

INFORMATION ITEMS

Week Ending May 24, 2019

REPORTS

1. 2018 Development Charge Reserve Fund Statement
2. 2018 Parkland Dedication Reserve Fund Statement
3. Federal and Provincial Capital Grant Funding Update
4. Technical Guidance Documents: Pedestrian Level Wind Studies Terms of Reference, Sun and Shadow Studies Terms of Reference and Lighting Guidelines for Lighting Plans

INTERGOVERNMENTAL CONSULTATIONS

1. 10th Year Review of Ontario's Endangered Species Act: Proposed Changes
2. Modernizing Conservation Authority Operations – Conservation Authorities Act
3. Modernizing Ontario's Environmental Assessment Program
4. Excess Soil Regulatory Proposal and Amendments to Brownfield Regulation
5. Bill 108 - (Schedule 3) – the proposed More Homes, More Choice Act: Amendments to the Development Charges Act, 1997
6. Bill 108 – (Schedule 11) – the proposed More Homes, More Choice Act: Amendments to the Ontario Heritage Act
7. Bill 108 – (Schedule 12) – the proposed More Homes, More Choice Act: Amendments to the Planning Act
8. Regulations for Recycling Electronic Equipment (EEE) and Batteries under the Resource Recovery and Circular Economy Act, 2016

CORRESPONDENCE

1. Township of Bonnechere Valley Resolution re: Proposed Changes to the Fisheries Act
2. Township of the Archipelago Resolution re: Bill 108, the More Homes, More Choice Act, 2019
3. Township of McNab/Braeside Resolution re: Government of Ontario E-Learning
4. Town of Fort Erie Resolution re: Issuance of Cannabis Licenses in Residentially Zoned Areas

BOARDS & COMMITTEES

1. None

ITEMS AVAILABLE IN THE CLERK'S OFFICE

1. None

Information Report



Service Area Corporate Services
Date Friday, May 24, 2019
Subject **2018 Development Charge Reserve Fund Statement**
Report Number CS-2019-14

Executive Summary

Purpose of Report

To report on the 2018 Development Charge Reserve Funds as required by Ontario Regulation 82/98 of the Development Charges Act, 1997.

Key Findings

Development Charge (DC) collections were \$21.3 million in 2018, a seven per cent increase from the \$19.9 million collected in 2017, but still below the targets identified in the DC Background Study.

A total of \$21.7 million of DC funds were used to finance eligible capital projects in 2018, representing a 16 per cent increase from 2017 spending levels.

The total closing balance of all 15 DC reserve funds, after capital commitments of \$44.6 million is \$1.77 million. This is an improvement over 2017 of \$5.6 million and shows staff commitment of aligning growth spending with revenue collections.

DC exemptions of \$3.96 million were awarded in 2018 in accordance with the DC By-law relating to industrial expansions, University-related purposes and accessory apartments. The City transfers funds from tax and non-tax supported sources to make up this lost DC revenue which ensures the DC Reserve Funds are sufficiently funded for future planned growth in accordance with the DC Background Study.

The City has DC debt outstanding of \$29.1 which enables the City to upfront the cost of infrastructure before the development occurs and repay it over the period while development is occurring. The City is planning to issue \$11.5 million of new DC debt in 2019 related to Wilson Parkade and the Police Headquarters.

Financial Implications

DC collections continue to lag behind the targets identified in the DC Background Study. In 2018, 69 per cent of DC revenues targeted in the DC Background Study were realized, primarily due to a shortfall in non-residential development. Staff will continue to monitor and adjust the growth-related capital forecast to reflect the actual rate and type of growth being achieved.

Report

Background

The Development Charges Act, 1997, (DCA) requires the treasurer of a municipality to provide Council with a financial statement annually, of its DC activity including a reserve fund statement. The statement must include opening and closing balances of the reserve funds and related transactions. In addition, Ontario Regulation 82/98 requires project-level details and descriptions of what projects the DCs were applied in the year including the funding from non-DC sources. Please refer to Attachment-1 2018 DC Reserve Fund Statement and Attachment-2 2018 Project Financing Statement for the detailed legislated reporting.

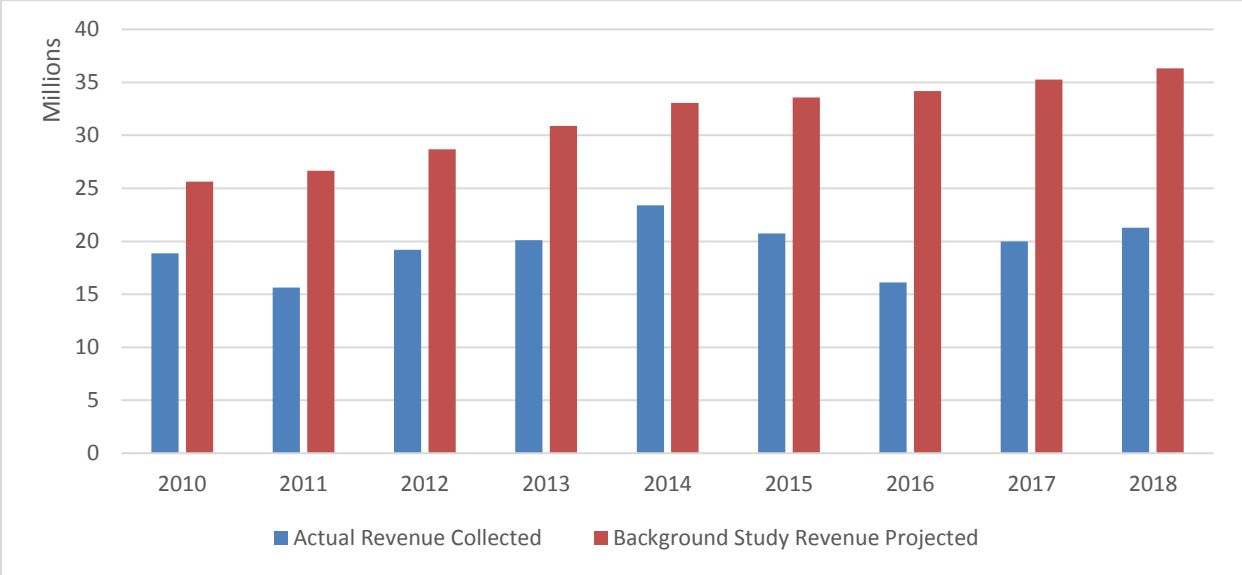
There are no amounts to report as credits for work performed that relates to a service for which development charges are chargeable.

In addition to meeting the legislated requirements, this report also provides the opportunity to highlight information relating to the City’s DC collection and expenditure activity throughout the year. As DCs play an important role in the achievement of the capital strategy, it is critical that the activity in and out of the DC Reserve Funds is monitored and reported on a regular basis.

Revenue

DC revenue collected in 2018 totalled \$21.3 million, representing a 7 per cent increase over 2017 revenues, however \$15 million short of the 2018 target identified in the DC Background Study. Chart 1: DC Revenue Collections, illustrates the divergence between the collections planned in the DC Background Study and actual DCs collected since 2010.

Chart 1: DC Revenue



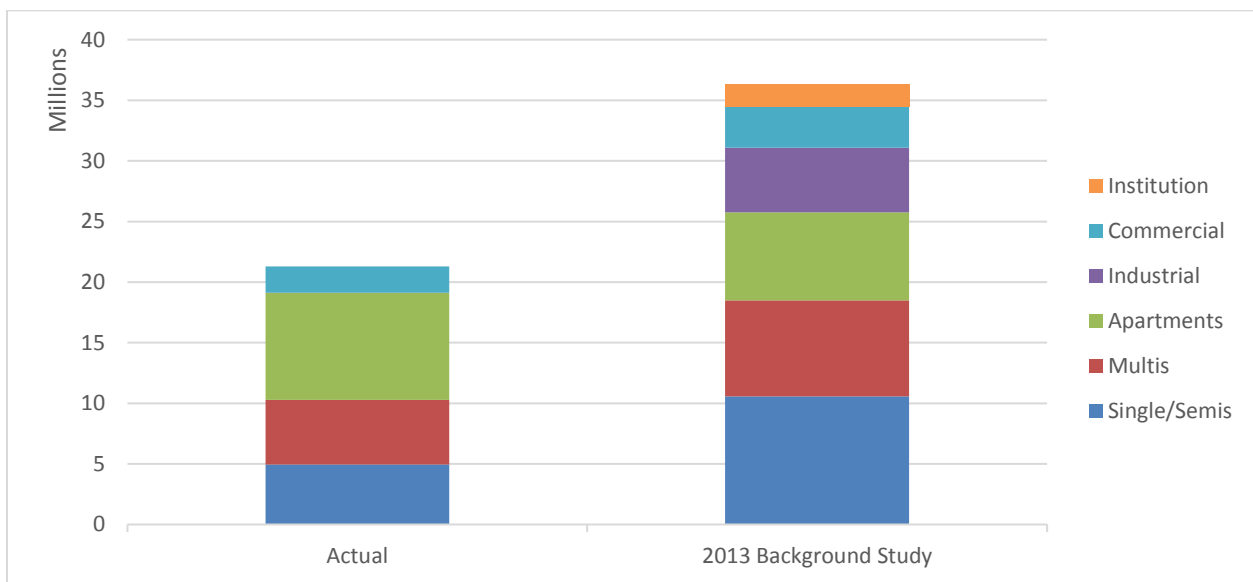
The unfavourable variance in revenue in 2018 can be attributed to two factors; a lack of non-residential development and a shift in the mix of residential development. The planned and actual housing mix is summarized in Table A: Residential Mix.

Table A: 2018 Residential Mix (does not include accessory apartments)

Applicable DC Background Study	2018 Residential Housing Mix Based on DC Payment Information
30% Low Density	8.36% Low Density
30% Medium Density	33.11% Medium Density
40% High Density	58.53% High Density

The impact of the shift in residential development mix and the variance in non-residential development from the targets identified in the DC Background Study are summarized in Chart 2: Development Charge Revenue by Type.

Chart 2: Development Charge Revenue by Type (does not include accessory apartments)



Expenditures

The City spent \$21.7 million on growth-related capital projects. Capital expenditures in Police, Wastewater, Water and Outdoor Recreation accounted for the most significant portion of the year's spending. Attachment-2 2018 Project Financing Statement identifies all the growth-related projects that received funding in 2018.

Major 2018 project spending includes:

- \$2.50 million on the York Trunk Ph 2b (PN0257)
- \$2.04 million on the Paisley Feedermain (PN0268)
- \$1.44 million for new supply initiatives (WT0002)
- \$1.71 million towards the Niska Road: City Boundary to Downey Road (PN0046)
- \$706 thousand on the Clair Maltby Secondary Plan (PL0022)
- \$970 thousand towards the South End Recreation Centre (RP0290)
- \$2.96 million on the Police Headquarter Renovation (PS0033)
- \$4.37 million toward work on the Wilson Parkade (PG0078)

There is \$44.6 million of prior year approved capital budget unspent and committed against the DC Reserve Funds. There are a number of reasons for the magnitude of the committed balance, including projects still in the planning stages, that have a timeline of over one year, or projects that are delayed. The most significant projects contributing to this balance are:

- New Water Supply (WT0002) \$6.22 million
- Paisley Feedermain (PN0268) \$4.13 million
- York Trunk Ph 2 (PN0257) \$2.65 million
- Police Headquarters (PS0033) \$3.08 million
- Wilson Parkade (PG0078) \$5.5 million
- Niska Bridge (PN0046) \$1.89 million
- South End Recreation Centre (RP0290) \$2.16 million

DC Exemptions

The Development Charge Exemption Policy By-law Number (2013)-19537 requires the City to contribute an amount equal to the loss of DC revenues attributable to DC exemptions back to the DC Reserve Funds each year. This lost DC revenue is funded from tax and non-tax supported sources. In 2018, the City approved \$3.96 million in exemptions in accordance with the DC By-law relating to:

- Industrial building expansion (legislated): \$34,165 (318.2 meters squared)
- University-related purpose (Council directed): \$79,368 (761.4 meters squared)
- Place of Worship (Council directed): \$87,643 (827 meters squared)
- Accessory apartments (legislated): \$3,762,343 (167 units)

The exemptions were funded 56 per cent from non-tax supported sources and 44 per cent from tax supported sources.

Debt

The DCA permits the use of external debt to manage the cash flow of the DC Reserve Funds. Often, growth-related infrastructure is required prior to the construction of a development, thereby resulting in a gap between when DCs are needed and when DCs are collected. The total DC debt outstanding as at December 31, 2018 is \$29.1 million and the annual interest cost in 2018 totalled \$735,904. Table B: DC Debt Outstanding details the projects for which debt was issued.

Table B: DC Debt Outstanding

Project	2018 Year-end Outstanding Balance	Maturity
Water Supply	\$729,140	2019
Wastewater Bio-solids Upgrade	\$670,136	2019
Clair Road Emergency Services Centre (Police)	\$349,517	2019
Clair Road Emergency Services Centre (Fire Services)	\$108,866	2019
Transit Terminal	\$213,904	2019

Public Health facilities	\$3,237,735	2026
Hanlon Expressway Interchange	\$16,289,774	2029
Police Headquarters, first of two issues	\$7,322,147	2029
Total	\$29,062,520	

There are two DC project debt issuances planned in the 2019 relating to Police Headquarters (PS0003) \$7.0 million and Wilson Parkade (PG0078) \$4.5 million.

Year-end Balances

The DC Reserve Fund closing balances (excluding commitments) at December 31, 2018, are as follows:

Non-Discounted Services		Discounted Services	
Water Services	\$30,731,665	Library Services	\$3,620,267
Wastewater Services	24,918,465	Indoor Recreation	15,706,673
Stormwater Drainage	(1,378,051)	Outdoor Recreation	4,592,221
Services Related to a Highway	(13,360,093)	Transit	1,254,009
Fire Protection Services	(1,200,725)	Administration	(95,540)
Police Services	<u>(13,634,526)</u>	Paramedic Services	(1,383,980)
		Municipal Court	(68,144)
		Parking	(2,341,212)
		Health	<u>(5,671,335)</u>
Subtotal	\$26,076,733		\$20,295,382
Grand Total			\$46,372,115

The total closing balance of all 15 Reserve Funds is \$46.37 million, representing a \$4.44 million increase over 2017. Total 2018 interest earned on the cumulative balance of the DC Reserve Funds was \$1.6 million.

Financial Implications

DC collections continue to lag behind the targets identified in the DC Background Study, having realized 69 per cent of the collections identified in the DC Background Study for 2018. It is critical for staff to monitor and adjust the growth-related capital construction forecast to reflect the actual rate and type of growth being achieved.

Consultations

None.

