

DEVELOPMENT CHARGES BACKGROUND STUDY



GEORGINA

HEMSON Consulting Ltd.

August 16, 2016
Amended January 27, 2017

HEMSON

Consulting Ltd.

TOWN OF GEORGINA 2016 DEVELOPMENT CHARGES BACKGROUND STUDY AMENDMENT REPORT

INTRODUCTORY NOTE

Hemson Consulting Ltd. prepared a 2016 Development Charges Background Study (Background Study) dated August 16, 2016 for the Town of Georgina. The study was undertaken in order to calculate both Town-wide and area-specific development charges for the Town. The Background Study and accompanying by-law were considered at a statutory public meeting held on May 25, 2016 and approved by Council at its meeting of June 22, 2016.

Subsequent to its passage, By-law 2016-0054 was appealed to the Ontario Municipal Board by Ainslie Hill Inc. and Greystone (Homestead) Limited. Through discussions between Town Staff and the appellants, including consultants and legal representatives, a settlement was reached, which resulted in a reduction to the calculated development charge rates of \$1,000 per single and semi-detached unit. The non-residential rates have remained unchanged.

The parties agreed to adjust the development charge calculations by making the following adjustments:

1. Grants applied to the Link Community Centre project costs were reduced from \$990,000 as shown in the original study to \$60,000 to reflect actual monies received towards the project.
2. The timing of the Multi-Use Recreation Centre (MURC) facility was delayed from 2017 to 2020 to reflect current best estimates.
3. The aquatic centre portion of the MURC was separated from the remainder of the facility so that the DC eligible costs will be recovered over a longer-term planning period to meet the needs of a population of 70,300.
4. A share of the provision for trails and parkland development has been shifted in period for recovery through development charges over the next ten years. Under the Staff Consolidation version of the Background Study, all of these costs were allocated to a post-period benefit share.

The above-noted changes are reflected in this report and a rate comparison is shown on the following page. Schedule C to the By-law will be replaced with a new rate schedule.

**TOWN OF GEORGINA
CALCULATED TOWN-WIDE DEVELOPMENT CHARGES
JUNE 2016 APPROVED RATES COMPARED WITH AMENDED RATES
RESIDENTIAL DEVELOPMENT CHARGES**

Service	June 2016 Approved Charge	Settlement Re-Calculated Charge	\$ Chage	% Change
Town-wide Residential Charge Per Unit				
Single & Semi-Detached	\$11,469	\$10,469	(\$1,000)	-9%
Rows & Other Multiples	\$9,239	\$8,434	(\$805)	-9%
Apartments ≥650 sq.ft.	\$8,055	\$7,353	(\$702)	-9%
Apartments <650 sq.ft.	\$5,559	\$5,074	(\$485)	-9%

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EXECUTIVE SUMMARY

The following summarizes the findings of the Town of Georgina's 2016 Development Charges (DC) Background Study.

A. STUDY CONSISTENT WITH DEVELOPMENT CHARGES LEGISLATION

- On December 3rd, 2015 the Province of Ontario passed Bill 73, Smart Growth for Our Communities Act, 2015, which amended the *Development Charges Act, 1997 (DCA)* and its associated regulation (*Ontario Regulation 82/98*), as well as Ontario's *Planning Act*.
- This study calculates development charges for the Town of Georgina in compliance with the above legislation.
- The Town's current development charge by-law 2011-78 will expire on July 19, 2016. Council must pass a new development charges by-law before this date in order to continue to levy DCs.
- The Town needs to continue implementing DCs to fund capital projects throughout Georgina so that new development pays for capital costs to the extent allowed by the *DCA* and so that new services required by development are provided in a fiscally responsible manner.
- The *DCA* and O. Reg. 82/98 require that a development charges background study be prepared in which development charges are determined with reference to:
 - a forecast of the amount, type and location of residential and non-residential development anticipated in the Town;
 - a review of future capital projects, including an analysis of gross expenditures, funding sources and net expenditures incurred or to be incurred by the Town to provide for the expected development, including the determination of the development and non-development-related components of the capital projects;

- an examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-law relates; and
- an asset management plan that deals with all assets whose capital costs are proposed to be funded under the DC By-law, and demonstrates that all assets included in the capital program are financially sustainable over their full life cycle.
- The report identifies the development-related net capital costs attributable to development that is forecast to occur in the Town. These costs are apportioned to types of development (residential and non-residential) in a manner that reflects the increase in the need for each service.

B. ALL SERVICES WITH DEVELOPMENT-RELATED COSTS INCLUDED IN THE ANALYSIS

The following municipal services have been included in the development charge analysis:

- Library Services;
- Fire and Emergency Services;
- Parks and Recreation;
- Operations;
- General Government (Studies);
- Roads and Related;
- Stormwater Management;
- Water; and
- Sewer.

C. TWO APPROACHES USED TO CALCULATE DEVELOPMENT CHARGES

- Development charge rates have been established under the parameters and limitations of the *DCA*. The study provides the rationale and basis for the calculated rates.
- A Town-wide average cost approach is used to calculate development charges for the general services of library, fire, parks and recreation, operations, and general government as well as for the Town-wide components of the engineered services of roads and stormwater

management. This approach results in uniform charges levied throughout Georgina.

- In addition, area-specific development charges are calculated for the recovery of certain engineered services – roadworks, water and sewer – that are required in specific service areas. The area-specific approach more closely aligns costs and benefits for services with benefits that are more localized and can be identified.

D. DEVELOPMENT FORECAST

- A forecast of the amount, type and location of residential and non-residential development anticipated in Georgina to 2036 is included in the report.
- The development forecast is based on estimates of development within the Town's approved development areas. This is consistent with Provincial regulations that require development charges forecasts be based on areas approved for development in a municipality's official plan.
- A ten-year forecast, from 2016 to 2025 was used in the development charges calculation for general services. A longer-term forecast period, from 2016 to 2036 was used for the municipal-wide and area-specific engineered services, based on the servicing capacity of the capital infrastructure.
- The development forecast for the ten-year planning period from 2016 to 2025 estimates that the Town will add approximately 2,605 new dwelling units and the population will grow by approximately 5,980 people.
- The long-term forecast, from 2016 to 2036 anticipates approximately 7,340 additional dwelling units and a population growth of 17,900 in the Town.
- Population growth in new dwelling units is expected to add 7,225 over the ten-year planning period. By 2036, it is anticipated that the population increase in new dwelling units will reach 20,070.
- Employment in Georgina is forecast to grow by approximately 4,170 employees over the next ten-years, which will be accommodated in 290,040

square metres of new non-residential building space. To 2036, an additional 10,950 employees are forecast and an estimated 746,965 square metres of building space.

- The following is a summary of the projected growth for the Town:

Town-wide Development Forecast	2015 Estimate	General Services Planning Period 2016 - 2025		Long-Term Planning Period 2016 - 2036	
		Growth	Total at 2025	Growth	Total at 2036
Residential					
Total Occupied Dwellings	16,663	2,604	19,267	7,337	24,000
Total Population					
Census	45,450	5,977	51,427	17,903	63,354
<i>Population In New Dwellings</i>		<i>7,225</i>		<i>20,070</i>	
Non-Residential					
Total Employment	8,718	4,169	12,887	10,952	19,670
Non-Residential Building Space (sq.m.)		290,040		746,965	

- The municipal services of area-specific roads, water and sewer are calculated on an area-specific basis. As such, growth forecasts for these service areas to 2036 have been compiled. The growth for the service areas is as follows:

Area-Specific Development Forecast	Long-Term Planning Period 2016- 2036 Growth
Residential	
Population Growth in New Dwellings	
<i>Sutton</i>	4,243
<i>Keswick</i>	13,304
<i>Sutton High Street Sewer</i>	1,732
<i>Remainder of Town</i>	791
Non-Residential	
Total Employment	
<i>Sutton</i>	691
<i>Keswick</i>	9,916
<i>Sutton High Street Sewer</i>	-
<i>Remainder of Town</i>	345
Non-Residential Building Space (sq.m.)	
<i>Sutton</i>	47,106
<i>Keswick</i>	676,306
<i>Sutton High Street Sewer</i>	-
<i>Remainder of Town</i>	23,553

E. FUNDING ENVELOPE BASED ON “NET” GROWTH

- In accordance with the *DCA*, development charges have been calculated at a level no higher than the average service level provided in the Town over the ten-year period immediately preceding the preparation of the Background Study, on a service by service basis.
- The service levels are expressed as a dollar value per capita or a dollar value per capita plus employment of infrastructure value. This service level expression is a construct to meet the requirements of s. 5(1) of the *DCA* and does not directly reflect the utilization of infrastructure or the way in which a municipality plans for services.
- The maximum permissible funding envelopes in the study are based on “net” population, employment and dwelling unit growth.

F. THE TOWN HAS AN EXTENSIVE DEVELOPMENT-RELATED CAPITAL FORECAST FOR THE PROVISION OF ELIGIBLE SERVICES

Town-Wide General Services

- Town staff, in collaboration with Hemson Consulting, have compiled a development-related capital forecast setting out projects that are required to service anticipated development in Georgina between 2016 and 2025.
- The gross cost of the Town's development-related capital forecast for general services amounts to \$63.14 million and provides for a wide range of infrastructure expansions. Of the \$63.14 million, approximately \$25.94 million has been identified as eligible for recovery through development charges over the 2016-2025 planning period.
- The *DCA* requires that development-related net capital costs for general services be reduced by 10 per cent when calculating the applicable development charges. The 10 per cent share of development-related net capital costs not included in the DC calculations must be funded from non-development charge sources. In total, about \$4.08 million is identified as the required 10 per cent reduction.
- A share of the capital program, \$8.57 million, will require funding from non-development charge sources and reflects the share of capital projects that replace existing infrastructure and otherwise benefit existing development.
- A share of the capital forecast for general services is for portions of projects that relate to development in the post-2025 period and may be considered for recovery in future development charges studies, subject to service level considerations. In total, about \$21.35 million is considered to be a post-2025 benefit.
- Available DC reserve funds in the amount of \$3.15 million have been identified to fund development-related infrastructure projects.
- The following is a summary of the general services development-related capital program:

General Services (2016-2025)		
Service	Gross Cost (\$000)	DC Eligible Cost (\$000)
Library Services	\$3,486.7	\$2,013.0
Fire and Emergency Services	\$16,743.5	\$3,306.3
Parks and Recreation	\$39,392.3	\$18,109.4
Operations	\$2,970.2	\$2,109.4
General Government	\$550.0	\$411.5
Total General Services	\$63,142.7	\$25,935.0

- Details of the capital program for each service are provided in Appendix B.

Town-Wide Engineered Services

- In the Town of Georgina, the municipal-wide engineered services development-related capital program is related to the delivery of roads and related infrastructure and stormwater management. The longer-term capital program for these services, extending from 2016 to 2036, totals \$1.70 million.
- Of the \$1.70 million in the municipal-wide engineered services capital program, almost \$680,800 of the total program is to be recovered from development charges over the planning period.
- No replacement shares that benefit the existing community have been identified as all projects included in the Town-wide engineered services capital programs are related entirely to development.
- Similarly, no shares of capital costs have been attributed to development beyond 2036.
- A portion of the capital program provides service to development that has already occurred in the Town and for which development charges have been collected. Current development charges reserve fund balances for the engineered services total \$1.02 million. This amount will be used to fund a portion of the capital program.

- The following is a summary of the development-related capital forecast for all municipal-wide engineered services:

Town-Wide Engineered Services (2016-2036)		
Service	Gross Cost (\$000)	DC Eligible Cost (\$000)
Roads and Related	\$1,500.0	\$480.8
Stormwater Management	\$200.0	\$200.0
Total Town-wide Engineered Services	\$1,700.0	\$680.8

- Appendix C provides the calculation details for the Town-wide engineered services.

Area-Specific Engineered Services

- Additional costs associated with the distribution of roads, water and sewer are calculated on an area-specific basis in the Town.
- Three servicing areas have been identified within this Development Charges Study and reflect the areas of the Town that will benefit from particular engineered infrastructure works. Area specific development charges are calculated for the Keswick, Sutton, and Sutton High Street Sewer service areas, over and above the Town-wide charge.
- The infrastructure included in the capital programs is intended to service population and employment growth in the Town to 2036. The gross cost of the area-specific projects totals \$9.78 million.
- Of the \$9.78 million net municipal cost, just over \$2.93 million is to be recovered from area-specific development charges over the planning period to 2036. Of this amount, \$1.74 million relates to Keswick, \$519,500 relates to development in Sutton, and \$670,200 will service the Sutton High Street Sewer area.
- Non-DC funding for replacement portions of the capital forecast and for portions of the capital projects that benefit existing development total \$4.05 million. These shares will require funding from other sources.

- A portion of the capital program provides service to development that has already occurred in the Town and for which development charges have been collected. Available DC reserve funds total \$1.65 million. This amount will be used to fund a portion of the capital program.
- The ten per cent service discount is not applicable for these services and there are no post-period benefit shares identified.
- The following is a summary of the development-related capital forecast for all area-specific services:

Area-Specific Services (2016-2036)		
Service Area	Gross Cost (\$000)	DC Eligible Cost (\$000)
Keswick	\$6,427.0	\$1,743.9
Sutton	\$1,151.0	\$519.5
Sutton High Street Sewer	\$2,205.0	\$670.2
Total Area-Specific Services	\$9,783.0	\$2,933.5

- Details on the calculation of the area-specific development charges are included in Appendices D to F.

G. CALCULATED TOWN-WIDE DEVELOPMENT CHARGES

- A municipal-wide cost approach is used to calculate development charges for the eligible services. Uniform residential and non-residential charges are levied throughout the Town of Georgina.
- The calculated residential municipal-wide charges are recommended to vary by unit type, reflecting the difference in occupancy patterns expected in various unit types and associated differences in demand placed on municipal services.

Calculated Residential Development Charges for Town-Wide Services

Service	Charge By Unit Type			
	Single & Semi-Detached	Rows & Other Multiples	Apartments	
			≥650 sq.ft.	<650 sq.ft.
Library Services	\$925	\$745	\$650	\$448
Fire And Emergency Services	\$910	\$733	\$639	\$441
Parks And Recreation	\$7,834	\$6,311	\$5,501	\$3,798
Operations	\$627	\$505	\$440	\$304
General Government	\$108	\$87	\$76	\$52
Total General Services	\$10,404	\$8,381	\$7,306	\$5,043
Town-Wide Roads And Related	\$46	\$37	\$33	\$22
Town-Wide Stormwater Management	\$19	\$16	\$14	\$9
TOTAL TOWN-WIDE CHARGE BY UNIT TYPE	\$10,469	\$8,434	\$7,353	\$5,074

- The Town-wide charges would be levied on all development within the Town, regardless of location. Non-Residential development charges for similar services have been calculated in the same way.

Calculated Non-Residential Development Charges for Town-Wide Services

Service	Non-Residential Charge (\$/sq.m)
Library Services	\$0.00
Fire And Emergency Services	\$4.33
Parks And Recreation	\$0.00
Operations	\$2.99
General Government	\$0.52
Total General Services	\$7.84
Town-Wide Roads And Related	\$0.23
Town-Wide Stormwater Management	\$0.09
TOTAL TOWN-WIDE CHARGE PER SQ.M	\$8.16

H. CALCULATED AREA-SPECIFIC DEVELOPMENT CHARGES

- An area-specific cost approach is used to calculate development charges for various services which have more localized benefits. Area-specific development charges are levied in addition to the Town-wide charges and vary by location of development. There are three service areas included in the calculation.
- The following table summarizes the calculated area-specific development charges:

Calculated Area-Specific Development Charges

Service	Residential Charge by Unit Type				Non-Residential Charge (\$/sq.m)
	Single & Semi-Detached	Rows & Other Multiples	Apartments		
			≥650 sq.ft.	<650 sq.ft.	
Keswick Service Area	\$225	\$181	\$158	\$109	\$1.10
Sutton Service Area	\$315	\$254	\$221	\$153	\$1.54
Sutton High Street Sewer	\$1,157	\$932	\$813	\$561	N/A

I. NEWLY CALCULATED DCS COMPARED WITH CURRENT RATES

- The fully calculated Town-wide residential charge for a single or semi-detached unit in Georgina is \$10,469, which represents an increase of \$3,356 from the Town's current charge of \$7,113.
- The total calculated residential development charges applicable in the Keswick Service Area represent an increase of \$3,518 from the current charge of \$7,176 to the calculated \$10,694 per single detached unit.
- The total calculated residential DCs for Sutton of \$10,784 per single detached unit represents an increase of \$3,648 from the current charge of \$7,136 per unit.
- The calculated charge of \$11,626 applicable in the Sutton High Street Sewer Area represents an increase of \$3,264 per single detached unit over the current charge of \$8,362.

- The calculated non-residential development charge of \$8.16 per square metre represents an increase of \$3.86 over the Town's current municipal-wide development charge of \$4.31 per square metre.
- The calculated non-residential development charges in Keswick increase by \$4.53 per square metre and by \$5.29 per square metre in Sutton.

J. A PORTION OF DEVELOPMENT-RELATED COSTS REQUIRE FUNDING FROM NON-DEVELOPMENT CHARGE SOURCES

- Non-development charge funding of \$12.65 million will be required to support the development-related capital program.
- It is estimated that net operating costs will increase by about \$9.74 million by the year 2025 as the facilities and infrastructure included in the capital forecast are operated and maintained.

K. ALL ASSETS INCLUDED IN THIS STUDY ARE FINANCIALLY SUSTAINABLE

- A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.
- By 2025, the Town will need to fund an additional \$884,500 in order to properly fund the full life-cycle costs of the new assets supported under this Development Charges By-law.

I INTRODUCTION

The *Development Charges Act, 1997 (DCA)* and its associated *Ontario Regulation 82/98 (O. Reg. 82/98)* allow municipalities in Ontario to recover development-related capital costs from new development. The Town of Georgina Development Charges (DC) Background Study is presented as part of a process to lead to the approval of a new development charges by-law in compliance with the legislation.

The anticipated residential and non-residential development in the Town of Georgina between 2016 and 2036 will increase demand on all municipal services. The Town wishes to continue implementing DCs to fund growth-related capital projects so that development continues to be serviced in a fiscally responsible manner.

The *DCA* and *O. Reg 82/98* require that a development charges background study be prepared in which DCs are determined with reference to:

- A forecast of the amount, type and location of development anticipated in the Town;
- The average level of service provided by the Town over the ten-year period immediately preceding the preparation of the background study;
- A review of capital works in progress and anticipated future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the Town or its local boards to provide for the expected development, including determination of the development and non-development-related components of the capital projects;
- An examination of long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-law relates; and
- An asset management plan to deal with all assets whose capital costs are proposed to be funded under the DC By-law, demonstrating that all assets included in the capital program are financially sustainable over their full life cycle.

The study presents the results of the review to determine the net capital costs attributable to new development that is forecast to occur in the Town of Georgina between 2016 and 2036. These development-related net capital costs are

apportioned to various types of development (residential; non-residential) in a manner that reflects the increase in the need for each service.

The *DCA* provides for a period of public review and comment regarding the proposed development charges. This process includes considering and responding to comments received by stakeholders and members of the public about the calculated charges and methodology used. Following completion of this process, and in accordance with the *DCA* and Council's review of the study, it is intended that Council will pass new development charges for the Town.

The remainder of the study sets out the information and analysis upon which the proposed development charges are based.

Section II designates the services for which development charges are proposed and the areas within the Town to which the development charges will apply. It also provides an overview of the methodology that has been used in the Background Study.

Section III presents a summary of the forecast residential and non-residential development which is expected to occur within the Town over two planning periods: from 2016 to 2025 and a longer-term planning period from 2016 to 2036.

Section IV summarizes the historic ten-year average capital service levels that have been attained in the Town of Georgina and form the basis for the development charge calculations. The expression of the "service level" used in the Background Study is a construct developed to meet the requirements of the *DCA* and does not necessarily reflect the way in which municipalities actually plan for services.

Section V summarizes the development-related capital forecast that has been developed by various municipal departments.

Section VI summarizes the calculation of applicable development charges and the resulting calculated development charges by class and type of development.

Section VII provides a comparison of existing development charge rates in the Town with the rates calculated in the study.

Section VIII provides a high level examination of the long-term capital and operating cost impacts for each service included in the development charge calculation.

Section IX highlights the findings of an Asset Management Plan undertaken for all development-related components of capital projects included in the capital programs.

Section X provides a discussion of other issues and considerations including by-law administration.

II THE METHODOLOGY COMBINES A TOWN-WIDE AND AREA-SPECIFIC APPROACH TO ALIGN DEVELOPMENT-RELATED COSTS AND BENEFITS

Several key steps are required when calculating any development charge. However, specific circumstances arise in each municipality that must be reflected in the calculation. Therefore, the study has been tailored specifically for the Town of Georgina. The approach to calculating the proposed development charges is focused on providing a reasonable alignment of development-related costs with the development that necessitates them. The study combines a Town-wide approach for general and municipal-wide engineered services with an area-specific approach for certain engineered services infrastructure works.

A. BOTH TOWN-WIDE AND AREA-SPECIFIC DEVELOPMENT CHARGES ARE PROPOSED

The Town provides a wide range of services to the community it serves and has an extensive inventory of facilities, land, infrastructure, vehicles and equipment. The *DCA* provides municipalities with flexibility to define services that will be included in a development charge by-law, provided that the other provisions of the *Act* and its associated regulations are met. The *DCA* also requires the by-law to designate the areas within which the DCs shall be imposed. Development charges may apply to all lands in the municipality or to other designated development areas as specified in the by-law.

1. Services Based on a Town-wide Approach

For the majority of services the Town provides, a range of capital facilities, land, equipment and infrastructure is available throughout Georgina; community centres, fire stations, arterial roads, parks and so on. As new development occurs, new facilities will need to be added so that overall service levels do not decline. A widely accepted method for sharing the development-related capital costs for such services is to apportion them over all new development anticipated in the Town.

The following services are included in the Town-wide development charge calculation:

- Library Services;
- Fire and Emergency Services;
- Parks and Recreation;

- Operations;
- General Government;
- Roads and Related; and
- Stormwater Management.

These services form a reasonable basis upon which to plan and administer the development charges. The Town-wide service of stormwater management is being introduced as part of this 2016 update. The resulting development charge for these services is to be imposed against all development anywhere in the Town.

2. Area-Specific Charges Are Proposed

For some services the Town provides, the need for development-related capital to support anticipated development is more localized. For such services, an alternative technique – using an area-specific approach – is used.

The area-specific charges relate to the provision of specific road, water and sewer works in specific settlement areas of Georgina. Charges for these services are called Area-Specific Development Charges (ASDC) and are consistent with the Town's existing development charge system for such works.

The service areas recommended in this study are as follows:

- Keswick
- Sutton
- Sutton High Street Sewer

It is noted that development occurring within these service areas would be subject to both the Town-wide charge as well as the area-specific charges.

B. KEY STEPS IN DETERMINING DEVELOPMENT CHARGES FOR FUTURE DEVELOPMENT-RELATED PROJECTS

Several key steps are required in calculating development charges for future development-related projects. These are summarized below.

1. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the ten-year study period, 2016–2025, for general services and to 2036 for engineered services. The forecast of the future residential and non-residential development used in this study is based on estimates of development occurring within the Town's approved development areas.

For the residential portion of the forecast, both net (or Census) population growth and population growth in new units is estimated. The use of net population growth is one approach to determining the increased need for servicing, infrastructure and facilities arising from development.

When calculating the development charge however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This population in new units represents the population from which development charges will be collected.

The non-residential portion of the forecast estimates the Gross Floor Area (GFA) of building space to be developed over the ten-year period, 2016 to 2025, and to 2036. The forecast of GFA is based on the employment forecast for the Town. Factors for floor space per worker are used to convert the employment forecast into gross floor area for the purposes of the development charges study.

2. Service Categories and Historical Service Levels

The *DCA* provides that the increase in the need for service attributable to anticipated development:

... must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the ten-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historical ten-year average service levels thus form a ceiling, or limit, on the share of a development-related capital program that can be funded from development charges. A review of the Town's capital service levels for buildings, land, vehicles and so on, has therefore been prepared as a reference for the calculation, so that the portion of future capital projects that may be included in the development charge can be determined. The historical service levels used in this study have been calculated based on the period 2006 to 2015. This method of expressing "service levels" is a construct developed to satisfy the requirements of the *DCA* but does not necessarily reflect the way that municipalities plan for services.

3. Development-Related Capital Forecast and Analysis of Net Capital Costs to be Included in the Development Charges

A development-related capital forecast has been prepared by the Town's departments as part of the current study and reflect Council's expressed intent of how to meet the increased servicing needs arising from development. The forecast identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the *Act* (*DCA*, s. 5. (2)). The capital forecast provides another cornerstone upon which development charges are based. The *DCA* requires that the increase in the need for service attributable to the anticipated development may include an increase:

... only if the council of the municipality has indicated that it intends to ensure that such an increase in need will be met. (s. 5. (1) 3.)

In conjunction with *DCA*, s. 5. (1) 4. referenced above, these sections have the effect of requiring that the development charge be calculated on the lesser of the historical ten-year average service levels or the service levels embodied in future plans of the Town. The development-related capital forecast prepared for this study ensures that development charges are only imposed to help pay for projects that have been or are intended to be purchased or built in order to accommodate future development. It is not sufficient in the calculation of development charges merely to have had the service in the past. There must also be a demonstrated commitment to continue to emplace facilities or infrastructure in the future. In this regard, *Ontario Regulation 82/98*, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an Official Plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

For some projects in the development-related capital forecast, a portion of the project may confer benefits to existing residents. As required by the *DCA*, s. 5. (1) 6., these portions of projects and their associated net costs are the funding responsibility of the Town from non-development charge sources. The amount of municipal funding for such non-development shares of projects is also identified as part of the preparation of the development-related capital forecast.

There is also a requirement in the *DCA* to reduce the applicable development charge by the amount of any “uncommitted excess capacity” that is available for a service. Adjustments are made in the analysis to meet this requirement of the *DCA*.

Finally, the development-related net capital costs must be reduced by ten per cent for all services except services related to a highway, protection services (*DCA*, s. 5. (1) 8.) and engineered services. The ten per cent discount is applied to the other services, e.g. Library, Parks and Recreation, General Government, and the resulting municipal funding responsibility from non-development charge sources is identified.

4. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the development-related net capital costs between the residential and non-residential sectors. This is done using apportionments for different services in accordance with the demands placed and the benefits derived.

Where reasonable data exist, the apportionment is based on the expected demand for, and use of, the service by sector (e.g. shares of population in new units and employment).

Finally, the residential component of the Town-wide development charge is applied to different housing types on the basis of average occupancy factors. The non-residential component is applied on the basis of gross building space in square metres.

5. Final Adjustment

The final determination of the development charge results from adjustments made to development-related net capital costs for each service and sector resulting from the application of any unallocated reserve fund balances. A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the *DCA*.

III DEVELOPMENT FORECAST

This section provides the basis for the development forecasts used in calculating the development charges, as well as a summary of the forecast results. A more detailed summary of the forecasts, including tables illustrating historical trends and forecast results is provided in Appendix A.

A. RESIDENTIAL FORECAST

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the *population growth*¹ as well as the *population in new units* is required.

- The population growth determines the need for additional facilities and provides the foundation for the development-related capital program.
- When calculating the development charge, however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This population in new units represents the population from which development charges will be collected.

Table 1 provides a summary of the residential forecast over the ten-year planning period, from 2016 to 2025. As noted in Section II, for development charge calculation purposes, the ten-year planning period is applicable to all non-engineering services. The longer-term development forecast to 2036 has been utilized in the calculation of certain Town-wide and area-specific development charges, which is shown on Table 2.

The Town's Census population is expected to increase by about 5,980 people over the next ten years, reaching approximately 51,430 by 2025. About 2,605 additional dwelling units are forecast to be built between 2016 and 2025 and the population residing in these units is expected to increase by 7,225.

Between 2016 and 2036, the Town of Georgina is forecast grow by 17,900 people, reaching a population in 2036 of 63,355. The Town anticipates adding an additional 7,340 residential dwelling units with an associated population growth of almost 20,070.

¹ Commonly referred to as "net population growth" in the context of development charges.

Of the total Town-wide population growth in new units between 2016 and 2036, it is anticipated that 13 per cent will occur in Sutton, 66 per cent in Keswick and 9 per cent in the Sutton High Street Sewer service areas. Therefore, the population in new dwelling units in Sutton over the long-term planning period is expected to grow by 4,240 (including both Sutton and Sutton High Street Sewer Area). In Keswick, the population growth is forecast at 13,300 and in the High Street Sewer Area of Sutton, a population growth in new dwelling units of 1,730 is anticipated. The remaining development is forecast to occur throughout the rest of the Town.

B. NON-RESIDENTIAL FORECAST

Development charges are levied on non-residential development as a charge per square metre of GFA.

The non-residential forecast projects an increase of approximately 4,170 employees to 2025, which will be accommodated in 290,040 square metres of new non-residential building space. To 2036, the Town anticipates adding 746,965 square metres of building space, which will be occupied by approximately 10,950 new employees.

Tables 1 and 2 also provide a summary of the non-residential development forecasts used in this analysis.

TABLE 1

**TOWN OF GEORGINA
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
TOWN-WIDE DEVELOPMENT FORECAST**

Town-wide Development Forecast	2015 Estimate	General Services Planning Period 2016 - 2025		Long-Term Planning Period 2016 - 2036	
		Growth	Total at 2025	Growth	Total at 2036
Residential					
Total Occupied Dwellings	16,663	2,604	19,267	7,337	24,000
Total Population					
Census	45,450	5,977	51,427	17,903	63,354
<i>Population In New Dwellings</i>		7,225		20,070	
Non-Residential					
Total Employment	8,718	4,169	12,887	10,952	19,670
Non-Residential Building Space (sq.m.)		290,040		746,965	

TABLE 2

**TOWN OF GEORGINA
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
AREA SPECIFIC DEVELOPMENT FORECAST**

Area-Specific Development Forecast	Long-Term Planning Period 2016- 2036 Growth
Residential	
Population Growth in New Dwellings	
<i>Sutton</i>	4,243
<i>Keswick</i>	13,304
<i>Sutton High Street Sewer</i>	1,732
<i>Remainder of Town</i>	791
Non-Residential	
Total Employment	
<i>Sutton</i>	691
<i>Keswick</i>	9,916
<i>Sutton High Street Sewer</i>	-
<i>Remainder of Town</i>	345
Non-Residential Building Space (sq.m.)	
<i>Sutton</i>	47,106
<i>Keswick</i>	676,306
<i>Sutton High Street Sewer</i>	-
<i>Remainder of Town</i>	23,553

IV SUMMARY OF HISTORICAL CAPITAL SERVICE LEVELS

The *DCA* and *Ontario Regulation 82/98* require that development charges be set at a level no higher than the average level of service provided in the municipality over the ten-year period immediately preceding the preparation of the Background Study, on a service by service basis.

For non-engineered services (library, parks and recreation, etc.) the legislative requirement is met by documenting historical service levels for the preceding ten years, in this case, for the period from 2006 to 2015. Typically, service levels for non-engineered services are measured as a ratio of inputs per capita, or per population plus employment.

O. Reg. 82/98 requires that when determining historical service levels, both quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet per capita. The qualitative aspect is introduced by the consideration of the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of dollars per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be charged to new development reflect not only the quantity (number and size) but also the quality (value or replacement cost) of service provided historically by the Town. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information provided by municipal staff, based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure as of 2015.

