solar
-  Schools Proposing Rooftop Solar
-  Other Buildings Proposing Rooftop Solar

**WARD 9**

**PROPOSED ROOFTOP SOLAR PROJECTS**  
 APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM



-  Existing Residential
-  City Facilities Proposing Rooftop Solar
-  Schools Proposing Rooftop Solar
-  Other Buildings Proposing Rooftop Solar

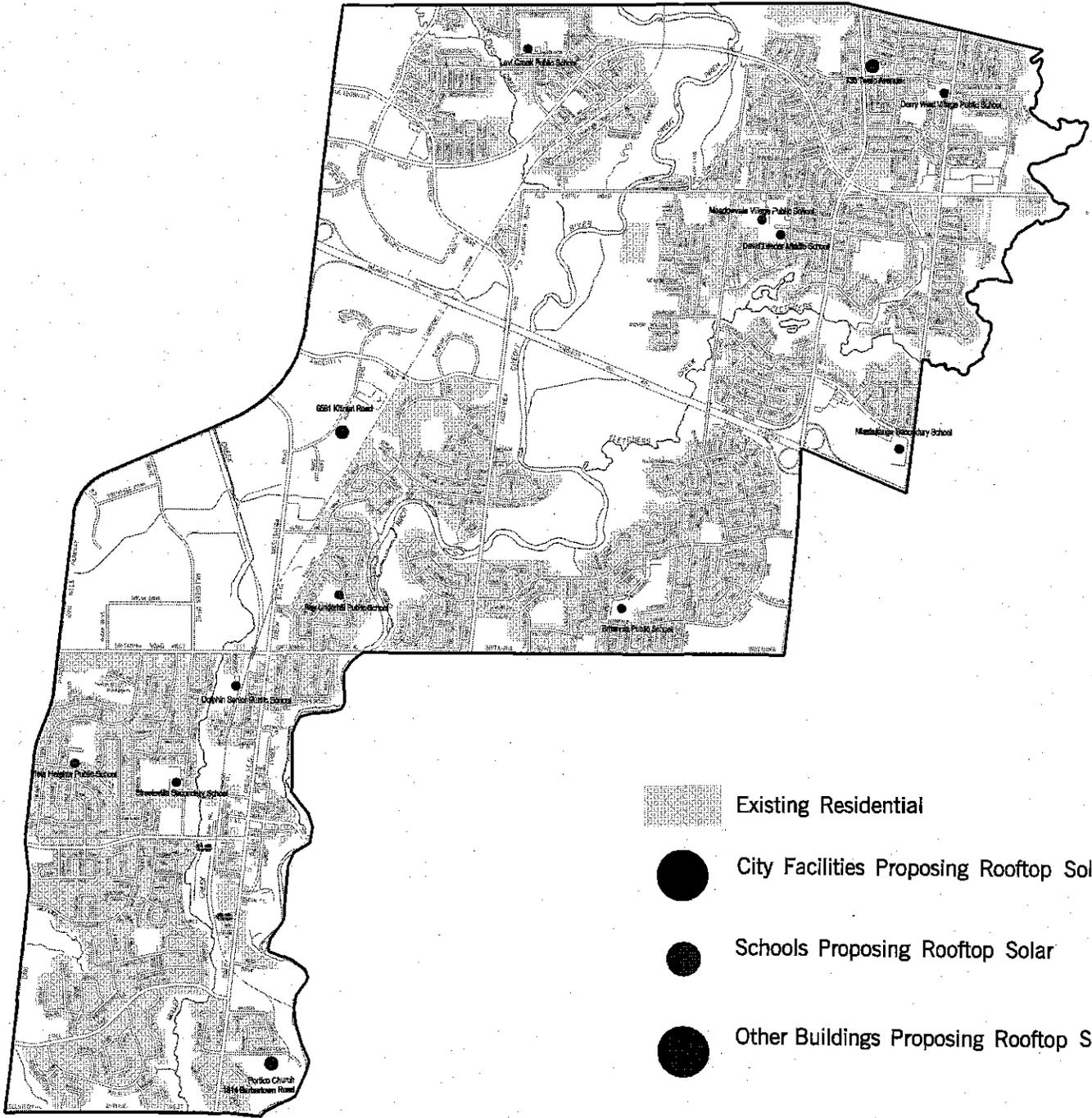
**WARD 10**

# PROPOSED ROOFTOP SOLAR PROJECTS

APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM



3(c)(g)



WARD 11

## PROPOSED ROOFTOP SOLAR PROJECTS

APPLYING TO THE ONTARIO POWER AUTHORITY FEED-IN TARIFF PROGRAM



**New Revised Motion for  
CITY OF MISSISSAUGA COUNCIL SUPPORT RESOLUTION  
FOR ROOFTOP SOLAR GENERATION PROJECTS**

RESOLUTION NO.: \_\_\_\_\_ DATE: \_\_\_\_\_

WHEREAS the Province's Feed-in Tariff (FIT) Program encourages the construction and operation of rooftop solar generation projects ("Rooftop Solar Projects");

AND WHEREAS one or more Rooftop Solar Projects may be constructed and operated in the City of Mississauga;

AND WHEREAS, pursuant to the rules governing the FIT Program (the "FIT Rules"), applications whose Rooftop Solar Projects receive the formal support of local municipalities will be awarded priority points, which may result in these applicants being offered a FIT contract by the Province prior to other persons applying for FIT contracts;

AND WHEREAS the *Green Energy Act, 2009*, S.O. 2009, c.12, as amended, stipulates that a municipal Official Plan and Zoning By-law does not apply to a renewable energy undertaking;

AND WHEREAS the *Building Code Act, 1992*, S.O. 1992, c.23, as amended, applies to renewable energy projects and, as such, each Rooftop Solar Project will require a building permit issued by the City of Mississauga Planning and Building Department;

AND WHEREAS, pursuant to the *Ontario Heritage Act*, R.S.O. 1990, c.0.18, as amended, each Rooftop Solar Project that is proposed to be located on a property listed on the City of Mississauga's Heritage Register or designated as a heritage property will require a Heritage Permit from the City of Mississauga prior to work commencing on such properties;

NOW THEREFORE BE IT RESOLVED THAT:

The Council of the City of Mississauga supports the construction and operation of Rooftop Solar Projects anywhere in the City of Mississauga, including but not limited to Rooftop Solar Projects on City-owned buildings.