Corporate Administrative Plan

Overarching Goals

Financial Stability

Service Area Operational Work Plans

Our Resources - A solid foundation for a growing city

Attachments

Attachment-1: 2018 Development Charge Reserve Fund Statement

Attachment-2: 2018 Development Charge Project Financing Statement

Departmental Approval

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Attachment-1
City of Guelph
Development Charge Reserve Fund Statement for 2018

Description	Non-Discounted Services						Discounted Services									Total					
	Water	Wastewater	Stormwater	Services Related to a Highway	Fire	Police	Library	Transit	Administration	Indoor Recreation	Outdoor Recreation	Parking	Ambulance	Courts	Health						
Opening Balance, January 1, 2018	29,033,406	19,613,065	(1,450,598)	(14,087,277)	(1,405,577)	(10,769,785)	3,192,519	925,159	746,782	14,329,548	2,891,031	5,979,265	(1,379,358)	(73,233)	(5,615,038)	41,929,909					
Plus:																					
Development Charge Collections	7,092,599	5,217,041	99,222	2,805,682	215,013	302,584	361,750	389,170	243,481	1,717,352	2,243,195	526,964	21,069	5,370	44,993	21,285,485					
Exemption Allocation	1,272,047	935,636	17,825	503,165	41,896	58,892	75,049	75,088	47,258	355,571	464,691	101,867	4,228	1,243	9,064	3,963,520					
Interest Allocated re Late Payments	4,272	3,424	92	1,711	134	159	176	328	119	792	1,012	339	11	7	11	12,585					
Accrued Interest	670,755	503,860	-	30,638	74,804	-	24,734	-	91,887	73,792	23,603	7,054	81,054	90,122	-	29,931	-	1,531	-	57,489	1,614,168
Subtotal	9,039,673	6,659,961	86,501	3,385,362	232,309	269,748	510,767	488,189	297,912	2,399,049	2,789,952	719,292	-	4,623	5,089	-	3,421	-	-	26,875,758	
Less:																					
Amount Transferred to Capital (or other) Funds	7,279,995	1,295,283	13,954	2,310,131	18,287	2,962,202	83,018	159,339	1,140,234	1,021,924	1,088,762	4,357,345	-	-	-	21,730,474					
Debt Charges - Interest	61,419	59,278	-	348,047	9,170	172,287										52,877	703,078				
Subtotal	7,341,414	1,354,561	13,954	2,658,178	27,457	3,134,489	83,018	159,339	1,140,234	1,021,924	1,088,762	4,357,345	-	-	-	52,877	22,433,552				
Closing Balance, December 31, 2017	30,731,665	24,918,465	(1,378,051)	(13,360,093)	(1,200,725)	(13,634,526)	3,620,268	1,254,009	(95,540)	15,706,673	4,592,221	2,341,212	(1,383,981)	(68,144)	(5,671,336)	46,372,115					
Less: Commitment not yet spent	17,404,260	6,870,669	499,575	4,028,526	24,412	3,076,914	424,353	183,264	2,317,487	2,157,417	2,094,032	5,519,148	-	-	-	44,600,057					
Closing balance not yet committed	13,327,405	18,047,796	(1,877,626)	(17,388,619)	(1,225,137)	(16,711,440)	3,195,915	1,070,745	(2,413,027)	13,549,256	2,498,189	(3,177,936)	(1,383,981)	(68,144)	(5,671,336)	1,772,058					

**Attachment-2
City of Guelph
2018 Development Charge Project Financing Statement**

Capital Fund Transactions	Gross Capital Cost	DC Recoverable Cost Share					Non-DC Recoverable Cost Share					
		DC By-Law Period			Post DC By-Law Period		Other Reserve/Reserve Fund Draws	Tax Supported Operating Fund Contributions	Rate Supported Operating Fund Contributions	Debt Financing	Grants, Subsidies Other Contributions	
		DC Reserve Fund Draw	DC Debt Financing	Grants, Subsidies Other Contributions	Post-Period Benefit/Capacity Interim Financing	Grants, Subsidies Other Contributions						
WATER												
SPDVL TRANS/TRK-PH1-SPDVL:WLCH	PN009	1,028,986	514,493							514,493		
YORK TRUNK-PH 2A - WATERWORKS	PN010	237,573	118,787							118,787		
YRK TRK&PSLY FDRMN-PH3-YRK:VIC	PN011	15,743	7,872							7,872		
HNLN:WLNLTN ST/CLR ST (W-I-3)	PN024	3,361	2,520							840		
YORK TRUNK-PH 2B - TO VICTORIA	PN025	4,813,607	2,502,163							2,311,444		
PAISLEY FEEDERMAIN-SILVER-RES	PN026	2,263,117	2,036,806							226,312		
WELLGTN:EDINBG S SIPHON REHAB	PN069	35,871	17,935							17,935		
ERAMOSIA-METCALFE GLENHILL	PN074	1,188,373	154,296							1,034,077		
PERFORMANCE/BENCHMARKING/CRITI	WD002	58,912	58,912							-		
NEW SUPPLY	WT000	1,437,404	1,437,404							-		
WF-4 ROBERTSON BOOSTER UPGRADE	WT001	651	325							325		
WATER SERVICING STUDIES	WT002	1,639	1,639							-		
ZONE 2E ELEVATED TANK	WT002	5,891	5,891							-		
WATER QUALITY UPGRADES	WT003	1,036	674							363		
CONSERVATION & EFFICIENCY	WW01	146,211	146,211							-		
W-I-25 DEVELOPMENT OVERSIZING	WW01	274,069	274,069							-		
Subtotal - Services Related to Highways		11,512,443	7,279,995	-	-	-	-	-	-	4,232,447	-	-
WASTEWATER												
ARTH TRK-PH2-HWTT:WYND/NEEVE	PN006	30,634	19,906							10,728		
ARTH TRK-PH4-CROSS ST/MCDNL	PN006	370,199	92,899							277,300		
SPDVL TRANS/TRK-PH1-SPDVL:WLCH	PN009	65,891	7,225							58,665		
STEVENSON:GRAN-BENN	PN009	110,648	19,403							91,246		
YORK TRUNK-PH 2A - WATERWORKS	PN010	541,086	270,485							270,601		
DOWNTOWN SERVICNG STUDIES	PN016	73,301	21,048							52,253		
I&I REDUCTION IMPLEMENTATION	PN020	1,530	765							765		
YORK TRUNK-PH 2B TO VICTORIA	PN025	993,041	107,693							885,347		
CCTV ADMIN AND SITE INSPECTION	PN075	77,432	19,358							58,074		
WWI15 NEW GRAVITY SEWERS	SC002	111	100							11		
WWI16 NEW FORCEMAINS	SC002	2,253	2,028							225		
WWF1 DECOMMISSION GORDON SPS	SC002	1,346,423	669,386							604,656		72,381
SERVICING STUDIES	SC002	22,385	12,872							9,513		
WWI0/WWSA FLOW MONITORING	SC003	99,111	49,556							49,556		
PLANT GENERATORS	ST000	7,089	7,089							-		
WWTP UPGRADE STUDIES	ST000	69,107	15,737							53,371		
WWTP PROCESS UPGRADES	ST000	9,950	4,231							5,718		
SCADA UPGRADES	ST000	74,614	15,314							59,300		
Subtotal - Water		3,833,538	1,295,283	-	-	-	-	-	-	2,465,874	-	72,381
STORMWATER												
DOWNTOWN SERVICNG STUDIES	PN016	13,090	9,791							3,299		
STORMWATER FUNDING STUDY	SW006	15,300	4,163							8,656		2,653
Subtotal - Wastewater		28,390	13,954	-	-	-	-	-	-	172	-	2,653
SERVICES RELATED TO A HIGHWAY												
NISKA RD:CITY BNDARY/DOWNEY RD	PN004	2,625,431	1,750,790									874,641
SPDVL TRANS/TRK-PH1-SPDVL:WLCH	PN009	776,927	91,761							26,173		658,993
YRK TRK&PSLY FDRMN-PH3-YRK:VIC	PN011	62,335	43,642							18,693		
STONE:PHASE 2	PN014	22,692	15,884							6,808		
TRANSPORTATION STRATEGY & TDM	PN017	22,971	11,486							11,486		
STONE:PHASE 1	PN026	3,210	2,247							963		
VICTORIA - STONE-ARHELL	RDO07	54,878	38,363							16,515		
YORK-VICTORIA TO EAST CITY LIM	RDO27	0	470							470		
ACTIVE TRANSPORTATION	RD032	277,754	278,271							88,603		88,087
ACTIVE TRANSPORTATION STUDY	RD032	17,970	17,970							-		
PTIF TRANS MASTER PL GUE-00	RD033	3,312	2,709							602		
TRAFFIC MGMT INITIATIVES	TF000	68,748	34,374							34,374		
NEW SIGNAL INSTALLATION	TF001	205,794	59,351							6,442		140,000
Subtotal - Stormwater		4,090,015	2,310,131	-	-	-	-	-	-	18,163	-	1,761,721
FIRE SERVICES												
FIRE VEHICLE NEW PUMPER 2016	FS005	40,888	18,287							22,601		
Subtotal - Fire		40,888	18,287	-	-	-	-	-	-	22,601	-	-
POLICE SERVICES												
POLICE HQ RENOVATIONS	PS003	2,962,202	2,962,202							-		
Subtotal - Police		2,962,202	2,962,202	-	-	-	-	-	-	-	-	-
LIBRARY												
MAIN BRANCH LIBRARY	LB002	71,537	100,647							172,184		
BAKER	SS001	12,532	17,629							30,161		
		59,005	83,018							142,023		
TRANSIT												
CAD/AVL REPLACEMENT	TC002	187,248	42,131							145,117		
MOBILITY VAN - EXPANSION	TM000	173,274	116,960							-		56,314
COMMUNITY BUS 2018	TM000	552	248							-		303

Capital Fund Transactions	Gross Capital Cost	DC Recoverable Cost Share					Non-DC Recoverable Cost Share				
		DC By-Law Period			Post DC By-Law Period		Other Reserve/Reserve Fund Draws	Tax Supported Operating Fund Contributions	Rate Supported Operating Fund Contributions	Debt Financing	Grants, Subsidies Other Contributions
		DC Reserve Fund Draw	DC Debt Financing	Grants, Subsidies Other Contributions	Post-Period Benefit/Capacity Interim Financing	Grants, Subsidies Other Contributions					
Subtotal - Transit	361,074	159,339	-	-	-	-	145,117	-	-	56,617	
ADMINISTRATION											
CORPORATE FACILITIES NEEDS ASSESSMENT FM000	274,323	62,346					211,977				
2019 DC STUDY GG023	146,637	131,973					14,664				
LEASH FREE REVIEW 2018 PK0062	24,490	16,531					7,959				
PARKS & REC MASTER PLAN 2018 PK0073	16,848	11,371					5,477				
Trail Masterplan Update PK0075	62,321	42,379					19,943				
PARKLAND DEDICATION BYLAW PK0085	75,743	54,535					21,208				
ENVIRONMENTAL INITIATIVES PL0020	35,389	(9,490)					44,879				
ZONING BY-LAW REVIEW PL0021	77,971	27,622					50,349				
CLAIR/MALTBY SECONDARY PLAN PL0022	785,952	706,214					79,738				
HERITAGE INITIATIVES PL0024	51,662	6,180					45,482				
MIXED USE NODES & CORRIDORS PL0036	1,834	847					987				
HOUSING INIT STRATEGY PL0050	668	311					357				
OFFICIAL PLAN REVIEW PL0054	107,880	72,819					35,061				
URBAN DESIGN GUIDELINES PL0056	49,151	18,125					31,026				
PTIF TRANS MASTER PL GUE-00 RD033	5,000	(2,893)					(2,107)				
SIGNALIZED CONTROL SYSTEM STUDY TF0006	2,727	1,364					1,364				
Subtotal - Administration	1,708,597	1,140,234	-	-	-	-	568,363	-	-	-	
INDOOR RECREATION											
VRRC EXPANSION/RENOVATION RF0051	68,478.31	52,758					15,720				
SOUTH END COMMUNITY CENTRE RP0290	1,195,241.28	969,166					226,076				
Subtotal - Indoor Rec	1,263,720	1,021,924	-	-	-	-	241,796	-	-	-	
OUTDOOR RECREATION											
GUELPH TRAILS GROWTH PK0002	407,837	377,854					41,984			12,000	
JUBILEE PARK PK0004	509	509									
VICTORIA RD NORTHVIEW PK0007	916	824					92				
EASTVIEW COMMUNITY PARK PK0014	276,625	248,963					27,663				
CEDERVALE PARK PK0030	44,358	39,922					4,436				
ELLIS CREEK PARK PK0047	95	86					10				
RIVERWALK PK0060	3,133	2,819					313				
PARKS & REC MASTER PLAN 2018 PK0073	10,933	7,379					3,554				
PEDESTRIAN RAILWAY BRIDGE PK0075	74,475	33,531					40,943				
BICYCLE SKILLS FACILITY PK0091	3,064	2,451					613				
STARWOOD PARK PK0104	32,134	28,921					3,213				
PARKS EQUIPMENT GROWTH PO0011	383,894	345,504					38,389				
Subtotal - Outdoor Recreation	1,237,972	1,088,762	-	-	-	-	161,210	-	-	12,000	
MUNICIPAL PARKING SPACES											
WILSON ST PARKADE PG0071	4,372,069	4,372,069					-				
BAKER SS0019	129,263	14,723					143,987				
Subtotal - Parking	4,501,332	4,357,345	-	-	-	-	143,987	-	-	-	
TOTAL	31,481,163	21,730,474	-	-	-	-	1,159,041	6,710,276	-	1,881,372	

Amount Transferred to Capital (or Other) Funds - Operating Fund Transactions

Operating Fund Transactions	Annual Debt Repayment	DC Reserve Fund Draw		Post DC By-Law Period			Non-DC Recoverable Cost Share		
		Principle	Interest	Principle	Interest	Source	Principle	Interest	Source
WATER Capital Cost J	703,555		61,419						
Subtotal - Services Related to Highways									
WASTEWATER Capital Cost M	646,623		59,278						
Subtotal - Water									
SERVICES RELATED TO A HIGHWAY Capital Cost P	1,346,243		348,047						
Subtotal - Wastewater									
POLICE SERVICES Capital Cost P	577,570		172,287						
Subtotal - Wastewater									
FIRE SERVICES Capital Cost P	105,046		9,170						
Subtotal - Wastewater									
Health Capital Cost P	450,094		52,877						
Subtotal - Wastewater									

Information Report



Service Area Corporate Services
Date Friday, May 24, 2019
Subject **2018 Parkland Dedication Reserve Fund Statement**
Report Number CS-2019-15

Executive Summary

Purpose of Report

The purpose of this report is to provide a Treasurer's Statement for the collective 2018 Parkland Dedication Reserve Funds. This is a requirement under Section 42 of the Planning Act, resulting from the proclamation of the Smart Growth for Our Communities Act (Bill 73).

Key Findings

Total 2018 cash-in-lieu of parkland collections were \$1,415,400, representing an 86 per cent increase over collections received in 2017.

Downtown cash-in-lieu funds were used to purchase a property intended to be converted to parkland as per the Downtown Secondary Plan costing \$1,526,804.

The collective closing balance of the Parkland Dedication Reserve Funds at year-end is \$4,220,383, a decrease of \$35,317 from 2017.

Financial Implications

There are no financial implications associated with this report. The information provided relates specifically to adhering to the legislated reporting requirements outlined throughout this report.

Report

Background

Municipal treasurers are required by legislation to provide Council with annual statements relating to special accounts (reserve funds) that have been created under Section 37 (increased density) and Section 42 (cash-in-lieu of parkland). The City of Guelph has not yet had any applications for density bonuses and therefore there is no reporting for this item under Section 37.

Under Section 42 of the Planning Act a municipality may require, as a condition of development, that land be conveyed to the municipality for park or other public recreational purposes. Alternatively, Council may require a payment-in-lieu of the value of the land otherwise required to be conveyed.

Those funds must be held in special accounts (reserve funds) and may be invested, allocated interest and spent only for the acquisition of land to be used for park or other recreational purposes including the erection, improvement or repair of buildings and the acquisition of machinery.

This report serves to meet the reporting requirements for cash-in-lieu of parkland funds under Section 42 of the Planning Act that include a financial statement and both public and provincial submission.

2018 Treasurer’s Statement - Parkland Dedication Reserve Funds

The City of Guelph has been collecting cash-in-lieu of parkland funds since 2001 and has been maintaining two dedicated reserve funds to record and track the use of those funds.

Total cash-in-lieu of parkland collections were \$1,415,400, representing an 86 per cent increase over collections received in 2017.

All payments received by the City were for development outside of the downtown area. Table 1: 2018 Cash-In-Lieu Revenue provides a breakdown of the cash-in-lieu collections received and the section of the Planning Act used to determine the amount owing.

Table 1: 2018 Cash-In-Lieu Revenue

Approvals pursuant to Section 51 or 53 of the Planning Act	Number of approvals where cash-in-lieu revenue was collected in accordance to the Official Plan Parkland Dedication Policy	Total amount of cash-in-lieu revenue collected
Consent for severance (Residential)	7	\$129,450
Vacant land condominium (Residential)	1	\$150,000

Approvals pursuant to Section 42 of the Planning Act	Number of approvals where cash-in-lieu revenue was collected in accordance to the Parkland Dedication By-law	Total amount of cash-in-lieu revenue collected
Building permit	24	\$1,135,950
Total		\$1,415,400

The breakdown for the 24 building permits where cash-in-lieu of parkland was collected is as follows:

18 detached houses and 2 apartment dwelling units	\$29,050
2 industrial additions and 1 new industrial building	\$182,100
1 restaurant	\$11,000
1 high density residential development	\$913,800
Total	\$1,135,950

2018 spending from the Downtown Parkland Dedication Reserve Fund was limited to the purchase of a parcel of land identified in the Downtown Secondary Plan as the preferred location for the future Wellington Park. In October 2018, the City purchased 110 Gordon Street at a cost of \$1,526,804 which led to the planned over-drawn position of \$917,142 as shown in Table 2. Council agreed that this was appropriate given the projected revenues to be generated through future growth. The city-wide Parkland Dedication Reserve Fund was used to fund the completion of the Victoria Road Recreation Centre (VRRRC) renovation in accordance with the Council-approved budget allocation.