The service levels are expressed as a dollar value per capita or a dollar value per capita plus employment of infrastructure value. This service level expression is a construction to meet the requirement of Section 5(1) of the *DCA* and does not necessarily directly reflect the utilization of infrastructure or the way municipalities plan for services.

Table 3 summarizes service levels for all applicable services included in the development charge calculation. Appendix B provides the detailed historical inventory data upon which the calculation of service levels for the general services is based.

TABLE 3

**TOWN OF GEORGINA
SUMMARY OF AVERAGE HISTORIC SERVICE LEVELS 2006 - 2015**

Service	2006 - 2015 Service Level Indicator
1.0 LIBRARY SERVICES Buildings Land Collection Materials Furniture And Equipment	\$374.23 per capita \$238.29 per capita \$6.26 per capita \$84.18 per capita \$45.50 per capita
2.0 FIRE AND EMERGENCY SERVICES Buildings Land Furniture & Equipment Vehicles	\$355.41 per population & employment \$129.69 per population & employment \$7.09 per population & employment \$42.28 per population & employment \$176.35 per population & employment
3.0 PARKS AND RECREATION Indoor Recreation Parkland Development Park Amenities Park Buildings & Equipment	\$3,537.34 per capita \$2,083.23 per capita \$1,105.01 per capita \$236.02 per capita \$113.08 per capita
4.0 OPERATIONS Buildings Land Furniture And Equipment Fleet & Related Equipment	\$207.92 per population & employment \$73.59 per population & employment \$30.71 per population & employment \$5.49 per population & employment \$98.13 per population & employment
5.0 ROADS AND RELATED Roads Bridges & Culverts Sidewalks	\$6,834.96 per population & employment \$6,264.43 per population & employment \$279.09 per population & employment \$291.44 per population & employment

V THE DEVELOPMENT-RELATED CAPITAL FORECAST

The *DCA* requires the Council of a municipality to express its intent to provide future capital facilities at the level reflected by the capital program incorporated in the development charges calculation and recovered through the proposed rates. As noted in Section II, *Ontario Regulation 82/98*, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

A. A DEVELOPMENT-RELATED CAPITAL FORECAST IS PROVIDED FOR COUNCIL'S APPROVAL

Based on the development forecasts summarized in Section III and detailed in Appendix A, municipal staff, in collaboration with the consultants have created a development-related capital forecast setting out those projects that are required to service anticipated development. For all Town-wide general services, the capital plan covers the ten-year period from 2016 to 2025. As permitted by the *DCA*, s. 5 (1) 4., the development charges for municipal-wide and area-specific engineered services is based on ultimate development.

One of the recommendations contained in this Background Study is for Council to adopt the capital forecast created for the purposes of the development charges calculation. It is assumed that future capital budgets and forecasts will continue to bring forward the development-related projects contained herein, that are consistent with the development occurring in Georgina. It is acknowledged that changes to the forecast presented herein may occur through the Town's normal capital budget process.

B. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR GENERAL SERVICES

A summary of the development-related capital forecast for general services is presented in Table 4.

TABLE 4

TOWN OF GEORGINA
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR GENERAL SERVICES 2016 - 2025
(in \$000)

Service	Gross Cost	Grants/ Subsidies	Municipal Cost	Total Net Capital Program									
				2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1.0 LIBRARY SERVICES	\$3,486.7	\$0.0	\$3,486.7	\$50.3	\$3,034.0	\$50.3	\$50.3	\$50.3	\$50.3	\$50.3	\$50.3	\$50.3	\$50.3
1.1 Buildings, Land & Materials	\$3,486.7	\$0.0	\$3,486.7	\$50.3	\$3,034.0	\$50.3	\$50.3	\$50.3	\$50.3	\$50.3	\$50.3	\$50.3	\$50.3
2.0 FIRE AND EMERGENCY SERVICES	\$16,743.5	\$0.0	\$16,743.5	\$0.0	\$0.0	\$0.0	\$0.0	\$6,943.5	\$0.0	\$7,800.0	\$0.0	\$0.0	\$2,000.0
2.1 Additional Fire Hall Space	\$14,625.0	\$0.0	\$14,625.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,875.0	\$0.0	\$7,800.0	\$0.0	\$0.0	\$1,950.0
2.2 New Vehicles & Equipment for South Keswick Station	\$1,978.5	\$0.0	\$1,978.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1,978.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.3 Development-Related Equipment	\$140.0	\$0.0	\$140.0	\$0.0	\$0.0	\$0.0	\$0.0	\$90.0	\$0.0	\$0.0	\$0.0	\$0.0	\$50.0
3.0 PARKS AND RECREATION	\$39,392.3	\$60.0	\$39,332.3	\$3,810.0	\$870.0	\$870.0	\$870.0	\$28,562.3	\$870.0	\$870.0	\$870.0	\$870.0	\$870.0
3.1 Indoor Recreation: The Link Community Centre	\$3,000.0	\$60.0	\$2,940.0	\$2,940.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.2 Indoor Recreation: Multi-Use Recreation Centre	\$27,692.3	\$0.0	\$27,692.3	\$0.0	\$0.0	\$0.0	\$0.0	\$27,692.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.3 Trails & Parkland Development	\$8,700.0	\$0.0	\$8,700.0	\$870.0	\$870.0	\$870.0	\$870.0	\$870.0	\$870.0	\$870.0	\$870.0	\$870.0	\$870.0
4.0 OPERATIONS	\$2,970.2	\$0.0	\$2,970.2	\$1,198.8	\$0.0	\$600.0	\$0.0	\$325.0	\$406.7	\$0.0	\$100.0	\$0.0	\$339.7
4.1 Recovery of Negative DC Reserve Fund Balance	\$792.1	\$0.0	\$792.1	\$792.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.2 Operations Buildings, Land, Equipment	\$125.0	\$0.0	\$125.0	\$0.0	\$0.0	\$0.0	\$0.0	\$125.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.3 Roads and Related Fleet	\$1,319.1	\$0.0	\$1,319.1	\$339.7	\$0.0	\$0.0	\$0.0	\$200.0	\$339.7	\$0.0	\$100.0	\$0.0	\$339.7
4.4 Water and Wastewater Vehicles	\$734.0	\$0.0	\$734.0	\$67.0	\$0.0	\$600.0	\$0.0	\$0.0	\$67.0	\$0.0	\$0.0	\$0.0	\$0.0
5.0 GENERAL GOVERNMENT	\$550.0	\$0.0	\$550.0	\$25.0	\$25.0	\$25.0	\$25.0	\$235.0	\$25.0	\$25.0	\$25.0	\$25.0	\$115.0
5.1 Development-Related Studies	\$550.0	\$0.0	\$550.0	\$25.0	\$25.0	\$25.0	\$25.0	\$235.0	\$25.0	\$25.0	\$25.0	\$25.0	\$115.0
TOTAL - GENERAL SERVICES	\$63,142.7	\$60.0	\$63,082.7	\$5,084.1	\$3,929.0	\$1,545.3	\$945.3	\$36,116.1	\$1,352.0	\$8,745.3	\$1,045.3	\$945.3	\$3,375.0

The table provides a total for all general services analysed over the ten-year planning period. Further details on the capital plans for each individual service category are available in Appendix B.

The development-related capital forecast for general services estimates a total gross cost of \$63.14 million. Alternative funding sources have been identified in the amount of \$60,000 and account for contributions from upper levels of government towards the renovation of The Link community hub. Therefore, the net municipal cost of the capital program is reduced to \$63.08 million.

Of the \$63.08 million ten-year net municipal capital costs for general services, \$39.33 million (62 per cent) is related to the Parks and Recreation capital program. The program includes the construction of a new recreation facility, the Multi-Use Recreation Centre (MURC), a share of The Link community hub renovations, as well as a provision for additional development related parkland and park amenities projects throughout the ten-year planning period.

The Fire and Emergency Services capital program represents approximately 27 per cent (\$16.74 million) of the total forecast and provides for the construction of new fire halls, associated vehicle and equipment acquisitions, as well as bunker gear for 20 additional firefighters.

The next largest part of the general services forecast is the Library Services capital program. The program totals \$3.50 million, or 5 per cent, and provides for the construction of new library space in the Town, which will be located in the new MURC. Also included in the forecast are additional collection materials to service the population of Georgina as it grows.

The capital program associated with Operations amounts to \$2.97 million, or 5 per cent, and includes additional bays, hoists, fleet associated with roads, water and wastewater servicing, as well as the recovery of a negative DC reserve fund balance.

The remainder of the capital forecast totals \$550,000 and accounts for almost 1 per cent of the total program for general services. The General Government program includes various development-related studies, including an update to the Library Master Plan, planning and development studies, and two future development charges studies.

It is not implied that all of these costs are to be recovered from new development by way of development charges (see Section VI for the method and determination of net capital costs attributable to development). Portions of this capital forecast may relate to providing servicing for development which has occurred prior to 2016 (for which development charge reserve fund balances exist), for replacement of existing capital facilities or for development anticipated to occur beyond the 2016–2025 planning period. In addition, the amounts shown on Table 4 have not been reduced by 10 per cent for various “soft” (or general) services as mandated by s. 5 (1) 8. of the *DCA*.

C. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR TOWN-WIDE ENGINEERED SERVICES

Table 5 provides the development-related capital recoveries for the Town-wide engineered services of roads and related and stormwater management. The Town-wide capital program totals \$1.70 million and provides servicing for anticipated development over the longer-term planning period from 2016 to 2036. Further details on the capital plans for each individual service category are available in Appendix C.

No grants, subsidies or alternative funding sources have been identified for the capital projects and, as such, the remaining net cost of \$1.70 million is the cost to be paid by the Town. 88 per cent, or \$1.50 million of the net capital program is associated with development-related roads and related projects. The Town-wide capital program includes a general provision for development-related works to the town-wide road network.

The remainder of the capital forecast includes \$200,000, or 12 per cent for the Town-wide stormwater management capital program. The forecast includes a stormwater management study to identify future servicing requirements.

D. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR AREA-SPECIFIC SERVICES

Table 6 provides the area-specific development-related capital recoveries for roads, water and sewer works in the Keswick, Sutton and Sutton High Street Sewer, Services Areas. The capital program totals \$9.78 million and provides servicing for anticipated development over the longer-term planning period from 2016 to 2036.

Further details on the capital plans for each individual service category in the servicing areas are available in Appendices D to F.

The development-related capital program for the Keswick Service Area totals \$6.43 million, or 66 per cent of the total program. The program includes the construction of a new road segment on Dovedale Drive, urbanization of the Queensway North, as well as various trunk sewers and trunk mains throughout the service area.

The Sutton High Street Sewer capital program provides development-related sewer works and totals \$2.21 million, or 23 per cent.

The remainder of the area-specific capital program relates to roads and water servicing projects in the Sutton service area. The program totals \$1.15 million, 12 per cent, and includes a road main and sidewalk project along Black River Road, as well as a watermain on High Street.

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TABLE 5

**TOWN OF GEORGINA
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR TOWN-WIDE ENGINEERED SERVICES 2016 - 2036
(in \$000)**

Service	Gross Cost	Grants / Subsidies	Net Municipal Cost
TOWN-WIDE CAPITAL PROGRAMS			
1.0 TOWN-WIDE ROADS AND RELATED	\$1,500.0	\$0.0	\$1,500.0
1.1 Town-Wide Roads	\$1,500.0	\$0.0	\$1,500.0
2.0 TOWN-WIDE STORMWATER MANAGEMENT	\$200.0	\$0.0	\$200.0
2.1 Town-Wide Stormwater Management	\$200.0	\$0.0	\$200.0
Total Town-Wide Engineered Services Capital Program	\$1,700.0	\$0.0	\$1,700.0

TABLE 6

TOWN OF GEORGINA
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR AREA-SPECIFIC ENGINEERED SERVICES 2016 - 2036
(in \$000)

Service	Gross Cost	Grants / Subsidies	Net Municipal Cost
1.0 KESWICK SERVICE AREA	\$6,427.0	\$0.0	\$6,427.0
1.1 Keswick Service Area - Roads	\$3,580.0	\$0.0	\$3,580.0
1.2 Keswick Service Area - Water & Sewerage	\$2,847.0	\$0.0	\$2,847.0
2.0 SUTTON SERVICE AREA	\$1,151.0	\$0.0	\$1,151.0
2.1 Engineered Services	\$1,151.0	\$0.0	\$1,151.0
3.0 SUTTON HIGH STREET SEWER SERVICE AREA	\$2,205.0	\$0.0	\$2,205.0
3.1 Engineered Services	\$2,205.0	\$0.0	\$2,205.0
Total Area-Specific Engineered Services Capital Program	\$9,783.0	\$0.0	\$9,783.0

VI PROPOSED DEVELOPMENT CHARGES ARE CALCULATED IN ACCORDANCE WITH THE *DCA*

This section summarizes the calculation of development charges for each service category and the resulting total charges by sector. For all municipal services, the calculation of the “unadjusted” per capita (residential) and per square metre (non-residential) charges is reviewed. Adjustments to these amounts resulting from a cash flow analysis that takes interest earnings and borrowing costs into account are also discussed.

For residential development, the adjusted total per capita amount is converted to a variable charge by housing unit type using various unit occupancy factors. For non-residential development, the charges are based on gross floor area of building space.

It is noted that the calculation of the Town-wide development charges does not include any provision for exemptions required under the *DCA*, such as the exemption from the payment of DCs for industrial buildings. Such legislated exemptions, or other exemptions that Council may choose to provide, will result in loss of DC revenue for the affected types of development. However, any such revenue loss may not be made up by offsetting increases in other portions of the calculated charge.

A. TOWN-WIDE AND AREA-SPECIFIC DEVELOPMENT CHARGES CALCULATION

A summary of the “unadjusted” residential and non-residential development charges is presented in Tables 7, 8 and 9 for Town-wide general and engineered services and area-specific services, respectively. Further details of the calculations for each individual service category are available in Appendices B to F.

1. General Services

A summary of the “unadjusted” residential and non-residential development charges for the Town-wide general services is presented in Table 7.

The net capital forecast for the general services totals \$63.08 million and incorporates those projects identified to be related to the development anticipated in the next ten years. However, not all of the capital costs are to be recovered from new development by way of DCs. As shown on Table 7, \$8.57 million relates to replacement of existing capital facilities or for shares of projects that provide benefit

to the existing community. These portions of capital costs will have to be funded from non-development charge revenue sources, largely property taxes for this group of services.

The *DCA*, s. 5 (1) 8 requires that development-related net capital costs for general services be reduced by ten per cent in calculating the applicable development charges. The discount does not apply to the protection services or services related to a highway (Operations). The ten per cent share of development-related net capital costs not included in the development charge calculations must be funded from non-development charge sources. In total, about \$4.08 million is identified as the required ten per cent reduction.

An additional share of \$3.15 million has been identified as available development charges reserve funds and represents the revenue collected from previous DCs. This portion has been netted out of the chargeable capital costs. A share of \$21.35 million, or 34 per cent of the forecast is attributable to development beyond 2025. This development-related share has been removed from the calculation and may therefore be recovered under future development charge studies.

The total costs eligible for recovery through development charges for general services is \$25.94 million. This amount is allocated between the residential and non-residential sectors to derive the unadjusted development charges. Library and Parks and Recreation are deemed to benefit residential development only, while the remaining services are allocated between both sectors based on shares of population in new units and employment growth over the next ten years. The allocation to the residential sector for these services is calculated at 63 per cent and 37 per cent to the non-residential sector.

Approximately \$23.80 million of the general services development charges eligible capital program is deemed to benefit residential development. When this amount is divided by the ten-year growth in population in new dwelling units (7,225), an unadjusted charge of \$3,294.52 per capita results. The non-residential share totals \$2.13 million, which yields an unadjusted charge of \$7.35 per square metre when divided by the ten-year increase in non-residential building space (290,040 square metres).

2. Town-Wide Engineered Services

Table 8 displays the calculation of the development charge rates for the Town-wide engineered services of roads and related infrastructure, water and stormwater management. The development-related Town-wide engineering infrastructure will be used to service development within the Town to 2036.

Of the total net municipal cost of all Town-wide engineered services development-related projects, \$1.70 million, not all are to be recovered from new development by way of development charges. Table 8 shows that no shares of the capital program relate to replacement of existing capital works or for shares of projects that provide

benefit development beyond 2036. Available reserve funds, \$1.02 million, have also been removed from the development charges calculation. The remaining \$680,800 is related to development in the 2016 to 2036 planning period and has been included in the development charge calculation.

As with the general services, the capital program eligible for recovery through development charges is allocated to the residential and non-residential sectors based on future shares of population in new units and employment growth over the planning period. On this basis, the allocation to the residential and non-residential sectors is calculated at 65 per cent and 35 per cent, respectively.

As a result, \$440,500 of the engineered services capital program is deemed to benefit residential development. When this amount is divided by the long-term growth in population in new dwelling units (20,070), a charge of \$21.95 per capita is the result.

The non-residential share totals \$240,400 and, when this amount is divided by the long-term forecast of non-residential space growth (746,965 square metres) a charge of \$0.32 per square metre results.

3. Area-Specific Services

A summary of the area-specific development charge capital programs for the Keswick, Sutton, and Sutton High Street Sewer Service Areas are shown on Table 9. The table shows the development-related net capital costs for area-specific services amount to \$9.78 million.

Approximately 40 per cent of the capital programs for all service areas account for the replacement or benefit to existing shares. These shares total \$4.05 million and related to the benefit of previously constructed works for the existing community.

Available DC reserve funds in the amount of \$1.65 million represent the DC monies that have been collected and used to partially fund the recovery of ongoing development-related projects. These funds have been netted out of the share to be included in the calculation of development charges. No post-period benefit shares have been identified for these projects.

The share of the area-specific capital programs eligible for recovery through development charges is allocated to the residential and non-residential sectors based on future shares of population in new units and employment growth over the planning period within that service area. On this basis, the allocation to the residential and non-residential sectors in Keswick is calculated at 57 per cent and 43 per cent, respectively. The allocation in Sutton is 86 per cent residential and 14 per cent non-residential. In the Sutton High Street Sewer Service Area, 100 per cent of costs are allocated to the residential sector.

As a result, \$999,100 of the engineered services capital program is deemed to benefit residential development in the Keswick area. When this amount is divided by the

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TABLE 7

**TOWN OF GEORGINA
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
10-YEAR CAPITAL PROGRAM FOR GENERAL SERVICES**

10 Year Growth in Population in New Units	7,225
10 Year Growth in Square Metres	290,040

Service	Development-Related Capital Program (2016 - 2025)									
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Required Service Discount (\$000)	Available DC Reserves (\$000)	Post-2025 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential Share		Non-Residential Share	
							%	(\$000)	%	(\$000)
1.0 LIBRARY SERVICES	\$3,486.7	\$0.0	\$348.7	\$766.2	\$358.8	\$2,013.0	100%	\$2,013.0	0%	\$0.0
Unadjusted Development Charge Per Capita								\$278.62		
Unadjusted Development Charge Per Sq.M										\$0.00
2.0 FIRE AND EMERGENCY SERVICES	\$16,743.5	\$6,000.0	\$0.0	\$1,071.5	\$6,365.7	\$3,306.3	63%	\$2,096.6	37%	\$1,209.8
Unadjusted Development Charge Per Capita								\$290.18		
Unadjusted Development Charge Per Sq.M										\$4.17
3.0 PARKS AND RECREATION	\$39,332.3	\$2,499.0	\$3,683.3	\$1,290.9	\$13,764.3	\$18,094.8	100%	\$18,094.8	0%	\$0.0
Unadjusted Development Charge Per Capita								\$2,504.47		
Unadjusted Development Charge Per Sq.M										\$0.00
4.0 OPERATIONS	\$2,970.2	\$0.0	\$0.0	\$0.0	\$860.8	\$2,109.4	63%	\$1,337.6	37%	\$771.8
Unadjusted Development Charge Per Capita								\$185.13		
Unadjusted Development Charge Per Sq.M										\$2.66
6.0 GENERAL GOVERNMENT	\$550.0	\$70.0	\$48.0	\$20.5	\$0.0	\$411.5	63%	\$261.0	37%	\$150.6
Unadjusted Development Charge Per Capita								\$36.12		
Unadjusted Development Charge Per Sq.M										\$0.52
TOTAL 10 YEAR GENERAL SERVICES	\$63,082.7	\$8,569.0	\$4,080.0	\$3,149.0	\$21,349.7	\$25,935.0		\$23,802.9		\$2,132.2
Unadjusted Development Charge Per Capita								\$3,294.52		
Unadjusted Development Charge Per Sq.M										\$7.35

**TOWN OF GEORGINA
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CAPITAL PROGRAM FOR MUNICIPAL-WIDE ENGINEERED SERVICES
2016 - 2036**

Long-Term Growth in Population in New Units	20,070
Long-Term Growth in Square Meters	746,965

Service	Development-Related Capital Program (2016 - 2036)								
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Available DC Reserves (\$000)	Post-Period Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential Share		Non-Residential Share	
						%	(\$000)	%	(\$000)
1.0 TOWN-WIDE ROADS AND RELATED	\$1,500.0	\$0.0	\$1,019.2	\$0.0	\$480.8	65%	\$311.1	35%	\$169.8
Development Charge Per Capita							\$15.50		
Development Charge Per Sq.M									\$0.23
2.0 TOWN-WIDE STORMWATER MANAGEMENT	\$200.0	\$0.0	\$0.0	\$0.0	\$200.0	65%	\$129.4	35%	\$70.6
Development Charge Per Capita							\$6.45		
Development Charge Per Sq.M									\$0.09
TOTAL MUNICIPAL-WIDE ENGINEERED SERVICES	\$1,700.0	\$0.0	\$1,019.2	\$0.0	\$680.8		\$440.5		\$240.4
Development Charge Per Capita							\$21.95		
Development Charge Per Sq.M									\$0.32

TOWN OF GEORGINA
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CAPITAL PROGRAM FOR AREA-SPECIFIC ENGINEERED SERVICES
2016 - 2036

Long-Term Growth in Population in New Units	
<i>Keswick Service Area</i>	13,304
<i>Sutton Service Area</i>	4,243
<i>Sutton High Street Service Area</i>	1,732
Long-Term Growth in Square Meters	
<i>Keswick Service Area</i>	676,306
<i>Sutton Service Area</i>	47,106
<i>Sutton High Street Service Area</i>	-

Service	Development-Related Capital Program (2016 - 2036)								
	Net Municipal Cost	Replacement & Benefit to Existing	Available DC Reserves	Post-Period Benefit	Total DC Eligible Costs for Recovery	Residential Share		Non-Residential Share	
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	%	(\$000)	%	(\$000)
1.0 KESWICK SERVICE AREA	\$6,427.0	\$3,635.3	\$1,047.9	\$0.0	\$1,743.9	57%	\$999.1	43%	\$744.7
Development Charge Per Capita							\$75.10		
Development Charge Per Sq.M									\$1.10
2.0 SUTTON SERVICE AREA	\$1,151.0	\$417.8	\$213.8	\$0.0	\$519.5	86%	\$446.8	14%	\$72.7
Development Charge Per Capita							\$105.28		
Development Charge Per Sq.M									\$1.54
3.0 SUTTON HIGH STREET SEWER SERVICE AREA	\$2,205.0	\$0.0	\$387.1	\$1,147.7	\$670.2	100%	\$670.2	0%	\$0.0
Development Charge Per Capita							\$387.00		
Development Charge Per Sq.M									\$0.00
TOTAL AREA-SPECIFIC ENGINEERED SERVICES	\$9,783.0	\$4,053.0	\$1,648.8	\$1,147.7	\$2,933.5		\$2,116.1		\$817.4

long-term growth in population in new dwelling units (13,304), a charge of \$75.10 per capita is the result. In Sutton, the residential share totals \$446,800, which results in a charge of \$105.28 per capita when divided by the anticipated population growth in new units within that area (4,243). The development related costs for the Sutton High Street sewer of \$670,200 are allocated to the ten-year population growth of 1,732, which results in an unadjusted charge of \$387.00 per capita.

The non-residential share totals \$744,700 in Keswick and, when this amount is divided by the local long-term forecast of non-residential space growth (676,306 square metres) a charge of \$1.10 per square metre results. The non-residential share in Sutton totals \$72,700 and results in a charge of \$1.54 per square metre when divided by the 47,106 square metres of new non-residential building space within that area. No non-residential charge is calculated for Sutton High Street Sewer area.

4. Adjusted Town-Wide Residential and Non-Residential Development Charges

Final adjustments to the “unadjusted” development charge rates are made through a cash flow analysis for the general services only. The analysis, details of which are included in the appendices, considers the borrowing cost and interest earnings associated with the timing of expenditures and development charge receipts for each service category. The Town-wide and area-specific engineered services were not subject to the cash flow analysis as the timing for certain projects is unknown. This is consistent with the Town’s current practice.

Table 10 summarizes the results of the cash flow adjustments for the Town-wide residential development charges rates. The adjusted per capita rate increases by \$184.24 from \$3,316.47 per capita to \$3,500.71 per capita after the cash flow analysis for the Town-wide residential charge.

Residential development charges are proposed to vary by dwelling unit type to reflect their different occupancy factors and resulting demand for municipal services, as shown on Table 10, the calculated charge for a single or semi-detached unit is \$10,469 per unit, \$8,434 for a row or other type of multiple unit, \$7,353 for a large apartment (650 square feet or larger), and \$5,074 for a small apartment (less than 650 square feet). It should be noted that, under the current DC by-law, the apartment charges are differentiated based on the number of bedrooms. The draft by-law included in this study proposes to adjust the method of differentiation based on square footage to be consistent with the DC practice of the Region of York.

The Town-wide non-residential development charge experiences an increase after cash flow considerations of \$0.49, from \$7.67 to \$8.16 per square metre for development anywhere in the Town. These charges are displayed on Table 11.

5. Area-Specific Charges

The calculated area specific development charges are presented in Table 12. These charges are to be levied in addition to the Town-wide development charges shown in Tables 10 and 11.

The area specific development charges in Keswick total \$225 per single or semi-detached unit, \$181 for all rows and other multiple units, \$158 for a large apartment and \$109 per small apartment unit. The non-residential charge applicable in Keswick is \$1.10 per square metre.

The area specific charge for a single or semi-detached unit located within Sutton is \$315 per unit, \$254 for a row or other type of multiple unit, \$221 per large apartment and \$153 for a small apartment unit. The non-residential charge applicable to development within this area is \$1.54 per square metre.

Finally, the charges applicable to development benefitting from the High Street Sewer total \$1,157 per single and semi-detached unit, \$932 for a row or other multiple residential unit, \$813 per large apartment and \$561 for a small apartment unit. No non-residential development charges have been calculated for development within this service area.

TABLE 10

**TOWN OF GEORGINA
TOWN-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES**

Service	Unadjusted Charge Per Capita	Adjusted Charge After Cashflow Per Capita	Charge By Unit Type ⁽¹⁾			
			Single & Semi- Detached	Rows & Other Multiples	Apartments	
					≥650 sq.ft.	<650 sq.ft.
Library Services	\$278.62	\$309.30	\$925	\$745	\$650	\$448
Fire And Emergency Services	\$290.18	\$304.30	\$910	\$733	\$639	\$441
Parks And Recreation	\$2,504.47	\$2,619.56	\$7,834	\$6,311	\$5,501	\$3,798
Operations	\$185.13	\$209.50	\$627	\$505	\$440	\$304
General Government	\$36.12	\$36.10	\$108	\$87	\$76	\$52
Total General Services	\$3,294.52	\$3,478.76	\$10,404	\$8,381	\$7,306	\$5,043
Town-Wide Roads And Related	\$15.50	\$15.50	\$46	\$37	\$33	\$22
Town-Wide Stormwater Management	\$6.45	\$6.45	\$19	\$16	\$14	\$9
TOTAL TOWN-WIDE CHARGE BY UNIT TYPE	\$3,316.47	\$3,500.71	\$10,469	\$8,434	\$7,353	\$5,074
(1) Based on Persons Per Unit Of:			2.99	2.41	2.10	1.45

TABLE 11

**TOWN OF GEORGINA
TOWN-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Non-Residential	
	Unadjusted Charge (\$/sq.m)	Adjusted Charge (\$/sq.m)
Library Services	\$0.00	\$0.00
Fire And Emergency Services	\$4.17	\$4.33
Parks And Recreation	\$0.00	\$0.00
Operations	\$2.66	\$2.99
General Government	\$0.52	\$0.52
Total General Services	\$7.35	\$7.84
Town-Wide Roads And Related	\$0.23	\$0.23
Town-Wide Stormwater Management	\$0.09	\$0.09
TOTAL TOWN-WIDE CHARGE PER SQ.M	\$7.67	\$8.16

TABLE 12
TOWN OF GEORGINA
CALCULATED DEVELOPMENT CHARGES BY UNIT TYPE & SERVICE AREA

Service	Residential Charge by Unit Type				Non-Residential Charge (\$/sq.m)
	Single & Semi-Detached	Rows & Other Multiples	Apartments		
			≥650 sq.ft.	<650 sq.ft.	
Keswick Service Area	\$225	\$181	\$158	\$109	\$1.10
Sutton Service Area	\$315	\$254	\$221	\$153	\$1.54
Sutton High Street Sewer	\$1,157	\$932	\$813	\$561	N/A
(1) Based on Persons Per Unit Of:					
	2.99	2.41	2.10	1.45	

VII COMPARISON OF CALCULATED AND CURRENT DEVELOPMENT CHARGES

Tables 13 and 14 present a comparison of the newly calculated residential and non-residential development charges with the Town's current charges as at January 4, 2016.

Table 13 shows that the calculated Town-wide residential development charge single or semi-detached unit is increasing by \$3,356 over the current charge of \$7,113 currently in force. The total calculated residential charge applied to development in Keswick of \$10,694 per single detached unit represents a \$3,518 increase from the current combined charge of \$7,176. In Sutton, the calculated charge of \$10,784 is \$3,648 more than the charge currently in force of \$7,136. The calculated charge to be levied on development benefitting from the Sutton High Street Sewer infrastructure is \$3,264 per unit greater than the current charge of \$8,362 in force.

The comparison of calculated non-residential development charges with current rates is shown on Table 14. The calculated Town-wide charge of \$8.16 per square metre is \$3.86 more than the current charge of \$4.31. The non-residential rate calculated for Keswick of \$9.26 is \$4.53 greater than the current rate in force of \$4.74 per square metre. Similarly, the \$9.71 per square metre calculated for development in Sutton represents an increase of \$5.29 over the current charge of \$4.41 per square metre in force.