And further, that this Resolution's sole purpose is to enable the participants in the FIT Program to receive priority points under the FIT Program, and that this Resolution may not be used for the purpose of any other form of municipal approval in relation to a FIT application or a Rooftop Solar Project or for any other purpose.

And further, that resolution 0170-2012 and resolution 0219-2012 be repealed.

And further, that Council support shall lapse twelve (12) months after its adoption by Council.

3(1)(1)

**City of Mississauga**  
**Rooftop Solar Projects**  
**applying for the Feed-in Tariff FIT 2.0 Program**  
**seeking City of Mississauga Council Support Resolution**

**Checklist**

The following information is required to be submitted to the City of Mississauga when requesting a Council Support Resolution.

**Applicant Information:**  
(\*note primary contact)

<b>Name</b>	<b>Address &amp; Postal Code</b>	<b>Contact Information: (telephone, mobile, e-mail)</b>
<b>Owner of property</b>		
<b>Applicant</b>		
<b>Agent</b>		

**Municipal Address of Subject Lands:**


**Kilowatts (kW) generated:**


**Project Summary:**

Please provide a brief description of the proposed project.


Are proposed solar installations (please check):

Fixed

Moveable

Flat

Angled

YES  NO Will the proposed installations form significant visible projections above beyond the wall or roof line?

YES  NO Will any noise be generated by the proposed installations?

YES  NO Will the proposed installations form sources of reflected light?

YES  NO Will the proposed installations present a danger related to sliding ice?

YES  NO Has a structural assessment been undertaken for the roof installation?

YES  NO Will measures be implemented to ensure the roof membrane is protected?

YES  NO Will there be a main cut-off or breaker readily accessible to emergency services?

YES  NO Will there be proper labelling of all Solar Photovoltaic equipment?

YES  NO Will there be adequate pathways on the roof for access during an emergency situation?

YES  NO Are the proposed installations to be fitted to a listed or designated heritage structure?





# Corporate Report

Clerk's Files

Originator's  
Files

H.

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**DATE:** November 21, 2012

**TO:** Chair and Members of General Committee  
Meeting Date: December 5, 2012

**FROM:** Martin Powell, P. Eng.  
Commissioner of Transportation and Works

**SUBJECT:** **Prohibition of Nuisance Lighting within the City of Mississauga**

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General Committee

DEC 05 2012

- RECOMMENDATION:**
1. That the report to General Committee, dated November 21, 2012, from the Commissioner of Transportation and Works titled "Prohibition of Nuisance Lighting within the City of Mississauga" be received for information.
  2. That a By-law (Appendix 1) to prohibit Nuisance Lighting within the City of Mississauga be enacted.
  3. That Compliance and Licensing Enforcement staff enforce the Nuisance Lighting By-law on a reactive basis to complaints received in the manner set out in the Enforcement Action Plan outlined in the report dated November 21, 2012, from the Commissioner of Transportation and Works titled "Prohibition of Nuisance Lighting within the City of Mississauga".

**REPORT  
HIGHLIGHTS:**

- Provides the rationale and proposed purposes for the enactment of a Nuisance Lighting By-law;
- Summarizes the key provisions of the draft Nuisance Lighting By-law;
- Outlines an Enforcement Action Plan.

**BACKGROUND:**

Concerns have been raised by Councillors and residents over the approval and installation of lights and lighting fixtures on retail, commercial and industrial sites that result in light trespass on adjacent residential properties.

On April 25, 2012, City Council adopted recommendation 0310-2012 (Appendix 2) requesting "That staff bring forward proposed by-law changes to allow the City to control lighting on buildings and that the Planning and Building Commissioner bring forward changes to the Site Plan Approval process to impose stricter lighting controls on buildings adjacent to residential neighbourhoods".

**COMMENTS:**

The Planning and Development Committee report (Appendix 3) dated November 13, 2012, from the Commissioner of Planning and Building titled "City of Mississauga – Outdoor Lighting Review", includes:

- Current outdoor lighting review practices are explained and discussed;
- Applicable legislation and municipal policies are summarized;
- Current practices of other municipalities are reviewed;
- Changes to the current Site Plan Approval process concerning outdoor lighting and a requirement for shielded lighting fixtures are recommended.

Compliance and Licensing Enforcement staff have received approximately 125 lighting complaints since 2002 to present date. The majority of the complaints were concerning lights shining onto residential properties. The complaints received by Compliance and Licensing Enforcement staff concerning lighting or outdoor illumination are typically resolved by enforcement through the provisions outlined in the Property Standards By-law 654-98, as amended.

The Property Standards By-law 654-98, as amended, has general provisions dealing with exterior lighting and lighting fixtures that are enforced similar to other general standards for property maintenance contained in the by-law.

The provisions of the Property Standards By-law 654-98, as amended, requires that exterior lighting fixtures are installed and maintained so as to prevent the light source from shining directly into a dwelling unit. Indirect and ambient light are not controlled by the existing Property Standards By-law.