Table 2: Parkland Dedication Reserve Fund Activity

Parkland Dedication Reserve Fund (300)		
Opening balance		\$3,642,743
Cash-in-lieu collected	\$1,415,400	
Interest earned	\$95,102	\$1,510,502
Less: VRRRC spending		\$(15,720)
Closing balance		\$5,137,525
Downtown Parkland Dedication Reserve Fund (301)		
Opening balance		\$612,957
Cash-in-lieu collected	\$	
Interest accrued	\$(3,295)	\$(3,295)
Less: parkland acquisition		\$(1,526,804)
Closing balance		\$(917,142)
Combined Total Closing Balance		\$4,220,383

Financial Implications

There are no financial implications associated with this report. The information provided relates specifically to adhering to the new legislated reporting requirements outlined throughout this report.

Consultations

Luke Jefferson, Manager Opens Space Planning

Corporate Administrative Plan

Overarching Goals

Financial Stability

Service Area Operational Work Plans

Our Resources - A solid foundation for a growing city

Departmental Approval

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Information Report



Service Area	Corporate Services
Date	Friday, May 24, 2019
Subject	Federal and Provincial Capital Grant Funding Update
Report Number	CS-2019-67

Executive Summary

Purpose of Report

To provide an update on funding announcements regarding the Investing in Canada Infrastructure Program: Public Transit Stream (ICIP:PTS), Connecting Links and one-time increase in the Federal Gas Tax program (Fed Gas).

Key Findings

The second phase of the ICIP:PTS will provide funding to the City to support expanded transit services through capital investment. The focus of this phase of funding is on City Building projects, with only 15 per cent allocated to Infrastructure Renewal. The total value of the program is \$145 million over eight years (2019-2027); the Federal government is providing 40 per cent, the Provincial government 33.33 per cent, and 26.67 per cent is the responsibility of the City. City staff are currently working to submit project proposals for this grant by the May 28 deadline. Staff have utilized the Council-endorsed 10-year capital plan and the Council-approved corporate energy framework and Master Plans to develop the project proposal submissions. The categories for these proposals are:

1. Route and network expansion to increase modal split
2. Electrification of the transit fleet
3. Expanded transit/fleet operations facility
4. Implementation of the approved Active Transportation Network plan
5. Upgrades and improvements to Guelph Central Station

Council will have the opportunity to discuss and approve these projects and even recommend submitting for additional projects once staff understand more details on the funding envelope. Having provincial and federal input on the proposals will make the conversation with Council more valuable and more certain in terms of long-term financial planning.

The Provincial government has also recently announced the next phase of the Connecting Links grant. Through the Connecting Links Program, the Province of Ontario is investing in the construction and repair of roads and bridges on connecting links. Connecting links are municipal roads designated under the Public Transportation and Highway Improvement Act. Funding will be provided for up to 90 percent of

total eligible project costs. The maximum amount of funding for eligible costs is \$3 million per project. Funding is provided for the design, construction, renewal, rehabilitation and replacement of connecting link infrastructure.

The 2019 Federal Budget also contained an additional one-time doubling of Fed Gas funding for 2019, resulting in an increase of \$8 million, for a total of approximately \$16 million for 2019. This funding will allow needed infrastructure renewal to move forward in the 10-year capital forecast based on priorities supported by the Corporate Asset Management Plan. Staff will advise Council on the recommended use of these grant funds through the 2020 Capital Budget or earlier if an urgent need is identified.

Financial Implications

The City's portion of the ICIP:PTS is \$39 million and will require realigning projects within the 10-year capital plan to accommodate this funding. The main portion of this funding will come from projects already planned within the forecast that will now be eligible for this funding. However, this will shift the timing/sequencing of certain projects to accommodate the grant timelines.

With a significant focus of the ICIP:PTS on City Building, there will be operating costs associated with the new assets, including staffing, maintenance and replacement. These costs will be identified as the project plans are further developed. Council may decide at that time that the operating property tax burden of an expanded system is not affordable and choose a different path. Submitting the project proposals at this point in time does not commit the City to investing in this infrastructure.

Both the Connecting Links (if successful) and the Fed Gas funds will not alter the City's journey to reach sustainable capital funding by 2036, this funding will reduce the burden on future tax payers to address the infrastructure backlog.

Report

Details

Infrastructure investment is one of the largest expenditures at the City of Guelph each year, funding for capital investment accounts for \$70 million of the rates and taxes collected annually. This funding still falls short of the level required to sustainably renew and replace existing infrastructure (the annual infrastructure deficit). The City relies on transfers from other levels of government to supplement this funding, specifically annual programs such as the Federal and Provincial Gas Tax programs. The City's Intergovernmental division continually advocates for expansion of these programs to assist the City in closing the annual infrastructure deficit.

The City uses comprehensive asset management planning tools and has put in place a capital funding strategy to close the annual infrastructure deficit by 2036. The current level of required capital funding for tax supported asset still exceeds the available resources by \$28 million as of 2019. In addition, closing of the annual gap does not address the accumulated backlog, which is forecasted to reach \$471

million by the time the gap is closed in 2036. Periodic grant programs like the Public Transit Infrastructure Funds (PTIF) received between 2016-2018 help address this backlog and ease the long-term pressure on the City to raise property taxes and user rates.

Recently, the Federal government, through their ICIP and one-time additional Fed Gas allocation, have recognized these needs and are providing funding for communities.

Investing in Canada Infrastructure Program

The ICIP is the Government of Canada's comprehensive, long-term infrastructure plan. The program seeks to invest \$180 billion over 12 years across the country in various streams of infrastructure including social, green and public transit. The program seeks to generate long-term economic growth to build a stronger middle class, improve the resilience of communities and transition to a green economy and improve social inclusion and socio-economic conditions for all Canadians. The ICIP is being released in multiple phases.

In 2016, Phase 1 of the program was launched, focused primarily on infrastructure renewal and rehabilitation of existing assets. Through Phase 1 the City received over \$17 million in funding through both the Clean Water and Wastewater Fund (CWWF) and the PTIF. These funds were used to replace 24 conventional transit buses and nine mobility buses, as well as improving the traffic signal system. Funds from this program are currently being used to replace fare boxes on all buses, replacing equipment at the transit operations facility and completion of the City's Transportation Master Plan.

The next phase of the program is structured to support long-term infrastructure planning, including new construction that will have long-term and lasting impacts on services and Canadian communities. In March 2018 the Government of Canada and the Government of Ontario entered into a bi-lateral agreement which established the level, timing and type of funding for the program from 2018 through to 2027. On April 2, 2019 the Government of Ontario announced that the call-for-proposal window for the ICIP:PTS of funding was open for eligible municipalities, including Guelph. The intake process is currently open for ICIP:PTS, with Guelph eligible for up to \$106 million in funding over the next eight-year time frame. The current intake window closes on May 28, 2019, with the timing of future intakes unknown at this time.

Details of the funding for Guelph are as follows:

- Cost Sharing
 - Federal 40.00%
 - Provincial 33.33%
 - Municipal 26.67%
- Total Funding Allocation (2018-2027)
 - Federal: \$58,213,891
 - Provincial: \$48,506,725

Municipal:	\$38,814,112
Total:	\$145,534,728

Municipalities can use other sources of provincial funding (i.e. Provincial Gas Tax Program) towards their municipal contribution, but cannot combine other federal funding. The determination of the above funding is allocation based using transit ridership as of 2014, which means that this level of funding is expected to be stable, provided continued support for the program at both the Federal and Provincial government levels.

The objectives of the funding must fall within the following categories:

- Improved capacity of public transit infrastructure
- Improved quality and/or safety of existing or future transit systems
- Improved access to a public transit system

Funding is intended mainly for new construction (City Building) with a limited amount (15 per cent) eligible for rehabilitation or replacement of existing infrastructure (Infrastructure Renewal).

Current Proposal Window

In order to meet the tight timeframe established by the province, staff are preparing proposal submissions for five groups of projects:

1. Route and network expansion to increase modal split
2. Electrification of the transit fleet
3. Expanded transit/fleet operations facility
4. Implementation of the approved Active Transportation Network plan
5. Upgrades and improvements to Guelph Central Station

These are very high level proposals at this time, with the main purpose of the intake focused on recording projects in the grant system and obtain approval of both provincial and federal governments to proceed with project development and execution. Further development of projects and changes in scope, schedule and budget will be accommodated as the projects move forward. This will also give staff more funding certainty for bringing these programs/projects to Council for approval in the future.

Next Steps

Once project proposals are submitted to the ICIP:PTS, the province will review the applications and work with staff to gather additional information as required. Provincially approved projects will be forwarded to the federal level for approval. At this time there is no identified timing for approval or a second application window.

Once projects are approved by both levels of government, Transfer Payment Agreements (TPAs) will need to be completed, at which time Council will be required to approve the projects. Staff will work to inform Council during the review process and ensure that Council has sufficient time to provide input into the final project scope, schedule and budget.

Connecting Links

The government has also recently announced the next phase of the Connecting Links grant. Through the Connecting Links Program, the Province of Ontario is investing in the construction and repair of roads and bridges on connecting links. Connecting links are municipal roads designated under the Public Transportation and Highway Improvement Act. Funding will be provided for up to 90 percent of total eligible project costs. The maximum amount of funding for eligible costs is \$3 million per project. Funding is provided for the design, construction, renewal, rehabilitation and replacement of connecting link infrastructure. The City intends on applying for funding for the York Road: Ontario Street to Stevenson Street full corridor reconstruction project as part of the grant program.

One-time Federal Gas Tax Increase

With the release of the 2019 Budget, the federal government announced that they will be providing a one-time doubling of Fed Gas funding. The Fed Gas Fund is a permanent sustainable source of funding provided to municipalities to support local infrastructure priorities. Municipalities can pool, accumulate and borrow against this funding, providing significant financial flexibility for a mature level of government.

Based upon historical Fed Gas contributions, the City anticipates it will receive approximately \$8 million in additional funding, totaling \$16 million in 2019. Municipalities are expected to receive the additional payment following passage of the federal budget.

The eligible categories of expenditure and requirements for this funding are the same as those that apply to the regular annual amount. The program lays out specific categories of services the funding can be used towards and the eligible types of expenditures, specifically tangible capital assets. The agreement between the City and the Association of Municipalities of Ontario (AMO) stipulates the eligible services and expenditures.

As per the [Fed Gas Agreement](#)

“The Recipient shall account in writing for outcomes achieved as a result of the Funds through an Outcomes Report to be submitted to AMO. Specifically the Outcomes Report shall describe, in a manner to be provided by AMO, the degree to which investments in each Eligible Project are supporting progress towards achieving:

- (a) beneficial impacts on communities of completed Eligible Projects; and
- (b) enhanced impact of Funds as a predictable source of funding.”

For each eligible category there are lists of potential outcome measurements, based on these criteria the City identifies projects that fit these requirements. The additional funding for 2019 is being approached in the same manner. The City’s internal Capital Steering Committee which consists of inter-departmental leaders from across the organization are working to identify projects that meet the criterion, maximize the value of the funding and are within the City’s top infrastructure priorities. The City is leveraging the 10-year capital forecast as

endorsed by Council in the 2019 Capital Budget, and applying the principles of the recent Council-approved Asset Management Plan.

Staff will advise Council on the recommended use of these grant funds through the 2020 Capital Budget or seek approval earlier if an urgent need is identified.

Financial Implications

These opportunities are beneficial to the City in that they help address aspects of the accumulated Infrastructure Backlog as well as a number of the City's identified City Building priorities. However, they do not provide for sustainable long-term funding to address the City's annual Infrastructure Deficit. The need to increase annual capital transfers from operating budgets will not be reduced in the short-term due to this funding.

The municipal portion of the ICI:PTS (26.67 per cent) will require identification of \$39 million in funding over the next eight years to support these projects. A significant portion of this funding will come from projects already forecasted in the 10-year Capital Plan that will now be funded from this grant program. Additional funding may be required from sources such as the Efficiency, Innovation and Opportunity Reserve Fund or other City reserves which may be leveraged in the short-term. As part of the 2020 Capital Budget, staff will incorporate these grants into the long-term forecast and show the impact of project timing and sequencing as a result of these funds.

There are considerable increases to the cost of operating the expanded transit assets that Council will need to consider prior to approving the projects. Staff are working to identify these impacts and will communicate them as projects move through the approval process.

Consultations

A team consisting of staff from Intergovernmental Relations, Operations, Asset and Project Management, Engineering and Transportation, Facilities Management, Guelph Transit and Finance collaborated on the development of this report and the project proposal applications.

Corporate Administrative Plan

Overarching Goals

Financial Stability

Attachments

None

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Information Report



Service Area Infrastructure, Development and Enterprise Services
Date Friday, May 24, 2019
Subject **Technical Guidance Documents: Pedestrian Level Wind Studies Terms of Reference, Sun and Shadow Studies Terms of Reference and Lighting Guidelines for Lighting Plans**
Report Number IDE-2019-59

Executive Summary

Purpose of Report

The purpose of this report is to release the following technical guidance documents: the Pedestrian Level Wind Studies Terms of Reference; Sun and Shadow Study Terms of Reference; and, Lighting Guidelines for Lighting Plans.

Key Findings

The purpose of these technical guidance documents is to provide terms of reference for wind studies, shadow studies, and lighting plans. The documents also include evaluation criteria. Staff worked with technical experts to develop technically sound guidelines which will facilitate desirable development.

Pedestrian Level Wind Studies Terms of Reference were developed by RWDI. Generally, wind studies are required for buildings 6 storeys in height or above.

Sun and Shadow Study Terms of Reference Lighting were developed by R. Bouwmeester & Associates. Generally, these studies will be required if a building is higher than 5 storeys and/or 16.5 m. Criteria for evaluating studies are provided based on the adjacent development and uses.

Lighting Guidelines for Lighting Plans were developed by LEA Consulting. Applicable to site plan applications, these guidelines establish criteria for the submission of lighting plans including requiring International Dark Sky Association (IDA) compliant light fixtures and specifying LED lights with a colour temperature of 3000K.

The above-noted guidance documents will be in effect as of June 1, 2019 and will be applied to development applications going forward.

Financial Implications

The preparation of the documents was funded through the approved capital budget.

Report

Background

As growth and intensification occur within the city in order to meet the future needs of residents and the Provincial Places to Grow Plan, it is important to maintain comfortable and safe conditions for pedestrians and to evaluate impacts of new development on surrounding areas. These technical standards are also priority actions in the updated Urban Design Action Plan.

The development of these guidance documents will assist in the implementation of urban design policies of the Official Plan and in the assessment and facilitation of development applications. The criteria and guidelines will provide direction for those who are submitting development applications and ensure that appropriate studies are completed early in the planning process to avoid delays. Standardized criteria will reduce staff review timing and provide a consistent approach to the development review process. These guidelines will help ensure that buildings do not have negative impacts on surrounding public areas and private property.

Pedestrian Level Wind Studies Terms of Reference (Attachment 1)

The Official Plan places an emphasis on the design of the built environment and ensuring spaces are comfortable to the public. In addition, the Official Plan states that Pedestrian Level Wind Studies may be required as part of a complete development application.

RWDI developed the terms of reference for pedestrian level wind studies. Guelph-based RWDI is world-renowned for assessing wind impacts on buildings and their surroundings. RWDI has conducted several thousands of these studies. RWDI has also assisted in drafting the Terms of Reference for Wind Studies for the City of North York (which was later adopted by the City of Toronto), the City of Mississauga, the City of Markham, and the City of Ottawa.

Key directions from the document include:

- Wind studies will be generally be required for buildings 6 storeys in height or above.
- The Wind Study approach is dependent on the building height.
- Wind comfort and safety criteria are established.
- Mitigation strategies are outlined. The most effective wind control measures involve adjustments to the building early in the design process (e.g., massing, shape and orientation changes).

Sun and Shadow Study Terms of Reference (Attachment 2)

As per the Official Plan, shadow studies may be required in support of development applications to demonstrate that the height and/or location of a proposed building will not cause excessive shade on the surrounding neighbourhood including parks, adjacent residential uses, public open space, private amenity space and retail streets.

R. Bouwmeester & Associates (RBA) developed the shadow study terms of reference. RBA specializes in the preparation of shadow impact studies related to urban development, site planning and building design projects. RBA has assisted several municipalities in the preparation of their shadow study guidelines including

the City of Mississauga, the City of Ottawa and the Town of Whitby. The firm has also provided expert witness testimony in the field of sun and shadow position modeling before the Ontario Municipal Board (now the Local Planning Appeal Tribunal).