TABLE 13

**TOWN OF GEORGINA
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES BY SERVICE AREA**

Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	
Library Services	\$133	\$925	\$792	597%
Fire And Emergency Services	\$459	\$910	\$451	98%
Parks And Recreation	\$6,264	\$7,834	\$1,570	25%
Operations	\$17	\$627	\$610	3677%
General Government	\$169	\$108	(\$61)	-36%
Total General Services	\$7,041	\$10,404	\$3,363	48%
Town-Wide Roads And Related	\$72	\$46	(\$26)	-36%
Town-Wide Stormwater Management	\$0	\$19	\$19	N/A
TOTAL TOWN-WIDE CHARGE BY UNIT TYPE	\$7,113	\$10,469	\$3,356	47%

Keswick				
Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	
Town-Wide Charge	\$7,113	\$10,469	\$3,356	47%
Keswick Service Area	\$63	\$225	\$162	257%
TOTAL DEVELOPMENT CHARGE FOR DEVELOPMENT IN KESWICK	\$7,176	\$10,694	\$3,518	49%

Sutton				
Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	
Town-Wide Charge	\$7,113	\$10,469	\$3,356	47%
Sutton Service Area	\$23	\$315	\$292	1270%
TOTAL DEVELOPMENT CHARGE FOR DEVELOPMENT IN SUTTON	\$7,136	\$10,784	\$3,648	51%

Sutton High Street Sewer				
Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	
Town-Wide Charge	\$7,113	\$10,469	\$3,356	47%
Sutton High Street Sewer	\$1,249	\$1,157	(\$92)	-7%
TOTAL DEVELOPMENT CHARGE IN THE SUTTON HIGH STREET SEWER AREA	\$8,362	\$11,626	\$3,264	39%

TABLE 14

**TOWN OF GEORGINA
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES BY SERVICE AREA**

Service	Current Non-Residential Charge / SQ.M	Calculated Non-Residential Charge / SQ.M	Difference in Charge
Library Services	\$0.00	\$0.00	\$0.00
Fire And Emergency Services	\$2.83	\$4.33	\$1.50
Parks And Recreation	\$0.00	\$0.00	\$0.00
Operations	\$0.11	\$2.99	\$2.88
General Government	\$1.02	\$0.52	(\$0.50)
Total General Services	\$3.97	\$7.84	\$3.87
Town-Wide Roads And Related	\$0.34	\$0.23	(\$0.11)
Town-Wide Stormwater Management	\$0.00	\$0.09	\$0.09
TOTAL TOWN-WIDE CHARGE PER SQ.M.	\$4.31	\$8.16	\$3.86

Keswick			
Service	Current Non-Residential Charge / SQ.M	Calculated Non-Residential Charge / SQ.M	Difference in Charge
Town-Wide Charge	\$4.31	\$8.16	\$3.86
Keswick Service Area	\$0.43	\$1.10	\$0.67
TOTAL DEVELOPMENT CHARGE FOR DEVELOPMENT IN KESWICK	\$4.74	\$9.26	\$4.53

Sutton			
Service	Current Non-Residential Charge / SQ.M	Calculated Non-Residential Charge / SQ.M	Difference in Charge
Town-Wide Charge	\$4.31	\$8.16	\$3.86
Sutton Service Area	\$0.11	\$1.54	\$1.44
TOTAL DEVELOPMENT CHARGE FOR DEVELOPMENT IN SUTTON	\$4.41	\$9.71	\$5.29

Note: No area-specific non-residential charge calculated or currently levied for the Sutton High Street Sewer area

Sutton High Street Sewer			
Service	Current Non-Residential Charge / SQ.M	Calculated Non-Residential Charge / SQ.M	Difference in Charge
Town-Wide Charge	\$4.31	\$8.16	\$3.86
Sutton High Street Sewer	\$0.00	\$0.00	\$0.00
TOTAL DEVELOPMENT CHARGE IN THE SUTTON HIGH STREET SEWER AREA	\$4.31	\$8.16	\$3.86

VIII LONG-TERM CAPITAL AND OPERATING COSTS

This section provides a brief examination of the long-term capital and operating costs for the capital facilities and infrastructure to be included in the Development Charges By-law. This examination is required as one of the features of the *Development Charges Act, 1997*.

A. NET OPERATING COSTS FOR THE TOWN'S SERVICES ESTIMATED TO INCREASE OVER THE FORECAST PERIOD

Table 15 summarizes the estimated increase in net operating costs that the Town will experience for additions associated with the planned capital program. This estimate is based on a high-level analysis of operating cost impacts to the Town.

As shown in Table 15, by 2025, Georgina's net operating costs are estimated to increase by \$9.74 million. The most significant portion of this increase relates to the new fire hall space and Multi-Use Recreation Centre to be constructed in 2017.

B. LONG-TERM CAPITAL FINANCING FROM NON-DEVELOPMENT CHARGE SOURCES TOTALS \$12.65 MILLION

Table 15 also summarizes the components of the development-related capital program that will require funding from non-development charge sources as discussed in Section VI. In total \$12.65 million will need to be financed from non-development charge sources over the next ten years. This includes about \$4.08 million in respect of the mandatory ten per cent discount required by the *DCA* for eligible "soft" (or general) services and about \$8.57 million for shares of projects related to capital replacement and for non-development shares of projects that provide benefit to the existing community. In addition, \$21.35 million in interim financing may be required for projects related to development in the post-2025 period. It is likely that most of these monies could be recovered from future development charges as the by-law is revisited at least every five years.

TABLE 15

TOWN OF GEORGINA
SUMMARY OF LONG TERM CAPITAL AND
OPERATING COST IMPACTS FOR TAX SUPPORTED SERVICES
(in thousands of constant dollars)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Net Operating Impacts (1)										
Library Services	\$0.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0
Fire And Emergency Services	\$0.0	\$0.0	\$0.0	\$0.0	\$4,060.3	\$4,060.3	\$6,310.3	\$6,310.3	\$6,310.3	\$6,317.8
Parks And Recreation	\$87.0	\$1,474.0	\$1,561.0	\$1,648.0	\$1,735.0	\$1,822.0	\$1,909.0	\$1,996.0	\$2,083.0	\$2,170.0
Operations	\$40.7	\$40.7	\$100.7	\$100.7	\$133.2	\$173.8	\$173.8	\$183.8	\$183.8	\$217.8
General Government	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Town-Wide Roads And Related	\$52.7	\$114.0	\$176.3	\$239.5	\$303.5	\$368.4	\$437.5	\$507.5	\$578.8	\$651.0
NET OPERATING IMPACTS	\$180.4	\$2,013.7	\$2,222.9	\$2,373.2	\$6,616.9	\$6,809.5	\$9,215.6	\$9,382.6	\$9,540.9	\$9,741.6

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Long-term Capital Impact (1)											
Total Net Cost	\$5,084.1	\$3,929.0	\$1,545.3	\$945.3	\$36,116.1	\$1,352.0	\$8,745.3	\$1,045.3	\$945.3	\$3,375.0	\$63,082.7
Net Cost From Development Charges	\$1,516.6	\$1,878.0	\$917.8	\$317.8	\$19,635.0	\$317.8	\$317.8	\$317.8	\$317.8	\$398.8	\$25,935.0
Prior Growth Share from DC Reserve Balances (2)	\$396.9	\$766.2	\$0.0	\$0.0	\$1,985.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,149.0
Portion for Post-2025 Development (3)	\$533.0	\$891.8	\$533.0	\$533.0	\$10,422.4	\$939.7	\$3,458.0	\$633.0	\$533.0	\$2,872.7	\$21,349.7
Funding From Non-DC Sources											
Discount Portion	\$138.6	\$392.9	\$94.5	\$94.5	\$2,877.8	\$94.5	\$94.5	\$94.5	\$94.5	\$103.5	\$4,080.0
Replacement	\$2,499.0	\$0.0	\$0.0	\$0.0	\$1,195.0	\$0.0	\$4,875.0	\$0.0	\$0.0	\$0.0	\$8,569.0
FUNDING FROM NON-DC SOURCES	\$2,637.6	\$392.9	\$94.5	\$94.5	\$4,072.8	\$94.5	\$4,969.5	\$94.5	\$94.5	\$103.5	\$12,649.0

Notes:

(1) See Appendix H

(2) Existing development charge reserve fund balances collected from growth prior to 2016 are applied to fund initial projects in development-related capital forecast

(3) Post 2026 development-related net capital costs may be eligible for development charge funding in future DC by-laws

IX ASSET MANAGEMENT PLAN

The *Development Charges Act* was amended in late 2015 and, effective January 1st 2016, municipalities are required to complete an Asset Management Plan before passing a development charges by-law. The main purpose of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

A. ANNUAL CAPITAL PROVISIONS WILL REACH \$884,500 BY 2025

Table 16 summarizes the annual capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law. This estimate is based on information obtained through discussions with Town staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset.

Table 16 illustrates that, by 2025, the Town will need to fund an additional \$884,500 per annum in order to properly fund the full life-cycle costs of the new assets supported under this Development Charges By-Law. The calculated life-cycle funding requirement equates to 1.82% of the Town's 2016 total own source revenues of \$48.56 million (tax levy of \$36.70 million and user fees/charges of \$11.86 million).

The calculated annual funding provision should be considered within the context of the Town's projected growth; over the next ten years (to 2025) the Town is projecting an increase of 2,600 total private dwellings units, which represents a 16 per cent increase over the existing base as well as approximately 4,170 new employees. This growth will have the effect of increasing the revenue generated from property taxes and user fees and charges that can offset the additional asset management funding requirements.

The calculated annual provisions identified are considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term.

TABLE 16

TOWN OF GEORGINA
SUMMARY OF CALCULATED ANNUAL PROVISIONS FOR FUTURE REPLACEMENT OF GROWTH-RELATED CAPITAL ⁽¹⁾
(in thousands of dollars)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Library Services	\$ -	\$ 3.39	\$ 60.00	\$ 63.53	\$ 67.12	\$ 70.79	\$ 74.54	\$ 78.36	\$ 82.25	\$ 86.22
Fire Protection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 115.08	\$ 115.08	\$ 115.08	\$ 115.08	\$ 115.08
Parks and Recreation	\$ -	\$ 20.18	\$ 31.83	\$ 43.72	\$ 55.84	\$ 482.03	\$ 494.65	\$ 507.51	\$ 520.64	\$ 534.02
Operations	\$ -	\$ 40.83	\$ 40.83	\$ 103.50	\$ 103.50	\$ 128.97	\$ 128.97	\$ 128.97	\$ 128.97	\$ 128.97
Roads & Related	\$ -	\$ 2.07	\$ 4.18	\$ 6.34	\$ 8.53	\$ 10.77	\$ 13.06	\$ 15.39	\$ 17.77	\$ 20.19
Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sewer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Annual Provision (in \$000)	\$ -	\$ 66.5	\$ 136.8	\$ 217.1	\$ 235.0	\$ 807.7	\$ 826.3	\$ 845.3	\$ 864.7	\$ 884.5

Notes:

(1) See Appendix I

X OTHER ISSUES AND CONSIDERATIONS

A. DEVELOPMENT CHARGES ADMINISTRATION

No significant changes are recommended to the Town's current policies and practices regarding development charge administration. In this regard:

- It is recommended that practices regarding the collection of development charges and by-law administration continue to the extent possible.
- As required under the *DCA*, the Town should codify any rules regarding application of the by-law and exemptions within the development charges by-law proposed for adoption.
- It is recommended that Council adopt the development-related capital forecast included in this background study, subject to annual review through the Town's normal capital budget process.
- It is recommended that current limited exemptions, over and above those required in the *DCA*, continue to be formally adopted in the by-law.
- It is recommended that that basis for imposing different development charge rates on "large" and "small" apartments be changed from one based on the number of bedrooms to one based on area.

B. LOCAL SERVICE DEFINITIONS

The following provides the definition of "local service" under the *DCA* for a number of services provided by the Town of Georgina. The purpose in establishing these definitions is to determine the eligible capital costs for inclusion in the development charges calculation for the Town. The functions or services deemed to be local in nature are not to be included in the determination of the development charge rates. The provision of local services is considered to be a direct developer responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the landowner or developer. The issue of "local service" is being specifically considered for the following services:

- Roads
- Water Service
- Wastewater Services
- Stormwater Services
- Parkland Development

1. Roads

It is assumed that the vast majority of future road improvements which are a Town responsibility represent local services and will be provided through subdivision and other development agreements. All roads and share of roads identified as local are to be treated as a local service under the DCA and the associated costs are not to be included in the development charges calculation.

2. Water and Sanitary Sewer

It is intended that the provision of local on and off-site sewer and water services which are related to a plan of subdivision or within the area to which the plan relates, be acquired via subdivision agreements and other Planning Act requirements.

3. Stormwater Management (SWM) Facilities

It is intended that any requirements for storm water management facilities be addressed through subdivision agreements.

4. Parkland Development

For the purpose of parkland development, local services include the requirement for the owner to undertake the:

- preparation of a concept/facilities fit plan;
- preparation of a grading plan;
- supply and installation of grading, including support structures (e.g. retaining walls), storm sewers, catch basins, manholes;
- sodding;
- parking lots and pathways to rough grade;
- services to the property line, including electrical, sanitary and water;
- all fencing, where the parkland abuts other land uses;
- landscaping, including trees and shrubs on the road allowance.

Overview of Local Engineered Services

Developers are responsible for the provision of all services within and related to their plan of subdivision to the extent that they are required primarily or exclusively by the plan of subdivision and are therefore local services. This may include off-site improvements to connecting roads to bring them to an urban collector standard and the extension of sewer and water services and storm water management works.

Individual developers may be required independently to cost share with other benefitting owners. In some cases, the Town may participate in the cost sharing (e.g. where services are provided to existing unserved development). The Town's approach to obtaining sewer, water, storm and roads servicing relating to plans of subdivision, is as follows:

Internal to Plan of Subdivision

Cost sharing may be required for works internal to the subdivision where some oversizing is involved.

Local External Works Related to Subdivision

Works to be located on roads or lands outside the boundary of the subdivision, but required as a result of the development, will be constructed and funded entirely from the development that creates the need for the work.

Local External Work Related to the Subdivision, to be Provided through Subdivision Agreement and/or "Best Efforts"

Where works are located on roads or lands outside of subdivisions but required as a result of two or more developments, arrangements will be made for one developer to construct the work and be refunded a portion of the cost by the other developers through the subdivision agreement process (e.g. best efforts or front-ending agreements).

Completed Works Where Funding is to be Recovered

Works which have been constructed to service developments but have not been totally funded via the previous Development Charges By-law are included in the Development Charge calculation.

APPENDIX A

DEVELOPMENT FORECAST

APPENDIX A

DEVELOPMENT FORECAST

This appendix provides the details of the development forecast that was used to prepare the 2016 *Development Charges Background Study* for the Town of Georgina. The forecast method and key assumptions are discussed. The results of the forecasts are presented in the following tables:

Historical Development

- A.1 Population, Households & Employment
- A.2 Housing Activity – Completions
- A.3 Housing Activity – Building Permits
- A.4 Households by Period of Construction Showing Household Size

Forecast Development

- A.5 Population, Household & Employment Forecast
- A.6 Housing Growth and Population in New Housing by Unit Type
- A.7 Employment Growth by Category
- A.8 Non-Residential Space Forecast
- A.9 Area Specific Growth Allocations

A. FORECAST AND KEY ASSUMPTIONS

The *Development Charges Act (DCA)* requires the Town to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the Town to prepare a reasonable development-related capital program. A ten-year development forecast, from 2016 to 2025, has been used for all eligible general services in the Town. For engineered services, a long-term forecast from 2016 to 2036 has been prepared.

The development forecast is based on estimates of development occurring within the Town’s approved development areas. This is consistent with Provincial regulations that require development charges forecasts be based on areas approved for development in a municipality’s official plan.

The forecasts used in this DC Study are consistent with the long-term population and employment targets established for the Town of Georgina by the Region of York. Adjustments have been made to account for the slower than anticipated growth that has occurred since the Region's Official Plan was approved in 2010. In the DC Study forecasts, the population and employment targets are assumed to be achieved soon after 2036, rather than the 2031 time horizon used in the Regional Official Plan.¹

Development charges for the general services of Library, Fire, Parks and Recreation, Operations, and General Government, as well as Roads and Related and Stormwater Management engineered infrastructure that provide Town-wide benefits, are based on the Town-wide forecasts shown herein. Charges for engineered infrastructure that benefit specific areas within the Town are based on allocations of the Town-wide forecasts to the settlement areas of Keswick and Sutton and, within Sutton, to the area benefitting from the Sutton High Street Sewer.

B. HISTORICAL DEVELOPMENT IN THE TOWN

The Town has experienced steady and sustained population, household and employment growth over the last ten years. The growth was fuelled by the Town's role as a gradually urbanizing community at the periphery of one of the fastest growth region's in Canada.

Historical growth and development figures presented here are based on Statistics Canada census data and the Town's historical building permit data to August 2015. A "Census-based" definition of population is used for the purposes of the development charges study. This definition does not include the Census net undercoverage which is typically included in the definition of "total" population used by the Town and Region of York in their Official Plans. For development charges purposes, a ten-year historical period of 2006 to 2015 is used for calculating service levels. Since 2011 was the year of the last Census, figures from 2012 to 2015 are estimated.

Table A.1 shows that annual population growth across the Town fluctuated between 0.5% and 1.4% over the historical period to 2011. The number of housing units in the

¹ The York Region Official Plan, 2010, Table 1, sets a population target of 70,300 and an employment target of 21,200 for the Town in 2031. It is noted that the population target includes a census undercount estimate of 4%. The equivalent "census" population is 68,100.

Town increased at slightly higher rate than the population over the same period, which is the result of a decline in the average number of persons residing in dwelling units.

Total employment numbers used in Table A.1 are based on Statistics Canada place of work data. Place of work employment figures record where people work rather than their place of residence. Table A.1 shows that the Town's employment grew over the last decade, from 7,479 jobs in 2001 to 7,673 jobs in 2011. The Town's activity rate (the ratio of employment to population) has decreased slightly in recent years as a result of the rate of population growth being higher than that of employment growth.

Details on housing unit growth in the Town since 2004 are provided in Table A.2. The market share of single- and semi-detached units has fallen somewhat over the last 10 years while an increase in higher density row house and apartment built forms is in evidence. A similar trend may be seen in the building permit data shown in Table A.3.

Table A.4 provides details on historical occupancy patterns in the Town. The overall average occupancy level in the Town is 2.71 persons per housing unit (ppu). Occupancy levels for recently constructed units (2001-2011) are higher than the overall average and are used in the development charges calculation since they better reflect the number of people that will be residing in new development. The average ppu of single and semi detached units built in the Town in the period 2001 to 2011 is 2.99. Average ppus for recently constructed row housing and apartments are 2.41 and 2.00 respectively.

C. FORECAST METHOD AND RESULTS

This section describes the method used to establish the development forecast for the planning periods from 2016 to 2025 and 2016 to 2036.

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the *population growth*² as well as the *population in new housing* is required.

² Commonly referred to as "net population growth" in the context of development charges.

- The *population growth* determines the need for additional facilities and provides the foundation for the development-related capital program.
- When calculating the development charge, however, the development-related net capital costs are spread over the total additional population that occupies new housing units. This *population in new units* represents the population from which development charges will be collected.

Development charges are levied on non-residential development as a charge per unit of gross floor area (GFA). The non-residential forecast requires a projection of employment growth as well as a projection of the new floorspace associated with the employment growth in the Town.

1. Residential Forecast

The residential development forecast incorporates forecasts of population, households, and housing units by type. The population forecast is Census based. Table A.5 summarizes the forecast for the Town between 2016 and 2036. The Town is forecast to grow by 17,903 persons and 7,337 households over the longer-term period.

Over the ten-year forecast period (2016-2025), 5,977 additional people and 2,604 new households are forecast to be added to the Town. A breakdown of the housing units forecast to accommodate these households is shown in Table A.6. Approximately 72 per cent of households are forecast to be accommodated in single- and semi-detached homes. This pattern of housing growth would represent somewhat higher density housing than the pattern experienced in the Town over the last ten years. Such a pattern is, however, in keeping with recent construction trends in Georgina and Town and Regional policies aimed at promoting intensification.

Population growth in the new units is estimated by applying the following ppus to the housing unit forecast: 2.99 for single and semi-detached units; 2.41 for rows and other multiples; and 2.00 for apartments. The ppu estimates are based upon the historical time series of population growth in housing by period of construction provided in Table A.4. The total population growth in new units in the Town is forecast at 7,225 for the period 2016 to 2025 and at 20,070 for the period 2016 to 2036.

2. Non-Residential Forecast

As with the residential forecast, the non-residential forecast covers the ten year period from 2016 to 2025 for general services and the long-term period from 2016 to 2036 for the town-wide and area-specific engineered services. Table A.5 shows that total Census employment by place of work (or “net” employment) is forecast to grow by 4,169 jobs between 2016 and 2025, and by 10,952 jobs between 2016 and 2036.

Non-residential development charges are calculated on a per unit of gross floor area (GFA) basis. Therefore, as required by the *DCA*, a forecast of future non-residential building space has been developed. The GFA forecast is based on the employment forecast. Two types of employment are distinguished in the forecast—population-related and employment land. The following factors have been used to convert the employment forecast into building space estimates:

Population-Related: 40 m² per employee
 Employment Land: 80 m² per employee

The employment and floorspace forecasts for the Town are summarized in Tables A.7 and A.8. The total floorspace growth is forecast at 746,965 m² over the long-term, of which the largest component relates to development on employment land (617,761 m² or 83%), mostly in the Keswick Business Park.

3. Area Specific Forecasts

Table A.9 summarizes the assumptions used to allocate the forecasts of population and employment and corresponding GFA for the purposes of calculating the area specific development charge rates for the Keswick, Sutton, and Sutton High Street service area. The allocations draw upon the population and employment settlement allocations prepared as part of the Town's recent Official Plan update.³

³ *Proposed Official Plan for the Town of Georgina*, April 2016, Table 1 (p.26) and Table 2 (p.27).

**APPENDIX A
TABLE 1**

**TOWN OF GEORGINA
HISTORICAL POPULATION, HOUSEHOLDS, & EMPLOYMENT**

Year	Census Population	Growth	Occupied Households	Growth	Household Size (PPU)	Employment by Place of Work	Growth	Activity Rate
2001	39,536		13,885		2.85	7,479		18.9%
2002	40,083	547	14,150	265	2.83	7,467	-12	18.6%
2003	40,637	554	14,420	270	2.82	7,455	-12	18.3%
2004	41,199	562	14,695	275	2.80	7,443	-12	18.1%
2005	41,769	570	14,975	280	2.79	7,431	-12	17.8%
2006	42,346	577	15,260	285	2.77	7,419	-12	17.5%
2007	42,578	232	15,378	118	2.77	7,469	50	17.5%
2008	42,811	233	15,497	119	2.76	7,519	50	17.6%
2009	43,045	234	15,617	120	2.76	7,570	51	17.6%
2010	43,280	235	15,738	121	2.75	7,621	51	17.6%
2011	43,517	237	15,860	122	2.74	7,673	52	17.6%
2012	44,061	544	16,046	186	2.75	7,905	232	17.7%
2013	44,519	458	16,249	203	2.74	8,155	250	17.8%
2014	44,982	463	16,455	206	2.73	8,425	270	17.9%
2015	45,450	468	16,663	208	2.73	8,718	293	18.0%
Growth 2006-2015		3,681		1,688			1,287	

Source: Statistics Canada, 2001, 2006, and 2011 Census; Statistics Canada, Building Permits, and Town of Georgina building permit data

Note: Figures for inter-censal years are estimated.

Note: Census population does not include an estimate of Census undercount.

Note: PPU = persons per unit

**APPENDIX A
TABLE 2**

**TOWN OF GEORGINA
HISTORICAL HOUSING COMPLETIONS**

Year	CMHC Annual Housing Completions - Units				Completions - Shares By Unit Type			
	Singles & Semis	Rows	Apartments	Total	Singles & Semis	Rows	Apartments	Total
2004	239	52	0	291	82%	18%	0%	100%
2005	313	0	0	313	100%	0%	0%	100%
2006	290	0	0	290	100%	0%	0%	100%
2007	116	0	0	116	100%	0%	0%	100%
2008	189	0	0	189	100%	0%	0%	100%
2009	70	6	0	76	92%	8%	0%	100%
2010	109	25	0	134	81%	19%	0%	100%
2011	127	17	0	144	88%	12%	0%	100%
2012	133	13	0	146	91%	9%	0%	100%
2013	119	26	0	145	82%	18%	0%	100%
2014	178	31	97	306	58%	10%	32%	100%
2015	127	37	0	164	77%	23%	0%	100%
Total	2,010	207	97	2,314	87%	9%	4%	100%
<i>Last 10 Years</i>	<i>146</i>	<i>16</i>	<i>10</i>	<i>171</i>	<i>85%</i>	<i>9%</i>	<i>6%</i>	<i>100%</i>
<i>Last 5 Years</i>	<i>137</i>	<i>25</i>	<i>19</i>	<i>181</i>	<i>76%</i>	<i>14%</i>	<i>11%</i>	<i>100%</i>

Source: Canada Mortgage and Housing Corporation (CMHC), Housing Market Information

**APPENDIX A
TABLE 3**

**TOWN OF GEORGINA
HISTORICAL RESIDENTIAL BUILDING PERMITS**

Year	Building Permits (New Units By Type)				Building Permits (Share of New Units By Type)			
	Singles & Semis	Rows	Apartments	Total	Singles & Semis	Rows	Apartments	Total
2004	239	0	1	240	100%	0%	0%	100%
2005	236	0	0	236	100%	0%	0%	100%
2006	209	0	0	209	100%	0%	0%	100%
2007	160	0	0	160	100%	0%	0%	100%
2008	127	0	2	129	98%	0%	2%	100%
2009	87	25	0	112	78%	22%	0%	100%
2010	155	17	0	172	90%	10%	0%	100%
2011	150	13	0	163	92%	8%	0%	100%
2012	152	44	100	296	51%	15%	34%	100%
2013	158	6	20	184	86%	3%	11%	100%
2014	183	53	13	249	73%	21%	5%	99%
2015 (August)	219	8	7	234	94%	3%	3%	100%
Total	1,966	158	138	2,262	87%	7%	6%	100%
<i>Last 10 Years</i>	<i>160</i>	<i>17</i>	<i>14</i>	<i>191</i>	<i>84%</i>	<i>9%</i>	<i>7%</i>	<i>100%</i>
<i>Last 5 Years</i>	<i>172</i>	<i>25</i>	<i>28</i>	<i>225</i>	<i>77%</i>	<i>11%</i>	<i>12%</i>	<i>100%</i>

Source: Statistics Canada, Building Permits

**APPENDIX A
TABLE 4**

**TOWN OF GEORGINA
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE**

Dwelling Unit Type	Period of Construction										Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	2006-2011	Pre-2001	2001-2011	Total
Singles													
Household Population	3,585	5,245	4,725	3,840	2,400	5,280	2,595	3,035	3,345	2,680	30,705	6,025	36,730
Households	1,365	2,180	1,850	1,380	840	1,745	815	940	1,090	910	11,115	2,000	13,115
Household Size	2.63	2.41	2.55	2.78	2.86	3.03	3.18	3.23	3.07	2.95	2.76	3.01	2.80
Semis													
Household Population	165	0	0	90	0	145	0	260	390	0	660	390	1,050
Households	55	0	0	50	0	70	0	120	145	0	295	145	440
Household Size	3.00	n/a	n/a	1.80	n/a	2.07	n/a	2.17	2.69	n/a	2.24	2.69	2.39
Singles and Semis													
Household Population	3,750	5,245	4,725	3,930	2,400	5,425	2,595	3,295	3,735	2,680	31,365	6,415	37,780
Households	1,420	2,180	1,850	1,430	840	1,815	815	1,060	1,235	910	11,410	2,145	13,555
Household Size	2.64	2.41	2.55	2.75	2.86	2.99	3.18	3.11	3.02	2.95	2.75	2.99	2.79
Rows													
Household Population	0	0	105	260	205	205	25	355	625	170	1,155	795	1,950
Households	0	0	35	80	55	85	10	140	265	65	405	330	735
Household Size	n/a	n/a	3.00	3.25	3.73	2.41	2.50	2.54	2.36	2.62	2.85	2.41	2.65
Apartments (excl. Duplexes)													
Household Population	95	240	155	355	320	175	180	0	20	0	1,520	20	1,540
Households	95	155	125	185	155	110	125	0	10	0	950	10	960
Household Size	1.00	1.55	1.24	1.92	2.06	1.59	1.44	n/a	2.00	n/a	1.60	2.00	1.60
Duplexes													
Household Population	135	195	140	225	125	320	135	85	0	0	1,360	0	1,360
Households	60	50	55	60	40	130	50	20	0	0	465	0	465
Household Size	2.25	3.90	2.55	3.75	3.13	2.46	2.70	4.25	n/a	n/a	2.92	n/a	2.92
Rows, Apartments, Duplexes													
Household Population	230	435	400	840	650	700	340	440	645	170	4,035	815	4,850
Households	155	205	215	325	250	325	185	160	275	65	1,820	340	2,160
Household Size	1.48	2.12	1.86	2.58	2.60	2.15	1.84	2.75	2.35	2.62	2.22	2.40	2.25
All Units													
Household Population	3,980	5,680	5,125	4,770	3,050	6,125	2,935	3,735	4,380	2,850	35,400	7,230	42,630
Households	1,575	2,385	2,065	1,755	1,090	2,140	1,000	1,220	1,510	975	13,230	2,485	15,715
Household Size	2.53	2.38	2.48	2.72	2.80	2.86	2.94	3.06	2.90	2.92	2.68	2.91	2.71

Note: Population and household figures in this table are based on National Household Survey and may differ from Census figures.
Source: Statistics Canada, 2011 National Household Survey Special Run.

