

Consolidated Report

Prepared by Hemson for the City of Barrie



Development Charges Background Study

October 10, 2023



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List of Acronyms

AMP Asset Management Plan

BTE Benefit to Existing

CBC Community Benefits Charges

COG Cost of Growth

DCA Development Charges Act

DC Development Charges

GFA Gross Floor Area

PPB Post-Period Benefit

PPU Persons Per Unit

Executive Summary

Hemson Consulting Ltd. was retained by the City of Barrie to complete a Development Charges (DC) Background Study (herein referred to as the “DC Background Study”). This Consolidated Background Study provides the basis and background to update the City’s development charges to reflect the servicing needs of development in the City.

A. Study Consistent with Development Charges Legislation

The City of Barrie 2023 Consolidated Development Charges Background Study forms part of the process to lead to the approval of new DC by-laws in compliance with the *Development Charges Act* (DCA). The study is prepared in accordance with the DCA and associated regulations, including amendments that came into force through the *More Homes, More Choice Act*, the *COVID-19 Economic Recovery Act*, and the *More Homes Built Faster Act* (Bill 23).

B. Key Steps of the Development Charges Calculation

The DCA in Ontario is the most prescriptive of all DC legislation in Canada with respect to recovering development-related costs. Several key steps are required to calculate DCs. These include:

- Preparing a development (growth) forecast;
- Establishing historical service levels;
- Determining the increased needs for services arising from development;
- Determining how these costs are attributed to development types (i.e. residential and non-residential); and
- Adjusting for a cash flow analysis.

A. Two Approaches are Used to Calculate Development Charges

A City-wide average cost approach is used to calculate development charges for Library Services, Protection Services, Parks and Recreation, Services Related to a Highway: Public Works and Fleet, Transit Services, Long Term Care Services, Ambulance Services, Waste Diversion Services, Services Related to a Highway: Roads, Water Services – Facilities, Water Services – Facilities Related Debt, Wastewater Services – Facilities and Wastewater Services – Facilities Related Debt. This approach results in uniform charges throughout the City.

In addition, area-specific development charges are calculated for the City's Former Municipal Boundary and Secondary Plan Areas (referred to as Salem and Hewitt's). A summary of the area-specific services by benefitting area is provided below:

Former Municipal Boundary:

- Stormwater Drainage and Control
- Water Services – Distribution Systems
- Wastewater Services – Collection Systems

Secondary Plan Areas (Salem and Hewitt's):

- Water Services – Distribution Systems
- Wastewater Services – Collection Systems

The area-specific approach more closely aligns costs and benefits for services where benefits are more localized and can be identified.

B. Development Forecast

The development forecasts are premised on the City achieving population and employment forecasts identified in the Municipal Comprehensive

Review (MCR) Long-Term Urban Land Needs Study, City of Barrie, May 21, 2019 (MCR Long-Term Urban Land Needs Study, 2019), updated to reflect available 2021 Census data. This is consistent with the forecast used in the City's 2019 DC Background Study.

The capital infrastructure planning period for General services is based on a 10-year planning horizon 2023 to 2032. The planning period for the Engineered services is from 2023 to 2041. A summary of the City-wide and area-specific development forecast for Census population, occupied dwelling units, and employment in new space is provided below:

Table 1 – Summary of City-Wide and Area-Specific Development Forecasts

City-wide	Census Population	Occupied Dwellings	Employment in New Space
2023-2032	54,830	25,008	18,459
2023-2041	92,659	42,505	41,539

Former Municipal Boundary	Census Population	Occupied Dwellings	Employment in New Space
2023-2032	21,504	11,848	11,668
2023-2041	49,906	25,157	27,601

Salem & Hewitt's	Census Population	Occupied Dwellings	Employment in New Space
2023-2032	33,326	13,160	6,791
2023-2041	42,753	17,348	13,938

C. Transit Ridership Forecast

For the purposes of the Transit Services development charges calculation, a ridership forecast for the 2023-2032 planning period was completed. The ridership forecast was based on analysis prepared by Dillion Consulting as part of the City's 2019 DC Background Study and updated to reflect the new planning horizon for the 2023 DC Background Study update. The ridership forecast is further discussed in Appendix C.

Table 2 – Summary of Transit Ridership Forecast

Transit Mode Share Targets	2022	2023	2032	2041
Secondary Plan Area	0.00%	0.10%	0.67%	1.20%
Former Barrie Boundary	2.70%	2.70%	3.17%	5.60%
Total Local Mode Share	2.70%	2.80%	3.83%	6.80%

P.M. Peak Hour Transit Trips	2022	2023	2032	2041
Secondary Plan Area	-	42	710	1,508
Former Barrie Boundary	1,986	2,105	3,673	8,698
Total City of Barrie	1,986	2,147	4,383	10,206

D. The City has an Extensive Development-Related Capital Program for the Provision of Eligible Services

The development-related capital programs are based on a 10-year planning period from 2023 to 2032 for the General services and the long-term planning period 2023 to 2041 for the other engineered services.

i. City-Wide General Services

- The gross cost of the City's development-related capital program for general services amounts to \$1.00 billion and provides for a wide range of infrastructure. Of the \$1.00 billion, approximately \$452.37 million has been identified as eligible for recovery through development charges over the 2023-2032 planning period.

- In total, approximately \$114.23 million has been identified as subsidies or grants that the City will anticipate receiving to fund development-related projects.
- Non-development charges funding for replacement portions of the capital program and for portions of development-related capital projects that benefit existing development have been identified. Replacement or benefit to existing shares amount to \$134.87 million.
- A share of the capital program is for portions of projects that relate to development in the post-2032 period (which will be considered for recovery in future development charges studies subject to service level considerations or funding through other growth funding tools such as CBCs). In total, about \$261.76 million is attributed as a post-period/other development related allocation.
- Available DC reserve funds, in the amount of \$38.94 million have been identified in each capital program to fund development-related infrastructure.
- Details regarding the capital programs for General services are provided in Appendix B of this report.

ii. City-Wide Engineered Services

- The total gross cost for City-wide Engineered services is \$4.80 billion. This provides for various projects for Roads, Water Services (facilities and debt), Wastewater Services (facilities and debt) and Stormwater Drainage and Control Services. Of this amount, only \$2.92 billion is eligible for recovery through the development charges.
- Details regarding the City-wide capital programs for Engineered services are provided in Appendix D of this report.

iii. Area-Specific Engineered Services

- The total gross cost for the Former Municipal Boundary Engineered services is \$662.24 million. This provides for various projects for Stormwater Drainage and Control Services, Water distribution and Wastewater collection. Of this amount, only \$276.66 million is eligible for recovery through the development charges.
- For the Secondary Plan Areas of Salem and Hewitt's, the total gross capital program cost amounts to \$416.72 million the entirety of the costs are brought forward to the DC calculation.
- Details regarding the area-specific capital programs for Engineered services are provided in Appendix E of this report.

E. Cost of Growth Analysis

An overview of the long-term capital and operating costs as well as the asset management-related annual provisions for capital facilities and infrastructure to be included in the DC by-law is provided in Appendix G of the DC Background Study. This examination is required as one of the provisions of the DCA.

Additional details on the cost of growth analysis for Transit Services, including the asset management plan, is included in Appendix C.3.

F. Calculated Development Charges

The City's development charge rates have been calculated in accordance with the tests and filters of the legislation. This includes limiting the recovery of General, Protection (e.g. Fire and Police) and Roads Services infrastructure to the 15-year average historical service level; deductions for ineligible shares of projects (e.g. portions of projects that relate to the replacement of existing infrastructure and/or provide a benefit to the existing community) and deductions for shares of projects that will provide a benefit to development beyond the identified planning periods.

Taking into consideration these factors, the following are the calculated development charge rates that relate to the increase in need for services arising from new development over the identified planning periods on a city-wide and area specific basis.

The charges for each unit type are summarize in the table below.

Table 3 - Calculated Residential and Non-Residential Development Charges

Description	Single & Semi-Detached \$/unit	Other Multiples \$/unit	Apartments 2+ Bedrooms \$/unit	Apartments Bachelor and 1 Bedroom \$/unit	Special Care/ Special Dwelling \$/unit
City-wide General	\$ 23,633	\$ 17,709	\$ 14,790	\$ 9,614	\$ 7,395
City-wide Engineering	\$ 74,635	\$ 55,936	\$ 46,708	\$ 30,361	\$ 23,354
Total City-wide	\$ 98,268	\$ 73,645	\$ 61,498	\$ 39,975	\$ 30,749
Area-Specific Former Municipal Boundary	\$ 13,603	\$ 10,195	\$ 8,513	\$ 5,534	\$ 4,257
Total City-wide	\$ 98,268	\$ 73,645	\$ 61,498	\$ 39,975	\$ 30,749
Total Area-Specific Former Municipal Boundary	\$ 111,871	\$ 83,840	\$ 70,011	\$ 45,509	\$ 35,006
Area-Specific Salem & Hewitt's	\$ 27,806	\$ 20,839	\$ 17,402	\$ 11,311	\$ 8,700
Total City-wide	\$ 98,268	\$ 73,645	\$ 61,498	\$ 39,975	\$ 30,749
Total Area-Specific Salem & Hewitt's	\$ 126,074	\$ 94,484	\$ 78,900	\$ 51,286	\$ 39,449

Description	Retail \$/m2	Non-Retail \$/m2
City-wide General	\$ 49.86	\$ 28.39
City-wide Engineering	\$ 492.54	\$ 284.83
Total City-wide	\$ 542.40	\$ 313.22
Area-Specific Former Municipal Boundary	\$ 65.28	\$ 41.10
Total City-wide	\$ 542.40	\$ 313.22
Total Area-Specific Former Municipal Boundary	\$ 607.68	\$ 354.32
Area-Specific Salem & Hewitt's	\$ 193.23	\$ 78.46
Total City-wide	\$ 542.40	\$ 313.22
Total Area-Specific Salem & Hewitt's	\$ 735.63	\$ 391.68

G. Development Charges By-Law Practices and Collection Policies

- It is recommended that existing practices regarding collection of development charges and by-law administration continue to the extent possible.

- As required under the DCA, the City should codify any rules regarding application of the by-laws and any exemptions within the development charges by-laws proposed for adoption.
- It is recommended that Council adopt the development-related capital program included in this background study, subject to annual review through the City's normal capital budget process. Any excess capacity that occurs over the life of the DC By-law is expected to be recovered from future development as part of the capital plans approved by Council during this period.

H. Approved 2023 Development Charge By-Law

The City's enacted and approved DC By-law is provided in Appendix I of this report.

1. Introduction

This City of Barrie Development Charges (DC) Background Study is presented as part of a process to lead to the approval of a new development charge by-law in compliance with the *Development Charges Act, 1997* (DCA).

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

- The average capital service levels provided in the City over the 15-year period immediately preceding the preparation of the background study;
- A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred, or to be incurred, by the City or its local boards to provide for the expected development, including the determination of the eligible and ineligible components of the capital projects; and,
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.

This study presents the results of the review which determines the development-related net capital costs which are attributable to development that is forecast to occur in the City. These development-related net capital costs are then apportioned among various types of development (residential; non-residential) in a manner that reflects the increase in the need for each service attributable to each type of development. The study arrives, therefore, at calculated development charges for various types of development.

The *DCA* provides for a period of public review and comment regarding the proposed development charges. Following completion of this process in accordance with the *DCA*, Council will review this study, and comments received regarding this study or other information brought to Council's attention about the proposed charges. Council will then pass a new development charges by-law for the City.

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

A. Legislative Context

The study is prepared in accordance with the *DCA* and associated regulations, including the amendments that came into force most recently on November 28, 2022 as per *Bill 23: More Homes Built Faster Act, 2022*.

Key legislative changes include:

- Five-year mandatory phase-in of the calculated DC rates (beginning with a 20% reduction in Year 1, decreasing by 5% annually until Year 5);
- Historical service level standards have been extended from a 10 to 15-year planning period;
- DC by-laws now expire every 10 years instead of 5 years;
- The amount of interest paid on DC deferrals and freeze is capped at prime plus 1%;
- Costs associated with studies and affordable housing services are now ineligible for recovery through DCs;
- Municipalities must spend or allocate 60% of available DC reserve funds per year for roads, water and wastewater services; and
- Discounts for purpose built rentals based on the number of bedrooms.

The *DCA* was also amended to exempt affordable and attainable housing developments from the payment of DCs; however, the regulations which will define these types of units have not yet been released and therefore, these changes are not yet in force.

B. Relevant Analysis

The underlying assumptions and calculation methodologies contained in the DC Background Study have been informed by a range of inputs including the City's capital budget, existing master plans, discussions with City staff and capital cost analysis completed by other consultants.

Of particular relevance, the City retained external consultants to update infrastructure costs identified in the existing master plans related to roads, water, wastewater and storm drainage infrastructure needs. These updated costs have been used for the purposes of the DC Background Study update.

C. Consultation and Approval Process

The following provides a summary of the consultation and approval process undertaken to complete the DC Background Study. Following the release of the DC Background Study, consultation continued with the public and development industry stakeholders prior to the passage of the new DC By-law in June 2023.

Table 4 – Timeline of Consultation and Approval Process

Activity	Timeline
Technical Stakeholder Consultation Sessions Prior to Release of DC Background Study	January 23, 2023 January, 24, 2023 January 25, 2023 February 27, 2023 February 28, 2023 March 6, 2023
Public Release of DC Background Study	April 21, 2023
Technical Stakeholder Consultation Sessions Following the Release of the DC Background Study	May 1, 2023
Statutory Public Meeting	May 10, 2023
Passage of 2023 DC By-law	June 21, 2023

2. The DC Methodology Aligns Development-Related Costs and Benefits

Several key steps are required in calculating a development charge. However, specific circumstances arise in each municipality which must be reflected in the calculation. In this study, we have tailored our approach to the City of Barrie's unique circumstances. The approach to the calculated development charges is focused on providing a reasonable alignment of development-related costs with the development that necessitates them. This study calculates charges on a City-wide and area-specific basis which is consistent with the City of Barrie's 2023 Development Charges Study.

A. Consideration for Area Rates Services

In accordance with the *DCA*, Council must give consideration to the use of area rating, also known as area-specific development charges, as part of the development charges background study. The City of Barrie has historically used both City-wide and area-specific charges and this practice is anticipated to continue into the future.

The rationale for the City-wide and area-specific development charges are discussed further in following sections.

B. Both City-Wide and Area-Specific Development Charges are Calculated

Barrie provides a range of services to its community and has a sizeable inventory of facilities, land, infrastructure, vehicles and equipment. The *DCA* provides the City with flexibility when defining services that will be included in the development charge by-law, provided that the other provisions of the *Act* and Regulations are met. The *DCA* also permits the City to designate, in

its by-laws, the areas within which the development charges shall be imposed. The charges may apply to all lands in the City or to other designated development areas as specified in the by-law.

i. Services Based on a City-Wide Approach

For the majority of services that the City provides, a range of capital facilities, land, equipment and infrastructure is available throughout the City; arenas, community centres, pools, libraries, fire and police stations, arterial roads, transit, parks and so on. As new development occurs, new facilities will need to be added so that service levels in newly developing areas are provided for at levels enjoyed in existing communities. A widely accepted method for sharing the development-related capital costs for such City services is to apportion them over all new growth anticipated in the City.

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

- Library Services
- Protection Services
- Parks and Recreation
- Long Term Care
- Paramedic Services
- Services Related to a Highway: Public Works and Fleet
- Waste Diversion Services
- Transit Services
- Services Related to a Highway: Roads & Related
- Water Services – Facilities
- Water Services – Facilities Related Debt
- Wastewater Services – Facilities
- Wastewater Services – Facilities Related Debt

These services form a reasonable basis on which to plan and administer the development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that make them up.

The resulting development charge for these services would be imposed against all development anywhere in the City.

ii. Services Based on an Area-Specific Approach

For some services that the City provides, the need for development-related capital additions to support anticipated development is more localized. For such services, where costs and benefits are more localized, an alternative technique — the area-specific approach — is employed.

The area-specific charges relate to the provision of stormwater drainage, water distribution and wastewater collection. Charges for these services are called area-specific development charges (ASDC) and are consistent with the City's existing development charges for such works.

The area-specific approach for these services reflects the fact that the demand for, and benefit from, the projects provided by the City is much more localized than that for other City services. Area-specific charges result in a more accurate distribution of costs among developers than the City-wide approach. The geographic areas that are included coincide with the specific service area for each project.

The following services have been included in the development charge analysis on an area-specific basis:

Former Municipal Boundary:

- Stormwater Drainage and Control
- Water Services – Distribution Systems
- Wastewater Services – Collection Systems

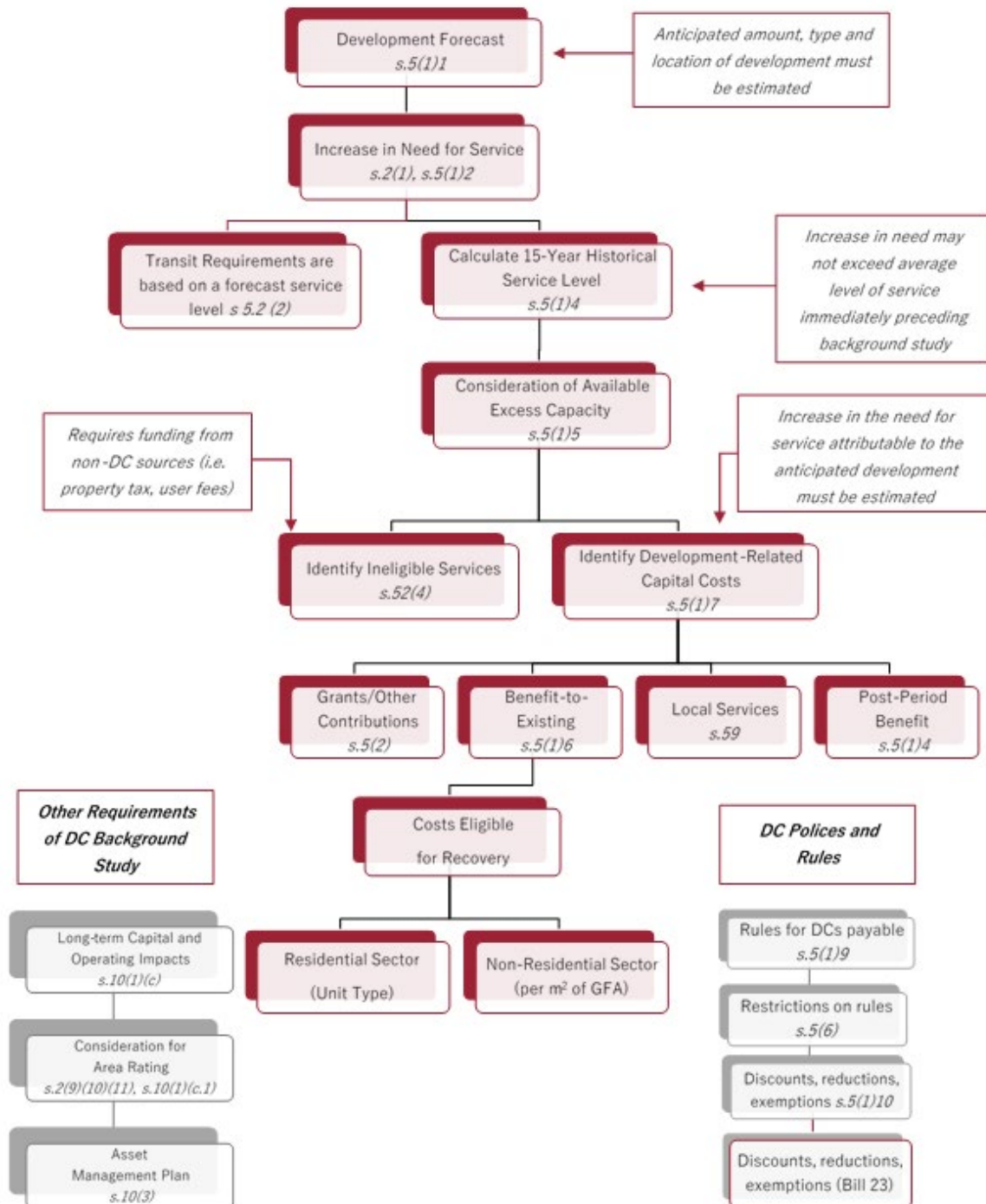
Secondary Plan Areas (Salem and Hewitt's):

- Water Services – Distribution Systems
- Wastewater Services – Collection Systems

C. 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 in Figure 1 and discussed further in the following sections.

Figure 1
Development Charge Calculation



i. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the 10-year study period, 2023–2032, for general services and growth to 2041 for all other engineered services. A City-wide and area-specific forecast was also proposed.

For the residential portion of the forecast both the Census population growth and population growth in new units is estimated. Net population growth determines the need for additional facilities and provides the foundation for the development-related capital program.

The non-residential portion of the forecast estimates the gross floor area (GFA) of building space to be developed over the 10-year period, 2023-2032, and to 2041. The forecast of GFA is based on the employment forecast for the City. Factors for floor space per worker by category are used to convert the employment forecast into gross floor areas for the purposes of the development charges study.

ii. 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 15-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historical 15-year average service levels thus form the basis for development charges. A review of the City'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 2008 – 2022.

In the case of Transit Ridership, the need for service is to be based on the future planned level of service. For the purposes of this study, the Transit capital program is considered to be the future planned level of service.

iii. Development-Related Capital Program and Analysis of DC Eligible Costs to be Recovered Through Development Charges

A development-related capital program has been prepared by the City's departments as part of the present study. The program identifies development-related projects and their gross and net municipal costs, after allowing for capital grants, subsidies or other recoveries as required by the *Act* (*DCA*, s. 5. (2)). The capital program 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 15-year average service levels or the service levels embodied in future plans of the City. The development-related capital program 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 anticipated 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, *O. Reg. 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 program, 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 City from non-development charges sources. The amount of municipal funding for such non-DC-eligible shares of projects is also identified as part of the preparation of the development-related capital program.

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. Such capacity is available to partially meet the future servicing requirements. Adjustments are made in the capital program analysis to meet this requirement of the *DCA*.

iv. 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 the non-residential sectors. In the City of Barrie, the allocation for general and engineered services is based on the consideration of projected changes in population and employment over the planning periods. The exceptions are for the services of library, parks and recreation and long-term care. The development-related costs for these services have been allocated 100% to residential growth.

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

v. Final Adjustment

The final determination of the development charge results from adjustments made to development-related DC eligible costs for each service and sector resulting from the application of any unallocated growth-related reserve fund balances that are available to finance the development-related capital costs in the capital program. 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*.

3. Development Forecast

This section summarizes the growth forecast used to calculate the development charges for the City of Barrie. Appendix A contains additional material related to the growth forecast.

The forecasts are premised on the City achieving population and employment forecasts identified in the Municipal Comprehensive Review (MCR) Long-Term Urban Land Needs Study, City of Barrie, May 21, 2019 (MCR Long-Term Urban Land Needs Study, 2019), updated to reflect available 2021 Census data.

A. Residential Growth Forecast

Table 5 provides a summary of the City-wide and area-specific residential forecast for two planning periods: a 10-year planning period, 2023 to 2032, and a 19-year planning horizon of 2023 to 2041. The 10-year planning period is used throughout this study for the General services and Transit, and the longer planning period is used for the other Engineered services.

Over the planning period from 2023 to 2032, the total number of new residential units will increase by 25,000, which translates into a population in new units of approximately 57,050 additional people. Of the 25,000 units approximately 47% will be built within the Former Municipal Boundary and the remaining 53% will be built in the Salem and Hewitt's Secondary Plan Area. The forecast has projected growth in the 2023 to 2041 period to accommodate 92,920 new persons in 42,500 new housing units. Of these housing units, 59% will be located within the Former Municipal Boundary and 41% will be located in in the Salem and Hewitt's Secondary Plan Area.

It should be noted that all population figures used in the DC Background Study are Census population figures, net of undercount. The DC Background

Study relies on the Census data without the undercount as it is consistent with the Census household data set. Both population and household figures are utilized in this DC Background Study so it is critical that a common and consistent data set is used.

A summary of the residential growth forecast can be found in Table 5.

B. Non-Residential Growth Forecast

The forecast employment for the City of Barrie is based on four major land use planning types: population-related, employment land, major office, and institutional.

The non-residential portion of the forecast estimates the amount of building space to be developed in the City over the 10 and 19-year planning periods. The forecast is based on the projected increase in employment levels and the anticipated amount of new building space required to accommodate them.

The 10-year forecast projects an increase of 18,460 new employees which can be accommodated in 1.36 million square metres of new non-residential building space. For the planning period to 2041, the City will see a growth of 41,540 new employees and roughly 2.97 million square metres of new non-residential building floor area. Over the long-term planning period, about 66% of new employment will be located within the City's Former Municipal Boundary.

A summary of the non-residential growth forecast can be found in Table 5.

TABLE 5

CITY OF BARRIE
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
GROWTH FORECAST

Growth Forecast	2022 Estimate	General Services 2023 - 2032		Engineered Services 2023 - 2041	
		Growth	Total at 2032	Growth	Total at 2041
City-wide Forecast					
Residential					
Occupied Dwellings	57,445	25,008	82,453	42,505	99,950
Population					
Census Population	152,641	54,830	207,471	92,659	245,300
<i>Population Growth In New Dwelling Units</i>		<i>57,051</i>		<i>92,924</i>	
Non-Residential					
Total Place of Work Employment*		18,459		41,539	
<i>Population-Related</i>		<i>7,159</i>		<i>16,339</i>	
<i>Employment Land</i>		<i>6,730</i>		<i>13,920</i>	
<i>Major Office</i>		<i>277</i>		<i>1,457</i>	
<i>Institutional</i>		<i>4,293</i>		<i>9,823</i>	
Non-Residential Building Space (sq.m.)*		1,362,830		2,974,030	
Former Municipal Boundary					
Residential					
Occupied Dwellings	56,872	11,848	68,720	25,157	82,029
Population					
Census Population	151,412	21,504	172,916	49,906	201,318
<i>Population Growth In New Dwelling Units</i>		<i>23,171</i>		<i>48,436</i>	
Non-Residential					
Total Place of Work Employment*		11,668		27,601	
<i>Population-Related</i>		<i>5,011</i>		<i>12,254</i>	
<i>Employment Land</i>		<i>3,701</i>		<i>6,960</i>	
<i>Major Office</i>		<i>166</i>		<i>1,020</i>	
<i>Institutional</i>		<i>2,790</i>		<i>7,367</i>	
Non-Residential Building Space (sq.m.)*		829,210		1,845,820	
Salem & Hewitt's Secondary Plan Area					
Residential					
Occupied Dwellings	573	13,160	13,733	17,348	17,921
Population					
Census Population	1,229	33,326	34,555	42,753	43,982
<i>Population Growth In New Dwelling Units</i>		<i>33,879</i>		<i>44,486</i>	
Non-Residential					
Total Place of Work Employment*		6,791		13,938	
<i>Population-Related</i>		<i>2,148</i>		<i>4,085</i>	
<i>Employment Land</i>		<i>3,029</i>		<i>6,960</i>	
<i>Major Office</i>		<i>111</i>		<i>437</i>	
<i>Institutional</i>		<i>1,503</i>		<i>2,456</i>	
Non-Residential Building Space (sq.m.)*		533,545		1,128,135	

*Represents employment in new space and new non-residential building space

4. Summary of Historical Capital Service Levels

The *DCA* and *O. Reg. 82/98* require that the development charges be set at a level no higher than the average service level provided in the City over the 15-year period immediately preceding the preparation of the background study, on a service-by-service basis.

For general services (library, protection, park and recreation etc.) and roads and related infrastructure the legislative requirement is met by documenting historical service levels for the preceding 15 years, in this case, for the period 2008 to 2022. Typically, service levels for general services are measured as a ratio of inputs per capita or per capita and employee.

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 City. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information provided by City staff based on historical records and their experience with costs to acquire or construct similar facilities, equipment and infrastructure.

In the case of Transit Services, the development charge calculation is based on the planned level of service. For the purposes of this study the 10-year Transit services capital program is considered the planned level of service (see details in Appendix C).

Table 6 summarizes service levels for all City-wide general services included in the development charge calculation (excluding Transit, but including Roads). Appendix B – General services and Appendix D – Engineered services provides detailed historical inventory data upon which the calculation of service levels is based for General and Roads Services.

TABLE 6

CITY OF BARRIE
SUMMARY OF AVERAGE HISTORIC SERVICE LEVELS 2008 - 2022

Service	2008 - 2022 Service Level Indicator
1.0 LIBRARY SERVICES	\$453.00 per capita
Buildings	\$345.44 per capita
Land	\$35.71 per capita
Materials	\$71.85 per capita
2.0 PROTECTION SERVICES	\$799.56 per population & employment
Fire Services	
Buildings	\$230.82 per population & employment
Land	\$17.30 per population & employment
Vehicles	\$118.77 per population & employment
Equipment	\$16.54 per population & employment
Police Services	
Buildings	\$283.49 per population & employment
Land	\$57.76 per population & employment
Equipment	\$34.47 per population & employment
Vehicles	\$40.41 per population & employment
3.0 SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET	\$630.23 per capita
Buildings	\$349.80 per capita
Land	\$108.35 per capita
Fleet & Equipment	\$172.08 per capita
3.0 TRANSIT SERVICES	N/A
4.0 PARKS AND RECREATION	\$4,637.13 per capita
Indoor Recreation	\$2,743.52 per capita
Outdoor Buildings	\$121.24 per capita
Parkland	\$1,707.98 per capita
Parks Fleet	\$62.34 per capita
Parks Equipment	\$2.05 per capita
5.0 WASTE DIVERSION SERVICES	\$391.09 per capita
Buildings	\$190.48 per capita
Land	\$144.11 per capita
Furniture & Equipment	\$7.98 per capita
Fleet	\$48.52 per capita
6.0 AMBULANCE SERVICES	\$96.11 per population & employment
Buildings	\$60.00 per population & employment
Land	\$17.50 per population & employment
Vehicles	\$17.49 per population & employment
Furniture & Equipment	\$1.12 per population & employment
7.0 LONG TERM CARE SERVICES	\$203.16 per population & employment
Buildings - Manors	\$194.03 per population & employment
Land - Manors	\$9.13 per population & employment
8.0 SERVICES RELATED TO A HIGHWAY: ROADS	\$41,598.80 per population & employment
Roads	\$38,651.93 per population & employment
Traffic Signals	\$370.19 per population & employment
Structures	\$2,576.68 per population & employment

5. The Development-Related Capital Program

A. A Development-Related Capital Program is Provided for Council's Approval

The *DCA* requires the Council of a Municipality to express its intent to provide future capital facilities at the level incorporated in the development charges calculation. As noted above in Section 2, *O. Reg. 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.

Based on the growth forecasts summarized in Section 3 and detailed in Appendix A, City staff, in collaboration with the consultants, developed a development-related capital program setting out those projects that are required to service anticipated development. For all General services and Transit the capital program covers the 10-year period from 2023 to 2032. The development charge for engineered services is based on development expected in the City to 2041 which aligns with the City's master servicing plans.

One of the recommendations contained in the DC Background Study is for Council to adopt the development-related capital program derived 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 the City. It is acknowledged that changes to the capital program presented here may occur through the City's normal capital budget process.

B. The Development-Related Capital Program for General Services

A summary of the growth-related capital forecast for General services is presented in Table 7.

The table provides a separate total for services analysed over the 10-year period, 2023–2032. Further details on the capital programs for each individual service category are available in Appendix B.

The development-related capital program for general services estimates a total gross cost of \$1.00 billion. Approximately \$114.23 million in grants and subsidies has been identified. Therefore, the net municipal cost of the capital program is approximately \$887.93 million.

This capital program incorporates those projects identified to be related to development anticipated in the next 10 years. It is not implied that all of these costs are to be recovered from new development by way of development charges (see Section 6 for the method and determination of net municipal costs attributable to development). Portions of this capital program may relate to providing servicing for development which has occurred prior to 2023 (for which development charge reserve fund balances exist), for replacement of existing capital facilities, or for development anticipated to occur beyond the 2023 – 2032 planning period.

TABLE 7

CITY OF BARRIE
SUMMARY OF DEVELOPMENT-RELATED CAPITAL FORECAST
FOR GENERAL AND TRANSIT SERVICES 2023 - 2032
(in \$000)

General and Transit Services	Gross Cost	Grants/ Subsidies	Municipal Cost
1.0 LIBRARY SERVICES	\$42,850.0	\$0.0	\$42,850.0
2.0 PROTECTION SERVICES	\$71,675.3	\$0.0	\$71,675.3
3.0 PARKS AND RECREATION	\$435,732.6	\$0.0	\$435,732.6
4.0 SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET	\$128,625.0	\$0.0	\$128,625.0
5.0 TRANSIT SERVICES	\$178,731.2	\$19,950.0	\$158,781.2
6.0 AMBULANCE SERVICES	\$34,835.9	\$16,465.5	\$18,370.5
7.0 LONG TERM CARE	\$86,283.7	\$77,817.6	\$8,466.1
8.0 WASTE DIVERSION	\$23,434.0	\$0.0	\$23,434.0
TOTAL GENERAL & TRANSIT SERVICES (2023-2032)	\$1,002,167.8	\$114,233.1	\$887,934.7

The capital program associated with **Library Services** relates to the plans for three net new library branches, a reconfiguration of the existing downtown branch, and also additional growth-related collection materials. The total net municipal cost for this program totals to \$42.85 million.

Protection Services is made up of Fire Protection Services and Police Protection Services. Included in the capital program is the recovery of the negative reserve fund balance, and the shared Barrie Simcoe Emergency Services Campus - Phase 2. Fire Protection Services has plans to construct a new fire station, construct a new building on an existing site, and develop a new site for a municipal campus. Also included in the capital program are two new rescue trucks, additional firefighters and officers, as well as the associated outfitting that will be purchased in the 10-year planning period. Police Protection Services has plans to purchase new vehicles and cruisers, as well as various equipment purchases. The net municipal cost of the entire capital program is therefore \$71.67 million.

Parks and Recreation has a net municipal cost \$435.73 million in the capital program. This includes parkland development across the entire City of Barrie (including the Former Boundary and Salem & Hewitt's areas), two new recreation facilities, and various fleet additions.

The **Services Related to a Highway: Public Works and Fleet** capital program provides for various additions to the fleet and equipment, as well as a new South Operations Facility in the Secondary Plan Area. A provision for new office space is also included. The net cost of the program is \$128.62 million.

The net municipal cost of the **Transit Services** capital program is \$158.78 million and recovers for debenture payments for the Transit Garage, the purchases of various new fleet and equipment, a new buildings. These buildings include Allandale Transit Hub Development (Relocation & Expansion), a terminal facility, and a garage facility.

The County of Simcoe delivers **Ambulance Services** to its area municipalities and the separated Cities of Barrie and Orillia. The City of Barrie is required to contribute to capital costs incurred by this service based on their weighted taxable assessment, as such, the City's share of the program is 25%. The program provides for the purchase of land, construction of stations and hubs, and additional emergency response vehicles. The gross cost of the program is \$34.83 million, however, the City's net municipal cost is \$18.37 million.

The County of Simcoe delivers **Long Term Care** to its area municipalities and the separated Cities of Barrie and Orillia. The City of Barrie is required to contribute to capital costs incurred by this service based on their weighted taxable assessment, as such, the City's share of the program is 11.17%. The net municipal cost for this program amounts to \$8.47 million, which does not include the affordable housing component.

The net municipal cost of the **Waste Diversion** capital program is \$23.43 million and recovers the purchases of a new transfer station and a provision for an additional facility, and the associated additional carts and containers.

C. Development-Related Capital Program for City-wide and Area-Specific Engineered services

Table 8 provides a summary of the 2022 – 2041 City-Wide and Area-Specific Engineered services capital program. The capital program is comprised of roads, water facilities, wastewater facilities, water distribution, wastewater collection and storm water management projects.

i. City-Wide Infrastructure

The gross cost of the capital program amounts to \$4.80 billion and includes for the recovery of roads, water, wastewater facilities and related debt. The following describes the City-wide engineering infrastructure:

The **Services Related to a Highway: Roads** projects are comprised of new roads, interchanges, roundabouts, road widenings, streetscape improvements and active transportation infrastructure.

Water Services Facilities and **Water Services Facilities Related Debt** relates to the plant and associated infrastructure (e.g. Water System Upgrades, SWTP Optimization) and the recovery of debenture financed projects. Similarly, **Wastewater Services Facilities** and **Wastewater Services Facilities Related Debt** relates to the plant and associated infrastructure (e.g. Wastewater Treatment Plant, Primary Clarifiers, MBR Retrofits) and the recovery of debenture financed projects.

ii. Former Municipal Boundary Infrastructure

In total, the infrastructure related to the Former Municipal Boundary totals \$662.24 million and includes stormwater drainage, water distribution and wastewater collection.

Stormwater Drainage and Collection includes projects related to culverts, storm sewers, watercourse improvements etc. **Water Services -**

Distribution and **Wastewater Services - Collection includes** linear infrastructure.

iii. Salem & Hewitt's Secondary Plan Area Infrastructure

The Salem and Hewitt's Secondary Plan Area includes the recovery of \$416.72 million in water distribution and wastewater collection.

Water Services - Distribution and **Wastewater Services - Collection includes** linear infrastructure.

TABLE 8

CITY OF BARRIE
SUMMARY OF DEVELOPMENT-RELATED CAPITAL FORECAST
AND ENGINEERED SERVICES 2023 - 2041
(in \$000)

Engineered Services	Gross Cost	Grants/ Subsidies	Municipal Cost
CITY-WIDE SERVICES			
1 SERVICES RELATED TO A HIGHWAY: ROADS	\$4,001,874.4	\$0.0	\$4,001,874.4
2 WATER SERVICES - FACILITIES	\$13,513.1	\$0.0	\$13,513.1
3 WATER SERVICES - FACILITIES RELATED DEBT	\$151,602.3	\$0.0	\$151,602.3
4 WASTEWATER SERVICES - FACILITIES	\$524,555.9	\$0.0	\$524,555.9
5 WASTEWATER SERVICES - FACILITIES RELATED DEBT	\$108,531.3	\$0.0	\$108,531.3
TOTAL CITY-WIDE SERVICES	\$4,800,077.0	\$0.0	\$4,800,077.0
FORMER MUNICIPAL BOUNDARY			
1 STORMWATER DRAINAGE AND CONTROL SERVICES	\$455,298.7	\$0.0	\$455,298.7
2 WATER SERVICES - DISTRIBUTION SYSTEMS	\$47,709.3	\$0.0	\$47,709.3
3 WASTEWATER SERVICES - COLLECTION SYSTEMS	\$159,230.1	\$0.0	\$159,230.1
TOTAL FORMER CITY OF BARRIE	\$662,238.1	\$0.0	\$662,238.1
SALEM & HEWITT'S SECONDARY PLAN AREAS			
1 WATER SERVICES - DISTRIBUTION SYSTEMS	\$226,371.9	\$0.0	\$226,371.9
2 WASTEWATER SERVICES - COLLECTION SYSTEMS	\$190,348.4	\$0.0	\$190,348.4
TOTAL SALEM & HEWITT'S SECONDARY PLAN AREAS	\$416,720.3	\$0.0	\$416,720.3
TOTAL ENGINEERED SERVICES (2023-2041)	\$5,879,035.5	\$0.0	\$5,879,035.5

6. 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 development charge by type of development. Furthermore, the calculation of the “unadjusted” per capita (residential) and per square metre (non-residential) is presented. Adjustments are made to these amounts resulting from a cash flow analysis that considers interest earnings and borrowing costs.

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

It is noted that the calculation of the City-wide development charges does not include any provision for exemptions required under the *DCA*. Such legislated exemptions, or other exemptions or reductions which Council may choose to provide, will result in loss of development charge revenue for the affected types of development. Any such revenue loss may not be made up, however, by offsetting increases in other portions of the calculated charge.

A. Unadjusted Development Charge Calculation for City-Wide General Services

A summary of the “unadjusted” residential and non-residential development charges for general services is presented in Table 9. Further details of the calculation for each individual City service category are available in Appendix B and Appendix C.

TABLE 9

CITY OF BARRIE
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
10-YEAR CAPITAL PROGRAM FOR GENERAL SERVICES

10 Year Growth in Population in New Units	57,051
10 Year Growth in Square Metres (Retail)	357,960
10 Year Growth in Square Metres (Non-Retail)	1,004,870

Service	Development-Related Capital Program (2023 - 2032)						Residential Share		Retail Share		Non-Retail Share	
	Total Project Cost	Grants/ Subsidies/ Other Contributions	Benefit to Existing Share	Available DC Reserves	Post 2032	Total Cost Eligible For DC Recovery						
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	%	(\$000)	%	(\$000)	%	(\$000)
1.0 LIBRARY SERVICES	\$42,850.0	\$0.0	\$1,350.0	\$3,169.3	\$13,492.7	\$24,838.0	100%	\$24,838.0	0%	\$0.00	0%	\$0.00
Unadjusted Development Charge Per Capita								\$435.36				
Unadjusted Development Charge Per Sq.M										\$0.00		\$0.00
2.0 PROTECTION SERVICES	\$71,675.3	\$0.0	\$24,220.9	\$0.0	\$0.0	\$47,454.4	76%	\$35,853.8	9%	\$4,499.09	15%	\$7,101.51
Unadjusted Development Charge Per Capita								\$628.45				
Unadjusted Development Charge Per Sq.M										\$12.57		\$7.07
3.0 PARKS AND RECREATION	\$435,732.6	\$0.0	\$33,897.4	\$31,241.5	\$116,339.9	\$254,253.8	100%	\$254,253.8	0%	\$0.00	0%	\$0.00
Unadjusted Development Charge Per Capita								\$4,456.61				
Unadjusted Development Charge Per Sq.M										\$0.00		\$0.00
4.0 SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET	\$128,625.0	\$0.0	\$49,245.8	\$3,176.7	\$30,013.6	\$46,188.9	76%	\$34,897.7	9%	\$4,379.11	15%	\$6,912.13
Unadjusted Development Charge Per Capita								\$611.69				
Unadjusted Development Charge Per Sq.M										\$12.23		\$6.88
5.0 TRANSIT SERVICES	\$178,731.2	\$19,950.0	\$16,019.2	\$0.0	\$94,802.1	\$47,959.9	76%	\$36,235.8	9%	\$4,547.02	15%	\$7,177.16
Unadjusted Development Charge Per Capita								\$635.15				
Unadjusted Development Charge Per Sq.M										\$12.70		\$7.14
6.0 AMBULANCE SERVICES	\$34,835.9	\$16,465.5	\$4,216.7	\$0.0	\$7,109.9	\$7,043.8	76%	\$5,321.9	9%	\$667.81	15%	\$1,054.10
Unadjusted Development Charge Per Capita								\$93.28				
Unadjusted Development Charge Per Sq.M										\$1.87		\$1.05
7.0 LONG TERM CARE	\$86,283.7	\$77,817.6	\$5,917.6	\$100.5	\$0.0	\$2,447.9	100%	\$2,447.9	0%	\$0.00	0%	\$0.00
Unadjusted Development Charge Per Capita								\$42.91				
Unadjusted Development Charge Per Sq.M										\$0.00		\$0.00
8.0 WASTE DIVERSION	\$23,434.0	\$0.0	\$0.0	\$1,253.8	\$0.0	\$22,180.2	86%	\$19,091.6	5%	\$1,197.85	9%	\$1,890.72
Unadjusted Development Charge Per Capita								\$334.64				
Unadjusted Development Charge Per Sq.M										\$6.69		\$3.76
TOTAL 10-YEAR GENERAL SERVICES	\$1,002,167.75	\$114,233.1	\$134,867.6	\$38,941.8	\$261,758.3	\$452,367.0		\$412,940.5		\$15,290.9		\$24,135.6
Unadjusted Development Charge Per Capita								\$7,238.09				
Unadjusted Development Charge Per Sq.M										\$46.06		\$25.90

The capital program for general services incorporates those projects identified to be related to development anticipated in the next 10 years and totals \$1.00 billion in gross costs. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 9 shows that \$134.87 million of the capital program relates to replacement of existing capital facilities or to shares of projects that provide benefit to the existing community. These portions of capital costs will likely be funded from property taxes, user fees or other non-development charge revenue sources.