Key directions direction from the document include:

- Generally, Sun and Shadow Studies will be required if a building is higher than 5 storeys and/or 16.5 m. However, they will generally not be required where a development conforms to the Zoning Bylaw.
- Shadow Study dates and times are outlined. These include April 21, June 21, September 21 and December 21 on the even hours between 1.5 hours after sunrise to 1.5 hours before sunset.
- Criteria for residential amenity spaces during spring, summer and fall are included.
- Criteria for places where children play, park features and outdoor amenity space during the spring, summer, fall and winter (applicable to school yards, tot-lots and play areas only) are included. Shadows from proposed developments should allow for a balance of sun and shade on these places.
- Criteria for the public realm including sidewalks, open spaces and plazas to maximize their use during the shoulder (spring and fall) seasons are established.
- Criteria for community gardens, public parks and cultural heritage resources are included.

Lighting Guidelines for Lighting Plans (Attachment 3)

These guidelines are intended to address lighting plans that are submitted and approved as part of site plan approval. The Planning Act allows for lighting studies to be requested as part of this process.

The guidelines will assist in the implementation of urban design policies of the Official Plan (primarily section 8.16). These policies state that lighting is to:

- be compatible with the area,
- address safety,
- address pedestrian-scaled lighting,
- incorporate energy efficiencies such as sensors and timers and direct light away from the night sky (while still permitting the lighting of prominent buildings), and
- minimize the impact of lighting on adjacent uses.

Joe Bastianpillai from LEA Consulting prepared these guidelines. He is a certified lighting specialist with over 40 years of experience in all aspects of lighting design. He is an active member of the Illuminating Engineering Society of North America (IES) and International Commission on Illumination (CIE). He is an active member of the Obtrusive Lighting Subcommittee. He has also prepared lighting standards for the Town of Whitby and Durham Region.

Key directions from the document include:

- Outlining requirements for the submission of lighting plans through the site plan approval process.

- Requiring full cut off and International Dark Sky Association (IDA) compliant fixtures
- Specifying LED lights with a colour temperature of 3000 K.
- Requiring zero light trespass to the Natural Heritage System and specifying the permitted light trespass and pole heights based on the Zoning By-law designation.
- Setting lighting design criteria for specific uses such as service stations and car dealerships.

Implementation

These guidance documents will be in effect as of June 1, 2019. They will be applied to development applications going forward and not applied to developments already in process. However, in the interim, staff will use the draft principles of these studies to inform planning comments on development applications that are currently being processed.

Financial Implications

The preparation of the documents was funded through the approved capital budget.

Consultations

Draft versions of the Pedestrian Level Wind Studies Terms of Reference and the Sun and Shadow Study Terms of Reference were presented at the City's meeting with the development industry in November of 2018. A commenting period followed the presentation.

Draft Lighting Guidelines were circulated to lighting consultants who had submitted lighting plans through the City's site plan process in the recent past in March/April of 2019.

Comments received have been incorporated, as appropriate, into the documents.

Corporate Administrative Plan

Overarching Goals

Service Excellence

Innovation

Service Area Operational Work Plans

Our Services - Municipal services that make lives better

Our People - Building a great community together

Attachments

Attachment 1: Pedestrian Level Wind Studies Terms of Reference

Attachment 2: Sun and Shadow Study Terms of Reference

Attachment 3: Lighting Guidelines for Lighting Plans

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Pedestrian Level Wind Studies Terms of Reference

May 2019. Prepared for the City of Guelph by RWDI

Introduction

As growth and intensification occur within the city it is important to maintain comfortable and safe conditions for pedestrians and to evaluate impacts of new development on surrounding areas. The City of Guelph, through documents such as the [Urban Design Brief Terms of Reference](#) and the [City's Official Plan](#), places emphasis on the design of the built environment and ensuring spaces are comfortable to the public.

New buildings may cause increased wind activity affecting pedestrian areas and surrounding neighbourhoods. Generally, as part of the pre-consultation process, requirements for a pedestrian level wind study will be identified. Pedestrian level wind studies may be required for proposed mid-rise or high-rise buildings in order to assess the potential wind comfort and, where necessary, to mitigate predicted, negative wind impacts on and around the proposed development site.

This Terms of Reference will assist development proponents when completing a pedestrian level wind study to determine the potential impacts of mid-rise and high-rise buildings to the surrounding neighbourhoods.

When is a wind study required?

Buildings taller than their immediate surroundings are exposed to stronger winds at higher elevations. These winds downwash off building facades and subsequently accelerate around building corners and along the gaps between buildings, resulting in higher wind activity in pedestrian areas (**Figure 1**). When there is a proposed development application, a pedestrian wind study may be required and **Table 1** can be used to determine the appropriate approach based on the proposed building height.

Figure 1: Typical Wind Flow Patterns around Buildings

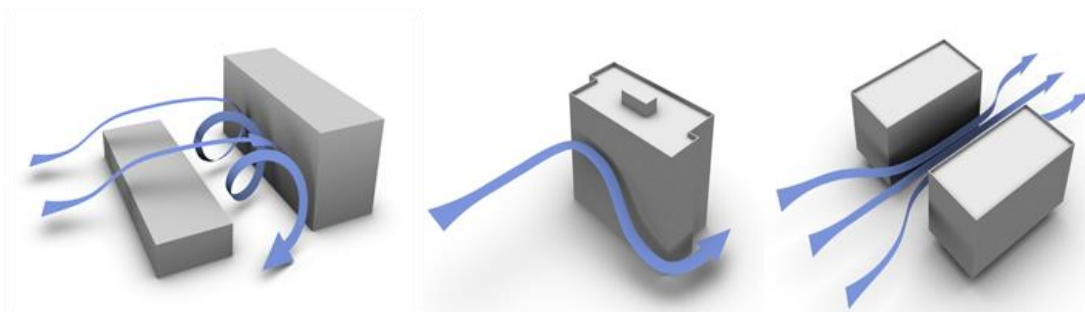


Table 1: Wind Study Approach Based on the Proposed Building Height

Building Height	Wind Study Approach
6 to 8 storeys	A letter of opinion is generally sufficient for all mid-rise buildings to identify any building design issues and to provide conceptual solutions for wind control, where needed.
9 to 10 storeys	An experienced-based desktop analysis using numerical tools, including computational fluid dynamics (CFD), is typically appropriate for a qualitative assessment and wind mitigation. For some cases (e.g. multiple buildings, an open wind exposure, a large continuous building façade, and/or special pedestrian uses), a quantitative wind tunnel study may be required by city staff.
11 storeys and up	A quantitative wind tunnel study using physical scale modelling in a boundary-layer wind tunnel is required to predict and assess the potential wind conditions and, if needed, to develop and confirm the effectiveness of wind mitigation measures.

Table 1 is intended as a guide to determine what type of study may be required for a proposed development; however, the decision as to what type of study is needed will be made at the sole discretion of Planning Services. For instance, Planning Staff may request that a wind study be completed for buildings less than 6 storeys in more sensitive cases or in cases where there may be a risk of hazard winds.

The study for pedestrian level wind conditions should be conducted as early as possible in the development application process when building massing can still be altered for wind control, if necessary. Based on this, the need for a wind tunnel study will generally be identified through the pre-consultation process.

A wind study will typically only be required through the site plan process:

- where significant changes are made to the building design since the previous wind study completed during rezoning; or,
- on sites where a contemporary planning application has not been completed (e.g. where a site contains legacy zoning).

Who is qualified to do the study?

A pedestrian wind study shall be prepared and stamped by a Professional Engineer with adequate experience in pedestrian wind evaluation. If Planning Services is uncertain about the level of experience demonstrated or the quality of the report submitted by a wind consultant, a peer review will be performed, the cost of which will be borne by the applicant.

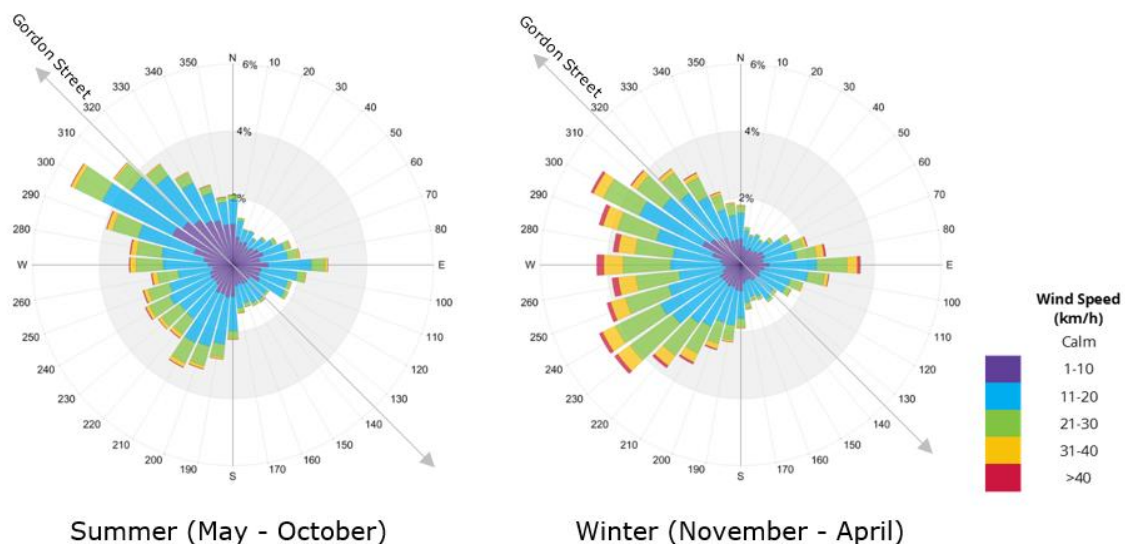
What are the technical requirements?

As specified in **Table 1**, a wind study can take the form of wind tunnel testing, desktop analysis and letter of opinion. The following technical contents should be included in a wind study.

Local Wind Data

Long-term data from Region of Waterloo International Airport (**Figure 2**) should be used as a reference for the wind assessment. The data can be grouped into two seasons: Summer (May through October) and Winter (November through April), for their distinct differences in pedestrian outdoor behaviours during these two periods.

Figure 2: Seasonal Distribution of Winds Approaching Region of Waterloo International Airport (1988-2017) - the angle of Gordon St is noted for reference



Study Approach

A qualitative assessment of wind conditions, including a letter of opinion and a desktop analysis, is largely based on wind consultants' knowledge of wind flows around buildings and experience with wind tunnel tests on similar building projects. Qualitative assessments may use CFD tools to visualize the flow patterns for select (or all) wind directions (see **Figure 3a** for example). However, quantitative wind speeds and exceeding frequencies can only be obtained through wind tunnel testing.

Quantitative wind tunnel testing should be conducted in a boundary-layer wind tunnel where wind and turbulence profiles are adequately simulated for 36 wind directions (**Figure 3b**). Both mean and gust wind speeds should be measured at 1.5 m above local grade for the existing surroundings with and without the proposed development. A building configuration with future surroundings may be warranted when there is a significant development or demolition planned for the surrounding area in the future. If needed, mitigation configuration(s) should also be included in wind tunnel testing to demonstrate the effectiveness of the mitigation. Measurement locations (to be determined in consultation with the planning department) should cover key pedestrian areas on the development site and in the surrounding areas. The results should be presented in both tabular and graphic forms for all test configurations.

Figure 3a: An Example of Computer Simulation of Wind Flows around Buildings

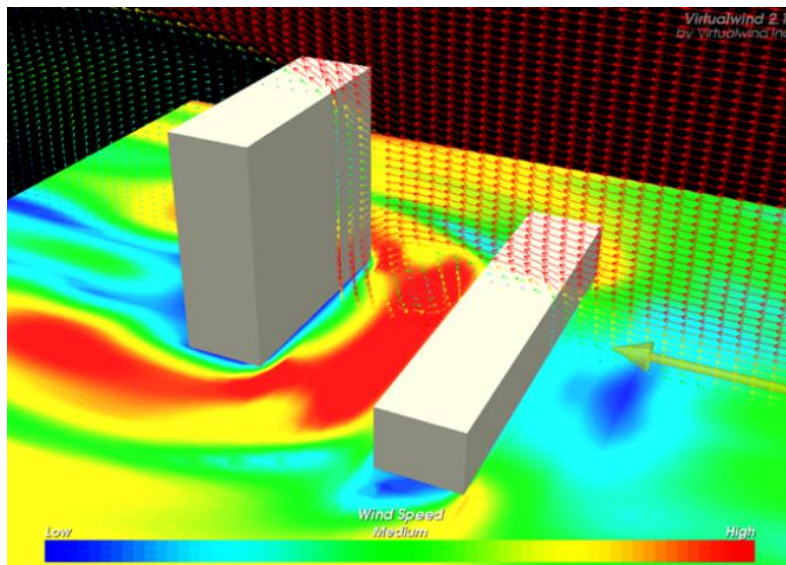


Figure 3b: Photo of Modelled Buildings in a Boundary-layer Wind Tunnel



Wind comfort levels must be assessed in public spaces on the proposed site and adjacent land. Of particular importance are public spaces such as parks, public courtyards, building entrances, and sidewalks, bike lanes or multi-use paths. Private outdoor spaces within the development, such as private amenity terraces, are not required to be assessed for wind comfort; however, ensuring that the users of the private space will not be exposed to dangerous wind conditions is recommended.

When assessing future wind conditions, the effect of existing and proposed landscaping must not be considered. This is common practice to establish baseline conditions. However, when considering mitigation strategies, the effect of landscaping on wind conditions may be considered (see Mitigation Strategies).

Wind Criteria and Results

The predicted wind speeds and frequencies should be compared to the following wind comfort and safety criteria (**Table 2**). Wind comfort may be affected by both mean and gust speeds and their combined effect should be quantified as a Gust Equivalent Mean (GEM), while only gust speeds are to be considered in the wind safety criterion.

Table 2: Wind Comfort and Safety Criteria

Comfort Category	GEM Speed (km/h)	Description
Sitting	≤ 10	Calm or light breezes desired for outdoor restaurants and seating areas where one can read a paper without having it blown away
Standing	≤ 15	Gentle breezes suitable for main building entrances, bus stops, plazas, and other places where pedestrians may linger
Walking	≤ 20	Relatively high speeds that can be tolerated if one's objective is to walk, run or cycle without lingering
Uncomfortable	> 20	Strong winds of this magnitude are considered a nuisance for all pedestrian activities, and wind mitigation is typically recommended

Notes:

- (1) GEM speeds are equal to the gust speed divided by 1.85, or the mean speed (whichever is larger); and,
- (2) GEM speeds listed above are based on a seasonal exceedance of 20% of the time between 6:00 and 23:00. Nightly hours between 0:00 and 5:00 are excluded from the wind analysis for comfort since limited usage of outdoor spaces is anticipated.

Safety Criterion	Gust Speed (km/h)	Description
Exceeded	> 90	Excessive gust speeds that can adversely affect a pedestrian's balance and footing. Wind mitigation is required.

Notes:

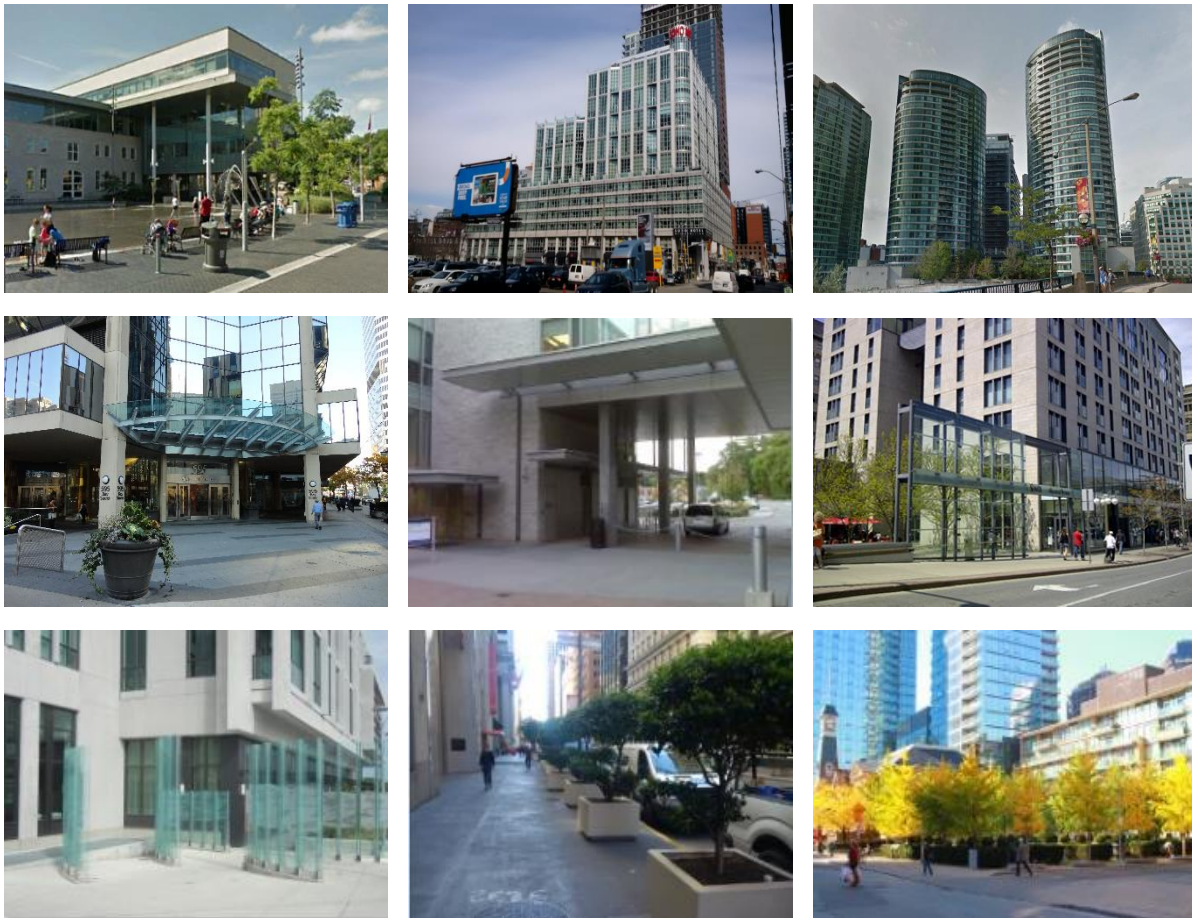
- (3) Based on an annual exceedance of 9 hours or 0.1% of the time for 24 hours a day.