APPENDIX A
TABLE 5

TOWN OF GEORGINA
POPULATION, HOUSEHOLD & EMPLOYMENT FORECAST

Year	Census Population	Growth	Occupied Households	Growth	Household Size	Employment by POW	Growth	Activity Rate
2015	45,450	468	16,663	208	2.73	8,718	293	19.2%
2016	45,923	473	16,874	211	2.72	9,037	319	19.7%
2017	46,481	558	17,119	245	2.72	9,418	381	20.3%
2018	47,046	565	17,368	249	2.71	9,850	432	20.9%
2019	47,617	572	17,621	253	2.70	10,340	490	21.7%
2020	48,196	578	17,877	256	2.70	10,900	560	22.6%
2021	48,782	586	18,137	260	2.69	11,543	643	23.7%
2022	49,430	648	18,413	276	2.68	11,856	313	24.0%
2023	50,087	657	18,693	280	2.68	12,184	328	24.3%
2024	50,753	666	18,978	285	2.67	12,527	343	24.7%
2025	51,427	674	19,267	289	2.67	12,887	360	25.1%
2026	52,109	682	19,560	293	2.66	13,265	378	25.5%
2027	52,958	849	19,899	339	2.66	13,737	472	25.9%
2028	53,820	862	20,244	345	2.66	14,234	497	26.4%
2029	54,696	876	20,594	350	2.66	14,759	525	27.0%
2030	55,586	890	20,951	357	2.65	15,315	556	27.6%
2031	56,491	905	21,313	362	2.65	15,904	589	28.2%
2032	57,802	1,311	21,825	512	2.65	16,585	681	28.7%
2033	59,142	1,341	22,349	524	2.65	17,300	715	29.3%
2034	60,514	1,372	22,886	537	2.64	18,051	751	29.8%
2035	61,918	1,404	23,436	550	2.64	18,840	789	30.4%
2036	63,354	1,436	24,000	564	2.64	19,670	830	31.0%
2016-2025		5,977		2,604			4,169	
2016-2036		17,903		7,337			10,952	

Source: Hemson Consulting Ltd., 2015

**APPENDIX A
TABLE 6**

**TOWN OF GEORGINA
FORECAST OF HOUSEHOLD GROWTH AND POPULATION IN NEW HOUSEHOLDS**

Year	New Households				Population in New Households *			
	Singles & Semis	Rows & Other Multiples	Apartments	Total	Singles & Semis	Rows & Other Multiples	Apartments	Total
2016	156	33	22	211	466	80	44	590
2017	181	39	25	245	542	93	51	686
2018	184	39	26	249	550	95	52	697
2019	187	40	26	253	559	96	52	707
2020	189	40	26	256	565	97	53	715
2021	192	41	27	260	573	99	54	726
2022	190	45	42	276	568	108	84	760
2023	192	45	42	280	575	109	85	769
2024	196	46	43	285	585	111	86	782
2025	198	47	44	289	593	113	87	793
2026	201	48	44	293	602	115	89	806
2027	219	55	65	339	656	131	130	917
2028	223	56	66	345	668	134	132	934
2029	227	56	67	350	678	136	134	948
2030	231	58	68	357	692	139	136	967
2031	235	58	69	362	702	141	138	981
2032	338	76	98	512	1,010	184	196	1,390
2033	346	78	100	524	1,034	188	200	1,422
2034	354	80	103	537	1,060	193	205	1,458
2035	363	82	105	550	1,085	197	210	1,492
2036	372	84	108	564	1,112	202	216	1,530
2016-2025	1,864	416	323	2,604	5,576	1,001	648	7,225
2016-2036	4,974	1,146	1,217	7,337	14,875	2,761	2,434	20,070

* Based on PPUs: 2.99 2.41 2.00

Source: Hemson Consulting Ltd., 2015

APPENDIX A
TABLE 7

TOWN OF GEORGINA
EMPLOYMENT GROWTH BY CATEGORY

Year	<u>Population-Related</u>		<u>Employment Land</u>		<u>Major Office</u>		<u>Total Employment</u>	
	Total	Growth	Total	Growth	Total	Growth	Total	Growth
2015	7,402	127	1,316	166	0	0	8,718	293
2016	7,531	129	1,506	190	0	0	9,037	319
2017	7,642	111	1,776	270	0	0	9,418	381
2018	7,755	113	2,095	319	0	0	9,850	432
2019	7,869	114	2,471	376	0	0	10,340	490
2020	7,985	116	2,915	444	0	0	10,900	560
2021	8,103	118	3,440	525	0	0	11,543	643
2022	8,198	95	3,658	218	0	0	11,856	313
2023	8,294	96	3,890	232	0	0	12,184	328
2024	8,391	97	4,136	246	0	0	12,527	343
2025	8,489	98	4,398	262	0	0	12,887	360
2026	8,588	99	4,677	279	0	0	13,265	378
2027	8,723	135	5,014	337	0	0	13,737	472
2028	8,859	136	5,375	361	0	0	14,234	497
2029	8,997	138	5,762	387	0	0	14,759	525
2030	9,138	141	6,177	415	0	0	15,315	556
2031	9,281	143	6,623	446	0	0	15,904	589
2032	9,537	256	7,048	425	0	0	16,585	681
2033	9,800	263	7,500	452	0	0	17,300	715
2034	10,070	270	7,981	481	0	0	18,051	751
2035	10,347	277	8,493	512	0	0	18,840	789
2036	10,632	285	9,038	545	0	0	19,670	830
2016-2025		1,087		3,082		0		4,169
2016-2036		3,230		7,722		0		10,952

Source: Hemson Consulting Ltd., 2015

**APPENDIX A
TABLE 8**

**TOWN OF GEORGINA
EMPLOYMENT GROWTH IN NEW NON-RESIDENTIAL SPACE BY CATEGORY**

Employment Density

Population Related 40.0 m² per employee

Employment Land 80.0 m² per employee

Year	<u>Population-Related</u>		<u>Employment Land</u>		<u>Major Office</u>		<u>Total</u>	
	Employment Growth	Growth in New Space (m ²)	Employment Growth	Growth in New Space (m ²)	Employment Growth	Growth in New Space (m ²)	Employment Growth	Growth in New Space (m ²)
2015	127	5,080	166	13,280	0	0	293	18,360
2016	129	5,174	190	15,168	0	0	319	20,342
2017	111	4,426	270	21,632	0	0	381	26,058
2018	113	4,520	319	25,520	0	0	432	30,040
2019	114	4,560	376	30,080	0	0	490	34,640
2020	116	4,640	444	35,520	0	0	560	40,160
2021	118	4,714	525	41,996	0	0	643	46,710
2022	95	3,806	218	17,444	0	0	313	21,250
2023	96	3,840	232	18,560	0	0	328	22,400
2024	97	3,880	246	19,680	0	0	343	23,560
2025	98	3,920	262	20,960	0	0	360	24,880
2026	99	3,979	279	22,309	0	0	378	26,288
2027	135	5,381	337	26,971	0	0	472	32,352
2028	136	5,440	361	28,880	0	0	497	34,320
2029	138	5,520	387	30,960	0	0	525	36,480
2030	141	5,640	415	33,200	0	0	556	38,840
2031	143	5,721	446	35,711	0	0	589	41,432
2032	256	10,239	425	33,969	0	0	681	44,208
2033	263	10,520	452	36,160	0	0	715	46,680
2034	270	10,800	481	38,480	0	0	751	49,280
2035	277	11,080	512	40,960	0	0	789	52,040
2036	285	11,404	545	43,601	0	0	830	55,005
2016-2025	1,087	43,480	3,082	246,560	0	0	4,169	290,040
2016-2031	1,879	75,161	5,307	424,591	0	0	7,186	499,752
2016-2036	3,230	129,204	7,722	617,761	0	0	10,952	746,965

Source: Hemson Consulting Ltd., 2015

**APPENDIX A
TABLE 9**

**TOWN OF GEORGINA
ALLOCATION OF FORECAST GROWTH TO SERVICE AREAS**

Service Area	Population in New Units	Employment	New Floorspace (GFA)
Keswick (including Business Park)	66%	91%	91%
Sutton High Street Sewer	9%	0%	0%
Sutton (Remainder)	13%	6%	6%
Remainder of Town	13%	3%	3%
Total	100%	100%	100%

Source: Hemson Consulting, based on Town of Georgina, Proposed Official Plan, April 2015

APPENDIX B

GENERAL SERVICES TECHNICAL APPENDIX

APPENDIX B

GENERAL SERVICES TECHNICAL APPENDIX

This appendix provides the detailed analysis undertaken to establish the development charge rates for each of the eligible general services provided by the Town of Georgina. Five general services have been analysed as part of this Development Charges (DC) Background Study:

Appendix B.1 Library Services

Appendix B.2 Fire and Emergency Services

Appendix B.3 Parks and Recreation

Appendix B.4 Operations

Appendix B.5 General Government

Every sub-section, with the exception of General Government, contains a set of three tables. The tables provide the background data and analysis undertaken to arrive at the calculated development charge rates for that particular service. An overview of the content and purpose of each of the tables is given below.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 presents the data used to determine the ten-year historical service level. The *DCA* and *Ontario Regulation 82/98* require that development charges be set at a level no higher than the average service level provided in a municipality over the ten-year period immediately preceding the preparation of the background study, on a service by service basis. For the purpose of this study, the historical inventory period is defined as 2006–2015.

O. Reg. 82/98 requires that, when defining and determining historical service levels, both the quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet. The qualitative aspect is introduced by considering the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of cost per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be funded by new growth reflect not only the quantity (number and size), but also the quality (replacement value or

cost) of service provided by the municipality in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by Town staff in consultation with Hemson Consulting Ltd. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

The approach used to calculate service levels and maximum funding envelopes is described as follows: for those services with only a residential impact (Library and Parks and Recreation), the service level measure of net population has been utilized. For the remaining services that levy both a residential and non-residential charge, the service level measure of net population + employment has been utilized.

There is also a requirement in the *DCA* to consider “excess capacity” within the Town’s existing infrastructure that may be available to partially meet future servicing requirements. If Council has expressed its intent before or at the time the capacity was created to recoup the cost of providing the capacity from new development, it is considered “committed excess capacity” under the *DCA*, and the associated capital cost is eligible for recovery. This requirement has been addressed through the use of “net” population and employment in the determination of maximum permissible funding envelopes.

Table 1 also shows the calculation of the maximum allowable funding envelope and the legislated ten per cent reduction (for all applicable services). The maximum allowable funding envelope is defined as the ten-year historical service level (expressed as \$/capita or \$/population and employment) multiplied by the forecast increase in net population or net population and employment over the future planning period. The resulting figure is the value of capital infrastructure that would have to be constructed for that particular service so that the ten-year historic service level is maintained.

**TABLE 2 2016 – 2025 DEVELOPMENT-RELATED CAPITAL PROGRAM AND
CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES**

The *DCA* requires that Council express its intent to provide capital facilities to support future development. Based on the development forecasts presented in Appendix A, Town staff in collaboration with consultants, have created a development-related capital forecast that sets out the projects required to service anticipated development for the ten-year period from 2016–2025.

To determine the share of the program that is eligible for recovery through development charges, the project costs are reduced by any anticipated grants, subsidies or other recoveries, “replacement” and benefit to existing shares, and the legislated “ten per cent reduction” for eligible services.

A replacement share represents the portion of a capital project that will benefit the existing community. It could for example, represent a portion of a new facility that will, at least in part, replace a facility that is demolished, redeployed or will otherwise not be available to serve its former function. The replacement share of the capital program is not deemed to be development-related and is therefore removed from the development charge calculation. The capital cost for replacement will require funding from non-development charge sources, typically property taxes or user fees.

When calculating development charges, the development-related net capital cost must be reduced by ten per cent for all services except protection services and engineered services (*DCA* s.5.(1)8.). In addition, under the *Development Charges Act, 1997*, services related to a highway as defined in subsection 1(1) of the *Municipal Act, 2001*, need not to be reduced by the legislated ten per cent (as with other general services). The services and capital assets of Public Works are considered to be related to a highway and therefore are not reduced. The ten per cent discount is applied to all general services considered in this appendix with the exception of Fire Services and Operations. As with replacement shares, the ten per cent mandatory reduction must be funded from non-development charge sources.

The capital program less any replacement shares or benefit to existing shares and ten per cent discount shares yields the development-related costs. Although deemed development-related, not all of the net development-related capital program may be recoverable from development charges in the period from 2016 to 2025. For some services, reserve fund balances may be available to fund a share of the program. In addition, a portion of the capital program may service growth occurring beyond 2025. This portion of the capital program is deemed “pre-built” service capacity and is considered as committed excess capacity to be recovered under future development charges, or is a service level increase.

The remaining portion of the net capital program represents the development-related cost that may be included in the DC calculation. In all cases, as required, this amount is equal to or less than the maximum allowable capital amount as calculated at the end of Table 1. The result is the discounted development-related net capital costs eligible for recovery against growth over the forecast period from 2016 to 2025.

Calculation of the Unadjusted Development Charges Rates

The section below the capital program displays the calculation of the “unadjusted” development charge rates. The term “unadjusted” development charge is used to distinguish the charge that is calculated prior to cash flow financing considerations. The cash flow analysis is shown in Table 3.

The first step in determining the unadjusted development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For all general services with the exception of Library Services and Parks and Recreation, the development-related costs have been apportioned as 63 per cent residential and 37 per cent non-residential. This apportionment is based on the anticipated shares of population growth in new units and employment growth in new space over the ten-year forecast period.

The development-related costs associated with Library and Parks and Recreation, have been allocated 100 per cent to the residential sector, as the need for these services is driven by residential development.

The residential share of the 2016–2025 DC eligible costs is then divided by the forecasted population growth in new dwelling units. This gives the unadjusted residential development charge per capita. The non-residential development-related net capital costs are divided by the forecasted increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential development.

TABLE 3 CASH FLOW ANALYSIS

A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs are accounted for in the calculation as allowed under the *DCA*. Based on the development forecast, the analysis calculates the DC rate required to finance the net development-related capital spending plan, including provisions for any borrowing costs or interest earnings on the reserve funds. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

In order to determine appropriate development charge rates reflecting borrowing and earnings necessary to support the net development-related funding requirement, assumptions are used for the inflation rate and interest rate. An inflation rate of 2.0 per cent is used for the funding requirements, an interest rate of 5.5 per cent is used

for borrowing on the funds and an interest rate of 3.5 per cent is applied to positive balances.

Table 3 displays the results of the cash flow analysis and provides the adjusted or final per capita residential and per square metre (of GFA) non-residential development charges.

APPENDIX B.1

LIBRARY SERVICE

APPENDIX B.1

LIBRARY SERVICE

The Georgina Public Library provides Library Services from three main branches in the Town. These library branches offer an array of collection materials and delivers various community services and programming for children, teens and adults.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for buildings, land, collection materials and furniture and equipment, excluding computer equipment for Library Services in the Town of Georgina. There are three library branches located throughout the Town, which total 31,510 square feet. At \$330 per square foot, the three branches are valued at \$10.40 million. The library buildings occupy 0.76 hectares of land, which is worth approximately \$273,300. Collection materials, including more than 104,000 books, 9,700 CDs and DVDs, databases, periodicals and e-books total \$3.54 million. Finally, the total value of all furniture and equipment, other than computer equipment adds approximately \$2.00 million to the total value of the inventory.

The 2015 combined replacement value of the inventory of capital assets for Library Services is \$16.21 million, resulting in a ten-year historical average service level of \$374.25 per capita. This historical service level, multiplied by the ten-year net population growth (5,977), results in a ten-year maximum allowable funding envelope of \$2.24 million. No excess capacity has been calculated for this service. The ten per cent legislated reduction totals \$223,672 and has been deducted from the calculated funding envelope. Therefore, the maximum allowable funding envelope brought forward to the development charges calculation is reduced to \$2.01 million.

TABLE 2 2016–2025 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The development-related capital program for Library Services totals \$3.49 million and provides for new library space and additional collection materials. The Town anticipates constructing a new Multi-Use Recreation Centre (MURC) to serve the South Keswick community. As detailed in the Recreation Facility Needs Study (May 2014), the MURC is proposed to include a library branch. Based on proposed square

footage, the library space is expected to occupy approximately 10 per cent of the total facility. Therefore, of the total estimated project cost of \$30.68 million, the library's share totals \$2.98 million. A provision of \$503,100 has also been included, which will recover for additional collection materials to be purchased throughout the ten-year planning period. The cost was derived by applying the historical cost per capita for collection materials of \$84.18 to the anticipated ten-year population growth.

No benefit to existing shares have been identified in the capital program as both projects are net additions to the inventory of capital assets and are, therefore, fully related to growth. The ten per cent discount is applied to both projects, as required by the *DCA*, and these shares amount to \$348,670. The Town's available Library DC reserve fund totals \$766,226, which will fund a share of the total DC eligible costs. The share of eligible costs exceeding the maximum permissible funding envelope, \$358,760 is determined to benefit development beyond 2025 and will be eligible for funding under subsequent development charge studies. The remaining share of \$2.01 million is eligible for recovery through development charges in the 2016 to 2025 period.

The development-related net capital cost is allocated entirely to residential development and, when divided by the ten-year growth in population in new dwelling units (7,225), an unadjusted charge of \$278.62 per capita results.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$309.30 per capita. The following table summarizes the calculation of the Library Services development charge:

LIBRARY SERVICES SUMMARY						
10-year Hist. Service Level per capita	2016 - 2025		Unadjusted Development Charge		Calculated Development Charge	
	Development-Related Capital Program		Residential	Non-Residential	Residential	Non-Residential
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$374.25	\$3,486,700	\$2,013,044	\$278.62	\$0.00	\$309.30	\$0.00

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APPENDIX B.1
TABLE 1 - PAGE 1

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES

BUILDINGS Branch Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Pefferlaw Library	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	\$330
Sutton Library	11,260	11,260	11,260	11,260	11,260	11,260	11,260	11,260	11,260	11,260	\$330
Keswick Library	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	\$330
Total (sq.ft.)	31,510	31,510	31,510	31,510	31,510	31,510	31,510	31,510	31,510	31,510	
Total (\$000)	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Pefferlaw Library	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$358,000
Sutton Library	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$358,000
Keswick Library	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	\$358,000
Total (ha)	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	
Total (\$000)	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	

COLLECTION MATERIALS Type of Collection	# of Collection Materials										UNIT COST (\$/item)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
All Hardcopy Book Materials (LSC)	103,239	106,894	121,954	121,954	121,954	121,618	122,458	104,479	90,245	104,016	\$30
DVD & CD	6,900	6,900	6,900	6,900	6,900	6,900	7,100	7,900	9,500	9,741	\$32
Databases	\$0	\$0	\$0	\$0	\$0	\$30,260	\$32,700	\$28,660	\$23,590	\$35,840	
Periodicals & eBooks	\$0	\$0	\$0	\$0	\$0	\$31,600	\$31,600	\$31,600	\$31,600	\$31,600	
Total (#)	110,139	113,794	128,854	128,854	128,854	128,518	129,558	112,379	99,745	113,757	
Total (\$000)	\$3,356.89	\$3,467.9	\$3,925.4	\$3,925.4	\$3,925.4	\$3,977.0	\$4,011.4	\$3,486.8	\$3,100.7	\$3,538.9	

FURNITURE AND EQUIPMENT Description	Total Value of Furniture and Equipment (\$)									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Furniture and Equipment - Keswick	\$610,750	\$610,750	\$610,750	\$610,750	\$610,750	\$610,750	\$610,750	\$610,750	\$610,750	\$610,750
Furniture and Equipment - Sutton	\$1,203,770	\$1,203,770	\$1,203,770	\$1,203,770	\$1,203,770	\$1,203,770	\$1,203,770	\$1,203,770	\$1,203,770	\$1,203,770
Furniture and Equipment - Keswick	\$153,420	\$153,420	\$153,420	\$153,420	\$153,420	\$153,420	\$153,420	\$153,420	\$153,420	\$153,420
Self Check Out - Keswick Branch	\$0	\$0	\$0	\$0	\$16,320	\$16,320	\$16,320	\$16,320	\$16,320	\$16,320
Self Check Out - Sutton Branch	\$0	\$0	\$0	\$0	\$0	\$16,320	\$16,320	\$16,320	\$16,320	\$16,320
Total (\$000)	\$1,967.9	\$1,967.9	\$1,967.9	\$1,967.9	\$1,984.3	\$2,000.6	\$2,000.6	\$2,000.6	\$2,000.6	\$2,000.6

Note: Total value of Furniture & Equipment based on detailed inventory provided by library staff. Does not include public access computers, computer-related equipment, or iPads.

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APPENDIX B.1
TABLE 1 - PAGE 2

TOWN OF GEORGINA
CALCULATION OF SERVICE LEVELS
LIBRARY SERVICES

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Historic Population	42,346	42,578	42,811	43,045	43,280	43,517	44,061	44,519	44,982	45,450

INVENTORY SUMMARY (\$000)

Buildings	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3	\$10,398.3
Land	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3	\$273.3
Collection Materials	\$3,356.9	\$3,467.9	\$3,925.4	\$3,925.4	\$3,925.4	\$3,977.0	\$4,011.4	\$3,486.8	\$3,100.7	\$3,538.9
Furniture And Equipment	\$1,967.9	\$1,967.9	\$1,967.9	\$1,967.9	\$1,984.3	\$2,000.6	\$2,000.6	\$2,000.6	\$2,000.6	\$2,000.6
Total (\$000)	\$15,996.4	\$16,107.5	\$16,564.9	\$16,564.9	\$16,581.2	\$16,649.2	\$16,683.6	\$16,159.0	\$15,772.9	\$16,211.1

SERVICE LEVEL (\$/capita)											Average Service Level
Buildings	\$245.56	\$244.22	\$242.89	\$241.57	\$240.26	\$238.95	\$236.00	\$233.57	\$231.16	\$228.78	\$238.29
Land	\$6.45	\$6.42	\$6.38	\$6.35	\$6.31	\$6.28	\$6.20	\$6.14	\$6.08	\$6.01	\$6.26
Collection Materials	\$79.27	\$81.45	\$91.69	\$91.19	\$90.70	\$91.39	\$91.04	\$78.32	\$68.93	\$77.86	\$84.18
Furniture And Equipment	\$46.47	\$46.22	\$45.97	\$45.72	\$45.85	\$45.97	\$45.40	\$44.94	\$44.47	\$44.02	\$45.50
Total (\$/capita)	\$377.76	\$378.30	\$386.93	\$384.83	\$383.12	\$382.59	\$378.65	\$362.97	\$350.65	\$356.68	\$374.25

TOWN OF GEORGINA
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2006 - 2015	\$374.25
Net Population Growth 2016 - 2025	5,977
Maximum Allowable Funding Envelope	\$2,236,715
Less: Uncommitted Excess Capacity	\$0
Less: 10% Legislated Reduction	\$223,672
Discounted Maximum Allowable Funding Envelope	\$2,013,044

APPENDIX B.1
TABLE 2

TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARY SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	10% Reduction		Available DC Reserves	2016-2025	Post 2025
1.0 LIBRARY SERVICES										
1.1 Buildings, Land & Materials										
1.1.1 Library Space at Multi-Use Recreation Centre	2017	\$ 2,983,600	\$ -	\$ 2,983,600	\$ -	\$ 298,360	\$ 2,685,240	\$ 766,226	\$ 1,560,254	\$ 358,760
1.1.2 Additional Collection Materials	Various	\$ 503,100	\$ -	\$ 503,100	\$ -	\$ 50,310	\$ 452,790	\$ -	\$ 452,790	\$ -
Subtotal Buildings, Land & Materials		\$ 3,486,700	\$ -	\$ 3,486,700	\$ -	\$ 348,670	\$ 3,138,030	\$ 766,226	\$ 2,013,044	\$ 358,760
TOTAL LIBRARY SERVICES		\$ 3,486,700	\$ -	\$ 3,486,700	\$ -	\$ 348,670	\$ 3,138,030	\$ 766,226	\$ 2,013,044	\$ 358,760

Residential Development Charge Calculation		
Residential Share of 2016 - 2025 DC Eligible Costs	100%	\$2,013,044
10-Year Growth in Population in New Units		7,225
Unadjusted Development Charge Per Capita		\$278.62
Non-Residential Development Charge Calculation		
Non-Residential Share of 2016 - 2025 DC Eligible Costs	0%	\$0
10-Year Growth in New Space (Square Metres)		290,040
Unadjusted Development Charge Per Square Metre		\$0.00

2016 - 2025 Net Funding Envelope	\$2,013,044
Reserve Fund Balance	
Balance as at January 1, 2016	\$766,226

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APPENDIX B.1
TABLE 3

TOWN OF GEORGINA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LIBRARY SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

LIBRARY SERVICES	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
OPENING CASH BALANCE	\$0.0	\$139.6	(\$1,315.8)	(\$1,207.9)	(\$1,087.1)	(\$953.1)	(\$804.2)	(\$631.0)	(\$440.6)	(\$230.5)	
2016 - 2025 RESIDENTIAL FUNDING REQUIREMENTS											
- Library Services: Non Inflated	\$45.3	\$1,605.5	\$45.3	\$45.3	\$45.3	\$45.3	\$45.3	\$45.3	\$45.3	\$45.3	\$2,013.0
- Library Services: Inflated	\$45.3	\$1,637.6	\$47.1	\$48.1	\$49.0	\$50.0	\$51.0	\$52.0	\$53.1	\$54.1	\$2,087.3
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	590	686	697	707	715	726	760	769	782	793	7,225
REVENUE											
- DC Receipts: Inflated	\$182.5	\$216.4	\$224.3	\$232.1	\$239.4	\$247.9	\$264.7	\$273.2	\$283.4	\$293.1	\$2,457.0
INTEREST											
- Interest on Opening Balance	\$0.0	\$4.9	(\$72.4)	(\$66.4)	(\$59.8)	(\$52.4)	(\$44.2)	(\$34.7)	(\$24.2)	(\$12.7)	(\$362.0)
- Interest on In-year Transactions	\$2.4	(\$39.1)	\$3.1	\$3.2	\$3.3	\$3.5	\$3.7	\$3.9	\$4.0	\$4.2	(\$7.7)
TOTAL REVENUE	\$184.9	\$182.2	\$155.0	\$168.9	\$182.9	\$198.9	\$224.2	\$242.4	\$263.2	\$284.6	\$2,087.3
CLOSING CASH BALANCE	\$139.6	(\$1,315.8)	(\$1,207.9)	(\$1,087.1)	(\$953.1)	(\$804.2)	(\$631.0)	(\$440.6)	(\$230.5)	\$0.0	

2016 Adjusted Charge Per Capita **\$309.30**

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2016

Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.2

FIRE & EMERGENCY SERVICES

APPENDIX B.2

FIRE & EMERGENCY SERVICES

The Georgina Fire and Emergency Services Department is responsible for the provision of fire suppression and rescue, prevention, public education, administration, communication, and training services. The department operates out of three stations and has a base complement of 36 full-time and 55 volunteer fire fighters as well as administrative and management staff.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for buildings, land, vehicles and equipment for Fire and Emergency Services. The department operates out of three fire stations, in the Keswick, Pefferlaw and Sutton areas. The buildings total 19,300 square feet and the total replacement value of the buildings in 2015 was \$6.68 million. It is noted that the unit cost per square foot of the facilities has increased from \$190 as included in the 2011 DC Study, to \$300-\$350 per square foot used herein. This information was provided by Town staff and is intended to reflect true replacement costs in 2015 dollars. The replacement cost of \$350 per square foot was applied to both the Keswick and Sutton stations as they are three-bay brick construction, while the unit cost of \$300 per square foot was applied to the Pefferlaw station, which is a smaller, two-bay, stucco building.

The land associated with both facilities totals 1.02 hectares and is valued at \$365,200. Furniture and equipment, which includes personal protective equipment and station furniture and equipment totals \$2.92 million. Finally, the 2015 fleet totals 21 vehicles with a replacement value of \$9.59 million.

The 2015 combined replacement value of the inventory of capital assets for Fire and Emergency Services is \$19.55 million, resulting in a ten-year historical average service level of \$355.42 per population and employment. The historical service level, multiplied by the ten-year net population and employment growth (10,146), results in a ten-year maximum allowable funding envelope of \$3.61 million. Uncommitted excess capacity in the amount of \$299,600 is netted out and results in a discounted maximum allowable funding envelope of \$3.31 million to be carried forward to the development charges calculation. There is no required ten per cent discount.

**TABLE 2 2016–2025 DEVELOPMENT-RELATED CAPITAL PROGRAM &
CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES**

The 2016 to 2025 development-related capital program totals \$16.74 million and includes additional fire hall space in both South Keswick and North Keswick, as well as a provision for development-related space in the Town, outside of Keswick. Additional provisions are included for vehicles and equipment to service the additional stations.

The first project in the capital program comprises a new 12,500 square foot fire station in South Keswick. The facility is proposed to be constructed in 2020 and is estimated at \$4.88 million. This station is proposed to be constructed at a higher standard than the stations currently in service in Georgina. Therefore, a benefit to existing share of \$1.13 million has been deducted to reflect the service level increase proposed. The new station and headquarters in North Keswick will be approximately 20,000 square feet and is estimated at \$7.80 million. This station will replace the existing Keswick station, which is 12,500 square feet. Therefore, a benefit to existing share of \$4.88 million, or 63 per cent, has been deducted. Finally, the provision for development-related space outside of Keswick has been included in the last year of the planning period and totals \$1.95 million. No benefit to existing shares have been deducted.

New vehicles and equipment for the new South Keswick Station have also been included. The new pumper, heavy rescue support vehicles, and station furniture and equipment total \$1.98 million, all of which is related to growth. Finally, bunker gear for 20 additional firefighters and a generators add another \$140,000 to the capital program.

Of the total DC eligible costs of \$10.74 million, \$1.07 million is to be funded by the Town’s available reserve funds. The majority of the program, \$6.37 million exceeds the maximum allowable funding envelope, and is deemed to provide benefit to development beyond 2025. This share will be eligible for funding under subsequent DC studies. The remaining \$3.31 million is related to development in the 2016 to 2025 planning period and is eligible for DC recovery. The net capital cost is allocated 63 per cent to residential development (\$2.10 million) and 37 per cent (\$1.21 million) to non-residential development. The residential share of the net development-related capital cost is divided by the ten-year growth in population in new dwelling units to derive an unadjusted charge of \$290.18 per capita. The non-residential share of the net growth related capital cost is divided by the ten-year

forecast growth in floor space by sector, resulting in an unadjusted charge of \$4.17 per square metre.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, both the residential and non-residential calculated charges increase to \$304.30 per capita and \$4.33 per square metre, respectively. The increases reflect the front-ended nature of the timing of anticipated capital projects.