A share of \$114.23 million has been identified as grant and subsidy funding and has been removed from the municipal cost. An additional share of \$38.94 million has been identified as DC reserve fund monies are available to fund growth-related projects. These funds have been earmarked for specific projects and they have each been identified in Appendix B and Appendix C. This portion has been netted out of the chargeable capital costs. Another share of the forecast, \$261.76 million, is attributable to development beyond the planning period (which will be considered for recovery in future development charges studies or through other growth funding tools, subject to service level considerations).

The total costs eligible for recovery through development charges for general services is \$452.37 million. This amount is allocated between the residential and non-residential (retail and non-retail) sectors to derive the unadjusted development charges. Library Services, Parks and Recreation, and Long Term Care are all deemed to benefit residential development only, while the other services are allocated between both sectors based on shares of Census population and new employment growth. Approximately \$412.94 million of the general services development charges recoverable amount is deemed to benefit residential development.

When this amount of \$412.94 million is divided by the 10-year population growth in new units (57,051), an unadjusted charge of \$7,238.09 per capita

is derived. The non-residential retail share of the general services capital program totals \$15.29 million and when this amount is divided by the 10-year forecast of new non-residential retail space growth (357,960 square metres), an unadjusted charge of \$46.06 per square metre is derived. The non-residential non-retail share of the general services capital program totals \$24.13 million and when this amount is divided by the 10-year forecast of new non-residential space growth (1,004,870 square metres), an unadjusted charge of \$25.90 per square metre is derived.

B. Unadjusted Development Charge Calculation for City-Wide Engineered Services

Table 10 describes the calculation of unadjusted rates for City-wide engineered services. The engineered services capital program totals \$4.80 billion, of which \$2.92 billion is identified to be related to development over the 2023-2041 period. The capital program eligible for recovery through development charges is allocated to the residential and non-residential (retail and non-retail) sectors based on future shares of Census population and employment growth. On this basis, the allocation to the residential and non-residential sectors is calculated at 69.1% for residential, 12.2% for retail, and 18.7% for non-retail.

The residential sector's share of the engineered services capital program is \$2.02 billion. This amount, divided by the population growth in new units to build-out (92,924) is \$21,719.22 per capita.

The retail share of the engineered services capital program is \$354.87 million. This amount, divided by the new non-residential space growth to build-out (816,960 square metres) is \$434.37 per square metre. The non-retail share of the engineered services capital program is \$547.32 million. This amount, divided by the new non-residential space growth to build-out (2.16 million square metres) is \$253.73 per square metre.

TABLE 10

CITY OF BARRIE
SUMMARY OF UNADJUSTED DEVELOPMENT CHARGES
FOR CITY-WIDE ENGINEERED SERVICES 2023 - 2041

City-Wide	
Long-Term Growth in Population in New Units	92,924
Long-Term Growth in Square Metres (Retail)	816,960
Long-Term Growth in Square Metres (Non-Retail)	2,157,070

Service	Development-Related Capital Program (in \$'000s)						Residential Share		Retail Share		Non-Retail Share	
	Total Project Cost	Grants/ Subsidies/ Other Contributions	Benefit to Existing Share	Available DC Reserves	Post 2041	Total Cost Eligible For DC Recovery						
							%	(\$'000)	%	(\$'000)	%	(\$'000)
CITY-WIDE ENGINEERED SERVICES												
SERVICES RELATED TO A HIGHWAY: ROADS Charge per Capita or Chagre per Square Metre	\$4,001,874.39	\$0.00	\$534,464.23	\$123,910.44	\$1,062,707.29	\$2,280,792.43	69.1%	\$1,576,198 \$16,962.23	12.2%	\$277,145.89 \$339.24	18.7%	\$427,448.21 \$198.16
WATER SERVICES - FACILITIES Charge per Capita or Chagre per Square Metre	\$13,513.11	\$0.00	\$1,668.46	\$584.66	\$0.00	\$11,260.00	69.1%	\$7,781 \$83.74	12.2%	\$1,368.24 \$1.67	18.7%	\$2,110.26 \$0.98
WATER SERVICES - FACILITIES RELATED DEBT Charge per Capita or Chagre per Square Metre	\$151,602.26	\$0.00	\$0.00	\$0.00	\$0.00	\$151,602.26	69.1%	\$104,769 \$1,127.46	12.2%	\$18,421.64 \$22.55	18.7%	\$28,412.11 \$13.17
WASTEWATER SERVICES - FACILITIES Charge per Capita or Chagre per Square Metre	\$524,555.94	\$0.00	\$93,056.38	\$40,703.84	\$22,549.75	\$368,245.97	69.1%	\$254,486 \$2,738.64	12.2%	\$44,746.67 \$54.77	18.7%	\$69,013.77 \$31.99
WASTEWATER SERVICES - FACILITIES RELATED DEBT Charge per Capita or Chagre per Square Metre	\$108,531.33	\$0.00	\$0.00	\$0.00	\$0.00	\$108,531.33	69.1%	\$75,003 \$807.15	12.2%	\$13,187.97 \$16.14	18.7%	\$20,340.09 \$9.43
TOTAL CITY-WIDE ENGINEERED SERVICES	\$4,800,077.03	\$0.00	\$629,189.07	\$165,198.93	\$1,085,257.04	\$2,920,431.98		\$2,018,237		\$354,870.40		\$547,324.44
City-Wide Unadjusted Development Charge Per Capita or Per Square Metre								\$21,719.22		\$434.37		\$253.73

C. Unadjusted Development Charge Calculation for Area-Specific Engineered services

Table 11 describes the calculation of unadjusted rates for the Area-Specific Engineered services in the Former Municipal Boundary and Salem and Hewitt's Secondary Plan Areas. Costs have been allocated based on shares of anticipated population and employment growth in each area.

In the Former Municipal Boundary, the total residential share of \$195.20 million results in an unadjusted residential charge is \$4,030.08 per capita. The unadjusted retail charge is \$58.11 per square metre, and the unadjusted non-retail charge is \$37.18 per square metre.

In Salem and Hewitt's, the unadjusted residential charge is \$7,132.69 per capita. The unadjusted retail charge is \$142.65 per square metre, and the unadjusted non-retail charge is \$76.07 per square metre.

TABLE 11

CITY OF BARRIE
SUMMARY OF UNADJUSTED DEVELOPMENT CHARGES
FOR AREA-SPECIFIC ENGINEERED SERVICES 2023 - 2041

Former Boundary

Long-Term Growth in Population in New Units	48,436
Long-Term Growth in Square Metres (Retail)	612,700
Long-Term Growth in Square Metres (Non-Retail)	1,233,120

Salem & Hewitt's

Long-Term Growth in Population in New Units	44,486
Long-Term Growth in Square Metres (Retail)	204,250
Long-Term Growth in Square Metres (Non-Retail)	923,885

Service	Development-Related Capital Program (in \$000s)						Residential Share		Retail Share		Non-Retail Share		
	Total Project Cost	Grants/ Subsidies/ Other Contributions	Benefit to Existing Share	Available DC Reserves	Post 2041	Total Cost Eligible For DC Recovery							
								%	(\$000)	%	(\$000)	%	(\$000)
FORMER BOUNDARY SERVICES													
STORMWATER DRAINAGE AND CONTROL SERVICES Charge per Capita or Chagre per Square Metre	\$455,298.70	\$0.00	\$340,468.92	\$4,837.09	\$0.00	\$109,992.70	80.9%	\$89,035.87 \$1,838.22	7.9%	\$8,740.89 \$14.27	11.1%	\$12,215.95 \$9.91	
WATER SERVICES - DISTRIBUTION SYSTEMS Charge per Capita or Chagre per Square Metre	\$47,709.34	\$0.00	\$11,758.11	\$0.00	\$0.00	\$35,951.23	63.7%	\$22,901.14 \$472.81	16.1%	\$5,793.84 \$9.46	20.2%	\$7,256.25 \$5.88	
WASTEWATER SERVICES - COLLECTION SYSTEMS Charge per Capita or Chagre per Square Metre	\$159,230.05	\$0.00	\$28,518.40	\$0.00	\$0.00	\$130,711.65	63.7%	\$83,264.06 \$1,719.05	16.1%	\$21,065.28 \$34.38	20.2%	\$26,382.31 \$21.39	
TOTAL FORMER BOUNDARY SERVICES	\$662,238.09	\$0.00	\$380,745.43	\$4,837.09	\$0.00	\$276,655.58		\$195,201.07		\$35,600.01		\$45,854.51	
SALEM AND HEWITT'S SERVICES													
WATER SERVICES - DISTRIBUTION SYSTEMS Charge per Capita or Chagre per Square Metre	\$226,371.93	\$0.00	\$0.00	\$0.00	\$0.00	\$226,371.93	76.1%	\$172,367.21 \$3,874.64	7.0%	\$15,827.90 \$77.49	16.9%	\$38,176.82 \$41.32	
WASTEWATER SERVICES - COLLECTION SYSTEMS Charge per Capita or Chagre per Square Metre	\$190,348.42	\$0.00	\$0.00	\$0.00	\$0.00	\$190,348.42	76.1%	\$144,937.69 \$3,258.05	7.0%	\$13,309.14 \$65.16	16.9%	\$32,101.58 \$34.75	
TOTAL SALEM & HEWITT'S SERVICES	\$416,720.35	\$0.00	\$0.00	\$0.00	\$0.00	\$416,720.35		\$317,304.90		\$29,137.04		\$70,278.41	
Former Boundary Unadjusted Development Charge Per Capita or Square Metre								\$4,030.08		\$58.11		\$37.18	
Salem & Hewitt's Unadjusted Development Charge Per Capita or Charge per Square Metre								\$7,132.69		\$142.65		\$76.07	

D. Adjusted Residential and Non-Residential Development Charges for City-Wide General and Engineered Services

Final adjustments to the “unadjusted” development charge rates summarized above are made through a cash flow analysis. 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.

Table 12 summarize the results of the adjustment for the residential development charge rates. The adjusted per capita rate for City-wide general and engineered services increases from \$28,957.32 to \$30,749.02 after the cash flow analysis. Residential City-wide development charges are proposed to vary by dwelling unit type to reflect their different occupancy factors and resulting demand for services. The calculated residential development charges for all services are shown in Table 12.

As shown in the table, the calculated residential charge ranges from \$30,749 for a special care/special dwelling unit to \$98,268 for single and semi-detached unit. The calculated charge for other multiples is \$73,645, large apartments is \$61,498 and for small apartments is \$39,975.

The calculated non-residential retail development charges rates are presented in Table 13. The calculated unadjusted charge is \$480.44 per square metre. The calculated cash-flow adjusted charge is \$542.40.

The calculated non-residential non-retail development charges rates are presented in Table 14. The calculated unadjusted charge is \$279.64 per square metre. The calculated cash-flow adjusted charge is \$313.22.

E. Adjusted Residential and Non-Residential Development Charges for Area-Specific Engineered services

Table 12 also summarize the results of the adjustment for the area-specific services residential development charge rates. The adjusted per capita rate increases from \$4,030.08 to \$4,256.70 after the cash flow analysis in the Former Municipal Boundary, and from \$7,132.69 to \$8,700.91 in the Salem and Hewitt's area.

The calculated non-residential retail development charges rates are presented in Table 13. The calculated unadjusted charge is \$58.10 per square metre, and the calculated cash-flow adjusted charge is \$65.28 in the Former Municipal Boundary. The calculated unadjusted charge is \$142.65 per square metre, and the calculated cash-flow adjusted charge is \$193.23 in the Salem and Hewitt's area.

The calculated non-residential non-retail development charges rates are presented in Table 14. The calculated unadjusted charge is \$37.19 per square metre, and the calculated cash-flow adjusted charge is \$41.10 in the Former Municipal Boundary. The calculated unadjusted charge is \$76.07 per square metre, and the calculated cash-flow adjusted charge is \$78.46 in the Salem and Hewitt's area.

TABLE 12

CITY OF BARRIE
CITY-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Residential Charge By Unit Type					Percentage of Charge
	Single & Semi-Detached	Other Multiples	Apartments 2+ Bedrooms	Apartments Bachelor and 1 Bedroom	Special Care/ Special Dwelling Units	
Library Services	\$1,425	\$1,068	\$892	\$580	\$446	1.5%
Protection Services	\$2,227	\$1,669	\$1,394	\$906	\$697	2.3%
Parks And Recreation	\$14,300	\$10,717	\$8,949	\$5,817	\$4,475	14.6%
Services Related To A Highway: Public Works And Fleet	\$2,030	\$1,521	\$1,270	\$826	\$635	2.1%
Transit Services	\$1,861	\$1,394	\$1,164	\$757	\$582	1.9%
Long Term Care Services	\$137	\$102	\$86	\$56	\$43	0.1%
Ambulance Services	\$500	\$374	\$313	\$203	\$156	0.5%
Waste Diversion Services	\$1,153	\$864	\$722	\$469	\$361	1.2%
Subtotal General Services	\$23,633	\$17,709	\$14,790	\$9,614	\$7,395	24.0%
Services Related To A Highway: Roads	\$55,293	\$41,440	\$34,604	\$22,493	\$17,302	56.3%
Water Services - Facilities	\$299	\$224	\$187	\$122	\$94	0.3%
Water Services - Facilities Related Debt	\$5,716	\$4,284	\$3,577	\$2,325	\$1,788	5.8%
Wastewater Services - Facilities	\$8,633	\$6,470	\$5,403	\$3,512	\$2,701	8.8%
Wastewater Services - Facilities Related Debt	\$4,694	\$3,518	\$2,937	\$1,909	\$1,469	4.8%
Subtotal Engineered Services	\$74,635	\$55,936	\$46,708	\$30,361	\$23,354	76.0%
TOTAL CITY-WIDE CHARGE PER UNIT	\$98,268	\$73,645	\$61,498	\$39,975	\$30,749	100.0%

FORMER MUNICIPAL BOUNDARY						
Stormwater Drainage And Control Services	\$5,855	\$4,388	\$3,664	\$2,382	\$1,832	5.2%
Water Services - Distribution Systems	\$2,128	\$1,595	\$1,332	\$866	\$666	1.9%
Wastewater Services - Collection Systems	\$5,620	\$4,212	\$3,517	\$2,286	\$1,759	5.0%
Subtotal Former Boundary per Unit	\$13,603	\$10,195	\$8,513	\$5,534	\$4,257	12.2%
Subtotal City-Wide Charge Per Unit	\$98,268	\$73,645	\$61,498	\$39,975	\$30,749	87.8%
TOTAL FORMER MUNICIPAL BOUNDARY PER UNIT	\$111,871	\$83,840	\$70,011	\$45,509	\$35,006	100.0%

SALEM & HEWITT'S						
Water Services - Distribution Systems	\$14,846	\$11,126	\$9,291	\$6,039	\$4,645	11.8%
Wastewater Services - Collection Systems	\$12,960	\$9,713	\$8,111	\$5,272	\$4,055	10.3%
Subtotal Salem & Hewitt's per Unit	\$27,806	\$20,839	\$17,402	\$11,311	\$8,700	22.1%
Subtotal City-Wide Charge Per Unit	\$98,268	\$73,645	\$61,498	\$39,975	\$30,749	77.9%
TOTAL SALEM & HEWITT'S BOUNDARY PER UNIT	\$126,074	\$94,484	\$78,900	\$51,286	\$39,449	100.0%

(1) Based on Persons Per Unit Of:	3.20	2.40	2.00	1.30	1.00
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TABLE 13

CITY OF BARRIE
CITY-WIDE DEVELOPMENT CHARGES
RETAIL DEVELOPMENT CHARGES PER SQUARE METRE

Service	Retail		Percentage of Charge
	Unadjusted Charge per Square Metre	Adjusted Charge per Square Metre	
Library Services	\$0.00	\$0.00	0.0%
Protection Services	\$12.57	\$14.21	2.6%
Parks And Recreation	\$0.00	\$0.00	0.0%
Services Related To A Highway: Public Works And Fleet	\$12.23	\$12.60	2.3%
Transit Services	\$12.70	\$12.81	2.4%
Long Term Care Services	\$0.00	\$0.00	0.0%
Ambulance Services	\$1.87	\$2.90	0.5%
Waste Diversion Services	\$6.69	\$7.33	1.4%
Subtotal General Services	\$46.06	\$49.86	9.2%
Services Related To A Highway: Roads	\$339.24	\$362.93	66.9%
Water Services - Facilities	\$1.67	\$2.00	0.4%
Water Services - Facilities Related Debt	\$22.55	\$38.56	7.1%
Wastewater Services - Facilities	\$54.77	\$56.61	10.4%
Wastewater Services - Facilities Related Debt	\$16.14	\$32.43	6.0%
Subtotal Engineered Services	\$434.38	\$492.54	90.8%
TOTAL CITY-WIDE CHARGE PER SQUARE METRE	\$480.44	\$542.40	100.0%

FORMER MUNICIPAL BOUNDARY			
Stormwater Drainage And Control Services	\$14.27	\$14.69	2.4%
Water Services - Distribution Systems	\$9.46	\$14.34	2.4%
Wastewater Services - Collection Systems	\$34.38	\$36.25	6.0%
Subtotal Former Boundary per Square Metre	\$58.10	\$65.28	10.7%
Subtotal City-Wide Charge Per Square Metre	\$480.44	\$542.40	89.3%
TOTAL FORMER BOUNDARY CHARGE PER SQUARE METRE	\$538.55	\$607.68	100.0%

SALEM & HEWITT'S			
Water Services - Distribution Systems	\$77.49	\$103.25	14.0%
Wastewater Services - Collection Systems	\$65.16	\$89.99	12.2%
Subtotal Salem & Hewitt's per Square Metre	\$142.65	\$193.23	26.3%
Subtotal City-Wide Charge Per Square Metre	\$480.44	\$542.40	73.7%
TOTAL SALEM & HEWITT'S CHARGE PER SQUARE METRE	\$623.10	\$735.63	100.0%

TABLE 14

CITY OF BARRIE
CITY-WIDE DEVELOPMENT CHARGES
NON-RETAIL DEVELOPMENT CHARGES PER SQUARE METRE

Service	Non Retail		Percentage of Charge
	Unadjusted Charge per Square Metre	Adjusted Charge per Square Metre	
Library Services	\$0.00	\$0.00	0.0%
Protection Services	\$7.07	\$7.99	2.6%
Parks And Recreation	\$0.00	\$0.00	0.0%
Services Related To A Highway: Public Works And Fleet	\$6.88	\$7.25	2.3%
Transit Services	\$7.14	\$7.24	2.3%
Long Term Care Services	\$0.00	\$0.00	0.0%
Ambulance Services	\$1.05	\$1.79	0.6%
Waste Diversion Services	\$3.76	\$4.12	1.3%
Subtotal General Services	\$25.90	\$28.39	9.1%
Services Related To A Highway: Roads	\$198.16	\$209.88	67.0%
Water Services - Facilities	\$0.98	\$1.16	0.4%
Water Services - Facilities Related Debt	\$13.17	\$22.31	7.1%
Wastewater Services - Facilities	\$31.99	\$32.73	10.4%
Wastewater Services - Facilities Related Debt	\$9.43	\$18.75	6.0%
Subtotal Engineered Services	\$253.74	\$284.83	90.9%
TOTAL CITY-WIDE CHARGE PER SQUARE METRE	\$279.64	\$313.22	100.0%

FORMER MUNICIPAL BOUNDARY			
Stormwater Drainage And Control Services	\$9.91	\$10.04	2.8%
Water Services - Distribution Systems	\$5.88	\$8.74	2.5%
Wastewater Services - Collection Systems	\$21.39	\$22.32	6.3%
Subtotal Former Boundary per Square Metre	\$37.19	\$41.10	11.6%
Subtotal City-Wide Charge Per Square Metre	\$279.64	\$313.22	88.4%
TOTAL FORMER BOUNDARY CHARGE PER SQUARE METRE	\$316.82	\$354.32	100.0%

SALEM & HEWITT'S			
Water Services - Distribution Systems	\$41.32	\$41.92	10.7%
Wastewater Services - Collection Systems	\$34.75	\$36.54	9.3%
Subtotal Salem & Hewitt's per Square Metre	\$76.07	\$78.46	20.0%
Subtotal City-Wide Charge Per Square Metre	\$279.64	\$313.22	80.0%
TOTAL SALEM & HEWITT'S CHARGE PER SQUARE METRE	\$355.70	\$391.68	100.0%

F. Comparison of 2022 Newly Calculated Development Charges With Charges Currently In Force in Barrie

Tables 15, 16 and 17 present a comparison of the newly calculated residential and non-residential development charges with the development charges rates as of January 1, 2023. As shown in Table 15, the residential development charge City-wide rate for a single- or semi-detached unit increased by \$21,919 per unit, or 28.7%. The Former Municipal Boundary rate for a single- or semi-detached unit increased by \$2,671 per unit, or 24.4%, and the Salem and Hewitt's rate for a single- or semi-detached unit increased by \$13,710 per unit, or 97.3%. However, after including the City-wide rate, the Former Municipal Boundary rate for a single- or semi-detached unit increased by \$24,590 per unit, or 28.2%, and the Salem and Hewitt's rate for a single- or semi-detached unit increased by \$35,629 per unit, or 39.4%. Development in the Secondary Plan Areas will pay both the City-wide and area-specific development charges rates.

The calculated City-wide development charges rate for retail development increased by \$161.89 per square metre, or 42.5%. The Former Municipal Boundary retail rate has decreased by \$8.62 per square metre, or by 11.7%. In Salem and Hewitt's, the retail rate has increased by \$107.31 per square metre. However, after including the City-wide rate, the Former Municipal Boundary retail rate has increased by \$153.27 per square metre, or by 33.7%. In Salem & Hewitt's the total retail rate has increased by \$269.20 per square metre, or 57.7%.

The calculated City-wide development charges rate for non-retail development increased by \$54.31 per square metre, or 23.6%. The Former Municipal Boundary non-retail rate has increased by \$21.00 per square metre, or by 104.5%. In Salem & Hewitt's non-retail rate has increased by \$25.33 per square metre, or 47.7%. After including the City-wide rate, the Former Municipal Boundary non-retail rate has increased by \$71.07 per square metre, or by 25.1%. In Salem & Hewitt's the total non-retail rate has increased by \$75.40 per square metre, or 23.8%.

TABLE 15

CITY OF BARRIE
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES

Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	
Library Services	\$1,082	\$1,425	\$343	31.7%
Protection Services	\$2,495	\$2,227	(\$268)	-10.7%
Parks And Recreation	\$11,043	\$14,300	\$3,257	29.5%
Services Related To A Highway: Public Works And Fleet	\$743	\$2,030	\$1,287	173.2%
Transit Services	\$1,571	\$1,861	\$290	18.5%
Long Term Care Services	\$57	\$137	\$80	140.4%
Ambulance Services	\$318	\$500	\$182	57.2%
Waste Diversion Services	\$585	\$1,153	\$568	97.1%
Growth Studies*	\$1,018	\$0	(\$1,018)	-100.0%
Airport*	\$0	\$0	\$0	N/A
Parking*	\$0	\$0	\$0	N/A
Housing Services*	\$0	\$0	\$0	N/A
Subtotal General Services	\$18,912	\$23,633	\$4,721	25.0%
Services Related To A Highway: Roads	\$37,697	\$55,293	\$17,596	46.7%
Water Services - Facilities	\$104	\$299	\$195	187.5%
Water Services - Facilities Related Debt	\$6,720	\$5,716	(\$1,004)	-14.9%
Wastewater Services - Facilities	\$8,083	\$8,633	\$550	6.8%
Wastewater Services - Facilities Related Debt	\$4,833	\$4,694	(\$139)	-2.9%
Subtotal Engineered Services	\$57,437	\$74,635	\$17,198	29.9%
TOTAL CITY-WIDE CHARGE PER UNIT	\$76,349	\$98,268	\$21,919	28.7%

FORMER MUNICIPAL BOUNDARY				
Stormwater Drainage And Control Services	\$8,816	\$5,855	(\$2,961)	-33.6%
Water Services - Distribution Systems	\$569	\$2,128	\$1,559	274.0%
Wastewater Services - Collection Systems	\$1,547	\$5,620	\$4,073	263.3%
Subtotal Former Boundary per Unit	\$10,932	\$13,603	\$2,671	24.4%
TOTAL FORMER MUNICIPAL BOUNDARY PER UNIT	\$87,281	\$111,871	\$24,590	28.2%

SALEM & HEWITT'S				
Water Services - Distribution Systems	\$7,308	\$14,846	\$7,538	103.1%
Wastewater Services - Collection Systems	\$6,788	\$12,960	\$6,172	90.9%
Subtotal Salem & Hewitt's per Unit	\$14,096	\$27,806	\$13,710	97.3%
TOTAL SALEM & HEWITT'S BOUNDARY PER UNIT	\$90,445	\$126,074	\$35,629	39.4%

(1) Current as of January 1, 2023

TABLE 16

CITY OF BARRIE
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Non-Residential - Retail		Difference in Charge	
	Current Charge per Square	Calculated Charge per		
Library Services	\$0.97	\$0.00	(\$0.97)	-100.0%
Protection Services	\$14.73	\$14.21	(\$0.52)	-3.5%
Parks And Recreation	\$10.55	\$0.00	(\$10.55)	-100.0%
Services Related To A Highway: Public Works And Fleet	\$4.30	\$12.60	\$8.30	193.1%
Transit Services	\$9.50	\$12.81	\$3.31	34.9%
Long Term Care Services	\$0.14	\$0.00	(\$0.14)	-100.0%
Ambulance Services	\$0.55	\$2.90	\$2.35	427.4%
Waste Diversion Services	\$0.55	\$7.33	\$6.78	1232.5%
Growth Studies*	\$6.12	\$0.00	(\$6.12)	-100.0%
Airport*	\$0.00	\$0.00	\$0.00	N/A
Parking*	\$0.00	\$0.00	\$0.00	N/A
Housing Services*	\$0.00	\$0.00	\$0.00	N/A
Subtotal General Services	\$47.41	\$49.86	\$2.45	5.2%
Services Related To A Highway: Roads	\$218.65	\$362.93	\$144.28	66.0%
Water Services - Facilities	\$0.59	\$2.00	\$1.41	239.2%
Water Services - Facilities Related Debt	\$38.97	\$38.56	(\$0.41)	-1.0%
Wastewater Services - Facilities	\$46.86	\$56.61	\$9.75	20.8%
Wastewater Services - Facilities Related Debt	\$28.03	\$32.43	\$4.40	15.7%
Subtotal Engineered Services	\$333.10	\$492.54	\$159.44	47.9%
TOTAL CITY-WIDE CHARGE PER SQUARE METRE	\$380.51	\$542.40	\$161.89	42.5%

FORMER MUNICIPAL BOUNDARY				
Stormwater Drainage And Control Services	\$47.66	\$14.69	(\$32.97)	-69.2%
Water Services - Distribution Systems	\$7.04	\$14.34	\$7.30	103.7%
Wastewater Services - Collection Systems	\$19.20	\$36.25	\$17.05	88.8%
Subtotal Former Boundary per Square Metre	\$73.90	\$65.28	(\$8.62)	-11.7%
TOTAL FORMER BOUNDARY CHARGE PER SQUARE METRE	\$454.41	\$607.68	\$153.27	33.7%

SALEM & HEWITT'S				
Water Services - Distribution Systems	\$44.55	\$103.25	\$58.70	131.8%
Wastewater Services - Collection Systems	\$41.37	\$89.99	\$48.62	117.5%
Subtotal Salem & Hewitt's per Square Metre	\$85.92	\$193.23	\$107.31	124.9%
TOTAL SALEM & HEWITT'S CHARGE PER SQUARE METRE	\$466.43	\$735.63	\$269.20	57.7%

(1) Current as of January 1, 2023

TABLE 17

CITY OF BARRIE
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Non-Residential - Non-Retail		Difference in Charge	
	Current Charge per Square	Calculated Charge per		
Library Services	\$0.69	\$0.00	(\$0.69)	-100.0%
Protection Services	\$10.36	\$7.99	(\$2.37)	-22.9%
Parks And Recreation	\$7.09	\$0.00	(\$7.09)	-100.0%
Services Related To A Highway: Public Works And Fleet	\$2.98	\$7.25	\$4.27	143.2%
Transit Services	\$6.37	\$7.24	\$0.87	13.7%
Long Term Care Services	\$0.14	\$0.00	(\$0.14)	-100.0%
Ambulance Services	\$0.42	\$1.79	\$1.37	327.0%
Waste Diversion Services	\$0.42	\$4.12	\$3.70	880.5%
Growth Studies*	\$4.16	\$0.00	(\$4.16)	-100.0%
Airport*	\$0.00	\$0.00	\$0.00	N/A
Parking*	\$0.00	\$0.00	\$0.00	N/A
Housing Services*	\$0.00	\$0.00	\$0.00	N/A
Subtotal General Services	\$32.63	\$28.39	(\$4.24)	-13.0%
Services Related To A Highway: Roads	\$151.29	\$209.88	\$58.59	38.7%
Water Services - Facilities	\$0.42	\$1.16	\$0.74	175.4%
Water Services - Facilities Related Debt	\$26.96	\$22.31	(\$4.65)	-17.2%
Wastewater Services - Facilities	\$32.45	\$32.73	\$0.28	0.9%
Wastewater Services - Facilities Related Debt	\$19.40	\$18.75	(\$0.65)	-3.4%
Subtotal Engineered Services	\$230.52	\$284.83	\$54.31	23.6%
TOTAL CITY-WIDE CHARGE PER SQUARE METRE	\$263.15	\$313.22	\$50.07	19.0%

FORMER MUNICIPAL BOUNDARY				
Stormwater Drainage And Control Services	\$12.95	\$10.04	(\$2.91)	-22.5%
Water Services - Distribution Systems	\$1.92	\$8.74	\$6.82	355.3%
Wastewater Services - Collection Systems	\$5.23	\$22.32	\$17.09	326.7%
Subtotal Former Boundary per Square Metre	\$20.10	\$41.10	\$21.00	104.5%
TOTAL FORMER BOUNDARY CHARGE PER SQUARE METRE	\$283.25	\$354.32	\$71.07	25.1%

SALEM & HEWITT'S				
Water Services - Distribution Systems	\$27.55	\$41.92	\$14.37	52.2%
Wastewater Services - Collection Systems	\$25.58	\$36.54	\$10.96	42.8%
Subtotal Salem & Hewitt's per Square Metre	\$53.13	\$78.46	\$25.33	47.7%
TOTAL SALEM & HEWITT'S CHARGE PER SQUARE METRE	\$316.28	\$391.68	\$75.40	23.8%

(1) Current as of January 1, 2023

G. Statutory Phase-in of Development Charge Rates

The DCA now requires that the calculated development charge rates be phased-in over a five year period based on the following:

- Year 1 = 80% of calculated rates
- Year 2 = 85% of calculated rates
- Year 3 = 90% of calculated rates
- Year 4 = 95% of calculated rates
- Year 5 = 100% of calculated rates

Table 18 provides a summary of the 5-year phase in for the calculated residential and non-residential rates in the City of Barrie.

Table 18: 5-Year Phase-in of Calculated Development Charges Rates

Year	Single & Semi-Detached	Other Multiples	Apartments 2+ Bedrooms	Apartments Bachelor and 1 Bedroom	Special Care/ Special Dwelling Units	Retail \$/m2	Non-Retail \$/m2	Phase-in %
Former Municipal Boundary								
2023	\$ 89,497	\$ 67,072	\$ 56,009	\$ 36,407	\$ 28,005	\$486.14	\$283.46	80%
2024	\$ 95,090	\$ 71,264	\$ 59,509	\$ 38,683	\$ 29,755	\$516.53	\$301.17	85%
2025	\$ 100,684	\$ 75,456	\$ 63,010	\$ 40,958	\$ 31,505	\$546.91	\$318.89	90%
2026	\$ 106,277	\$ 79,648	\$ 66,510	\$ 43,234	\$ 33,256	\$577.30	\$336.61	95%
2027	\$ 111,871	\$ 83,840	\$ 70,011	\$ 45,509	\$ 35,006	\$607.68	\$354.32	100%
Salem & Hewitt's Secondary Plan Area								
2023	\$100,859	\$ 75,587	\$ 63,120	\$ 41,029	\$ 31,559	\$588.51	\$313.35	80%
2024	\$107,163	\$ 80,311	\$ 67,065	\$ 43,593	\$ 33,532	\$625.29	\$332.93	85%
2025	\$113,467	\$ 85,036	\$ 71,010	\$ 46,157	\$ 35,504	\$662.07	\$352.51	90%
2026	\$119,770	\$ 89,760	\$ 74,955	\$ 48,722	\$ 37,477	\$698.85	\$372.10	95%
2027	\$126,074	\$ 94,484	\$ 78,900	\$ 51,286	\$ 39,449	\$735.63	\$391.68	100%

7. Cost of Growth Analysis

This section provides a brief examination of the long-term capital and operating costs as well as the asset management-related annual provisions for the capital facilities and infrastructure to be included in the DC By-law. This examination is required as one of the provisions of the *DCA*. Additional details on the cost of growth analysis, including asset management analysis, for Transit services is included in Appendix C.3. The analysis for all other services is included in Appendix G.

A. Asset Management Plan

i. Transit Services

The City utilizes a range of fiscal planning tools and approaches in examining the funding and maintenance of Transit Services infrastructure. For example, the City prepared a Transit Asset Management Plan in 2019 which addressed the current state of infrastructure and the proposed levels of service to 2028 with considerations to 2041.

In particular, the City as part of its annual budget processes implements and manages the year-to-year expenditure needs and revenue requirements of the program.

For the purpose of the AMP analysis, assets have been grouped into the following categories identified in the Transit Services capital program (see Appendix C.2) and the following useful life assumptions have been applied. The current outstanding debentures are not included in the AMP as it relates to the existing transit garage which has been operational since 2015. The associated AMP requirements are already reflected in the 2019 Transit AMP.

1. Debentures = 0 years
2. Fleet = 10 years

3. Other Equipment = 10-20 years
4. Buildings and Facilities = 40 years

Table 19 provides a summary of the calculated annual asset management contributions based on the identified useful lives of the various assets and projects.

Table 19 – Summary of Calculated Full Life Cycle Annual Contributions at 2033

Service	2023 - 2032 Capital Program		Calculated AMP Annual Provision by 2033	
	DC Related	Non-DC Related*	DC Related	Non-DC Related*
Transit Services	\$47,959,936	\$130,771,287	\$2,297,522	\$1,231,110

* Includes costs that will be recovered under future development charges studies (i.e. other development-related).

A detailed analysis of the asset management and financial strategies for the various asset groups is described in detail in Appendix C.1. Reports and documents are referenced that identify the City's commitment to fund capital expenditures and address long-term capital and operating impacts.

ii. All Other Services

Tables 20 and 21 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2023-2032 and 2023-2041 DC recoverable portion. The year 2033 and 2042 have been included to calculate the annual contribution for the 2023-2032 and 2023-2041 periods as the expenditures in 2032 and 2041 will not trigger asset management contributions until 2033 and 2042, respectively. As shown in Table 20, by 2032, the City should fund an additional \$5.89 million per annum to fund the full life cycle costs of the new assets related to the general services supported under the development charges by-law.

Table 21 provides a separate analysis of the annual provisions required for the engineered services capital program as the program extends to 2041. As shown in Table 21, the annual provision in 2042 amounts to \$18.24 million.

Table 20 - Calculated Annual Provision by 2033 for General Services

Service	2023 - 2032 Capital Program		Calculated AMP Annual Provision by 2033	
	DC Related	Non-DC Related*	DC Related	Non-DC Related*
Library Services	\$24,837,990	\$18,012,010	\$1,095,778	\$205,829
Protection Services	\$47,454,402	\$24,220,921	\$1,256,719	\$287,391
Parks And Recreation	\$254,253,838	\$181,478,776	\$2,266,162	\$3,645,187
Services Related To A Highway: Public Works And Fleet	\$46,188,926	\$82,436,074	\$878,437	\$1,210,569
Ambulance Services	\$7,043,806	\$27,792,106	\$89,748	\$851,924
Long Term Care Services	\$2,447,924	\$83,835,755	\$27,973	\$958,018
Waste Diversion Services	\$22,180,152	\$1,253,848	\$284,244	\$14,328
TOTAL	\$404,407,038	\$419,029,490	\$5,899,061	\$7,173,247

* Includes costs that will be recovered under future development charges studies (i.e. other development-related).

Table 21 - Calculated Annual Provision by 2042 for Engineered Services

Service	2023 - 2041 Capital Program		Calculated AMP Annual Provision by 2042	
	DC Related	Non-DC Related*	DC Related	Non-DC Related*
City-Wide Services				
Services Related To A Highway: Roads	\$2,280,792,431	\$1,721,081,963	\$12,564,298	\$9,692,010
Water Services - Facilities	\$11,259,995	\$2,253,112	\$83,049	\$16,618
Wastewater Services - Facilities	\$368,245,971	\$156,309,969	\$3,015,870	\$3,438,697
Former City of Barrie				
Stormwater Drainage And Control Services	\$109,992,704	\$345,306,001	\$573,758	\$1,694,598
Water Services - Distribution Systems	\$35,951,230	\$11,758,110	\$178,416	\$57,809
Wastewater Services - Collection Systems	\$130,711,650	\$28,518,400	\$299,524	\$65,713
Salem & Hewitt's Secondary Plan Areas				
Water Services - Distribution Systems	\$226,371,932	\$0	\$1,112,346	\$0
Wastewater Services - Collection Systems	\$190,348,417	\$0	\$413,292	\$0
TOTAL	\$3,353,674,331	\$2,265,227,555	\$18,240,552	\$14,965,446

* Includes costs that will be recovered under future development charges studies (i.e. other development-related).

B. Long-Term Capital and Operating Cost Impacts

i. Net Operating Costs for the City's Services Estimated to Increase over the Forecast Period

The City will experience estimated increase in net operating costs for additions associated with the planned capital program. These estimates are based on average costs derived from a review of recent budgets and the FIR (additional details are included in Appendix G).

As described in Appendix G, by 2032, the City's net operating costs are estimated to increase by \$24.04 million for property tax supported services. Increases in net operating costs will be experienced as new facilities such as community centres are opened. By 2041, the City's net operating costs for roads services will increase by \$6.81 million. Operating and maintenance costs will also increase as additions to the City's road network are made.

The anticipated net operating impacts arising from the addition of 33 new buses over the 10-year planning period of 2022-2031 and the new proposed transit facilities. In total, it is anticipated that the City will incur approximately \$980,900 in additional operating costs by 2032. Additional details are provided in Appendix C.

ii. Long-Term Capital Financing from Non-Development Charge Sources Totals \$1.13 Billion

Table 22 summarizes the components of the development-related capital program that will require funding from non-development charges sources. In total, \$1.13 billion will need to be financed from non-DC sources over the 2023-2032 and 2023-2041 planning period. In addition, \$1.25 billion in interim DC financing related to post-period shares of projects may be required or these costs may be recovered from other growth funding tools.

TABLE 22

CITY OF BARRIE
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES

General Services	Development-Related Capital Program (2023 - 2032)				
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Available DC Reserves (\$000)	Post-Period Benefit* (\$000)	Total DC Eligible Costs for Recovery (\$000)
1 LIBRARY SERVICES	\$42,850.0	\$1,350.0	\$3,169.3	\$13,492.7	\$24,838.0
2 PROTECTION SERVICES	\$71,675.3	\$24,220.9	\$0.0	\$0.0	\$47,454.4
3 PARKS AND RECREATION	\$435,732.6	\$33,897.4	\$31,241.5	\$116,339.9	\$254,253.8
4 SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET	\$128,625.0	\$49,245.8	\$3,176.7	\$30,013.6	\$46,188.9
5 LONG TERM CARE SERVICES	\$8,466.1	\$5,917.6	\$100.5	\$0.0	\$2,447.9
6 AMBULANCE SERVICES	\$18,370.5	\$4,216.7	\$0.0	\$7,109.9	\$7,043.8
7 WASTE DIVERSION SERVICES	\$23,434.0	\$0.0	\$1,253.8	\$0.0	\$22,180.2
TOTAL GENERAL SERVICES	\$729,153.5	\$118,848.5	\$38,941.8	\$166,956.2	\$404,407.0

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Engineered Services	Development-Related Capital Program (2023 - 2041)				
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Available DC Reserves (\$000)	Post-Period Benefit* (\$000)	Total DC Eligible Costs for Recovery (\$000)
CITY-WIDE SERVICES					
1 SERVICES RELATED TO A HIGHWAY: ROADS	\$4,001,874.4	\$534,464.2	\$123,910.4	\$1,062,707.3	\$2,280,792.4
2 WATER SERVICES - FACILITIES	\$13,513.1	\$1,668.5	\$584.7	\$0.0	\$11,260.0
3 WATER SERVICES - FACILITIES RELATED DEBT	\$151,602.3	\$0.0	\$0.0	\$0.0	\$151,602.3
4 WASTEWATER SERVICES - FACILITIES	\$524,555.9	\$93,056.4	\$40,703.8	\$22,549.7	\$368,246.0
5 WASTEWATER SERVICES - FACILITIES RELATED DEBT	\$108,531.3	\$0.0	\$0.0	\$0.0	\$108,531.3
TOTAL CITY-WIDE SERVICES	\$4,800,077.0	\$629,189.1	\$165,198.9	\$1,085,257.0	\$2,920,432.0
FORMER CITY OF BARRIE					
1 STORMWATER DRAINAGE AND CONTROL SERVICES	\$455,298.7	\$340,468.9	\$4,837.1	\$0.0	\$109,992.7
2 WATER SERVICES - DISTRIBUTION SYSTEMS	\$47,709.3	\$11,758.1	\$0.0	\$0.0	\$35,951.2
3 WASTEWATER SERVICES - COLLECTION SYSTEMS	\$159,230.1	\$28,518.4	\$0.0	\$0.0	\$130,711.7
TOTAL FORMER CITY OF BARRIE	\$662,238.1	\$380,745.4	\$4,837.1	\$0.0	\$276,655.6
SALEM & HEWITT'S SECONDARY PLAN AREAS					
1 WATER SERVICES - DISTRIBUTION SYSTEMS	\$226,371.9	\$0.0	\$0.0	\$0.0	\$226,371.9
2 WASTEWATER SERVICES - COLLECTION SYSTEMS	\$190,348.4	\$0.0	\$0.0	\$0.0	\$190,348.4
TOTAL SALEM & HEWITT'S SECONDARY PLAN AREAS	\$416,720.3	\$0.0	\$0.0	\$0.0	\$416,720.3
TOTAL ENGINEERED SERVICES	\$5,879,035.5	\$1,009,934.5	\$170,036.0	\$1,085,257.0	\$3,613,807.9
TOTAL GENERAL AND ENGINEERED SERVICES	\$6,608,188.9	\$1,128,783.0	\$208,977.8	\$1,252,213.2	\$4,018,215.0

*Development related costs to be considered for funding from other tools and/or future DC Studies.