Mitigation Strategies

Wind mitigation *may* be required for areas where wind conditions are uncomfortable or not suitable for the intended pedestrian uses. Wind mitigation *is* required where wind conditions are predicted to be unsafe and additional wind tunnel modelling of proposed mitigation should be conducted to demonstrate the resultant conditions meet the safety criterion.

The most effective wind control measures involve adjustments to the building early in the design process (e.g., massing, shape and orientation changes) that are more responsive to the local wind climate. These can be assisted by tower setbacks, low podiums, colonnades/arcades, corner articulations and so on. Smaller-scale measures such as canopies, trellises, wind screens and street art are also often used for local wind control. Landscaping elements, especially coniferous and marcescent species, are commonly used to improve wind conditions to appropriate levels. The use of landscaping for wind control requires consideration to the species, size and viability in the predicted local microclimate (e.g., sustainable in a wind environment). **Figure 4** shows several examples of positive building design and landscaping features for wind control.

Figure 4: Examples of Wind Control Solutions



1	2	3
4	5	6
7	8	9

- 1.** Massing and Landscaping **2.** Stepped Massing
3. Curved Towers **4.** Recessed Entrance with Canopy
5. Canopy above Passageway **6.** Screen along Sidewalk
7. Screen at Building Corner **8.** Landscaping along Sidewalk **9.** Landscaping at Park

Report Structure and Format

Upon the completion of wind study, a technical report shall be prepared to describe the proposed project and existing surroundings in detail. A Pedestrian Level Wind Study should use the following format:

1.1 Physical Context

a. Building information

- What is the height of the proposed development?
- Where is it located?
- Are there existing structures to remain?
- Identify any key pedestrian areas on the site.

b. Surroundings

- Describe topography.
- Is the surrounding area developed?
- What are the heights of surrounding buildings or developments?
- Identify any key pedestrian areas in immediate surroundings.

1.2 Study Approach

a. Type of Study

- State type of study being conducted, per Table 1.
- Explain reasoning, referencing Table 1, for using this type of study.
- Present the meteorological data and criteria used in the assessment of wind conditions.

1.3 Results of Assessment

a. Present wind data used for study

- Discuss wind conditions at key pedestrian areas on and around the development. Conditions in existing and proposed configurations for summer and winter seasons must be described.
- Provide statement to indicate frequency that comfort and/or safety wind conditions may be exceeded.
- Provide recommendations for mitigation where wind safety conditions are exceeded and to bring wind conditions to appropriate levels.

Sun and Shadow Study

Terms of Reference



May 2019. Prepared for the City of Guelph by R. Bouwmeester & Associates

Introduction

Sun and shadow studies illustrate the impact of proposed development on public and private spaces.

As per the Official Plan of the City of Guelph, sun and shadow studies may be required in support of development applications to demonstrate that the height and/or location of a proposed building will be compatible with and not cause excessive shade on the surrounding neighbourhood including parks, adjacent residential uses, public open space, private amenity space and retail streets. In addition to the above, the Official Plan deems that shadows on cultural heritage resources create a negative impact if they “alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden.”

These standards are intended to ensure adequate sun exposure on the above at specified times of day and year. Additional study times and analysis may be required prior to final approval to properly determine the degree of impact.

It is noted that **incremental shadows** do not necessarily represent adverse or undue impacts. Accordingly, each proposal, while expected to meet the criteria outlined herein, will be assessed on its own merits on a case-by-case basis.

When is a sun and shadow study required?

Generally, as part of the pre-consultation process, a Sun and Shadow Study may be required as part of a development application including site plan applications, rezoning applications, Official Plan amendments, etc. Generally, they will be required if a building is higher than five storeys and/or 16.5 m. However, they will generally not be required where a development conforms to the Zoning Bylaw. This being said, on a case-by-case basis the City may still require a Sun and Shadow Study for shorter buildings or in other cases such as:

- where additional height is being requested;
- near shade-sensitive uses; and/or
- on sites where different massing/height configurations are possible.

Who is qualified to do the study?

The Sun and Shadow Study shall be completed by a licenced design professional such as an architect, engineer, or planner qualified or experienced in this field, and the Study shall include the name of the firm and individual who prepared it.

The City of Guelph reserves the right to request peer reviews, the cost of which will be borne by the applicant.

Background

The solstices, June 21 and December 21, represent the seasonal extremes in terms of length of daylight and **altitude** of the sun—June 21 being the longest day of the year with the highest sun angles and shortest shadows, and December 21 being the shortest day of the year with the lowest sun angles and longest shadows. The equinoxes, around March 21 and September 21, represent the seasonal averages.

In order to provide a spring-time test date other than March 21¹, April 21 has been selected. This is an appropriate alternative because daily average temperatures in Guelph in late April are similar to those in late September (about 9°C and 12°C, respectively) according to Environment Canada. In addition, April 21 shadow directions and lengths are about midway between those on March 21 and June 21.

Based on the above, the criteria described below apply to one or more of April 21, June 21, September 21 and December 21 on the even hours between 1.5 hours after sunrise to 1.5 hours before sunset.

See Tables 1 to 4 - Guelph Sun Angle Data attached for the test times required on each of the above test dates.

Shadow Impact Criteria

Adequate sunlight should be ensured on

- 1. Residential amenity spaces** to maximize their utility during spring, summer and fall.

Shadows from proposed developments should not last for more than one hour per day on areas such as yards, decks, and (rooftop) patios and pools on

- April 21
- June 21, and
- September 21

¹ Since the Daylight Saving Time rule change that took effect in 2007, shadow patterns on March 21 and September 21 essentially follow the same path.

This criterion is met if **incremental shadows** occur for no more than two consecutive test times (see Tables 1 to 4 - Guelph Sun Angle Data).

The point of assessment shall be the centre of decks and (rooftop) patios and pools, where applicable, or 3 m from the midpoint of the rear wall of the dwelling. In cases where there is existing shade, the addition of new net shadows should result in not less than two hours of sunlight. Where less than two hours of sunlight already exists, no new net shade may be added.

Balconies are exempt unless they are the only outdoor living area available to the resident, and they are at least 4 m deep, outside the building façade, and unenclosed.

- 2. Places where children play including school yards, tot-lots, play areas and park features such as wading pools or other outdoor sun-sensitive activity areas, and outdoor amenity areas used by seniors and those associated with commercial and employment areas** during spring, summer, fall and winter.

Incremental shadows from proposed developments should allow for a balance of sun and shade on the above places on each of the following dates between the hours of 10:00 a.m. and 2:00 p.m. On an average basis during this period, at least half of the area must be in sun (e.g. full sun half the time, or 50 per cent sun coverage all the time).

- April 21
- June 21
- September 21
- December 21 (applicable to school yards, tot-lots and play areas only)

If the period of prime use can be clearly identified, the above need only apply to that period – not all the test times.

This criterion is met if the **Sun Access Factor** (see page 13 for sample calculation) is at least 50 per cent on each of the test dates, calculated as follows:

- Measure the total area (A_T) of the feature.
- Measure the area in sunshine (A_S) at each of the five hourly test times.
- Find the average area (A_{AS}) for each of the four one-hour periods.
- Find the overall average area ($A_{S(ave)}$) of the four A_{AS} values.
- Sun Access Factor = $A_{S(ave)} / A_T$ (passes if > 0.50).

See example calculation in Attachments.

This criterion applies to off-site public areas as well as those common outdoor amenity areas that are part of a proposed development.

3. Public realm including sidewalks, open spaces and plazas to maximize their use during the shoulder (spring and fall) seasons.

3.1. Developments should be designed to provide full sunlight to the opposite sidewalk in mixed-use, commercial, employment and high-density residential areas with pedestrian traffic on September 21

- for at least four full hours total including the two-hour period between 12 and 2 p.m., plus any two additional one-hour periods between either 9 and 11 a.m. or 3 and 5 p.m.

This criterion is met if there is no **incremental shadow** from the proposed development at 12, 1 and 2 p.m., and at any two consecutive times in each of the morning and afternoon groups or three consecutive times in either the morning or afternoon group.

See Table 5 and Figures 2 and 3 for angular planes that will achieve these criteria on Guelph's main street grid (i.e. NW-SE and SW-NE). Note that the Table and Figures are provided for information only and are applicable to only the main street grid of Guelph. For further details, see notes included with the Table and Figures.

3.2 Developments should also be designed to provide a **Sun Access Factor*** of at least 50 per cent on public open spaces and plazas on September 21 (*See Criteria 2 for explanation.).

4. Community gardens, and turf and flower gardens in public parks during the growing season March to October by providing at least 6 hours of direct sun on September 21.

This criterion is met if full sun is provided on any 7 test times on September 21.

5. Cultural heritage resources to ensure that shadows do not create a negative impact by altering the appearance of identified cultural heritage attributes such as historical buildings and landmarks, buildings with elaborate or carved elements that rely on sun/shadow patterns, and stained glass windows, or by changing the viability of a natural feature or plantings, such as gardens or heritage trees. (Resources shall be identified in consultation with City.)

Incremental shadows, if any, must be identified in the sun and shadow study, and the determination of negative impact will be made by the City on a case-by-case basis.

This criterion is met if no **incremental shadows** fall on identified cultural heritage resources on any of the test dates and times.

Material to be submitted with a Sun and Shadow Study

1. The Sun and Shadow Study must include shadow drawings for the dates and test times shown in Tables 1 to 4 - Guelph Sun Angle Data attached (i.e. excluding sunrise, sunset, and 1.5 hours after sunrise and 1.5 hours before sunset).
2. The drawings shall at the very least:
 - include a north arrow, scale bar, legend, key street names, project name, date, preparer's company name;
 - be oriented with true north pointing straight up;
 - include a reference bearing (astronomic) for the site; and
 - be drawn to a scale suitable to show the entire shadow coverage area.
3. Base mapping must include a minimum coverage area as follows:
 - to the north – 3.3 x building height
 - to the south – 0.7 x building height
 - to the east – 2.7 x building height
 - to the west – 3.6 x building height

See Figure 4 attached for details.

 - The size of the shaded area is proportional to the height of the building.
 - Properties within the shaded area have the potential to be shadowed.
 - Properties outside the shaded area cannot be reached by shadows from the proposed development at the test dates and times.
4. The drawings may be based on 2D mapping or air photos showing shadows from only the proposal, or they may be based on mapping including 3D buildings and their shadows. This applies to all buildings within the coverage area.
5. It may be advantageous for the proponent to consider topography since uphill grades from the subject site lead to shorter shadows, which in turn may reduce the shadow impact. On the other hand, the City may require topography to be taken into account where the grade falls away from the subject site resulting in longer shadows. Digital contour data is available from the [City's GeoDataHub website](#).
6. Proposed and as-of-right shadow outlines (based on the subject site only) should be shown (by lines or shading/hatching of contrasting colour/pattern) on the ground plane in the absence of existing buildings and shadows. Shading/hatching shall be translucent such that underlying features remain clearly visible.

7. Since only **incremental shadows** are considered in the determination of impact, it may be helpful to include existing buildings and shadows so that **incremental shadows** can be netted out and highlighted. Where possible,
 - existing and **incremental shadows** should be shown in differential hatching or colour. (Trees are not considered to be part of the existing or proposed shadow context.); and
 - approved but not yet built buildings should be shown in contrasting colour. Their shadows are considered part of the existing shadow context.
 8. The Sun and Shadow Study must include a written report including:
 - confirmation of site **latitude** and **longitude** used.
 - the origin/source of base mapping used.
 - a statement as to how astronomic north was determined. Care should be taken to ensure that the base mapping is oriented with respect to astronomic (true) north.
 - a description of all locations/uses of areas not meeting the Shadow Impact Criteria (including a key plan for reference).
 - a quantification and assessment of the impact in the areas not meeting the Shadow Impact Criteria.
 - a summary outlining how the Shadow Impact Criteria have been met including a description of any mitigating features that have been incorporated into the site and building design.
 - the full name and professional designation of the person(s) who prepared the drawings and report.
-

For more information

City of Guelph
Planning Services
519-822-1260 extension 5616
TTY 519-826-9771
planning@guelph.ca

Alternate formats are available as per the Accessibility for Ontarians with Disabilities Act.

Attachments

Sun Angles to be used for Guelph sun and shadow studies

Angles are based on City of Guelph City Hall **latitude** and **longitude**.

Latitude: 43° 32' 35" N

Longitude: 80° 14' 55" W

Time Zone: Eastern

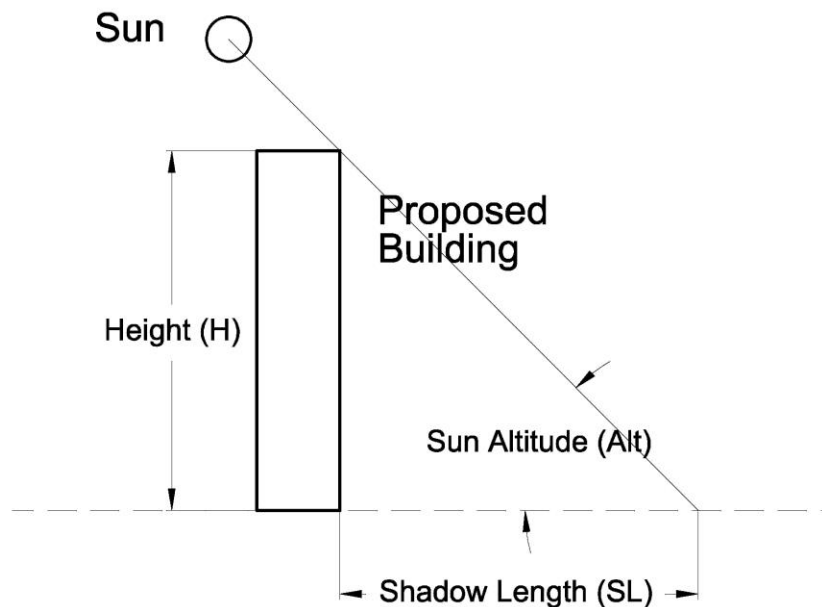
Standard Time (EST): UTC* – 5 hours (applies December 21)

Daylight Saving Time (EDT): UTC* – 4 hours (applies April, June and September 21)

*Note: UTC denotes Coordinated Universal Time (i.e. Greenwich Mean Time).

Multiply building height by **Shadow Length Factor (SLF)** to determine shadow length as follows: Shadow Length = Building Height x **SLF**. See Figure 1.

Figure 1 – Determining Shadow Length



$$\text{Shadow Length Factor (SLF)} = 1 / \tan(\text{Alt})$$

$$\text{Shadow Length (SL)} = H \times \text{SLF}$$

See Tables 1 to 4 - Guelph Sun Angle Data following for **SLF** data.