FIRE AND EMERGENCY SERVICES SUMMARY						
10-year Hist. Service Level per pop+empl	2016 - 2025		Unadjusted Development Charge		Calculated Development Charge	
	Development-Related Capital Program		Residential	Non-Residential	Residential	Non-Residential
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$355.42	\$16,743,500	\$3,306,329	\$290.18	\$4.17	\$304.30	\$4.33

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TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
FIRE AND EMERGENCY SERVICES

BUILDINGS	# of Square Feet										UNIT COST
Station Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	(\$/sq. ft.)
Keswick	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	\$350
Pefferlaw	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	\$300
Sutton	5,200	5,200	5,200	5,200	5,200	5,200	5,200	5,200	5,200	5,200	\$350
Total (sq.ft.)	19,300	19,300	19,300	19,300	19,300	19,300	19,300	19,300	19,300	19,300	
Total (\$000)	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	

LAND	# of Hectares										UNIT COST
Station Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	(\$/ha)
Keswick	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	\$358,000
Pefferlaw	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$358,000
Sutton	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$358,000
Total (ha)	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	
Total (\$000)	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	

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APPENDIX B.2
TABLE 1 - PAGE 2

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
FIRE AND EMERGENCY SERVICES

FURNITURE & EQUIPMENT Description	Total Value of Furniture & Equipment (\$)									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Firefighting Equipment	\$693,675	\$693,675	\$693,675	\$693,675	\$693,675	\$1,556,825	\$1,556,825	\$1,556,825	\$1,556,825	\$1,637,325
Furniture and Equipment	\$332,500	\$332,500	\$332,500	\$332,500	\$332,500	\$332,500	\$332,500	\$332,500	\$332,500	\$332,500
Communication	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$390,000	\$392,000	\$392,000	\$392,000	\$402,500
Emergency Management - Generators	\$0	\$0	\$75,000	\$90,000	\$105,000	\$120,000	\$126,000	\$135,000	\$135,000	\$150,000
Compressors	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000
SCBA Related Equipment	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Total (\$000)	\$1,506.2	\$1,506.2	\$1,581.2	\$1,596.2	\$1,611.2	\$2,749.3	\$2,807.3	\$2,816.3	\$2,816.3	\$2,922.3

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Pumpers	4	4	4	4	4	4	4	4	4	4	\$591,900
Aerials	2	2	2	2	2	2	3	3	3	3	\$1,313,000
Tanker	3	3	3	3	3	3	3	3	3	3	\$525,200
Rescue	3	3	3	3	3	3	2	2	2	2	\$502,000
Haz Mat Trailer	1	1	1	1	1	1	1	1	1	1	\$40,800
Ice / Water Boat/Trailer & Equipment	1	1	1	1	1	1	1	1	1	1	\$345,400
Chief Vehicles	2	2	2	2	2	2	2	2	2	2	\$50,500
Utility Vehicles	1	2	2	2	2	2	2	2	2	2	\$50,500
Fire Prevention Vehicles	2	2	2	3	3	3	3	3	3	3	\$38,400
Total (#)	19	20	20	21	21	21	21	21	21	21	
Total (\$000)	\$8,689.7	\$8,740.2	\$8,740.2	\$8,778.6	\$8,778.6	\$8,778.6	\$9,589.6	\$9,589.6	\$9,589.6	\$9,589.6	

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APPENDIX B.2
TABLE 1 - PAGE 3

TOWN OF GEORGINA
CALCULATION OF SERVICE LEVELS
FIRE AND EMERGENCY SERVICES

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Historic Population	42,346	42,578	42,811	43,045	43,280	43,517	44,061	44,519	44,982	45,450
Historic Employment	<u>7,419</u>	<u>7,469</u>	<u>7,519</u>	<u>7,570</u>	<u>7,621</u>	<u>7,673</u>	<u>7,905</u>	<u>8,155</u>	<u>8,425</u>	<u>8,718</u>
Historic Population + Employment	49,765	50,047	50,330	50,615	50,901	51,190	51,966	52,674	53,407	54,168

INVENTORY SUMMARY (\$000)

Buildings	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0	\$6,675.0
Land	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2	\$365.2
Furniture & Equipment	\$1,506.2	\$1,506.2	\$1,581.2	\$1,596.2	\$1,611.2	\$2,749.3	\$2,807.3	\$2,816.3	\$2,816.3	\$2,922.3
Vehicles	\$8,689.7	\$8,740.2	\$8,740.2	\$8,778.6	\$8,778.6	\$8,778.6	\$9,589.6	\$9,589.6	\$9,589.6	\$9,589.6
Total (\$000)	\$17,236.0	\$17,286.5	\$17,361.5	\$17,414.9	\$17,429.9	\$18,568.1	\$19,437.1	\$19,446.1	\$19,446.1	\$19,552.1

SERVICE LEVEL (\$/pop+empl)											Average Service Level
Buildings	\$134.13	\$133.37	\$132.62	\$131.88	\$131.14	\$130.40	\$128.45	\$126.72	\$124.98	\$123.23	\$129.69
Land	\$7.34	\$7.30	\$7.26	\$7.21	\$7.17	\$7.13	\$7.03	\$6.93	\$6.84	\$6.74	\$7.09
Furniture & Equipment	\$30.27	\$30.10	\$31.42	\$31.54	\$31.65	\$53.71	\$54.02	\$53.47	\$52.73	\$53.95	\$42.28
Vehicles	\$174.61	\$174.64	\$173.66	\$173.44	\$172.46	\$171.49	\$184.54	\$182.05	\$179.56	\$177.03	\$176.35
Total (\$/pop+empl)	\$346.35	\$345.41	\$344.95	\$344.07	\$342.43	\$362.73	\$374.03	\$369.18	\$364.11	\$360.95	\$355.42

TOWN OF GEORGINA
CALCULATION OF MAXIMUM ALLOWABLE
FIRE AND EMERGENCY SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2006 - 2015	\$355.42
Net Population & Employment Growth 2016 - 2025	10,146
Maximum Allowable Funding Envelope	\$3,605,923
Less: Uncommitted Excess Capacity	\$299,594
Discounted Maximum Allowable Funding Envelope	\$3,306,329

Excess Capacity Calculation	
Total Value of Inventory in 2015	\$19,552,085
Inventory Using Average Service Level	\$19,252,491
Excess Capacity	\$299,594
Excess Capacity:	Uncommitted

**APPENDIX B.2
TABLE 2**

**TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
FIRE AND EMERGENCY SERVICES**

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares ¹	0% Reduction		Available DC Reserves	2016-2025	Post 2025
2.0 FIRE AND EMERGENCY SERVICES										
2.1 Additional Fire Hall Space										
2.1.1 New Station in South Keswick (12,500 sq.ft.)	2020	\$ 4,875,000	\$ -	\$ 4,875,000	\$ 1,125,000	\$ -	\$ 3,750,000	\$ 1,071,476	\$ 2,678,524	\$ -
2.1.2 North Keswick Station and Headquarters (20,000 sq.ft.)	2022	\$ 7,800,000	\$ -	\$ 7,800,000	\$ 4,875,000	\$ -	\$ 2,925,000	\$ -	\$ -	\$ 2,925,000
2.1.3 Provision for Growth-Related Expansion Outside Keswick	2025	\$ 1,950,000	\$ -	\$ 1,950,000	\$ -	\$ -	\$ 1,950,000	\$ -	\$ -	\$ 1,950,000
Subtotal Additional Fire Hall Space		\$ 14,625,000	\$ -	\$ 14,625,000	\$ 6,000,000	\$ -	\$ 8,625,000	\$ 1,071,476	\$ 2,678,524	\$ 4,875,000
2.2 New Vehicles & Equipment for South Keswick Station										
2.2.1 Pumper - South Keswick Station	2020	\$ 806,000	\$ -	\$ 806,000	\$ -	\$ -	\$ 806,000	\$ -	\$ 627,805	\$ 178,195
2.2.2 Heavy Rescue Support Vehicle - South Keswick Station	2020	\$ 790,000	\$ -	\$ 790,000	\$ -	\$ -	\$ 790,000	\$ -	\$ -	\$ 790,000
2.2.3 Furniture & Equipment for South Keswick Station	2020	\$ 332,000	\$ -	\$ 332,000	\$ -	\$ -	\$ 332,000	\$ -	\$ -	\$ 332,000
2.2.4 Support Vehicle	2020	\$ 50,500	\$ -	\$ 50,500	\$ -	\$ -	\$ 50,500	\$ -	\$ -	\$ 50,500
Subtotal New Vehicles & Equipment for South Keswick Station		\$ 1,978,500	\$ -	\$ 1,978,500	\$ -	\$ -	\$ 1,978,500	\$ -	\$ 627,805	\$ 1,350,695
2.3 Development-Related Equipment										
2.3.1 Bunker Gear for 20 Additional Firefighters	2020	\$ 90,000	\$ -	\$ 90,000	\$ -	\$ -	\$ 90,000	\$ -	\$ -	\$ 90,000
2.3.2 Emergency Management Generator	2025	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000
Subtotal Development-Related Equipment		\$ 140,000	\$ -	\$ 140,000	\$ -	\$ -	\$ 140,000	\$ -	\$ -	\$ 140,000
TOTAL FIRE AND EMERGENCY SERVICES		\$ 16,743,500	\$ -	\$ 16,743,500	\$ 6,000,000	\$ -	\$ 10,743,500	\$ 1,071,476	\$ 3,306,329	\$ 6,365,695

Note 1: For project 2.1.1, the BTE represents that portion of the facility that is a higher quality construction than the stations that are currently in use.

Residential Development Charge Calculation		
Residential Share of 2016 - 2025 DC Eligible Costs	63%	\$2,096,562
10-Year Growth in Population in New Units		7,225
Unadjusted Development Charge Per Capita		\$290.18
Non-Residential Development Charge Calculation		
Non-Residential Share of 2016 - 2025 DC Eligible Costs	37%	\$1,209,767
10-Year Growth in New Space (Square Metres)		290,040
Unadjusted Development Charge Per Square Metre		\$4.17

2016 - 2025 Net Funding Envelope	\$3,306,329
Reserve Fund Balance Balance as at January 1, 2016	\$1,071,476

TOWN OF GEORGINA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE AND EMERGENCY SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

FIRE AND EMERGENCY SERVICES	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
OPENING CASH BALANCE	\$0.0	\$182.6	\$405.7	\$644.4	\$899.3	(\$1,159.1)	(\$974.7)	(\$763.3)	(\$531.8)	(\$277.4)	
2016 - 2025 RESIDENTIAL FUNDING REQUIREMENTS											
- Fire And Emergency Services New Projects: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$2,096.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,096.6
- Fire Emergency Services New Projects: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$2,269.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,269.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	590	686	697	707	715	726	760	769	782	793	7,225
REVENUE											
- DC Receipts: Inflated	\$179.5	\$212.9	\$220.7	\$228.3	\$235.5	\$243.9	\$260.4	\$268.8	\$278.8	\$288.4	\$2,417.2
INTEREST											
- Interest on Opening Balance	\$0.0	\$6.4	\$14.2	\$22.6	\$31.5	(\$63.7)	(\$53.6)	(\$42.0)	(\$29.2)	(\$15.3)	(\$129.2)
- Interest on In-year Transactions	\$3.1	\$3.7	\$3.9	\$4.0	(\$55.9)	\$4.3	\$4.6	\$4.7	\$4.9	\$5.0	(\$17.8)
TOTAL REVENUE	\$182.6	\$223.0	\$238.8	\$254.8	\$211.0	\$184.4	\$211.4	\$231.5	\$254.4	\$278.2	\$2,270.2
CLOSING CASH BALANCE	\$182.6	\$405.7	\$644.4	\$899.3	(\$1,159.1)	(\$974.7)	(\$763.3)	(\$531.8)	(\$277.4)	\$0.8	

2016 Adjusted Charge Per Capita **\$304.30**

Allocation of Capital Program

Residential Sector	63.4%
Non-Residential Sector	36.6%

Rates for 2016

Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

TOWN OF GEORGINA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE AND EMERGENCY SERVICES
NON-RESIDENTIAL OTHER DEVELOPMENT CHARGE
(in \$000)

FIRE AND EMERGENCY SERVICES	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
OPENING CASH BALANCE	\$0.00	\$89.64	\$209.89	\$354.91	\$529.32	(\$604.29)	(\$410.31)	(\$327.47)	(\$232.13)	(\$123.30)	
2016 - 2025 NON-RESIDENTIAL - OTHER FUNDING REQUIREMENTS											
- Fire And Emergency Services New Projects: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$1,209.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,209.8
- Fire Emergency Services New Projects: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$1,309.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,309.5
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	20,342	26,058	30,040	34,640	40,160	46,710	21,250	22,400	23,560	24,880	290,040
REVENUE											
- DC Receipts: Inflated	\$88.1	\$115.1	\$135.3	\$159.2	\$188.2	\$223.3	\$103.6	\$111.4	\$119.5	\$128.7	\$1,372.4
INTEREST											
- Interest on Opening Balance	\$0.0	\$3.1	\$7.3	\$12.4	\$18.5	(\$33.2)	(\$22.6)	(\$18.0)	(\$12.8)	(\$6.8)	(\$51.9)
- Interest on In-year Transactions	\$1.5	\$2.0	\$2.4	\$2.8	(\$30.8)	\$3.9	\$1.8	\$1.9	\$2.1	\$2.3	(\$10.1)
TOTAL REVENUE	\$89.6	\$120.3	\$145.0	\$174.4	\$175.9	\$194.0	\$82.8	\$95.3	\$108.8	\$124.2	\$1,310.4
CLOSING CASH BALANCE	\$89.6	\$209.9	\$354.9	\$529.3	(\$604.3)	(\$410.3)	(\$327.5)	(\$232.1)	(\$123.3)	\$0.9	

2016 Adjusted Charge Per Square Metre \$4.33

Allocation of Capital Program	
Residential Sector	63.4%
Non-Residential Sector	36.6%
Rates for 2016	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.3

PARKS AND RECREATION

APPENDIX B.3

PARKS AND RECREATION

The Town's Recreation and Culture Department is responsible for providing indoor and outdoor recreation facilities and programs. The department strives to provide residents of all ages the opportunities to enjoy physical activity, cultural initiatives, social interaction and special events.

TABLE 1 HISTORICAL SERVICE LEVELS

The ten-year historic inventory of capital assets for indoor recreation facilities includes 254,230 square feet of building space in 18 facilities located throughout the Town. The total square footage shown in the table is only for space that provides indoor recreation activities. Space associated with culture and theatre services, such as the Stephen Leacock Theatre, have been removed from the inventory, as these services are ineligible for development charge funding. The total value of this indoor recreation space is \$85.97 million. The land associated with the facilities totals 16.95 hectares, which is valued at \$6.07 million. The Town owns and maintains a substantial amount of furniture and equipment used to provide indoor recreation services. The total replacement value of all indoor recreation equipment in 2015 was \$1.50 million.

The ten-year historic inventory of capital assets for Georgina's Town parks includes 306.22 acres of developed parkland and 18.90 kilometres of multi-use recreational trails. Various types of parks have been included in the inventory, including neighborhood parks, special park areas, and community parks. The combined value of all developed parkland and trails amounts to \$50.68 million.

The Town also owns and maintains many park facilities, including 34 playground structures, 18 baseball diamonds, 18 soccer fields, 3 splash pads, 3 tennis courts, 6 basketball courts, 6 volleyball courts, and 3 skate parks. The combined value of all park facilities in 2015 was \$11.76 million. The 15,900 square feet of outdoor park buildings, including storage, washrooms and the harbour building are valued at \$2.98 million. Finally, the parks and recreation department is responsible for parks fleet and related equipment. The 67 vehicles and equipment have a total value of \$2.15 million.

The total combined value of capital assets for Parks and Recreation in the Town of Georgina amounts to \$161.11 million. The ten-year historical average service level is \$3,537.33 per capita, and this, multiplied by the ten-year net population growth (5,977), results in a ten-year maximum allowable funding envelope of \$21.14 million. Uncommitted excess capacity in the amount of \$342,000 is netted out of the maximum funding envelope. The Parks and Recreation funding envelope must be reduced by ten per cent as required under the *DCA*. The discount amounts to \$2.08 million and is netted out of the calculation. The resulting net maximum allowable funding envelope brought forward to the development charges calculation is reduced to \$18.72 million.

**TABLE 2 2016–2025 DEVELOPMENT-RELATED PROGRAM & CALCULATION
OF THE “UNADJUSTED” DEVELOPMENT CHARGES**

The 2016 - 2025 development-related capital program for Parks and Recreation totals \$39.39 million and largely recovers for additional indoor recreation space.

The first portion of the program recovers for a portion of the new Link Community Centre. The Link is a former school in Sutton that has been renovated and repurposed into a community centre that will be used by the Town as well as various local organizations, non-profit groups, and social services. The renovations total \$3.00 million, of which the Town is responsible for \$2.94 million. The remaining \$60,000 will come from alternative revenue sources. A share of \$2.50 million, 85 per cent, has been removed from the DC eligible costs as it is estimated that the majority of the facility will be used for community groups and non-DC eligible activities (arts and culture, health care, etc.) The remaining 15 per cent is allocated to indoor recreation activities and, following the 10 per cent reduction of \$44,100, the DC eligible costs amount to \$396,900. These costs will be funded entirely by available DC reserve funds.

Also included in the Parks and Recreation capital program is the new Multi-Use Recreation Centre, as outlined in the Recreation Facility Needs Study (May, 2014). The estimated project cost totals \$30.68 million, of which 90 per cent, or \$27.69 million is allocated to indoor recreation activities. The aquatic centre portion of the facility is separated from the remainder of the indoor recreation space as it is allocated out over a longer planning period to service a greater population figure. The remaining 10 per cent has been included in the Library Services capital program as a new branch is proposed to be located in the facility. See Appendix B.1 for further details.

The MURC will be a net addition to the Town's existing stock of indoor recreation facilities and, as such, is considered to be related entirely to development. The 10 per cent reduction totals \$2.77 million and is removed from the development charges calculation. Of the total DC eligible costs of \$24.92 million, \$893,950 will be funded by available DC reserve funds. A share (76 per cent) of the DC eligible costs associated with the aquatic centre is allocated to development that will occur beyond the planning period under review to service a population of 70,300. As such, \$8.43 million has been allocated to the post-2025 period benefit and will be eligible for DC funding under subsequent by-laws. The remaining share of \$15.59 million is eligible for recovery through development charges during the 2016 to 2025 planning period.

The final project in the capital program is an annual provision for new park and trail development and outdoor park amenities. The cost of \$8.70 million is based on the level of service provided to residents over the last ten years and applied to anticipated development in the planning period. The 10 per cent service discount totals \$870,000 and is removed from the development charge calculation. Of the total DC eligible costs, \$2.50 million is included for recovery throughout the ten-year planning period. The remainder, \$5.33 million is deemed to provide a post-2025 benefit and will be considered for recovery under future development charge studies, subject to service level restrictions.

The total DC costs eligible for recovery of \$18.09 million are allocated entirely against future residential development in the Town. When this amount is allocated to the ten-year growth in population in new dwelling units between 2016 and 2025, an unadjusted development charge of \$2,504.47 per capita results.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$2,619.56 per capita. The following table summarizes the calculation of the Parks and Recreation development charge:

PARKS AND RECREATION SUMMARY						
10-year Hist. Service Level per capita	2016 - 2025		Unadjusted Development Charge		Calculated Development Charge	
	Development-Related Capital Program		Residential	Non-Residential	Residential	Non-Residential
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$3,537.33	\$39,392,277	\$18,094,773	\$2,504.47	\$0.00	\$2,619.56	\$0.00

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TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
INDOOR RECREATION

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Belhaven Hall	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	\$380
Claredon Beach House	770	770	770	770	770	770	770	770	-	-	\$250
Club 55 Keswick	9,226	9,226	9,226	9,226	9,226	9,226	9,226	9,226	9,226	9,226	\$380
Club 55 Sutton	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	\$320
De La Salle Hall	8,900	8,900	8,900	8,900	8,900	8,900	8,900	8,900	8,900	8,900	\$320
De La Salle/Jericho	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	\$160
Egypt Community Hall	4,400	4,400	4,400	4,400	4,400	4,400	-	4,400	4,400	4,400	\$380
Elmgrove Hall	2,200	2,200	2,200	2,200	2,200	2,200	2,200	-	-	-	\$380
Family Life Centre	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	\$320
Georgina Ice Palace	104,000	104,000	104,000	104,000	104,000	104,000	104,000	104,000	104,000	104,000	\$320
Georgina Leisure Pool	17,400	17,400	17,400	17,400	17,400	17,400	17,400	17,400	17,400	17,400	\$510
Kin Hall (Sutton)	6,800	6,800	6,800	6,800	6,800	6,800	6,800	6,800	6,800	6,800	\$320
Pefferlaw Ice Pad	-	-	-	-	15,555	15,555	15,555	15,555	15,555	15,555	\$150
Pefferlaw Lions Community Centre	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	\$380
Pefferlaw Youth Centre	2,480	2,480	2,480	2,480	2,480	2,480	-	-	-	-	\$380
Port Bolster Hall	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	\$320
ROC Chalet, Snowmaking Shed and Canteen	-	-	-	-	-	-	11,900	11,900	11,900	11,900	\$380
Roches Point Hall	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	\$380
Stephen Leacock Theatre	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	\$380
Sutton Arena	34,900	34,900	34,900	34,900	34,900	34,900	34,900	34,900	34,900	34,900	\$350
Udora Hall	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	\$380
Virginia Hall	3,100	3,100	3,100	3,100	3,100	3,100	3,100	-	-	-	\$380
Total (sq.ft.)	235,324	235,324	235,324	235,324	250,879	250,879	255,899	254,999	254,229	254,229	
Total (\$000)	\$82,267.9	\$82,267.9	\$82,267.9	\$82,267.9	\$84,601.1	\$84,601.1	\$86,508.7	\$86,166.7	\$85,974.2	\$85,974.2	

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TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
INDOOR RECREATION

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Belhaven Hall	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$358,000
Claredon Beach House	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-	-	\$358,000
Club 55 Keswick	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	\$358,000
Club 55 Sutton	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$358,000
De La Salle Hall	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$358,000
De La Salle/Jericho	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	\$358,000
Egypt Community Hall	1.04	1.04	1.04	1.04	1.04	1.04	-	1.04	1.04	1.04	\$358,000
Elmgrove Hall	0.20	0.20	0.20	0.20	0.20	0.20	-	-	-	-	\$358,000
Family Life Centre	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$358,000
Georgina Ice Palace	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	\$358,000
Georgina Leisure Pool	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	\$358,000
Kin Hall (Sutton)	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	\$358,000
Pefferlaw Ice Pad	-	-	-	-	-	-	-	-	-	-	\$358,000
Pefferlaw Lions Community Centre	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$358,000
Pefferlaw Youth Centre	0.20	0.20	0.20	0.20	0.20	0.20	-	-	-	-	\$358,000
Port Bolster Hall	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$358,000
ROC Chalet, Snowmaking Shed and Canteen	-	-	-	-	-	-	1.83	1.83	1.83	1.83	\$358,000
Roches Point Hall	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$358,000
Stephen Leacock Theatre	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$358,000
Sutton Arena	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$358,000
The Link	-	-	-	-	-	3.11	3.11	3.11	3.11	3.11	\$358,000
Udora Hall	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$358,000
Virginia Hall	0.40	0.40	0.40	0.40	0.40	0.40	-	-	-	-	\$358,000
Total (ha)	12.82	12.82	12.82	12.82	12.82	15.93	15.92	16.96	16.95	16.95	
Total (\$000)	\$4,587.9	\$4,587.9	\$4,587.9	\$4,587.9	\$4,587.9	\$5,701.2	\$5,697.7	\$6,070.0	\$6,066.9	\$6,066.9	

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TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
INDOOR RECREATION

FURNITURE & EQUIPMENT Facility Name	Total Value of Furniture & Equipment (\$)									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Belhaven Hall	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500
Claredon Beach House	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Club 55 Keswick	\$101,200	\$101,200	\$101,200	\$101,200	\$101,200	\$101,200	\$101,200	\$101,200	\$101,200	\$101,200
Club 55 Sutton	\$203,600	\$203,600	\$203,600	\$203,600	\$203,600	\$203,600	\$203,600	\$203,600	\$203,600	\$203,600
De La Salle Hall	\$18,700	\$18,700	\$18,700	\$18,700	\$18,700	\$18,700	\$18,700	\$18,700	\$18,700	\$18,700
De La Salle/Jericho	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000
Egypt Community Hall	\$36,300	\$36,300	\$36,300	\$36,300	\$36,300	\$36,300	\$36,300	\$36,300	\$41,000	\$41,000
Elmgrove Hall	\$9,900	\$9,900	\$9,900	\$9,900	\$9,900	\$9,900	\$0	\$0	\$0	\$0
Family Life Centre	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Georgina Ice Palace	\$172,800	\$172,800	\$172,800	\$172,800	\$172,800	\$172,800	\$172,800	\$172,800	\$172,800	\$172,800
Georgina Leisure Pool	\$86,400	\$86,400	\$86,400	\$86,400	\$86,400	\$86,400	\$86,400	\$86,400	\$86,400	\$86,400
Ice Resurfacers	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000
Kin Hall (Sutton)	\$45,100	\$45,100	\$45,100	\$45,100	\$45,100	\$45,100	\$45,100	\$45,100	\$45,100	\$45,100
Pefferlaw Ice Pad	\$0	\$0	\$0	\$0	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000
Pefferlaw Lions Community Centre	\$73,200	\$73,200	\$73,200	\$73,200	\$73,200	\$73,200	\$73,200	\$73,200	\$73,200	\$73,200
Pefferlaw Youth Centre	\$18,200	\$18,200	\$18,200	\$18,200	\$18,200	\$18,200	\$0	\$0	\$0	\$0
Port Bolster Hall	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500
ROC Chalet, Snowmaking Shed and Canteen	\$0	\$0	\$0	\$0	\$0	\$0	\$165,000	\$165,000	\$165,000	\$165,000
Roches Point Hall	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200
Stephen Leacock Theatre	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Sutton Arena	\$111,100	\$111,100	\$111,100	\$111,100	\$111,100	\$111,100	\$111,100	\$111,100	\$111,100	\$111,100
Udora Hall	\$58,300	\$58,300	\$58,300	\$58,300	\$58,300	\$58,300	\$58,300	\$58,300	\$58,300	\$58,300
Virginia Hall	\$4,400	\$4,400	\$4,400	\$4,400	\$4,400	\$4,400	\$0	\$0	\$0	\$0
Total (\$000)	\$1,350.4	\$1,350.4	\$1,350.4	\$1,350.4	\$1,361.4	\$1,361.4	\$1,493.9	\$1,493.9	\$1,498.6	\$1,498.6

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARKLAND DEVELOPMENT

PARK DEVELOPMENT Park Type	# of Acres of Developed Parkland										UNIT COST (\$/acre)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Neighbourhood Parks	98.91	101.22	103.52	103.52	103.52	103.52	104.00	104.00	104.72	104.72	\$187,000
Special Park Areas	66.11	69.82	73.52	73.52	73.52	73.52	73.52	73.52	73.52	73.52	\$130,900
Community Park	93.87	96.62	99.38	99.38	99.38	127.98	127.98	127.98	127.98	127.98	\$130,900
											\$/km
Multi-Use Trails (km)	18.90	18.90	18.90	18.90	18.90	18.90	18.90	18.90	18.90	18.90	\$250,000
Total (acres)	277.8	286.6	295.3	295.3	295.3	323.9	324.4	324.4	325.1	325.1	
Total (\$000)	\$44,162.7	\$45,439.1	\$46,715.5	\$46,715.5	\$46,715.5	\$50,459.2	\$50,549.0	\$50,549.0	\$50,683.6	\$50,683.6	

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK AMENITIES

PLAYGROUNDS Park Name	# of Playgrounds										UNIT COST (\$/unit)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Constable Garret Styles Park	-	-	-	-	-	-	-	-	1	1	\$50,000
Bayview Park	-	-	-	-	-	1	1	1	1	1	\$65,000
Civic Centre Park	1	1	1	1	1	1	1	1	1	1	\$40,000
Claredon Beach Park	-	-	-	-	-	-	-	-	1	1	\$125,000
De La Salle Park	-	-	-	-	-	-	-	1	1	1	\$95,000
Egypt Hall and Park	1	1	1	1	1	1	1	1	1	1	\$50,000
Gwendolyn Park	1	1	1	1	1	1	1	1	1	1	\$65,000
Glenwoods Park	1	1	1	1	1	1	1	1	1	1	\$35,000
Highcastle Park	1	1	1	1	1	1	1	1	1	1	\$75,000
Hollywood Park	-	-	-	-	-	-	-	-	1	1	\$50,000
Holmes Point Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Kin Park	1	1	1	1	1	1	1	1	1	1	\$85,000
Lions Park	-	-	-	-	-	-	-	-	1	1	\$95,000
Lorne Street Park	-	-	-	-	-	-	-	-	1	1	\$40,000
Sutton Multi-Use Complex	1	1	1	1	1	1	1	1	1	1	\$50,000
North Gwillimbury Park	1	1	1	1	1	1	1	1	1	1	\$95,000
Richmond Park #1	-	-	-	1	1	1	1	1	1	1	\$60,000
Richmond Park #2	-	-	-	1	1	1	1	1	1	1	\$45,000
Sheppard Avenue Park	-	-	-	-	-	-	-	-	-	1	\$95,000
Thornlodge Park	1	1	1	1	1	1	1	1	1	1	\$95,000
Udora Hall and Park #1	1	1	1	1	1	1	1	1	1	1	\$50,000
Udora Hall and Park #2	1	1	1	1	1	1	1	1	1	1	\$35,000
Virginia Hall and Park	1	1	1	1	1	1	1	1	1	1	\$20,000
Vista Park	1	1	1	1	1	1	1	1	1	1	\$45,000
Whipper Watson Park	-	-	-	-	1	1	1	1	1	1	\$140,000
West Park	1	1	1	1	1	1	1	1	1	1	\$85,000
Willow Beach Park	1	1	1	1	1	1	1	1	1	1	\$125,000
Young's Harbour	1	1	1	1	1	1	1	1	1	1	\$40,000
Wyndham Park	-	-	-	-	-	-	1	1	1	1	\$125,000
ROC #1	-	-	-	-	-	1	1	1	1	1	\$15,000
ROC #2	-	-	-	-	-	1	1	1	1	1	\$15,000
ROC #3	-	-	-	-	-	1	1	1	1	1	\$15,000
ROC#4	-	-	-	-	-	1	1	1	1	1	\$15,000
ROC#5	-	-	-	-	-	1	1	1	1	1	\$15,000
Total (#)	17	17	17	19	20	26	27	28	33	34	
Total (\$000)	\$1,045.0	\$1,045.0	\$1,045.0	\$1,150.0	\$1,290.0	\$1,430.0	\$1,555.0	\$1,650.0	\$2,010.0	\$2,105.0	

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK AMENITIES

PARK FACILITIES Park Name	# of Facilities										UNIT COST (\$/unit)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Baseball Diamonds											
Belhaven hall	1	1	1	1	1	1	1	1	1	1	\$100,000
Egypt hall and park	1	1	1	1	1	1	1	1	1	1	\$100,000
Highcastle park	1	1	1	1	1	1	1	1	1	1	\$125,000
Kingsway garden	1	1	1	1	1	1	1	1	1	1	\$125,000
Lakeside park	1	1	1	1	1	1	1	1	1	1	\$200,000
Pefferlaw Lions Club & park	1	1	1	1	1	1	1	1	1	1	\$250,000
Port Bolster Hall & park	-	-	-	-	-	-	-	-	-	1	\$100,000
ROC	4	4	4	4	4	4	4	4	4	4	\$285,000
Thornlodge park	1	1	1	1	1	1	1	1	1	1	\$250,000
Udora Hall & park	1	1	1	1	1	1	1	1	1	1	\$250,000
West Park	4	4	4	4	4	4	4	4	4	4	\$250,000
Whipper Watson park	1	1	1	1	1	1	1	1		1	\$200,000
Soccer Fields											
De La Salle Park	3	3	3	3	3	3	3	3	3	3	\$150,000
Pefferlaw Lions Hall & park	3	3	3	3	3	3	3	3	3	3	\$150,000
ROC	9	9	9	9	9	9	9	9	9	9	\$185,000
West Park	3	3	3	3	3	3	3	3	3	3	\$150,000
Splash Pad											
Constable Garrett Styles	-	-	-	-	-	-	-	1	1	1	\$125,000
ROC	-	-	-	-	-	-	1	1	1	1	\$125,000
Whipper Watson park	-	-	1	1	1	1	1	1	1	1	\$125,000
Tennis Courts											
Civic Centre	1	1	1	1	1	1	1	1	1	1	\$175,000
Whipper Watson park	-	-	1	1	1	1	1	1	1	1	\$175,000
Udora Park	1	1	1	1	1	1	1	1	1	1	\$175,000
Total (#)	37	37	39	39	39	39	40	41	40	42	
Total (\$000)	\$7,105.0	\$7,105.0	\$7,405.0	\$7,405.0	\$7,405.0	\$7,405.0	\$7,530.0	\$7,655.0	\$7,455.0	\$7,755.0	

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK AMENITIES

PARK FACILITIES CONTINUED Park Name	# of Facilities										UNIT COST (\$/unit)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Basketball Courts											
Richmond Park	1	1	1	1	1	1	1	1	1	1	\$75,000
Riverview Park	1	1	1	1	1	1	1	1	1	1	\$75,000
ROC	-	-	2	2	2	2	2	2	2	2	\$75,000
Udora Hall	1	1	1	1	1	1	1	1	1	1	\$75,000
Wyndham	-	-	-	-	-	-	1	1	1	1	\$75,000
Volleyball Courts											
De La Salle Park	2	2	2	2	2	2	2	2	2	2	\$75,000
ROC	-	-	3	3	3	3	3	3	3	3	\$75,000
Whipper Watson	-	-	1	1	1	1	1	1	1	1	\$75,000
Skate Park											
Sutton (The Link)	-	-	-	-	-	-	-	-	1	1	\$125,000
Keswick (Georgina Ice Palace)	1	1	1	1	1	1	1	1	1	1	\$125,000
ROC	-	-	-	-	-	-	1	1	1	1	\$125,000
Other Facilities											
Challenge Course - ROC	-	-	1	1	1	1	1	1	1	1	\$500,000
Bike Park - ROC	-	-	1	1	1	1	1	1	1	1	\$125,000
Total (#)	6	6	14	14	14	14	16	16	17	17	
Total (\$000)	\$500.0	\$500.0	\$1,575.0	\$1,575.0	\$1,575.0	\$1,575.0	\$1,775.0	\$1,775.0	\$1,900.0	\$1,900.0	