Enactment of a Nuisance Lighting by-law would provide for more prescriptive regulations that would assist in addressing lighting complaints that are currently not enforceable under the Property Standards By-law 654-98, as amended.

### **General Purposes for enacting a Nuisance Lighting By-law**

- To promote reasonable uses of outdoor lighting for night-time safety, utility, security, productivity, enjoyment and commerce while preserving the ambiance of the night.
- To reduce glare from exterior luminaries and interior luminaries.
- To control light pollution by minimizing non-target light and by requiring light reduction through adaptive lighting techniques.
- To reduce unwanted light trespass and spill.
- To prohibit and control light nuisances.

Attached is a draft Nuisance Lighting By-law (Appendix 1). The draft by-law includes the following provisions:

No Person shall cause a Light Nuisance within the City without limiting the generality of the foregoing:

- No Direct Lighting or Indirect Lighting shall be used so that an unusual quantity or type of light creates a Glare or Light Trespass upon the land of others so as to be or to cause a Nuisance to the public generally or to others residing or carrying on a business or trade in the vicinity.
- "Nuisance" means anything that is injurious to health, offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

- Temporary Exemption application provisions similar to the current exemption provisions in the Noise Control by-law 360-79, as amended and the Fence By-law 397-78, as amended.
- The Commissioner or his/her designate shall consult with the affected Ward Councillor on an application for an exemption and the consultation shall include any terms and conditions that may be attached to an exemption.
- General Exemption provisions similar to the current exemption provisions in the Noise Control by-law 360-79, as amended. This would include special events such as the Mississauga Waterfront Festival, Southside Shuffle, Streetsville Founders Bread & Honey Festival and all approved programming at Mississauga Celebration Square.

If Council approves the enactment of a by-law, it should be substantially similar to the attached draft by-law, and the Commissioner, Transportation and Works, would be responsible for the administration of this by-law.

#### **Enforcement Action Plan**

Enforcement staff recommend that the by-law be investigated and enforced in the same manner as the Nuisance Noise By-law 785-80, as amended, and the Noise Control By-law 360-79, as amended, as noted below.

This will require that the complainant provide the evidence and be willing to testify in court that the contravention is a nuisance as defined under the by-law "... is injurious to health, offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property".

It is the position of Enforcement staff that due to the subjective nature of the by-law and for court purposes, the complainant is best suited to testify as to the nuisance the lighting is causing them as opposed to Enforcement staff. In addition, it has been Enforcement staff's experience in enforcing the City's two noise by-laws that requiring complainants to testify significantly assists in reducing the number of frivolous or vexatious complaints. Further, due to the limited trial time

available for municipal by-law charges, it is imperative that the best evidence be provided, which is that of the complainant.

Upon receipt of a complaint Enforcement staff will initiate the following action:

- First seek compliance with the by-law through education by notifying the offending party by letter of the complaint and applicable provisions of the by-law.
- The letter will also advise that professional mediation services are available free of charge subject to the complainant and offending party being agreeable to attempt mediation. Further, it will also note that legal action may be initiated by the complainant should the contravention under the by-law continue.
- The complainant will be sent a Nuisance Lighting Complaint Witness Questionnaire to be completed and returned to the area Municipal Law Enforcement Officer (MLEO). The complainant will also be advised that professional mediation services are available subject to both parties being agreeable to attempt mediation.
- If mediation is not attempted or is unsuccessful, the MLEO will review the evidence provided by the complainant and consult with prosecution staff from Legal Services to determine if there is sufficient evidence for the issuance of a charge under the by-law.
- If it is determined that there is sufficient evidence to proceed with a charge under the by-law, the MLEO will prepare the charge with the complainant named as the informant.
- The complainant will be required to attend court to testify if the charge is set for trial.
- No further action will be taken if there is not sufficient evidence to issue a charge and the MLEO will close the complaint file.

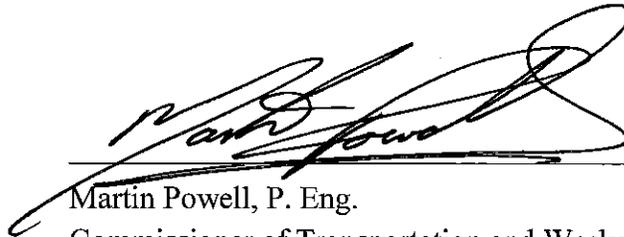
**FINANCIAL IMPACT:** There is no financial impact.

**CONCLUSION:**

Enforcement staff support the enactment of a Nuisance Lighting By-law to address nuisance lighting complaints that are currently not enforceable under the Property Standards By-law 654-98, as amended. Further, Enforcement staff recommend that the by-law be enforced as outlined in the Enforcement Action Plan.

**ATTACHMENTS:**

- Appendix 1: Enacting By-law
- Appendix 2: Recommendation GC-0310-2012
- Appendix 3: Outdoor Lighting Review Report dated November 13, 2012, Planning and Development Committee



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Martin Powell, P. Eng.  
Commissioner of Transportation and Works

*Prepared By: Douglas Meehan, Manager, Compliance and  
Licensing Enforcement*

A by-law to regulate and control light nuisances  
on private property

**WHEREAS** sections 8, 9, and 11 of the *Municipal Act, 2001* authorize the Corporation of the City of Mississauga to pass by-laws necessary or desirable for municipal purposes, and in particular paragraphs 5, 6, 8 of subsection 11(2) and paragraph 7 of subsection 11(3) authorize by-laws respecting the economic, social and environmental well-being of the municipality; the health, safety and well-being of persons, and the protection of persons and property;