I. Program is Deemed Financially Sustainable

The calculated annual funding provision should be considered within the context of the City's projected growth. Over the next 10 years (to 2032) the City is projected to increase by approximately 25,000 households. In addition, the City will also add nearly 18,460 new employees that will result in approximately 1.36 million square metres of additional non-residential building space.

By 2041, there will be an increase of nearly 42,500 new households. In addition, the City will also add nearly 41,540 new employees that will result in approximately 2.97 million square metres of additional non-residential building space. This growth will have the effect of increasing the overall assessment base and additional user fee 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 the City's reserves for the future replacement of these assets.

In addition, as part of the annual budget update the City also contributes to asset replacement reserves and spends on yearly asset replacement needs as needed.

Through this annual exercise, staff identify the required funding and propose mitigating measures in order to ensure there are sufficient funds in reserves over the long term. Life-cycle funding methodologies are also reviewed in order to ensure that the City is continuing to implement financially sustainable practices for funding the eventual replacement of assets.

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.

8. Development Charges Administration

A. Development Charges Recommendations

No significant changes are recommended to the City's current policies and practices regarding development charges administration. Considering the requirements of the *DCA*, the following recommendations are made:

- That present practices regarding collection of DCs and by-law administration continue to the extent possible, having regard to any requirements of the *DCA*;
- That under the *DCA*, the City should codify any rules regarding application of the by-laws and exemptions within the DC by-laws proposed for adoption;
- That the City continue to use front-ending agreements or developer agreements (or services-in-lieu arrangements), whichever are practical and desirable by the development industry and the City;
- That the by-law permit the payment of DCs in cash or through services-in-lieu agreements. The City is not obligated to enter into services-in-lieu agreements;
- That Council adopt the development-related capital forecasts, and the increase in the need for services attributable to the anticipated development, as included in the 2023 DC Background Study, subject to annual review through the City's normal capital budget process.
- That Council confirms its intention to fund the adopted capital forecast to ensure that the increase in need for service will be met.

- That Council determine that the future excess capacity identified in the DC Background Study shall be paid for by the development charges contemplated in the said DC Background Study, or other similar charges.
- That Council has given consideration of the use of more than one development charge by-law to reflect different needs for services in different areas, also known as area rating or area-specific DCs. Both City-wide and area-specific rates are proposed.
- That Council has determined that for the services, and associated infrastructure proposed to be funded by DCs under the DC by-law, that the charges be calculated on a City-wide and area-specific basis.
- That Council adopt the Transit development-related capital program, as included in the DC Background Study, as the “planned level of service”, and in doing so, indicate that it intends to ensure that the increase in need for Transit will be met.
- That Council approve the Cost of Growth analysis, including the Asset Management Plan, that deals with all assets whose capital costs are intended to be funded under the development charge by-law and that such assets are considered to be financially sustainable over their full life-cycle.

B. Approved 2023 Development Charge By-Law

The enacted and approved 2023 DC By-law is attached as Appendix I.

Appendix A

Development Forecast

Development Forecast

This appendix summarizes the development forecast used to prepare the 2023 Development Charges Background Study for the City of Barrie. The forecast method and key assumptions are discussed. The forecast results are presented in the following tables:

Historical Development

Table A-1	Population & Occupied Dwelling Summary
Table A-2	Annual Housing Completions (CMHC)
Table A-3	Occupied Dwellings by Unit Type
Table A-4	Annual Growth in Occupied Dwellings by Unit Type
Table A-5	Occupied Dwellings by Period of Construction
Table A-6	Place of Work Employment

Forecast Development – City-Wide

Table A-7	Population & Occupied Dwellings
Table A-8	Occupied Dwellings by Unit Type
Table A-9	Occupied Dwelling Growth by Unit Type
Table A-10	Population in New Housing by Unit Type
Table A-11	Place of Work Employment
Table A-12	Employment in New Space

Forecast Development – Area-Specific

Table A-13	Population
Table A-14	Occupied Dwellings & Population Growth in New Housing
Table A-15	Place of Work Employment

A. Forecast Approach, Key Assumptions and Definitions

The *Development Charges Act* (DCA) requires the City to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The 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 City to prepare a reasonable development-related capital program.

i. Identified Forecast Targets

A 10-year development forecast, from 2023 to 2032, has been used for the General Services as well as the Services Related to a Highway: Public Works and Fleet and the Transit Service. For Services Related to a Highway: Roads as well as Water and Wastewater services, a longer-term forecast, from 2023 to 2041, has been used.

The forecasts are premised on the City achieving population and employment forecasts identified in the *Municipal Comprehensive Review (MCR) Long-Term Urban Land Needs Study, City of Barrie, May 21, 2019 (MCR Long-Term Urban Land Needs Study, 2019)*, updated to reflect 2021 Census data. By way of background:

- The Provincial plan *A Place to Grow. Growth Plan for the Greater Golden Horseshoe, 2020 (Growth Plan)* requires that the City plan to achieve a minimum population of 298,000 and employment of 150,000 by 2051. The City’s new Official Plan 2051, adopted in February 2022 but not yet approved by the Minister, incorporates these long-term 2051 population and employment forecasts.
- The City is currently updating its infrastructure plans to align with the new 2051 planning horizon and associated population and employment forecasts. As this work is not yet complete, this 2023 DC Background Study relies on 2031 and 2041 population and employment targets

identified in the *MCR Long-Term Urban Land Needs Study, 2019*, which were used as the basis for the City’s current infrastructure master plans (see Figure 1). The City will continue to plan to achieve the 2051 population and employment forecasts set out in its Official Plan and it is expected that these forecasts will be used in future DC Background Study updates.

Figure 1: City of Barrie 2031 and 2041 Population and Employment

	2031	2041
Population	210,000	253,000
Employment	101,000	129,000

In short, the development charge calculations in this study are consistent with development forecasts used to prepare the City’s current master servicing plans and other capital development plans. As well, all development charge calculations are based on forecasts occurring within areas approved for development in the City’s Official Plan.

ii. Total Population and Employment vs. Census Population and Employment

Population figures used in the forecasts represent the population recorded in the Census (“Census population”). This definition excludes the Census net under-coverage (approximately 3.20% of the total population), which represents those who were missed or double-counted by the Census and which is included in the definition of population used in the Growth Plan and the City’s master plans. Population figures shown in the development forecast represent mid-year estimates.

Household figures represent occupied private dwellings, and reflect the year in which the dwellings are anticipated to be occupied.

Employment figures in the forecasts are based on Statistics Canada place of work data. “Place of work employment” data record where people work rather than their place of residence. It includes all employment with a regular or no fixed place of work. However, work-at-home employment is excluded from the figures as, for development charge purposes, this type of employment is considered not to require building floorspace for its activities. The City’s infrastructure master plans typically include work-at-home employment in assessing servicing capacity needs.

Employment is categorized based on land use:

- **Population-related employment** is employment that primarily serves the City’s resident population. This category captures most retail and other commercial activities.
- **Institutional** employment refers to employment accommodated in education, health care, local government, and cultural activities.
- **Major office** employment refers to office type employment contained within free standing buildings more than 20,000 net sq.ft. (1,858 m²).
- **Employment land** employment refers to traditional industrial-type employment accommodated primarily in low-rise industrial buildings in business parks and industrial areas.

B. Historical Development in the City of Barrie

Historical population and employment set out below is used to determine the average service levels attained in the City over the last 15 years (2008-2022). Since 2021 was the year of the most recent Census, population and employment figures for 2022 are estimated based on Statistics Canada *Annual Demographic Estimates* and monthly *Labour Force Survey*.

i. Historical Residential Development

The Simcoe Census Division is the geographic area containing Simcoe County and the Cities of Barrie and Orillia. Between 1996 and 2006 most population growth in the Simcoe Census Division was accommodated in the City of Barrie; this was at the time when Barrie was the fastest growing municipality in the country. Barrie's share of regional growth slowed considerably during the recessionary years 2008-2009 in large part because it ran out of designated greenfield area for new housing. As a result, between 2007 and 2018 the majority of population growth shifted to Simcoe County, which had ample designated greenfield area to accommodate the high demand for new housing.

Barrie's constrained supply of urban land has been relieved over the last decade through the annexation, planning, and servicing of additional designated greenfield area at its southern boundary – known as the Salem and Hewitt's Secondary Plan Areas. The availability of these lands for development, together with its continuing role as the “central city” in the Simcoe Census Division, has lead to Barrie accommodating an increased share of population growth in the Census Division in recent years. This re-orientation of regional growth towards Barrie is forecast to continue in the near-term.

Table A-1 shows that between 2008 and 2022 the City's population increased from 131,430 to 152,641, or 17%, with growth accelerating since 2016. The number of occupied dwellings (households) in the City grew slightly faster than the population over the same period, the result of a declining household size. As of 2022, there are an estimated 57,445 households in the City.

Details on historical housing growth in the City are provided in Tables A-2, A-3 and A-4. This information is sourced from CHMC housing market data and Statistics Canada Census data. Overall, the prevailing types of new housing in Barrie constructed since 2011 have been row houses and

apartments. These units represent 73% of all homes completed between 2012 and 2022 (37% rows and 35% apartments).

As shown in Table A-3, the share of the City's overall housing stock that is low density, or single and semi-detached units, fell from 67% to 62% between 2011 and 2022. Equivalent shares of apartments and row houses have risen from 17% to 20% and 16% to 18% respectively.

Table A-5 provides details on historical occupancy patterns for different unit types in the City by period of construction. The overall average occupancy level for single and semi-detached units is 2.99 persons per unit (PPU). Occupancy levels for recently constructed units, built between 2011 and 2021, are higher than the overall average and are used in the development charges calculations since they better reflect the number of people that are likely to reside in new development. The average PPU of single and semi-detached units built in the City between 2011 to 2021 is 3.20. Average PPUs for recently constructed row housing (including duplexes) and apartments are 2.10 and 1.75 respectively. For the purpose of the development charges calculations, the following PPUs are assumed:

- **Single & Semi-Detached** = 3.20 PPU, based on occupancy levels for units constructed between 2011 and 2021.
- **Rows** = 2.40 PPU, based on occupancy levels for all row houses in the City. A higher PPU for row houses moving forward is in keeping with Official Plan policies aimed at promoting higher density family-oriented housing.
- **Apartments** = 1.80 PPU, based on recently constructed apartments with two or more bedrooms having a PPU of 1.98 and recently constructed apartments with one bedroom or less having a PPU of 1.10. The overall apartment PPU is higher than for recently constructed units. This reflects the City's plan to accommodate a greater range and mix of apartment units types moving forward.. Higher PPUs are already evident in large and small apartments built since 2006.

ii. Historical Non-Residential Development

Historical employment figures are shown in Table A-6. Overall employment grew steadily in the City between 2006 and 2019. As with most communities in Ontario, the COVID-19 pandemic resulted in a severe shock to the local economy, the effects of which are still being felt. At the time of the 2021 Census business closures and stay-at-home orders were still in effect. As such, a large portion of the labour force was unemployed and many others were working from home on a full-time basis, and often outside the City.

Total employment in Barrie declined by 6,860 jobs between 2019 and 2020, with a significant increase in work at home employment of 11,980 jobs over the same period. And although employees continue to gradually return to their usual place of work, either full-time or under hybrid arrangements, it is evident that some shifts in work-at-home patterns will be long-lasting (see Table A-11).

Table A-6 summarizes the growth in historical employment by land use category in the City since 2006. Every employment category experienced a sharp decline in employment during the pandemic, with the population-related employment sector, which includes most retail and tourism activities in Barrie, being the most significant.

C. Forecast Method and Results

This section describes the method used to establish the development forecast for the planning periods 2023 to 2032 and 2023 to 2041.

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*, commonly referred to as net population in the context of development charges studies, 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 occupies new dwelling 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). As with the residential forecast, the non-residential forecast includes both a projection of *employment growth* as well as a projection of the *employment growth associated with new floorspace* in the City.

i. Residential Forecast

As shown in Table A-7, the City's Census population is forecast to grow from 152,641 in 2022 to 207,471 in 2032 and 245,300 in 2041. The population forecasts are consistent with forecasts set out in the City's *MCR Long-Term Urban Land Needs Study, 2019*. The number of occupied dwellings is forecast to increase from 57,445 units in 2022 to 82,453 units in 2032 and 99,950 units in 2041. The rate of housing growth is anticipated to be higher in the first 10 years of the forecast period: about 2,500 units per year between 2023 and 2032; and about 1,950 units per year between 2033 and 2041.

A breakdown of forecast housing by unit type in the City is shown in Tables A-8 and A-9.

- The market share of single and semi-detached units will continue to decline over the forecast period, as new development increasingly takes the form of higher density units.

- The current share of housing growth that is row housing is anticipated to remain relatively steady over the period, consistent with the recent trends.
- The City will continue to see a shift towards higher density housing, including a greater range and mix of apartment building types. A breakdown of the apartment unit forecast into low rise and mid-high rise buildings can be found in the *City of Barrie Community Benefit Charge Strategy, 2023*.

Population growth in the new units is estimated by applying the following PPUs to the housing unit forecast: 3.20 for single and semi-detached units; 2.40 for rows; and 1.80 for apartments.

The forecast population growth in new units is set out in Table A-10. Over the 10-year planning horizon the population in new units is forecasted to be 57,050. Over the longer planning horizon to 2041 the population in new units is forecast to be 92,920.

ii. Non-Residential Forecast

Non-residential development charges are calculated on a per unit of gross floor area basis. Therefore, as per the DCA, a forecast of future non-residential building space has been developed.

Approximately 1.36 million square metres of new non-residential floor space is anticipated to be added over the 2023-2032 planning period, with a further 2.97 million square metres being added over the long-term to 2041. The majority of new space is anticipated to be needed to accommodate population-related employment (39%) and employment land employment (34%).

An assumed floor space per worker (FSW) for each employment category is applied to the new floorspace forecast in order to establish the number of associated employees. The following FSW assumptions have been used:

Population-Related	50m ² per employee
Employment Land	110m ² per employee
Institutional	60m ² per employee
Major Office	25m ² per employee

iii. **Area-Specific Forecasts – Former Municipal Boundary and Secondary Plan Areas**

Area-specific forecasts have been prepared for two areas within the City: the Former Municipal Boundary and Secondary Plan Areas of Salem and Hewitt's. The allocations of population and employment between these areas are consistent with those used in the City's 2019 DC Background Study. The forecast has been adjusted to account for development which has already paid development charges, but will continue to meet the identified 2041 housing targets in the MCR Long-Term Urban Land Needs Study, 2019.

As shown in Table A-14, the Secondary Plan Areas of Salem and Hewitt's are expected to develop rapidly over the next decade, at about 1,400 units per year from 2023 to 2031. Growth will then slow to approximately 500 units per year until 2041. The majority of units constructed in the Secondary Plan Areas will be low and medium density.

Housing growth in the Former Municipal Boundary will be relatively steady, averaging 1,100 units over the 2023-2032 planning period before increasing to 1,500 units per year from 2033-2041. Higher density apartments will be the dominant form in the Former Municipal Boundary recognizing that most of the area is built-out and most growth will take the form of intensification.

As shown in Table A-15, the same PPU assumptions applied to the City-wide forecast have been used for the Area-Specific forecasts.

Table A-16 summarizes the anticipated employment growth in new floorspace over the 10-year and long-term planning periods within the Secondary Plan Areas and Former Municipal Boundary. Approximately 62% of the new non-residential floor space is anticipated to be located within the Former Municipal Boundary. The same FSW assumptions used to determine the City-wide forecasts of new non-residential gross floor area have been used for the Salem and Hewitt's Secondary Plan Area forecasts.

A map showing the Salem and Hewitt's Secondary Plan Area is provided in Appendix E.

APPENDIX A
TABLE A-1
CITY OF BARRIE
HISTORICAL POPULATION & OCCUPIED DWELLING UNIT SUMMARY

Mid-Year	Census Population	Annual Growth	Occupied Dwelling Unit	Annual Growth	Av. Household Size (PPU)
2006	128,430		46,540		2.76
2007	129,922	1,492	47,200	660	2.75
2008	131,431	1,509	47,869	669	2.75
2009	132,957	1,526	48,548	679	2.74
2010	134,501	1,544	49,236	688	2.73
2011	136,063	1,562	49,935	699	2.72
2012	137,121	1,058	50,436	501	2.72
2013	138,187	1,066	50,942	506	2.71
2014	139,261	1,074	51,453	511	2.71
2015	140,343	1,082	51,969	516	2.70
2016	141,434	1,091	52,490	521	2.69
2017	142,690	1,256	53,043	553	2.69
2018	143,958	1,268	53,602	559	2.69
2019	145,237	1,279	54,167	565	2.68
2020	146,527	1,290	54,738	571	2.68
2021	147,829	1,302	55,315	577	2.67
2022	152,641	4,812	57,445	2,130	2.66
Growth 2008-2022		22,719		10,245	

Source: Statistics Canada, Census of Canada, Hemson Consulting Ltd., 2023

APPENDIX A
TABLE A-2
CITY OF BARRIE
HISTORICAL ANNUAL HOUSING COMPLETIONS (CMHC)

Mid-Year	Housing Units by Type				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2011	226	116	191	533	42%	22%	36%	100%
2012	161	47	10	218	74%	22%	5%	100%
2013	196	224	89	509	39%	44%	17%	100%
2014	116	48	285	449	26%	11%	63%	100%
2015	89	142	320	551	16%	26%	58%	100%
2016	109	67	212	388	28%	17%	55%	100%
2017	66	125	254	445	15%	28%	57%	100%
2018	101	159	366	626	16%	25%	58%	100%
2019	36	138	127	301	12%	46%	42%	100%
2020	217	133	82	432	50%	31%	19%	100%
2021	163	19	283	465	35%	4%	61%	100%
2022	103	238	329	670	15%	36%	49%	100%

Source: Statistics Canada, Census of Canada and Canada Mortgage and Housing Corporation (CMHC), Housing Market Information.

APPENDIX A
TABLE A-3
CITY OF BARRIE
HISTORICAL OCCUPIED DWELLINGS BY UNIT TYPE

Mid-Year	Housing Units by Type				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2011	33,425	7,930	8,580	49,935	67%	16%	17%	100%
2012	33,507	8,123	8,795	50,425	66%	16%	17%	100%
2013	33,589	8,321	9,015	50,925	66%	16%	18%	100%
2014	33,671	8,524	9,241	51,436	65%	17%	18%	100%
2015	33,753	8,732	9,473	51,958	65%	17%	18%	100%
2016	33,835	8,945	9,710	52,490	64%	17%	18%	100%
2017	33,992	9,154	9,891	53,037	64%	17%	19%	100%
2018	34,149	9,368	10,075	53,592	64%	17%	19%	100%
2019	34,307	9,587	10,263	54,157	63%	18%	19%	100%
2020	34,466	9,811	10,454	54,731	63%	18%	19%	100%
2021	34,625	10,040	10,650	55,315	63%	18%	19%	100%
2022	35,372	10,573	11,500	57,445	62%	18%	20%	100%

Source: Statistics Canada

APPENDIX A
TABLE A-4
CITY OF BARRIE
HISTORICAL ANNUAL GROWTH IN OCCUPIED DWELLINGS BY UNIT TYPE

Mid-Year	Annual Growth in Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2011	468	165	67	700	67%	24%	10%	100%
2012	82	193	215	490	17%	39%	44%	100%
2013	82	198	220	500	16%	40%	44%	100%
2014	82	203	226	511	16%	40%	44%	100%
2015	82	208	232	522	16%	40%	44%	100%
2016	82	213	237	532	15%	40%	45%	100%
2017	157	209	181	547	29%	38%	33%	100%
2018	157	214	184	555	28%	39%	33%	100%
2019	158	219	188	565	28%	39%	33%	100%
2020	159	224	191	574	28%	39%	33%	100%
2021	159	229	196	584	27%	39%	34%	100%
2022	747	533	850	2,130	35%	25%	40%	100%
Growth 2011 - 2022	1,668	2,275	2,137	6,080	27%	37%	35%	100%

Source: Statistics Canada, Census of Canada and Canada Mortgage and Housing Corporation (CMHC), Housing Market Information.

APPENDIX A
TABLE A-5
CITY OF BARRIE
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION

Dwelling Unit Type	Period of Construction											Pre 2011	2011-2021	Total
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	2016-2021			
<i>Singles & Semis</i>														
Household Population	2,830	5,340	5,900	10,240	14,340	10,255	17,805	20,580	9,270	3,980	2,795	96,560	6,775	103,335
Households	1,150	2,240	2,160	3,715	4,810	3,330	5,910	6,400	2,775	1,165	955	32,490	2,120	34,610
Household Size	2.46	2.38	2.73	2.76	2.98	3.08	3.01	3.22	3.34	3.42	2.93	2.97	3.20	2.99
<i>Rows (with duplex)</i>														
Household Population	540	1,005	1,385	2,635	3,425	1,960	3,990	3,900	2,025	1,490	1,500	20,865	2,990	23,855
Households	300	470	540	1,100	1,390	830	1,580	1,535	790	635	790	8,535	1,425	9,960
Household Size	1.80	2.14	2.56	2.40	2.46	2.36	2.53	2.54	2.56	2.35	1.90	2.44	2.10	2.40
<i>Apartments - One Bedroom or Less</i>														
Household Population	525	335	440	720	750	340	285	195	250	285	305	3,840	590	4,430
Households	440	265	375	605	630	285	220	165	195	250	250	3,180	500	3,680
Household Size	1.19	1.26	1.17	1.19	1.19	1.19	1.30	1.18	1.28	1.14	1.22	1.21	1.18	1.20
<i>Apartments - Two or More Bedrooms</i>														
Household Population	695	720	1,420	2,370	2,150	1,265	875	810	910	1,285	1,185	11,215	2,470	13,685
Households	320	365	750	1,155	1,150	650	445	450	485	670	580	5,770	1,250	7,020
Household Size	2.17	1.97	1.89	2.05	1.87	1.95	1.97	1.80	1.88	1.92	2.04	1.94	1.98	1.95
<i>Apartments Total</i>														
Household Population	1,220	1,055	1,860	3,090	2,900	1,605	1,160	1,005	1,160	1,570	1,490	15,055	3,060	18,115
Households	760	630	1,125	1,760	1,780	935	665	615	680	920	830	8,950	1,750	10,700
Household Size	1.61	1.67	1.65	1.76	1.63	1.72	1.74	1.63	1.71	1.71	1.80	1.68	1.75	1.69
<i>All Units</i>														
Household Population	5,810	8,455	11,005	19,055	23,565	15,425	24,115	26,490	13,615	8,610	7,275	147,535	15,885	163,420
Households	2,970	3,970	4,950	8,335	9,760	6,030	8,820	9,165	4,925	3,640	3,405	58,925	7,045	65,970
Household Size	1.96	2.13	2.22	2.29	2.41	2.56	2.73	2.89	2.76	2.37	2.14	2.50	2.25	2.48

Source: Statistics Canada

APPENDIX A
TABLE A-6
CITY OF BARRIE
HISTORICAL PLACE OF WORK EMPLOYMENT

Mid-Year	Total For DC Study	Annual Growth	Work at Home	Annual Growth	Total Employment	Annual Growth
2006	60,318		4,080		64,398	
2007	60,931	613	4,067	(13)	64,998	600
2008	61,563	632	4,054	(13)	65,617	619
2009	62,217	654	4,041	(13)	66,258	641
2010	62,892	675	4,028	(13)	66,920	662
2011	63,590	698	4,015	(13)	67,605	685
2012	64,392	802	4,118	103	68,510	905
2013	65,205	813	4,223	105	69,428	918
2014	66,030	825	4,331	108	70,361	933
2015	66,866	836	4,442	111	71,308	947
2016	67,715	849	4,555	113	72,270	962
2017	69,210	1,495	4,690	135	73,900	1,630
2018	70,730	1,520	4,830	140	75,560	1,660
2019	72,730	2,000	4,960	130	77,690	2,130
2020	53,890	(18,840)	16,940	11,980	70,830	(6,860)
2021	57,330	3,440	14,960	(1,980)	72,290	1,460
2022	65,310	7,980	9,760	(5,200)	75,070	2,780
Growth 2008 - 2022		4,379		5,693		10,072

Source: Statistics Canada, Census of Canada.

Note: Employment Values Include No Fixed Place of Work Employment.

APPENDIX A
TABLE A-7
CITY OF BARRIE
POPULATION & OCCUPIED DWELLING UNIT FORECAST SUMMARY

Mid-Year	Total Population	Annual Growth	Census Population	Annual Growth	Occupied Dwelling Unit	Annual Growth	Av. Household Size (PPU)
2021	152,560		147,829		55,315		2.67
2022	157,514	4,954	152,641	4,812	57,445	2,130	2.66
2023	162,629	5,115	157,610	4,969	59,657	2,212	2.64
2024	167,910	5,281	162,740	5,130	61,954	2,297	2.63
2025	173,362	5,452	168,037	5,297	64,339	2,385	2.61
2026	178,991	5,629	173,507	5,470	66,816	2,477	2.60
2027	184,803	5,812	179,155	5,648	69,389	2,573	2.58
2028	190,804	6,001	184,987	5,832	72,061	2,672	2.57
2029	197,000	6,196	191,009	6,022	74,836	2,775	2.55
2030	203,397	6,397	197,227	6,218	77,717	2,881	2.54
2031	210,000	6,603	203,646	6,419	80,709	2,992	2.52
2032	213,949	3,949	207,471	3,825	82,453	1,744	2.52
2033	217,972	4,023	211,368	3,897	84,235	1,782	2.51
2034	222,070	4,098	215,338	3,970	86,056	1,821	2.50
2035	226,246	4,176	219,383	4,045	87,916	1,860	2.50
2036	230,500	4,254	223,504	4,121	89,816	1,900	2.49
2037	234,834	4,334	227,702	4,198	91,757	1,941	2.48
2038	239,250	4,416	231,979	4,277	93,740	1,983	2.47
2039	243,749	4,499	236,337	4,358	95,766	2,026	2.47
2040	248,332	4,583	240,776	4,439	97,836	2,070	2.46
2041	253,000	4,668	245,300	4,524	99,950	2,114	2.45
Growth 2023 - 2032		56,435		54,830		25,008	
Growth 2023 - 2041		95,486		92,659		42,505	

Source: City of Barrie Growth Forecast Update - Scenario 3 (Made in Barrie)

APPENDIX A
TABLE A-8
CITY OF BARRIE
FORECAST OF OCCUPIED DWELLING UNITS BY UNIT TYPE

Mid-Year	Housing Units by Type				Shares by Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2021	34,625	10,040	10,650	55,315	63%	18%	19%	100%
2022	35,372	10,573	11,500	57,445	62%	18%	20%	100%
2023	36,105	11,134	12,418	59,657	61%	19%	21%	100%
2024	36,819	11,725	13,410	61,954	59%	19%	22%	100%
2025	37,511	12,347	14,481	64,339	58%	19%	23%	100%
2026	38,177	13,002	15,637	66,816	57%	19%	23%	100%
2027	38,811	13,692	16,886	69,389	56%	20%	24%	100%
2028	39,408	14,419	18,234	72,061	55%	20%	25%	100%
2029	39,962	15,184	19,690	74,836	53%	20%	26%	100%
2030	40,465	15,990	21,262	77,717	52%	21%	27%	100%
2031	40,907	16,840	22,962	80,709	51%	21%	28%	100%
2032	41,181	17,176	24,096	82,453	50%	21%	29%	100%
2033	41,430	17,519	25,286	84,235	49%	21%	30%	100%
2034	41,652	17,869	26,535	86,056	48%	21%	31%	100%
2035	41,844	18,226	27,846	87,916	48%	21%	32%	100%
2036	42,004	18,591	29,221	89,816	47%	21%	33%	100%
2037	42,222	18,997	30,538	91,757	46%	21%	33%	100%
2038	42,413	19,412	31,915	93,740	45%	21%	34%	100%
2039	42,576	19,836	33,354	95,766	44%	21%	35%	100%
2040	42,709	20,269	34,858	97,836	44%	21%	36%	100%
2041	42,811	20,710	36,429	99,950	43%	21%	36%	100%

Source: City of Barrie Growth Forecast Update - Scenario 3 (Made in Barrie)

APPENDIX A
TABLE A-9
CITY OF BARRIE
FORECAST OF OCCUPIED DWELLING GROWTH BY UNIT TYPE

Mid-Year	Growth in Occupied Dwellings by Unit Type			Total Growth
	Singles/Semis	Rows	Apartments	
2023	733	561	918	2,212
2024	714	591	992	2,297
2025	692	622	1,071	2,385
2026	666	655	1,156	2,477
2027	634	690	1,249	2,573
2028	597	727	1,348	2,672
2029	554	765	1,456	2,775
2030	503	806	1,572	2,881
2031	442	850	1,700	2,992
2032	274	336	1,134	1,744
2033	249	343	1,190	1,782
2034	222	350	1,249	1,821
2035	192	357	1,311	1,860
2036	160	365	1,375	1,900
2037	218	406	1,317	1,941
2038	191	415	1,377	1,983
2039	163	424	1,439	2,026
2040	133	433	1,504	2,070
2041	102	441	1,571	2,114
Growth 2023 - 2032	5,809	6,603	12,596	25,008
Growth 2023 - 2041	7,439	10,137	24,929	42,505

Source: City of Barrie Growth Forecast Update - Scenario 3 (Made in Barrie), Hemson Consulting 2023

APPENDIX A
TABLE A-10
CITY OF BARRIE
POPULATION GROWTH IN NEW OCCUPIED DWELLINGS BY UNIT TYPE*

Mid-Year	Population By Unit Type			Total Occupied
	Singles/Semis	Rows	Apartments	
2023	2,342	1,344	1,652	5,338
2024	2,282	1,415	1,786	5,483
2025	2,211	1,490	1,928	5,629
2026	2,128	1,569	2,081	5,778
2027	2,026	1,653	2,248	5,927
2028	1,908	1,741	2,426	6,075
2029	1,770	1,832	2,621	6,223
2030	1,607	1,930	2,830	6,367
2031	1,413	2,036	3,060	6,509
2032	876	805	2,041	3,722
2033	796	822	2,142	3,760
2034	709	838	2,248	3,795
2035	614	855	2,360	3,829
2036	511	874	2,475	3,860
2037	697	972	2,371	4,040
2038	610	994	2,479	4,083
2039	521	1,016	2,590	4,127
2040	425	1,037	2,707	4,169
2041	326	1,056	2,828	4,210
Growth 2023 - 2032	18,563	15,815	22,673	57,051
Growth 2023 - 2041	23,772	24,279	44,873	92,924
*Based on PPU's	3.20	2.40	1.80	

Source: Hemson Consulting Ltd., 2023

APPENDIX A
TABLE A-11
CITY OF BARRIE
FORECAST OF PLACE OF WORK EMPLOYMENT

Mid-Year	Total For DC Study	Annual Growth	Activity Rate	Work at Home	Annual Growth	Total Employment	Annual Growth
2021	57,330	3,440	39%	14,960	(1,980)	72,290	1,460
2022	65,310	7,980	43%	9,760	(5,200)	75,070	2,780
2023	68,310	3,000	43%	9,650	(110)	77,960	2,890
2024	71,490	3,180	44%	9,470	(180)	80,960	3,000
2025	74,990	3,500	45%	9,090	(380)	84,080	3,120
2026	77,930	2,940	45%	9,380	290	87,310	3,230
2027	80,220	2,290	45%	9,670	290	89,890	2,580
2028	82,580	2,360	45%	9,970	300	92,550	2,660
2029	85,010	2,430	45%	10,280	310	95,290	2,740
2030	87,510	2,500	44%	10,600	320	98,110	2,820
2031	90,070	2,560	44%	10,930	330	101,000	2,890
2032	92,300	2,230	44%	11,190	260	103,490	2,490
2033	94,600	2,300	45%	11,440	250	106,040	2,550
2034	96,940	2,340	45%	11,710	270	108,650	2,610
2035	99,350	2,410	45%	11,980	270	111,330	2,680
2036	101,812	2,462	46%	12,260	280	114,072	2,742
2037	104,390	2,578	46%	12,520	260	116,910	2,838
2038	107,030	2,640	46%	12,790	270	119,820	2,910
2039	109,740	2,710	46%	13,060	270	122,800	2,980
2040	112,520	2,780	47%	13,340	280	125,860	3,060
2041	115,380	2,860	47%	13,620	280	129,000	3,140
Growth 2023 - 2032		26,990			1,430		28,420
Growth 2023 - 2041		50,070			3,860		53,930

Source: Hemson Consulting Ltd., 2023

Note: Includes No Fixed Place of Work Employment

APPENDIX A
TABLE A-12
CITY OF BARRIE
EMPLOYMENT IN NEW SPACE & NON-RESIDENTIAL SPACE FORECAST

Employment Density Assumptions		
Population-Related	50.0	m ² / employee
Employment Land	110.0	m ² / employee
Major Office	25.0	m ² / employee
Institutional	60.0	m ² / employee
Rural	-	m ² / employee

Mid-Year	Population-Related		Employment Land		Major Office		Institutional		Total for DC Study		Total Retail		Total Non-Retail	
	Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)	Emp. Growth in New Space	New Space (m2)
2022	431	21,540	410	45,060	13	320	257	15,400	1,111	82,320	431	21,540	680	60,780
2023	485	24,230	461	50,690	14	360	289	17,320	1,249	92,600	485	24,230	764	68,370
2024	538	26,920	512	56,320	16	400	321	19,250	1,387	102,890	538	26,920	849	75,970
2025	592	29,610	563	61,950	18	440	353	21,170	1,526	113,170	592	29,610	934	83,560
2026	646	32,300	614	67,580	19	480	385	23,100	1,664	123,460	646	32,300	1,018	91,160
2027	700	35,000	666	73,220	21	520	417	25,020	1,804	133,760	700	35,000	1,104	98,760
2028	754	37,690	717	78,850	22	560	449	26,950	1,942	144,050	754	37,690	1,188	106,360
2029	808	40,380	768	84,480	24	600	481	28,870	2,081	154,330	808	40,380	1,273	113,950
2030	861	43,070	819	90,110	26	640	513	30,800	2,219	164,620	861	43,070	1,358	121,550
2031	915	45,760	870	95,740	27	680	545	32,720	2,357	174,900	915	45,760	1,442	129,140
2032	860	43,000	740	81,400	90	2,250	540	32,400	2,230	159,050	860	43,000	1,370	116,050
2033	890	44,500	770	84,700	90	2,250	550	33,000	2,300	164,450	890	44,500	1,410	119,950
2034	920	46,000	750	82,500	100	2,500	570	34,200	2,340	165,200	920	46,000	1,420	119,200
2035	950	47,500	770	84,700	110	2,750	580	34,800	2,410	169,750	950	47,500	1,460	122,250
2036	990	49,500	752	82,720	120	3,000	600	36,000	2,462	171,220	990	49,500	1,472	121,720
2037	1,020	51,000	818	89,980	130	3,250	610	36,600	2,578	180,830	1,020	51,000	1,558	129,830
2038	1,050	52,500	820	90,200	140	3,500	630	37,800	2,640	184,000	1,050	52,500	1,590	131,500
2039	1,080	54,000	830	91,300	150	3,750	650	39,000	2,710	188,050	1,080	54,000	1,630	134,050
2040	1,120	56,000	840	92,400	160	4,000	660	39,600	2,780	192,000	1,120	56,000	1,660	136,000
2041	1,160	58,000	840	92,400	180	4,500	680	40,800	2,860	195,700	1,160	58,000	1,700	137,700
Growth 2023 - 2032	7,159	357,960	6,730	740,340	277	6,930	4,293	257,600	18,459	1,362,830	7,159	357,960	11,300	1,004,870
Growth 2023 - 2041	16,339	816,960	13,920	1,531,240	1,457	36,430	9,823	589,400	41,539	2,974,030	16,339	816,960	25,200	2,157,070

Source: Hemson Consulting Ltd., 2023

APPENDIX A
TABLE A-13
CITY OF BARRIE
FORECAST AREA-SPECIFIC POPULATION

Census Population

	Year	Total
Former Mun Boundary	2022	151,412
Salem & Hewitt's	2022	1,229
Total		152,641
Former Mun Boundary	2032	172,916
Salem & Hewitt's	2032	34,555
Total		207,471
Former Mun Boundary	2041	201,318
Salem & Hewitt's	2041	43,982
Total		245,300

Census Population Growth

Year	Salem & Hewitt's	Former Mun Boundary	Total
2022	1,229	151,412	152,641
2023	4,077	153,533	157,610
2024	6,451	156,289	162,740
2025	9,225	158,812	168,037
2026	12,566	160,941	173,507
2027	15,463	163,692	179,155
2028	18,796	166,191	184,987
2029	23,216	167,793	191,009
2030	27,525	169,702	197,227
2031	33,322	170,324	203,646
2032	34,555	172,916	207,471
2033	35,732	175,636	211,368
2034	36,829	178,509	215,338
2035	37,855	181,528	219,383
2036	38,748	184,756	223,504
2037	39,837	187,865	227,702
2038	40,959	191,020	231,979
2039	42,050	194,287	236,337
2040	43,043	197,733	240,776
2041	43,982	201,318	245,300
Growth 2023 - 2032	33,326	21,504	54,830
Growth 2023 - 2041	42,753	49,906	92,659

Source: Hemson Consulting Ltd., 2023

APPENDIX A
TABLE A-14
CITY OF BARRIE
FORECAST AREA-SPECIFIC OCCUPIED DWELLING UNITS

Salem & Hewitt's

Mid-Year	Housing Units by Type				Shares by Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2022	573	-	-	573	100%	0%	0%	100%
2023	1,273	150	120	1,543	83%	10%	8%	100%
2024	1,973	300	183	2,456	80%	12%	7%	100%
2025	2,653	600	279	3,532	75%	17%	8%	100%
2026	3,313	1,100	426	4,839	68%	23%	9%	100%
2027	3,938	1,400	651	5,989	66%	23%	11%	100%
2028	4,528	1,800	994	7,322	62%	25%	14%	100%
2029	5,078	2,500	1,518	9,096	56%	27%	17%	100%
2030	5,528	3,000	2,318	10,846	51%	28%	21%	100%
2031	5,954	3,699	3,553	13,206	45%	28%	27%	100%
2032	6,224	3,871	3,638	13,733	45%	28%	26%	100%
2033	6,464	4,051	3,725	14,240	45%	28%	26%	100%
2034	6,664	4,240	3,814	14,718	45%	29%	26%	100%
2035	6,827	4,437	3,906	15,170	45%	29%	26%	100%
2036	6,927	4,644	4,000	15,571	44%	30%	26%	100%
2037	7,097	4,860	4,096	16,053	44%	30%	26%	100%
2038	7,271	5,086	4,194	16,551	44%	31%	25%	100%
2039	7,421	5,323	4,295	17,039	44%	31%	25%	100%
2040	7,521	5,571	4,398	17,490	43%	32%	25%	100%
2041	7,587	5,830	4,504	17,921	42%	33%	25%	100%

Former Municipal Boundary

Mid-Year	Occupied Households				Shares by Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2022	34,799	10,573	11,500	56,872	61%	19%	20%	100%
2023	34,832	10,984	12,298	58,114	60%	19%	21%	100%
2024	34,846	11,425	13,227	59,498	59%	19%	22%	100%
2025	34,858	11,747	14,202	60,807	57%	19%	23%	100%
2026	34,864	11,902	15,211	61,977	56%	19%	25%	100%
2027	34,873	12,292	16,235	63,400	55%	19%	26%	100%
2028	34,880	12,619	17,240	64,739	54%	19%	27%	100%
2029	34,884	12,684	18,172	65,740	53%	19%	28%	100%
2030	34,937	12,990	18,944	66,871	52%	19%	28%	100%
2031	34,953	13,141	19,409	67,503	52%	19%	29%	100%
2032	34,957	13,305	20,458	68,720	51%	19%	30%	100%
2033	34,966	13,468	21,561	69,995	50%	19%	31%	100%
2034	34,988	13,629	22,721	71,338	49%	19%	32%	100%
2035	35,017	13,789	23,940	72,746	48%	19%	33%	100%
2036	35,077	13,947	25,221	74,245	47%	19%	34%	100%
2037	35,125	14,137	26,442	75,704	46%	19%	35%	100%
2038	35,142	14,326	27,721	77,189	46%	19%	36%	100%
2039	35,155	14,513	29,059	78,727	45%	18%	37%	100%
2040	35,188	14,698	30,460	80,346	44%	18%	38%	100%
2041	35,224	14,880	31,925	82,029	43%	18%	39%	100%

APPENDIX A
TABLE A-14
CITY OF BARRIE
FORECAST AREA-SPECIFIC OCCUPIED DWELLING UNITS

Salem & Hewitt's

Mid-Year	Growth in Occupied Dwellings by Unit Type			Total Growth
	Singles/Semis	Rows	Apartments	
2023	700	150	120	970
2024	700	150	63	913
2025	680	300	96	1,076
2026	660	500	147	1,307
2027	625	300	225	1,150
2028	590	400	343	1,333
2029	550	700	524	1,774
2030	450	500	800	1,750
2031	426	699	1,235	2,360
2032	270	172	85	527
2033	240	180	87	507
2034	200	189	89	478
2035	163	197	92	452
2036	100	207	94	401
2037	170	216	96	482
2038	174	226	98	498
2039	150	237	101	488
2040	100	248	103	451
2041	66	259	106	431
Growth 2023 - 2032	5,651	3,871	3,638	13,160
Growth 2023 - 2041	7,014	5,830	4,504	17,348

Source: Hemson Consulting Ltd., 2023

Former Municipal Boundary

Mid-Year	Growth in Occupied Dwellings by Unit Type			Total Growth
	Singles/Semis	Rows	Apartments	
2023	33	411	798	1,242
2024	14	441	929	1,384
2025	12	322	975	1,309
2026	6	155	1,009	1,170
2027	9	390	1,024	1,423
2028	7	327	1,005	1,339
2029	4	65	932	1,001
2030	53	306	772	1,131
2031	16	151	465	632
2032	4	164	1,049	1,217
2033	9	163	1,103	1,275
2034	22	161	1,160	1,343
2035	29	160	1,219	1,408
2036	60	158	1,281	1,499
2037	48	190	1,221	1,459
2038	17	189	1,279	1,485
2039	13	187	1,338	1,538
2040	33	185	1,401	1,619
2041	36	182	1,465	1,683
Growth 2023 - 2032	158	2,732	8,958	11,848
Growth 2023 - 2041	425	4,307	20,425	25,157

Source: Hemson Consulting Ltd., 2023

APPENDIX A
TABLE A-15
CITY OF BARRIE
FORECAST AREA-SPECIFIC OCCUPIED DWELLING UNITS

Salem & Hewitt's

Mid-Year	Population By Unit Type			Total
	Singles/Semis	Rows	Apartments	
2023	2,237	359	216	2,812
2024	2,237	359	113	2,709
2025	2,173	719	173	3,065
2026	2,109	1,198	265	3,572
2027	1,997	719	405	3,121
2028	1,885	958	617	3,460
2029	1,758	1,677	943	4,378
2030	1,438	1,198	1,440	4,076
2031	1,361	1,674	2,223	5,258
2032	863	412	153	1,428
2033	767	431	157	1,355
2034	639	453	160	1,252
2035	521	472	166	1,159
2036	320	496	169	985
2037	543	517	173	1,233
2038	556	541	176	1,273
2039	479	568	182	1,229
2040	320	594	185	1,099
2041	211	620	191	1,022
Growth 2023 - 2032	18,058	9,273	6,548	33,879
Growth 2023 - 2041	22,414	13,965	8,107	44,486
*Based on PPU's	3.20	2.40	1.80	

Source: Hemson Consulting Ltd., 2023

Former Municipal Boundary

Mid-Year	Population By Unit Type			Total
	Singles/Semis	Rows	Apartments	
2023	105	984	1,436	2,525
2024	45	1,056	1,672	2,773
2025	38	771	1,755	2,564
2026	19	371	1,816	2,206
2027	29	934	1,843	2,806
2028	22	783	1,809	2,614
2029	13	156	1,678	1,847
2030	169	733	1,390	2,292
2031	51	362	837	1,250
2032	13	393	1,888	2,294
2033	29	390	1,985	2,404
2034	70	386	2,088	2,544
2035	93	383	2,194	2,670
2036	192	378	2,306	2,876
2037	153	455	2,198	2,806
2038	54	453	2,302	2,809
2039	42	448	2,408	2,898
2040	105	443	2,522	3,070
2041	115	436	2,637	3,188
Growth 2023 - 2032	504	6,543	16,124	23,171
Growth 2023 - 2041	1,357	10,315	36,764	48,436
*Based on PPU's	3.20	2.40	1.80	

Source: Hemson Consulting Ltd., 2023

APPENDIX A
TABLE A-16
CITY OF BARRIE
FORECAST AREA-SPECIFIC PLACE OF WORK EMPLOYMENT & NEW NON-RESIDENTIAL SPACE

Employment - Growth

	Year	Population-Related	Employment Land	Major Office	Institutional	Total
Former Municipal Boundary	2023-2032	5,011	3,701	166	2,790	11,668
Salem & Hewitt's	2023-2032	2,148	3,029	111	1,503	6,791
Total		7,159	6,730	277	4,293	18,459
Former Mun Boundary	2023-2041	12,254	6,960	1,020	7,367	27,601
Salem & Hewitt's	2023-2041	4,085	6,960	437	2,456	13,938
Total		16,339	13,920	1,457	9,823	41,539

Employment - GFA Growth

	Year	Population-Related	Employment Land	Major Office	Institutional	Total
Former Municipal Boundary	2023-2032	250,550	407,110	4,150	167,400	829,210
Salem & Hewitt's	2023-2032	107,400	333,190	2,775	90,180	533,545
Total		357,950	740,300	6,925	257,580	1,362,755
Former Municipal Boundary	2023-2041	612,700	765,600	25,500	442,020	1,845,820
Salem & Hewitt's	2023-2041	204,250	765,600	10,925	147,360	1,128,135
Total		816,950	1,531,200	36,425	589,380	2,973,955

Employment Density Assumptions

Population-Related	50.0	m ² / employee
Employment Land	110.0	m ² / employee
Major Office	25.0	m ² / employee
Institutional	60.0	m ² / employee
Rural	-	m ² / employee

Source: Hemson Consulting Ltd., 2023

Appendix B

General Services

Technical Appendix

General Services Technical Appendix

Introduction and Overview

The following appendix provides the detailed analysis undertaken to establish the development charge rates for each of the General Services in the City of Barrie. Seven General Services have been analysed as part of the Development Charges Background Study:

Appendix B.1	Library Services
Appendix B.2	Protection Services (Fire & Police)
Appendix B.3	Parks and Recreation
Appendix B.4	Services Related to a Highway: Public Works
Appendix B.5	Waste Diversion Services
Appendix B.6	Ambulance Services
Appendix B.7	Long Term Care

Every service 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.

A. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

Table 1 presents the data used to determine the 15-year historical service level. The *DCA* and *O. Reg. 82/98* require that development charges be set at a level no higher than the average service level provided in the City. This must be done over the 15-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 has been defined as 2008 to 2022.

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 growth-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 City in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by municipal staff. This information is generally based on historical records, recent tenders and experience with costs to acquire or construct similar facilities, equipment and infrastructure in comparable municipalities.

The final page of Table 1 shows the calculation of the “maximum allowable” funding envelope. The maximum allowable is defined as the 15-year historical service level (expressed as either \$/capita or \$/population and employment) multiplied by the forecast increase in net population growth, or net population and employment growth, over the planning period. The resulting figure is the value of capital infrastructure that must be constructed for that particular service so that the 15-year historical service level is maintained.

There is also a requirement in the *DCA* to consider “excess capacity” within the City’s existing infrastructure that may be available to partially meet the 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. The development of the capital programs takes into consideration any available, or useable, servicing capacity with existing infrastructure.

Should uncommitted excess capacity exist, it is determined whether or not this capacity will be available to service new development, and if so, deductions to maximum allowable funding envelope are required.

B. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

The *DCA* requires that Council express its intent to provide future capital facilities to support future growth. Based on the growth forecasts presented in Appendix A, the City’s master plans and capital budgets, Hemson Consulting in collaboration with City staff has developed a development-related capital program which sets out the projects required to service anticipated growth for the 10-year period from 2023 to 2032.

A replacement share occurs when a new facility 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.

Although deemed development-related, not all of the net development-related capital program may be recoverable from development charges in the period from 2023 to 2032. For some of the services, a portion of the capital program will service growth that will not occur until after 2032. This portion of the capital program is either deemed “pre-built” service capacity to be considered as committed excess capacity to be recovered under future development, 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 development charge. In all cases, as required, this amount is equal to or less than the maximum allowable capital amount as calculated on the final page of Table 1. The

result is the discounted development-related net capital cost that is eligible for recovery against growth over the period from 2023 to 2032.

Calculation of the Unadjusted Development Charge 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 when determining the unadjusted development charge rate is to allocate the growth-related net capital cost between the residential and non-residential sectors. For services of Protection Services, Public Works and Fleet, and Ambulance Services, the growth-related costs have been apportioned as 75.6% residential and 24.4% non-residential (9.5% retail and 15.0% non-retail). This apportionment is based on the anticipated shares of census population and employment growth over the 10-year forecast period. Waste Diversion Services has been allocated 86.1% as residential and 13.9% non-residential (5.4% retail and 8.5% non-retail) which is based on the anticipated employment growth weighted at 50%. This allocation reflects that the non-residential sector has limited Waste Diversion Services which is discussed further in Appendix B.5.

The development-related costs associated with the Library Service, Parks and Recreation, and Long-Term Care have been allocated 100% to the residential sector because the need for these services is generally driven by residential development.

The residential share of the 2023-2032 DC eligible costs are then divided by the forecast population growth in new units. This gives the unadjusted residential development charge per capita. The non-residential growth-related net capital costs are divided by the forecast increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential GFA.

C. 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, therefore, accounted for in the calculation as allowed under the *DCA*. Based on the growth forecast, the analysis calculates the development charges rate that is 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 charges 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% is used for the funding requirements, an interest rate of 3.5% is used for positive opening balances, and a rate of 5.5% is used for negative opening 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 Services

Library Services

The Barrie Public Library provides library services from its central branch at 60 Worsley Street. The City has two additional branches including the Painswick Branch, and the Holly Branch which opened in 2022. The Library provides a wide range of resources including books, e-books, audio books, media and streaming services as well as a number of programs to the residents of the City. The following discusses the individual components included in the Library Services category. The analysis is set out in the tables which follow.

Table B.1-1	Historical Service Levels and Calculation of 15-Year Average Service Level
Table B.1-2	2023-2032 Development-Related Capital Forecast and Calculation of the Growth-Related Net Capital Costs
Table B.1-3	Cash Flow Analysis

A. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

Table B.1-1 displays the Library Board 15-year historical inventory for buildings, land, materials, and furniture and equipment (excluding computer equipment).

The total gross floor area of the Downtown Branch, Painswick Branch, and the Holly Branch total 65,500 square feet. The total replacement value of the library buildings is \$55.68 million. The library buildings occupy approximately 2.12 hectares of land worth \$7.43 million. The City’s collection materials, furniture and equipment associated with the branches are valued at \$8.47 million.

The 2022 full replacement value of the inventory of capital assets for library services for the City amounts to \$71.58 million and the 15-year historical average service level is \$453.00 per capita.

The historical service level multiplied by the 10-year forecast of net population growth results in a 10-year maximum allowable funding envelope of \$24.84 million (54,830 net population growth X historical service level of \$453.00/capita). Table 1 provides a summary of the level of service and the calculation of the 10-year funding envelope from 2023 to 2032. The calculation of the maximum allowable funding envelope is summarized as follows:

10-Year Funding Envelope Calculation

15-Year Average Service Level (2008 – 2022)	\$453.00
Net Pop. Growth (2023 – 2032)	54,830
Maximum Allowable Funding Envelope	\$24,837,990

B. Development-Related Capital Program

The Library capital program includes four new building projects dispersed throughout the 10-year planning period. These projects include a provision for additional library space (5,000 sq.ft.) for \$4.25 million, a new Hewitt’s Branch (15,000 sq.ft.) for \$10.50 million, a new Salem Branch (25,000 sq.ft.) for \$19.40 million, and a Downtown Branch Reconfiguration for \$1.50 million. Approximately, \$1.35 million has been removed from the eligible costs for the Downtown Branch Reconfiguration as benefit to existing (BTE) share as the reconfiguration is not creating net new additional space, but is nominally increasing programming capabilities.

The remainder of the Library Board capital program includes additions to the collection materials for each new branch for a total of \$7.20 million. There are no BTE shares for these provisions.

In total, \$3.17 million is available in DC reserves for Library Services and has been removed from the DC eligible costs. A further \$13.49 million related to the Salem Branch has been identified as a post-period share and will be eligible for recovery under subsequent DC Background Studies.

Approximately \$24.84 million of the DC costs are eligible for in-period recovery, and is allocated entirely against future residential development in the City of Barrie. This results in an unadjusted development charge of \$435.36 per capita.

C. Cash Flow Analysis

The current balance in the Library Board development charge reserve fund is \$3.17 million and that is included as the opening balance. After cash flow adjustments, the residential calculated charge increases to \$445.94 per capita. The increase reflects the front-ended nature of the capital program.

The following table summarizes the calculation of the Library Services development charge:

15-year Hist. Service Level per capita	LIBRARY SERVICES SUMMARY							
	2023 - 2032			Unadjusted			Adjusted	
	Development-Related Capital Program			Development Charge			Development Charge	
	Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non- Retail \$/sq.m
\$453.00	\$42,850,000	\$24,837,990	\$435.36	\$0.00	\$0.00	\$445.94	\$0.00	\$0.00

APPENDIX B.1
TABLE B.1-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES

BUILDINGS Branch Name	# of Square Feet															UNIT COST (\$/sq. ft.)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Downtown Branch	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	\$850
Painswick Branch	-	-	-	-	15,005	15,005	15,005	15,005	15,005	15,005	15,005	15,005	15,005	15,005	15,005	\$850
Holly Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,500	\$850
Total (sq.ft.)	46,000	46,000	46,000	46,000	61,005	61,005	61,005	61,005	61,005	61,005	61,005	61,005	61,005	61,005	65,505	
Total (\$000)	\$39,100.0	\$39,100.0	\$39,100.0	\$39,100.0	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$55,679.1	

LAND Branch Name	# of Hectares															UNIT COST (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Downtown Branch	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$3,500,000
Painswick Branch	-	-	-	-	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	\$3,500,000
Holly Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25	\$3,500,000
Total (ha)	0.25	0.25	0.25	0.25	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	2.12	
Total (\$000)	\$873.6	\$873.6	\$873.6	\$873.6	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$7,427.7	

**APPENDIX B.1
TABLE B.1-1**

**CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES**

MATERIALS Type of Collection	# of Collection Materials															UNIT COST (\$/item)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Books - Adult	104,597	103,711	112,469	145,205	128,981	134,846	133,247	110,298	110,824	109,730	109,080	97,205	85,387	87,187	87,187	\$50
Books - Children	88,792	88,040	95,475	114,871	109,492	114,470	113,113	110,676	104,045	94,725	90,167	78,731	66,730	66,791	66,791	\$20
Books - Teen	5,530	5,483	5,946	7,154	6,819	7,130	7,045	7,943	8,193	7,894	7,925	7,815	7,462	6,585	6,585	\$40
Audiobooks - Inc Daisy, Book & CD Kits	7,018	6,959	7,547	8,200	8,655	9,048	8,941	9,265	9,074	8,637	8,186	7,736	6,540	6,514	6,514	\$60
Music CDs	5,020	4,977	5,397	5,628	6,189	6,471	6,394	6,352	4,160	3,889	3,785	3,470	2,696	2,641	2,641	\$25
DVDs/Blu-Rays	23,495	23,296	25,263	26,782	28,972	30,289	29,930	34,563	36,123	33,499	34,450	30,831	27,305	25,776	25,776	\$45
Microforms	475	471	511	542	586	612	605	461	468	478	481	486	484	487	487	\$8
Video Games	71	70	76	80	87	91	90	176	212	277	320	1,335	1,200	1,768	1,768	\$100
Periodicals & Newspapers	1,777	1,762	1,911	1,989	2,192	2,291	2,264	2,687	2,386	2,375	2,610	2,740	2,499	2,397	2,397	\$9
Other Miscellaneous Equipment	172	171	186	195	213	223	220	1,213	1,086	1,113	1,189	96	93	221	221	\$120
eBooks (OverDrive + Hoopla)	20,518	20,344	22,062	23,562	25,301	26,452	26,138	40,197	49,718	57,354	63,132	70,941	79,596	-	-	\$2
Cloudlibrary eBooks (licences)	-	-	-	-	-	-	-	-	-	-	-	-	-	5,485	5,485	\$26
Hoopla (ebooks + egraphic) streaming	-	-	-	-	-	-	-	-	-	-	-	-	-	23,134	23,134	\$2
Cantook eBooks	-	-	-	-	-	-	-	-	-	-	-	-	-	138	138	\$11
eAudiobooks (OverDrive + Hoopla)	6,630	6,574	7,129	7,513	8,176	8,547	8,446	28,508	37,951	40,550	42,390	49,490	57,631	-	-	\$2
Cloudlibrary eAudio	-	-	-	-	-	-	-	-	-	-	-	-	-	1,476	1,476	\$75
Hoopla eAudio streaming	-	-	-	-	-	-	-	-	-	-	-	-	-	25,045	25,045	\$2
Cantook eAudio	-	-	-	-	-	-	-	-	-	-	-	-	-	670	670	\$2
eMagazines (Zinio + PressReader)	3	3	3	4	4	4	4	28,047	30,022	41,471	44,369	53,176	63,514	-	-	\$1
Cloudlibrary NewsStand eMagazines	-	-	-	-	-	-	-	-	-	-	-	-	-	6,660	6,660	\$1
PressReader eMagazines	-	-	-	-	-	-	-	-	-	-	-	-	-	14,574	14,574	\$1
Hoopla eVideo streaming	254	252	273	303	314	328	324	6,508	9,345	10,330	9,513	11,319	13,424	11,963	11,963	\$3
Hoopla eMusic streaming	147	146	159	165	182	190	188	2,395	4,406	5,833	7,007	8,924	11,300	-	-	\$1
Hoopla eMusic streaming	-	-	-	-	-	-	-	-	-	-	-	-	-	2,003	2,003	\$2
eCourses (Lynda + Universal Class)	24	24	26	28	30	31	31	42	560	6,382	8,048	10,812	-	-	-	\$3
eCourses (Lynda + Universal Class)	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3	\$40,737
Other eResources	33	33	35	38	41	42	42	45	47	49	37	41	41	40	40	\$3,268
Total (#)	264,556	262,316	284,468	342,259	326,234	341,065	337,022	389,376	408,620	424,586	432,689	435,148	425,905	291,558	291,558	
Total (\$000)	\$9,042.3	\$8,965.8	\$9,720.4	\$11,922.9	\$11,150.3	\$11,654.5	\$11,517.9	\$10,841.8	\$10,793.6	\$10,459.5	\$10,348.4	\$9,362.7	\$8,394.2	\$8,470.4	\$8,470.4	

**APPENDIX B.1
TABLE B.1-1**

**CITY OF BARRIE
CALCULATION OF SERVICE LEVELS
LIBRARY SERVICES**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Historical Population	131,431	132,957	134,501	136,063	137,121	138,187	139,261	140,343	141,434	142,690	143,958	145,237	146,527	147,829	152,641

INVENTORY SUMMARY (\$000)

Buildings	\$39,100.0	\$39,100.0	\$39,100.0	\$39,100.0	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$51,854.1	\$55,679.1
Land	\$873.6	\$873.6	\$873.6	\$873.6	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$6,552.7	\$7,427.7
Materials	\$9,042.3	\$8,965.8	\$9,720.4	\$11,922.9	\$11,150.3	\$11,654.5	\$11,517.9	\$10,841.8	\$10,793.6	\$10,459.5	\$10,348.4	\$9,362.7	\$8,394.2	\$8,470.4	\$8,470.4
Total (\$000)	\$49,016.0	\$48,939.4	\$49,694.0	\$51,896.5	\$69,557.1	\$70,061.3	\$69,924.8	\$69,248.7	\$69,200.5	\$68,866.4	\$68,755.3	\$67,769.6	\$66,801.1	\$66,877.3	\$71,577.3

SERVICE LEVEL (\$/capita)

**Average
Service
Level**

Buildings	\$297.49	\$294.08	\$290.70	\$287.37	\$378.16	\$375.25	\$372.35	\$369.48	\$366.63	\$363.40	\$360.20	\$357.03	\$353.89	\$350.77	\$346.77	\$345.44
Land	\$6.65	\$6.57	\$6.50	\$6.42	\$47.79	\$47.42	\$47.05	\$46.69	\$46.33	\$45.92	\$45.52	\$45.12	\$44.72	\$44.33	\$48.66	\$35.71
Materials	\$68.80	\$67.43	\$72.27	\$87.63	\$81.32	\$84.34	\$82.71	\$77.25	\$76.32	\$73.30	\$71.88	\$64.46	\$57.29	\$57.30	\$55.49	\$71.85
Total (\$/capita)	\$372.94	\$368.08	\$369.47	\$381.42	\$507.27	\$507.00	\$502.11	\$493.42	\$489.28	\$482.63	\$477.61	\$466.61	\$455.90	\$452.40	\$468.93	\$453.00

**CITY OF BARRIE
CALCULATION OF MAXIMUM ALLOWABLE FUNDING ENVELOPE
LIBRARY SERVICES**

15-Year Funding Envelope Calculation	
15 Year Average Service Level 2008 - 202	\$453.00
Net Population Growth 2023 - 2032	54,830
Maximum Allowable Funding Envelope	\$24,837,990

APPENDIX B.1
TABLE B.1-2

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARY SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
1.0 LIBRARY SERVICES										
1.1 Buildings										
1.1.1 Provision for additional space (i.e. branch library - 5,000 sq.ft.)	2023 - 2028	\$ 4,250,000	\$ -	\$ 4,250,000	0%	\$ -	\$ 4,250,000	\$ 3,169,263	\$ 1,080,737	\$ -
1.1.2 Hewitt's Branch (15,000 sq.ft.)	2025 - 2026	\$ 10,500,000	\$ -	\$ 10,500,000	0%	\$ -	\$ 10,500,000	\$ -	\$ 10,500,000	\$ -
1.1.3 Salem Branch (25,000 sq.ft.)	2027 - 2031	\$ 19,400,000	\$ -	\$ 19,400,000	0%	\$ -	\$ 19,400,000	\$ -	\$ 5,907,253	\$ 13,492,747
1.1.4 Downtown Branch Reconfiguration	2024 - 2024	\$ 1,500,000	\$ -	\$ 1,500,000	90%	\$ 1,350,000	\$ 150,000	\$ -	\$ 150,000	\$ -
Subtotal Buildings		\$ 35,650,000	\$ -	\$ 35,650,000		\$ 1,350,000	\$ 34,300,000	\$ 3,169,263	\$ 17,637,990	\$ 13,492,747
1.2 Materials and Equipment										
1.2.1 Additional Library Materials (Hewitt's)	2023 - 2031	\$ 2,500,000	\$ -	\$ 2,500,000	0%	\$ -	\$ 2,500,000	\$ -	\$ 2,500,000	\$ -
1.2.2 Additional Library Materials (Salem)	2026 - 2028	\$ 4,200,000	\$ -	\$ 4,200,000	0%	\$ -	\$ 4,200,000	\$ -	\$ 4,200,000	\$ -
1.2.3 Additional Library Materials (additional branch)	2023 - 2028	\$ 500,000	\$ -	\$ 500,000	0%	\$ -	\$ 500,000	\$ -	\$ 500,000	\$ -
Subtotal Materials and Equipment		\$ 7,200,000	\$ -	\$ 7,200,000		\$ -	\$ 7,200,000	\$ -	\$ 7,200,000	\$ -
TOTAL LIBRARY SERVICES		\$ 42,850,000	\$ -	\$ 42,850,000		\$ 1,350,000	\$ 41,500,000	\$ 3,169,263	\$ 24,837,990	\$ 13,492,747

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2032 DC Eligible Costs	100%	\$24,837,990
10-Year Growth in Population in New Units		57,051
Unadjusted Development Charge Per Capita		\$435.36
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		357,960
Unadjusted Retail Development Charge Per Square Metre		\$0.00
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		1,004,870
Unadjusted Non-Retail Development Charge Per Square Metre		\$0.00

2023 - 2032 Net Funding Envelope	\$24,837,990
Reserve Fund Balance as at December 31st, 2022	\$3,169,263

APPENDIX B.1

TABLE 3

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LIBRARY SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

LIBRARY SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$3,169.3	\$4,614.1	\$6,047.6	\$2,187.1	(\$3,344.0)	(\$4,648.8)	(\$5,973.0)	(\$4,793.7)	(\$3,444.4)	(\$1,913.1)	
2023 - 2032 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$528.2	\$528.2	\$528.2	\$528.2	\$528.2	\$528.2	\$0.0	\$0.0	\$0.0	\$0.0	\$3,169.3
- Library Services: Non Inflated	\$541.2	\$691.2	\$5,791.2	\$7,191.2	\$3,122.7	\$3,122.7	\$1,459.2	\$1,459.2	\$1,459.2	\$0.0	\$24,838.0
- Library Services: Inflated	\$1,069.4	\$1,243.8	\$6,574.8	\$8,191.9	\$3,951.8	\$4,030.9	\$1,643.3	\$1,676.2	\$1,709.7	\$0.0	\$30,091.9
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722	57,051
REVENUE											
- DC Receipts: Inflated	\$2,380.4	\$2,494.0	\$2,611.6	\$2,734.3	\$2,860.9	\$2,991.0	\$3,125.2	\$3,261.4	\$3,400.9	\$1,983.6	\$27,843.3
INTEREST											
- Interest on Opening Balance	\$110.9	\$161.5	\$211.7	\$76.5	(\$183.9)	(\$255.7)	(\$328.5)	(\$263.7)	(\$189.4)	(\$105.2)	(\$765.8)
- Interest on In-year Transactions	\$22.9	\$21.9	(\$109.0)	(\$150.1)	(\$30.0)	(\$28.6)	\$25.9	\$27.7	\$29.6	\$34.7	(\$154.9)
TOTAL REVENUE	\$2,514.3	\$2,677.3	\$2,714.3	\$2,660.8	\$2,647.0	\$2,706.7	\$2,822.6	\$3,025.5	\$3,241.0	\$1,913.1	\$26,922.7
CLOSING CASH BALANCE	\$4,614.1	\$6,047.6	\$2,187.1	(\$3,344.0)	(\$4,648.8)	(\$5,973.0)	(\$4,793.7)	(\$3,444.4)	(\$1,913.1)	(\$0.0)	

2023 Adjusted Charge Per Capita

\$445.94

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2023

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

Appendix B.2

Protection Services

Protection Services

Barrie Protection Services includes both Fire Services and Police Services. The Barrie Fire Department operates from five stations and an Emergency Services Campus (ESC) shared with Police and Ambulance (Paramedics). Fire has approximately a 6% share of the ESC. The Barrie Police Service operates from their two satellite offices, and the shared ESC, which they have approximately a 62% share of. The Fire Department and Police Service are responsible for traffic enforcement, community service, investigations, fire prevention inspections, public education sessions, communications (including dispatching), and fire suppression. The following discusses the individual components included in the Protection Services category. The analysis is set out in the tables which follow.

Table B.2-1	Historical Service Levels and Calculation of 15-Year Average Service Level
Table B.2-2	2023-2032 Development-Related Capital Forecast and Calculation of the Growth-Related Net Capital Costs
Table B.2-3	Cash Flow Analysis

A. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

The Fire Services’ current inventory of capital assets includes five stations and a share of the ESC. The combined area of the stations is 65,980 square feet.

A portion of the ESC is related to the Protection Services negative DC reserve fund balance included for recovery in the capital program. As such, a portion of the building GFA has been removed from the historical inventory calculated. This share has been calculated by dividing the value of the negative reserve fund balance related to Fire Services (\$314,868) by the

dollar per square foot assumption of the facility (\$820 per square foot) to yield an adjustment of approximately 384 square feet of excess capacity.

The net values of the stations used in the service level calculations is \$53.79 million. The land area associated with the buildings is roughly 1.66 hectares and is valued at \$5.81 million. The total value of furniture and equipment is \$3.50 million. Finally, the 44 vehicles and related equipment associated with the stations have a replacement value of \$27.64 million.

The Police Services' current inventory of capital assets includes two satellite stations and a share of the ESC. The combined area of the stations is 37,770 square feet. Approximately 3,570 square feet is removed from the inventory for the ESC as excess capacity relating to the Police Services share of the negative reserve fund balance included for recovery in the capital program (\$3.40 million), reducing the combined area in the service level calculations to 34,190 square feet.

The net values of the stations used in the service level calculations is \$17.23 million. The land area associated with the buildings is roughly 6.11 hectares and is valued at \$21.39 million. The total value of furniture and equipment is \$8.29 million. Finally, the 114 vehicles associated with the stations have a replacement value of \$8.40 million. The combined replacement value of the Fire and Police Services capital infrastructure is \$146.05 million.

The historical service level multiplied by the 10-year forecast of net population and employment growth results in a 10-year maximum allowable funding envelope of \$58.60 million (73,289 net population and employment growth X historical service level of \$799.54/capita). Table 1 provides a summary of the level of service and the calculation of the 10-year funding envelope from 2023 to 2032. The calculation of the maximum allowable funding envelope is summarized as follows:

10-Year Funding Envelope Calculation

15-Year Average Service Level (2008 – 2022)	\$799.54
Net Pop. Growth (2023 – 2032)	73,289
Maximum Allowable Funding Envelope	\$58,597,487

B. Development-Related Capital Program

The first project in the Protection Services capital program is for the recovery of the negative reserve fund balance which amounts to \$3.71 million and is included in the total DC eligible costs.

The Fire Services capital program includes a new BFES Station 6 that will be constructed in 2023, a Secondary Plan Area Municipal Campus Site, and a Provision for a New Station, totaling \$16.18 million. Fire is also acquiring two new vehicles during the planning period, for a total of \$3.00 million. Of this amount, approximately \$466,700 is removed from the DC eligible costs as the Technical Rescue Truck is replacing an existing vehicle, but the size and type of vehicle has been upgraded thus increasing servicing capacity. Finally, \$645,500 of equipment is included in the program for new firefighters, fire prevention officers, public education officer, and associated outfitting.

The Police Services capital program includes new police vehicles and cruisers for \$1.77 million. Vehicle equipment and other officer and miscellaneous equipment are also included for \$5.37 million.

The ESC is expected to begin Phase 2 in 2027 for \$41.00 million, which will be shared between both services. Approximately \$23.75 million has been removed from the in-period costs as a benefit to existing share to replace the existing facility at 79 Bell Farm Road.

The entirety of the \$47.45 million 2023–2032 DC costs for Protection Services are eligible for in-period recovery and is brought forward to the DC rate calculation.

The costs are allocated 75.6%, or \$35.85 million, against residential development, 9.5%, or \$4.50 million, against non-residential retail development, and 15.0%, or \$7.10 million, against non-residential non-retail development. The allocation between residential and non-residential development is based on shares of forecasted growth. The resulting unadjusted development charge is \$628.45 per capita for residential, \$12.57 per square metre for retail, and \$7.07 per square metre for non-retail.

C. Cash Flow Analysis

The current balance in the Protection Services development charge reserve fund is in a deficit, thus the negative balance of \$3.71 million included in the cash-flow calculations.

After cash flow consideration, the residential charge increases to \$696.94 per capita, the non-residential retail charge increases to \$14.21 per square metre, and the non-residential non-retail charges increases to \$7.99 per square metre. The increase reflects the timing of capital expenditures and development charge revenues.

The following table summarizes the calculation of the Protection Services development charge:

PROTECTION SERVICES SUMMARY								
15-year Hist. Service Level per pop & emp	2023 - 2032		Unadjusted Development Charge	Adjusted Development Charge		\$/capita	Retail \$/sq.m	Non- Retail \$/sq.m
	Total	Net DC Recoverable		Retail \$/sq.m	Non-Retail\$/sq.m			
\$799.54	\$71,675,323	\$47,454,402	\$628.45	\$12.57	\$7.07	\$696.94	\$14.21	\$7.99

**APPENDIX B.2
TABLE B.2-1**

**CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PROTECTION SERVICES**

BUILDINGS Station Name	# of Square Feet															UNIT COST (\$/sq. ft.)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Station #1	24,003	24,003	24,003	-	-	-	-	-	-	-	-	-	-	-	-	\$500
Station #2	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	5,995	\$820
Station #3	6,997	6,997	6,997	6,997	6,997	6,997	6,997	6,997	6,997	6,997	6,997	6,997	6,997	6,997	6,997	\$820
Station #4	6,501	6,501	6,501	6,501	6,501	6,501	6,501	6,501	6,501	6,501	6,501	6,501	6,501	6,501	6,501	\$820
New Fire Station #1	-	-	-	38,998	38,998	38,998	38,998	38,998	38,998	38,998	38,998	38,998	38,998	38,998	38,998	\$820
Fire Station #5 (Lease)	-	-	-	-	-	6,448	6,448	6,448	6,448	6,448	6,448	6,448	6,448	6,448	6,448	\$820
Emergency Services Campus (110 Fairview)*	-	-	-	-	-	-	-	-	-	-	-	-	-	1,045	1,045	\$820
Emergency Services Campus (110 Fairview)*Excess C	-	-	-	-	-	-	-	-	-	-	-	-	(384)	(384)	(384)	\$820
Total (sq.ft.)	43,497	43,497	43,497	58,491	58,491	64,939	64,939	64,939	64,939	64,939	64,939	64,939	65,600	65,600	65,600	
Total (\$000)	\$27,986.4	\$27,986.4	\$27,986.4	\$47,962.6	\$47,962.6	\$53,249.7	\$53,249.7	\$53,249.7	\$53,249.7	\$53,249.7	\$53,249.7	\$53,249.7	\$53,791.7	\$53,791.7	\$53,791.7	

*Shared facility between Fire, Police and Paramedics. Fire Service = 5.6%

LAND Station Name	# of Hectares															UNIT COST (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Station #1	0.31	0.31	0.31	-	-	-	-	-	-	-	-	-	-	-	-	\$3,500,000
Station #2	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$3,500,000
Station #3	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$3,500,000
Station #4	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$3,500,000
New Fire Station #1	-	-	-	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$3,500,000
Fire Station #5 (Lease)	-	-	-	-	-	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	\$3,500,000
Emergency Services Campus (110 Fairview)*	-	-	-	-	-	-	-	-	-	-	-	-	0.53	0.53	0.53	\$3,500,000
Total (ha)	0.49	0.49	0.49	0.49	0.49	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.66	1.66	1.66	
Total (\$000)	\$1,708.6	\$1,708.6	\$1,708.6	\$1,708.6	\$1,708.6	\$3,960.0	\$3,960.0	\$3,960.0	\$3,960.0	\$3,960.0	\$3,960.0	\$3,960.0	\$5,815.0	\$5,815.0	\$5,815.0	

*Shared facility between Fire, Police and Paramedics. Fire Service = 5.6%

APPENDIX B.2
TABLE B.2-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PROTECTION SERVICES

VEHICLES Vehicle Type	# of Vehicles															UNIT COST (\$/vehicle)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Light Duty Vehicles	13	15	16	16	16	16	16	16	16	17	21	17	17	17	17	\$70,600
50' Ladder Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,614,500
75' Ladder Truck	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	\$1,618,600
65' Ladder Truck	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	\$1,480,000
Pumper/Rescue	8	9	9	9	9	9	9	9	9	9	8	8	8	8	8	\$1,001,500
Pumper Truck 4WD (mini)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,001,500
Tanker Truck	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	\$538,200
Rescue Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	\$1,001,500
Command Centre	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	\$1,087,100
Heavy Rescue	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	\$2,018,200
Air Boat	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	\$298,700
100' Aerial/Platform	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$2,556,300
Command Truck/ Platoon Chiefs 03-3001	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	\$201,800
Haz Mat Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,164,000
Haz Mat Trailer	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	\$144,000
Utility Trailers	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2	\$7,300
Trench Trailer	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$145,300
Hovercraft	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	\$201,800
Total (#)	31	36	38	38	39	41	40	40	40	40	42	38	38	38	44	
Total (\$000)	\$21,492.0	\$25,336.3	\$25,945.1	\$25,945.1	\$26,089.1	\$26,103.7	\$25,016.6	\$25,016.6	\$25,016.6	\$24,885.4	\$21,912.6	\$21,630.2	\$21,630.2	\$21,630.2	\$27,639.2	

APPENDIX B.2
TABLE B.2-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PROTECTION SERVICES

EQUIPMENT Description	# of Equipment															UNIT COST (\$/unit)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Personal Equipment																
Fire Fighter Equipment	114	124	124	124	144	144	144	144	144	144	144	144	144	144	144	\$12,600
Training Personnel	2	2	2	5	5	5	5	5	5	5	5	5	5	4	4	\$12,600
Fire Prevention Personnel	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	\$4,000
Chief Officers	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5	\$8,000
Civilian (uniforms)	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	\$800
Communications/Operators	10	10	13	13	13	13	15	15	14	14	14	14	14	16	21	\$2,000
Shared Equipment																
Radio Towers (Shared with other services)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$754,800
Total (#)	142	152	155	159	179	179	183	183	182	182	182	182	182	184	190	
Total (\$000)	\$3,046.4	\$3,172.4	\$3,178.4	\$3,220.2	\$3,472.2	\$3,472.2	\$3,485.0	\$3,485.0	\$3,483.0	\$3,483.0	\$3,483.0	\$3,483.0	\$3,483.0	\$3,478.4	\$3,496.4	

**APPENDIX B.2
TABLE B.2-1**

**CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PROTECTION SERVICES**

BUILDINGS Station Name	# of Square Feet															UNIT COST (\$/sq. ft.)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Barrie Police Headquarters (29 Sperling)	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	-	-	-	\$950
Satellite Office - Downtown (Leased)	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	1,496	\$780
Satellite Office - 60 Bell Farm Road (Leased)	33,002	33,002	33,002	33,002	33,002	33,002	33,002	33,002	33,002	33,002	33,002	33,002	-	-	-	\$350
Satellite Office - 79 Bell Farm Road	-	25,005	25,005	25,005	25,005	25,005	25,005	25,005	25,005	25,005	25,005	25,005	25,005	25,005	25,005	\$350
Emergency Services Campus (110 Fairview)*	-	-	-	-	-	-	-	-	-	-	-	-	11,267	11,267	11,267	\$950
<i>Emergency Services Campus (110 Fairview)* Excess Capacity</i>	-	-	-	-	-	-	-	-	-	-	-	-	(3,574)	(3,574)	(3,574)	<i>\$950</i>
Total (sq.ft.)	84,498	109,503	109,503	109,503	109,503	109,503	109,503	109,503	109,503	109,503	109,503	109,503	34,194	34,194	34,194	
Total (\$000)	\$60,217.8	\$68,969.4	\$68,969.4	\$68,969.4	\$68,969.4	\$68,969.4	\$68,969.4	\$68,969.4	\$68,969.4	\$68,969.4	\$68,969.4	\$68,969.4	\$17,227.0	\$17,227.0	\$17,227.0	

*Shared facility between Fire, Police and Paramedics. Police Service = 62.06%

LAND Station Name	# of Hectares															UNIT COST (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Barrie Police Headquarters (29 Sperling)	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	-	-	-	\$3,500,000
Satellite Office - Downtown (Leased)	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	\$3,500,000
Satellite Office - 60 Bell Farm Road (Leased)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	-	-	-	\$3,500,000
Satellite Office - 79 Bell Farm Road	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	\$3,500,000
Emergency Services Campus (110 Fairview)*	-	-	-	-	-	-	-	-	-	-	-	-	5.70	5.70	5.70	\$3,500,000
Total (ha)	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	6.11	6.11	6.11	
Total (\$000)	\$9,491.7	\$9,491.7	\$9,491.7	\$9,491.7	\$9,491.7	\$9,491.7	\$9,491.7	\$9,491.7	\$9,491.7	\$9,491.7	\$9,491.7	\$9,491.7	\$21,392.3	\$21,392.3	\$21,392.3	

*Shared facility between Fire, Police and Paramedics. Police Service = 62.06%

APPENDIX B.2
TABLE B.2-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PROTECTION SERVICES

EQUIPMENT Description	# of Units															UNIT COST (\$/unit)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Equipped Officers & Special Constables																
Police Outfitting Equipment	207	218	228	236	241	241	241	237	237	237	239	245	254	241	248	\$5,700
Special Constables Equipment	21	22	22	22	22	22	22	20	20	23	21	24	24	21	23	\$3,100
Part Time Special Constables and Auxiliary Equipment	12	13	12	16	31	35	40	38	47	44	47	31	23	20	22	\$2,600
Conducted Energy Weapons (Tasers)	48	51	54	66	70	101	123	132	129	143	157	157	157	157	157	\$2,400
Rifles	52	55	65	65	65	65	65	65	65	69	72	72	72	72	72	\$2,400
Portable Radios	44	46	60	69	76	92	102	115	124	130	135	135	135	135	135	\$10,100
Vehicle Equipment																
Mobile Police Stations (Mobile Data Terminal)	37	39	40	41	46	50	57	58	58	59	60	60	60	60	60	\$8,600
Information System & Equipment																
Voicelogger	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$28,900
Storage Area Network	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	\$178,800
Investigative Equipment																
Binoculars	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	\$300
Monocular	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$2,800
Spotting Scope	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$800
Camera/Video Equipment	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	\$1,700
Machinery & Equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$300
Radio Equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$900
Specialty Equipment	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	\$8,100
Garage Equipment																
2 post Hoist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$14,400
4 post Hoist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$19,000
Brake Lathe	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$12,500
Transmission flush machine	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$12,600
Ident Equipment																
Alternative Light Source	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$31,500
Avid System	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$68,800
Biohazard Equipment - Cynaosafe	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$23,300
Biohazard Equipment - Fume Hood & Chemical Storage	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$47,600
Biohazard Equipment - Hazard Cabinet	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$27,900
Biohazard Equipment - Hazard Cabinet (double)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$33,100
SLR Digital Camera	1	1	5	5	5	5	5	5	5	5	5	5	5	5	5	\$4,800
Downdraft Dusting Station	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	\$6,600
ID Card Printer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$7,100
ID Card System	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	\$13,100
Portable Alternate Light Source	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$12,400
X-Ray System	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$67,400
Traffic Equipment																
Camera/Video Recorder	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,200
Camera/Video Lenses	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	\$4,300
Breath Alcohol Testers	9	10	10	10	10	10	14	14	14	14	14	14	14	14	14	\$2,000
Intoxilyzers	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	\$12,200
Speed Measuring Devices	10	11	12	12	12	13	17	17	17	17	17	17	17	17	17	\$3,500
Total Stations	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	\$21,800
License Plate Reader	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	\$25,000
Commercial Motor Vehicle Weigh Scales	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	\$10,400
Weigh Pads	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	\$2,800

APPENDIX B.2
TABLE B.2-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PROTECTION SERVICES

EQUIPMENT Description	# of Units															UNIT COST (\$/unit)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Canine Equipment																
Canine Kennel	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	\$11,300
Other Equipment																
Bikes	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$1,200
Fingerprint Reader	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	\$52,700
Drug Processing Station	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	\$46,600
Training Structure	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	\$63,200
Specialized Equipment																
Camera/Video Equipment	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$2,000
Other Camera/Video Equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$900
Audio Equipment	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	\$9,600
Specialized Visual Equipment	1	1	1	1	1	1	2	2	3	3	3	3	3	3	3	\$7,500
Optical Equipment	11	12	12	12	12	12	12	12	12	12	12	12	12	12	12	\$9,300
Specialized Optical Equipment	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	\$22,100
Portable Imaging System	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$65,100
Radio Equipment	27	28	28	28	28	28	28	28	28	28	28	28	28	28	28	\$700
Specialized Communication Equipmen	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	\$34,400
Command Vehicle Recorder	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$55,800
GPS	25	26	26	26	26	26	26	26	26	26	35	35	35	35	35	\$500
Robot	0	0	1	2	3	3	3	3	3	3	3	3	3	3	3	\$19,900
ICOR Robot	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	\$234,900
Robot Accessories	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$8,500
Defensive Equipment	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	\$500
Other Defensive Equipment	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$3,800
Specialized Defensive Equipment	1	1	3	3	3	3	3	3	3	3	3	3	3	3	3	\$7,900
Bomb Suit	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	\$38,500
Entry Equipment	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$2,300
Other Entry Equipment	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	\$900
Specialized Entry Equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$8,200
Firearms	9	10	12	12	12	12	12	12	12	12	12	12	12	12	12	\$4,600
Other Firearms	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	\$2,700
Other Specialized Firearms	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	\$6,700
Specialized Firearms	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$13,900
Other Weapons	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$6,100
Firearms Accessories	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,600
Other Firearms Accessories	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$300
Specialized Firearms Equipment	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$26,500
Other Specialized Firearms Accessories	7	7	9	10	10	10	10	10	10	10	10	10	10	10	10	\$2,800
Firearms Equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,300
Specialized Firearm Equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$21,300
Large Equipment	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$4,200
Other Large Equipment	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$1,600
Specialized Equipment	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	\$16,500
Specialized Large Equipment	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$7,400
Specialized Storage Equipment	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$7,400
Unmanned Aerial Vehicle	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	\$230,200
Other																
Radio Towers (shared with other services)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$ 754,800
Total (#)	641	675	727	769	810	866	928	946	962	989	1,023	1,016	1,017	998	1,009	
Total (\$000)	\$4,930.8	\$5,112.6	\$5,459.7	\$5,876.6	\$6,167.4	\$6,451.7	\$7,360.7	\$7,735.6	\$7,850.2	\$8,189.5	\$8,300.3	\$8,302.2	\$8,332.7	\$8,241.5	\$8,292.8	

APPENDIX B.2
TABLE B.2-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PROTECTION SERVICES

VEHICLES Vehicle Type	# of Vehicles															UNIT COST (\$/vehicle)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Police Front Line and Traffic	54	56	45	42	43	44	50	46	49	51	52	52	52	52	52	\$72,700
Police Investigative and Unmarked	21	22	22	20	16	17	14	15	17	18	17	17	17	17	17	\$49,000
Police Canine Vehicle	4	4	3	3	3	3	3	4	4	3	4	4	4	4	4	\$84,100
Police Other Vehicles	28	29	33	36	32	32	31	31	28	28	27	27	27	27	27	\$54,000
Police Prisoner Transport Van	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	\$92,600
Police Tactical and Training	4	4	6	7	7	8	10	11	11	10	9	9	9	9	9	\$76,800
Police Boat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$152,000
Police Zodiac	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$66,500
Police Command Post	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$970,100
Police Trailer	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	\$12,800
Total (#)	116	120	113	113	106	109	113	112	114	115	114	114	114	114	114	
Total (\$000)	\$8,431.5	\$8,732.6	\$8,125.8	\$8,061.3	\$7,722.0	\$7,920.5	\$8,309.3	\$8,228.4	\$8,382.5	\$8,416.0	\$8,393.0	\$8,393.0	\$8,393.0	\$8,393.0	\$8,393.0	