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK BUILDINGS & EQUIPMENT

PARK BUILDINGS Description	# of Square Feet										UNIT COST (\$/sq.ft)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Parks Shop and Storage	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	\$160
De la Salle Hall - Park Buildings	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	\$160
Oasis Snack Bar/Washroom	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	\$320
Harbour Building	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$320
Irrigation Pumping Station	400	400	400	400	400	400	400	400	400	400	\$250
Total (sq.ft.)	15,900	15,900	15,900	15,900	15,900	15,900	15,900	15,900	15,900	15,900	
Total (\$000)	\$2,980.0	\$2,980.0	\$2,980.0	\$2,980.0	\$2,980.0	\$2,980.0	\$2,980.0	\$2,980.0	\$2,980.0	\$2,980.0	

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK VEHICLES & EQUIPMENT

VEHICLES & RELATED EQUIPMENT Description	# of Units										UNIT COST (\$/unit)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Rear Mount Mower	1	1	1	1	1	1	1	1	1	1	\$3,000
Trailer	5	5	6	6	6	6	6	6	6	6	\$10,000
Top Dresser	1	1	1	1	1	1	1	1	1	1	\$28,000
Seeder	1	1	1	1	1	1	1	1	1	1	\$22,000
Generator	2	2	2	2	2	2	2	2	2	2	\$14,000
Generator	1		-	-	-	-	-	-	-	-	\$27,000
Water Tank/Pumper	2	1	-	-	-	-	-	-	-	-	\$8,000
Auger	1	1	1	1	1	1	1	1	1	1	\$5,000
Gas Blower	2	2	2	2	2	2	2	2	2	4	\$3,000
Snow Blower	2	2	2	2	2	2	2	2	2	2	\$5,000
Aquacide Machine	1	1	1	1	1	1	1	1	1	1	\$15,000
Irrigation Pump	1	1	-	-	-	-	-	-	-	-	\$27,000
Irrigation Sprinkler	2	2	3	3	3	3	3	3	3	3	\$5,000
Genie Lift	1		-	-	-	1	1	1	1	1	\$5,400
4x4 Pickup with Plow	2	3	4	4	4	4	4	4	4	4	\$70,000
Pickup Trucks	6	7	8	8	8	9	9	9	9	9	\$32,000
1Ton Trucks	5	6	7	7	7	5	5	5	5	5	\$85,000
Trackless Tractors	2	3	2	2	2	2	2	2	3	3	\$145,000
Trackless Blowers	2	2	2	1	1	1	1	1	2	2	\$15,000
Tractors	2	2	3	3	3	3	4	4	4	4	\$36,000
Mowers	4	5	6	6	6	6	6	6	6	6	\$15,000
Aerator	1	2	2	2	2	2	2	2	2	2	\$25,000
Groomers	1	2	2	2	2	2	2	2	2	2	\$12,000
Chipper	1	1	1	1	1	1	1	1	1	1	\$32,500
Truck-Mount Sander	1	1	1	1	1	1	1	2	3	3	\$12,000
Bobcat and Attachments	-	1	1	1	1	1	-	-	-	-	\$75,500
Stump Grinder Attachment	-	1	1	1	1	1	1	1	1	1	\$10,000
Shatter Tines	-	-	1	1	1	1	1	1	1	1	\$3,500
Pay and Display Parking Machines	-	-	-	-	-	-	-	-	1	1	\$100,000
Total (#)	50	56	61	60	60	60	60	61	65	67	
Total (\$000)	\$1,542.9	\$1,972.0	\$2,048.5	\$2,033.5	\$2,033.5	\$1,900.9	\$1,861.4	\$1,873.4	\$2,145.4	\$2,151.4	

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**TOWN OF GEORGINA
CALCULATION OF SERVICE LEVELS
PARKS AND RECREATION**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Historic Population	42,346	42,578	42,811	43,045	43,280	43,517	44,061	44,519	44,982	45,450

INVENTORY SUMMARY (\$000)

Indoor Recreation	\$88,206.1	\$88,206.1	\$88,206.1	\$88,206.1	\$90,550.4	\$91,663.7	\$93,700.3	\$93,730.6	\$93,539.7	\$93,539.7
Parkland Development	\$44,162.7	\$45,439.1	\$46,715.5	\$46,715.5	\$46,715.5	\$50,459.2	\$50,549.0	\$50,549.0	\$50,683.6	\$50,683.6
Park Amenities	\$8,650.0	\$8,650.0	\$10,025.0	\$10,130.0	\$10,270.0	\$10,410.0	\$10,860.0	\$11,080.0	\$11,365.0	\$11,760.0
Park Buildings & Equipment	\$4,522.9	\$4,952.0	\$5,028.5	\$5,013.5	\$5,013.5	\$4,880.9	\$4,841.4	\$4,853.4	\$5,125.4	\$5,131.4
Total (\$000)	\$145,541.7	\$147,247.2	\$149,975.1	\$150,065.1	\$152,549.3	\$157,413.8	\$159,950.6	\$160,212.9	\$160,713.7	\$161,114.7

SERVICE LEVEL (\$/capita)

**Average
Service
Level**

Indoor Recreation	\$2,082.99	\$2,071.64	\$2,060.36	\$2,049.16	\$2,092.20	\$2,106.39	\$2,126.60	\$2,105.39	\$2,079.48	\$2,058.07	\$2,083.23
Parkland Development	\$1,042.90	\$1,067.20	\$1,091.20	\$1,085.27	\$1,079.38	\$1,159.53	\$1,147.25	\$1,135.44	\$1,126.74	\$1,115.14	\$1,105.01
Park Amenities	\$204.27	\$203.16	\$234.17	\$235.34	\$237.29	\$239.22	\$246.48	\$248.88	\$252.65	\$258.74	\$236.02
Park Buildings & Equipment	\$106.81	\$116.30	\$117.46	\$116.47	\$115.84	\$112.16	\$109.88	\$109.02	\$113.94	\$112.90	\$113.08
Total (\$/capita)	\$3,436.96	\$3,458.29	\$3,503.19	\$3,486.24	\$3,524.71	\$3,617.30	\$3,630.21	\$3,598.73	\$3,572.82	\$3,544.86	\$3,537.33

**TOWN OF GEORGINA
CALCULATION OF MAXIMUM ALLOWABLE
PARKS AND RECREATION**

10-Year Funding Envelope Calculation

10 Year Average Service Level 2006 - 2015	\$3,537.33
Net Population 2016 - 2025	5,977
Maximum Allowable Funding Envelope	\$21,140,949
Less: Uncommitted Excess Capacity	\$342,064
Less: 10% Legislated Reduction	\$2,079,889
Discounted Maximum Allowable Funding Envelope	\$18,718,997

Excess Capacity Calculation

Total Value of Inventory in 2015	\$161,114,714
Inventory Using Average Service Level	\$160,772,650
Excess Capacity	\$342,064
Excess Capacity	Uncommitted

**APPENDIX B.3
TABLE 2**

**TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS AND RECREATION**

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	10% Reduction		Available DC Reserves	2016-2025	Post 2025
3.0 PARKS AND RECREATION										
3.1 Indoor Recreation: The Link Community Centre										
3.1.1 The Link Community Centre (35,000 sq.ft.)	2016	\$ 3,000,000	\$ 60,000	\$ 2,940,000	\$ 2,499,000	\$ 44,100	\$ 396,900	\$ 396,900	\$ -	\$ -
Subtotal Indoor Recreation: The Link Community Centre		\$ 3,000,000	\$ 60,000	\$ 2,940,000	\$ 2,499,000	\$ 44,100	\$ 396,900	\$ 396,900	\$ -	\$ -
3.2 Indoor Recreation: Multi-Use Recreation Centre										
3.2.1 Aquatic Centre	2020	\$ 12,339,115	\$ -	\$ 12,339,115	\$ -	\$ 1,233,912	\$ 11,105,204	\$ -	\$ 2,670,878	\$ 8,434,326
3.2.1 Athletic Gyms & Other Space	2020	\$ 15,353,162	\$ -	\$ 15,353,162	\$ -	\$ 1,535,316	\$ 13,817,846	\$ 893,950	\$ 12,923,896	\$ -
Subtotal Indoor Recreation: Multi-Use Recreation Centre		\$ 27,692,277	\$ -	\$ 27,692,277	\$ -	\$ 2,769,228	\$ 24,923,049	\$ 893,950	\$ 15,594,773	\$ 8,434,326
3.3 Trails & Parkland Development										
3.3.1 Provision for New Park & Trail Development & Amenities	Various	\$ 8,700,000	\$ -	\$ 8,700,000	\$ -	\$ 870,000	\$ 7,830,000	\$ -	\$ 2,500,000	\$ 5,330,000
Subtotal Trails & Parkland Development		\$ 8,700,000	\$ -	\$ 8,700,000	\$ -	\$ 870,000	\$ 7,830,000	\$ -	\$ 2,500,000	\$ 5,330,000
TOTAL PARKS AND RECREATION		\$ 39,392,277	\$ 60,000	\$ 39,332,277	\$ 2,499,000	\$ 3,683,328	\$ 33,149,949	\$ 1,290,850	\$ 18,094,773	\$ 13,764,326

Residential Development Charge Calculation

Residential Share of 2016 - 2025 DC Eligible Costs	100%	\$18,094,773
10-Year Growth in Population in New Units		7,225
Unadjusted Development Charge Per Capita		\$2,504.47

Non-Residential Development Charge Calculation

Non-Residential Share of 2016 - 2025 DC Eligible Costs	0%	\$0
10-Year Growth in New Space (Square Metres)		290,040
Unadjusted Development Charge Per Square Metre		\$0.00

2016 - 2025 Net Funding Envelope \$18,718,997

Reserve Fund Balance
Balance as at January 1, 2016 \$1,290,850

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TABLE 3

TOWN OF GEORGINA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARKS AND RECREATION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PARKS AND RECREATION	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
OPENING CASH BALANCE	\$0.0	\$1,318.2	\$2,969.9	\$4,742.1	\$6,637.9	(\$8,669.2)	(\$7,290.4)	(\$5,696.6)	(\$3,947.6)	(\$2,020.7)	
2016 - 2025 RESIDENTIAL FUNDING REQUIREMENTS											
- Parks And Recreation: Non Inflated	\$250.0	\$250.0	\$250.0	\$250.0	\$15,844.8	\$250.0	\$250.0	\$250.0	\$250.0	\$250.0	\$18,094.8
- Parks And Recreation: Inflated	\$250.0	\$255.0	\$260.1	\$265.3	\$17,150.9	\$276.0	\$281.5	\$287.2	\$292.9	\$298.8	\$19,617.7
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	590	686	697	707	715	726	760	769	782	793	7,225
REVENUE											
- DC Receipts: Inflated	\$1,545.5	\$1,833.0	\$1,899.6	\$1,965.4	\$2,027.4	\$2,099.7	\$2,242.0	\$2,314.0	\$2,400.1	\$2,482.6	\$20,809.3
INTEREST											
- Interest on Opening Balance	\$0.0	\$46.1	\$103.9	\$166.0	\$232.3	(\$476.8)	(\$401.0)	(\$313.3)	(\$217.1)	(\$111.1)	(\$971.0)
- Interest on In-year Transactions	\$22.7	\$27.6	\$28.7	\$29.8	(\$415.9)	\$31.9	\$34.3	\$35.5	\$36.9	\$38.2	(\$130.4)
TOTAL REVENUE	\$1,568.2	\$1,906.8	\$2,032.2	\$2,161.1	\$1,843.8	\$1,654.8	\$1,875.3	\$2,036.2	\$2,219.9	\$2,409.7	\$19,708.0
CLOSING CASH BALANCE	\$1,318.2	\$2,969.9	\$4,742.1	\$6,637.9	(\$8,669.2)	(\$7,290.4)	(\$5,696.6)	(\$3,947.6)	(\$2,020.7)	\$90.2	

2016 Adjusted Charge Per Capita **\$2,619.56**

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2016

Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.4

OPERATIONS

APPENDIX B.4

OPERATIONS

The Georgina Infrastructure and Operations Department is responsible for road construction and maintenance, snow removal on the roads and sidewalks, vehicle fleet, traffic control, sidewalk construction and maintenance, streetlights, sanitary sewer collection, water distribution, and the maintenance of all parks and facilities. This section deals only with the operations of buildings, land, related furniture and equipment, and municipal fleet. The Parks and Recreation components, including fleet, are addressed in Appendix B.3. The roads and related infrastructure, as well as the water, sewer and storm drainage infrastructure is discussed in Appendices C to F.

TABLE 1 HISTORICAL SERVICE LEVELS

The Town of Georgina provides Operations services from two main sites – Egypt and Belhaven. At these sites there are a variety of facilities, including equipment depots, storage buildings, sand domes and a waterworks facility. The facilities total 50,640 square feet of building space, which was worth almost \$4.44 million in 2015. The 5.75 hectares of land associated with these operations is valued at \$1.58 million. Furniture and equipment required for service provision totals \$287,300 and the operations fleet and associated required equipment includes 80 items, with a combined value of \$5.40 million.

The total value of the Operations inventory of capital assets is \$11.71 million. The resulting ten-year historic average service level is \$207.91 per population and employment, and this, multiplied by the ten-year growth in population and employment (10,146), results in a maximum allowable funding envelope of \$2.11 million. Excess capacity has been calculated in the amount of \$443,310, however it is deemed to be committed through the recovery of a negative reserve fund balance (\$792,85) in the capital program. Under the *Development Charges Act, 1997*, services related to a highway as defined in subsection 1(1) of the *Municipal Act, 2001*, need not to be reduced by the legislated ten per cent. The services and capital assets of Public Works and Operations are considered to be related to a highway, and as such, the full maximum allowable funding envelope of \$2.11 million is brought forward to the development charges calculation.

TABLE 2 2016 – 2025 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The ten-year development-related capital program for Operations totals \$2.97 million. This includes two new vehicle bays, additional equipment, roads fleet acquisitions, water and wastewater servicing vehicles, as well as the recovery of a negative DC reserve fund balance.

No grants or alternative funding sources have been identified so the full amount remains as the net municipal cost. No replacement shares have been deducted as all projects included in the capital program represent net acquisitions to the existing service and related fully to development in the Town. Of the remaining DC eligible costs, the amount which exceeds the maximum allowable funding envelope, \$860,828 has been deferred to beyond 2025 and will be eligible for recovery under future development charges.

The remaining development-related cost eligible for recovery between 2016 and 2025, \$2.11 million, is allocated 63 per cent, or \$1.34 million against new residential development and 37 per cent, or \$771,802 to non-residential development. This yields an unadjusted residential development charge of \$185.13 per capita and \$2.66 per square metre for non-residential development.

TABLE 3 CASH FLOW ANALYSIS

After cash flow considerations, both the residential and non-residential development charges increase. The residential development charge increases to \$209.50 per capita. The non-residential development charge increases to \$2.63 per square metre. The increases represent the front-ended nature of the timing of the capital program.

The following table summarizes the calculation of the Operations development charges:

OPERATIONS SUMMARY						
10-year Hist. Service Level per pop+empl	2016 - 2025		Unadjusted Development Charge		Calculated Development Charge	
	Total	Net DC Recoverable	Residential \$/capita	Non-Residential \$/sq.m	Residential \$/capita	Non-Residential \$/sq.m
\$207.91	\$2,970,185	\$2,109,357	\$185.13	\$2.66	\$209.50	\$2.99

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TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
OPERATIONS

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Egypt Equipment Depot	6,273	6,273	6,273	6,273	6,273	6,273	6,793	6,793	6,793	6,793	\$140
Belhaven Equipment Depot	6,440	6,440	6,440	6,440	6,440	6,440	7,220	6,440	6,440	6,440	\$140
Waterworks Equipment Depot	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	\$200
Belhaven Storage Building	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	\$80
Egypt Storage Building 1	420	420	420	420	420	420	420	420	420	420	\$80
Egypt Storage Building 2	900	900	900	900	900	900	900	900	900	900	\$80
Belhaven Sand Dome 1	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	\$35
Belhaven Sand Dome 2	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	\$35
Egypt Sand Dome	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	7,850	\$35
Waterworks Facility	-	-	-	-	-	8,605	8,605	8,605	8,605	8,605	\$140
Total (sq.ft.)	41,513	41,513	41,513	41,513	41,513	50,118	51,418	50,638	50,638	50,638	
Total (\$000)	\$3,159.7	\$3,159.7	\$3,159.7	\$3,159.7	\$3,159.7	\$4,364.4	\$4,546.4	\$4,437.2	\$4,437.2	\$4,437.2	

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Egypt Yard	3.72	3.72	3.72	3.72	3.72	3.72	3.72	3.72	3.72	3.72	\$275,000
Belhaven Yard	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	\$275,000
Total (ha)	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	
Total (\$000)	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	

FURNITURE AND EQUIPMENT Description	Total Value of Furniture & Equipment (\$)										UNIT COST (\$/sq. ft.)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Egypt Equipment Depot	\$125,460	\$125,460	\$125,460	\$125,460	\$125,460	\$125,460	\$135,860	\$135,860	\$135,860	\$135,860	\$20
Belhaven Equipment Depot	\$128,800	\$128,800	\$128,800	\$128,800	\$128,800	\$128,800	\$144,400	\$128,800	\$128,800	\$128,800	\$20
Waterworks Equipment Depot	\$22,600	\$22,600	\$22,600	\$22,600	\$22,600	\$22,600	\$22,600	\$22,600	\$22,600	\$22,600	\$20
Total (\$000)	\$276.9	\$276.9	\$276.9	\$276.9	\$276.9	\$276.9	\$302.9	\$287.3	\$287.3	\$287.3	

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
OPERATIONS

FLEET & RELATED EQUIPMENT Description	# of Vehicles or Equipment										UNIT COST (\$/vehicle)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Electrical Maintenance											
2010 Ford Transit Connect 5 seater	-	-	-	-	1	1	1	1	1	1	\$36,360
2008 Chevrolet G-Van ETV	-	-	-	1	1	1	1	1	1	1	\$50,500
2012 GMC Savana White 1SA	-	-	-	-	-	1	1	1	1	1	\$50,500
2013 Chevrolet Express Cargo RWD2500 White Truck	-	-	-	-	-	-	-	1	1	1	\$50,500
2011 Haulmark FVN Cargo Enclosed White Trailer	-	-	-	-	-	1	1	1	1	1	\$10,100
Genie Bucket Manlift	-	-	1	1	1	1	1	1	1	1	\$25,250
2011 Self propelled Scissor lift 19' Electric Model SJIII 3219	-	-	-	-	-	1	1	1	1	1	\$10,100
Electrogenes Somers Portable Generator	1	1	1	1	1	1	1	1	1	1	\$50,500
Electrogenes Somers Portable Generator	1	1	1	1	1	1	1	1	1	1	\$50,500
Engineering											
2006 Dodge Dakota	1	1	1	1	1	1	1	1	1	1	\$30,300
2010 Jeep Patriot	-	-	-	-	1	1	1	1	1	1	\$30,300
Mechanincs Yard											
Hoist 2 Pole 12K Rotary lift EH2	-	-	-	-	-	-	1	1	1	1	\$10,100
Hoffmann Geodyna Balancer	-	-	-	-	-	-	-	1	1	1	\$4,545
Canbuilt Hydraulic Shop Press 50 ton	-	-	-	-	-	-	-	1	1	1	\$3,535
Coates Tire Machine Rim Clamp X Series	-	-	-	-	-	-	-	1	1	1	\$6,262
Solus Ultra Diagnostic Scanner & accessories	-	-	-	-	-	-	-	1	1	1	\$4,040
Pressure Washers	-	-	-	-	-	-	-	1	1	1	\$2,020
White Used oil Tank 500 gallons	-	-	-	-	-	-	-	1	1	1	\$5,050
6" dia Hose Reel Kit, Exhaust Fan, Adapter	-	-	-	-	-	-	-	1	1	1	\$5,050
Oil tank Gravity feed 870 litres Cubet (Tanks)	-	-	-	-	-	-	-	1	1	1	\$6,060
Lincoln Power MIG 256 - 220 volts	-	-	-	-	-	-	-	1	1	1	\$3,030

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TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
OPERATIONS

FLEET & RELATED EQUIPMENT, CONT'D Description	# of Vehicles or Equipment										UNIT COST (\$/vehicle)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Waterworks											
2012 Dodge Truck Ram Pickup Bright White	-	-	-	-	-	1	1	1	1	1	\$50,500
2010 Ford Transit Connect 5 seater	-	-	-	-	1	1	1	1	1	1	\$25,250
2010 Ford Transit Connect 5 seater	-	-	-	-	1	1	1	1	1	1	\$25,250
2006 Dodge Truck Ram Pickup	1	1	1	1	1	1	1	1	1	1	\$50,500
2008 Chevrolet G Van	-	-	1	1	1	1	1	1	1	1	\$50,500
2008 Chevrolet G Van	-	-	1	1	1	1	1	1	1	1	\$50,500
2005 Ford 4x2 F550	1	1	1	1	1	1	1	1	1	1	\$80,800
2005 JCTR Float Trailers	1	1	1	1	1	1	1	1	1	1	\$8,080
2005 JCTR Float Trailers	1	1	1	1	1	1	1	1	1	1	\$10,100
2011 American Hauler Trailer -AFX8514TA4 (Traffic Control	-	-	-	-	1	1	1	1	1	1	\$10,100
Peel Engines Generator Model- J9595-Serial M16163	1	1	1	1	1	1	1	1	1	1	\$12,120
Cummins Generator Model - G0508 6187	1	1	1	1	1	1	1	1	1	1	\$12,120
Arrow Board LED Trailer Model - SE15LEDT	1	1	1	1	1	1	1	1	1	1	\$10,100
Arrow Board LED Trailer Model - SE15LEDT	1	1	1	1	1	1	1	1	1	1	\$10,100
Steam Jenny -Model A	-	-	1	1	1	1	1	1	1	1	\$15,150
Aqualoader Bulk Fill Station	-	-	-	-	-	-	1	1	1	1	\$35,350
Roads											
2009 Cheverlot Colorado	-	-	-	-	1	1	1	1	1	1	\$35,350
2013 GMC Sierra 1500 Summit White	1	1	1	1	1	1	1	1	1	1	\$50,500
2013 GMC Sierra 1500 Summit White	1	1	1	1	1	1	1	1	1	1	\$50,500
2006 Int'l 5T Dump	1	1	1	1	1	1	1	1	1	1	\$272,700
2011 Int'l FRTLNR-5T Dump	1	1	1	1	1	1	1	1	1	1	\$232,300
2008 Int'l 5T Work Star Dump	1	1	1	1	1	1	1	1	1	1	\$232,300
2009 Int'l FRTLNR-6T Dump	1	1	1	1	1	1	1	1	1	1	\$232,300
2009 Int'l FRTLNR-6T Dump	1	1	1	1	1	1	1	1	1	1	\$232,300
2012 Intnl. Freightliner with Dump	1	1	1	1	1	1	1	1	1	1	\$232,300
2006 Int'l 5T Dump	1	1	1	1	1	1	1	1	1	1	\$272,700
2004 Int'l 5T Dump	1	1	1	1	1	1	1	1	1	1	\$191,900
2012 John Deere Front end Loader	1	1	1	1	1	1	1	1	1	1	\$126,250
2008 New Holland Wheel Loader	-	1	1	1	1	1	1	1	1	1	\$111,100
2004 Int'l 8T Dump	1	1	1	1	1	1	1	1	1	1	\$212,100
2004 Int'l 8T Dump	1	1	1	1	1	1	1	1	1	1	\$212,100
Tractor & Rear Mower	1	1	1	1	1	1	1	1	1	1	\$101,000

APPENDIX B.4
TABLE 1 - PAGE 4

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
OPERATIONS

FLEET & RELATED EQUIPMENT, CONT'D Description	# of Vehicles or Equipment										UNIT COST (\$/vehicle)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Tractor	1	1	1	1	1	1	1	1	1	1	\$141,400
Tractor	1	1	1	1	1	1	1	1	1	1	\$141,400
2010 Ford F150 Pick-up	-	-	-	-	1	1	1	1	1	1	\$35,350
2010 Ford F150 Pick-up	-	-	-	-	1	1	1	1	1	1	\$35,350
2005 Triaxle Trailer	1	1	1	1	1	1	1	1	1	1	\$20,200
Steam Jennys (2)- Pressure washer (1)	1	1	1	1	1	1	1	1	1	1	\$15,150
Gradall (used)	1	1	1	1	1	1	1	1	1	1	\$151,500
Backhoe/Loader	1	1	1	1	1	1	1	1	1	1	\$141,400
Pole Trailer	1	1	1	1	1	1	1	1	1	1	\$30,300
2005 J & J Trailer	1	1	1	1	1	1	1	1	1	1	\$8,080
2003 Dodge Pickup	1	1	1	1	1	1	1	1	1	1	\$50,500
2005 JCTR Trailer DBW	1	1	1	1	1	1	1	1	1	1	\$10,100
2011 American Hauler Utility Trailer	-	-	-	-	1	1	1	1	1	1	\$10,100
2012 J.C. Yellow Single Axle Pole Trailer	-	-	-	-	-	-	1	1	1	1	\$10,100
Webber Lane Utility Trailer - walkbehind	-	-	-	1	1	1	1	1	1	1	\$10,100
Hot Boxes 1	1	1	1	1	1	1	1	1	1	1	\$30,300
Transmitter	1	1	1	1	1	1	1	1	1	1	\$20,200
John Deere Heavy Duty Rear Swing Flail Diamond Mower	1	1	1	1	1	1	1	1	1	1	\$15,150
John Deere Heavy Duty Rear Swing Flail Diamond Mower	1	1	1	1	1	1	1	1	1	1	\$15,150
2012 Thompson Model "A" Steamer with 100' sewer snake	1	1	1	1	1	1	1	1	1	1	\$15,150
2013 Hydraulic 8' Loader Mounted Angle Broom	1	1	1	1	1	1	1	1	1	1	\$20,200
Safe Pace Radar signs 100 yellow with brackets (Qty -7) and	-	-	-	-	-	-	-	1	1	1	\$38,380
2013 Bush Hog Model 100-08 Three point hitch rear blade	-	-	-	-	-	-	-	1	1	1	\$5,050
2003 Aquacide Machine	1	1	1	1	1	1	1	1	1	1	\$15,150
2015 FREIGHLINER SD	1	1	1	1	1	1	1	1	1	1	\$244,420
2015 FREIGHLINER SD	1	1	1	1	1	1	1	1	1	1	\$244,420
2015 FREIGHLINER SD	1	1	1	1	1	1	1	1	1	1	\$227,250
Total (#)	45	46	50	52	61	65	68	80	80	80	
Total (\$000)	\$4,533.9	\$4,645.0	\$4,786.4	\$4,847.0	\$5,090.4	\$5,211.6	\$5,267.2	\$5,400.7	\$5,400.7	\$5,400.7	

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APPENDIX B.4
TABLE 1 - PAGE 5

TOWN OF GEORGINA
CALCULATION OF SERVICE LEVELS
OPERATIONS

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Historic Population	42,346	42,578	42,811	43,045	43,280	43,517	44,061	44,519	44,982	45,450
Historic Employment	7,419	7,469	7,519	7,570	7,621	7,673	7,905	8,155	8,425	8,718
Historic Population + Employment	49,765	50,047	50,330	50,615	50,901	51,190	51,966	52,674	53,407	54,168

INVENTORY SUMMARY (\$000)

Buildings	\$3,159.7	\$3,159.7	\$3,159.7	\$3,159.7	\$3,159.7	\$4,364.4	\$4,546.4	\$4,437.2	\$4,437.2	\$4,437.2
Land	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3	\$1,580.3
Furniture And Equipment	\$276.9	\$276.9	\$276.9	\$276.9	\$276.9	\$276.9	\$302.9	\$287.3	\$287.3	\$287.3
Fleet & Related Equipment	\$4,533.9	\$4,645.0	\$4,786.4	\$4,847.0	\$5,090.4	\$5,211.6	\$5,267.2	\$5,400.7	\$5,400.7	\$5,400.7
Total (\$000)	\$9,550.8	\$9,661.9	\$9,803.3	\$9,863.9	\$10,107.3	\$11,433.2	\$11,696.7	\$11,705.4	\$11,705.4	\$11,705.4

SERVICE LEVEL (\$/pop+empl)											Average Service Level
Buildings	\$63.49	\$63.13	\$62.78	\$62.43	\$62.07	\$85.26	\$87.49	\$84.24	\$83.08	\$81.91	\$73.59
Land	\$31.76	\$31.58	\$31.40	\$31.22	\$31.05	\$30.87	\$30.41	\$30.00	\$29.59	\$29.17	\$30.71
Furniture And Equipment	\$5.56	\$5.53	\$5.50	\$5.47	\$5.44	\$5.41	\$5.83	\$5.45	\$5.38	\$5.30	\$5.49
Fleet & Related Equipment	\$91.11	\$92.81	\$95.10	\$95.76	\$100.01	\$101.81	\$101.36	\$102.53	\$101.12	\$99.70	\$98.13
Total (\$/pop+empl)	\$191.92	\$193.06	\$194.78	\$194.88	\$198.57	\$223.35	\$225.08	\$222.22	\$219.17	\$216.09	\$207.91

TOWN OF GEORGINA
CALCULATION OF MAXIMUM ALLOWABLE
OPERATIONS

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2006 - 2015	\$207.91
Net Population & Employment in New Space Growth 2015 - 2024	10,146
Maximum Allowable Funding Envelope	\$2,109,357
Less: Uncommitted Excess Capacity	\$0
Discounted Maximum Allowable Funding Envelope	\$2,109,357

Excess Capacity Calculation	
Total Value of Inventory in 2015	\$11,705,434
Inventory Using Average Service Level	\$11,262,128
Excess Capacity	\$443,306
Excess Capacity:	Committed