**AND WHEREAS** Section 128 of the *Municipal Act, 2001* provides municipalities with authority to prohibit and regulate public nuisances, including matters that, in the opinion of the Council of the City of Mississauga are or could become public nuisances;

**AND WHEREAS** in the opinion of the Council of the City of Mississauga certain kinds of lights are or could become a public nuisance;

**AND WHEREAS** Section 129 of the *Municipal Act, 2001* provides municipalities with authority to prohibit and regulate with respect to noise, vibration, odour, dust and outdoor illumination, including indoor lighting that can be seen outdoors;

**AND WHEREAS** section 425 of the *Municipal Act, 2001* authorizes the Corporation of the City of Mississauga to pass by-laws providing that a person, who contravenes a by-law of the City of Mississauga passed under the *Act*, is guilty of an offence;

**AND WHEREAS** the *Municipal Act, 2001* further authorizes the City of Mississauga, amongst other things, to delegate its authority, to impose fees or charges on persons for services or activities provided or done by or on behalf of it, to provide for inspections and inspection orders, and to make orders to discontinue activity or to do work;

**AND WHEREAS** the City of Mississauga wishes to adopt a by-law to prohibit and regulate nuisance lighting;

**NOW THEREFORE** the Council of The Corporation of the City of Mississauga. ENACTS as follows:

**1. PURPOSE**

1.1 The general purpose of this By-law is:

- (a) to promote reasonable uses of outdoor lighting for night-time safety, utility, security, productivity, enjoyment and commerce while preserving the ambiance of the night;
- (b) to reduce glare from exterior luminaries and interior luminaries;
- (c) to control light pollution by minimizing non-target light and by requiring light reduction through adaptive lighting techniques under site plan control;
- (d) to reduce unwanted light trespass and spill; and
- (e) to prohibit and regulate light nuisances.

**2. DEFINITIONS**

2.1 In this by-law:

- (a) "By-law" means this Nuisance Lighting By-law and any amendments or updates thereto.
- (b) "City" means The Corporation of the City of Mississauga.
- (c) "Commissioner" means the Commissioner of the Transportation and Works Department for the City or his/her designate.
- (d) "Direct Lighting" means light emitted directly from the lamp of the reflector or luminaire.
- (e) "Fixture" means the assembly that houses the lamp or lamps and can include all or some of the following parts: housing, a reflector, and a mounting bracket or pole socket.
- (f) "Flood or Spot Light" means any light fixture or lamp that incorporates a reflector or a refractor to concentrate the light output into a directed beam in a particular direction.
- (g) "Glare" means light emitting from a luminaire with intensity great enough to reduce a viewer's ability to see, or to produce sensation of discomfort.
- (h) "Indirect Lighting" means light that has been reflected or has scattered off other surfaces.
- (i) "Enforcement Officers" means Municipal By-law Enforcement Officers appointed by City Council from time to time to enforce this By-law;
- (j) "Light Trespass" means the shining of light produced by a luminaire beyond the boundaries of the property on which it is located.
- (k) "Luminaire" means a complete lighting system, including a lamp or lamps enclosed in a housing complete with reflectors, refractors, etc.
- (l) "Motion-Sensor Activated Lighting" means lighting products equipped with a sensor that detecting activity will switch on the luminaire and then switch it off again after an interval of no activity detection.
- (m) "Nuisance" means anything that is injurious to health, offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
- (n) "Outdoor Light Fixtures" means outdoor artificial illuminating devices, installed or portable, used for flood lighting, general illumination or advertisement.
- (o) "Person" includes, but is not limited to, an individual, sole proprietorship, partnership, association or corporation.
- (p) "Special Event" includes festivals, carnivals, entertainment or advertising, which includes, but is not limited to that which may require City approval for specific event components, such as compliance with zoning regulations as well as related road access restrictions or congestion supervision.
- (q) "Wall-Pack Light Fixture" means light fixtures on exterior walls of buildings.

**3. APPLICATION**

3.1 Any Person who installs outdoor lighting on private property within the boundaries of the City of Mississauga shall do so in conformity with the requirements of this By-law. If conflicts arise between this By-law and other by-

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laws regarding control and maintenance of outdoor lighting, this By-law shall be the governing document.

- 3.2 Direct or Indirect Lighting from private property identified as causing Glare or Light Trespass by the Commissioner and not in compliance with the provisions of the By-law shall be corrected or removed to the satisfaction of the Commissioner.
- 3.3 Direct or Indirect Light emitted from Wall-Pack Light Fixtures on private property identified as creating Glare or Light Trespass by the Commissioner, and not in compliance with the provisions of the By-law shall be corrected or removed to the satisfaction of the Commissioner.
- 3.4 Nothing in this By-law shall affect the rights of any City employees or other Persons from enforcing the Property Standards By-law 654-98, as amended, or any other applicable laws or by-laws, if such City employees or Persons are authorized to enforce such laws and by-laws. Further, nothing in this By-law shall limit the enforceability or applicability of the Property Standards By-law 654-98, as amended, the standards for maintenance and occupancy of property as prescribed as the minimum standards for the City.

**4. NUISANCE**

- 4.1 No Person shall cause a Light Nuisance within the City without limiting the generality of the foregoing:
  - (a) The use of laser source light, signal beacons, Flood Light, Spot Lights, flashing lights any other similar high intensity Luminaire that projects light onto adjacent private property is prohibited; notwithstanding the exemptions set out in Section 5.
  - (b) The use of strobe, twinkling or chasing lights for private purposes and for advertising or entertainment purposes on private property is prohibited notwithstanding the exemptions set out in Section 5.
  - (c) No Direct Lighting or Indirect Lighting shall be used so that an unusual quantity or type of light creates a Glare or Light Trespass upon the land of others so as to be or to cause a Nuisance to the public generally or to others residing or carrying on a business or trade in the vicinity.