Table 1 - Guelph Sun Angle Data – April 21

Date	Shadow Direction and Length		Comments
	Az (deg)	SLF ratio length/height	
21-Apr Local Time EDT			
6:29	252.62		Rise (for info only)
7:59			Rise + 1.5 hr (for info only)
8:00	268.09	3.6163	test time
9:00	278.69	2.0226	test time
10:00	290.75	1.3356	test time
11:00	305.68	0.9517	test time
12:00	325.39	0.7246	test time
13:00	350.85	0.6205	test time
14:00	18.48	0.6420	test time
15:00	42.09	0.7873	test time
16:00	59.97	1.0601	test time
17:00	73.73	1.5198	test time
18:00	85.17	2.3934	test time
18:41			Set - 1.5 hr (for info only)
20:11	107.66		Set (for info only)

Table 2 - Guelph Sun Angle Data – June 21

Date	Shadow Direction and Length		Comments
	Az (deg)	SLF ratio length/height	
21-Jun Local Time EDT			
5:40	235.76		Rise (for info only)
7:10			Rise + 1.5 hr (for info only)
8:00	258.38	2.4230	test time
9:00	268.07	1.5277	test time
10:00	278.97	1.0339	test time
11:00	292.79	0.7135	test time
12:00	313.04	0.4953	test time
13:00	345.00	0.3769	test time
14:00	23.82	0.3942	test time
15:00	52.67	0.5392	test time
16:00	70.92	0.7793	test time
17:00	83.82	1.1314	test time
18:00	94.31	1.6898	test time
19:00	103.86	2.7632	test time
19:36			Set - 1.5 hr (for info only)
21:06	124.23		Set (for info only)

Table 3 - Guelph Sun Angle Data – September 21

Date	Shadow Direction and Length		Comments
	Az (deg)	SLF ratio length/height	
21-Sep Local Time EDT			
7:07	268.34		Rise (for info only)
8:37			Rise + 1.5 hr (for info only)
9:00	288.51	2.8564	test time
10:00	300.94	1.7927	test time
11:00	315.78	1.2951	test time
12:00	333.85	1.0376	test time
13:00	354.88	0.9366	test time
14:00	16.61	0.9737	test time
15:00	36.18	1.1548	test time
16:00	52.44	1.5241	test time
17:00	65.84	2.2541	test time
17:50			Set - 1.5 hr (for info only)
19:20	91.38		Set (for info only)

Table 4 - Guelph Sun Angle Data – December 21

Date	Shadow Direction and Length		Comments
	Az (deg)	SLF ratio length/height	
21-Dec Local Time EST			
7:51	302.34		Rise (for info only)
9:21			Rise + 1.5 hr (for info only)
10:00	327.05	3.5339	test time
11:00	340.63	2.6606	test time
12:00	355.23	2.3700	test time
13:00	10.13	2.4301	test time
14:00	24.43	2.8825	test time
15:00	37.52	4.1549	test time
15:17			Set - 1.5 hr (for info only)
16:47	57.66		Set (for info only)

Note: Az denotes shadow **azimuth** measured clockwise in decimal degrees from astronomic (true) north.

Table 5 – Maximum Allowable Angular Planes
 (to protect opposite side sidewalks as per Criteria 3)

	Criteria 3 mixed use, commercial, employment, and high-density residential areas with pedestrian traffic
E-W Street	
Proposed bldg on north side	No limit
Proposed bldg on south side	45.5°
N-S Street	
Proposed bldg on west side	49.4°
Proposed bldg on east side	No limit

Notes:

1. The angular planes given above apply only to the alignment of Guelph’s main street grid which runs approximately due SW-NE and due NW-SE. (See Figure 2.) These are provided for information only, and angular planes along other streets will vary. Ultimately, Criteria 3 governs.
2. Angular planes are measured from closest edge of opposite sidewalk. See Figure 3.
3. Angular planes are measured up from grade, in a direction perpendicular to street line.
4. Proposed buildings lying under the angular plane limits given will in most cases meet the requirements of Criteria 3. Ultimately, the requirements of Criteria 3 govern.
5. See Figures 2 and 3 for diagrams of the angular plane limits for Guelph’s main street grid.

Figure 2 – Maximum Allowable Angular Planes
 (to protect opposite side sidewalks as per Criteria 3)

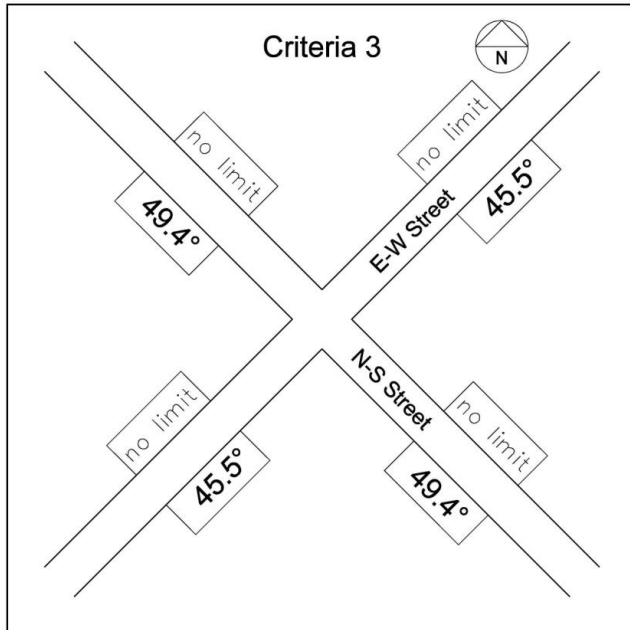


Figure 3 – Angular Plane Section Views

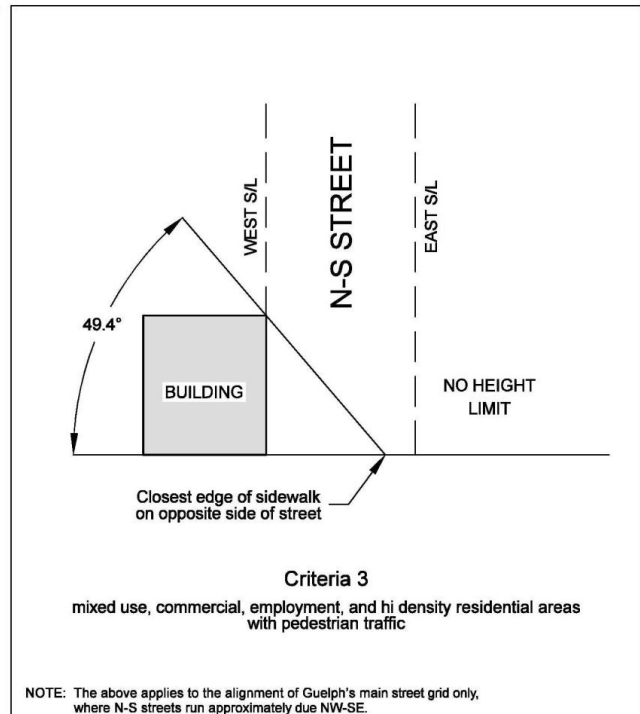
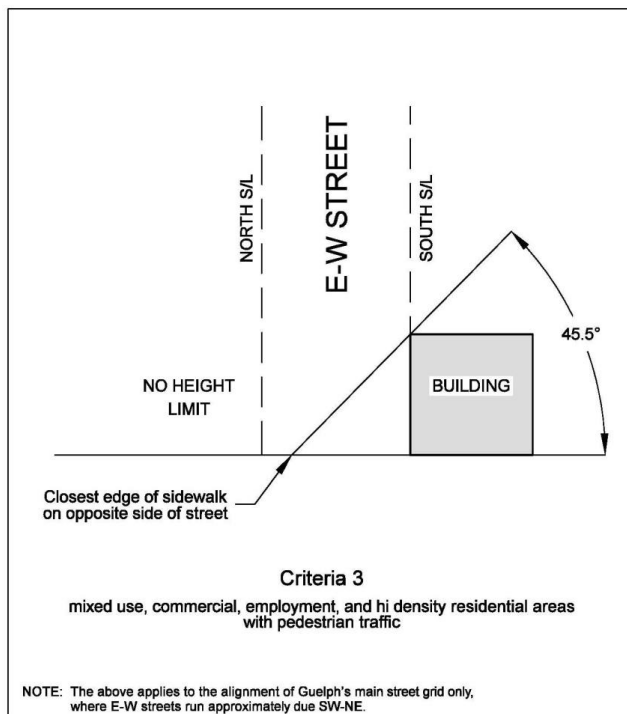


Figure 4 – Sun and Shadow Study Coverage Area
(See notes in Item 3 on page 5.)

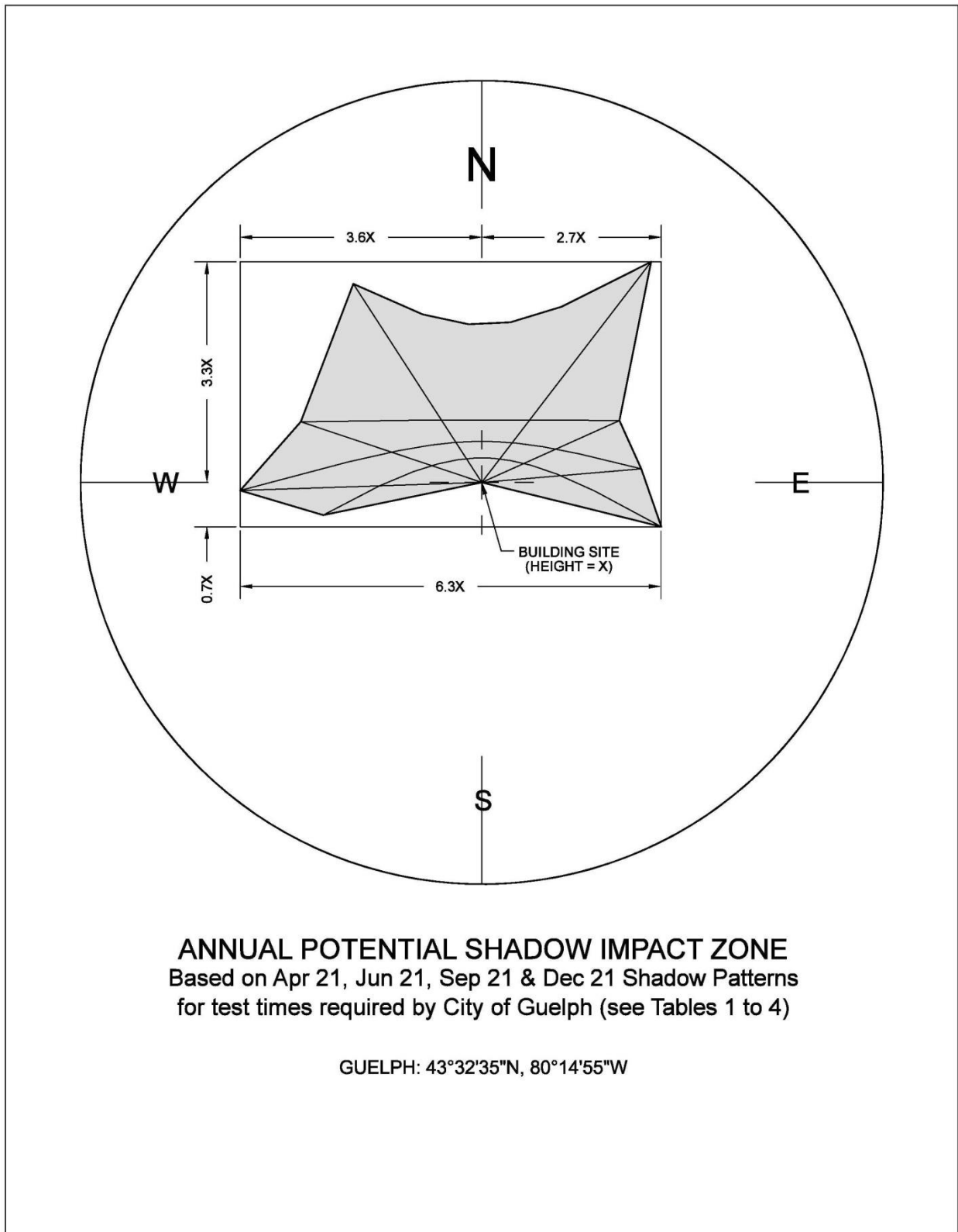
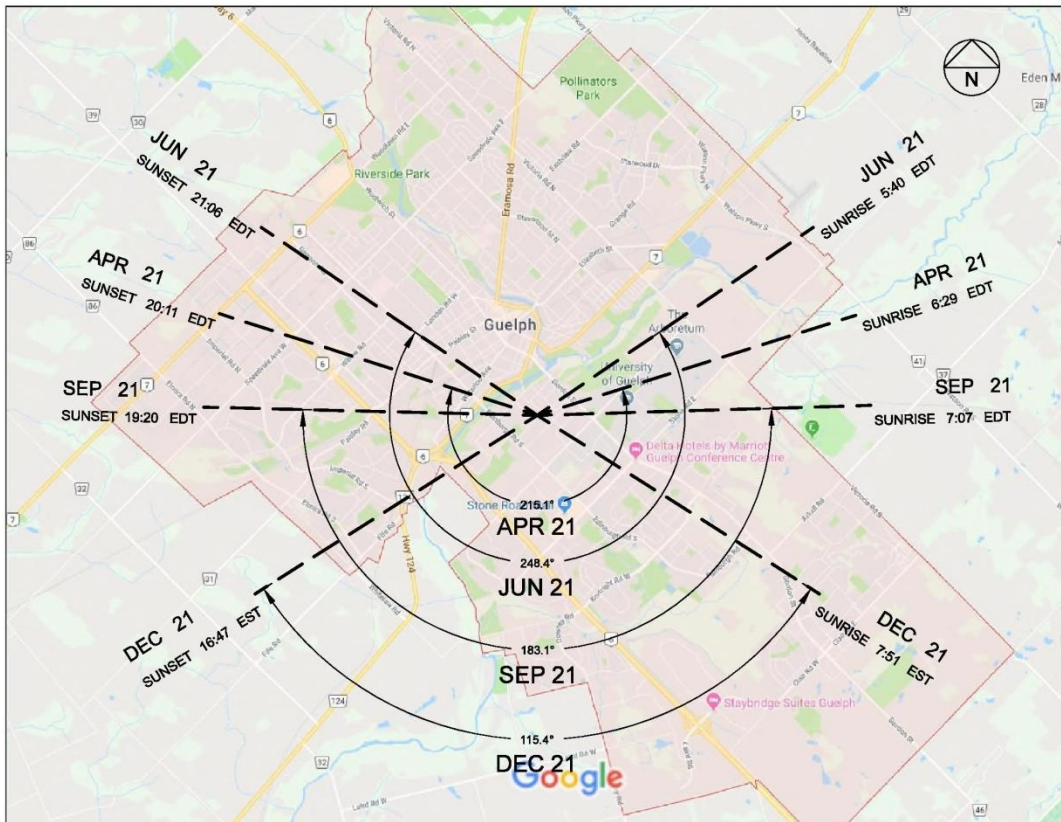


Figure 5 – Seasonal Sun Rise/Set Angles and Times



**SEASONAL SOLAR ANGLE RANGE
GUELPH: 43°32'35"N, 80°14'55"W**

Sun Access Factor – Sample Calculation

- Area of feature (A_T) is 100 sm.
- Areas in sunshine (A_S) at each hourly test time 10 a.m. to 2 p.m. are 20 sm, 60 sm, 100 sm, 60 sm and 20 sm.
- The averages (A_{AS}) for the four one-hour periods are 40 sm, 80 sm, 80 sm and 40 sm.
- The overall average area ($A_{AS(ave)}$) in sunshine is 60 sm resulting in a Sun Access Factor of 0.60 - which passes the 50 per cent test.

Definitions

Altitude - the vertical angular distance, measured in degrees, between the horizon and the centre of the sun's disk (positive above horizon).

Azimuth - the bearing, or direction of the sun, as viewed by an observer, measured in degrees clockwise from north (e.g. North = 0, East = 90, South = 180, West = 270).

Coordinated Universal Time (UTC) – commonly used synonym for Greenwich Mean Time (GMT).

Daylight Saving Time - *Standard Time* adjusted by adding 1 hour. Starting in 2007, daylight time begins in North America on the second Sunday in March and ends on the first Sunday in November. (On the second Sunday in March, clocks are set ahead one hour at 2:00 a.m. local *Standard Time*, which becomes 3:00 a.m. local daylight time. On the first Sunday in November, clocks are set back one hour at 2:00 a.m. local daylight time, which becomes 1:00 a.m. local *Standard Time*.)

Declination - the angular distance, measured in degrees, between the celestial equator and the direction of the observer to sun. It is equivalent to latitude. By convention, when the sun lies north of the equator, **declination** is positive (Mar 21 to Sep 21); similarly, south of the equator is negative (Sep 21 to Mar 21). Maximum of $+23.5^\circ$ occurs about Jun 21; minimum of -23.5° occurs about Dec 21.