**APPENDIX B.2
TABLE B.2-1**

**CITY OF BARRIE
CALCULATION OF SERVICE LEVELS
PROTECTION SERVICES**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Historical Population	131,431	132,957	134,501	136,063	137,121	138,187	139,261	140,343	141,434	142,690	143,958	145,237	146,527	147,829	152,641
Historical Employment	61,563	62,217	62,892	63,590	64,392	65,205	66,030	66,866	67,715	69,210	70,730	72,730	53,890	57,330	65,310
Historical Population & Employment	192,994	195,174	197,393	199,653	201,513	203,392	205,291	207,209	209,149	211,900	214,688	217,967	200,417	205,159	217,951

INVENTORY SUMMARY (\$000)

Fire Services															
Buildings	\$27,986	\$27,986	\$27,986	\$47,963	\$47,963	\$53,250	\$53,250	\$53,250	\$53,250	\$53,250	\$53,250	\$53,250	\$53,792	\$53,792	\$53,792
Land	\$1,709	\$1,709	\$1,709	\$1,709	\$1,709	\$3,960	\$3,960	\$3,960	\$3,960	\$3,960	\$3,960	\$3,960	\$5,815	\$5,815	\$5,815
Vehicles	\$21,492	\$25,336	\$25,945	\$25,945	\$26,089	\$26,104	\$25,017	\$25,017	\$25,017	\$24,885	\$21,913	\$21,630	\$21,630	\$21,630	\$27,639
Equipment	\$3,046	\$3,172	\$3,178	\$3,220	\$3,472	\$3,472	\$3,485	\$3,485	\$3,483	\$3,483	\$3,483	\$3,483	\$3,483	\$3,478	\$3,496
Police Services															
Buildings	\$60,218	\$68,969	\$68,969	\$68,969	\$68,969	\$68,969	\$68,969	\$68,969	\$68,969	\$68,969	\$68,969	\$68,969	\$17,227	\$17,227	\$17,227
Land	\$9,492	\$9,492	\$9,492	\$9,492	\$9,492	\$9,492	\$9,492	\$9,492	\$9,492	\$9,492	\$9,492	\$9,492	\$21,392	\$21,392	\$21,392
Equipment	\$4,931	\$5,113	\$5,460	\$5,877	\$6,167	\$6,452	\$7,361	\$7,736	\$7,850	\$8,190	\$8,300	\$8,302	\$8,333	\$8,242	\$8,293
Vehicles	\$8,431	\$8,733	\$8,126	\$8,061	\$7,722	\$7,921	\$8,309	\$8,228	\$8,383	\$8,416	\$8,393	\$8,393	\$8,393	\$8,393	\$8,393
Total (\$000)	\$137,305	\$150,510	\$150,865	\$171,235	\$171,583	\$179,619	\$179,842	\$180,136	\$180,403	\$180,645	\$177,760	\$177,479	\$140,065	\$139,969	\$146,047

SERVICE LEVEL (\$/pop & emp)

**Average
Service
Level**

Fire Services																
Buildings	\$145.01	\$143.39	\$141.78	\$240.23	\$238.01	\$261.81	\$259.39	\$256.99	\$254.60	\$251.30	\$248.03	\$244.30	\$268.40	\$262.20	\$246.81	\$230.82
Land	\$8.85	\$8.75	\$8.66	\$8.56	\$8.48	\$19.47	\$19.29	\$19.11	\$18.93	\$18.69	\$18.45	\$18.17	\$29.01	\$28.34	\$26.68	\$17.30
Vehicles	\$111.36	\$129.81	\$131.44	\$129.95	\$129.47	\$128.34	\$121.86	\$120.73	\$119.61	\$117.44	\$102.07	\$99.24	\$107.93	\$105.43	\$126.81	\$118.77
Equipment	\$15.78	\$16.25	\$16.10	\$16.13	\$17.23	\$17.07	\$16.98	\$16.82	\$16.65	\$16.44	\$16.22	\$15.98	\$17.38	\$16.95	\$16.04	\$16.54
Police Services																
Buildings	\$312.02	\$353.37	\$349.40	\$345.45	\$342.26	\$339.10	\$335.96	\$332.85	\$329.76	\$325.48	\$321.25	\$316.42	\$85.96	\$83.97	\$79.04	\$283.49
Land	\$49.18	\$48.63	\$48.09	\$47.54	\$47.10	\$46.67	\$46.24	\$45.81	\$45.38	\$44.79	\$44.21	\$43.55	\$106.74	\$104.27	\$98.15	\$57.76
Equipment	\$25.55	\$26.20	\$27.66	\$29.43	\$30.61	\$31.72	\$35.86	\$37.33	\$37.53	\$38.65	\$38.66	\$38.09	\$41.58	\$40.17	\$38.05	\$34.47
Vehicles	\$43.69	\$44.74	\$41.17	\$40.38	\$38.32	\$38.94	\$40.48	\$39.71	\$40.08	\$39.72	\$39.09	\$38.51	\$41.88	\$40.91	\$38.51	\$40.41
Total (\$000)	\$711.45	\$771.16	\$764.29	\$857.67	\$851.47	\$883.12	\$876.04	\$869.35	\$862.56	\$852.50	\$827.99	\$814.25	\$698.87	\$682.25	\$670.09	\$799.54

**CITY OF BARRIE
CALCULATION OF MAXIMUM ALLOWABLE FUNDING ENVELOPE
PROTECTION SERVICES**

15-Year Funding Envelope Calculation	
15 Year Average Service Level 2008 - 2022	\$799.54
Net Population & Employment Growth 2023 - 2032	73,289
Maximum Allowable Funding Envelope	\$58,597,487

APPENDIX B.2

TABLE 3-1

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PROTECTION SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PROTECTION SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	(\$2,802.9)	(\$6,277.3)	(\$7,892.8)	(\$5,133.7)	(\$2,046.7)	(\$1,478.4)	(\$1,691.1)	(\$1,798.7)	(\$1,795.1)	(\$1,671.3)	
2023 - 2032 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Protection Services: Non Inflated	\$6,951.7	\$5,033.4	\$906.6	\$906.6	\$3,512.6	\$4,349.7	\$4,349.7	\$4,349.7	\$4,349.7	\$1,144.0	\$35,853.8
- Protection Services: Inflated	\$6,951.7	\$5,134.0	\$943.2	\$962.1	\$3,802.1	\$4,802.4	\$4,898.5	\$4,996.5	\$5,096.4	\$1,367.2	\$38,954.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722	57,051
REVENUE											
- DC Receipts: Inflated	\$3,720.3	\$3,897.8	\$4,081.6	\$4,273.4	\$4,471.3	\$4,674.6	\$4,884.3	\$5,097.2	\$5,315.1	\$3,100.1	\$43,515.7
INTEREST											
- Interest on Opening Balance	(\$154.2)	(\$345.3)	(\$434.1)	(\$282.4)	(\$112.6)	(\$81.3)	(\$93.0)	(\$98.9)	(\$98.7)	(\$91.9)	(\$1,792.4)
- Interest on In-year Transactions	(\$88.9)	(\$34.0)	\$54.9	\$57.9	\$11.7	(\$3.5)	(\$0.4)	\$1.8	\$3.8	\$30.3	\$33.7
TOTAL REVENUE	\$3,477.3	\$3,518.5	\$3,702.4	\$4,049.0	\$4,370.4	\$4,589.8	\$4,790.9	\$5,000.1	\$5,220.2	\$3,038.5	\$41,757.1
CLOSING CASH BALANCE	(\$6,277.3)	(\$7,892.8)	(\$5,133.7)	(\$2,046.7)	(\$1,478.4)	(\$1,691.1)	(\$1,798.7)	(\$1,795.1)	(\$1,671.3)	\$0.0	

2023 Adjusted Charge Per Capita

\$696.94

Allocation of Capital Program

Residential Sector	75.6%
Non-Residential Sector	24.4%

Rates for 2023

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

**APPENDIX B.2
TABLE 3-2**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PROTECTION SERVICES
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PROTECTION SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	(\$351.7)	(\$913.48)	(\$1,224.62)	(\$966.84)	(\$647.08)	(\$620.16)	(\$665.68)	(\$670.01)	(\$629.23)	(\$539.07)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Protection Services: Non Inflated	\$872.3	\$631.6	\$113.8	\$113.8	\$440.8	\$545.8	\$545.8	\$545.8	\$545.8	\$143.6	\$4,499.1
- Protection Services: Inflated	\$872.3	\$644.2	\$118.4	\$120.7	\$477.1	\$602.6	\$614.7	\$627.0	\$639.5	\$171.6	\$4,888.1
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	24,230	26,920	29,610	32,300	35,000	37,690	40,380	43,070	45,760	43,000	357,960
REVENUE											
- DC Receipts: Inflated	\$344.4	\$390.3	\$437.9	\$487.2	\$538.5	\$591.5	\$646.4	\$703.3	\$762.1	\$730.5	\$5,632.3
INTEREST											
- Interest on Opening Balance	(\$19.3)	(\$50.2)	(\$67.4)	(\$53.2)	(\$35.6)	(\$34.1)	(\$36.6)	(\$36.9)	(\$34.6)	(\$29.6)	(\$397.5)
- Interest on In-year Transactions	(\$14.5)	(\$7.0)	\$5.6	\$6.4	\$1.1	(\$0.3)	\$0.6	\$1.3	\$2.1	\$9.8	\$5.1
TOTAL REVENUE	\$310.6	\$333.1	\$376.1	\$440.5	\$504.0	\$557.1	\$610.4	\$667.8	\$729.7	\$710.6	\$5,239.9
CLOSING CASH BALANCE	(\$913.5)	(\$1,224.6)	(\$966.8)	(\$647.1)	(\$620.2)	(\$665.7)	(\$670.0)	(\$629.2)	(\$539.1)	\$0.0	

2023 Adjusted Charge Per Square Metre \$14.21

Allocation of Capital Program

Residential Sector	75.6%
Retail	9.5%
Non-Retail	15.0%

Rates for 2023

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

APPENDIX B.2

TABLE 3-3

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PROTECTION SERVICES
NON-RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PROTECTION SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	(\$555.2)	(\$1,439.37)	(\$1,927.44)	(\$1,517.01)	(\$1,008.13)	(\$961.05)	(\$1,027.54)	(\$1,028.36)	(\$957.16)	(\$807.21)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Protection Services: Non Inflated	\$1,376.9	\$997.0	\$179.6	\$179.6	\$695.7	\$861.5	\$861.5	\$861.5	\$861.5	\$226.6	\$7,101.5
- Protection Services: Inflated	\$1,376.9	\$1,016.9	\$186.8	\$190.6	\$753.1	\$951.2	\$970.2	\$989.6	\$1,009.4	\$270.8	\$7,715.6
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	68,370	75,970	83,560	91,160	98,760	106,360	113,950	121,550	129,140	116,050	1,004,870
REVENUE											
- DC Receipts: Inflated	\$546.1	\$618.9	\$694.4	\$772.7	\$853.8	\$937.9	\$1,025.0	\$1,115.2	\$1,208.5	\$1,107.8	\$8,880.4
INTEREST											
- Interest on Opening Balance	(\$30.5)	(\$79.2)	(\$106.0)	(\$83.4)	(\$55.4)	(\$52.9)	(\$56.5)	(\$56.6)	(\$52.6)	(\$44.4)	(\$617.6)
- Interest on In-year Transactions	(\$22.8)	(\$10.9)	\$8.9	\$10.2	\$1.8	(\$0.4)	\$1.0	\$2.2	\$3.5	\$14.6	\$8.0
TOTAL REVENUE	\$492.7	\$528.8	\$597.3	\$699.4	\$800.2	\$884.7	\$969.4	\$1,060.8	\$1,159.4	\$1,078.0	\$8,270.8
CLOSING CASH BALANCE	(\$1,439.4)	(\$1,927.4)	(\$1,517.0)	(\$1,008.1)	(\$961.1)	(\$1,027.5)	(\$1,028.4)	(\$957.2)	(\$807.2)	\$0.0	

2023 Adjusted Charge Per Square Metre

\$7.99

Allocation of Capital Program

Residential Sector	75.6%
Retail	9.5%
Non-Retail	15.0%

Rates for 2023

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

Appendix B.3

Parks and Recreation

Parks and Recreation

The City of Barrie Parks and Recreation Department is responsible for the indoor and outdoor recreation and leisure needs of the community, including the provision and maintenance of arenas, facilities, recreation services, and the provision and maintenance of parks and programs to the residents of Barrie. The City currently offers indoor recreation services from 12 facilities across the City; including Allandale Community Centre, the Sadlon Centre (formerly the Barrie Molson Centre), the East Bayfield Community Centre, and others. The City offers 1,330 hectares of developed parkland and an array of parks facilities including playgrounds, soccer fields and baseball diamonds. The following discusses the individual components included in the Parks and Recreation service category. The analysis is set out in the tables which follow.

Table B.3-1	Historical Service Levels and Calculation of 15-Year Average Service Level
Table B.3-2	2023-2032 Development-Related Capital Forecast and Calculation of the Growth-Related Net Capital Costs
Table B.3-3	Cash Flow Analysis

A. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

Table B.3-1 displays the Parks and Recreation 15-year historical inventory for buildings, land, equipment, park facilities, parkland, park buildings, and parks fleet. The building space associated with indoor recreation facilities amounts to 437,340 square feet, valued at \$336.75 million. The land associated with the buildings amount to 13.16 hectares, and is valued at \$46.05 million. The equipment found in the facilities has a total value of \$102,000. The Parks

buildings include washrooms, concession, storage, stadium, pavilions, and other features for a replacement value of \$18.19 million.

Parkland in the City includes regional parks, district parks, community parks, neighbourhood parks, village squares, open space, and trails, with a replacement value of \$277.57 million. Replacement values for Parkland in Barrie include the cost of park amenities (e.g. playgrounds, baseball diamonds, tennis courts etc.) but exclude land costs. Parks fleet and equipment is extensive in the City at 105 items that have a combined value of \$9.07 million. The 2022 full replacement value of the inventory of capital assets for Parks and Recreation amounts to \$687.73 million.

The historical service level multiplied by the 10-year forecast of net population growth results in a 10-year maximum allowable funding envelope of \$254.25 million (54,830 net population growth X historical service level of \$4,637.13/capita). Table 1 provides a summary of the level of service and the calculation of the 10-year funding envelope from 2023 to 2032. The calculation of the maximum allowable funding envelope is summarized as follows:

10-Year Funding Envelope Calculation

15-Year Average Service Level (2008 – 2022)	\$4,637.13
Net Pop. Growth (2023 – 2032)	54,830
Maximum Allowable Funding Envelope	\$254,253,838

B. Development-Related Capital Program

The Parks and Recreation capital program includes the recovery of Parkland Development for Former Barrie, Salem & Hewitt’s Secondary Plan Area, and other locations in Barrie. These developments include sports fields, play courts, tennis courts, ball diamonds, splash pads, playgrounds, skateboard

parks, pickleball courts, cricket pitches, volleyball courts, and other types of parks throughout the City.

Former Barrie has \$31.70 million in growth-related costs, with \$15.59 million removed as benefit to existing shares. Approximately, \$6.96 million of available DC reserves will be used in the planning period and is removed from the DC eligible shares of these projects. In total, \$5.67 million will be considered post-period and recovered under subsequent DC Study updates, with the remaining \$3.48 million eligible for in-period DC recovery.

Salem & Hewitt's Secondary Plan Area has \$11.50 million in growth-related costs, and are considered to be fully DC eligible. A total of \$2.96 million of available DC reserves will be applied to projects occurring in the initial years of the planning period and \$6.83 million will be considered a post-period benefit. The remaining \$1.71 million is an in-period DC eligible cost.

Other Park Development in Barrie has \$17.68 million in growth-related costs, with no benefit to existing shares as it relates to the construction of net new assets. Approximately, \$1.77 million of available DC reserves will be applied to project occurring in the initial years of the planning period. A further \$14.14 million will be considered a post-period benefit, with the remaining \$1.77 million eligible for in-period DC recovery.

Parkland Development for Off-Road and Hiking Trails are included for the Former Boundary and Salem and Hewitt's areas for a gross total of \$45.76 million. Both projects have a 40% benefit to existing share allocation which is consistent with the Roads and Related active transportation infrastructure allocation. Recognizing that these projects extend beyond the 10-year planning horizon of 2032, approximately \$16.47 million has been identified as a post-period benefit and will be included for recovery as part of subsequent DC Background Studies. The remaining \$10.98 million is included as an in-period DC eligible share.

Two new Recreation Facilities in the City – in Salem and Hewitt’s – are included in the capital program, amounting to \$324.27 million. There are no benefit to the existing shares. Of this amount, \$15.37 will be funded from the available DC reserve balance and a further \$73.22 million is allocated to post-period. The remaining costs, \$235.68 million, are considered to benefit development within the planning period.

The City will also purchase \$3.50 million in fleet across the City of Barrie over the 10-year planning period to service new growth in the Former Boundary. To service growth in the Salem and Hewitt’s area, \$1.32 million of fleet will be purchased over the 10-year planning period. Approximately \$4.18 million in reserves will be used, therefore the remaining \$640,000 will be funded in the planning period.

The total 2023 – 2032 DC costs eligible for recovery amount to \$254.25 million which is allocated entirely against future residential development in the City of Barrie. This results in an unadjusted development charge of \$4,456.61 per capita.

C. Cash Flow Analysis

After cash flow and reserve fund consideration, the residential calculated charge increases to \$4,474.61 per capita. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the parks and recreation development charge:

PARKS AND RECREATION SUMMARY								
15-year Hist. Service Level per capita	2023 - 2032 Development-Related Capital Program		\$/capita	Unadjusted Development Charge		\$/capita	Adjusted Development Charge	
	Total	Net DC Recoverable		Retail \$/sq.m	Non-Retail\$/sq.m		Retail \$/sq.m	Non- Retail \$/sq.m
\$4,637.13	\$435,732,614	\$254,253,838	\$4,456.61	\$0.00	\$0.00	\$4,474.65	\$0.00	\$0.00

**APPENDIX B.3
TABLE B.3-1**

**CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION**

BUILDINGS Facility Name	# of Square Feet															UNIT COST
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	(\$/sq.ft.)
Allandale-Phase 1 & 2	121,383	121,383	121,383	121,383	121,383	121,383	121,383	121,383	121,383	121,383	121,383	121,383	121,383	121,383	121,383	\$820
Sadlon Centre (Barrie Molson Centre) ¹	66,237	66,237	66,237	66,237	66,237	66,237	66,237	66,237	66,237	66,237	66,237	66,237	66,237	66,237	66,237	\$730
Parkview Community Centre-Original and Addition	16,200	16,200	16,200	16,200	16,200	16,200	16,200	16,200	16,200	16,200	16,200	16,200	16,200	16,200	16,200	\$820
Southshore Community Centre	19,536	19,536	19,536	19,536	19,536	19,536	19,536	19,536	19,536	19,536	19,536	19,536	19,536	19,536	19,536	\$820
Barrie Arena	55,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$730
Eastview Arena	25,005	25,005	30,042	30,042	30,042	30,042	30,042	30,042	30,042	30,042	30,042	30,042	30,042	30,042	30,042	\$820
Lampman Land Community Centre	12,895	12,895	12,895	12,895	12,895	12,895	12,895	12,895	12,895	12,895	12,895	12,895	12,895	12,895	12,895	\$730
Dorian Parker Community Centre	7,847	7,847	7,847	7,847	7,847	7,847	7,847	7,847	7,847	7,847	7,847	7,847	7,847	7,847	7,847	\$730
East Bayfield Community Centre	152,331	152,331	152,331	152,331	152,331	152,331	152,331	152,331	152,331	152,331	152,331	152,331	152,331	152,331	152,331	\$730
70 Collier St. (Parks & Rec. Share = 6.74%)	6,405	6,405	6,405	6,405	6,405	6,405	6,405	6,405	6,405	6,405	6,405	6,405	6,405	6,405	6,405	\$780
Circle at the Centre	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	\$780
Victoria Village	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	-	-	-	-	-	-	-	\$65
Sports Dome (Building only)	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	\$820
Queens Park Tennis Court Building	883	883	883	883	883	883	883	883	883	883	883	883	883	883	883	\$780
Total (sq.ft.)	488,435	433,435	438,472	438,472	438,472	438,472	438,472	438,472	437,342	437,342	437,342	437,342	437,342	437,342	437,342	
Total (\$000)	\$372,841.3	\$332,691.3	\$336,822.1	\$336,822.1	\$336,822.1	\$336,822.1	\$336,822.1	\$336,822.1	\$336,749.1	\$336,749.1	\$336,749.1	\$336,749.1	\$336,749.1	\$336,749.1	\$336,749.1	

(1) Total GFA of Sadlon Centre is 110,395. 60% is attributed to community use

**APPENDIX B.3
TABLE B.3-1**

**CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION**

LAND Facility Name	# of Hectares															UNIT COST (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Allandale-Phase 1 & 2	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	\$3,500,000
Sadlon Centre (Barrie Molson Centre) ¹	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	\$3,500,000
Parkview Community Centre-Original and Addition	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	\$3,500,000
Southshore Community Centre	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	\$3,500,000
Barrie Arena	0.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$3,500,000
Eastview Arena	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	\$3,500,000
Lampman Land Community Centre	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	\$3,500,000
Dorian Parker Community Centre	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$3,500,000
East Bayfield Community Centre	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	3.81	\$3,500,000
70 Collier St. (Parks & Rec. Share = 6.74%)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$3,500,000
Circle at the Centre	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$3,500,000
Victoria Village	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-	-	-	-	-	-	-	\$3,500,000
Sports Dome (Building only)	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	\$3,500,000
Queens Park Tennis Court Building	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$3,500,000
Total (ha)	13.53	13.17	13.17	13.17	13.17	13.17	13.17	13.17	13.16	13.16	13.16	13.16	13.16	13.16	13.16	
Total (\$000)	\$47,359.4	\$46,082.1	\$46,082.1	\$46,082.1	\$46,082.1	\$46,082.1	\$46,082.1	\$46,082.1	\$46,047.1	\$46,047.1	\$46,047.1	\$46,047.1	\$46,047.1	\$46,047.1	\$46,047.1	

(1) Total land area of Sadlon Centre is 0.61 ha. 60% is attributed to community use

EQUIPMENT Description	Value of Equipment															
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Floor Scrubbers	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	
Allandale Recreation Centre-Security system (CCTV)	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	
Security upgrade (CCTV)-East Bayfield Centre	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	
Total (\$000)	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	\$102.0	

**APPENDIX B.3
TABLE B.3-1**

**CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
OUTDOOR BUILDINGS**

PARK BUILDINGS Facility Name	# of Square Feet															UNIT COST
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	(\$/sq.ft.)
Queens Park Concession/Storage	484	484	484	484	484	484	484	484	484	484	484	484	484	484	484	\$780
Centennial Concession	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	1,163	\$780
Heritage Park Washrooms	2,895	2,895	2,895	2,895	2,895	2,895	2,895	2,895	2,895	2,895	2,895	2,895	2,895	2,895	2,895	\$780
Tyndale Park Washrooms	2,110	2,110	2,110	2,110	2,110	2,110	2,110	2,110	2,110	2,110	2,110	2,110	2,110	2,110	2,110	\$780
St. Vincent Park Washrooms	301	301	301	301	301	301	301	301	301	301	786	786	786	786	786	\$780
MacMorrison Park Washrooms	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	\$780
Johnson Beach Washrooms	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	\$780
Minets Point Washrooms	1,518	1,518	1,518	1,518	1,518	1,518	1,518	1,518	1,518	1,518	1,518	1,518	1,518	1,518	1,518	\$780
Queens Park Washrooms	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	\$780
Shear Park Washrooms	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	\$780
Centennial Park Washrooms	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	3,488	\$780
Barrie Community Sports Park - Pump House	301	301	301	301	301	301	301	301	301	301	301	301	301	301	301	\$390
Barrie Community Sports Park - Electrical Vaults	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	\$170
Barrie Community Sports Park - Drive Shed	-	-	-	-	-	-	-	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	\$70
Barrie Community Sports Park - Concession storage portable	872	872	872	872	872	872	872	872	872	872	872	872	872	872	872	\$490
Barrie Community Sports Park - Admin. Building	-	-	-	-	-	-	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	\$490
Lion's Pavillion	-	-	-	-	-	-	-	-	-	-	818	818	818	818	818	\$290
Barrie Community Sports Park - Stadium	2,734	2,734	2,734	2,734	2,734	2,734	2,734	2,734	2,734	2,734	2,734	2,734	2,734	2,734	2,734	\$490
Barrie Community Sports Park - Containers	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	\$30
Barrie Community Sports Park - Pavillion, including washrooms	3,455	3,455	3,455	3,455	3,455	3,455	3,455	3,455	3,455	3,455	3,455	3,455	3,455	3,455	3,455	\$440
Barrie Community Sports Park - Fields building (changerooms)	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	1,625	\$440
Centennial Beach (Pavillion Structure)	-	-	-	-	-	-	-	-	-	-	-	1,270	1,270	1,270	1,270	\$440
Total (sq.ft.)	27,082	27,082	27,082	27,082	27,082	27,082	28,277	30,677	30,677	30,677	31,980	33,250	33,250	33,250	33,250	
Total (\$000)	\$16,262	\$16,262	\$16,262	\$16,262	\$16,262	\$16,262	\$16,847	\$17,015	\$17,015	\$17,015	\$17,630	\$18,189	\$18,189	\$18,189	\$18,189	

APPENDIX B.3
TABLE B.3-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARKLAND

DEVELOPED PARKLAND	# of Hectares															UNIT COST¹
Park Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	(\$/ha)
Regional Parks																
Barrie Community Sports Park	47.95	47.95	47.95	47.95	47.95	47.95	47.95	47.95	47.95	47.95	48.92	48.92	48.92	48.92	48.92	\$530,000
Sunnidale Park	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67	\$530,000
District Parks (Excluding Facility Portion)																
Allandale Recreation Center	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$555,000
Centennial Beach North	-	-	-	-	-	-	-	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	\$555,000
Centennial Beach South	11.37	11.37	11.37	11.37	11.37	11.37	11.37	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	\$555,000
East Bayfield Park	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	\$555,000
Eastview Park	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	5.76	5.76	5.76	5.76	5.76	\$555,000
Heritage Park	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.96	2.96	2.96	2.96	2.96	\$555,000
Holly Community Park	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	\$555,000
Lampman Lane Park	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	7.22	7.22	7.22	7.22	7.22	\$555,000
Marina	-	-	-	-	-	-	-	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	\$555,000
South Shore Park	-	-	-	-	-	-	-	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	\$555,000
Tiffin Launch	-	-	-	-	-	-	-	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	\$555,000
Community Parks																
Allandale Station Park	10.84	10.84	10.84	10.84	10.84	10.84	10.84	10.84	10.84	10.84	8.15	8.15	8.15	8.15	8.15	\$592,000
Ferndale Park	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	5.12	5.12	5.12	5.12	5.12	\$592,000
Huron Park North	8.26	8.26	8.26	8.26	8.26	8.26	8.26	8.26	8.26	8.26	11.78	11.78	11.78	11.78	11.78	\$592,000
Lennox Park	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	\$592,000
Marina North	-	-	-	-	-	-	-	1.01	1.01	1.01	2.49	2.49	2.49	2.49	2.49	\$592,000
Military Heritage Park	-	-	-	-	-	-	-	1.05	0.93	1.05	2.59	2.59	2.59	2.59	2.59	\$592,000
Minets Point	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	\$592,000
North Shore Trail	-	-	-	-	-	-	-	6.55	6.55	6.55	6.55	6.55	6.55	6.55	6.55	\$592,000
Painswick Park	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	\$592,000
Queens Park	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	\$592,000
Sandringham	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	9.06	9.06	9.06	9.06	9.06	\$592,000
Shear Park	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	4.27	4.27	4.27	4.27	4.27	\$592,000
Tyndale Park	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	6.18	6.18	6.18	6.18	6.18	\$592,000

APPENDIX B.3
TABLE B.3-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARKLAND

DEVELOPED PARKLAND Park Name	# of Hectares															UNIT COST¹ (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Neighbourhood Parks																
Allandale Heights Park	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	\$800,000
Archie Goodall Park	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	\$800,000
Assikinack Park	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	\$800,000
Barwick Park	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.57	1.57	1.57	1.57	1.57	\$800,000
Batteaux	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	3.02	3.02	3.02	3.02	3.02	\$800,000
Bayshore Park	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	\$800,000
Bear Creek	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.17	3.17	3.17	3.17	3.17	\$800,000
Berczy Park	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.89	0.89	0.89	0.89	0.89	\$800,000
Blair Park	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$800,000
Brock Park	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.56	1.56	1.56	1.56	1.56	\$800,000
Brownwood Park	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.96	0.96	0.96	0.96	0.96	\$800,000
Brunton Park	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	\$800,000
Carter Park	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.46	0.46	0.46	0.46	0.46	\$800,000
Cartwright Park	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	\$800,000
Catherine	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.14	1.14	1.14	1.14	1.14	\$800,000
Cedargrove Park	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	1.31	1.31	1.31	1.31	1.31	\$800,000
Chalmers Park	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	\$800,000
Cheltenham Park	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	\$800,000
Clougheey Park	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	\$800,000
College Heights Park	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	\$800,000
Coronation Park	-	-	-	-	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	\$800,000
Cudia Park	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	\$800,000
Cumming Park	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$800,000
Cundles West Park	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	\$800,000

APPENDIX B.3
TABLE B.3-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARKLAND

DEVELOPED PARKLAND Park Name	# of Hectares															UNIT COST¹ (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Neighbourhood Parks																
D & J Fralick Park	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	3.53	3.53	3.53	3.53	3.53	\$800,000
D'ambrosio Park	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	\$800,000
Dock Road Park	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.33	1.33	1.33	1.33	1.33	\$800,000
Donald St. Park	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	\$800,000
Dunsmore Park	-	-	-	-	-	-	0.81	0.81	0.81	0.81	2.00	2.00	2.00	2.00	2.00	\$800,000
Eccles Park	-	-	-	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.11	0.11	0.11	0.11	0.11	\$800,000
Elizabeth Park	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	\$800,000
Emms Park	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	\$800,000
Ferris Park	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	\$800,000
Gibbon Park	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.78	0.78	0.78	0.78	0.78	\$800,000
Golden Meadow Park	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	\$800,000
Greenfield Park	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	\$800,000
Hanmer Park	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85	0.85	0.85	\$800,000
Harvie Park	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	\$800,000
H.G. Robertson Park	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	0.85	0.85	0.85	0.85	0.85	\$800,000
Hickling Park	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	\$800,000
Highland Park	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	\$800,000
Hurst Park	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	\$800,000
Hyde Park	-	-	-	1.87	1.87	1.87	1.87	1.87	1.87	1.87	4.70	4.70	4.70	4.70	4.70	\$800,000
Irwin Park	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.17	1.17	1.17	1.17	1.17	\$800,000
J Gibbons Park	-	-	-	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$800,000
John Edwin Coupe Park	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	\$800,000
Johnson Beach	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.40	0.40	0.40	0.40	0.40	\$800,000
Kearsey Park	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	\$800,000
Kempfenfelt Park	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	\$800,000
Kozlov Park	-	-	-	-	-	-	-	-	0.68	0.68	1.68	1.68	1.68	1.68	1.68	\$800,000
Kuzmich Park	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	\$800,000
Leacock Park	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	\$800,000
Lions Park	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	\$800,000
Livingstone Park	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	\$800,000
Lonsdale Park	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$800,000
Lougheed Park	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	\$800,000
Loyalist Park	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	1.77	1.77	1.77	1.77	1.77	\$800,000
MacMorrison Park	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	\$800,000
Madelaine Park	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.69	2.69	2.69	2.69	2.69	\$800,000
Maitland Park	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.24	2.24	2.24	2.24	2.24	\$800,000
Mapleton Park	1.35	1.35	1.35	1.35	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	\$800,000

APPENDIX B.3
TABLE B.3-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARKLAND

DEVELOPED PARKLAND Park Name	# of Hectares															UNIT COST¹ (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Neighbourhood Parks																
Marsellus Park	2.66	2.66	2.66	2.66	2.66	2.66	2.66	2.66	2.66	2.66	2.66	2.66	2.66	2.66	2.66	\$800,000
Mayfair Park	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.76	1.76	1.76	1.76	1.76	\$800,000
McConkey Park	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	\$800,000
Monserand Park	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	\$800,000
Nelson Lookout	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.43	0.43	0.43	0.43	0.43	\$800,000
Nelson Square	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	\$800,000
Oates Park	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	1.05	1.05	1.05	1.05	1.05	\$800,000
Osprey Ridge Park	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	\$800,000
Patricia Park	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$800,000
Patterson Place Park	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	\$800,000
Pioneer Park	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	\$800,000
Pringle Park	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	\$800,000
Radenhurst Park	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	1.45	1.45	1.45	1.45	1.45	\$800,000
Redfern Park	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	1.45	1.45	1.45	1.45	1.45	\$800,000
Redpath Park	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	\$800,000
Robin Court	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	\$800,000
Riverwood Park	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	\$800,000
Sam Cancilla Park	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	2.06	2.06	2.06	2.06	2.06	\$800,000
Scott Park	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	\$800,000
Shalom Park	-	-	-	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	\$800,000
Sheppards Park	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.49	0.49	0.49	0.49	0.49	\$800,000
Shoreview Park	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.79	1.79	1.79	1.79	1.79	\$800,000
Snowshoe Park	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	\$800,000
St. Vincent Park	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	\$800,000
Steel St. Park	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	0.99	0.99	0.99	0.99	0.99	\$800,000
Stollar Park	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	\$800,000
Strabane Park	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	\$800,000
Succession Parkette	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.16	0.16	0.16	0.16	0.16	\$800,000
Summerset Park	-	-	-	-	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	\$800,000
Surrey Park	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.34	2.34	2.34	2.34	2.34	\$800,000
Tall Trees	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	1.70	1.70	1.70	1.70	1.70	\$800,000
The Gables	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	14.51	14.51	14.51	14.51	14.51	\$800,000
Tollendal Woods Park	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.71	0.71	0.71	0.71	0.71	\$800,000
Valley View Park North	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.35	0.35	0.35	0.35	0.35	\$800,000
Valley View Park South	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.16	0.16	0.16	0.16	0.16	\$800,000
Vancouver Lookout	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.16	0.16	0.16	0.16	0.16	\$800,000
Veteran's Woods	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	4.70	4.70	4.70	4.70	4.70	\$800,000
Victoria Woods	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	\$800,000
Walnut Crescent Park	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.76	0.76	0.76	0.76	0.76	\$800,000
Wessenger Park	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	\$800,000
Wilkin's Beach	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	\$800,000
Willoughby Park	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	5.30	5.30	5.30	5.30	5.30	\$800,000

APPENDIX B.3
TABLE B.3-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARKLAND

DEVELOPED PARKLAND Park Name	# of Hectares															UNIT COST¹ (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Village Squares																
Pending Development Per Park	-	-	-	-	-	-	-	-	-	-	0.30	0.30	0.30	0.30	0.30	\$2,200,000
Meridian Square	-	-	-	-	-	-	-	-	-	-	-	0.47	0.47	0.47	0.47	\$2,200,000
Environmentally Protected Open Space and Natural Heritage System With Trails																
Ardagh Bluffs	119.00	119.00	119.00	119.00	119.00	119.00	119.00	119.00	119.00	119.00	119.00	119.00	119.00	119.00	119.00	\$82,000
Ardagh Bluffs East	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	\$82,000
Ardagh Bluffs South	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	\$82,000
Ardagh Bluffs West	69.09	69.09	69.09	69.09	69.09	69.09	69.09	69.09	69.09	69.09	69.09	69.09	69.09	69.09	69.09	\$82,000
Audrey Milligan Park	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	\$82,000
Bayshore Ridge West	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	\$82,000
Bear Creek Eco Park	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	\$82,000
Brown's Bush	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	\$82,000
Bunkers Creek Eco Park	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	\$82,000
Dyments Pond	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	\$82,000
Hewitts Creek East	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	\$82,000
Hewitts Creek North	17.59	17.59	17.59	17.59	17.59	17.59	17.59	17.59	17.59	17.59	17.59	17.59	17.59	17.59	17.59	\$82,000
Hewitts Creek Ravine	12.47	12.47	12.47	12.47	12.47	12.47	12.47	12.47	12.47	12.47	12.47	12.47	12.47	12.47	12.47	\$82,000
Hewitts Creek South	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	\$82,000
Lovers Creek Ravine Hurst	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	\$82,000
Lovers Creek Ravine Tollendale	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	\$82,000
Loyalist Woods	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	\$82,000
Molson Centre Woods	10.88	10.88	10.88	10.88	10.88	10.88	10.88	10.88	10.88	10.88	10.88	10.88	10.88	10.88	10.88	\$82,000
Renny Deboer's Woods	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	\$82,000
Sandy Hollow Buffer	100.64	100.64	100.64	100.64	100.64	100.64	100.64	100.64	100.64	100.64	100.64	100.64	100.64	100.64	100.64	\$82,000
Sandy Hollow Ravine	26.32	26.32	26.32	26.32	26.32	26.32	26.32	26.32	26.32	26.32	26.32	26.32	26.32	26.32	26.32	\$82,000
Saunders Access	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	\$82,000
Strabane Corridor North	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	\$82,000
Strabane Corridor South	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$82,000
Sunnidale Natural Area	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76	\$82,000
Walnut Crescent	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	\$82,000
Whiskey Creek Walk	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	\$82,000

**APPENDIX B.3
TABLE B.3-1**

**CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARKLAND**

DEVELOPED PARKLAND Park Name	# of Hectares															UNIT COST¹
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	(\$/ha)
Environmentally Protected Open Space and Natural Heritage System (Excluding Trails)																
Anne St N Buffer	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$15,000
Anne St Natural Area	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	\$15,000
Austen Ravine East	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	\$15,000
Austen Ravine West	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	\$15,000
Bayshore Ridge Buffer	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$15,000
Bayshore Ridge East	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	\$15,000
Bayview East Natural Area	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	\$15,000
Bayview West Natural Area	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	\$15,000
Bayview Woods East	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	\$15,000
Bayview Woods West	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	\$15,000
Bear Creek Corridor	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	\$15,000
Benson Natural Area	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$15,000
Brunton Parcel	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$15,000
Bunkers West	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$15,000
Camelot Woods	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$15,000
Cloughley Woods	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$15,000
Cumberland Natural Area	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$15,000
Dock Road Buffer East	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$15,000
Dock Road Buffer West	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	\$15,000
Dock Road Park South	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	\$15,000
Dyments Creek East Innisfil St	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	\$15,000
Dyments Creek East John St	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	\$15,000
Dyments Creek South	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	\$15,000
Dyments Creek West Anne	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	\$15,000
Dyments Creek West George	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	\$15,000
Dyments Creek West Victoria	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	\$15,000
Eccles Natural Area	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	\$15,000
Edgehill Open Space	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$15,000
Ellis Natural Area	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	\$15,000
Essa (Future Development)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	\$15,000
Essa Open Space	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	\$15,000
Garibaldi Lookout	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$15,000
Georgian Fields 2	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$15,000
Georgian Wetlands	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	\$15,000
Grandforest Open Space	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$15,000
Grove St Natural Area	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	\$15,000
Hanmer Natural Area	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	\$15,000
Harvie Road Greenbelt	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	\$15,000
Hogan's Woods	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	\$15,000
Hollywoods Ravine East	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	\$15,000
Hollywoods Ravine South	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	\$15,000
Hollywoods Ravine West	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	\$15,000
Huron Industrial Buffer South	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	\$15,000

**APPENDIX B.3
TABLE B.3-1**

**CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARKLAND**

DEVELOPED PARKLAND Park Name	# of Hectares															UNIT COST¹
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	(\$/ha)
Environmentally Protected Open Space and Natural Heritage System (Excluding Trails)																
Huronia Natural Area	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$15,000
Innisfil St Open Space	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$15,000
Kozlov Open Space	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$15,000
Lackies Bush East	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	\$15,000
Lackies Bush West	20.46	20.46	20.46	20.46	20.46	20.46	20.46	20.46	20.46	20.46	20.46	20.46	20.46	20.46	20.46	\$15,000
Little Lake Park East	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	\$15,000
Little Lake Park North	81.26	81.26	81.26	81.26	81.26	81.26	81.26	81.26	81.26	81.26	81.26	81.26	81.26	81.26	81.26	\$15,000
Little Lake Park North West	119.74	119.74	119.74	119.74	119.74	119.74	119.74	119.74	119.74	119.74	119.74	119.74	119.74	119.74	119.74	\$15,000
Little Lake Park South	17.91	17.91	17.91	17.91	17.91	17.91	17.91	17.91	17.91	17.91	17.91	17.91	17.91	17.91	17.91	\$15,000
Little Lake Park South West	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	\$15,000
Lovers Creek Country Lane	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	\$15,000
Lovers Creek Ravine	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	\$15,000
Lovers Creek Ravine Chalmers	32.16	32.16	32.16	32.16	32.16	32.16	32.16	32.16	32.16	32.16	32.16	32.16	32.16	32.16	32.16	\$15,000
Lovers Creek Ravine Huronia	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	\$15,000
Lovers Creek Ravine Huronia	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$15,000
Lovers Creek Ravine South	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	15.29	\$15,000
Lovers Creek Ravine Yonge	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	7.98	\$15,000
Mayfair Open Space	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$15,000
Melinda Woods	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$15,000
Minets Point Rd Natural Area	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	\$15,000
Northland Park Natural Area	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	\$15,000
Northview Twp North	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$15,000
Osprey Ridge East	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	\$15,000
Osprey Ridge West	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	\$15,000
Parkdale Natural Area	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$15,000
Patterson Place Natural Area	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	\$15,000
Redfern Natural Area	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$15,000
Riverwood Ravine	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	\$15,000
Rotary Fish Habitat Island East	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$15,000
Rotary Fish Habitat Island West	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$15,000
Royal Oak Facility	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$15,000
Shalom Natural Area	17.98	17.98	17.98	17.98	17.98	17.98	17.98	17.98	17.98	17.98	17.98	17.98	17.98	17.98	17.98	\$15,000
Sophia Creek 1	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$15,000
Sophia Creek 2	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$15,000
Sophia Creek 3	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$15,000
Sophia Creek 4	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$15,000
Sundew Corridor	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	\$15,000
Sunnidale Buffer	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$15,000
The Gables West	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	\$15,000
Vine Crescent Natural Area	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	\$15,000
Welham East Natural Area	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	\$15,000
Welham Open Space	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	\$15,000
Wilkins Beach Natural Area	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	\$15,000
Woodcrest Ravine	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$15,000
Total (ha)	1,246.33	1,246.33	1,246.33	1,249.55	1,255.18	1,253.14	1,255.99	1,270.73	1,270.61	1,270.73	1,330.61	1,331.08	1,331.08	1,331.08	1,331.08	
Total (\$000)	\$215,319.9	\$215,319.9	\$215,319.9	\$217,895.9	\$222,399.9	\$221,192.2	\$223,047.9	\$231,713.7	\$231,642.7	\$231,713.7	\$276,539.5	\$277,573.5	\$277,573.5	\$277,573.5	\$277,573.5	