APPENDIX B.4
TABLE 2

TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
OPERATIONS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	0% Reduction		Available DC Reserves	2016-2025	Post 2025
4.0 OPERATIONS										
4.1 Recovery of Negative DC Reserve Fund Balance										
4.1.3 Recovery of Negative DC Reserve Fund Balance	2016	\$ 792,085	\$ -	\$ 792,085	\$ -	\$ -	\$ 792,085	\$ -	\$ 792,085	\$ -
Subtotal Recovery of Negative DC Reserve Fund Balance		\$ 792,085	\$ -	\$ 792,085	\$ -	\$ -	\$ 792,085	\$ -	\$ 792,085	\$ -
4.2 Operations Buildings, Land, Equipment										
4.2.1 2 Bays at 1,000 sq.ft. each	2020	\$ 70,000	\$ -	\$ 70,000	\$ -	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -
4.2.2 New Hoist - Small	2020	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -
4.2.3 New Hoist - Large	2020	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -	\$ 25,572	\$ 14,428
Subtotal Operations Buildings, Land, Equipment		\$ 125,000	\$ -	\$ 125,000	\$ -	\$ -	\$ 125,000	\$ -	\$ 110,572	\$ 14,428
4.3 Roads and Related Fleet										
4.3.1 Tandem Axel Dump Truck	2016	\$ 272,700	\$ -	\$ 272,700	\$ -	\$ -	\$ 272,700	\$ -	\$ 272,700	\$ -
4.3.2 Crew Cab	2016	\$ 67,000	\$ -	\$ 67,000	\$ -	\$ -	\$ 67,000	\$ -	\$ 67,000	\$ -
4.3.3 Road Sweeper	2020	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
4.3.4 Tandem Axel Dump Truck	2021	\$ 272,700	\$ -	\$ 272,700	\$ -	\$ -	\$ 272,700	\$ -	\$ -	\$ 272,700
4.3.5 Crew Cab	2021	\$ 67,000	\$ -	\$ 67,000	\$ -	\$ -	\$ 67,000	\$ -	\$ -	\$ 67,000
4.3.6 Service Truck	2023	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000
4.3.7 Tandem Axel Dump Truck	2025	\$ 272,700	\$ -	\$ 272,700	\$ -	\$ -	\$ 272,700	\$ -	\$ -	\$ 272,700
4.3.8 Crew Cab	2025	\$ 67,000	\$ -	\$ 67,000	\$ -	\$ -	\$ 67,000	\$ -	\$ -	\$ 67,000
Subtotal Roads and Related Fleet		\$ 1,319,100	\$ -	\$ 1,319,100	\$ -	\$ -	\$ 1,319,100	\$ -	\$ 539,700	\$ 779,400
4.4 Water and Wastewater Vehicles										
4.4.1 Crew Cab	2016	\$ 67,000	\$ -	\$ 67,000	\$ -	\$ -	\$ 67,000	\$ -	\$ 67,000	\$ -
4.4.2 1 Vacuum Truck	2018	\$ 600,000	\$ -	\$ 600,000	\$ -	\$ -	\$ 600,000	\$ -	\$ 600,000	\$ -
4.4.3 Crew Cab	2021	\$ 67,000	\$ -	\$ 67,000	\$ -	\$ -	\$ 67,000	\$ -	\$ -	\$ 67,000
Subtotal Water and Wastewater Vehicles		\$ 734,000	\$ -	\$ 734,000	\$ -	\$ -	\$ 734,000	\$ -	\$ 667,000	\$ 67,000
TOTAL OPERATIONS		\$ 2,970,185	\$ -	\$ 2,970,185	\$ -	\$ -	\$ 2,970,185	\$ -	\$ 2,109,357	\$ 860,828

Residential Development Charge Calculation

Residential Share of 2016 - 2025 DC Eligible Costs	63%	\$1,337,555
10-Year Growth in Population in New Units		7,225
Unadjusted Development Charge Per Capita		\$185.13

Non-Residential Development Charge Calculation

Non-Residential Share of 2016 - 2025 DC Eligible Costs	37%	\$771,802
10-Year Growth in New Space (Square Metres)		290,040
Unadjusted Development Charge Per Square Metre		\$2.66

2016 - 2025 Net Funding Envelope \$2,109,357

Reserve Fund Balance

Balance as at January 1, 2016 (\$792,085)

TOWN OF GEORGINA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
OPERATIONS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

OPERATIONS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
OPENING CASH BALANCE	\$0.00	(\$654.06)	(\$540.87)	(\$821.26)	(\$706.48)	(\$797.81)	(\$670.85)	(\$525.31)	(\$365.86)	(\$190.62)	
2016 - 2025 RESIDENTIAL FUNDING REQUIREMENTS											
- Operations: Non Inflated	\$760.2	\$0.0	\$380.5	\$0.0	\$196.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,337.6
- Operations: Inflated	\$760.2	\$0.0	\$395.8	\$0.0	\$213.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,369.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	590	686	697	707	715	726	760	769	782	793	7,225
REVENUE											
- DC Receipts: Inflated	\$123.6	\$146.6	\$151.9	\$157.2	\$162.1	\$167.9	\$179.3	\$185.1	\$192.0	\$198.5	\$1,664.2
INTEREST											
- Interest on Opening Balance	\$0.0	(\$36.0)	(\$29.7)	(\$45.2)	(\$38.9)	(\$43.9)	(\$36.9)	(\$28.9)	(\$20.1)	(\$10.5)	(\$290.0)
- Interest on In-year Transactions	(\$17.5)	\$2.6	(\$6.7)	\$2.8	(\$1.4)	\$2.9	\$3.1	\$3.2	\$3.4	\$3.5	(\$4.2)
TOTAL REVENUE	\$106.1	\$113.2	\$115.4	\$114.8	\$121.8	\$127.0	\$145.5	\$159.4	\$175.2	\$191.5	\$1,370.0
CLOSING CASH BALANCE	(\$654.1)	(\$540.9)	(\$821.3)	(\$706.5)	(\$797.8)	(\$670.8)	(\$525.3)	(\$365.9)	(\$190.6)	\$0.9	

2016 Adjusted Charge Per Capita **\$209.50**

Allocation of Capital Program

Residential Sector	63.4%
Non-Residential Sector	36.6%

Rates for 2016

Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

TOWN OF GEORGINA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
OPERATIONS
NON-RESIDENTIAL OTHER DEVELOPMENT CHARGE
(in \$000)

OPERATIONS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
OPENING CASH BALANCE	\$0.00	(\$388.22)	(\$328.68)	(\$485.48)	(\$400.35)	(\$415.25)	(\$281.19)	(\$223.81)	(\$157.87)	(\$82.61)	
2016 - 2025 NON-RESIDENTIAL - OTHER FUNDING REQUIREMENTS											
- Operations: Non Inflated	\$438.6	\$0.0	\$219.5	\$0.0	\$113.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$771.8
- Operations: Inflated	\$438.6	\$0.0	\$228.4	\$0.0	\$123.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$790.0
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	20,342	26,058	30,040	34,640	40,160	46,710	21,250	22,400	23,560	24,880	290,040
REVENUE											
- DC Receipts: Inflated	\$60.8	\$79.5	\$93.4	\$109.9	\$130.0	\$154.2	\$71.6	\$76.9	\$82.5	\$88.9	\$947.7
INTEREST											
- Interest on Opening Balance	\$0.0	(\$21.4)	(\$18.1)	(\$26.7)	(\$22.0)	(\$22.8)	(\$15.5)	(\$12.3)	(\$8.7)	(\$4.5)	(\$152.0)
- Interest on In-year Transactions	(\$10.4)	\$1.4	(\$3.7)	\$1.9	\$0.1	\$2.7	\$1.3	\$1.3	\$1.4	\$1.6	(\$2.4)
TOTAL REVENUE	\$50.4	\$59.5	\$71.6	\$85.1	\$108.1	\$134.1	\$57.4	\$65.9	\$75.3	\$85.9	\$793.3
CLOSING CASH BALANCE	(\$388.2)	(\$328.7)	(\$485.5)	(\$400.4)	(\$415.3)	(\$281.2)	(\$223.8)	(\$157.9)	(\$82.6)	\$3.3	

2016 Adjusted Charge Per Square Metre

\$2.99

Allocation of Capital Program

Residential Sector	63.4%
Non-Residential Sector	36.6%

Rates for 2016

Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.5

GENERAL GOVERNMENT

APPENDIX B.5

GENERAL GOVERNMENT

The *DCA* allows the cost of development-related studies and other general government functions to be included in the calculation of development charges. Consistent with s. 5 (1) 7 of the *DCA*, the eligible development-related net capital cost for the provision of studies and permitted general government expenditures is reduced by ten per cent when calculating the development charges.

TABLE 1 2016 – 2025 DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

As shown in Table 1, the 2016–2025 development-related gross cost for general government is \$550,000. The capital program relates to various development-related studies, including two five-year updates to the development charges study at a cost of \$50,000 each, an update to the Official Plan and Zoning By-law, a Library Master Plan, as well as a provision for development-related studies throughout the ten-year planning period.

As many of these studies are related to growth in the Town of Georgina, only a small amount of “benefit to existing” shares have been deducted. Benefit to existing shares have been calculated at 40 per cent of the net municipal costs of the ten-year update to the Official Plan and 50 per cent to the Zoning By-law update costs. These shares total \$70,000.

The legislated ten per cent discount totals \$48,000 and is deducted from the capital costs. The remaining DC eligible share totals \$432,000, \$20,457 of which will be funded by the Town’s available DC reserve funds. The remaining \$411,543 is eligible for recovery over the ten-year planning period under review.

This amount is apportioned 63 per cent (\$260,962) to residential development and 37 per cent (\$150,581) to non-residential development. The resulting unadjusted development charges for General Government are \$36.12 per capita and \$0.52 per square metre of new non-residential building space.

TABLE 2 CASH FLOW ANALYSIS

The cash-flow analysis is displayed in Table 2 and considers the timing of the development charges revenues to determine the adjusted rates. After cash flow

considerations, the residential development charge decreases to \$36.10 per capita. The non-residential development charge remains unchanged at \$0.52 per square metre.

GENERAL GOVERNMENT SUMMARY					
2016 - 2025		Unadjusted		Calculated	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	Residential \$/capita	Non-Residential \$/sq.m	Residential \$/capita	Non-Residential \$/sq.m
\$550,000	\$411,543	\$36.12	\$0.52	\$36.10	\$0.52

APPENDIX B.5
TABLE 1

TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
GENERAL GOVERNMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	10% Reduction		Available DC Reserves	2016-2025	Post 2025
5.0 GENERAL GOVERNMENT										
5.1 Development-Related Studies										
5.1.1 Development Charges Study	2020	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 5,000	\$ 45,000	\$ 20,457	\$ 24,543	\$ -
5.1.2 Ten Year OP Update and Review	2020	\$ 100,000	\$ -	\$ 100,000	\$ 40,000	\$ 6,000	\$ 54,000	\$ -	\$ 54,000	\$ -
5.1.3 Zoning By-law Update	2020	\$ 60,000	\$ -	\$ 60,000	\$ 30,000	\$ 3,000	\$ 27,000	\$ -	\$ 27,000	\$ -
5.1.4 Development Charges Study	2025	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
5.1.5 Library Master Plan	2025	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 4,000	\$ 36,000	\$ -	\$ 36,000	\$ -
5.1.6 Miscellaneous Planning Studies (e.g. Secondary Plans)	Various	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ 25,000	\$ 225,000	\$ -	\$ 225,000	\$ -
Subtotal Development-Related Studies		\$ 550,000	\$ -	\$ 550,000	\$ 70,000	\$ 48,000	\$ 432,000	\$ 20,457	\$ 411,543	\$ -
TOTAL GENERAL GOVERNMENT		\$ 550,000	\$ -	\$ 550,000	\$ 70,000	\$ 48,000	\$ 432,000	\$ 20,457	\$ 411,543	\$ -

Residential Development Charge Calculation

Residential Share of 2016 - 2025 DC Eligible Costs	63%	\$260,962
10-Year Growth in Population in New Units		7,225
Unadjusted Development Charge Per Capita		\$36.12

Non-Residential Development Charge Calculation

Non-Residential Share of 2016 - 2025 DC Eligible Costs	37%	\$150,581
10-Year Growth in New Space (Square Metres)		290,040
Unadjusted Development Charge Per Square Metre		\$0.52

Reserve Fund Balance
Balance as at January 1, 2016

\$20,457

TOWN OF GEORGINA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

GENERAL GOVERNMENT	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
OPENING CASH BALANCE	\$0.00	\$7.16	\$18.34	\$30.54	\$43.78	(\$16.33)	(\$3.85)	\$11.03	\$27.20	\$44.82	
2016 - 2025 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$14.3	\$14.3	\$14.3	\$14.3	\$81.2	\$14.3	\$14.3	\$14.3	\$14.3	\$65.6	\$261.0
- General Government: Inflated	\$14.3	\$14.6	\$14.8	\$15.1	\$87.9	\$15.8	\$16.1	\$16.4	\$16.7	\$78.4	\$290.0
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	590	686	697	707	715	726	760	769	782	793	7,225
REVENUE											
- DC Receipts: Inflated	\$21.3	\$25.3	\$26.2	\$27.1	\$27.9	\$28.9	\$30.9	\$31.9	\$33.1	\$34.2	\$286.8
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.3	\$0.6	\$1.1	\$1.5	(\$0.9)	(\$0.2)	\$0.4	\$1.0	\$1.6	\$5.3
- Interest on In-year Transactions	\$0.1	\$0.2	\$0.2	\$0.2	(\$1.6)	\$0.2	\$0.3	\$0.3	\$0.3	(\$1.2)	(\$1.1)
TOTAL REVENUE	\$21.4	\$25.7	\$27.0	\$28.4	\$27.8	\$28.2	\$30.9	\$32.6	\$34.3	\$34.6	\$291.0
CLOSING CASH BALANCE	\$7.2	\$18.3	\$30.5	\$43.8	(\$16.3)	(\$3.8)	\$11.0	\$27.2	\$44.8	\$0.9	

2016 Adjusted Charge Per Capita

\$36.10

Allocation of Capital Program

Residential Sector	63.4%
Non-Residential Sector	36.6%

Rates for 2016

Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

TOWN OF GEORGINA
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
NON-RESIDENTIAL OTHER DEVELOPMENT CHARGE
(in \$000)

GENERAL GOVERNMENT	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
OPENING CASH BALANCE	\$0.00	\$2.41	\$7.99	\$16.14	\$27.25	(\$0.68)	\$17.30	\$21.09	\$25.84	\$31.58	
2016 - 2025 NON-RESIDENTIAL - OTHER FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$8.2	\$8.2	\$8.2	\$8.2	\$46.9	\$8.2	\$8.2	\$8.2	\$8.2	\$37.9	\$150.6
- General Government: Inflated	\$8.2	\$8.4	\$8.6	\$8.7	\$50.7	\$9.1	\$9.3	\$9.5	\$9.6	\$45.3	\$167.4
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	20,342	26,058	30,040	34,640	40,160	46,710	21,250	22,400	23,560	24,880	290,040
REVENUE											
- DC Receipts: Inflated	\$10.6	\$13.8	\$16.3	\$19.1	\$22.6	\$26.8	\$12.4	\$13.4	\$14.4	\$15.5	\$164.9
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.1	\$0.3	\$0.6	\$1.0	(\$0.0)	\$0.6	\$0.7	\$0.9	\$1.1	\$5.2
- Interest on In-year Transactions	\$0.0	\$0.1	\$0.1	\$0.2	(\$0.8)	\$0.3	\$0.1	\$0.1	\$0.1	(\$0.8)	(\$0.6)
TOTAL REVENUE	\$10.6	\$14.0	\$16.7	\$19.8	\$22.8	\$27.1	\$13.1	\$14.2	\$15.4	\$15.8	\$169.5
CLOSING CASH BALANCE	\$2.4	\$8.0	\$16.1	\$27.2	(\$0.7)	\$17.3	\$21.1	\$25.8	\$31.6	\$2.1	

2016 Adjusted Charge Per Square Metre \$0.52

Allocation of Capital Program

Residential Sector	63.4%
Non-Residential Sector	36.6%

Rates for 2016

Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C

TOWN-WIDE ENGINEERED SERVICES

TECHNICAL APPENDIX

APPENDIX C

TOWN-WIDE ENGINEERED SERVICES TECHNICAL APPENDIX

The Georgina Infrastructure and Operations Department is responsible for road construction and maintenance, snow removal, vehicle fleet, tree removal and tree planting, traffic control, sidewalk construction and maintenance, streetlights, sanitary sewer collection, water distribution, and the maintenance of all parks and facilities. This appendix deals with town-wide roads and related infrastructure and stormwater management. The Parks and Recreation components are addressed in Appendix B.3, and the soft components of road maintenance, including the fleet and operations garages is discussed in Appendix B.4. Area-specific road works for the Keswick and Sutton service areas are discussed in Appendices D and E, respectively.

APPENDIX C.1

TOWN-WIDE ROADS AND RELATED TECHNICAL APPENDIX

The roads and related infrastructure in Georgina includes the roads themselves, as well as intersection improvements, by-passes, sidewalks, bridges, culverts and other structures.

The development-related roads infrastructure projects identified herein are required to service the demands of new development in the Town over the period from 2016 to 2036, for a growth of approximately 7,340 new households and a total employment growth of roughly 10,952 new employees. This forecast is discussed in more detail in Appendix A.

The following tables set out the 2016 to 2036 development-related capital forecast and the calculation of the development charge for roads. The content of the tables is as follows:

Table 1	Historic Service Level Analysis
Table 2	Development-Related Capital Program

TABLE 1 HISTORICAL SERVICE LEVELS

As shown in Table 1, the Town operates 664.8 lane kilometres of roads. All roads have a combined replacement cost of \$322.42 million. The value of the 18 bridges and culverts is estimated at \$14.36 million. Finally, the 75 kilometres of sidewalks in 2015 were worth \$15.00 million.

The combined value of the roads and related inventory of capital assets totals \$351.78 million and the ten-year historical average service level is calculated at \$6,834.96 per capita plus employment. This overall replacement value multiplied by the forecast growth in net population and employment in from 2016 to 2036 (28,856), results in a maximum allowable funding envelope of \$197.23 million.

**TABLE 2 2016 – 2036 DEVELOPMENT-RELATED CAPITAL PROGRAM AND
CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES**

The total cost of the town-wide roads capital program is \$1.50 million and provides for any development-related road works that will be needed throughout the Town between 2016 and 2036. This does not include any works that would be defined as a local service. Table 1 details the allocation of the included costs.

As the \$1.50 million provision relates only to the development-related portion of town-wide roadworks, no benefit to existing or replacement shares have been deducted. The Town’s roads DC reserve fund has an available balance of \$1.02 million, which will be used to fund the majority of these works. The remaining DC eligible share of \$480,843 is incorporated into the development charges calculation and is allocated to the residential sector and non-residential sector based on shares of population and non-residential building space growth between 2016 and 2036.

The residential share of the costs totals \$311,085, or 65 per cent. When divided by the long-term population growth in new units of 20,070, a charge of \$15.50 per capita results. The non-residential share of the costs represents 35 per cent and total \$169,758. When divided by the anticipated increase in square metres of building space between 2016 and 2036 (746,965 square metres), a charge of \$0.23 per square metre results.

The following is a summary of the calculated Town-wide roads development charges:

TOWN-WIDE ROADS AND RELATED SUMMARY						
10-year Hist. Service Level per pop+empl	2016 - 2036		Unadjusted Development Charge		Calculated Development Charge	
	Development-Related Capital Program		Residential	Non-Residential	Residential	Non-Residential
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$6,834.96	\$1,500,000	\$480,843	\$15.50	\$0.23	\$15.50	\$0.23

TOWN OF GEORGINA
INVENTORY OF CAPITAL ASSETS
ROADS AND RELATED

ROADS Type of Road	# of Lane Kilometres										UNIT COST (\$/km)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
High Class Bit.	414.60	414.60	414.60	414.60	414.60	414.60	414.60	414.60	414.60	414.60	\$628,000
Low Class Bit.	250.20	250.20	250.20	250.20	250.20	250.20	250.20	250.20	250.20	250.20	\$248,000
Total (km)	664.80	664.80	664.80	664.80	664.80	664.80	664.80	664.80	664.80	664.80	
Total (\$000)	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	

BRIDGES & CULVERTS Description	# of Bridges & Culverts										UNIT COST (\$/unit)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Bridges & Culverts	18	18	18	18	18	18	18	18	18	18	\$798,000
Total (#)	18	18	18	18	18	18	18	18	18	18	
Total (\$000)	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	

SIDEWALKS Description	# of Kilometres										UNIT COST (\$/km)
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Sidewalks	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	\$200,000
Total (km)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	
Total (\$000)	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	

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APPENDIX C.1
TABLE 1 - PAGE 2

TOWN OF GEORGINA
CALCULATION OF SERVICE LEVELS
ROADS AND RELATED

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Historic Population	42,346	42,578	42,811	43,045	43,280	43,517	44,061	44,519	44,982	45,450
Historic Employment	7,419	7,469	7,519	7,570	7,621	7,673	7,905	8,155	8,425	8,718
Historic Population + Employment	49,765	50,047	50,330	50,615	50,901	51,190	51,966	52,674	53,407	54,168

INVENTORY SUMMARY (\$000)

Roads	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6	\$322,417.6
Bridges & Culverts	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0	\$14,364.0
Sidewalks	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0	\$15,000.0
Total (\$000)	\$351,781.6	\$351,781.6	\$351,781.6	\$351,781.6	\$351,781.6	\$351,781.6	\$351,781.6	\$351,781.6	\$351,781.6	\$351,781.6

SERVICE LEVEL (\$/pop+empl)											Average Service Level
Roads	\$6,478.80	\$6,442.30	\$6,406.07	\$6,370.00	\$6,334.21	\$6,298.44	\$6,204.39	\$6,120.97	\$6,036.95	\$5,952.15	\$6,264.43
Bridges & Culverts	\$288.64	\$287.01	\$285.40	\$283.79	\$282.19	\$280.60	\$276.41	\$272.69	\$268.95	\$265.17	\$279.09
Sidewalks	\$301.42	\$299.72	\$298.03	\$296.35	\$294.69	\$293.03	\$288.65	\$284.77	\$280.86	\$276.91	\$291.44
Total (\$/pop+empl)	\$7,068.86	\$7,029.03	\$6,989.50	\$6,950.15	\$6,911.09	\$6,872.07	\$6,769.45	\$6,678.43	\$6,586.76	\$6,494.24	\$6,834.96

TOWN OF GEORGINA
CALCULATION OF MAXIMUM ALLOWABLE
ROADS AND RELATED

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2006 - 2015	\$6,834.96
Net Population & Employment Growth in New Space 2016 - 2036	28,856
Maximum Allowable Funding Envelope	\$197,226,465
Less: Uncommitted Excess Capacity	\$0
Discounted Maximum Allowable Funding Envelope	\$197,226,465

Excess Capacity Calculation	
Total Value of Inventory in 2015	\$351,781,640
Inventory Using Average Service Level	\$370,238,049
Excess Capacity	\$0
Excess Capacity:	Uncommitted

APPENDIX C.1
TABLE 2

TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
TOWN-WIDE ROADS AND RELATED

Project Description	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
				Replacement & BTE Shares	0% Reduction		Available DC Reserves	2016-2036	Post 2036
1.0 TOWN-WIDE ROADS AND RELATED									
1.1 Town-Wide Roads									
1.1.1 Provision for Future Road Improvements	\$ 1,500,000	\$ -	\$ 1,500,000	\$ -	\$ -	\$ 1,500,000	\$ 1,019,157	\$ 480,843	\$ -
Subtotal Town-Wide Roads	\$ 1,500,000	\$ -	\$ 1,500,000	\$ -	\$ -	\$ 1,500,000	\$ 1,019,157	\$ 480,843	\$ -
TOTAL TOWN-WIDE ROADS AND RELATED	\$ 1,500,000	\$ -	\$ 1,500,000	\$ -	\$ -	\$ 1,500,000	\$ 1,019,157	\$ 480,843	\$ -

Residential Development Charge Calculation

Residential Share of 2016 - 2036 DC Eligible Costs	65%	\$311,085
2016-2036 Growth in Population in New Units		20,070
Unadjusted Development Charge Per Capita		\$15.50

Non-Residential Development Charge Calculation

Non-Residential Share of 2016 - 2036 DC Eligible Costs	35%	\$169,758
2016-2036 Growth in New Space (Square Metres)		746,965
Unadjusted Development Charge Per Square Metre		\$0.23

2016 - 2036 Net Funding Envelope \$197,226,465

Reserve Fund Balance
Balance as at January 1, 2016 \$1,019,157

APPENDIX C.2

TOWN-WIDE STORMWATER MANAGEMENT TECHNICAL APPENDIX

The Town of Georgina proposes to introduce a Stormwater Management component to the town-wide engineered serviced development charge. This will fund a Stormwater Management Study, which will inform future development-related infrastructure works required across the Town of Georgina.

The development-related study will identify works required to service the demands of new development in the Town over the period from 2016 to 2036, for a growth of approximately 7,340 new households and a total employment growth of roughly 10,952 new employees. This forecast is discussed in more detail in Appendix A.

The total cost of the Stormwater Management Study is estimated at \$200,000. As it is deemed fully growth-related, no replacement shares have been deducted. Also, there are no available reserve funds as this is a new service. As such, the full \$200,000 is eligible for funding through development charges during the planning period under review and incorporated into the calculation.

The residential share of the costs totals \$129,392, or 65 per cent. When divided by the long-term population growth in new units of 20,070, a charge of \$6.45 per capita results. The non-residential share of the costs represents 35 per cent and total \$70,608. When divided by the anticipated increase in square metres of building space between 2016 and 2036 (746,965 square metres), a charge of \$0.09 per square metre results.

The following is a summary of the calculated Town-wide stormwater management development charges:

TOWN-WIDE STORMWATER MANAGEMENT					
2016 - 2036		Unadjusted		Calculated	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	Residential	Non-Residential	Residential	Non-Residential
		\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$200,000	\$200,000	\$6.45	\$0.09	\$6.45	\$0.09

APPENDIX C.2
TABLE 1

TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
TOWN-WIDE STORMWATER MANAGEMENT

Project Description	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
				Replacement & BTE Shares	0% Reduction		Available DC Reserves	2016-2036	Post 2036
2.0 TOWN-WIDE STORMWATER MANAGEMENT									
2.1 Town-Wide Stormwater Management									
2.1.1 Stormwater Management Study	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
Subtotal Town-Wide Stormwater Management	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
TOTAL TOWN-WIDE STORMWATER MANAGEMENT	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -

Residential Development Charge Calculation

Residential Share of 2016 - 2036 DC Eligible Costs	65%	\$129,392
2016-2036 Growth in Population in New Units		20,070
Unadjusted Development Charge Per Capita		\$6.45

Non-Residential Development Charge Calculation

Non-Residential Share of 2016 - 2036 DC Eligible Costs	35%	\$70,608
2016-2036 Growth in New Space (Square Metres)		746,965
Unadjusted Development Charge Per Square Metre		\$0.09

Reserve Fund Balance	
Balance as at January 1, 2016	\$0

APPENDIX D

KESWICK SERVICE AREA

TECHNICAL APPENDIX

APPENDIX D

KESWICK SERVICE AREA TECHNICAL APPENDIX

This appendix provides a brief outline of the municipal water, sewer and road services required in the Keswick Service Area. The water services include water supply and distribution, the sewer services provide for sewage collection and treatment, and the roads include a new road segment and urbanization project. The Keswick community is anticipated to accommodate most of the development in the Town over the long-term planning period – 66 per cent of residential development and 91 per cent of non-residential development. The capital costs and resulting development charges outlined in this appendix only apply to development within the boundaries of Keswick, as illustrated in Exhibit 1. Development occurring within this area will be subject to both the Keswick-specific charge, as well as the Town-wide development charges calculated in this Background Study.

Table 1 provides the details of the projects included in the Keswick area-specific development charge calculation. The roads and related infrastructure includes the construction of a new segment of Dovedale Drive, as well as the urbanization of Queensway North. The total cost of this share of the program is \$3.58 million. As the segment of Dovedale Drive included in the program constitutes a brand new road segment, no replacement shares have been deducted. A share of the urbanization costs of Queensway North, \$1.50 million, are removed from the calculation as they represent the basic reconstruction of the road segment, which would have been required in the absence of development, prior to the urbanization and improvement works.

The water and sewer portion of the program includes the ongoing funding of the Keswick Trunk Sewers and Trunk Main, which were oversized at the time of construction to accommodate future development. The development-related share of the construction costs continues to be recovered through development charges and are included in the capital program. The total cost of these works was \$2.85 million. Benefit to existing shares total \$2.14 million, or 75 per cent of the costs. These shares represent the portion of the works that have benefitted the existing community and

have been increased since the 2011 study (66 per cent) to reflect development over the last five years.

Of the total DC eligible costs of \$2.79 million, \$1.05 million is to be funded by the available Keswick Service Area DC reserve funds. The remaining share of \$1.74 million is eligible for recovery through development charges during the 2016 to 2036 planning period and has been allocated to the residential and non-residential sectors based on anticipated development within the service area.

The residential share of costs totals \$999,128, or 57 per cent. This share is divided by the anticipated population growth in new units (13,304) in Keswick over the longer-term planning period, and yields a development charge of \$75.10 per capita.

The non-residential share of 43 per cent, or \$744,724, is divided by the long-term increase in non-residential building space of 676,306 square metres. This results in a charge of \$1.10 per square metre of non-residential development located within the boundaries of the Keswick Service Area.

EXHIBIT 1

Legend

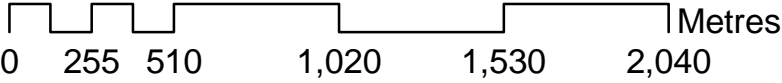
Keswick Service Area Boundary

Secondary Plan Area

COOK
BAY

KESWICK

KESWICK URBAN SERVICE AREA MAP



APPENDIX D
TABLE 1

TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
KESWICK SERVICE AREA

Project Description	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
				Replacement & BTE Shares	0% Reduction		Available DC Reserves	2016-2036	Post 2036
1.0 KESWICK SERVICE AREA									
1.1 Keswick Service Area - Roads									
1.1.1 Dovedale Drive	\$ 1,830,000	\$ -	\$ 1,830,000	\$ -	\$ -	\$ 1,830,000	\$ 336,148	\$ 1,493,852	\$ -
1.1.2 Queensway North Urbanization	\$ 1,750,000	\$ -	\$ 1,750,000	\$ 1,500,000	\$ -	\$ 250,000	\$ -	\$ 250,000	\$ -
Subtotal Keswick Service Area - Roads	\$ 3,580,000	\$ -	\$ 3,580,000	\$ 1,500,000	\$ -	\$ 2,080,000	\$ 336,148	\$ 1,743,852	\$ -
1.2 Keswick Service Area - Water & Sewerage									
1.2.1 Keswick Trunk Sewers	\$ 1,412,000	\$ -	\$ 1,412,000	\$ 1,059,000	\$ -	\$ 353,000	\$ 353,000	\$ -	\$ -
1.2.2 Keswick Trunk Main	\$ 1,435,000	\$ -	\$ 1,435,000	\$ 1,076,250	\$ -	\$ 358,750	\$ 358,750	\$ -	\$ -
Total Keswick Service Area - Water & Sewerage	\$ 2,847,000	\$ -	\$ 2,847,000	\$ 2,135,250	\$ -	\$ 711,750	\$ 711,750	\$ -	\$ -
TOTAL KESWICK SERVICE AREA	\$ 6,427,000	\$ -	\$ 6,427,000	\$ 3,635,250	\$ -	\$ 2,791,750	\$ 1,047,898	\$ 1,743,852	\$ -

Residential Development Charge Calculation

Residential Share of 2016 - 2036 DC Eligible Costs	57%	\$999,128
2016-2036 Growth in Population in New Units		13,304
Unadjusted Development Charge Per Capita		\$75.10

Non-Residential Development Charge Calculation

Non-Residential Share of 2016 - 2036 DC Eligible Costs	43%	\$744,724
2016-2036 Growth in New Space (Square Metres)		676,306
Unadjusted Development Charge Per Square Metre		\$1.10

Reserve Fund Balance	
Balance as at January 1, 2016	\$1,047,898

APPENDIX E

SUTTON SERVICE AREA

TECHNICAL APPENDIX

APPENDIX E

SUTTON SERVICE AREA TECHNICAL APPENDIX

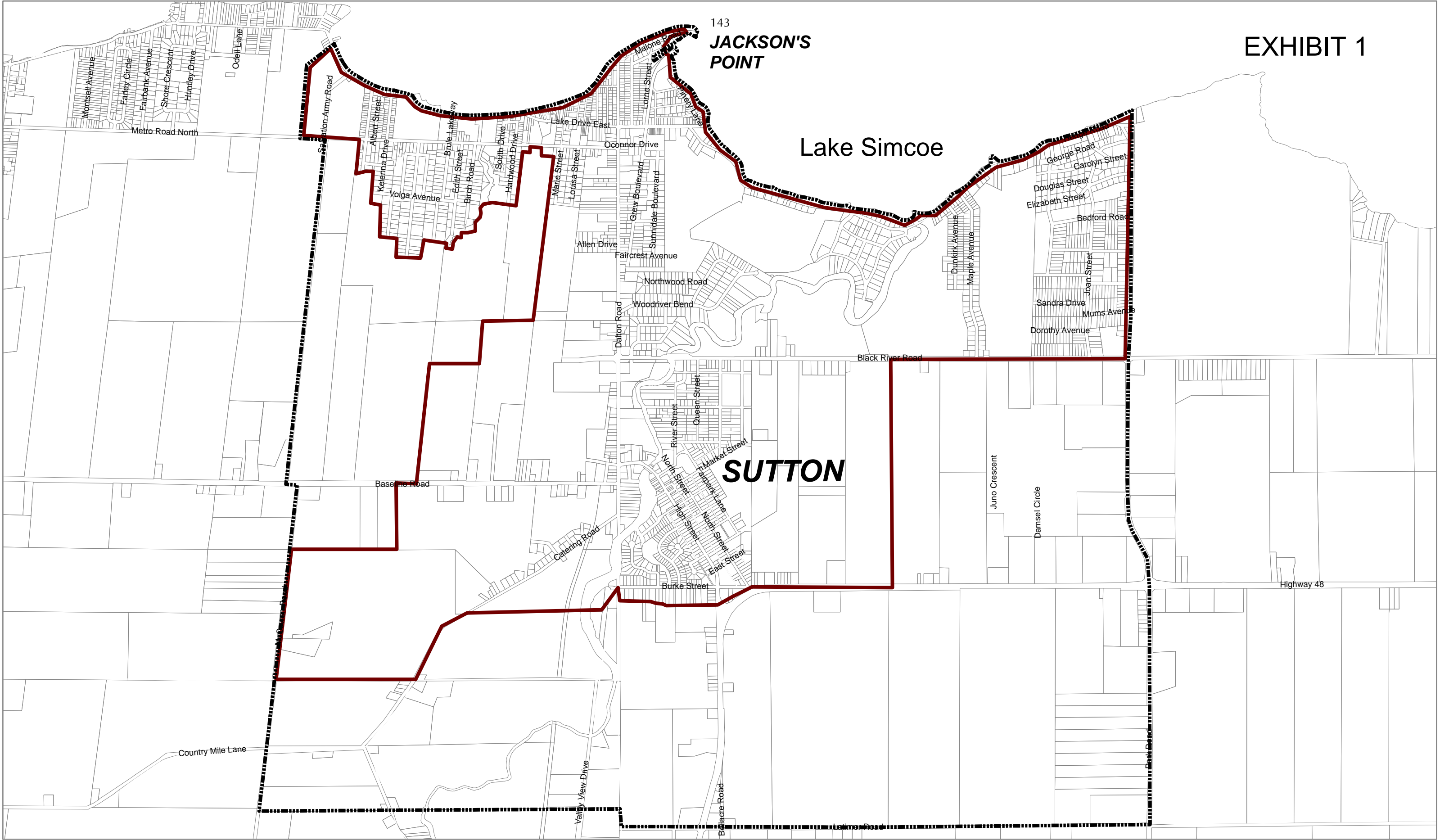
This appendix provides a brief outline of the municipal water and road services required in the Sutton Service Area. The Sutton community is anticipated to accommodate approximately 22 per cent of the residential development and 6 per cent of the non-residential development in the Town over the long-term planning period. The capital costs and resulting development charges outlined in this appendix only apply to development within the boundaries of Sutton, as illustrated in Exhibit 1. Development occurring within this area will be subject to both the Sutton-specific charge, as well as the Town-wide development charges calculated herein.