**5. TEMPORARY EXEMPTIONS**

- 5.1 Any Person may submit a written request on a form prepared by the City for a temporary exemption to the requirements imposed by this By-law by way of an application to the Commissioner.
- 5.2 The request for a lighting exemption for temporary events shall contain the following information:
  - (a) Specific exemption requested;
  - (b) Type and use of exterior light involved;
  - (c) Date(s) of the event;
  - (d) Duration of time for requested exemption;
  - (e) Proposed location of exterior light;
  - (f) Physical size of exterior light;
  - (g) Wattage of exterior light;

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- (h) Height of exterior light; and
- (i) Proof of publication for two consecutive days within the preceding ten (10) days in a newspaper of general circulation within the City, of a Notice of intention to apply for any exemption to this By-law, received or by the distribution of a flyer as prescribed by the City to all residences and businesses within a 100 meter radius of the subject property containing the information required by Clauses (a) through (h) hereof, stating the date upon which objections may be submitted to City staff.

5.3 The owner of lands upon which it is intended to place and use prohibited light(s) for the purposes of a Special Event or other activity, shall apply to the Commissioner for a temporary exemption to the requirements imposed by this By-law certifying approval of the light(s). Plans for the location and fixture specifications for such light(s) shall be submitted with the application and application fee, and temporary exemption shall not be issued unless the light(s) shown on such plans comply with the provisions of all applicable by-laws of the City.

5.4 The Commissioner may grant an exemption, in whole or in part, with terms and conditions, subject to the provisions of this By-law.

5.5 In considering the completed application for any exemption, the Commissioner shall take into account the following:

- (a) If an exemption is granted, a time limit shall be specified, and an exemption shall not exceed six months.
- (b) The Commissioner shall consult with the affected Ward Councillor on an application for an exemption and the consultation shall include any terms and conditions that may be attached to an exemption.
- (c) Any correspondence received regarding the application as a result of the distribution of the notice or newspaper advertisement referred to in Section 5.2(i).
- (d) The proximity of the light to a residential area and the likelihood that the light for which an exemption is requested may negatively affect persons in a residential area.
- (f) Whether any negative impacts under clauses (c) or (d) can be reduced with the use of mitigation measures including limiting the light to certain days or times of the day.

5.6 A breach by the applicant of any of the terms or conditions imposed by the Commissioner in granting an exemption shall immediately render the exemption null and void.

5.7 Notwithstanding that the authority to grant an exemption is delegated to the Commissioner, and that he or she may have already exercised the delegated power, Council shall retain the right to exercise the authority to grant or deny an exemption in accordance with the conditions set out in section 5.5 of this By-law.

## 6. GENERAL EXEMPTIONS

6.1 The City is exempt from the requirements of this By-law.

6.2 Motion-Sensor Activated Lighting may be left unshielded provided it is located in such a manner as to prevent Direct Lighting and Glare on to the properties of others, or into a public right of way, and provided the light is set to only go on

when activated and to go off within five minutes after activation has ceased, and the light shall not be triggered by activity off the property.

- 6.3 Vehicular lights and all temporary emergency lighting needed by the Fire and Police departments, or other emergency services shall be exempt from the requirements of this By-law.
- 6.4 Nothing in this By-law shall apply to navigational lighting systems at lighthouses and airports, or to airport lighting systems marking runways or taxiways. All radio, communications and navigation towers that require lights shall have dual lighting capabilities. For daytime, white strobe lights may be used, and for nighttime, only red lights shall be used.
- 6.5 Outdoor lighting utilizing only fossil fuels, including torches, lanterns and open flame devices are exempt from the requirements of this By-law.
- 6.6 A contractor's identification light, provided it is located on the property where the work is being performed and only during the period of such work, is exempt from the requirements of this By-law.
- 6.7 The provisions of this By-law do not apply to any theatrical, film or television production approved by the City.
- 6.8 The provisions of this By-law do not apply to any of the Special Events or other activities set out in Schedule 1 to this By-law.

**7. ENFORCEMENT**

- 7.1 Enforcement of this By-law is carried out by Enforcement Officers as defined in this By-law, as amended herein.
- 7.2 For the purpose of determining whether there is compliance with this By-law, an Enforcement Officer may have access to or enter any land, building, or structure governed by this By-law and may conduct an inspection.
- 7.3 An Enforcement Officer conducting an inspection shall upon request produce identification issued by the City.
- 7.4 No Person shall hinder, obstruct or interfere with an Enforcement Officer lawfully conducting an inspection under this By-law.
- 7.5 Every Person who is served with a Notice of Contravention pursuant to the provisions of this By-law shall comply with the terms of the Notice within the time set out therein.
- 7.6 Where an Enforcement Officer has reasonable grounds to believe that an offence has been committed by a Person, the Enforcement Officer may require the name, address and proof of identity of that Person, and the Person shall supply the required information.

**8. ADMINISTRATION, OFFENCES AND PENALTIES**

- 8.1 If an Enforcement Officer is satisfied that a contravention of this By-law has occurred, he or she may issue a notice of contravention requiring the Person who contravened the By-law or who caused or permitted the contravention or the owner of the property on which the contravention occurred to discontinue the contravening activity.
- 8.2 Every Person who contravenes any provision of this By-law is, upon conviction, guilty of an offence and is liable:

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- (a) on a first conviction, to a fine of not more than \$10,000; and,
  - (b) on any subsequent conviction, to a fine of not more than \$25,000.
- 8.3 Despite section 8.2, where the Person convicted is a corporation:
- (a) the maximum fine in subsection 8.2(a) is \$50,000; and,
  - (b) the maximum fine in subsection 8.2(b) is \$100,000.
- 8.4 Where a Person has been convicted of an offence, the court in which the conviction has been entered and any court of competent jurisdiction thereafter may, in addition to any other remedy and to any penalty imposed by this By-law, make an order prohibiting the continuation or repetition of the offence by the Person convicted.
- 8.5 Where the repair, alteration, change or removal of lighting is a matter of extreme urgency so as to be a danger to the public, or motorists or any other situation deemed to be dangerous, the Enforcement Officer may give notice verbally and may reduce the period within which, in his/her sole discretion, is adequate, taking into account the circumstances at the time the notice is given.