(1) Per hectare unit costs include the cost of park amenities

**APPENDIX B.3
TABLE B.3-1**

**CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
FLEET**

PARKS FLEET Vehicle Name	# of Vehicles															UNIT COST (\$/vehicle)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Light Duty Vehicles	18	18	18	18	18	18	18	18	18	18	18	18	17	17	17	\$52,300
Forestry Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$426,500
Truck with Crane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$279,800
Maintenance Truck c/w Crane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$122,400
Park Maintenance Vehicle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$174,900
Water Truck	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$102,300
Tractor	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	\$98,200
Larger Mover (15' cut)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$189,700
Mower, Bobcats, etc.	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	\$60,500
One Ton Dump Truck	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$72,700
All Terrain Vehicle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$24,200
Snowmobile	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$17,500
Wood Chipper	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$74,000
Electric Fork Lift	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$60,500
Forestry Truck (mid size)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$153,400
Large Cub Van	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$83,400
Mower 12'	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$87,500
Skid Steer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$157,400
Utility Vehicle (gator style)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	\$30,900
Stumper	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$39,000
Vacuum /Compactors	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$232,800
Groomers (ball diamond)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$33,600
Light Duty Trucks	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$60,500
4 x 4/Plow	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$76,700
Cube Van	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$83,400
Fork Lift	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$61,900
Ice Resurfacers	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	\$139,900
Marina Boat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$30,900
Rentals	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	\$63,200
Beach groomer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$39,000
GVD Overseeder 1275	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$28,900
GLE Broadcast Spreader	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$10,300
Kubota Mulcher	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$18,600
Total (#)	103	103	103	103	103	103	103	103	103	103	103	106	105	105	105	
Total (\$000)	\$ 8,751.2	\$ 8,751.2	\$ 8,751.2	\$ 8,751.2	\$ 8,751.2	\$ 8,751.2	\$ 8,751.2	\$ 8,751.2	\$ 8,751.2	\$ 8,751.2	\$ 8,751.2	\$ 8,809.0	\$ 8,756.7	\$ 8,756.7	\$ 8,756.7	

PARKS EQUIPMENT Vehicle Name	# of Vehicles															UNIT COST (\$/unit)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Radio Towers (Shared with other services)	0.34	0.34	0.34	0.34	0.34	0.34	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$754,800
Total (#)	0.34	0.34	0.34	0.34	0.34	0.34	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	
Total (\$000)	\$ 256.6	\$ 256.6	\$ 256.6	\$ 256.6	\$ 256.6	\$ 256.6	\$ 309.5	\$ 309.5	\$ 309.5	\$ 309.5	\$ 309.5	\$ 309.5	\$ 309.5	\$ 309.5	\$ 309.5	

APPENDIX B.3
TABLE B.3-1

CITY OF BARRIE
CALCULATION OF SERVICE LEVELS
PARKS AND RECREATION

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Historical Population	131,431	132,957	134,501	136,063	137,121	138,187	139,261	140,343	141,434	142,690	143,958	145,237	146,527	147,829	152,641

INVENTORY SUMMARY (\$000)

Indoor Recreation	\$420,302.7	\$378,875.4	\$383,006.1	\$383,006.1	\$383,006.1	\$383,006.1	\$383,006.1	\$383,006.1	\$382,898.2	\$382,898.2	\$382,898.2	\$382,898.2	\$382,898.2	\$382,898.2	\$382,898.2
Outdoor Buildings	\$16,261.8	\$16,261.8	\$16,261.8	\$16,261.8	\$16,261.8	\$16,261.8	\$16,847.2	\$17,015.3	\$17,015.3	\$17,015.3	\$17,630.3	\$18,189.2	\$18,189.2	\$18,189.2	\$18,189.2
Parkland	\$215,319.9	\$215,319.9	\$215,319.9	\$217,895.9	\$222,399.9	\$221,192.2	\$223,047.9	\$231,713.7	\$231,642.7	\$231,713.7	\$276,539.5	\$277,573.5	\$277,573.5	\$277,573.5	\$277,573.5
Parks Fleet	\$8,751.2	\$8,751.2	\$8,751.2	\$8,751.2	\$8,751.2	\$8,751.2	\$8,751.2	\$8,751.2	\$8,751.2	\$8,751.2	\$8,751.2	\$8,809.0	\$8,756.7	\$8,756.7	\$8,756.7
Parks Equipment	\$256.6	\$256.6	\$256.6	\$256.6	\$256.6	\$256.6	\$309.5	\$309.5	\$309.5	\$309.5	\$309.5	\$309.5	\$309.5	\$309.5	\$309.5
Total (\$000)	\$660,892.2	\$619,464.9	\$623,595.6	\$626,171.6	\$630,675.6	\$629,467.9	\$631,961.9	\$640,795.8	\$640,616.8	\$640,687.8	\$686,128.6	\$687,779.3	\$687,727.0	\$687,727.0	\$687,727.0

SERVICE LEVEL (\$/capita)

Average
Service
Level

Indoor Recreation	\$3,197.9	\$2,849.6	\$2,847.6	\$2,814.9	\$2,793.2	\$2,771.7	\$2,750.3	\$2,729.1	\$2,707.3	\$2,683.4	\$2,659.8	\$2,636.4	\$2,613.2	\$2,590.1	\$2,508.5	\$2,743.52
Outdoor Buildings	\$123.7	\$122.3	\$120.9	\$119.5	\$118.6	\$117.7	\$121.0	\$121.2	\$120.3	\$119.2	\$122.5	\$125.2	\$124.1	\$123.0	\$119.2	\$121.24
Parkland	\$1,638.27	\$1,619.47	\$1,600.88	\$1,601.43	\$1,621.92	\$1,600.67	\$1,601.65	\$1,651.05	\$1,637.81	\$1,623.90	\$1,920.97	\$1,911.18	\$1,894.35	\$1,877.67	\$1,818.47	\$1,707.98
Parks Fleet	\$66.58	\$65.82	\$65.06	\$64.32	\$63.82	\$63.33	\$62.84	\$62.36	\$61.87	\$61.33	\$60.79	\$60.65	\$59.76	\$59.24	\$57.37	\$62.34
Parks Equipment	\$1.95	\$1.93	\$1.91	\$1.89	\$1.87	\$1.86	\$2.22	\$2.21	\$2.19	\$2.17	\$2.15	\$2.13	\$2.11	\$2.09	\$2.03	\$2.05
Total (\$/capita)	\$5,028.4	\$4,659.1	\$4,636.4	\$4,602.1	\$4,599.4	\$4,555.2	\$4,538.0	\$4,565.9	\$4,529.4	\$4,490.1	\$4,766.2	\$4,735.6	\$4,693.5	\$4,652.2	\$4,505.5	\$4,637.13

CITY OF BARRIE
CALCULATION OF MAXIMUM ALLOWABLE FUNDING ENVELOPE
PARKS AND RECREATION

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2008 - 2022	\$4,637.13
Net Population Growth 2023 - 2032	54,830
Maximum Allowable Funding Envelope	\$254,253,838

APPENDIX B.3

TABLE B.3-2

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS AND RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
3.0 PARKS AND RECREATION										
3.1 Parkland Development - Former Barrie										
3.1.1 Sandringham V (Craigmel)	2023 - 2023	\$ 355,000	\$ -	\$ 355,000	0%	\$ -	\$ 355,000	\$ 355,000	\$ -	\$ -
3.1.2 Sandringham VI (Gilroy)	2023 - 2023	\$ 170,704	\$ -	\$ 170,704	0%	\$ -	\$ 170,704	\$ 170,704	\$ -	\$ -
3.1.3 Sproule (Previn Court)	2023 - 2023	\$ 757,000	\$ -	\$ 757,000	0%	\$ -	\$ 757,000	\$ 757,000	\$ -	\$ -
3.1.4 Play Court Construction and Replacement Program	2023 - 2032	\$ 2,090,000	\$ -	\$ 2,090,000	74%	\$ 1,537,659	\$ 552,341	\$ 552,341	\$ -	\$ -
3.1.5 Rectangular Sports Fields - Artificial Turf (1)	2023 - 2041	\$ 2,960,000	\$ -	\$ 2,960,000	0%	\$ -	\$ 2,960,000	\$ 740,000	\$ 444,000	\$ 1,776,000
3.1.6 Lit Major Ball Diamond (4)	2023 - 2041	\$ 3,664,000	\$ -	\$ 3,664,000	0%	\$ -	\$ 3,664,000	\$ 916,000	\$ 549,600	\$ 2,198,400
3.1.7 Unlit Multi-use Court (7)	2023 - 2041	\$ 471,000	\$ -	\$ 471,000	0%	\$ -	\$ 471,000	\$ 117,750	\$ 70,650	\$ 282,600
3.1.8 Pickleball Court (4)	2023 - 2041	\$ 700,000	\$ -	\$ 700,000	0%	\$ -	\$ 700,000	\$ 175,000	\$ 105,000	\$ 420,000
3.1.9 Splash Pad (2)	2023 - 2041	\$ 750,000	\$ -	\$ 750,000	0%	\$ -	\$ 750,000	\$ 187,500	\$ 112,500	\$ 450,000
3.1.10 Skateboard Park - Major (2)	2023 - 2041	\$ 908,000	\$ -	\$ 908,000	0%	\$ -	\$ 908,000	\$ 227,000	\$ 136,200	\$ 544,800
3.1.11 Painswick Park Rehabilitation	2023 - 2023	\$ 1,900,000	\$ -	\$ 1,900,000	74%	\$ 1,397,872	\$ 502,128	\$ 502,128	\$ -	\$ -
3.1.12 Heritage Park Redevelopment	2024 - 2027	\$ 11,300,000	\$ -	\$ 11,300,000	80%	\$ 9,040,000	\$ 2,260,000	\$ 2,260,000	\$ -	\$ -
3.1.13 Sam Cancilla Park Redevelopment	2028 - 2032	\$ 2,510,000	\$ -	\$ 2,510,000	50%	\$ 1,255,000	\$ 1,255,000	\$ -	\$ 1,255,000	\$ -
3.1.14 Johnson's Beach Redevelopment	2028 - 2032	\$ 1,465,000	\$ -	\$ 1,465,000	80%	\$ 1,172,000	\$ 293,000	\$ -	\$ 293,000	\$ -
3.1.15 Tyndale Park Redevelopment	2028 - 2032	\$ 1,700,000	\$ -	\$ 1,700,000	70%	\$ 1,190,000	\$ 510,000	\$ -	\$ 510,000	\$ -
Subtotal Parkland Development - Former Barrie		\$ 31,700,704	\$ -	\$ 31,700,704		\$ 15,592,531	\$ 16,108,173	\$ 6,960,423	\$ 3,475,950	\$ 5,671,800
3.2 Parkland Development - Salem & Hewitt's Secondary Plan Areas										
3.2.1 Bullut Subdivision New Park Development - Hewitts Park 10H - Village Square	2023 - 2023	\$ 111,700	\$ -	\$ 111,700	0%	\$ -	\$ 111,700	\$ 111,700	\$ -	\$ -
3.2.2 Rectangular Sports Fields - Lit (2)	2023 - 2041	\$ 1,345,000	\$ -	\$ 1,345,000	0%	\$ -	\$ 1,345,000	\$ 336,250	\$ 201,750	\$ 807,000
3.2.3 Lit Major Ball Diamond (2)	2023 - 2041	\$ 1,832,000	\$ -	\$ 1,832,000	0%	\$ -	\$ 1,832,000	\$ 458,000	\$ 274,800	\$ 1,099,200
3.2.4 Lit Tennis Court (4)	2023 - 2041	\$ 700,000	\$ -	\$ 700,000	0%	\$ -	\$ 700,000	\$ 175,000	\$ 105,000	\$ 420,000
3.2.5 Unlit Multi-use Court (6)	2023 - 2041	\$ 404,000	\$ -	\$ 404,000	0%	\$ -	\$ 404,000	\$ 101,000	\$ 60,600	\$ 242,400
3.2.6 Basketball Court (2)	2023 - 2041	\$ 160,000	\$ -	\$ 160,000	0%	\$ -	\$ 160,000	\$ 40,000	\$ 24,000	\$ 96,000
3.2.7 Splash Pad (2)	2023 - 2041	\$ 875,000	\$ -	\$ 875,000	0%	\$ -	\$ 875,000	\$ 218,750	\$ 131,250	\$ 525,000
3.2.8 Playground - Enhanced (2)	2023 - 2041	\$ 1,040,000	\$ -	\$ 1,040,000	0%	\$ -	\$ 1,040,000	\$ 260,000	\$ 156,000	\$ 624,000
3.2.9 Playground - Standard (25)	2023 - 2041	\$ 4,125,000	\$ -	\$ 4,125,000	0%	\$ -	\$ 4,125,000	\$ 1,031,250	\$ 618,750	\$ 2,475,000
3.2.10 Skateboard Park - Major (2)	2023 - 2041	\$ 908,000	\$ -	\$ 908,000	0%	\$ -	\$ 908,000	\$ 227,000	\$ 136,200	\$ 544,800
Subtotal Parkland Development - Salem & Hewitt's Secondary Plan Areas		\$ 11,500,700	\$ -	\$ 11,500,700		\$ -	\$ 11,500,700	\$ 2,958,950	\$ 1,708,350	\$ 6,833,400
3.3 Parkland Development - Unidentified Location										
3.3.1 Rectangular Sports Fields - Artificial Turf (2)	2023 - 2041	\$ 5,920,000	\$ -	\$ 5,920,000	0%	\$ -	\$ 5,920,000	\$ 592,000	\$ 592,000	\$ 4,736,000
3.3.2 Cricket Pitch (1)	2023 - 2041	\$ 942,000	\$ -	\$ 942,000	0%	\$ -	\$ 942,000	\$ 94,200	\$ 94,200	\$ 753,600
3.3.3 Ball Diamonds (16)	2023 - 2041	\$ 10,763,000	\$ -	\$ 10,763,000	0%	\$ -	\$ 10,763,000	\$ 1,076,300	\$ 1,076,300	\$ 8,610,400
3.3.4 Outdoor Sand Volleyball Court (4)	2023 - 2041	\$ 54,000	\$ -	\$ 54,000	0%	\$ -	\$ 54,000	\$ 5,400	\$ 5,400	\$ 43,200
Subtotal Parkland Development - Unidentified Location		\$ 17,679,000	\$ -	\$ 17,679,000		\$ -	\$ 17,679,000	\$ 1,767,900	\$ 1,767,900	\$ 14,143,200
3.4 Parkland Development - Trails										
3.4.1 Off-Road & Hiking Trails -Former Municipal Boundary	2023 - 2041	\$ 13,577,185	\$ -	\$ 13,577,185	40%	\$ 5,430,874	\$ 8,146,311	\$ -	\$ 3,258,524	\$ 4,887,787
3.4.2 Off-Road & Hiking Trails -Salem & Hewitt's	2023 - 2041	\$ 12,141,903	\$ -	\$ 12,141,903	40%	\$ 4,856,761	\$ 7,285,142	\$ -	\$ 2,914,057	\$ 4,371,085
3.4.3 Trail Bridges	2023 - 2041	\$ 13,344,812	\$ -	\$ 13,344,812	40%	\$ 5,337,925	\$ 8,006,887	\$ -	\$ 3,202,755	\$ 4,804,132
3.4.4 Trail Underpass	2023 - 2041	\$ 6,698,311	\$ -	\$ 6,698,311	40%	\$ 2,679,324	\$ 4,018,986	\$ -	\$ 1,607,594	\$ 2,411,392
Subtotal Parkland Development - Trails		\$ 45,762,210	\$ -	\$ 45,762,210		\$ 18,304,884	\$ 27,457,326	\$ -	\$ 10,982,930	\$ 16,474,396

APPENDIX B.3
TABLE B.3-2

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS AND RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
3.5 Recreation Facilities - Salem & Hewitt's Secondary Plan Areas										
3.5.1 Salem Community Centre New Building Development	2026 - 2031	\$ 139,020,000	\$ -	\$ 139,020,000	0%	\$ -	\$ 139,020,000	\$ -	\$ 139,020,000	\$ -
3.5.2 Hewitt's Community Centre New Building Development	2024 - 2027	\$ 185,250,000	\$ -	\$ 185,250,000	0%	\$ -	\$ 185,250,000	\$ 15,374,222	\$ 96,658,708	\$ 73,217,070
Subtotal Recreation Facilities - Salem & Hewitt's Secondary Plan Areas		\$ 324,270,000	\$ -	\$ 324,270,000		\$ -	\$ 324,270,000	\$ 15,374,222	\$ 235,678,708	\$ 73,217,070
3.6 Parks and Recreation Fleet - Former Barrie										
3.6.1 Roll off Truck - Horticulture	2023 - 2023	\$ 100,000	\$ -	\$ 100,000	0%	\$ -	\$ 100,000	\$ 100,000	\$ -	\$ -
3.6.2 Parks & Forestry Operations New Fleet to Service Growth	2024 - 2025	\$ 2,469,000	\$ -	\$ 2,469,000	0%	\$ -	\$ 2,469,000	\$ 2,469,000	\$ -	\$ -
3.6.3 Mini-excavator	2023 - 2023	\$ 60,000	\$ -	\$ 60,000	0%	\$ -	\$ 60,000	\$ 60,000	\$ -	\$ -
3.6.4 Trail Utility Vehicle - Trail inspections and maintenance	2023 - 2023	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ 25,000	\$ -	\$ -
3.6.5 Stump Grinder	2023 - 2023	\$ 85,000	\$ -	\$ 85,000	0%	\$ -	\$ 85,000	\$ 85,000	\$ -	\$ -
3.6.6 16' large area mower	2023 - 2023	\$ 125,000	\$ -	\$ 125,000	0%	\$ -	\$ 125,000	\$ 125,000	\$ -	\$ -
3.6.7 4x4 Pickup Trucks (5)	2023 - 2028	\$ 175,000	\$ -	\$ 175,000	0%	\$ -	\$ 175,000	\$ -	\$ 175,000	\$ -
3.6.8 4x4 crew cab Pickup Truck (5)	2023 - 2028	\$ 180,000	\$ -	\$ 180,000	0%	\$ -	\$ 180,000	\$ -	\$ 180,000	\$ -
3.6.9 Landscape Trailers (10)	2023 - 2028	\$ 60,000	\$ -	\$ 60,000	0%	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -
3.6.10 Spider Lift (compact unit)	2025 - 2025	\$ 60,000	\$ -	\$ 60,000	0%	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -
3.6.11 Mid-sized Loader	2024 - 2024	\$ 125,000	\$ -	\$ 125,000	0%	\$ -	\$ 125,000	\$ -	\$ 125,000	\$ -
3.6.12 Trail Compactor Unit	2027 - 2027	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ 40,000	\$ -
Subtotal Parks and Recreation Fleet - Former Barrie		\$ 3,504,000	\$ -	\$ 3,504,000		\$ -	\$ 3,504,000	\$ 2,864,000	\$ 640,000	\$ -
3.7 Parks and Recreation Fleet - Salem & Hewitt's Secondary Plan Areas										
3.7.1 Ice Resurfacers (4)	2023 - 2028	\$ 416,000	\$ -	\$ 416,000	0%	\$ -	\$ 416,000	\$ 416,000	\$ -	\$ -
3.7.2 Provision for Additional Parks Vehicles	2023 - 2032	\$ 900,000	\$ -	\$ 900,000	0%	\$ -	\$ 900,000	\$ 900,000	\$ -	\$ -
Subtotal Parks and Recreation Fleet - Salem & Hewitt's Secondary Plan Areas		\$ 1,316,000	\$ -	\$ 1,316,000		\$ -	\$ 1,316,000	\$ 1,316,000	\$ -	\$ -
TOTAL PARKS AND RECREATION		\$ 435,732,614	\$ -	\$ 435,732,614		\$ 33,897,415	\$ 401,835,199	\$ 31,241,495	\$ 254,253,838	\$ 116,339,866

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2032 DC Eligible Costs	100%	\$254,253,838
10-Year Growth in Population in New Units		57,051
Unadjusted Development Charge Per Capita		\$4,456.61
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		357,960
Unadjusted Retail Development Charge Per Square Metre		\$0.00
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		1,004,870
Unadjusted Non-Retail Development Charge Per Square Metre		\$0.00

2023 - 2032 Net Funding Envelope	\$254,253,838
Reserve Fund Balance as at December 31st, 2022	\$31,241,495

APPENDIX B.3

TABLE 3

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARKS AND RECREATION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PARKS AND RECREATION	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$31,241.5	\$51,795.06	\$45,245.85	\$39,068.06	\$9,392.94	(\$21,244.61)	(\$21,265.54)	(\$20,347.11)	(\$18,583.31)	(\$15,907.34)	
2023 - 2032 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$3,103.4	\$6,566.6	\$6,566.6	\$5,332.1	\$5,332.1	\$923.6	\$854.2	\$854.2	\$854.2	\$854.2	\$31,241.5
- Parks And Recreation: Non Inflated	\$1,656.9	\$25,946.6	\$25,881.6	\$48,991.6	\$49,031.6	\$25,238.5	\$25,169.3	\$25,169.3	\$25,169.3	\$1,999.3	\$254,253.8
- Parks And Recreation: Inflated	\$4,760.3	\$33,163.5	\$33,759.1	\$57,648.7	\$58,845.0	\$28,885.0	\$29,306.8	\$29,892.9	\$30,490.7	\$3,410.3	\$310,162.3
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722	57,051
REVENUE											
- DC Receipts: Inflated	\$23,885.7	\$25,025.2	\$26,205.4	\$27,437.1	\$28,707.5	\$30,012.8	\$31,358.9	\$32,726.2	\$34,125.2	\$19,903.9	\$279,387.8
INTEREST											
- Interest on Opening Balance	\$1,093.5	\$1,812.8	\$1,583.6	\$1,367.4	\$328.8	(\$1,168.5)	(\$1,169.6)	(\$1,119.1)	(\$1,022.1)	(\$874.9)	\$831.9
- Interest on In-year Transactions	\$334.7	(\$223.8)	(\$207.7)	(\$830.8)	(\$828.8)	\$19.7	\$35.9	\$49.6	\$63.6	\$288.6	(\$1,299.0)
TOTAL REVENUE	\$25,313.9	\$26,614.2	\$27,581.3	\$27,973.6	\$28,207.5	\$28,864.1	\$30,225.2	\$31,656.7	\$33,166.7	\$19,317.6	\$278,920.8
CLOSING CASH BALANCE	\$51,795.1	\$45,245.9	\$39,068.1	\$9,392.9	(\$21,244.6)	(\$21,265.5)	(\$20,347.1)	(\$18,583.3)	(\$15,907.3)	\$0.0	

2023 Adjusted Charge Per Capita

\$4,474.65

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2023

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

Appendix B.4

Services Related to a Highway: Public Works

Services Related to a Highway: Public Works and Fleet

The City of Barrie Services Related to a Highways is divided into two major areas of responsibilities: Public Works and Fleet, and Roads. This section deals with the capital infrastructure of Services Related to a Highway: Public Works and Fleet. The following discusses the individual components included in the Services Related to a Highway: Public Works and Fleet service category. The analysis is set out in the tables which follow.

Table B.4-1	Historical Service Levels and Calculation of 15-Year Average Service Level
Table B.4-2	2023-2032 Development-Related Capital Forecast and Calculation of the Growth-Related Net Capital Costs
Table B.4-3	Cash Flow Analysis

A. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

The 15-year historical inventory of capital assets for Public Works includes 195,960 square feet of building space with a replacement value of \$71.72 million. The 18.83 hectares of land associated with the Public Works buildings are valued at \$22.22 million, and the total of 211 fleet and equipment amounts to \$35.31 million.

The total replacement value of the Public Works capital infrastructure is estimated to be \$129.25 million. The 15-year historical average service level is \$630.23 per capita and employment and this, multiplied by the 10-year forecast net population and employment growth (73,289), results in a 10-year maximum allowable of \$46.19 million. Table 1 provides a summary of

the level of service and the calculation of the 10-year funding envelope from 2023 to 2032. The calculation of the maximum allowable funding envelope is summarized as follows:

10-Year Funding Envelope Calculation

15-Year Average Service Level (2008 – 2022)	\$630.23
Net Pop. Growth (2023 – 2032)	73,289
Maximum Allowable Funding Envelope	\$46,188,926

B. Development-Related Capital Program

The Public Works development related capital program consists of buildings, fleet, and equipment capital. This includes South Operations Facility located in the Secondary Plan Area for \$121.25 million and a provision for new office space to house Public Works staff (1,000 sq.ft.) for \$780,000. Approximately, \$49.25 million has been removed from the South Operations Facility costs as a benefit to existing share and relates to the anticipated replacement of the RA Archer facility. Fleet acquisitions include growth-related roads, water and wastewater vehicles totaling \$6.31 million. Two new pieces of equipment are anticipated to be purchased in 2024 for winter maintenance, totaling \$285,000.

The gross capital program amounts to \$128.62 million with no grants or recoveries identified. The replacement share of the program is \$49.24 million and is removed from the DC eligible costs. The post-period benefit amounts to \$30.01 million and will be considered for recovery from other funding tools and/or future DC Background Studies. After these adjustments the total DC eligible capital program from 2023-2032 is \$46.19 million.

The costs are allocated 75.6%, or \$34.90 million, against residential development, 9.5%, or \$4.38 million, against non-residential retail development, and 15.0%, or \$6.91 million against non-residential non-retail

development. The allocation between residential and non-residential development is based on shares of forecasted growth. The resulting unadjusted development charge is \$611.69 per capita for residential, \$12.23 per square metre for retail, and \$6.88 per square metre for non-retail.

C. Cash Flow Analysis

After cash flow and reserve fund analysis, the residential calculated charge increases to \$635.19 per capita, the retail charge increases to \$12.60 per square metre, and the non-retail charge increases to \$7.25 per square metre for Public Works and Fleet. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the Services Related to a Highway: Public Works and Fleet development charge:

SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET SUMMARY								
15-year Hist. Service Level per pop & emp	2023 - 2032			Unadjusted			Adjusted	
	Development-Related Capital Program			Development Charge			Development Charge	
	Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non- Retail \$/sq.m
\$630.23	\$128,625,000	\$46,188,926	\$611.69	\$12.23	\$6.88	\$635.19	\$12.60	\$7.25

APPENDIX B.4
TABLE B.4-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET

BUILDINGS Facility Name	# of Square Feet															UNIT COST (\$/sq.ft.)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
R.A. Archer Operations Centre	126,271	126,271	126,271	126,271	126,271	126,271	126,271	126,271	126,271	126,271	126,271	126,271	126,271	126,271	126,271	\$390
Sand Dome	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	5,759	\$180
Salt Shed	8,331	8,331	8,331	8,331	8,331	8,331	8,331	8,331	8,331	8,331	8,331	8,331	8,331	8,331	8,331	\$180
Materials and Equipment Storage Building (Op. Centre)	38,395	38,395	38,395	38,395	38,395	38,395	38,395	38,395	38,395	38,395	38,395	38,395	38,395	38,395	38,395	\$170
70 Collier St. (Traffic & Engineering Share = 18%)	17,201	17,201	17,201	17,201	17,201	17,201	17,201	17,201	17,201	17,201	17,201	17,201	17,201	17,201	17,201	\$780
Total (sq.ft)	195,957	195,957	195,957	195,957	195,957	195,957	195,957	195,957	195,957	195,957	195,957	195,957	195,957	195,957	195,957	
Total (\$000)	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	

LAND Facility Name	# of Hectares															UNIT COST (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
R.A. Archer Operations Centre	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	\$1,180,000
Sand Dome *	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$1,180,000
Salt Shed *	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$1,180,000
Materials and Equipment Storage Building (Op. Centre) *	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$1,180,000
70 Collier St. (Traffic & Engineering Share = 18%)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$1,180,000
Total (ha)	18.83	18.83	18.83	18.83	18.83	18.83	18.83	18.83	18.83	18.83	18.83	18.83	18.83	18.83	18.83	
Total (\$000)	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	

*Included in R.A. Archer Operations Centre HA

APPENDIX B.4
TABLE B.4-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET

FLEET & EQUIPMENT Description	# of Fleet and Small Equipment															UNIT COST (\$/unit)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Snow Plow Truck	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	\$450,000
Sander Truck S/A	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	\$355,000
Leaf Vacuums	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	\$52,000
Snow Blowers	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$597,000
Street Sweepers (mec)	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	\$513,000
Grader	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$339,000
Front End Loader	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$500,000
Dump Trucks (1 Ton)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	\$125,000
Sidewalk Plow/Blowers	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	\$175,000
Tractors	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$87,000
Sewer Truck (repair)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$161,000
Rollers	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$42,000
Aerial Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$175,000
Light Duty Vehicles	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	\$61,000
Street Sweepers (vac)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$826,000
One Ton with U-Box and Crane	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$140,000
One Ton Cube Van	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$83,000
Fork Lift	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$52,000
Sewer Flusher/vac.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$700,000
Gradall	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$348,000
Skidd Steer (with attachments)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$175,000
Pickups 3/4 with snow plow (Traffic)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	\$77,000
Sidewalk Snow removal Units	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	\$175,000
Snow Melter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$787,000
Sidewalk sweeper	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$63,000

APPENDIX B.4
TABLE B.4-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET

FLEET & EQUIPMENT Description	# of Fleet and Small Equipment															UNIT COST (\$/unit)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Stacker	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$141,000
Mid-size sweeper	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$141,000
Tractor(snow melter)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$157,000
Asphalt hot box	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$39,000
Cart mounted traffic line painter	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$19,000
Trailers	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$31,000
Light Duty Trucks	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	\$61,000
Trailers	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$7,000
Light Duty	49	49	49	50	50	50	50	50	50	50	50	50	50	50	50	\$61,000
One Ton Service Trucks	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$115,000
Backhoe	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$188,000
Compressor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$19,000
Sewer/flusher vac	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$700,000
Sewer/flusher vac trailer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$128,000
Trench trailer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$23,000
Large Service Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$150,000
Tandem Dump Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$250,000
Fork Lift	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$54,000
Light Duty Trucks	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	\$61,000
4x4/Plow	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$77,000
Large Mobile Generator	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$133,000
Large Service Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$157,000
Utility Vehicle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$19,000
Weather Stations																
Equipment																
Radio Towers (Shared with other services)	0.34	0.34	0.34	0.34	0.34	0.34	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$755,000
Total (#)	211	211	210	211	211	211	211	211	211	211	211	211	211	211	211	
Total (\$000)	\$35,249.7	\$35,249.7	\$35,197.7	\$35,258.7	\$35,258.7	\$35,258.7	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	

**APPENDIX B.4
TABLE B.4-1**

**CITY OF BARRIE
CALCULATION OF SERVICE LEVELS
SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Historical Population	131,431	132,957	134,501	136,063	137,121	138,187	139,261	140,343	141,434	142,690	143,958	145,237	146,527	147,829	152,641
Historical Employment	61,563	62,217	62,892	63,590	64,392	65,205	66,030	66,866	67,715	69,210	70,730	72,730	73,890	75,330	76,310
Total Historical Population & Employment	192,994	195,174	197,393	199,653	201,513	203,392	205,291	207,209	209,149	211,900	214,688	217,967	220,417	223,159	228,951

INVENTORY SUMMARY (\$000)

Buildings	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7	\$71,725.7
Land	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8	\$22,216.8
Fleet & Equipment	\$35,249.7	\$35,249.7	\$35,197.7	\$35,258.7	\$35,258.7	\$35,258.7	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6	\$35,311.6
Total (\$000)	\$129,192.2	\$129,192.2	\$129,140.2	\$129,201.2	\$129,201.2	\$129,201.2	\$129,254.0	\$129,254.0	\$129,254.0	\$129,254.0	\$129,254.0	\$129,254.0	\$129,254.0	\$129,254.0	\$129,254.0

SERVICE LEVEL (\$/capita)

**Average
Service
Level**

Buildings	\$371.65	\$367.50	\$363.36	\$359.25	\$355.94	\$352.65	\$349.39	\$346.15	\$342.94	\$338.49	\$334.09	\$329.07	\$325.88	\$321.61	\$317.39
Land	\$115.12	\$113.83	\$112.55	\$111.28	\$110.25	\$109.23	\$108.22	\$107.22	\$106.22	\$104.85	\$103.48	\$101.93	\$100.85	\$99.89	\$98.93
Fleet & Equipment	\$182.65	\$180.61	\$178.31	\$176.60	\$174.97	\$173.35	\$172.01	\$170.42	\$168.83	\$166.64	\$164.48	\$162.00	\$159.19	\$156.12	\$152.89
Total (\$/capita)	\$669.41	\$661.93	\$654.23	\$647.13	\$641.16	\$635.23	\$629.61	\$623.79	\$618.00	\$609.98	\$602.06	\$593.00	\$584.93	\$576.62	\$568.21

**CITY OF BARRIE
CALCULATION OF MAXIMUM ALLOWABLE FUNDING ENVELOPE
SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2008 - 2022	\$630.23
Net Population & Employment Growth 2023 - 2032	73,289
Maximum Allowable Funding Envelope	\$46,188,926

APPENDIX B.4
TABLE B.4-2

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2032	Post-Period Benefit*
4.0 SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET										
4.1 Buildings										
4.1.1 South Operations Facility (Secondary Plan Area)	2025 - 2028	\$ 121,250,000	\$ -	\$ 121,250,000	41%	\$ 49,245,811	\$ 72,004,189	\$ -	\$ 41,990,591	\$ 30,013,597
4.1.2 Provision for New Office Space - PW Staff (1,000 sq.ft.)	2025 - 2028	\$ 780,000	\$ -	\$ 780,000	0%	\$ -	\$ 780,000	\$ -	\$ 780,000	\$ -
Subtotal Buildings		\$ 122,030,000	\$ -	\$ 122,030,000		\$ 49,245,811	\$ 72,784,189	\$ -	\$ 42,770,591	\$ 30,013,597
4.2 Fleet										
4.2.1 Growth-Related Fleet (Former Barrie)	2023 - 2032	\$ 1,600,000	\$ -	\$ 1,600,000	0%	\$ -	\$ 1,600,000	\$ 1,600,000	\$ -	\$ -
4.2.2 Growth-Related Fleet (Secondary Plan Area)	2023 - 2032	\$ 1,377,000	\$ -	\$ 1,377,000	0%	\$ -	\$ 1,377,000	\$ 543,665	\$ 833,335	\$ -
4.2.3 Roads Operations New Fleet to Service Growth	2024 - 2024	\$ 1,500,000	\$ -	\$ 1,500,000	0%	\$ -	\$ 1,500,000	\$ -	\$ 1,500,000	\$ -
Wastewater Fleet										
4.2.4 Growth-Related Fleet Wastewater	2023 - 2032	\$ 100,000	\$ -	\$ 100,000	0%	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -
4.2.5 New Vacuum Truck - Wastewater	2025 - 2025	\$ 700,000	\$ -	\$ 700,000	0%	\$ -	\$ 700,000	\$ -	\$ 700,000	\$ -
Water Fleet										
4.2.6 Growth-Related Fleet Water	2023 - 2023	\$ 1,033,000	\$ -	\$ 1,033,000	0%	\$ -	\$ 1,033,000	\$ 1,033,000	\$ -	\$ -
Subtotal Fleet		\$ 6,310,000	\$ -	\$ 6,310,000		\$ -	\$ 6,310,000	\$ 3,176,665	\$ 3,133,335	\$ -
4.3 Equipment										
4.3.1 Downtown Winter Control Intersection Clearing Equipment New Purchase	2024 - 2024	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
4.3.2 New Front End Loader for Downtown Winter Maintenance and Equipment	2024 - 2024	\$ 235,000	\$ -	\$ 235,000	0%	\$ -	\$ 235,000	\$ -	\$ 235,000	\$ -
Subtotal Equipment		\$ 285,000	\$ -	\$ 285,000		\$ -	\$ 285,000	\$ -	\$ 285,000	\$ -
TOTAL SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET		\$ 128,625,000	\$ -	\$ 128,625,000		\$ 49,245,811	\$ 79,379,189	\$ 3,176,665	\$ 46,188,926	\$ 30,013,597

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2032 DC Eligible Costs	75.6%	\$34,897,688
10-Year Growth in Population in New Units		57,051
Unadjusted Development Charge Per Capita		\$611.69
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	9.5%	\$4,379,109
10-Year Growth in Square Metres		357,960
Unadjusted Retail Development Charge Per Square Metre		\$12.23
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	15.0%	\$6,912,129
10-Year Growth in Square Metres		1,004,870
Unadjusted Non-Retail Development Charge Per Square Metre		\$6.88

2023 - 2032 Net Funding Envelope	\$46,188,926
Reserve Fund Balance as at December 31st, 2022	\$3,176,665

**APPENDIX B.4
TABLE 3-1**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$2,400.1	\$4,903.41	\$7,048.64	\$1,667.41	(\$3,334.84)	(\$8,574.82)	(\$14,097.48)	(\$10,609.84)	(\$6,738.22)	(\$2,457.03)	
2023 - 2032 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$942.4	\$162.0	\$162.0	\$162.0	\$162.0	\$162.0	\$162.0	\$162.0	\$162.0	\$162.0	\$2,400.1
- Services Related To A Highway: Public Works And Fleet	\$70.5	\$1,419.2	\$8,678.1	\$8,149.3	\$8,149.3	\$8,149.3	\$70.5	\$70.5	\$70.5	\$70.5	\$34,897.7
- Services Related To A Highway: Public Works And Fleet	\$1,013.0	\$1,612.7	\$9,197.2	\$8,819.9	\$8,996.3	\$9,176.3	\$261.8	\$267.0	\$272.4	\$277.8	\$39,894.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722	57,051
REVENUE											
- DC Receipts: Inflated	\$3,390.6	\$3,552.4	\$3,719.9	\$3,894.8	\$4,075.1	\$4,260.4	\$4,451.5	\$4,645.6	\$4,844.2	\$2,825.4	\$39,660.0
INTEREST											
- Interest on Opening Balance	\$84.0	\$171.6	\$246.7	\$58.4	(\$183.4)	(\$471.6)	(\$775.4)	(\$583.5)	(\$370.6)	(\$135.1)	(\$1,959.0)
- Interest on In-year Transactions	\$41.6	\$33.9	(\$150.6)	(\$135.4)	(\$135.3)	(\$135.2)	\$73.3	\$76.6	\$80.0	\$44.6	(\$206.5)
TOTAL REVENUE	\$3,516.3	\$3,758.0	\$3,816.0	\$3,817.7	\$3,756.4	\$3,653.6	\$3,749.4	\$4,138.7	\$4,553.6	\$2,734.9	\$37,494.5
CLOSING CASH BALANCE	\$4,903.4	\$7,048.6	\$1,667.4	(\$3,334.8)	(\$8,574.8)	(\$14,097.5)	(\$10,609.8)	(\$6,738.2)	(\$2,457.0)	(\$0.0)	

2023 Adjusted Charge Per Capita	\$635.19
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Allocation of Capital Program	
Residential Sector	75.6%
Non-Residential Sector	24.4%
Rates for 2023	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**APPENDIX B.4
TABLE 3-2**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$301.2	\$488.56	\$644.50	(\$129.55)	(\$827.44)	(\$1,525.79)	(\$2,223.50)	(\$1,751.65)	(\$1,212.66)	(\$602.39)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$118.3	\$20.3	\$20.3	\$20.3	\$20.3	\$20.3	\$20.3	\$20.3	\$20.3	\$20.3	\$301.2
- Services Related To A Highway: Public Works And Fleet	\$8.8	\$178.1	\$1,089.0	\$1,022.6	\$1,022.6	\$1,022.6	\$8.8	\$8.8	\$8.8	\$8.8	\$4,379.1
- Services Related To A Highway: Public Works And Fleet	\$127.1	\$202.4	\$1,154.1	\$1,106.8	\$1,128.9	\$1,151.5	\$32.9	\$33.5	\$34.2	\$34.9	\$5,006.1
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	24,230	26,920	29,610	32,300	35,000	37,690	40,380	43,070	45,760	43,000	357,960
REVENUE											
- DC Receipts: Inflated	\$305.3	\$346.0	\$388.2	\$432.0	\$477.4	\$524.4	\$573.1	\$623.5	\$675.7	\$647.6	\$4,993.2
INTEREST											
- Interest on Opening Balance	\$6.0	\$9.8	\$12.9	(\$4.5)	(\$29.0)	(\$53.4)	(\$77.8)	(\$61.3)	(\$42.4)	(\$21.1)	(\$260.9)
- Interest on In-year Transactions	\$3.1	\$2.5	(\$21.1)	(\$18.6)	(\$17.9)	(\$17.2)	\$9.5	\$10.3	\$11.2	\$10.7	(\$27.4)
TOTAL REVENUE	\$314.5	\$358.3	\$380.1	\$408.9	\$430.6	\$453.8	\$504.7	\$572.5	\$644.4	\$637.3	\$4,705.0
CLOSING CASH BALANCE	\$488.6	\$644.5	(\$129.6)	(\$827.4)	(\$1,525.8)	(\$2,223.5)	(\$1,751.6)	(\$1,212.7)	(\$602.4)	(\$0.0)	

2023 Adjusted Charge Per Square Metre **\$12.60**

Allocation of Capital Program	
Residential Sector	75.6%
Retail	9.5%
Non-Retail	15.0%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**APPENDIX B.4
TABLE 3-3**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET
NON-RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$475.4	\$789.81	\$1,062.01	(\$113.34)	(\$1,183.76)	(\$2,273.68)	(\$3,382.16)	(\$2,681.28)	(\$1,860.22)	(\$909.53)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$186.7	\$32.1	\$32.1	\$32.1	\$32.1	\$32.1	\$32.1	\$32.1	\$32.1	\$32.1	\$475.4
- Services Related To A Highway: Public Works And Fleet: Non Inflated	\$14.0	\$281.1	\$1,718.9	\$1,614.1	\$1,614.1	\$1,614.1	\$14.0	\$14.0	\$14.0	\$14.0	\$6,912.1
- Services Related To A Highway: Public Works And Fleet: Inflated	\$200.6	\$319.4	\$1,821.7	\$1,747.0	\$1,781.9	\$1,817.5	\$51.9	\$52.9	\$54.0	\$55.0	\$7,901.9
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	68,370	75,970	83,560	91,160	98,760	106,360	113,950	121,550	129,140	116,050	1,004,870
REVENUE											
- DC Receipts: Inflated	\$495.5	\$561.6	\$630.0	\$701.1	\$774.7	\$851.0	\$930.0	\$1,011.8	\$1,096.5	\$1,005.1	\$8,057.3
INTEREST											
- Interest on Opening Balance	\$16.6	\$27.6	\$37.2	(\$6.2)	(\$65.1)	(\$125.1)	(\$186.0)	(\$147.5)	(\$102.3)	(\$50.0)	(\$600.8)
- Interest on In-year Transactions	\$2.9	\$2.4	(\$20.9)	(\$18.3)	(\$17.6)	(\$16.9)	\$8.8	\$9.6	\$10.4	\$9.5	(\$30.0)
TOTAL REVENUE	\$515.1	\$591.6	\$646.3	\$676.5	\$692.0	\$709.0	\$752.7	\$874.0	\$1,004.6	\$964.6	\$7,426.5
CLOSING CASH BALANCE	\$789.8	\$1,062.0	(\$113.3)	(\$1,183.8)	(\$2,273.7)	(\$3,382.2)	(\$2,681.3)	(\$1,860.2)	(\$909.5)	\$0.0	

2023 Adjusted Charge Per Square Metre **\$7.25**

Allocation of Capital Program	
Residential Sector	75.6%
Retail	9.5%
Non-Retail	15.0%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix B.5

Waste Diversion Services

Waste Diversion Services

The DCA permits municipalities to impose a development charge for waste diversion services (i.e. not landfill or waste incineration). The City of Barrie provides services for curbside collection, full disposal and recycling services, and education of waste management.