Table 1 provides the details of the projects included in the Sutton area-specific development charge calculation. The growth-related forecast includes the recovery of previously constructed watermains, as well as a new sidewalk on Black River Road. The gross cost of the capital program is \$1.15 million. Benefit to existing shares total \$417,750 and have been removed from the calculation of development charges. These shares account for shares of the previously constructed Black River Road Main and High Street Watermain, which were oversized at the time of construction to accommodate new development. The replacement shares total 75 per cent of construction costs and represent the benefit of the works on the existing community in Sutton. These shares were increased from the 66 per cent share that was included in the 2011 DC Study. Replacement shares of \$162,000, or 20 per cent, have been removed from the Black River Road sidewalk costs, which reflects the segment of the new sidewalk that borders serviced lands already developed, and will benefit existing residents.

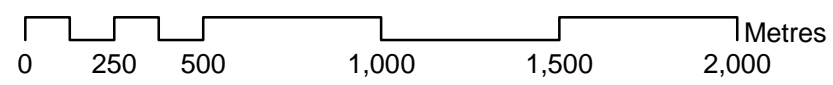
Of the DC eligible costs of \$733,250, \$213,783 is to be funded by the available Sutton Service Area DC reserve funds. The remaining share of \$519,467 is eligible for recovery through development charges during the 2016 to 2036 planning period and has been allocated to the residential and non-residential sectors based on anticipated development within the service area.

The residential share of costs totals \$466,751, or 86 per cent. This share is divided by the anticipated population growth in new units (4,243) in Sutton over the longer-term planning period, and yields a development charge of \$105.28 per capita.

The non-residential share of 14 per cent, or \$72,716, is divided by the long-term increase in non-residential building space of 47,106 square metres. This results in a charge of \$1.54 per square metre of non-residential development located within the boundaries of the Sutton Service Area.



SUTTON URBAN SERVICE AREA MAP



Legend

Secondary Plan Area

Sutton Service Area Boundary

**APPENDIX E
TABLE 1**

**TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
SUTTON SERVICE AREA**

Project Description	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
				Replacement & BTE Shares	0% Reduction		Available DC Reserves	2016-2036	Post 2036
1.0 SUTTON SERVICE AREA									
1.1 Engineered Services									
1.1.1 Black River Road Main	\$ 259,000	\$ -	\$ 259,000	\$ 194,250	\$ -	\$ 64,750	\$ 64,750	\$ -	\$ -
1.1.2 High Street Watermain	\$ 82,000	\$ -	\$ 82,000	\$ 61,500	\$ -	\$ 20,500	\$ 20,500	\$ -	\$ -
1.1.3 Black River Sidewalk	\$ 810,000	\$ -	\$ 810,000	\$ 162,000	\$ -	\$ 648,000	\$ 128,533	\$ 519,467	\$ -
Total Engineered Services	\$ 1,151,000	\$ -	\$ 1,151,000	\$ 417,750	\$ -	\$ 733,250	\$ 213,783	\$ 519,467	\$ -
TOTAL SUTTON SERVICE AREA	\$ 1,151,000	\$ -	\$ 1,151,000	\$ 417,750	\$ -	\$ 733,250	\$ 213,783	\$ 519,467	\$ -

Residential Development Charge Calculation

Residential Share of 2016 - 2036 DC Eligible Costs	86%	\$446,751
2016-2036 Growth in Population in New Units		4,243
Unadjusted Development Charge Per Capita		\$105.28

Non-Residential Development Charge Calculation

Non-Residential Share of 2016 - 2036 DC Eligible Costs	14%	\$72,716
2016-2036 Growth in New Space (Square Metres)		47,106
Unadjusted Development Charge Per Square Metre		\$1.54

Reserve Fund Balance	
Balance as at January 1, 2016	\$213,783

APPENDIX F

SUTTON HIGH STREET SEWER SERVICE AREA

TECHNICAL APPENDIX

APPENDIX F**SUTTON HIGH STREET SEWER SERVICE AREA
TECHNICAL APPENDIX**

This appendix provides a brief outline of the municipal sewer services required in the Sutton High Street Sewer Service Area. The capital costs and resulting development charges outlined in this appendix only apply to development benefitting from the sewer works along High Street. Development within the boundaries of the subject lands, as illustrated in Exhibit 1 will be required to pay the calculated area-specific charges in addition to the Town-wide development charges calculated herein.

Table 1 provides the details of the capital program. The Sutton High sewer works are required as an infrastructure oversize to accommodate new development in northwest Sutton and Ainsley Hill. The \$2.21 million project cost remains unchanged from the Town's 2011 Development Charges Background Study. The works are fully related to development and, as such, no replacement shares have been deducted. The available DC reserve funds of \$387,142 have been applied to the DC eligible cost. An amount totalling \$1.15 million has been identified to be eligible for recovery beyond 2036 under future development charges, and is based on the anticipated timing of benefitting development. The remaining \$670,200 is eligible for recovery in the 2016-2036 period.

The entire development-related net capital cost of \$670,196 is allocated to the residential sector, which reflects the type of development that will benefit from the works. When divided by the 2016-2036 population growth in new units anticipated in the service area (1,732), a development charge of \$387.00 per capita results.

EXHIBIT 1

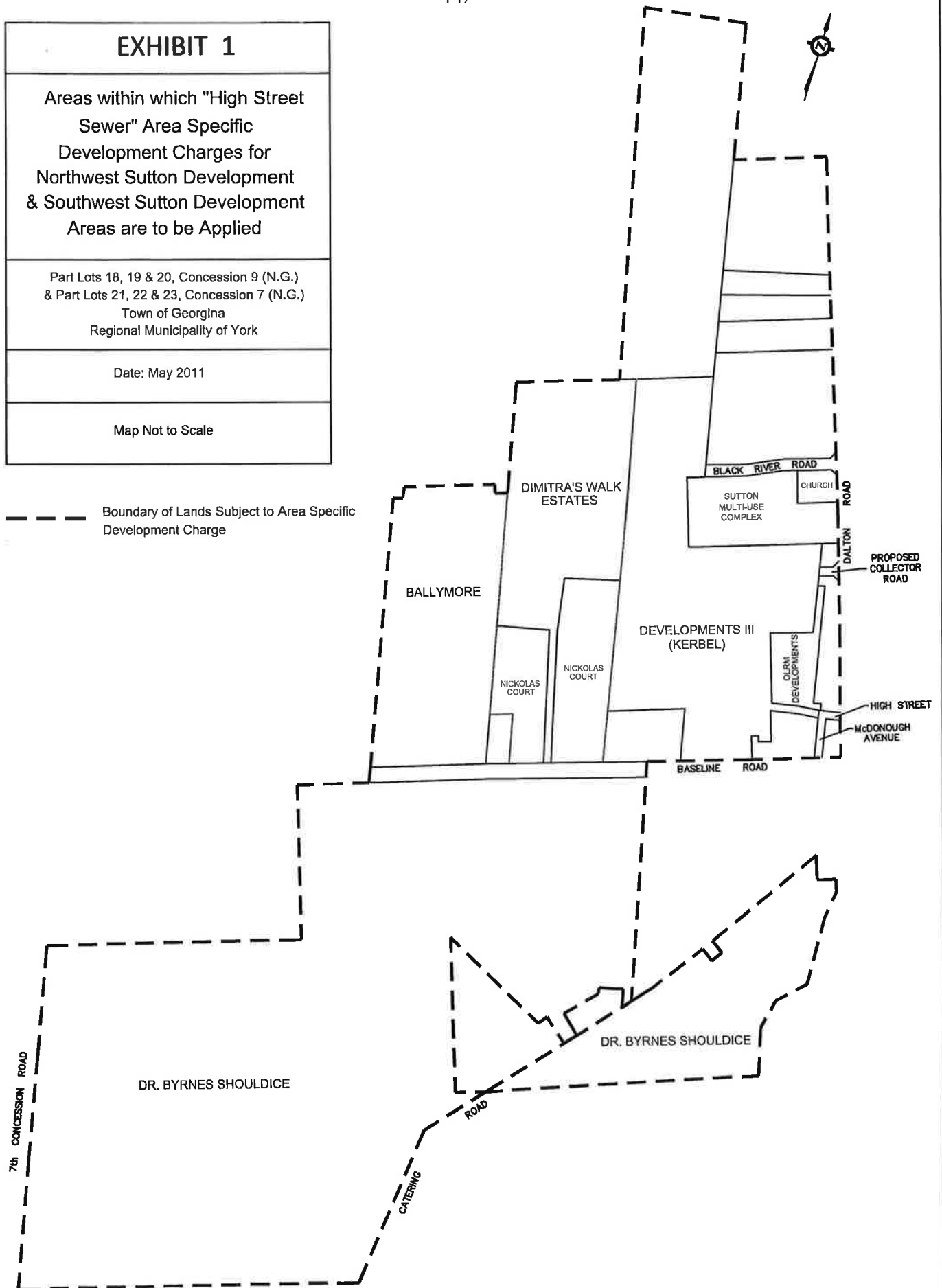
Areas within which "High Street
Sewer" Area Specific
Development Charges for
Northwest Sutton Development
& Southwest Sutton Development
Areas are to be Applied

Part Lots 18, 19 & 20, Concession 9 (N.G.)
& Part Lots 21, 22 & 23, Concession 7 (N.G.)
Town of Georgina
Regional Municipality of York

Date: May 2011

Map Not to Scale

--- Boundary of Lands Subject to Area Specific
Development Charge



**APPENDIX F
TABLE 1**

**TOWN OF GEORGINA
DEVELOPMENT-RELATED CAPITAL PROGRAM
SUTTON HIGH STREET SEWER SERVICE AREA**

Project Description	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
				Replacement & BTE Shares	0% Reduction		Available DC Reserves	2016-2036	Post 2036
1.0 SUTTON HIGH STREET SEWER SERVICE AREA									
1.1 Engineered Services									
1.1.1 High Street Sewer	\$ 2,205,000	\$ -	\$ 2,205,000	\$ -	\$ -	\$ 2,205,000	\$ 387,142	\$ 670,196	\$ 1,147,662
Total Engineered Services	\$ 2,205,000	\$ -	\$ 2,205,000	\$ -	\$ -	\$ 2,205,000	\$ 387,142	\$ 670,196	\$ 1,147,662
TOTAL SUTTON HIGH STREET SEWER SERVICE AREA	\$ 2,205,000	\$ -	\$ 2,205,000	\$ -	\$ -	\$ 2,205,000	\$ 387,142	\$ 670,196	\$ 1,147,662

Residential Development Charge Calculation

Residential Share of 2016 - 2036 DC Eligible Costs	100%	\$670,196
2016-2036 Growth in Population in New Units		1,732
Unadjusted Development Charge Per Capita		\$387.00

Non-Residential Development Charge Calculation

Non-Residential Share of 2016 - 2036 DC Eligible Costs	0%	\$0
2016-2036 Growth in New Space (Square Metres)		-
Unadjusted Development Charge Per Square Metre		N/A

Reserve Fund Balance	
Balance as at January 1, 2016	\$387,142

APPENDIX G

RESERVE FUNDS

APPENDIX G

DEVELOPMENT CHARGES RESERVE FUNDS

The *Development Charges Act* requires that a reserve fund be established for each service for which development charges are collected. Table 1 presents the uncommitted reserve fund balances, as at December 31, 2015, that are available to help fund the development-related net capital costs identified in this study. All of the available reserve funds are accounted for in this study.

As shown in Table 1, the December, 2015 total reserve fund balance was in a positive position of \$5.02 million. These funds are assigned to projects in the initial years of the capital program for each service. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation and the cash flow analysis. Where there is a negative balance (Operations), the amount is brought forward in the DC capital program for recovery through future development charges.

**APPENDIX G
TABLE 1**

**TOWN OF GEORGINA
DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
AS AT DECEMBER 31, 2015**

Service	Opening Balance December 31, 2015
General Government	\$20,457
Library Services	\$766,226
Fire And Emergency Services	\$1,071,476
Parks And Recreation	\$1,290,850
Operations	(\$792,085)
Town-Wide Roads And Related	\$1,019,157
Keswick Service Area	
Roads, Water & Sewer	\$1,047,898
Sutton Service Area	
Water & Sewer	\$213,783
Sutton High Street Sewer Service Area	
Sewer	\$387,142
Total Development Charge Reserves	\$5,024,904

APPENDIX H

LONG-TERM CAPITAL AND OPERATING COST IMPACTS

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APPENDIX H
TABLE 1

TOWN OF GEORGINA
ESTIMATED NET OPERATING COST OF THE PROPOSED
DEVELOPMENT-RELATED CAPITAL PROGRAM
(in constant 2015 dollars)

Net Cost (in 2015\$)			Estimated Operating Costs (\$000)									
			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Library Services			\$0.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0
- New Library Space at MURC (approx 7,000 sq.ft)	\$55	per sq.ft. added	\$0.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0	\$385.0
Fire And Emergency Services			\$0.0	\$0.0	\$0.0	\$0.0	\$4,060.3	\$4,060.3	\$6,310.3	\$6,310.3	\$6,310.3	\$6,317.8
- New Station in South Keswick (12,500 sq.ft.)	\$300	per sq.ft. added	\$0.0	\$0.0	\$0.0	\$0.0	\$3,750.0	\$3,750.0	\$3,750.0	\$3,750.0	\$3,750.0	\$3,750.0
- North Keswick Station & HQ (7,500 additional sq.ft.)	\$300	per sq.ft. added	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,250.0	\$2,250.0	\$2,250.0	\$2,250.0
- Additional Furniture & Equipment	\$0.15	per \$1.00 of add'l	\$0.0	\$0.0	\$0.0	\$0.0	\$310.3	\$310.3	\$310.3	\$310.3	\$310.3	\$317.8
		infrastructure										
Parks And Recreation			\$87.0	\$1,474.0	\$1,561.0	\$1,648.0	\$1,735.0	\$1,822.0	\$1,909.0	\$1,996.0	\$2,083.0	\$2,170.0
- MURC (approx 65,000 sq.ft.)	\$20	per sq.ft. added	\$0.0	\$1,300.0	\$1,300.0	\$1,300.0	\$1,300.0	\$1,300.0	\$1,300.0	\$1,300.0	\$1,300.0	\$1,300.0
- Development & Additional Park Amenities	\$0.10	per \$1.00 of add'l	\$87.0	\$174.0	\$261.0	\$348.0	\$435.0	\$522.0	\$609.0	\$696.0	\$783.0	\$870.0
		infrastructure										
Operations			\$40.7	\$40.7	\$100.7	\$100.7	\$133.2	\$173.8	\$173.8	\$183.8	\$183.8	\$217.8
- Development-Related Capital Projects	\$0.10	per \$1.00 of add'l	\$40.7	\$40.67	\$100.7	\$100.7	\$133.2	\$173.8	\$173.8	\$183.8	\$183.8	\$217.8
		infrastructure										
General Government			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- No additional operating costs			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Town-Wide Roads And Related			\$52.7	\$114.0	\$176.3	\$239.5	\$303.5	\$368.4	\$437.5	\$507.5	\$578.8	\$651.0
- Development-Related Roads Infrastructure	\$250	per household	\$52.7	\$114.0	\$176.3	\$239.5	\$303.5	\$368.4	\$437.5	\$507.5	\$578.8	\$651.0
TOTAL ESTIMATED OPERATING COSTS			\$180.4	\$2,013.7	\$2,222.9	\$2,373.2	\$6,616.9	\$6,809.5	\$9,215.6	\$9,382.6	\$9,540.9	\$9,741.6

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APPENDIX H
TABLE 2 - PAGE 1

TOWN OF GEORGINA
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Development-Related Projects	2016 (\$000)	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	TOTAL (\$000)
LIBRARY SERVICES											
Total Net Cost (1)	50.3	3,034.0	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	3,486.7
Net Cost From Development Charges (2)	45.3	1,605.5	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	2,013.0
Net Cost From Non-DC Sources	5.0	1,428.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1,473.7
- Discount Portion (3)	5.0	303.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	348.7
- Available DC Reserves (4)	0.0	766.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	766.2
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2025 Development (5)	0.0	358.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	358.8
FIRE AND EMERGENCY SERVICES											
Total Net Cost (1)	0.0	0.0	0.0	0.0	6,943.5	0.0	7,800.0	0.0	0.0	2,000.0	16,743.5
Net Cost From Development Charges (2)	0.0	0.0	0.0	0.0	3,306.3	0.0	0.0	0.0	0.0	0.0	3,306.3
Net Cost From Non-DC Sources	0.0	0.0	0.0	0.0	3,637.2	0.0	7,800.0	0.0	0.0	2,000.0	13,437.2
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	1,071.5	0.0	0.0	0.0	0.0	0.0	1,071.5
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	1,125.0	0.0	4,875.0	0.0	0.0	0.0	6,000.0
- For Post 2025 Development (5)	0.0	0.0	0.0	0.0	1,440.7	0.0	2,925.0	0.0	0.0	2,000.0	6,365.7
PARKS AND RECREATION											
Total Net Cost (1)	3,810.0	870.0	870.0	870.0	28,562.3	870.0	870.0	870.0	870.0	870.0	39,332.3
Net Cost From Development Charges (2)	250.0	250.0	250.0	250.0	15,844.8	250.0	250.0	250.0	250.0	250.0	18,094.8
Net Cost From Non-DC Sources	3,560.0	620.0	620.0	620.0	12,717.5	620.0	620.0	620.0	620.0	620.0	21,237.5
- Discount Portion (3)	131.1	87.0	87.0	87.0	2,856.2	87.0	87.0	87.0	87.0	87.0	3,683.3
- Available DC Reserves (4)	396.9	0.0	0.0	0.0	894.0	0.0	0.0	0.0	0.0	0.0	1,290.9
- Replacement & Benefit to Existing	2,499.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,499.0
- For Post 2025 Development (5)	533.0	533.0	533.0	533.0	8,967.3	533.0	533.0	533.0	533.0	533.0	13,764.3

Notes: (1) For total development-related capital program see Appendix B.

(2) Share of capital program to be funded from development charges if calculated rates are fully implemented

(3) Mandatory 10% reduction for applicable services

(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Post 2025 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

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APPENDIX H
TABLE 2 - PAGE 2

TOWN OF GEORGINA
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Development-Related Projects	2016 (\$000)	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	TOTAL (\$000)
OPERATIONS											
Total Net Cost (1)	1,198.8	0.0	600.0	0.0	325.0	406.7	0.0	100.0	0.0	339.7	2,970.2
Net Cost From Development Charges (2)	1,198.8	0.0	600.0	0.0	310.6	0.0	0.0	0.0	0.0	0.0	2,109.4
Net Cost From Non-DC Sources	0.0	0.0	0.0	0.0	14.4	406.7	0.0	100.0	0.0	339.7	860.8
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2025 Development (5)	0.0	0.0	0.0	0.0	14.4	406.7	0.0	100.0	0.0	339.7	860.8
GENERAL GOVERNMENT											
Total Net Cost (1)	25.0	25.0	25.0	25.0	235.0	25.0	25.0	25.0	25.0	115.0	550.0
Net Cost From Development Charges (2)	22.5	22.5	22.5	22.5	128.0	22.5	22.5	22.5	22.5	103.5	411.5
Net Cost From Non-DC Sources	2.5	2.5	2.5	2.5	107.0	2.5	2.5	2.5	2.5	11.5	138.5
- Discount Portion (3)	2.5	2.5	2.5	2.5	16.5	2.5	2.5	2.5	2.5	11.5	48.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	0.0	20.5
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	70.0	0.0	0.0	0.0	0.0	0.0	70.0
- For Post 2025 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL MUNICIPAL SERVICES											
Total Net Cost (1)	5,084.1	3,929.0	1,545.3	945.3	36,116.1	1,352.0	8,745.3	1,045.3	945.3	3,375.0	63,082.7
Net Cost From Development Charges (2)	1,516.6	1,878.0	917.8	317.8	19,635.0	317.8	317.8	317.8	317.8	398.8	25,935.0
Net Cost From Non-DC Sources	3,567.5	2,050.9	627.5	627.5	16,481.1	1,034.2	8,427.5	727.5	627.5	2,976.2	37,147.7
- Discount Portion (3)	138.6	392.9	94.5	94.5	2,877.8	94.5	94.5	94.5	94.5	103.5	4,080.0
- Available DC Reserves (4)	396.9	766.2	0.0	0.0	1,985.9	0.0	0.0	0.0	0.0	0.0	3,149.0
- Replacement & Benefit to Existing	2,499.0	0.0	0.0	0.0	1,195.0	0.0	4,875.0	0.0	0.0	0.0	8,569.0
- For Post 2025 Development (5)	533.0	891.8	533.0	533.0	10,422.4	939.7	3,458.0	633.0	533.0	2,872.7	21,349.7

Notes: (1) For total development-related capital program see Appendix B.

(2) Share of capital program to be funded from development charges if calculated rates are fully implemented

(3) Mandatory 10% reduction for applicable services

(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Post 2025 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

APPENDIX I

ASSET MANAGEMENT PLAN

APPENDIX I

ASSET MANAGEMENT PLAN

The *Development Charges Act* was amended in late 2015 and, effective January 1st 2016, municipalities are now required to complete an Asset Management Plan before the passing of a development charges by-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

Asset Types

A summary of the future municipal-owned assets and estimated useful life assumptions considered under the 2016 Development Charges Study is outlined in Table 1. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some exceptions apply and the justification is as follows:

- Some of the works identified may represent one-time expenditures and may be temporary in nature. Therefore, the assets would not be required to be replaced and no ongoing operation and maintenance costs exist. Such assets are identified as “not a long-term asset” in the table.
- Some projects do not relate to the emplacement of a tangible capital asset– some examples include the acquisition of land or the undertaking of development-related studies. These projects/costs do not necessarily require future replacement or ongoing maintenance. Such projects are identified as “not infrastructure” in the table.
- Some projects provide for the ongoing recovery of infrastructure works already completed. These projects do not result in additional asset management costs.

It should be noted that the capital cost estimates prepared for each of the projects’ identified in this study include grouped costs of various individual elements, which, as a stand-alone item, may have its own useful life (e.g. New buildings include: HVAC, structural elements, roof, etc.). Accordingly, the average useful life assumptions noted below are applicable to all project components.

Table 1 – Summary of Assets Considered	
Capital Project Description	Estimated Useful Life
Library Space at the MURC	50 years
Additional Collection Materials	15 years
Additional Fire Hall Space	50 years
Fire Vehicles	20 years
The Link Community Centre	50 years
MURC Facility	50 years
Additional Park and Trail Development	30 years
Public Works Additional Vehicle Bays	50 years
Public Works Vehicle Hoists	20 years
Public Works Vehicles	10 years
Town-wide Road Improvements	35 years
Dovedale Drive – Road Construction	50 years
Queensway North Urbanization	50 years
Black River Road Sidewalk	40 years
Black River Road Main	Recovery of completed project
High Street Watermain	Recovery of completed project
Keswick Trunk Sewers	Recovery of completed project
Keswick Trunk Main	Recovery of completed project
High Street Sewer	Recovery of completed project

Annual Provision

When assets require rehabilitation or are due for replacement, the source of funds is limited to reserves or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not development-related, and therefore, are not eligible for funding through development charge revenues or other developer contributions.

Based on the information obtained through discussions with Town staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, a number of assumptions are made to account for inflation (2.0%) and interest (3.5%). Consistent with the requirements of the *Development Charge Act*, only the assets that are proposed to be funded under the development charges by-law have been included analysis. As a result, the total calculated annual provision has been netted down based on the following considerations:

1. Funding shares for which the developer is responsible for emplacing the asset or shares which the Town anticipates receiving funding from other sources (i.e. Province);
2. the replacement of existing infrastructure or benefit-to-existing development;
3. infrastructure as it relates to development occurring outside of the respective planning periods (post 2025 for general services and 2036 for engineered services);

Figure 1 provides an overview of the capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law. It should be noted that for all engineered works, only the costs to reconstruct the asset was included in the annual provision. Specifically related to roads, regular road maintenance and rehabilitation expenditures are assumed to be accounted for through:

- The calculation of the replacement and benefit to existing share components for each road;
- The Town's existing asset management practices; and
- The long-term operating and capital cost impact analysis identified in Appendix H of the study.

Figure 1 illustrates that, by 2025, the Town will need to fund an additional \$884,500 per annum in order to properly fund the full life-cycle costs of the new assets supported under this Development Charges By-Law. The calculated life-cycle funding requirement equates to 1.82 per cent of the Town's 2016 budgeted own source revenues of \$48.56 million (property tax levy of \$36.70 million and user fees/charges of \$11.86). Water and sewer asset management costs as all projects included in the Town-wide and area-specific capital programs provider for the ongoing recovery of previously constructed infrastructure projects.

The calculated annual funding provision should be considered within the context of the Town's projected growth; over the next ten years (to 2025) the Town is projecting an increase of about 2,600 total private dwellings units, which represents a 16 per cent increase over the existing base as well as approximately 4,170 new employees. This growth will have the effect of increasing the overall assessment base and additional user fee, utility rate and charges revenues to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the development charges by-law. The collection of these funds is intended to be allocated to reserves for the future replacement of these assets. Table 2 provides a summary of the calculated annual provision by asset category in 2025.

The calculated annual provisions identified in Figure 1 are considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term.

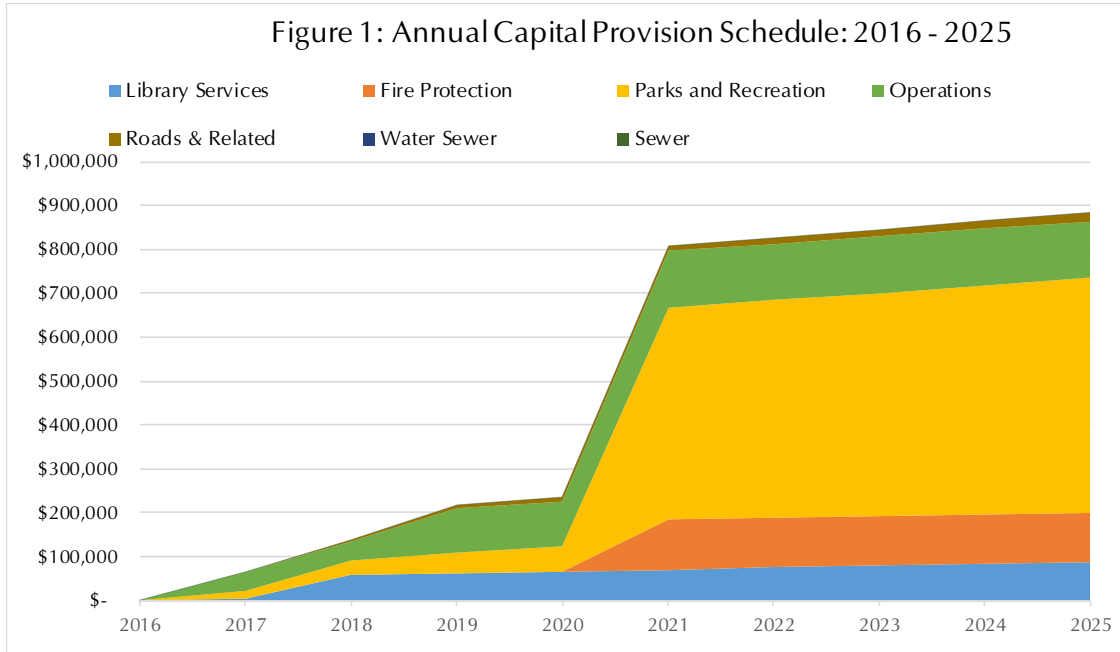


Table 2 Calculated Annual Provision by 2025	
Library Services	\$ 86,223
Fire Protection	\$ 115,081
Parks and Recreation	\$ 534,024
Operations	\$ 128,969
Roads & Related	\$ 20,193
Total 2025 Provision	\$ 884,490

APPENDIX J

DRAFT AMENDED BY-LAW

(AVAILABLE UNDER SEPARATE COVER)