**9. LIABILITY**

- 9.1 Any Person installing or maintaining any Luminaire or illumination device on whose property a Luminaire or illumination device is located, shall be liable for such light device. The City is hereby indemnified against all losses, damages, claims, actions, demands, suits, costs and interest arising directly or indirectly from the erection, maintenance, removal or falling of such light device or part thereof and anything done in connection with the performance of, outside of, or contrary to this By-law and whether or not in accordance with the City's standards, inclusive of anything done on the public highway or other City or public property.

**10. SEVERABILITY**

- 10.1 Should and part, section, subsection or portion of this By-law be repealed or declared by a court of competent jurisdiction to be illegal, the same shall not affect the validity of the By-law as a whole or in part thereof, except for the which was declared to be invalid.
- 10.2 In the event there is a conflict with this By-law and any other bylaw this By-law will prevail.

**11. EFFECTIVE DATE**

- 11.1 This By-law shall take effect upon the date of its passing and shall be called the "Nuisance Lighting By-law".

ENACTED AND PASSED this                      day of                      2012.

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CLERK

SCHEDULE 1 TO BY-LAW XX-2012  
 SPECIAL EVENTS AND ACTIVITIES TO WHICH THIS BY-LAW DOES NOT APPLY

ACTIVITIES TO WHICH THE BYLAW DOES NOT APPLY	LOCATION
All Mississauga Celebration Square Approved Activities  Exemption applies to appropriately approved events and activities that appear on the MCS calendar of events, programs and activities	Civic Square 300 City Centre Drive,  Library Square 301 Burnhamthorpe Road West  Living Arts Centre Park 4141 Living Arts Centre Drive
Can-Sikh Festival	Wildwood Park 3430 Derry Road West
Canadian Cancer Society – Relay for Life	Mississauga Secondary School 730 Courtney Park Dr. West
Carolling in the Park	Port Credit Memorial Park 22 Stavebank Road North
Desh Bhagat	Wildwood Park 3430 Derry Road West
Kalayaan Festival	Mississauga Valley Park 1275 Mississauga Valley Boulevard
Malton Community Festival	Wildwood Park 3430 Derry Road West
Mississauga Waterfront Festival	Port Credit Memorial Park 22 Stavebank Road North
Movies In The Park Series	Port Credit Memorial Park 22 Stavebank Road North
On the Verandah Concert Series	Benares Museum 1507 Clarkson Road North
Port Credit Paint the Town Red / Canada Day Celebration	Port Credit Memorial Park 22 Stavebank Road North
Port Credit's Busker Fest	Downtown Port Credit, Port Credit Memorial Park 22 Stavebank Road North
San Salvador Del Mundo Festival	Fred Halliday Park 2187 Stir Crescent
Shakespeare Under the Stars	Bradley Museum 1620 Orr Road
Sherwood Forrest Family Fun Day	Sherwood Green Park 1864 Deer's Wold
Streetsville Canada Celebration	Streetsville Memorial Park 335 Church Street
Streetsville Founders Bread & Honey Festival	Streetsville Memorial Park 335 Church Street
Southside Shuffle	Port Credit Memorial Park 22 Stavebank Road North

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RECOMMENDATION 0310-2012  
adopted by the Council of  
The Corporation of the City of Mississauga  
at its meeting on April 25, 2012

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GC-0310-2012

That staff bring forward proposed by-law changes to allow the City to control lighting on buildings and that the Planning and Building Commissioner bring forward changes to the Site Plan process to impose stricter lighting controls on buildings adjacent to residential.



# Corporate Report

Clerk's Files

Originator's

Files **CD.07.OUT**

**PDC** DEC 3 2012

**DATE:** November 13, 2012

**TO:** Chair and Members of Planning and Development Committee  
Meeting Date: December 3, 2012.

**FROM:** Edward R. Sajecki  
Commissioner of Planning and Building

**SUBJECT:** City of Mississauga – Outdoor Lighting Review

- RECOMMENDATION:**
1. That the report dated November 13, 2012, from the Commissioner of Planning and Building entitled "City of Mississauga – Outdoor Lighting Review", be received for information.
  2. That the Site Plan Approval process be modified to include a more detailed review of proposed outdoor lighting on properties abutting or adjacent to residentially zoned properties and to require all proposed lighting fixtures to be shielded.

**REPORT  
HIGHLIGHTS:**

- Current outdoor lighting review practices are explained and discussed;
- Applicable legislation and municipal policies are summarized;
- Current practices of other municipalities are reviewed;
- Changes to the current Site Plan Approval process concerning outdoor lighting and a requirement for shielded lighting fixtures are recommended; and
- A potential nuisance lighting by-law is also discussed.

**BACKGROUND:** Concerns have been raised by Councillors and residents over the approval and installation of lights and lighting fixtures on retail, commercial and industrial sites that result in light trespass on

adjacent residential properties. Excessive or poor site lighting design, whether it be outdoor lighting or improper shielding of lighting, can create light pollution and trespass which can be a nuisance and negatively affect neighboring properties. Excessive or unnecessary lighting can also be inefficient in terms of energy consumption and the over lighting can render the night sky effectively unviewable to residents. Regulatory tools are available to municipalities to control lighting design and placement provided the municipality has the proper policies in place to do so.