Waste Diversion Services is provided to both residential and non-residential development in the City. However, the services provided by the City to the non-residential sector is limited to “domestic waste” typically generated from lunch and break rooms. As a result, most non-residential uses also have arrangements for private collection. In order to reflect this, the non-residential allocation has been weighted at 50% for the purposes of establishing the 15-year historical service level and the allocation of DC eligible capital costs. The following discusses the individual components included in the Waste Diversion service category. The analysis is set out in the tables which follow.

Table B.5-1	Historical Service Levels and Calculation of 15-Year Average Service Level
Table B.5-2	2023-2032 Development-Related Capital Forecast and Calculation of the Growth-Related Net Capital Costs
Table B.5-3	Cash Flow Analysis

A. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

The 15-year historical inventory of capital assets for Waste Diversion Services includes 257,520 square feet of building space with a replacement value of \$33.55 million. The 7.24 hectares of land associated with Waste Diversion Services buildings are valued at \$25.34 million. Furniture and

equipment amounts to \$1.55 million, and 46 units of fleet and small equipment amounts to \$11.54 million. Each of these calculations is net of the portion related to landfill operations.

The total value of the Waste Diversion Services capital infrastructure is estimated to be \$71.98 million. The 15-year historical average service level is \$391.09 per capita this, multiplied by the 10-year forecast net population and employment growth (employment weighted at 50% – 64,060), results in a 10-year maximum allowable of \$25.05 million. Table 1 provides a summary of the level of service and the calculation of the 10-year funding envelope from 2023 to 2032. The calculation of the maximum allowable funding envelope is summarized as follows:

10-Year Funding Envelope Calculation

15-Year Average Service Level (2008 – 2022)	\$391.09
Net Pop. Growth (2023 – 2032)	64,060
Maximum Allowable Funding Envelope	\$25,053,030

B. Development-Related Capital Program

The Waste Diversion development-related capital program includes a gross project cost of \$23.43 million related to facilities and equipment. These costs include a Transfer Station in 2025, provision for additional waste diversion facilities in 2028, and a provision for additional carts and containers. There are no benefit to existing shares for these projects as they are entirely related to future development. As such, the DC-eligible cost is \$23.43 million.

Of the DC-eligible costs for Waste Diversion, \$1.25 million in available DC reserves will fund the Transfer Station. Therefore, the total 2023-2032 DC-eligible cost is reduced to \$22.18 million.

The costs are allocated 86.1%, or \$19.09 million, against residential development, 5.4%, or \$1.20 million, against non-residential retail development, and 8.5%, or \$1.90 million against non-residential non-retail development. The allocation between residential and non-residential development is based on shares of forecasted growth, with employment weighted at 50%. The resulting unadjusted development charge is \$334.64 per capita for residential, \$6.69 per square metre for retail, and \$3.76 per square metre for non-retail.

C. Cash Flow Analysis

After cash flow and reserve fund analysis, the residential calculated charge increases to \$360.89 per capita, the retail charge increases to \$7.33 per square metre, and the non-retail charge increases to \$4.12 per square metre. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the Waste Diversion Services development charge:

15-year Hist. Service Level per pop & emp	WASTE DIVERSION SERVICES SUMMARY							
	2023 - 2032			Unadjusted			Adjusted	
	Development-Related Capital Program			Development Charge			Development Charge	
	Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non- Retail \$/sq.m
\$391.09	\$23,434,000	\$22,180,152	\$334.64	\$6.69	\$3.76	\$360.89	\$7.33	\$4.12

APPENDIX B.5
TABLE B.5-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
WASTE DIVERSION SERVICES

BUILDINGS Facility Name	Share Related to Waste	# of Square Feet															UNIT COST (\$/sq.ft.)
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Barrie Environmental Centre - 272 Ferndale Drive South:																	
Administration Centre	75%	10,384	10,384	10,384	10,384	10,384	10,384	10,384	10,384	10,384	10,384	10,384	10,384	10,384	10,384	10,384	\$500
Environmental Education Centre	100%	-	-	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	\$500
Scale House	83%	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	\$500
Office Trailer (adjacent to admin centre)	75%	-	-	-	-	-	-	-	-	-	-	266	266	266	266	266	\$200
Waste Segregation Kiosk	100%	183	183	183	183	183	183	183	183	183	183	183	183	183	183	183	\$300
Waste Segregation Area	83%	26,829	26,829	26,829	26,829	26,829	26,829	26,829	26,829	26,829	26,829	26,829	26,829	26,829	26,829	26,829	\$400
Municipal Household Hazardous Waste Depot & Commodities Building	100%	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	\$500
Dome Building	100%	-	-	-	-	-	-	9,440	9,440	9,440	9,440	9,440	9,440	9,440	9,440	9,440	\$10
Satellite Municipal Household Special Waste Depot	100%	31,484	31,484	31,484	31,484	31,484	31,484	31,484	31,484	31,484	31,484	31,484	31,484	31,484	31,484	31,484	\$400
Compost Facility	100%	170,888	170,888	170,888	170,888	170,888	170,888	170,888	170,888	170,888	170,888	170,888	170,888	170,888	170,888	170,888	\$10
Pre-Fabricated & Modular Office Building	100%	-	-	-	-	-	-	-	-	-	-	-	-	3,025	3,025	3,025	\$200
Total (sq.ft)		243,701	243,701	244,788	244,788	244,788	244,788	254,228	254,228	254,228	254,495	254,495	254,495	257,519	257,519	257,519	
Total (\$000)		\$32,247.7	\$32,247.7	\$32,791.3	\$32,791.3	\$32,791.3	\$32,791.3	\$32,890.4	\$32,890.4	\$32,890.4	\$32,943.7	\$32,943.7	\$32,943.7	\$33,548.6	\$33,548.6	\$33,548.6	

LAND Facility Name	Share Related to Waste	# of Hectares															UNIT COST (\$/ha)
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Barrie Environmental Centre - 272 Ferndale Drive South:																	
Administration Centre	75%	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	\$3,500,000
Environmental Education Centre	100%	-	-	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$3,500,000
Scale House	83%	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$3,500,000
Office Trailer (adjacent to admin centre)	75%	-	-	-	-	-	-	-	-	-	-	0.01	0.01	0.01	0.01	0.01	\$3,500,000
Waste Segregation Kiosk	100%	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$3,500,000
Waste Segregation Area	83%	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	\$3,500,000
Municipal Household Hazardous Waste Depot & Commodities Building	100%	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$3,500,000
Dome Building	100%	-	-	-	-	-	-	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	\$3,500,000
Satellite Municipal Household Special Waste Depot	100%	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	\$3,500,000
Compost Facility	100%	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	\$3,500,000
Pre-Fabricated & Modular Office Building	100%	-	-	-	-	-	-	-	-	-	-	-	-	0.01	0.01	0.01	\$3,500,000
Total (ha)		6.93	6.93	6.96	6.96	6.96	6.96	7.22	7.22	7.22	7.23	7.23	7.23	7.24	7.24	7.24	
Total (\$000)		\$24,255.0	\$24,255.0	\$24,360.0	\$24,360.0	\$24,360.0	\$24,360.0	\$25,270.0	\$25,270.0	\$25,270.0	\$25,305.0	\$25,305.0	\$25,305.0	\$25,340.0	\$25,340.0	\$25,340.0	

APPENDIX B.5
TABLE B.5-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
WASTE DIVERSION SERVICES

FURNITURE & EQUIPMENT Facility Name	Share Related to Waste	Total Value of Furniture & Equipment (\$)															UNIT COST (\$/item)
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Curbside Green Bin	100%	32,041	32,496	32,957	33,425	33,507	33,589	33,671	33,753	33,835	33,992	34,149	34,307	34,466	34,625	35,372	\$18
Small Green Bin	100%	32,041	32,496	32,957	33,425	33,507	33,589	33,671	33,753	33,835	33,992	34,149	34,307	34,466	34,625	35,372	\$3
Blue Recycling Bin	100%	32,041	32,496	32,957	33,425	33,507	33,589	33,671	33,753	33,835	33,992	34,149	34,307	34,466	34,625	35,372	\$7
Grey Recycling Bin	100%	32,041	32,496	32,957	33,425	33,507	33,589	33,671	33,753	33,835	33,992	34,149	34,307	34,466	34,625	35,372	\$7
In-Unit recycling bin - MR	100%	8,181	8,181	8,337	8,578	9,009	9,043	9,167	9,591	9,705	9,723	10,936	10,936	10,936	12,123	12,123	\$2
In-Unit green bin - MR	100%	-	-	-	-	-	-	-	-	1,573	5,052	8,502	8,502	8,502	9,149	9,436	\$3
Grey Recycling Cart - MR	100%	516	516	526	536	546	556	566	576	586	596	606	606	606	751	742	\$77
Blue Recycling Cart - MR	100%	521	521	531	541	551	561	571	581	591	601	611	611	611	766	739	\$77
Organics Carts - MR	100%	-	-	-	-	-	-	-	-	78	244	368	368	368	338	276	\$60
Special Events carts	100%	100	100	100	100	100	100	100	100	100	100	100	100	100	72	385	\$66
Recycling carts on the pad	100%	30	30	30	30	30	30	30	30	30	30	30	30	30	40	40	\$77
Organics carts on the pad	100%	-	-	-	-	-	-	-	5	5	5	5	5	5	7	7	\$60
Diversion related roll offs on the pad	100%	2	2	2	2	2	3	6	6	6	7	9	9	9	9	9	\$11,000
Total (sq.ft)		137,514	139,334	141,354	143,487	144,266	144,649	145,124	145,901	148,014	152,326	157,763	158,395	159,031	161,755	165,245	
Total (\$000)		\$1,248.6	\$1,264.5	\$1,282.5	\$1,300.9	\$1,306.1	\$1,321.6	\$1,359.3	\$1,364.8	\$1,378.9	\$1,417.3	\$1,466.6	\$1,472.1	\$1,477.7	\$1,507.9	\$1,549.1	

APPENDIX B.5
TABLE B.5-1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
WASTE DIVERSION SERVICES

FLEET Description	Share Related to Waste	# of Fleet and Small Equipment															UNIT COST (\$/unit)
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Chev Van	80%	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	1.80	1.80	1.80	\$60,500
Roll off Truck	85%	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	\$122,700
Fork Lift	100%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$24,900
Sander	80%	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$17,100
Snowblower	80%	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$60,500
John Deere 6x4 Gator	80%	-	-	-	-	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$153,800
930G CAT Loader	85%	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	\$31,100
Brown Bear Composter	100%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	\$38,900
Stacker	100%	-	-	-	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$60,500
Riding Mower	50%	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$76,000
Dodge Ram	50%	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$83,800
John Deere 12-8009	80%	-	-	-	-	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$139,800
Dodge 1500 13-1129 (Walker-Prince)	50%	-	-	-	-	-	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$63,600
Western 4700 13-5032	85%	-	-	-	-	-	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	\$310,500
14-6086 Pronovost Snowblower	80%	-	-	-	-	-	-	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$1,600
Husq 16-9275 & 16-9276 Chainsaws	100%	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	\$1,200
Chev Silverado 18-1173	100%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$69,800
CAT D6T 18-8012	100%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$1,009,200
Caterpillar - 950M	100%	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	\$546,800
Caterpillar - 323-07	100%	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	\$520,300
Caterpillar - 725C2-Articulated Truck	100%	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	\$726,000
8" Portable Centrifugal Pump Trailer	100%	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	\$131,100
Enclosed trailer	100%	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	\$30,600
Enclosed trailer	100%	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	\$28,200
Roll off Hoist - Freightliner	100%	-	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	\$298,000
Chev 1500 20-1180	100%	-	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	\$40,300
Chev 1500 20-1182	100%	-	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	\$43,900
Ford 250 20-1220	100%	-	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	\$56,600
Mitsubishi RVR 20-1228	100%	-	-	-	-	-	-	-	-	-	-	-	-	1.00	1.00	1.00	\$35,500
Rental Heavy Equipment																	
Rental Roll Off Truck	85%	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	\$122,700
Collection Rental/Leased Vehicles																	
Garbage and Organics Trucks	30%	1.80	1.80	2.10	2.10	2.10	2.10	2.10	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	\$422,500
Recycling Trucks	100%	6.00	6.00	7.00	7.00	7.00	7.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	\$396,900
Yard Waste Trucks	100%	2.00	2.00	2.00	2.00	2.00	2.00	2.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	\$357,900
Multi-Res Recycling Trucks	100%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$422,500
Multi-Res Organics Trucks	100%	-	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$422,500
Supervisor Trucks	80%	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$48,000
Total (#)		24	24	25	26	27	29	30	33	34	34	34	40	46	46	46	
Total (\$000)		\$5,889.2	\$5,889.2	\$6,412.9	\$6,473.4	\$6,708.2	\$7,004.0	\$7,005.2	\$8,602.7	\$9,025.2	\$9,025.2	\$9,025.2	\$11,008.2	\$11,543.0	\$11,543.0	\$11,543.0	

APPENDIX B.5
TABLE B.5-1

CITY OF BARRIE
CALCULATION OF SERVICE LEVELS
WASTE DIVERSION SERVICES

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Historical Population	131,431	132,957	134,501	136,063	137,121	138,187	139,261	140,343	141,434	142,690	143,958	145,237	146,527	147,829	152,641
Historical Employment (Weighted at 0.5)	30,782	31,109	31,446	31,795	32,196	32,603	33,015	33,433	33,857	34,605	35,365	36,365	26,945	28,665	32,655
Total Historical Population & Employment	162,213	164,066	165,947	167,858	169,317	170,790	172,276	173,776	175,291	177,295	179,323	181,602	173,472	176,494	185,296

INVENTORY SUMMARY (\$000)

Buildings	\$32,247.7	\$32,247.7	\$32,791.3	\$32,791.3	\$32,791.3	\$32,791.3	\$32,890.4	\$32,890.4	\$32,890.4	\$32,943.7	\$32,943.7	\$32,943.7	\$33,548.6	\$33,548.6	\$33,548.6
Land	\$24,255.0	\$24,255.0	\$24,360.0	\$24,360.0	\$24,360.0	\$24,360.0	\$25,270.0	\$25,270.0	\$25,270.0	\$25,305.0	\$25,305.0	\$25,305.0	\$25,340.0	\$25,340.0	\$25,340.0
Furniture & Equipment	\$1,248.6	\$1,264.5	\$1,282.5	\$1,300.9	\$1,306.1	\$1,321.6	\$1,359.3	\$1,364.8	\$1,378.9	\$1,417.3	\$1,466.6	\$1,472.1	\$1,477.7	\$1,507.9	\$1,549.1
Fleet	\$5,889.2	\$5,889.2	\$6,412.9	\$6,473.4	\$6,708.2	\$7,004.0	\$7,005.2	\$8,602.7	\$9,025.2	\$9,025.2	\$9,025.2	\$11,008.2	\$11,543.0	\$11,543.0	\$11,543.0
Total (\$000)	\$63,640.5	\$63,656.4	\$64,846.6	\$64,925.5	\$65,165.7	\$65,476.9	\$66,524.9	\$68,127.9	\$68,564.5	\$68,691.2	\$68,740.5	\$70,729.0	\$71,909.3	\$71,939.5	\$71,980.7

SERVICE LEVEL (\$/capita)

Average
Service
Level

Buildings	\$198.80	\$196.55	\$197.60	\$195.35	\$193.67	\$192.00	\$190.92	\$189.27	\$187.63	\$185.81	\$183.71	\$181.41	\$193.39	\$190.08	\$181.05	\$190.48
Land	\$149.53	\$147.84	\$146.79	\$145.12	\$143.87	\$142.63	\$146.68	\$145.42	\$144.16	\$142.73	\$141.11	\$139.34	\$146.08	\$143.57	\$136.75	\$144.11
Furniture & Equipment	\$7.70	\$7.71	\$7.73	\$7.75	\$7.71	\$7.74	\$7.89	\$7.85	\$7.87	\$7.99	\$8.18	\$8.11	\$8.52	\$8.54	\$8.36	\$7.98
Fleet	\$36.31	\$35.90	\$38.64	\$38.56	\$39.62	\$41.01	\$40.66	\$49.50	\$51.49	\$50.90	\$50.33	\$60.62	\$66.54	\$65.40	\$62.29	\$48.52
Total (\$/capita)	\$392.33	\$387.99	\$390.77	\$386.79	\$384.87	\$383.38	\$386.15	\$392.04	\$391.15	\$387.44	\$383.33	\$389.47	\$414.53	\$407.60	\$388.46	\$391.09

CITY OF BARRIE
CALCULATION OF MAXIMUM ALLOWABLE FUNDING ENVELOPE
WASTE DIVERSION SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2008 - 2022	\$391.09
Net Population & Employment (Weighted 0.5) Growth 2023 - 2032	64,060
Maximum Allowable Funding Envelope	\$25,053,030

APPENDIX B.5
TABLE B.5-2

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
WASTE DIVERSION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
5.0 WASTE DIVERSION										
5.1 New Projects										
5.1.1 000284 & 000794 Transfer Station	2025 - 2025	\$ 21,000,000	\$ -	\$ 21,000,000	0%	\$ -	\$ 21,000,000	\$ 1,253,848	\$ 19,746,152	\$ -
5.1.2 Provision for Additional Waste Diversion Facilities	2028 - 2032	\$ 2,000,000	\$ -	\$ 2,000,000	0%	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -
5.1.3 Provision for Additional Carts & Containers	2023 - 2032	\$ 434,000	\$ -	\$ 434,000	0%	\$ -	\$ 434,000	\$ -	\$ 434,000	\$ -
Subtotal New Projects		\$ 23,434,000	\$ -	\$ 23,434,000		\$ -	\$ 23,434,000	\$ 1,253,848	\$ 22,180,152	\$ -
TOTAL WASTE DIVERSION		\$ 23,434,000	\$ -	\$ 23,434,000		\$ -	\$ 23,434,000	\$ 1,253,848	\$ 22,180,152	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2032 DC Eligible Costs	86.1%	\$19,091,586
10-Year Growth in Population in New Units		57,051
Unadjusted Development Charge Per Capita		\$334.64
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	5.4%	\$1,197,846
10-Year Growth in Square Metres		178,980
Unadjusted Retail Development Charge Per Square Metre		\$6.69
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	8.5%	\$1,890,720
10-Year Growth in Square Metres		502,435
Unadjusted Non-Retail Development Charge Per Square Metre		\$3.76

2023 - 2032 Net Funding Envelope	\$25,053,030
Reserve Fund Balance as at December 31st, 2022	\$1,253,848

**APPENDIX B.5
TABLE 3-1**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTE DIVERSION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

WASTE DIVERSION	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$1,079.3	\$3,039.14	\$5,160.38	(\$11,850.51)	(\$10,291.07)	(\$8,542.40)	(\$6,978.05)	(\$5,225.78)	(\$3,273.67)	(\$1,108.31)	
2023 - 2032 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$1,079.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,079.3
- Waste Diversion: Non Inflated	\$37.4	\$37.4	\$17,033.9	\$37.4	\$37.4	\$381.7	\$381.7	\$381.7	\$381.7	\$381.7	\$19,091.6
- Waste Diversion: Inflated	\$37.4	\$38.1	\$18,844.9	\$39.6	\$40.4	\$421.4	\$429.8	\$438.4	\$447.2	\$456.1	\$21,193.3
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722	57,051
REVENUE											
- DC Receipts: Inflated	\$1,926.4	\$2,018.3	\$2,113.5	\$2,212.8	\$2,315.3	\$2,420.6	\$2,529.1	\$2,639.4	\$2,752.2	\$1,605.3	\$22,533.0
INTEREST											
- Interest on Opening Balance	\$37.8	\$106.4	\$180.6	(\$651.8)	(\$566.0)	(\$469.8)	(\$383.8)	(\$287.4)	(\$180.1)	(\$61.0)	(\$2,275.1)
- Interest on In-year Transactions	\$33.1	\$34.7	(\$460.1)	\$38.0	\$39.8	\$35.0	\$36.7	\$38.5	\$40.3	\$20.1	(\$143.9)
TOTAL REVENUE	\$1,997.2	\$2,159.3	\$1,834.0	\$1,599.1	\$1,789.1	\$1,985.7	\$2,182.1	\$2,390.5	\$2,612.5	\$1,564.4	\$20,114.1
CLOSING CASH BALANCE	\$3,039.1	\$5,160.4	(\$11,850.5)	(\$10,291.1)	(\$8,542.4)	(\$6,978.1)	(\$5,225.8)	(\$3,273.7)	(\$1,108.3)	\$0.0	

2023 Adjusted Charge Per Capita

\$360.89

Allocation of Capital Program

Residential Sector	86.1%
Non-Residential Sector	13.9%

Rates for 2023

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

**APPENDIX B.5
TABLE 3-2**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTE DIVERSION
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

WASTE DIVERSION	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$67.7	\$157.39	\$262.12	(\$816.91)	(\$737.49)	(\$640.39)	(\$548.31)	(\$437.39)	(\$306.12)	(\$152.86)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$67.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$67.7
- Waste Diversion: Non Inflated	\$2.3	\$2.3	\$1,068.7	\$2.3	\$2.3	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$1,197.8
- Waste Diversion: Inflated	\$2.3	\$2.4	\$1,182.4	\$2.5	\$2.5	\$26.4	\$27.0	\$27.5	\$28.1	\$28.6	\$1,329.7
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	12,115	13,460	14,805	16,150	17,500	18,845	20,190	21,535	22,880	21,500	178,980
REVENUE											
- DC Receipts: Inflated	\$88.8	\$100.6	\$112.9	\$125.6	\$138.8	\$152.5	\$166.6	\$181.3	\$196.5	\$188.3	\$1,451.9
INTEREST											
- Interest on Opening Balance	\$2.4	\$5.5	\$9.2	(\$44.9)	(\$40.6)	(\$35.2)	(\$30.2)	(\$24.1)	(\$16.8)	(\$8.4)	(\$183.1)
- Interest on In-year Transactions	\$0.9	\$1.0	(\$18.7)	\$1.2	\$1.4	\$1.3	\$1.4	\$1.5	\$1.7	\$1.6	(\$6.8)
TOTAL REVENUE	\$92.0	\$107.1	\$103.3	\$81.9	\$99.6	\$118.5	\$137.9	\$158.8	\$181.3	\$181.5	\$1,262.0
CLOSING CASH BALANCE	\$157.4	\$262.1	(\$816.9)	(\$737.5)	(\$640.4)	(\$548.3)	(\$437.4)	(\$306.1)	(\$152.9)	\$0.0	

2023 Adjusted Charge Per Square Metre **\$7.33**

Allocation of Capital Program	
Residential Sector	86.1%
Retail	5.4%
Non-Retail	8.5%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.5
TABLE 3-3

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTE DIVERSION
NON-RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WASTE DIVERSION	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$106.9	\$249.07	\$415.13	(\$1,287.15)	(\$1,160.72)	(\$1,006.28)	(\$859.56)	(\$682.95)	(\$473.99)	(\$230.12)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$106.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$106.9
- Waste Diversion: Non Inflated	\$3.7	\$3.7	\$1,686.9	\$3.7	\$3.7	\$37.8	\$37.8	\$37.8	\$37.8	\$37.8	\$1,890.7
- Waste Diversion: Inflated	\$3.7	\$3.8	\$1,866.3	\$3.9	\$4.0	\$41.7	\$42.6	\$43.4	\$44.3	\$45.2	\$2,098.9
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	34,185	37,985	41,780	45,580	49,380	53,180	56,975	60,775	64,570	58,025	502,435
REVENUE											
- DC Receipts: Inflated	\$140.8	\$159.6	\$179.0	\$199.2	\$220.1	\$241.8	\$264.2	\$287.5	\$311.6	\$285.6	\$2,289.3
INTEREST											
- Interest on Opening Balance	\$3.7	\$8.7	\$14.5	(\$70.8)	(\$63.8)	(\$55.3)	(\$47.3)	(\$37.6)	(\$26.1)	(\$12.7)	(\$286.6)
- Interest on In-year Transactions	\$1.4	\$1.6	(\$29.5)	\$2.0	\$2.2	\$2.0	\$2.2	\$2.4	\$2.7	\$2.4	(\$10.8)
TOTAL REVENUE	\$145.9	\$169.8	\$164.0	\$130.4	\$158.4	\$188.5	\$219.2	\$252.4	\$288.2	\$275.3	\$1,992.0
CLOSING CASH BALANCE	\$249.1	\$415.1	(\$1,287.1)	(\$1,160.7)	(\$1,006.3)	(\$859.6)	(\$682.9)	(\$474.0)	(\$230.1)	\$0.0	

2023 Adjusted Charge Per Square Metre **\$4.12**

Allocation of Capital Program	
Residential Sector	86.1%
Retail	5.4%
Non-Retail	8.5%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix B.6

Ambulance Services

Ambulance Services

The City of Barrie and the City of Orillia receive Ambulance Services from the County of Simcoe through a cost-sharing agreement. The capital costs are allocated between Barrie and Simcoe based on shares of weighted taxable assessment values of approximately 25% (Barrie) and 6% (Orillia). The County began delivering the Ambulance Services January 1, 2001 when the Province downloaded service delivery responsibility Simcoe. There are 26 ambulance stations positioned among all of the lower-tier municipalities in the County. Only the City of Barrie’s share is used to calculate development charges.

The current arrangement of ambulance stations and service delivery is a product of separate systems existing prior to the transfer of this service from the Province to the County of Simcoe. Recently, the County hired consultants to assist in developing a facility model and the result was to implement a hub and spoke service delivery approach. The development-related capital program for Ambulance Services implements this new approach. The following discusses the individual components included in the Ambulance Services category. The analysis is set out in the tables which follow.

Table B.6-1	Historical Service Levels and Calculation of 15-Year Average Service Level
Table B.6-2	2023-2032 Development-Related Capital Forecast and Calculation of the Growth-Related Net Capital Costs
Table B.6-3	Cash Flow Analysis

A. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

The Ambulance Services inventory of capital assets includes 27 stations, the combined building area is 139,860 square feet, valued at approximately \$89.99 million, of which \$22.69 million is related to Barrie's share. The buildings occupy roughly 12.92 hectares of land which is valued at \$17.38 million, with the City's share representing 25% or \$4.38 million. The 77 vehicles associated with the paramedic stations in the County of Simcoe have a replacement value of nearly \$16.20 million (Barrie's share amounting to \$4.08 million). Station equipment adds another \$1.24 million to the inventory with \$311,900 relating to the City of Barrie.

Barrie's share of the total current value of Ambulance Services infrastructure including building, land, vehicles, furniture and equipment is valued at approximately \$31.47 million. The 15-year average historical service level amounts to \$96.11 per population and employment. The calculated maximum allowable recoverable through development charges is \$7.04 million. Table 1 provides a summary of the level of service and the calculation of the 10-year funding envelope from 2023 to 2032. The calculation of the maximum allowable funding envelope is summarized as follows:

10-Year Funding Envelope Calculation – Barrie's Share

15-Year Average Service Level (2008 – 2022)	\$96.11
Net Pop. Growth (2023 – 2032)	73,289
Maximum Allowable Funding Envelope	\$7,043,806

B. Development-Related Capital Program

The County of Simcoe's Ambulance Services 10-year capital program includes a number of new station construction, as well as a reorganization

and re-location of several existing stations. The County plans to construct a centralized hub paramedic station as well as seven satellite posts. The capital program consists of prior growth-related projects totaling \$2.99 million, which relates to projects that are still to be funded as per the shared facilities agreement with the County.

The Ambulance Services DC reserve fund balance is in a negative position, and relates largely to the initial funding of the new Bradford and Severn Paramedic Stations. As such, \$3.07 million is included for recovery through DCs. The capital program also includes seven new stations (Barrie's share only) totaling \$6.76 million, land acquisition costs of \$1.95 million and building construction costs totaling an additional \$13.29 million. Finally, additional emergency response vehicles will be added to the current fleet which amounts to roughly \$6.77 million.

Altogether, the 10-year capital forecast for Ambulance Services amounts to \$34.83 million. An amount of \$16.47 million is identified as, "Grants, Subsidies, and Other Recoveries" and represents the County's and Orillia's share of the capital program. These recoveries are netted off the total gross project costs.

An overall benefit to existing share has been calculated for the land and construction costs in the capital program which totals 34% and is consistent with the allocations identified in the 2021 Simcoe County DC Background Study and the 2022 City of Orillia DC Background Study. The total benefit to existing share amounts to \$4.22 million and this amount will not be recovered through development charges.

The total DC eligible costs amount to \$14.15 million of which \$7.11 million, is deemed to be post-period benefit, and will be considered for recovery in subsequent development charges by-laws. The remaining in-period DC-eligible share after these adjustments amounts to \$7.04 million.

The costs are allocated 75.6%, or \$5.32 million, against residential development, 9.5%, or \$667,800, against non-residential retail development, and 15.0%, or \$1.05 million against non-residential non-retail development. The allocation between residential and non-residential development is based on shares of forecasted growth. The resulting unadjusted development charge is \$93.28 per capita for residential, \$1.87 per square metre for retail, and \$1.05 per square metre for non-retail.

C. Cash Flow Analysis

After cash flow and reserve fund analysis, the residential calculated charge increases to \$156.35 per capita, the retail charge increases to \$2.90 per square metre, and the non-retail charge increases to \$1.79 per square metre. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the Ambulance Services development charge:

15-year Hist. Service Level per pop & emp	2023 - 2032		AMBULANCE SERVICES SUMMARY				Adjusted	
	Development-Related Capital Program		\$/capita	Unadjusted Development Charge		\$/capita	Development Charge	
	Total	Net DC Recoverable		Retail \$/sq.m	Non-Retail\$/sq.m		Retail \$/sq.m	Non- Retail \$/sq.m
\$96.11	\$34,835,912	\$7,043,806	\$93.28	\$1.87	\$1.05	\$156.35	\$2.90	\$1.79

APPENDIX B.6
TABLE 1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
AMBULANCE SERVICES

Weighted Taxable Assessment Excluding City of Orillia & County of Simcoe: 25.22%

BUILDINGS	# of Square Feet															UNIT COST
Station Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	(\$/sq.ft.)
Alliston Station	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	5,447	5,447	5,447	5,447	5,447	5,447	\$650
Angus Station	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	\$650
Barrie North Station	5,893	5,893	5,893	5,893	5,893	5,893	5,893	5,893	5,893	5,893	5,893	5,893	5,893	5,893	5,893	\$650
Barrie Tiffin Station	5,246	5,246	5,246	5,246	5,246	5,246	5,246	5,246	5,246	5,246	5,246	5,246	5,246	5,246	5,246	\$650
Bradford Station	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	3,120	\$650
Coldwater Station	1,254	1,254	1,254	1,254	627	627	627	627	627	627	627	627	627	627	627	\$650
Collingwood Station	3,026	3,026	3,026	3,026	3,026	3,026	3,026	3,026	3,026	3,026	3,026	3,026	6,000	6,000	6,000	\$650
Craighurst Station	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	\$650
Elmvale Station	600	600	600	600	600	600	600	600	600	600	600	600	600	3,412	3,412	\$650
Midland Station	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	\$650
Orillia Station	7,420	7,420	7,420	7,420	7,420	7,420	7,420	7,420	7,420	7,420	7,420	9,665	9,665	9,665	9,665	\$650
Ramara (Brechin)	-	-	-	-	-	-	-	-	600	600	600	600	600	600	600	\$630
Stayner Station	-	-	-	-	-	-	5,424	5,424	5,424	5,424	5,424	5,424	5,424	5,424	5,424	\$650
Stroud Station	2,715	2,715	2,715	2,715	2,715	2,715	2,715	2,715	2,715	2,715	2,715	2,715	2,715	2,715	2,715	\$650
New Tecumseth (Tottenham)	-	-	444	444	444	444	444	444	444	444	444	444	444	444	444	\$650
Wasaga Beach Station	2,178	2,178	2,178	2,178	2,178	2,178	2,178	2,178	2,178	2,178	2,178	2,178	2,178	2,178	2,178	\$650
Washago Station	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	2,597	\$650
Administration Centre	2,240	2,240	2,240	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	\$420
Barrie Simcoe Emergency Services Campus	-	-	-	-	-	-	-	-	-	-	-	-	60,000	60,000	60,000	\$650
Central East Barrie (downtown)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$650
Beeton Station	-	-	-	-	-	-	-	-	-	-	3,918	3,918	3,918	3,918	3,918	\$650
Oro	-	-	-	-	-	-	-	-	-	150	150	150	150	150	150	\$650
Innisfil	-	-	-	-	-	-	-	-	-	600	600	600	600	600	600	\$650
Penetanguishene	-	-	-	-	-	-	-	-	-	-	800	800	800	1,050	1,050	\$650
Everett/ADJT	-	-	-	-	-	-	-	-	200	200	200	200	200	200	200	\$650
Perkinsfield	-	-	-	-	-	-	-	-	-	500	500	500	500	500	500	\$650
Bradford Street Warehouse	-	-	-	-	-	-	-	-	-	-	3,700	3,700	3,700	3,700	3,700	\$650
Total (sq.ft.)	51,822	51,822	52,266	53,988	53,361	58,785	58,785	58,785	59,585	63,162	71,580	73,825	136,799	139,861	139,861	
Total (\$000)	\$33,169.1	\$33,169.1	\$33,457.7	\$34,180.9	\$33,773.4	\$37,299.2	\$37,299.2	\$37,299.2	\$37,807.2	\$40,132.0	\$45,603.7	\$47,063.0	\$87,996.1	\$89,986.4	\$89,986.4	
City of Barrie Share ¹ (\$000)	\$8,799.8	\$8,799.8	\$8,939.9	\$9,054.5	\$8,939.8	\$9,783.6	\$9,694.1	\$9,556.1	\$9,693.8	\$10,354.1	\$11,738.4	\$12,069.2	\$22,391.8	\$22,943.1	\$22,690.8	

APPENDIX B.6

TABLE 1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
AMBULANCE SERVICES

Weighted Taxable Assessment Excluding City of Orillia & County of Simcoe:

25.22%

LAND Station Name	# of Hectares															UNIT COST (\$/sq.ft.)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Alliston Station	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.58	0.58	0.58	0.58	0.58	0.58	\$1,500,000
Angus Station	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$1,500,000
Barrie North Station	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$1,500,000
Barrie Tiffin Station	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	\$1,500,000
Bradford Station	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	\$1,500,000
Coldwater Station	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	\$1,200,000
Collingwood Station	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.28	0.28	0.28	\$1,200,000
Craighurst Station	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	\$1,200,000
Elmvale Station	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.29	0.29	\$1,200,000
Midland Station	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	\$1,200,000
Orillia Station	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.24	0.24	0.24	0.24	\$1,200,000
Ramara (Brechin)	-	-	-	-	-	-	-	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$1,200,000
Stayner Station	-	-	-	-	-	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	\$1,200,000
Stroud Station	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	\$1,500,000
New Tecumseth (Tottenham)	-	-	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	\$1,500,000
Wasga Beach Station	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$1,200,000
Washago Station	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	\$1,200,000
Administration Centre	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,500,000
Barrie Simcoe Emergency Services Campus	-	-	-	-	-	-	-	-	-	2.29	2.29	2.29	2.29	2.29	2.29	\$1,500,000
Central East Barrie (downtown)	-	-	-	-	-	-	-	-	-	-	-	0.03	0.03	0.03	0.03	\$1,500,000
Beeton Station	-	-	-	-	-	-	-	-	-	-	-	0.55	0.55	0.55	0.55	\$1,500,000
Oro	-	-	-	-	-	-	-	-	-	0.0014	0.0014	0.0014	0.0014	0.001	0.001	\$1,200,000
Innisfil	-	-	-	-	-	-	-	-	-	0.006	0.006	0.006	0.006	0.006	0.006	\$1,500,000
Penetanguishene	-	-	-	-	-	-	-	-	-	-	0.007	0.007	0.007	0.007	0.007	\$1,200,000
Everett	-	-	-	-	-	-	-	-	0.002	0.002	0.002	0.002	0.002	0.002	0.002	\$1,500,000
Perkinsfield	-	-	-	-	-	-	-	-	-	0.005	0.005	0.005	0.005	0.005	0.005	\$1,200,000
Bradford Street Warehouse	-	-	-	-	-	-	-	-	-	-	0.034	0.034	0.034	0.034	0.034	\$1,500,000
Total (ha)	8.40	8.40	9.02	9.02	9.02	9.66	9.66	9.66	9.67	12.12	12.16	12.62	12.75	12.92	12.92	
Total (\$000)	\$10,848.0	\$10,848.0	\$11,778.0	\$11,778.0	\$11,778.0	\$12,546.0	\$12,546.0	\$12,546.0	\$12,555.5	\$16,227.3	\$16,287.8	\$17,013.8	\$17,169.8	\$17,377.9	\$17,377.9	
City of Barrie Share¹ (\$000)	\$2,878.0	\$2,878.0	\$3,147.1	\$3,120.0	\$3,117.6	\$3,290.8	\$3,260.7	\$3,214.3	\$3,219.2	\$4,186.7	\$4,192.5	\$4,363.1	\$4,369.1	\$4,430.7	\$4,382.0	

APPENDIX B.6
TABLE 1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
AMBULANCE SERVICES

Weighted Taxable Assessment Excluding City of Orillia & County of Simcoe: 25.22%

VEHICLES Vehicle Type	# of Vehicles															UNIT COST (\$/vehicle)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Ambulance	39	39	39	39	39	39	39	41	42	42	42	43	43	46	46	\$279,600
Emergency Response Vehicle (ERV)	8	8	9	9	9	9	9	9	9	13	14	16	18	18	18	\$147,800
Emergency Support Unit (ESU)	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$55,200
Logistics Support Vehicle (LSV)	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	\$55,200
Mobile Command Centre	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$220,900
Director Vehicle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$48,300
Public Access Defibrillation (PAD) Vehicle	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	\$35,900
ATV	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	\$16,500
ATV Trailer	1	1	1	1	1	1	1	1	1	1	1	3	2	2	2	\$3,500
Gator	-	-	1	1	1	1	1	1	1	1	-	-	-	-	-	\$82,800
Golf Cart	-	-	1	1	1	1	1	1	1	1	-	-	-	-	-	\$6,900
Emergency Support Unit (ESU) Trailer	-	-	-	2	2	2	2	2	-	-	-	-	-	-	-	\$11,100
Paramedicine Vehicle	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	\$55,200
Public Relations Vehicle	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	\$55,200
Total (#)	54	55	58	59	59	59	59	61	62	68	67	73	74	77	77	
Total (\$000)	\$12,503.0	\$12,558.2	\$12,795.7	\$12,782.0	\$12,782.0	\$12,782.0	\$12,782.0	\$13,341.2	\$13,709.0	\$14,410.6	\$14,468.7	\$15,067.4	\$15,359.5	\$16,198.3	\$16,198.3	
City of Barrie Share¹ (\$000)	\$3,317.0	\$3,331.7	\$3,419.0	\$3,386.0	\$3,383.4	\$3,352.7	\$3,322.0	\$3,418.0	\$3,515.0	\$3,717.9	\$3,724.2	\$3,864.0	\$3,908.4	\$4,130.0	\$4,084.5	

APPENDIX B.6
TABLE 1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
AMBULANCE SERVICES

Weighted Taxable Assessment Excluding City of Orillia & County of Simcoe: 25.22%

FURNITURE & EQUIPMENT Station Name	Total Value of Furniture & Equipment (\$)														
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Alliston Station	\$ 49,478	\$ 49,478	\$ 49,478	\$ 49,478	\$ 49,478	\$ 50,962	\$ 50,962	\$ 50,962	\$ 50,962	\$ 50,962	\$ 63,917	\$ 63,917	\$ 63,917	\$ 63,917	\$ 63,917
Angus Station	\$ 45,962	\$ 45,962	\$ 45,962	\$ 45,962	\$ 45,962	\$ 47,340	\$ 47,340	\$ 47,340	\$ 47,340	\$ 47,340	\$ 47,340	\$ 47,340	\$ 47,340	\$ 47,340	\$ 47,340
Barrie North Station	\$ 63,314	\$ 63,314	\$ 63,314	\$ 63,314	\$ 63,314	\$ 65,213	\$ 65,213	\$ 65,213	\$ 65,213	\$ 65,213	\$ 65,213	\$ 65,213	\$ 65,213	\$ 65,213	\$ 65,213
Barrie Tiffin Station	\$ 83,223	\$ 83,223	\$ 83,223	\$ 83,223	\$ 83,223	\$ 85,720	\$ 85,720	\$ 85,720	\$ 85,720	\$ 85,720	\$ 85,720	\$ 85,720	\$ 85,720	\$ 85,720	\$ 85,720
Bradford Station	\$ 51,432	\$ 51,432	\$ 51,432	\$ 51,432	\$ 51,432	\$ 52,975	\$ 52,975	\$ 52,975	\$ 52,975	\$ 52,975	\$ 52,975	\$ 52,975	\$ 52,975	\$ 52,975	\$ 52,975
Coldwater Station	\$ 30,551	\$ 30,551	\$ 30,551	\$ 30,551	\$ 30,551	\$ 31,468	\$ 31,468	\$ 31,468	\$ 31,468	\$ 31,468	\$ 31,468	\$ 31,468	\$ 31,468	\$ 31,468	\$ 31,468
Collingwood Station	\$ 52,198	\$ 52,198	\$ 52,198	\$ 52,198	\$ 52,198	\$ 53,764	\$ 53,764	\$ 53,764	\$ 53,764	\$ 53,764	\$ 53,764	\$ 53,764	\$ 53,764	\$ 23,245	\$ 23,245
Craighurst Station	\$ 43,586	\$ 43,586	\$ 43,586	\$ 43,586	\$ 43,586	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894
Elmvale Station	\$ 25,134	\$ 25,134	\$ 25,134	\$ 25,134	\$ 25,134	\$ 25,888	\$ 25,888	\$ 25,888	\$ 25,888	\$ 25,888	\$ 25,888	\$ 25,888	\$ 25,888	\$ 25,888	\$ 47,865
Midland Station	\$ 48,483	\$ 48,483	\$ 48,483	\$ 48,483	\$ 48,483	\$ 49,937	\$ 49,937	\$ 49,937	\$ 49,937	\$ 49,937	\$ 49,937	\$ 49,937	\$ 49,937	\$ 49,937	\$ 49,937
Orillia Ambulance Station	\$ 86,687	\$ 86,687	\$ 86,687	\$ 86,687	\$ 86,687	\$ 89,287	\$ 89,287	\$ 89,287	\$ 89,287	\$ 89,287	\$ 89,287	\$ 89,287	\$ 30,636	\$ 30,636	\$ 30,636
Ramara (Brechin)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808
Stayner Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,355	\$ 75,355	\$ 75,355	\$ 75,355	\$ 75,355	\$ 75,355	\$ 75,355	\$ 75,355	\$ 75,355
Stroud Ambulance Station	\$ 50,039	\$ 50,039	\$ 50,039	\$ 50,039	\$ 50,039	\$ 51,540	\$ 51,540	\$ 51,540	\$ 51,540	\$ 51,540	\$ 51,540	\$ 51,540	\$ 51,540	\$ 51,540	\$ 51,540
New Tecumseth (Tottenham)	\$ 7,021	\$ 7,021	\$ 7,021	\$ 7,021	\$ 7,021	\$ 7,231	\$ 7,231	\$ 7,231	\$ 7,231	\$ 7,231	\$ 7,231	\$ 7,231	\$ 7,231	\$ 7,231	\$ 7,231
Wasga Beach Ambulance Station	\$ 43,329	\$ 43,329	\$ 43,329	\$ 43,329	\$ 43,329	\$ 44,629	\$ 44,629	\$ 44,629	\$ 44,629	\$ 44,629	\$ 44,629	\$ 44,629	\$ 44,629	\$ 44,629	\$ 44,629
Washago Ambulance Station	\$ 43,586	\$ 43,586	\$ 43,586	\$ 43,586	\$ 43,586	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894	\$ 44,894
Administration Centre	\$ 58,505	\$ 58,505	\$ 58,505	\$ 58,505	\$ 58,505	\$ 60,260	\$ 60,260	\$ 60,260	\$ 60,260	\$ 60,260	\$ 60,260	\$ 60,260	\$ 60,260	\$ 60,260	\$ 60,260
Barrie Simcoe Emergency Services Campus	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 385,664	\$ 385,664
Central East Barrie (downtown)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Beeton Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,339	\$ 10,339	\$ 10,339	\$ 10,339
Oro	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808
Innisfil	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808
Penetanguishene	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808
Everett	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808
Perkinsfield	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808	\$ 1,808
Bradford Street Warehouse	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,013	\$ 3,013	\$ 3,013	\$ 3,013
Total (\$000)	\$782.5	\$782.5	\$782.5	\$782.5	\$782.5	\$806.0	\$881.4	\$881.4	\$881.4	\$885.0	\$903.4	\$918.5	\$859.9	\$1,215.0	\$1,237.0
City of Barrie Share¹ (\$000)	\$207.6	\$207.6	\$209.1	\$207.3	\$207.1	\$211.4	\$229.1	\$225.8	\$226.0	\$228.3	\$232.5	\$235.5	\$218.8	\$309.8	\$311.9