Equation of Time - also known as the "Sundial Correction", this time correction factor takes into account the variations in the earth's velocity as it travels through its elliptical orbit.

Hour Angle - the angle between an observer's *Meridian* and the sun's meridian. Measured from south; west of south is positive, east is negative.

Incremental Shadows - net new shadows over and above all existing building shadows and as-of-right shadows from the approved zoning massing envelope for the subject site along with shadows from approved but not yet built buildings.

Latitude - the angular distance, measured in degrees, between the equator and an observer's location. North of the equator is positive; south is negative.

Local Civil Time - Standard Time corrected for one's actual location based on Longitude east or west of the Time Zone's central Meridian. (Correction applied at the rate of 4 minutes per degree.)

Local Time - local watch time (Standard Time or Daylight Saving Time).

Longitude - the angular distance, measured in degrees, between the Prime Meridian (0 degrees Longitude at Greenwich, England) and an observer's location. West of Greenwich is negative; east is positive.

Meridian - a line of Longitude.

Prime Meridian - Longitude "zero" which runs through Greenwich, England.

Shadow Length Factor (SLF) - ratio of shadow length to object height. It is the factor by which to multiply an object's height to find its shadow length. ($SLF = 1 / \tan \text{Altitude}$)

Solar Noon - local time at which the sun crosses the local Meridian. At Solar Noon the sun is due south and reaches its peak. It is approximately the midpoint between Sunrise and Sunset.

Standard Time - the time within a specified time zone. Usually varies from Greenwich Mean Time (GMT) by an even number of hours. (e.g. EST = UTC -5)

Sun Access Factor - the ratio of sun duration over a given area expressed in percent (e.g. a 50% sun access factor can mean 50% sun coverage 100% of the time, or 100% sun coverage 50% of the time).

Sunrise/Sunset Time - local time at which the upper edge of the sun's disk appears on the horizon. The time takes into account average refraction conditions (34 arc minutes) and half the sun's diameter (16 arc minutes).

Time Zone - a 15° wide zone within which all watch times are the same for the sake of convenience. Each zone represents one hour, and they are measured in about 15° increments east and west from the Prime Meridian, which is the centre of the first zone. (The central meridians of some sample time zones occur at longitudes 15, 30, 45, 60, 75 degrees west, etc. Guelph lies in the Eastern Standard Time zone centred on longitude 75° west. Since each 15 degrees represents one hour, EST is 5 hours behind Greenwich Mean Time.)

True Solar Time - Local Civil Time + Equation of Time.



Lighting Guidelines for Lighting Plans

May 2019. Prepared for the City of Guelph by LEA Consulting

Introduction

The purpose of these guidelines is to provide a set of effective standards designed to limit the impacts of excess and unnecessary external lighting.

When is a Lighting Plan Required?

These guidelines are intended to address lighting plans that are submitted and approved as part of site plan approval. The Planning Act (Section 41(7)(a)(5)) allows for lighting studies to be requested as part of this process.

The scope of the lighting guidelines is to create a set of standards that are applicable across the City of Guelph, depending upon the particular and adjacent land use.

Specifically, these guidelines are intended to be used as part of the site plan approval process for new development as it pertains to applications for commercial, industrial, institutional, recreational, and multi residential (3 or more units) uses.

These guidelines are not intended to regulate lighting for single detached dwellings, semi-detached dwellings, and on-street street townhouse dwellings or municipal street lighting.

Who is qualified to do the study?

Applicants will be required to submit information from a qualified lighting consultant with respect to any proposed external lighting. The Lighting Plan submission shall be stamped by a Professional Engineer (P.Eng) responsible for the plan.

Background

As growth and intensification occur within the city in order to meet the future needs of residents and the Provincial Places to Grow Plan, it is important to maintain night time comfort and safe conditions, reduce **light pollution**, support dark skies and evaluate impacts of new development on surrounding areas.

The guidelines will assist in the implementation of urban design policies of the Official Plan (Sections 8.16, 8.10, 8.13, and, 8.14.1). These policies state that lighting is to:

- be compatible with the area,
- address safety,

- address pedestrian-scaled lighting,
- incorporate energy efficiencies such as sensors and timers and direct light away from the night sky (while still permitting the lighting of prominent buildings), and
- minimize the impact of lighting on adjacent uses.

Excessive and unnecessary site lighting can have a number of detrimental environmental and safety impacts. Specifically, excessive lighting can be inefficient in terms of energy consumption, as well as create glare levels that can be a detriment to drivers, pedestrians and neighbouring properties. From an environmental perspective, the over lighting of towns and cities creates a phenomenon known as Urban Sky Glow, that renders the night sky effectively unviewable to town and city dwellers. Furthermore, poor outdoor lighting design can create **light trespass** which is a nuisance that negatively affects the enjoyment of a person's property.

The uneven application of lighting standards can create issues around transition; moving from an under lit area to an over lit one. This can have a significant affect on the night vision of drivers, cyclists and pedestrians.

These guidelines are designed to mitigate these issues through introducing standards that will address concerns about direct glare and **light trespass**. In addition, these standards are designed to factor in safety issues, such as those addressed through Crime Prevention Through Environmental Design (CPTED) and in particular those safety issues that pertain to shadowing, peripheral visual detection and clarity of vision, with respect to seeing other people and objects.

Submission Requirements and Standards

When requested, site plan applications shall be accompanied by a lighting plan and lighting fixture details that demonstrates the proposal meets the guidelines. The following submission requirements and standards will apply:

Lighting Fixtures

- Detail specifications, including **lamp** type, fixture type, **lumens** rating of **lamp**, wattage, colour temperature and drive current etc.;
- Light source shall be LED with a colour temperature (CCT) 3000 K;
- Only full cut off and International Dark Sky Association (IDA) compliant fixtures shall be accepted;
- As general principles, light fixtures should be positioned across a site so as to give a uniform distribution of light across the relevant area. This assists in the avoidance of the creation of "hot spots," being areas of over-illumination that make adjacent areas seem darker.
- Fixtures shall be positioned such that they focus light down, preventing light from emitting above the horizontal plane (90-degree position relative to the ground) and preventing **light trespass**;
- Encourage the conservation of energy;
- **Lamps** shall be located in such a way to direct light away from neighbouring properties;
- Except where lighting is strictly ornamental, photometric performance (the glare, intensity and uniformity of the light produced) will be a more important factor in assessing the suitability of proposed lighting, rather than aesthetics;

Lighting Fixture Requirements

A wide number of lighting fixture designs and **lamp** types exist today. Light sources, or **lamps**, are available in a variety of styles. Depending on what the light is intended to do will affect which **lamp** is best for the job.

Light fixture designs which cannot meet these standards, such as those with sag lenses or wall mount lights that shine horizontally, are prohibited.

Examples of full cut off and International Dark Sky Association compliant fixtures and prohibited fixtures are provided below.

Acceptable Fixtures (Full Cut Off)



FIGURE 2: FULL CUT OFF WALL MOUNT



FIGURE 3: CUT OFF LIGHT STANDARD FULL

Prohibited Fixtures



FIGURE 4: PROHIBITED SAG LENS LIGHT STANDARD



FIGURE 5: PROHIBITED WALL MOUNT

Illumination Requirements

In addition to setting standards for acceptable **lamps** and fixture types, these guidelines have established a set of maximum illumination values for different lighting zones. The illumination requirements are expressed in the form of tables pertaining to each lighting zone (see Attachment A).

The purpose of the lighting zones is to recognize the illumination needs for various land uses, while at the same time setting maximum illumination values at the property lines. This will ensure that sites are adequately illuminated as well as controlling **light trespass**.

The land uses that these guidelines will apply to are:

- Commercial uses such as Plazas, Retail Outlets, Car Dealerships, Offices, Personal Service Uses, and others;
- Employment uses such as warehousing, manufacturing, fabrication, aggregate extraction and processing uses;
- Institutional uses such as, places of worship, schools (public and private), hospitals, and government facilities;
- Residential uses (3 or more units, save and except for on-street townhouses).

Glare

Glare is the sensation produced by a light source within the visual field that is sufficiently greater than the background brightness to which the eye is adapted to cause discomfort, annoyance or loss in visibility.

The control of glare is primarily a function of the light distribution characteristics of the luminaire and to some extent the brightness of the surroundings.

For outdoor lighting applications the impact of glare can be contained by limiting the Glare Index as outlined in the IES TM15-07 (Luminaire classification system for outdoor luminaires).

The glare rating for outdoor applications should be limited to G0 to G1 (see Attachment A).

Lighting Plan

- The illumination levels expressed in **foot candles** or **lux** values and in the form of Isolux curves showing the predicted lighting levels at the property line and throughout the development site;
- Lighting analysis shall be carried out with independent software (e.g. AGI 32);
- Pole specification such as height, spacing, foundation details, and placement;
- The lot boundaries;
- The location of all structures;
- Location and height of all proposed luminaires, including wattage, and **lamp** type;
- The illumination levels at all property lines should follow the levels outlined in Attachment A. However, the design should strive to achieve '0' **Lux (0 foot candles)**;
- A photometric diagram showing the predicted lighting levels from each of the proposed light sources;
- The lighting plan is to be signed by a Professional Engineer responsible for the plan;
- Five (5) copies of the lighting plan and fixture details are to be included in the submission.

Post Installation Investigation

After the installation of any new lighting subject to municipal review and approval, the applicant's lighting consultant shall provide a written signoff confirming that the lighting has been installed as per the approved plans. This will be confirmed as part of the site plan inspection.

For more information

City of Guelph
Planning Services
519-822-1260 extension 5616
TTY 519-826-9771
planning@guelph.ca

Alternate formats are available as per the Accessibility for Ontarians with Disabilities Act

Attachment A

Lighting Design Criteria for Outdoor Applications

Parking Lots and Loading Areas

	Basic (Lux)	Enhanced Security ¹ (Lux)
Minimum Horizontal Illuminance	20 (2.0 f.c.)	50 (5.0 f.c)
Uniformity Ratio (Max:Min)	20:1	15:1
Average Vertical Illuminance ²	10 (1.0 f.c)	25 (2.5 f.c)
Glare Rating	G1	

Note: During periods of non-use, the **illuminance** of certain parking facilities may be turned off or reduced to conserve energy. If reduced lighting is to be used for the purpose of security, the minimum value should not be less than 1.0. Reductions should not be applied to facilities subject to intermittent night use, such as apartments, hospitals and transport terminals. If there are a number of handicap parking spaces, enhanced lighting levels may be used

Car Dealerships

Business Districts	Max Illuminance Horizontal Lux	Uniformity (Max:Min)
Adjacent to roadway	200	5:1
Other areas	100	10:1
Entrances	100	5:1
Driveways	30	10:1
Glare rating	G2	

Private Roads and Driveways

Area Description	Avg. Horizontal Lux	Minimum Lux
Commercial/Industrial Driveways	6.0 (0.6 f.c)	2.0 (0.2 f.c.)
Residential/ Institutional Driveways	4.5 (0.4 f.c.)	1.5 (0.15 f.c.)
Glare Rating	G0	

¹ Enhanced security applied to lots where night staff may be using the facility (e.g. Hospitals)

² The calculation of vertical illuminance is outlined in IES RP-8 and RP-20.

Service Stations

Area Description	Average Illuminance Lux
Approach	20
Driveway	20
Pump island	200
Building facades	30
Service areas	30
Landscape highlights	20
Glare rating	G1

Floodlighting Buildings and Monuments

Area Description ³	Average Target Illuminance (Vertical) Lux
Bright surroundings and light surfaces	50
Bright surroundings and medium light surfaces	70
Bright surroundings and dark surfaces	100
Dark surroundings and light surfaces	20
Dark surroundings and medium light surfaces	30
Dark surroundings and dark surfaces	50

³ The surrounding brightness values are related to if the subject is in an urban setting (bright) or rural setting

Attachment B

Lighting Zones, Spill Light Limitations and Maximum Pole Heights

Lighting Zones, Spill Light Limitations and Maximum Pole Heights					
Lighting Zone	Ambient Brightness	Locations	Zoning Category	Lighting levels Lux Level at Property Lines ⁴	Maximum Pole Height (metres)
LZ1	Dark	Natural Heritage System	Natural Heritage System identified in the Official Plan ⁵ ; Wetland Zone (WL); Conservation Land (P.1)	0 (0 f.c.) at the limit of the Natural Heritage System	4.5
LZ2	Low	Open Space	Urban Reserve (UR)	2 (0.2 f.c.)	4.5
LZ3	Medium	Low/medium density Residential or Institutional	Residential Zones (R.1, R.2, R.3); Institutional (I) Zones; Office Residential (OR); Commercial Residential (CR); Park Zones (P.2, P.3, P.4, P.5)	5 (0.5 f.c.)	6.0
LZ4	High	Dense Urban with Mixed Commercial and Industrial	Downtown Zones (D.1, D.2, D.3, D.3a); Residential Apartment (R.4); Convenience Commercial (C.1); Commercial Shopping Center Zones (CC); Service Commercial (SC); Industrial (B) Zones	7.5 (0.75f.c.)	6.0 ⁶

⁴ Where a property is adjacent to another zone the more restrictive illuminance level shall apply at the property line. Where multiple zones exist on the same lot, the zone line shall be treated as property line for the purposes of the lighting plan.

⁵ The full Natural Heritage System is not identified in the Zoning By-law however where the Natural Heritage System is within the property line (as identified through an EIS or other document) the **lux** level will be required to be met at the limit of Natural Heritage System and/or the property line whatever is greater.

⁶ For industrial sites or large commercial sites (i.e. 2000 square metres or greater) the maximum pole height may be increased to 7.3 metres. However with the Hanlon Creek Business Park use a pole height of 4.6m as shown in the Hanlon Creek Business Park Urban Design Guidelines.

Attachment C

Lighting Site Plan Approval Checklist

City of Guelph Lighting Site Plan Approval Checklist

#	Task	Complies? (Yes or No)	N/A	Notes
1	Site Plan Ref. Number _____			
2	Lighting Zone and Adjacent Lighting Zone Noted (Attachment B)			
3	Lighting Pole Type and Mounting Height Maximum Pole Height (Attachment B): _____			
4	Light Source to be LED			
5	Colour Temperature (3000k or less)			
6	Drive Current Specified			
7	Luminaires that are full cut off and International Dark Sky Association (IDA) compliant specified			
8	Manufacturer Catalogue Number Specified			
9	Photometric Data with IES I file Number Specified			
10	Applicable Lighting Design Criteria (check all that apply): <input type="checkbox"/> Parking Lot/Loading Area <input type="checkbox"/> Private Driveway or Road <input type="checkbox"/> Car Dealership <input type="checkbox"/> Service Station			
11	Glare Rating Specified (see Attachment A)			
12	Independent Lighting Software Specified			
13	Illuminance and Luminance Grid Pattern as specified in IES RP-8 and RP-20			

14	Vertical Illuminance Level at Property Limit (See Attachment A)			
15	Horizontal Illuminance Level at Property Limit (See Attachment B) Lighting Zoning: _____ Illuminance Level at Property Line: _____			
16	Summary Tabulation of Photometric Analysis Submitted			
17	Lighting Controls and Energy Saving Measures Specified			
18	Submission Stamped by P.Eng			

Attachment D

Definitions

Candelas: related to luminous flux is luminous intensity. Candelas are the intensity of a light source in a particular direction. One Lumen = one Candela emitted within a solid angle known as a steradian. (There are 4π , or 12.57 steradians in a sphere).

Foot candles: Lumens per square foot.

Illuminance: is the amount of light that actually falls on an object. It is the density of light on a particular surface – measured in **lux** or lumens per square foot (foot candles – fc).

Lamp: refers to a bulb or other light producing source.

Light Pollution: the overall impact that the lighting of cities and towns has on the night sky.

Light Trespass: the projection of light from one site onto another.

Lumens: measurement of total amount of light emitted by a bulb, known as luminous flux. A 100-watt incandescent bulb will put out roughly 1,800 lumens, while a high-pressure sodium street lamp of the same wattage will emit about 8,550 lumens.

Luminaire: lighting fixture itself. It is a combination of the bulb, socket, reflectors or lenses, ballast, and housing.

Luminance: is the light that the eye sees – i.e., light that has been reflected by a surface. It is measured in Candelas per square foot or metre.

Lux: is the measure of illuminance, expressed in units of Lumens per square metre.

Pole Height: Height of a light standard, measured from grade to top tenon cap.

Qualified Lighting Design Professional: Registered Professional Engineer (P.Eng).