On April 18, 2012 Council passed a recommendation requesting that staff bring forward proposed by-law changes to allow the City to control lighting on buildings and that the Planning and Building Commissioner bring forward changes to the Site Plan Approval process to impose stricter lighting controls on buildings adjacent to residential neighbourhoods.

**COMMENTS:**

**JURISDICTION**

The main tools available to municipalities in Ontario to regulate outdoor lighting include Site Plan Control under the *Planning Act* and lighting by-laws under the *Municipal Act*.

***Planning Act***

Municipalities cannot regulate lighting or address lighting issues through Zoning By-laws; however, Section 41 of the *Planning Act* permits the municipality to regulate lighting for new development or modifications to existing buildings and structures that are subject to Site Plan Control.

Through the Site Plan Approval process, municipalities have the authority to approve plans showing the location of all proposed buildings and structures to be erected and all facilities and works to be provided, as well as building elevation plans that display the massing and design of each building. Relevant to the plans are matters relating to exterior design and landscaping, which includes outdoor light fixtures. The City of Mississauga currently addresses site lighting design through the Site Plan Approval process.

***Municipal Act, 2001***

Section 129 of the *Municipal Act, 2001* allows municipalities to pass by-laws to regulate outdoor illumination, including indoor lighting that can be seen outdoors, as well as other issues such as noise, dust and odours. The passing of a by-law to control lighting can also involve the creation of a system for regulating these fixtures by requiring a permit to be obtained prior to the installation or erection of any lighting fixture or feature that is subject to the by-law. An outdoor lighting by-law would address many of the same issues as through Site Plan Control except that the by-law approach allows municipalities to regulate lighting features for existing development, not just new development. The City of Mississauga does not currently have a lighting by-law or permit process in place to regulate outdoor illumination.

**POLICIES**

**Official Plan Policies**

Section 5.3.6 of Mississauga Plan (2003) governs Site Plans and designates all lands in Mississauga as a Site Plan Control Area. The policies provide that applications for Site Plan Approval will be required to contain sufficient information to ensure compliance with all relevant matters contained in the *Planning Act*, such as building design and design features, which includes lighting fixtures.

The policies also allow for aesthetic and functional design guidelines to be established to guide the preparation of site plans and the design of buildings. Currently the City does not have design guidelines in place that pertain specifically to the installation of lights and lighting fixtures.

Mississauga Official Plan (2011), not yet in effect, expands on the policies in Mississauga Plan (2003) to also specifically identify that site plan applications will address matters relating to exterior design such as, but not limited to, the character, scale, appearance and design features of all buildings, and their sustainable design.

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**Site Plan Control By-law**

As per the *Planning Act*, Council passed Site Plan Control By-law 0293-2006, to designate specific areas of the municipality subject to Site Plan Control. All development proposed within these areas, unless otherwise exempt, are subject to Site Plan Control. There are many industrial and business employment locations throughout the City that are not subject to Site Plan Control.

**REVIEW**

**Current Mississauga Practices**

For new development subject to Site Plan Control, applicants are required, as deemed necessary, to submit lighting plans and details. Lighting review is typically limited to ensuring lamps and fixtures are located in such a way as to direct light away from neighbouring properties. A notation is also required to be included on the site plan stating: "All exterior lighting will be directed onto the site and will not infringe upon the adjacent properties."

Complaints received by the City concerning lighting or outdoor illumination are typically resolved by the City's Compliance and Licensing Enforcement Section through the provisions outlined in the Property Standards By-law 654-98. This By-law has general provisions dealing with exterior lighting and lighting fixtures (Section 18) that are enforced similar to other general standards for property maintenance contained in the by-law. Enforcement staff ensures that exterior lighting fixtures are installed and maintained so as to prevent the light source from shining directly into a dwelling unit. Indirect and ambient light are not controlled by the existing Property Standards By-law.

**Comparison to Other Municipalities**

Staff compared the City's current practice of reviewing lighting design with the processes of Brampton, Burlington, Oakville, Richmond Hill and Toronto. Each of those municipalities governs lighting on private property through Site Plan Control.

- Brampton and Toronto currently handle the review of lighting similar to Mississauga in that they do not have any guidelines

in place and their review is limited to ensuring lamps and fixtures are located in such a way as to direct light away from neighbouring properties.

- Burlington has lighting design guidelines in place while Oakville is in the process of developing guidelines to assess lighting on private lands to protect against light trespass and promote night sky friendly lighting.
- Richmond Hill developed a light pollution by-law in the mid 1990's, mainly responding to concerns of light pollution on the Donald Dunlop Observatory, through special provincial legislation. This was the only way a municipality could pass a by-law prior to the current changes to the *Municipal Act, 2001*. Their by-law regulates new lighting fixtures for existing and new development, acts as a guideline to review new lighting fixtures and provides authority for enforcement of lighting features that do not comply with the provisions of the by-law.

No Greater Toronto Area (GTA) municipality has an outdoor illumination by-law with an accompanying permit system in place to regulate private site lighting for new or existing developments. Burlington is expected to pass a special event lighting by-law to supplement their existing lighting by-law in the near future.

**PROPOSED MODIFICATIONS**

**Lighting Guidelines**

In accordance with the Site Plan Policies in Mississauga Plan, lighting guidelines could be established to assist in the preparation of site plans and the design of buildings, as well as to provide more detailed standards by which staff could review proposed lighting designs beyond the current practice. However, lighting guidelines can be highly technical documents that may be difficult to enforce and administer while not substantially improving situations where ambient and/or indirect light trespass occurs due to faulty installation and/or fixtures. Therefore, this Department does not recommend the formulation and adoption of lighting guidelines.

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**Modification to Existing Site Plan Approval Process**

As a means of further improving the Site Plan Approval process, with the least amount impact on approval timelines and increased costs to the applicant, the following changes are recommended:

- All Site Plan applications, except for detached and semi-detached dwellings, within 60 m (196.8 ft.) of a residentially zoned property will be required to submit an engineer certified lighting plan for review and approval;
- All proposed exterior lights will be required to be "shielded" as opposed to "unshielded lights" that produce glare and light infringement (see Appendix 2 showing examples of acceptable and unacceptable lighting fixtures). Applicants will also be required to include a note on the site plan indicating the use of only "shielded" lighting fixtures. Exemptions will be allowed only when required by either the Ontario Building Code and/or in order to comply with the recommendations of the Illuminating Engineering Society of North America (IESNA) lighting handbook for uses and/or activities;
- Financial securities posted for site works associated with a Site Plan application shall include lighting fixture compliance to approved plans. Securities are returned once compliance of the site has been met;
- The Department's Site Plan Manual will be revised to provide appropriate direction to applicants.

**Nuisance Lighting By-law**

The Compliance and Licensing Section of the Transportation and Works Department will be presenting a report and draft nuisance lighting by-law at the December 5, 2012 General Committee meeting.

A nuisance lighting by-law would contain regulations to assess lighting installations and would apply to both new developments as well as existing buildings. It could also enhance Compliance and Licensing Enforcement's ability to enforce lighting standards.

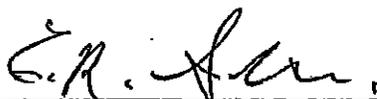
Implementing a lighting by-law would not eliminate a reliance on the Compliance and Licensing Section to ensure adherence to the lighting by-law.

**CONCLUSION:**

In order to better regulate lighting or address lighting issues, modifications to the City's current Site Plan Approval process are proposed to be implemented, as described in this report, including a more detailed review of proposed outdoor lighting on properties abutting or adjacent to residentially zoned properties and to prescribe shielded lighting fixtures. These initiatives, coupled with the implementation of a nuisance lighting by-law under the *Municipal Act, 2001* through the Transportation and Works Department will provide additional means to the City's Compliance and Licensing Section to address lighting related complaints.

**ATTACHMENTS:**

- Appendix 1: Recommendation GC-0310-2012
- Appendix 2: Examples of Acceptable/Unacceptable Lighting Fixtures



Edward R. Sajeckl  
Commissioner of Planning and Building

*Prepared By: Chris Rouse, Acting Manager  
Development North*



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**Appendix 1**

**City of Mississauga – Outdoor Lighting Review**

**File: CD.07.OUT**

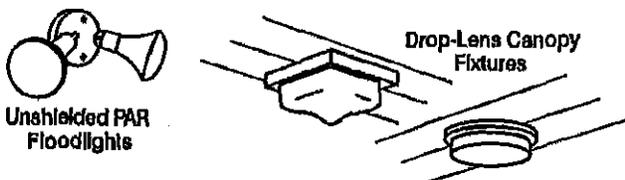
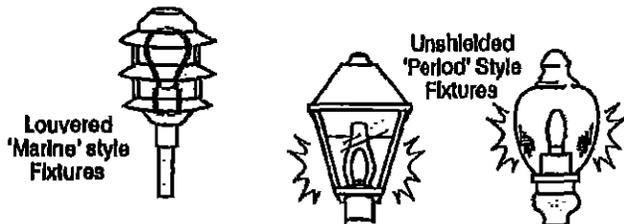
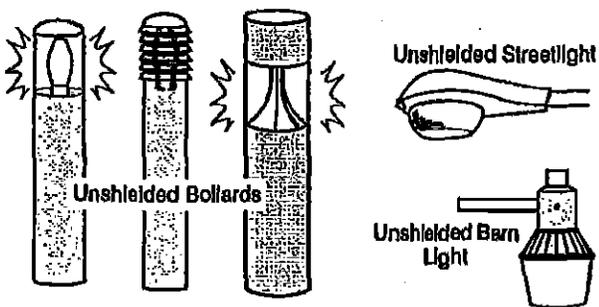
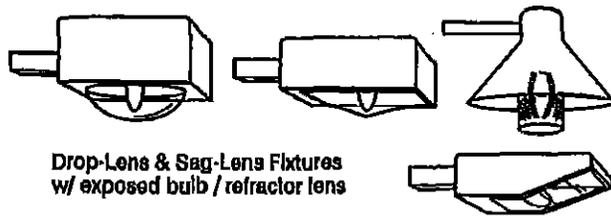
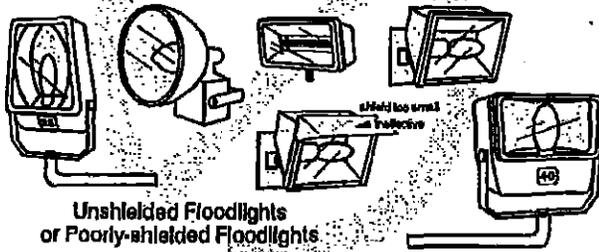
**Recommendation GC-0310-2012**

**GC-0310-2012**

**"That staff bring forward proposed by-law changes to allow the City to control lighting on buildings and that the Planning and Building Commissioner bring forward changes to the Site Plan process to impose stricter lighting controls on buildings adjacent to residential".**

# Examples of Acceptable / Unacceptable Lighting Fixtures

## Unacceptable / Discouraged Fixtures that produce glare and light trespass



## Acceptable Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night