Uniformity: Defines the uniformity of light distribution. Measured as maximum: minimum and average: minimum.

Provincial/Federal Consultation Alert							
Title	Ministry	Consultation Deadline	Summary	Proposed Form of Input	Rationale	Lead	Link to Ministry Website
ERO 013-5033 10th Year Review of Ontario's Endangered Species Act: Proposed changes	Ministry of the Environment, Conservation and Parks	May 18, 2019	<p>In January 2019, the government launched its consultation on how best to update the 10-year old act to improve the effectiveness of the program for species at risk by ensuring Ontario's best-in-class endangered and threatened species protections include advice and species' classifications from an independent scientific committee and modern approaches to enforcement and compliance; species and habitat protections; and recovery planning</p> <p>Based on the review, consideration of modern approaches from other jurisdictions and feedback received, the government is implementing recommendations to modernize and improve the effectiveness of the act and improve outcomes for species at risk.</p>	On-line submission	The proposed changes could negatively impact the City's Natural Heritage System and endangered species within the City.	Planning	https://ero.ontario.ca/notice/013-5033

Provincial/Federal Consultation Alert							
Title	Ministry	Consultation Deadline	Summary	Proposed Form of Input	Rationale	Lead	Link to Ministry Website
ERO 013-5018: Modernizing Conservation Authority Operations – Conservation Authorities Act	Ministry of Environment, Conservation and Parks	May 21 st 2019 (deadline was extended by one day)	Proposal to introduce amendments to the <i>Conservation Authorities Act</i> , which if passed, would help conservation authorities focus and deliver on their core mandate, and to improve governance	Submission via on-line Environmental Registry	The Grand River Conservation Authority (GRCA) is an agency the City of Guelph works with to attain common goals for the surrounding watershed. Programs that may not be considered “core duties” through this proposal are of interest. The City’s response will be largely in support for the GRCA and will align with the responses the agency has already submitted.	Environmental Services	https://ero.ontario.ca/notice/013-5018

Provincial/Federal Consultation Alert							
Title	Ministry	Consultation Deadline	Summary	Proposed Form of Input	Rationale	Lead	Link to Ministry Website
<p>Modernizing Ontario's Environmental Assessment Program – Environmental Assessment Act</p> <p>There is also a discussion paper on the same topics</p>	Ministry of Environment, Conservation and Parks	May 25, 2019	The MECP is proposing to introduce amendments to the <i>Environmental Assessment Act</i> , which, if passed, would help the ministry to modernize by focusing on projects that pose actual, real risks to our environment and communities, streamlining approval timelines and eliminating duplication.	Letter to MECP through Environmental Registry.	<p>The City of Guelph utilizes the Municipal Class Environmental Assessment process to complete a significant amount of projects and maintenance.</p> <p>Consistent with Report IDE-2018-28 Municipal Class Environmental Assessment Reform, the City is supportive of the concept of reform, and is seeking to provide input into the changes being considered by the MECP.</p>	Engineering and Transportation Services	<p>https://ero.ontario.ca/notice/013-5102 (Proposed Amendments to the Act)</p> <p>https://ero.ontario.ca/notice/013-5101 (Discussion Paper)</p>

Provincial/Federal Consultation Alert							
Title	Ministry	Consultation Deadline	Summary	Proposed Form of Input	Rationale	Lead	Link to Ministry Website
ERO 013-5000 Excess soil regulatory proposal and amendments to Record of Site Condition (Brownfields) Regulation	Ministry of Environment, Conservation, and Parks	May 31, 2019	MECP is proposing regulatory changes to the management of excess construction soil and brownfields redevelopment.	Letter to Environmental Registry	The City of Guelph has numerous projects that are impacted by Excess Soil and Brownfield Regulations. The City is also a municipal leader on these topics. We have been working with the MECP on this reform for years and will provide commentary to continue to help shape the Regulations in a way Guelph can support.	Engineering and Transportation Services	https://ero.ontario.ca/notice/013-5000

Provincial/Federal Consultation Alert							
Title	Ministry	Consultation Deadline	Summary	Proposed Form of Input	Rationale	Lead	Link to Ministry Website
Bill 108 - (Schedule 3) – the proposed More Homes, More Choice Act: Amendments to the Development Charges Act, 1997	Ministry of Municipal Affairs and Housing	June 1, 2019	<p>The government is proposing changes to the Development Charges Act, 1997 to help reduce costs and increase the supply of housing.</p> <p>The proposed changes include:</p> <ul style="list-style-type: none"> • Replacing discounted DC's, height and density bonusing and in some cases, parkland dedication with new Planning Act authority called a Community Benefit charge that will be tied to land value (similar to current parkland dedication rules) rather than the capital cost required over the next 10 years (DC Act authority). • Proposed timing changes for collection of DC's for industrial, commercial and institutional revenues – 6 year payment plan allowed • Proposing timing of calculation of amount of DC owing locked in at zoning or site plan approval (rather than building permit issuance). • New exemption to the <i>Development Charges Act</i> will exempt the creation of one secondary suite in new residential buildings from development charges. • New exemption to the Development Charges Act will exempt the creation of the conversion of communal areas to residential units in rental buildings from development charges. • Waste diversion proposed to become a non-discounted service. 	Written	There are significant unfavourable impacts of these proposed changes and the City needs to provide strong messaging back to the Province on the outcomes of these proposals.	Finance	https://ero.ontario.ca/notice/019-0017

Provincial/Federal Consultation Alert							
Title	Ministry	Consultation Deadline	Summary	Proposed Form of Input	Rationale	Lead	Link to Ministry Website
ERO-019-0021 – Bill 108 – (Schedule 11) – the proposed More Homes, More Choice Act: Amendments to the Ontario Heritage Act	Ministry of Tourism, Culture and Sport	June 1, 2019	The Ontario government is proposing changes to the Ontario Heritage Act to support streamlining development approvals and increasing housing supply while continuing to empower municipalities to identify and conserve their cultural heritage resources.	On-line submission	The proposed changes would have significant and potentially negative implications for how the City manages, protects and conserves cultural heritage resources.	Planning	https://ero.ontario.ca/notice/019-0021

Provincial/Federal Consultation Alert							
Title	Ministry	Consultation Deadline	Summary	Proposed Form of Input	Rationale	Lead	Link to Ministry Website
ERO-019-0016 – Bill 108 – (Schedule 12) – the proposed More Homes, More Choice Act: Amendments to the Planning Act	Ministry of Municipal Affairs and Housing	June 1, 2019	The government is proposing changes to the Planning Act to help increase the supply of housing and streamline development approvals.	On-line submission	The proposed changes would have significant and potentially negative implications for how the City processes development applications, including how the community can participate and provide input and how appeals will be addressed.	Planning	https://ero.ontario.ca/notice/019-0016

Provincial/Federal Consultation Alert							
Title	Ministry	Consultation Deadline	Summary	Proposed Form of Input	Rationale	Lead	Link to Ministry Website
Regulations for Recycling of Electrical and Electronic Equipment (EEE) and Batteries under the Resource Recovery and Circular Economy Act, 2016	Ministry of the Environment, Conservation and Parks	June 23, 2019 (Regulations posted for a 45-day consultation period.)	<p>An EBR notice has been posted (019-0048) proposing regulations that will make producers of electronics and batteries environmentally accountable and financially responsible for the waste generated from products they supply into Ontario. The regulations will set requirements for collection, management and consumer education, as well as incenting waste reduction activities.</p> <p>The proposed regulations outline a number of requirements, including:</p> <ul style="list-style-type: none"> • Establishing free collection networks • Achieving resource recovery targets • Educating consumers • Registering with and reporting to the Resource Productivity and Recovery Authority • Other requirements, including record keeping and third-party audits <p>The key principles of the proposed regulation are:</p> <ul style="list-style-type: none"> • Improve environmental outcomes • Ensuring economic growth • Ensuring consistency, and reducing costs and burden, while promoting innovation 	Staff comments will be submitted on the online Environmental Registry (EBR) and provided to Council via the Information Package following the consultation deadline.	The City of Guelph currently allows residents to drop off EEE and batteries at the Waste Resource Innovation Centre for free. Our funding sources and service levels provided for these programs will be affected by the proposed changes.	Environmental Services - Solid Waste Resources	Environmental Registry

The Corporation of the Township of Bonnechere Valley

49 Bonnechere Street East
P.O. Box 100
Eganville, Ontario K0J 1T0



Phone (613) 628-3101
Fax (613) 628-1336
Email admin@eganville.com

May 23, 2019

At the May 21, 2019 Regular Meeting of Council, the following Resolution was passed.

19.083 MOVED BY **Tim Schison**
SECONDED BY **Jack Roesner**

THAT: Whereas the Federal Government has proposed Bill C-68, An Act to amend the Fisheries Act and other Act in consequence;

And Whereas Bill C-68 was amended by the Standing Committee on Fisheries and Oceans, to re-write Section 2(2) of the Fisheries Act;

And Whereas this amendment will deem any body of water capable of supporting fish as being a fish habitat;

And Whereas consequential of this amendment, puddles in farm fields, municipal lands, drainage ditches or water reservoirs can possibly be declared protected fish habitats;

And Whereas this amendment has been described by the Canadian Cattlemen's Association as something which will "place a crippling regulatory burden on family-owned operations."

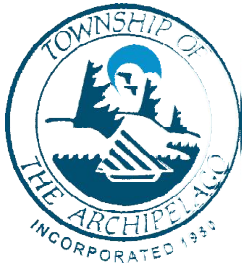
And Whereas Bill C-68 as it currently reads threatens the future viability of the family farm in Canada;

Be it resolved that the Township of Bonnechere Valley call on the Parliament of Canada to remove the proposed changes to Section 2(2) of the Fisheries Act.

Further Be it resolved that this resolution be circulated to Prime Minister Justin Trudeau; Cheryl Gallant, MP, Renfrew-Nipissing-Pembroke; John Yakabuski, MPP, Renfrew-Nipissing-Pembroke; the Federal of Canadian Municipalities; and all municipalities in the County of Renfrew.

Carried

Original signed by Mayor Jennifer Murphy



Township of The Archipelago
9 James Street, Parry Sound ON P2A 1T4
Tel: 705-746-4243/Fax: 705-746-7301
www.thearchipelago.on.ca

May 17, 2019

19-078

**Moved by Councillor Ashley
Seconded by Councillor Frost**

RE: Bill 108, the More Homes, More Choice Act, 2019

WHEREAS, the Government of Ontario has introduced Bill 108, The More Homes, More Choice Act, which amends 13 different Acts with the stated objective of stimulating the supply of housing in the Province of Ontario;

AND WHEREAS, Schedule 9 of the proposed legislation would amend the Local Planning Appeal Tribunal Act, reverting many of the practices and procedures of the tribunal to those of the former Ontario Municipal Board, thereby allowing an un-elected, unaccountable body to make important planning decision for our community;

AND WHEREAS, Schedule 12 of the proposed legislation would make multiple amendments to the Planning Act and, specifically, would reduce the timelines for making decision related to official plans, zoning by-laws and plans of subdivision, further impeding a municipalities ability to make important planning decision at the local level and reducing appeals to the Local Planning Appeals Tribunal;

AND WHEREAS, Schedule 5 of the proposed legislation would amend the Endangered Species Act, thereby establishing a Species at Risk Conservation Fund, enabling a charge in lieu of meeting requirements to adequately protect species at risk and their habitat;

AND WHEREAS the government of Ontario has not adequately consulted with the municipalities with respect to this proposed legislation, and;

NOW THEREFORE BE IT RESOLVED that Council for the Township of The Archipelago opposes Schedules 9, 12, and 5 of the proposed legislation highlighted above, as they will have a negative impact on our community and therefore call for their removal from the Bill;

AND NOW THEREFORE FURTHER BE IT RESOLVED that Council for the Township of The Archipelago request the Government of Ontario to halt the legislation and properly engage and consult with Municipalities before further considering the proposed legislation.

BE IT FURTHER RESOLVED that a copy of this resolution be sent to The Honourable Doug Ford, Premier of Ontario, The Honourable Christine Elliott, Deputy Premier, The Honourable Steve Clark, Minister of Municipal Affairs and Housing, Andrea Horwath, Leader of the New Democratic Party, Norm Miller, Parry Sound Muskoka MPP, Association of Municipalities of Ontario, and all Ontario Municipalities.

Carried.



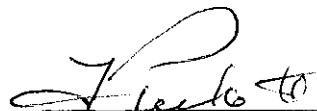
Regular Council Meeting Resolution Form

Date: April 16, 2019 No: RESOLUTION - 131-2019
 Moved by Councillor Scott Brum Disposition: CARRIED
 Seconded by Councillor Heather Lang Item No: 9.1

Description: Request for Support #1-4
 2. Councillor Scott Brum - Government of Ontario E-Learning

RESOLUTION:

WHEREAS the Government of Ontario is proposing education adjustments; **AND WHEREAS** the Government of Ontario announced that secondary school students will be required to take four (4) out of the thirty (30) high school credits as online courses; **AND WHEREAS** thirty (30) credits are required for an Ontario high school diploma, the government is not providing rural Ontario with the same broadband access as the rest of the Province; **AND WHEREAS** throughout much of rural and northern Ontario, broadband service is lacking, making e-learning impossible, and may set our students up for a two-tier education system due to the lack of internet access; **AND WHEREAS** online e-learning will disproportionately affect students with special needs, who may need more attention from their teachers, and students in low-income families, who may not have access to a laptop and internet at home to do their online course work; **THEREFORE BE IT RESOLVED THAT** the Township of McNab/Braeside respectfully requests the Premier of Ontario to reconsider these online courses until rural Ontario students can be given the same opportunity to access the internet as the urban students; **BE IT FURTHER RESOLVED THAT** this motion be circulated to Ontario Premier Doug Ford, Minister of Education Lisa M. Thompson, MPP of Renfrew-Nipissing-Pembroke John Yakabuski, MP of Renfrew-Nipissing-Pembroke Cheryl Gallant, all Municipalities in the Province of Ontario, AMO, and ROMA.



 MAYOR

Recorded Vote Requested by: _____

	Yea	Nay
T. Peckett	_____	_____
B. Armsden	_____	_____
H. Lang	_____	_____
S. Brum	_____	_____
O. Jacob	_____	_____

Declaration of Pecuniary Interest: _____
 Disclosed his/her/their interest(s), vacated his/her/their seat(s),
 abstained from discussion and did not vote



Community Services

Legislative Services

May 22, 2019

File #120203

Sent via email: Justin.trudeau@parl.gc.ca

The Right Honourable Justin Trudeau
Prime Minister
House of Commons
Ottawa, ON K1A 0A6

Honourable and Dear Sir:

Re: Issuance of Cannabis Licenses in Residentially Zoned Areas

The Municipal Council of the Town of Fort Erie at its meeting of May 21, 2019 passed the following resolution:

That: Council requests the Federal Government to provide information on all cannabis licenses including personal medical licenses to the Town of Fort Erie when licenses are issued, and further

That: A public process take place in connection with granting cannabis licenses and their location, and further

That: This resolution be circulated to the Prime Minister, the Minister of Health, the Niagara Members of Parliament and Provincial Parliament, and all Ontario municipalities.

Thank you for your attention to this very important issue.

Yours very truly,

Carol Schoffeld, Dipl.M.A.
Manager, Legislative Services/Clerk

cschoffeld@forterie.ca

c.c The Honourable Ginette Petitpas Taylor, Minister of Health *Sent via email: Ginette.petitpastalor@parl.gc.ca*
The Honourable Rob Nicholson, MP-Niagara, *Sent via email: rob.nicholson@parl.gc.ca*
Vance Badawey, MP-Niagara Centre *Sent via email: vance.badawey@parl.gc.ca*
Chris Bittle, MP-St. Catharines *Sent via email: chris.bittle@parl.gc.ca*
Wayne Gates, MPP-Niagara Falls, Legislative Assembly of Ontario *Sent via email: wgates-co@ndp.on.ca*
Sam Oosterhoff, MPP-Niagara West-Glanbrook, Legislative Assembly of Ontario *Sent via email: sam.oosterhoff@pc.ola.org*
Jennifer Stevens, MPP-St. Catharines *Sent via email: JStevens-CO@ndp.on.ca*
Jeff Burch, MPP-Niagara Centre *Sent via email: JBurch-QP@ndp.on.ca*
All Ontario Municipalities *Sent via email*

Mailing Address:

The Corporation of the Town of Fort Erie
1 Municipal Centre Drive, Fort Erie ON L2A 2S6

Office Hours 8:30 a.m. to 5:00 p.m. Phone: (905) 871-1600 FAX: (905) 871-4022

Web-site: www.forterie.ca