¹ County of Simcoe currently manages and operates the paramedic services for its towns and townships as well as the separated cities (Barrie & Orillia). Cities of Barrie and Orillia have a cost-sharing agreement with the County, and their shares are based on weighted taxable assessment values of 26% and 6% respectively

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Barrie Share:	26.5300%	26.5300%	26.7200%	26.4900%	26.4700%	26.2300%	25.9900%	25.6200%	25.6400%	25.8000%	25.7400%	25.6447%	25.4464%	25.4962%	25.2158%

**APPENDIX B.6
TABLE 1**

**CITY OF BARRIE
CALCULATION OF SERVICE LEVELS
AMBULANCE SERVICES**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Historical Population	131,431	132,957	134,501	136,063	137,121	138,187	139,261	140,343	141,434	142,690	143,958	145,237	146,527	147,829	152,641
Historical Employment	61,563	62,217	62,892	63,590	64,392	65,205	66,030	66,866	67,715	69,210	70,730	72,730	53,890	57,330	65,310
Historical Population & Employment	192,994	195,174	197,393	199,653	201,513	203,392	205,291	207,209	209,149	211,900	214,688	217,967	200,417	205,159	217,951

INVENTORY SUMMARY (\$000) - County Share Only

Buildings	\$8,799.8	\$8,799.8	\$8,939.9	\$9,054.5	\$8,939.8	\$9,783.6	\$9,694.1	\$9,556.1	\$9,693.8	\$10,354.1	\$11,738.4	\$12,069.2	\$22,391.8	\$22,943.1	\$22,690.8
Land	\$2,878.0	\$2,878.0	\$3,147.1	\$3,120.0	\$3,117.6	\$3,290.8	\$3,260.7	\$3,214.3	\$3,219.2	\$4,186.7	\$4,192.5	\$4,363.1	\$4,369.1	\$4,430.7	\$4,382.0
Vehicles	\$3,317.0	\$3,331.7	\$3,419.0	\$3,386.0	\$3,383.4	\$3,352.7	\$3,322.0	\$3,418.0	\$3,515.0	\$3,717.9	\$3,724.2	\$3,864.0	\$3,908.4	\$4,130.0	\$4,084.5
Furniture & Equipment	\$207.6	\$207.6	\$209.1	\$207.3	\$207.1	\$211.4	\$229.1	\$225.8	\$226.0	\$228.3	\$232.5	\$235.5	\$218.8	\$309.8	\$311.9
Total (\$000)	\$15,202.4	\$15,217.0	\$15,715.1	\$15,767.8	\$15,648.0	\$16,638.5	\$16,505.9	\$16,414.2	\$16,654.0	\$18,487.0	\$19,887.7	\$20,531.8	\$30,888.2	\$31,813.5	\$31,469.2

SERVICE LEVEL (\$/population & employment)

**Average
Service
Level**

Buildings	\$45.60	\$45.09	\$45.29	\$45.35	\$44.36	\$48.10	\$47.22	\$46.12	\$46.35	\$48.86	\$54.68	\$55.37	\$111.73	\$111.83	\$104.11	\$60.00
Land	\$14.91	\$14.75	\$15.94	\$15.63	\$15.47	\$16.18	\$15.88	\$15.51	\$15.39	\$19.76	\$19.53	\$20.02	\$21.80	\$21.60	\$20.11	\$17.50
Vehicles	\$17.19	\$17.07	\$17.32	\$16.96	\$16.79	\$16.48	\$16.18	\$16.50	\$16.81	\$17.55	\$17.35	\$17.73	\$19.50	\$20.13	\$18.74	\$17.49
Furniture & Equipment	\$1.08	\$1.06	\$1.06	\$1.04	\$1.03	\$1.04	\$1.12	\$1.09	\$1.08	\$1.08	\$1.08	\$1.08	\$1.09	\$1.51	\$1.43	\$1.12
Total (\$/population & employment)	\$78.77	\$77.97	\$79.61	\$78.98	\$77.65	\$81.81	\$80.40	\$79.22	\$79.63	\$87.24	\$92.64	\$94.20	\$154.12	\$155.07	\$144.39	\$96.11

**CITY OF BARRIE
CALCULATION OF MAXIMUM ALLOWABLE
AMBULANCE SERVICES**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2008-2022	\$96.11
Net Population & Employment Growth 2023-2032	73,289
Maximum Allowable Funding Envelope	\$7,043,806

APPENDIX B.6
TABLE B.6-2

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
AMBULANCE SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
6.0 AMBULANCE SERVICES										
6.1 Recovery of Negative Reserve Fund Balance										
6.1.1 Balance as at December 31st, 2022	2023 - 2023	\$ 3,071,129	\$ -	\$ 3,071,129	0%	\$ -	\$ 3,071,129	\$ -	\$ 3,071,129	\$ -
Subtotal Recovery of Negative Reserve Fund Balance		\$ 3,071,129	\$ -	\$ 3,071,129		\$ -	\$ 3,071,129	\$ -	\$ 3,071,129	\$ -
6.2 Prior Growth Projects										
6.2.1 Southwest Barrie Paramedic Station	2029 - 2030	\$ 509,173	\$ -	\$ 509,173	68%	\$ 346,237	\$ 162,936	\$ -	\$ -	\$ 162,936
6.2.2 Waubaushe Paramedic Station	2023 - 2023	\$ 781,959	\$ -	\$ 781,959	34%	\$ 265,866	\$ 516,093	\$ -	\$ 516,093	\$ -
6.2.3 LTP - RRU Enhancements	2023 - 2024	\$ 134,471	\$ -	\$ 134,471	0%	\$ -	\$ 134,471	\$ -	\$ 134,471	\$ -
6.2.4 Ambulance Enhancements	2023 - 2031	\$ 1,563,594	\$ -	\$ 1,563,594	0%	\$ -	\$ 1,563,594	\$ -	\$ 156,359	\$ 1,407,235
Subtotal Prior Growth Projects		\$ 2,989,197	\$ -	\$ 2,989,197		\$ 612,103	\$ 2,377,094	\$ -	\$ 806,924	\$ 1,570,171
6.3 New Paramedic Stations - Barrie's Share Only										
6.3.1 Bradford	2023 - 2023	\$ 592,844	\$ -	\$ 592,844	34%	\$ 201,567	\$ 391,277	\$ -	\$ 391,277	\$ -
6.3.2 Severn	2023 - 2023	\$ 1,018,904	\$ -	\$ 1,018,904	34%	\$ 346,427	\$ 672,476	\$ -	\$ 672,476	\$ -
6.3.3 Oro South	2026 - 2027	\$ 1,127,700	\$ -	\$ 1,127,700	34%	\$ 383,418	\$ 744,282	\$ -	\$ -	\$ 744,282
6.3.4 Barrie Big Bay Paramedic Station	2027 - 2028	\$ 896,377	\$ -	\$ 896,377	34%	\$ 304,768	\$ 591,609	\$ -	\$ -	\$ 591,609
6.3.5 Barrie Central West Paramedic Station	2023 - 2024	\$ 775,293	\$ -	\$ 775,293	34%	\$ 263,600	\$ 511,693	\$ -	\$ 511,693	\$ -
6.3.6 Innisfil/Alcona Paramedic Station Post #7	2024 - 2025	\$ 1,460,292	\$ -	\$ 1,460,292	34%	\$ 496,499	\$ 963,793	\$ -	\$ -	\$ 963,793
6.3.7 Wasaga Beach Paramedic Station	2023 - 2024	\$ 886,880	\$ -	\$ 886,880	34%	\$ 301,539	\$ 585,341	\$ -	\$ 383,037	\$ 202,304
Subtotal New Paramedic Stations - Barrie's Share Only		\$ 6,758,290	\$ -	\$ 6,758,290		\$ 2,297,818	\$ 4,460,471	\$ -	\$ 1,958,484	\$ 2,501,987
6.4 Other New Paramedic Stations - Land										
6.4.1 Tiny/Perkinsfield	2025 - 2025	\$ 300,000	\$ 224,353	\$ 75,647	34%	\$ 25,720	\$ 49,927	\$ -	\$ -	\$ 49,927
6.4.2 Oro North	2028 - 2028	\$ 500,000	\$ 373,921	\$ 126,079	34%	\$ 42,867	\$ 83,212	\$ -	\$ -	\$ 83,212
6.4.3 Everett	2030 - 2030	\$ 500,000	\$ 373,921	\$ 126,079	34%	\$ 42,867	\$ 83,212	\$ -	\$ -	\$ 83,212
6.4.4 Tottenham	2030 - 2030	\$ 383,523	\$ 286,815	\$ 96,708	34%	\$ 32,881	\$ 63,828	\$ -	\$ -	\$ 63,828
6.4.5 Springwater South Paramedic Station - Snow Valley Road	2023 - 2023	\$ 150,000	\$ 112,176	\$ 37,824	34%	\$ 12,860	\$ 24,964	\$ -	\$ 24,964	\$ -
6.4.6 Victoria Harbour Paramedic Station	2023 - 2023	\$ 120,000	\$ 89,741	\$ 30,259	34%	\$ 10,288	\$ 19,971	\$ -	\$ 19,971	\$ -
Subtotal Other New Paramedic Stations - Land		\$ 1,953,523	\$ 1,460,927	\$ 492,596		\$ 167,483	\$ 325,114	\$ -	\$ 44,935	\$ 280,179

APPENDIX B.6
TABLE B.6-2

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
AMBULANCE SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
6.5 Other New Paramedic Stations - Building Construction										
6.5.1 Springwater South	2023 - 2023	\$ 2,200,946	\$ 1,645,960	\$ 554,986	34%	\$ 188,695	\$ 366,291	\$ -	\$ 366,291	\$ -
6.5.2 Waubauskene (Vic Harbour)	2023 - 2023	\$ 2,730,181	\$ 2,041,744	\$ 688,437	34%	\$ 234,069	\$ 454,368	\$ -	\$ 454,368	\$ -
6.5.3 Central West Barrie	2024 - 2024	\$ 1,388,422	\$ 1,038,320	\$ 350,102	34%	\$ 119,035	\$ 231,067	\$ -	\$ -	\$ 231,067
6.5.4 Tiny/Perkinsfield	2026 - 2026	\$ 1,805,162	\$ 1,349,976	\$ 455,186	34%	\$ 154,763	\$ 300,423	\$ -	\$ -	\$ 300,423
6.5.5 Oro North	2029 - 2029	\$ 1,745,831	\$ 1,305,606	\$ 440,225	34%	\$ 149,677	\$ 290,549	\$ -	\$ -	\$ 290,549
6.5.6 Everett	2031 - 2031	\$ 1,709,101	\$ 1,278,137	\$ 430,963	34%	\$ 146,528	\$ 284,436	\$ -	\$ -	\$ 284,436
6.5.7 Tottenham	2031 - 2031	\$ 1,709,101	\$ 1,278,137	\$ 430,963	34%	\$ 146,528	\$ 284,436	\$ -	\$ -	\$ 284,436
Subtotal Other New Paramedic Stations - Building Construction		\$ 13,288,744	\$ 9,937,881	\$ 3,350,863		\$ 1,139,293	\$ 2,211,570	\$ -	\$ 820,659	\$ 1,390,910
6.6 Fleet										
6.6.1 Paramedic Fleet	2023 - 2032	\$ 6,775,029	\$ 5,066,651	\$ 1,708,378	0%	\$ -	\$ 1,708,378	\$ -	\$ 341,676	\$ 1,366,702
Subtotal Fleet		\$ 6,775,029	\$ 5,066,651	\$ 1,708,378		\$ -	\$ 1,708,378	\$ -	\$ 341,676	\$ 1,366,702
TOTAL AMBULANCE SERVICES		\$ 34,835,912	\$ 16,465,459	\$ 18,370,453		\$ 4,216,698	\$ 14,153,755	\$ -	\$ 7,043,806	\$ 7,109,950

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2032 DC Eligible Costs	75.6%	\$5,321,893
10-Year Growth in Population in New Units		57,051
Unadjusted Development Charge Per Capita		\$93.28
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	9.5%	\$667,814
10-Year Growth in Square Metres		357,960
Unadjusted Retail Development Charge Per Square Metre		\$1.87
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	15.0%	\$1,054,099
10-Year Growth in Square Metres		1,004,870
Unadjusted Non-Retail Development Charge Per Square Metre		\$1.05

2023 - 2032 Net Funding Envelope	\$7,043,806
Reserve Fund Balance as at December 31st, 2022	\$ (3,071,129)

**APPENDIX B.6
TABLE 3-1**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
AMBULANCE SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

AMBULANCE SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	(\$2,320.4)	(\$6,312.55)	(\$6,213.94)	(\$5,665.24)	(\$5,043.39)	(\$4,343.02)	(\$3,558.57)	(\$2,684.00)	(\$1,713.60)	(\$641.00)	
2023 - 2032 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Ambulance Services: Non Inflated	\$4,595.7	\$427.7	\$38.9	\$38.9	\$38.9	\$38.9	\$38.9	\$38.9	\$38.9	\$25.8	\$5,321.9
- Ambulance Services: Inflated	\$4,595.7	\$436.3	\$40.5	\$41.3	\$42.2	\$43.0	\$43.9	\$44.7	\$45.6	\$30.9	\$5,364.1
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722	57,051
REVENUE											
- DC Receipts: Inflated	\$834.6	\$874.4	\$915.7	\$958.7	\$1,003.1	\$1,048.7	\$1,095.7	\$1,143.5	\$1,192.4	\$695.5	\$9,762.4
INTEREST											
- Interest on Opening Balance	(\$127.6)	(\$347.2)	(\$341.8)	(\$311.6)	(\$277.4)	(\$238.9)	(\$195.7)	(\$147.6)	(\$94.2)	(\$35.3)	(\$2,117.3)
- Interest on In-year Transactions	(\$103.4)	\$7.7	\$15.3	\$16.1	\$16.8	\$17.6	\$18.4	\$19.2	\$20.1	\$11.6	\$39.4
TOTAL REVENUE	\$603.6	\$534.9	\$589.2	\$663.2	\$742.5	\$827.4	\$918.4	\$1,015.1	\$1,118.2	\$671.9	\$7,684.5
CLOSING CASH BALANCE	(\$6,312.6)	(\$6,213.9)	(\$5,665.2)	(\$5,043.4)	(\$4,343.0)	(\$3,558.6)	(\$2,684.0)	(\$1,713.6)	(\$641.0)	(\$0.0)	

2023 Adjusted Charge Per Capita

\$156.35

Allocation of Capital Program

Residential Sector	75.6%
Non-Residential Sector	24.4%

Rates for 2023

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

**APPENDIX B.6
TABLE 3-2**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
AMBULANCE SERVICES
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

AMBULANCE SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	(\$291.2)	(\$821.7)	(\$825.1)	(\$768.2)	(\$699.2)	(\$617.2)	(\$521.5)	(\$411.1)	(\$285.2)	(\$142.8)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Ambulance Services: Non Inflated	\$576.7	\$53.7	\$4.9	\$4.9	\$4.9	\$4.9	\$4.9	\$4.9	\$4.9	\$3.2	\$667.8
- Ambulance Services: Inflated	\$576.7	\$54.7	\$5.1	\$5.2	\$5.3	\$5.4	\$5.5	\$5.6	\$5.7	\$3.9	\$673.1
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	24,230	26,920	29,610	32,300	35,000	37,690	40,380	43,070	45,760	43,000	357,960
REVENUE											
- DC Receipts: Inflated	\$70.3	\$79.7	\$89.4	\$99.4	\$109.9	\$120.7	\$131.9	\$143.5	\$155.5	\$149.1	\$1,149.4
INTEREST											
- Interest on Opening Balance	(\$10.2)	(\$28.8)	(\$28.9)	(\$26.9)	(\$24.5)	(\$21.6)	(\$18.3)	(\$14.4)	(\$10.0)	(\$5.0)	(\$188.4)
- Interest on In-year Transactions	(\$13.9)	\$0.4	\$1.5	\$1.6	\$1.8	\$2.0	\$2.2	\$2.4	\$2.6	\$2.5	\$3.3
TOTAL REVENUE	\$46.2	\$51.3	\$62.0	\$74.2	\$87.3	\$101.1	\$115.9	\$131.5	\$148.2	\$146.6	\$964.3
CLOSING CASH BALANCE	(\$821.7)	(\$825.1)	(\$768.2)	(\$699.2)	(\$617.2)	(\$521.5)	(\$411.1)	(\$285.2)	(\$142.8)	\$0.0	

2023 Adjusted Charge Per Square Metre **\$2.90**

Allocation of Capital Program

Residential Sector	75.6%
Retail	9.5%
Non-Retail	15.0%

Rates for 2023

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

**APPENDIX B.6
TABLE 3-3**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
AMBULANCE SERVICES
NON-RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

AMBULANCE SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	(\$459.6)	(\$1,286.3)	(\$1,304.0)	(\$1,226.3)	(\$1,126.8)	(\$1,003.6)	(\$854.7)	(\$678.0)	(\$471.3)	(\$232.3)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Ambulance Services: Non Inflated	\$910.3	\$84.7	\$7.7	\$7.7	\$7.7	\$7.7	\$7.7	\$7.7	\$7.7	\$5.1	\$1,054.1
- Ambulance Services: Inflated	\$910.3	\$86.4	\$8.0	\$8.2	\$8.3	\$8.5	\$8.7	\$8.9	\$9.0	\$6.1	\$1,062.5
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	68,370	75,970	83,560	91,160	98,760	106,360	113,950	121,550	129,140	116,050	1,004,870
REVENUE											
- DC Receipts: Inflated	\$122.6	\$139.0	\$155.9	\$173.5	\$191.7	\$210.6	\$230.1	\$250.4	\$271.4	\$248.7	\$1,994.0
INTEREST											
- Interest on Opening Balance	(\$25.3)	(\$70.7)	(\$71.7)	(\$67.4)	(\$62.0)	(\$55.2)	(\$47.0)	(\$37.3)	(\$25.9)	(\$12.8)	(\$475.4)
- Interest on In-year Transactions	(\$13.8)	\$0.5	\$1.5	\$1.7	\$1.8	\$2.0	\$2.2	\$2.4	\$2.6	\$2.4	\$3.4
TOTAL REVENUE	\$83.6	\$68.8	\$85.7	\$107.7	\$131.6	\$157.4	\$185.4	\$215.5	\$248.1	\$238.4	\$1,522.0
CLOSING CASH BALANCE	(\$1,286.3)	(\$1,304.0)	(\$1,226.3)	(\$1,126.8)	(\$1,003.6)	(\$854.7)	(\$678.0)	(\$471.3)	(\$232.3)	\$0.0	

2023 Adjusted Charge Per Square Metre **\$1.79**

Allocation of Capital Program	
Residential Sector	75.6%
Retail	9.5%
Non-Retail	15.0%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix B.7

Long Term Care

Long Term Care

Long term care facilities provide a range of long term care needs, from Life Lease homes to assisted living suites, only assets and capital needs related to long term care needs are included in the development charges analysis. The Long Term Care component of this service is provided by Simcoe County and is based on a cost sharing agreement with the Cities of Barrie and Orillia. Only the City of Barrie’s share of 11.17% is incorporated into the development charges calculation. The following discusses the individual components included in the Long Term Cares service category. The analysis is set out in the tables which follow.

Table B.7-1	Historical Service Levels and Calculation of 15-Year Average Service Level
Table B.7-2	2023-2032 Development-Related Capital Forecast and Calculation of the Growth-Related Net Capital Costs
Table B.7-3	Cash Flow Analysis

A. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

Table B.7-1 displays the 15-year historical inventory for buildings, land, vehicles and furniture and equipment for Long Term Care. In 2022, the County of Simcoe’s share was 77.99% cent of the costs, Barrie’s share was 11.17%, and Orillia’s shares was 10.84%. The City’s historical service level does not include vehicles, furniture and equipment as those operational costs are only incurred by the County.

Simcoe County provides long term care services from four manors. In 2022, the total square footage of the manors was 497,100 with a replacement cost of \$258.50 million, of which \$28.88 million is the City of Barrie’s financial

share. Georgian Village in Penetanguishene was reconstructed and expanded in 2013 and has both a Manor and a Village component. Common spaces in the facility have been split and allocated to both the manor and village based on total facility gross floor area.

The four manors occupy 10.45 hectares of land. The land for the manors is valued at \$13.27 million, of which \$1.48 million is the City of Barrie’s financial responsibility.

The 2022 combined replacement value of the City’s share of the inventory of capital assets for Long Term Care is \$30.36 million. The historical service level of \$203.17, multiplied by the 10-year net population growth (54,830), results in a 10-year maximum allowable funding envelope of \$11.14 million. Table 1 provides a summary of the level of service and the calculation of the 10-year funding envelope from 2023 to 2032. The calculation of the maximum allowable funding envelope is summarized as follows:

10-Year Funding Envelope Calculation – Barrie’s Share

15-Year Average Service Level (2008 – 2022)	\$203.17
Net Pop. Growth (2023 – 2032)	54,830
Maximum Allowable Funding Envelope	\$11,139,811

B. Development-Related Capital Program

The 2023 to 2032 development-related capital program includes the redevelopment of Simcoe Manor/Village. In total, the Long Term Care capital program amounts to \$86.28 million, with a net municipal cost of \$8.47 million for the City of Barrie. The City of Orillia and Simcoe County’s shares of these projects have been reduced from the net municipal cost. A portion of the Simcoe Manor/Village redevelopment related to new affordable housing has also been excluded from the recovery total as these costs are no longer eligible for DC funding.

Of the net municipal cost, \$5.92 million or 70%, has been identified as replacement or benefit to existing share based on the redevelopment of existing beds and net new additional space. Approximately \$100,530 in available DC reserves has been applied to the total DC eligible costs and is reduced from the 2023-2032 in-period recovery.

The remaining \$2.45 million is related to development in the 2023–2032 planning period and is eligible for DC recovery. It is noted that the residential DC eligible capital costs are divided by the 10-year growth in population in new dwelling units (57,051) to derive an unadjusted charge of \$42.91 per capita.

C. Cash Flow Analysis

After cash flow consideration, the residential calculated charge decreases marginally to \$42.78 per capita which accounts for the timing of expenditures and anticipated revenues.

The following table summarizes the calculation of the Long Term Care development charge:

LONG TERM CARE SERVICES SUMMARY								
15-year Hist. Service Level per pop & emp	2023 - 2032 Development-Related Capital Program		Unadjusted Development Charge \$/capita	Unadjusted Development Charge		Adjusted Development Charge \$/capita	Adjusted Development Charge	
	Total	Net DC Recoverable		Retail \$/sq.m	Non-Retail\$/sq.m		Retail \$/sq.m	Non- Retail \$/sq.m
\$203.17	\$86,283,679	\$2,447,924	\$42.91	\$0.00	\$0.00	\$42.78	\$0.00	\$0.00

APPENDIX B.7
TABLE 1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
LONG TERM CARE SERVICES

BUILDINGS - MANORS Facility Name	# of Square Feet															UNIT COST (\$/sq. ft.)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Georgian Manor - Penetanguishene	68,782	68,782	68,782	68,782	68,782	68,782	132,017	132,017	132,017	132,017	132,017	132,017	132,017	132,017	132,017	\$520
Georgian Manor - Penetanguishene (Common Areas)	-	-	-	-	-	4,865	4,865	4,865	4,865	4,865	4,865	4,865	4,865	4,865	4,865	\$520
Simcoe Manor - Beeton - Long Term Care	121,746	121,746	121,746	121,746	121,746	121,746	121,746	121,746	121,746	121,746	121,746	121,746	121,746	121,746	121,746	\$520
Sunset Manor - Collingwood - Long Term Care	137,270	137,270	137,270	137,270	137,270	137,270	137,270	137,270	137,270	137,270	137,270	137,270	137,270	137,270	137,270	\$520
Trillium Manor - Orillia	101,206	101,206	101,206	101,206	101,206	101,206	101,206	101,206	101,206	101,206	101,206	101,206	101,206	101,206	101,206	\$520
Total (sq.ft.)	429,004	429,004	429,004	429,004	429,004	433,869	497,104	497,104	497,104	497,104	497,104	497,104	497,104	497,104	497,104	
Total (\$000)	\$223,082.1	\$223,082.1	\$223,082.1	\$223,082.1	\$223,082.1	\$225,611.8	\$258,494.0	\$258,494.0	\$258,494.0	\$258,494.0	\$258,494.0	\$258,494.0	\$258,494.0	\$258,494.0	\$258,494.0	
City of Barrie Share¹ (\$000)	\$24,922.7	\$24,922.7	\$24,922.7	\$24,922.7	\$24,922.7	\$25,205.4	\$28,878.9	\$28,878.9	\$28,878.9	\$28,878.9	\$28,878.9	\$28,878.9	\$28,878.9	\$28,878.9	\$28,878.9	

LAND - MANORS Facility Name	# of Hectares															UNIT COST (\$/ha)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Georgian Manor - Penetanguishene	0.17	0.17	0.17	0.17	0.17	0.17	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77	\$ 1,200,000
Simcoe Manor - Beeton	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	\$ 1,500,000
Sunset Manor - Collingwood	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	\$ 1,200,000
Trillium Manor - Orillia	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	\$ 1,200,000
Total (ha)	6.85	6.85	6.85	6.85	6.85	6.85	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45	
Total (\$000)	\$8,960.5	\$8,960.5	\$8,960.5	\$8,960.5	\$8,960.5	\$8,960.4	\$13,275.4	\$13,275.4	\$13,275.4	\$13,275.0	\$13,275.0	\$13,275.0	\$13,275.0	\$13,275.0	\$13,275.0	
City of Barrie Share¹ (\$000)	\$1,001.1	\$1,001.1	\$1,001.1	\$1,001.1	\$1,001.1	\$1,001.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	

¹ City of Barrie shares the funding and operating responsibility of all Manors with the County of Simcoe and the separated City of Orillia. The cities have a cost-sharing agreement with the County, and the City of Barrie's share is 11.17%

APPENDIX B.7
TABLE 1

CITY OF BARRIE
CALCULATION OF SERVICE LEVELS
LONG TERM CARE SERVICES

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Historical Population	131,431	132,957	134,501	136,063	137,121	138,187	139,261	140,343	141,434	142,690	143,958	145,237	146,527	147,829	152,641

INVENTORY SUMMARY (\$000) - County Share Only

Buildings - Manors	\$24,922.73	\$24,922.73	\$24,922.73	\$24,922.73	\$24,922.73	\$25,205.35	\$28,878.95	\$28,878.95	\$28,878.95	\$28,878.95	\$28,878.95	\$28,878.95	\$28,878.95	\$28,878.95	\$28,878.95
Land - Manors	\$1,001.1	\$1,001.1	\$1,001.1	\$1,001.1	\$1,001.1	\$1,001.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1	\$1,483.1
Total (\$000)	\$25,923.8	\$25,923.8	\$25,923.8	\$25,923.8	\$25,923.8	\$26,206.4	\$30,362.1	\$30,362.1	\$30,362.1	\$30,362.0	\$30,362.0	\$30,362.0	\$30,362.0	\$30,362.0	\$30,362.0

SERVICE LEVEL (\$/capita)

Average
Service
Level

Buildings - Manors	\$189.63	\$187.45	\$185.30	\$183.17	\$181.76	\$182.40	\$207.37	\$205.77	\$204.19	\$202.39	\$200.61	\$198.84	\$197.09	\$195.35	\$189.20	\$194.03
Land - Manors	\$7.62	\$7.53	\$7.44	\$7.36	\$7.30	\$7.24	\$10.65	\$10.57	\$10.49	\$10.39	\$10.30	\$10.21	\$10.12	\$10.03	\$9.72	\$9.13
Total (\$/capita)	\$197.24	\$194.98	\$192.74	\$190.53	\$189.06	\$189.64	\$218.02	\$216.34	\$214.67	\$212.78	\$210.91	\$209.05	\$207.21	\$205.39	\$198.91	\$203.17

CITY OF BARRIE
CALCULATION OF MAXIMUM ALLOWABLE
LONG TERM CARE SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2008 - 2022	\$203.17
Net Population Growth 2023 - 2032	54,830
Maximum Allowable Funding Envelope	\$11,139,811

APPENDIX B.7
TABLE B.7-2

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
LONG TERM CARE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
7.0 LONG TERM CARE										
7.1 Buildings										
7.1.1 Simcoe Manor/Village Redevelopment	2023 - 2032	\$ 86,283,679	\$ 77,817,607	\$ 8,466,072	70%	\$ 5,917,615	\$ 2,548,456	\$ 100,532	\$ 2,447,924	\$ -
Subtotal Buildings		\$ 86,283,679	\$ 77,817,607	\$ 8,466,072		\$ 5,917,615	\$ 2,548,456	\$ 100,532	\$ 2,447,924	\$ -
TOTAL LONG TERM CARE		\$ 86,283,679	\$ 77,817,607	\$ 8,466,072		\$ 5,917,615	\$ 2,548,456	\$ 100,532	\$ 2,447,924	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

** Institutional component is under review for eligibility under the DC Act and may be included in the recovery under subsequent DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2032 DC Eligible Costs	100%	\$2,447,924
10-Year Growth in Population in New Units		57,051
Unadjusted Development Charge Per Capita		\$42.91
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		357,960
Unadjusted Retail Development Charge Per Square Metre		\$0.00
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		1,004,870
Unadjusted Non-Retail Development Charge Per Square Metre		\$0.00

2023 - 2032 Net Funding Envelope	\$11,139,811
Reserve Fund Balance as at December 31st, 2022	\$100,532

**APPENDIX B.7
TABLE 3**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LONG TERM CARE
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

LONG TERM CARE	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$100.5	\$76.82	\$58.22	\$45.23	\$38.44	\$38.32	\$45.30	\$59.90	\$82.46	\$113.46	
2023 - 2032 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$10.1	\$10.1	\$10.1	\$10.1	\$10.1	\$10.1	\$10.1	\$10.1	\$10.1	\$10.1	\$100.5
- Long Term Care: Non Inflated	\$244.8	\$244.8	\$244.8	\$244.8	\$244.8	\$244.8	\$244.8	\$244.8	\$244.8	\$244.8	\$2,447.9
- Long Term Care: Inflated	\$254.8	\$259.9	\$265.1	\$270.4	\$275.9	\$281.4	\$287.0	\$292.7	\$298.6	\$304.6	\$2,790.5
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722	57,051
REVENUE											
- DC Receipts: Inflated	\$228.3	\$239.2	\$250.5	\$262.3	\$274.4	\$286.9	\$299.8	\$312.9	\$326.2	\$190.3	\$2,670.9
INTEREST											
- Interest on Opening Balance	\$3.5	\$2.7	\$2.0	\$1.6	\$1.3	\$1.3	\$1.6	\$2.1	\$2.9	\$4.0	\$23.1
- Interest on In-year Transactions	(\$0.7)	(\$0.6)	(\$0.4)	(\$0.2)	(\$0.0)	\$0.1	\$0.2	\$0.4	\$0.5	(\$3.1)	(\$4.0)
TOTAL REVENUE	\$231.1	\$241.4	\$252.2	\$263.6	\$275.7	\$288.4	\$301.6	\$315.3	\$329.6	\$191.1	\$2,690.0
CLOSING CASH BALANCE	\$76.8	\$58.2	\$45.2	\$38.4	\$38.3	\$45.3	\$59.9	\$82.5	\$113.5	\$0.0	

2023 Adjusted Charge Per Capita

\$42.78

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2023

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

Appendix C

Transit Services Technical Appendix

Transit Services

The City of Barrie's Transit Services provides bus transit across the City via eight routes and one express route. The City also offers a Transit on Demand (ToD) service which allows users to schedule trip within a specific zone without a fixed schedule or route. The transit route is optimized through a computer-based system.

A. Ridership Analysis

In accordance with the DCA, Transit Services must be based on a “planned level of service” rather than the “15-year historical average level of service”. As discussed further in Appendix C.2, for the purposes of determining the “planned level of service” for transit, the City's Transit Services development-related capital program has been informed based on existing and proposed capital budget documents, discussions with staff, and Council directed initiatives.

In addition, any background study that incorporates Transit Services into the calculation must now include the following:

- An assessment of ridership forecast for all modes of transit and whether ridership is generated from existing or planned development (O.Reg. 82/98 s.8(2)4).
- An assessment of ridership capacity for all modes of transit over the 10-year forecast period (O. Reg. 82/98 s.8(2)5).

The ridership forecast for the purposes of the 2023 DC Background Study has been informed by the ridership analysis prepared by Dillion Consulting in Appendix F of the 2019 DC Background Study. As the transit network and general ridership assumptions have not fundamentally changed since the 2019 DC Background Study, the same ridership assumptions are used for the

purposes of this update and updated to reflect the planning horizon and anticipated growth. The ridership analysis is discussed further in Appendix C.1.

It is noted that the DCA requires the DC Background Study to include forecast ridership data but does not require this data be used in determining the development charge rate for projects included in the development-related capital program.

B. Planned Level of Service

The DCA (s.5.2 (3)) requires that in estimating the increase in need for Transit Services the increased need “shall not exceed the planned level of service over the 10-year period immediately following the preparation of the background study”. For the purposes of the development charge calculations, the “planned level of service” is considered the 10-year development-related capital program (2023-2032), as informed by the 2019 DC Background Study, capital budgets and discussions with City staff. The capital program identified in the 2019 DC Background Study was developed to achieve the 2041 transit mode share identified in the 2019 Transportation Master Plan and is also used for the purposes of this update.

Through its approval of the DC Background Study and the related underlying capital program, Council will express its intent to ensure that the increase in need in Transit Services arising from development over the planning period will be met. The proposed Transit Services capital program is discussed in further detail in Appendix C.2.

C. Other Transit Requirements: Asset Management Plan and Long-Term Capital and Operating Impacts

Section 10 of the DCA identifies what must be included in a development charge background study. This appendix deals those requirements for Transit Services, namely:

- s.10 (2) The development charge background study shall include,
 - (c) an examination, for each service to which the development charge by-law would relate, of the long term capital and operating costs for capital infrastructure required for the service;
 - (c.2) an asset management plan prepared in accordance with subsection (3);
- s.10 (3) The asset management plan shall,
 - (a) deal with all assets whose capital costs are proposed to be funded under the development charge by-law;
 - (b) demonstrate that all the assets mentioned in clause (a) are financially sustainable over their full life cycle;
 - (c) contain any other information that is prescribed; and
 - (d) be prepared in a prescribed manner.

The requirement to produce an Asset Management Plan (AMP) was included as part of the DCA amendments that came into effect on January 1, 2016. A key function of the AMP is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

In addition to the requirements set out in section 10 of the DCA, the associated regulations, O.Reg. 82/98, identify additional direction on the contents of the AMP for Transit Services to be addressed in a DC Background Study. However, the Regulations are silent with respect to the AMP requirements for any other services. This analysis is discussed further in Appendix C.3.

D. Overview of Transit Technical Appendices

The following describes the Transit Services analysis contained in this appendix.

Appendix C.1 – Transit Ridership Analysis

- Describes the ridership analysis required under section 8(2) of O.Reg. 82/98.

Appendix C.2 – Transit Development-Related Capital Program (2023-2032)

- Contains details on the development-related capital program including a description of projects, timing and costing.
- Includes details on cash flow considerations.

Appendix C.3 – Transit Cost of Growth Analysis

Addresses the requirements of section 10(2) of the DCA relating to the examination of long-term capital and operating impact costs for capital infrastructure and section 8(3) of O.Reg. 82/98 for a DC Background Study to include an asset management plan relating to Transit Services.

Appendix C.1

Transit Ridership Forecast

Transit Ridership Forecast

A. Transit Service Delivery in the City of Barrie

As demonstrated in Appendix A, the City of Barrie has experienced steady population and employment growth which is anticipated to continue over the forecast period. As the City continues to develop, so will the need to provide adequate levels of Transit Services.

The ridership forecast for the purposes of the 2023 DC Background Study was prepared by Hemson based on the ridership forecast and analysis prepared by Dillion Consulting as part of the 2019 DC Background Study (see Appendix F – Transit Servicing Needs). The following summarizes the transit ridership forecast.

B. Ridership Forecast

As required by the DCA, the anticipated ridership forecast includes an assessment of all modes (collectively) of transit proposed to be funded by development charges over the forecast period. For the purposes of the 2023 DC Background Study transit analysis, the PM Peak Hour Transit Trips are used.

Key inputs used from Appendix F of the 2019 DC Background Study are described below:

- **Table 3: Transit Mode Share Targets to 2041** – identifies a 2041 transit mode share target of 7.0% target, derived from the 2019 Transportation Master Plan and also used for the purposes of the 2023 DC Background Study update.

- **Table 7: Total, Internal, and External P.M. Peak Hour Transit Trips and Mode Share** – identifies City of Barrie internal total P.M. Peak Hour Transit Trips from 2016 to 2041.
- **Table 8: Ridership Forecast by Year (2018-2041)** – summarizes the anticipated PM Peak Hour Person Trips and Local Barrie Transit Mode Share from 2018 to 2041. The local Barrie transit mode share of 6.8% in 2041 is used for the purposes of the 2023 DC Background Study.

C. Anticipated Ridership

Table C.1-1 summarizes the key assumptions used to arrive at the ridership forecast. The 2041 mode share targets are consistent with the share identified in the 2019 DC Background Study and the 2019 TMP. The targets for 2022 and 2023 have been delayed as a result of deferred capital acquisitions and delays in the anticipated development of the Secondary Plan Areas.

Consistent with the 2019 DC Background Study, the ridership analysis was allocated using shares of net population growth over the planning horizon. The P.M. Peak Hour Transit Trips was determined based on anticipated net population growth and peak hour transit trips potential identified in the 2019 DC Background Study. Total P.M. Peak Hour Person Trips is calculated by multiplying the annual mode share targets and P.M. Peak Hour Transit Trips.

Table C.1-1 Population, P.M. Peak Hour Ridership and Mode Share Targets

Transit Mode Share Targets	2022	2023	2032	2041
Secondary Plan Area	0.00%	0.10%	0.67%	1.20%
Former Barrie Boundary	2.70%	2.70%	3.17%	5.60%
Total Local Mode Share	2.70%	2.80%	3.83%	6.80%

Net Population	2022	2023	2032	2041
Secondary Plan Area	1,229	4,077	34,555	43,982
Former Barrie Boundary	151,412	153,533	172,916	201,318
Total City of Barrie	152,641	157,610	207,471	245,300

P.M. Peak Hour Transit Trips	2022	2023	2032	2041
Secondary Plan Area	-	42	710	1,508
Former Barrie Boundary	1,986	2,105	3,673	8,698
Total City of Barrie	1,986	2,147	4,383	10,206

Total P.M. Peak Hour Person Trips	73,556	76,679	114,339	150,088
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Source: Dillion Consulting, 2019 and Hemson Consulting, 2023

D. Assessment of Ridership Capacity

The proposed transit infrastructure included in the Transit Services capital program is required to achieve the total P.M. Peak Hour Transit Trips of 10,206 by 2041. However, recognizing that a P.M. Peak Hour Transit Trips of 4,383 will be achieved by 2032, there is available ridership capacity at the end of the 10-year planning period.

E. Transit Ridership Allocations

Table C.1-2 provides a summary of the transit ridership allocations used to arrive at the benefit to existing share calculations for some of the Transit Services related projects.

Of particular importance, the allocations of benefit to existing were determined on a project-by-project basis and are discussed further in Appendix C.2, thus the allocations arising from the ridership analysis were not applied to all projects.

F. Benefit to Existing Share (BTE) Calculation

The benefit to existing share is calculated based using a similar methodology applied in the 2019 DC Background Study. The 2022 (base) trips in the Secondary Plan Areas and Former Municipal Boundary were calculated for a total of 369 trips (see description in Table C.1-2). The anticipated growth in P.M. Peak Hour Transit Trips over the 10-year planning period is 2,397 trips. This estimate, less the 369 “base” trips, amounts to 2,028 growth-related trips over the 10-year planning period.

Table C.1-2 Ridership Allocation

BTE Methodology	Analysis	Description
Benefit to Existing (Secondary Plan Areas Transit Service)	4%	2022 Secondary Plan Areas Population / 2032 Secondary Plan Areas Population
Benefit to Growth (Secondary Plan Areas Transit Service)	96%	2032 Secondary Plan Areas Population - 2022 Secondary Plan Areas Population) / 2022 Secondary Plan Areas
Number of Daily 2032 Barrie Transit Riders in the Secondary Plan Areas from Existing Population	25	Secondary Plan Areas Benefit to Existing Apportionment X 2032 Forecast Secondary Plan Areas Transit Ridership
2032 P.M. Peak Transit Trips Attributed to Existing Population in the former Barrie boundary area	343	2022 P.M. Peak Hour Person Trips X 2032 Local Transit Mode Share accounted for in the former Barrie boundary area - 2022 P.M. Peak Hour Local Transit Trips in the former Barrie boundary area
Total 2032 increase in P.M. peak hour transit trips from existing population =	369	2032 increase in P.M. peak hour Barrie Transit trips in the Secondary Plan Areas from the existing population + 2032 increase in P.M. peak hour Barrie Transit trips in the former Barrie boundary area from the existing population

P.M. Peak Hour Transit Trips	Trips	%
Benefit to Existing Share	369	15%
Growth-Related Trips	2,028	85%
Trips generated to 2023-2032	2,397	100%

G. Post-Period Benefit Calculation

The post-period benefit has been assessed on a project-by-project basis. As the capital program is intended to meet the servicing needs associated with development to 2041, only costs intended to be funded over the 10-year planning horizon and required to meet increased ridership to 2032 have been included in the calculation.

Appendix C.2

Transit Services Development-Related Capital Program

Transit Services Development Related Capital Program

A. Description of Projects Included in the Capital Program

Table 1 provides details on the 2023-2032 development-related capital program for Transit Services. The capital program includes projects associated with the outstanding debenture payments related to the Transit Garage, bus related infrastructure, equipment as well as the construction of various transit facilities.

i. Outstanding Debentures

A total of \$8.22 million in principal payments has been included in the Transit Services capital program. The associated interest payments have been included in the DC rates and are accounted for in the cash flow analysis. Only the growth-related shares of the projects have been debenture financed and are included in the capital program.

ii. Fleet

The capital program includes the acquisition of buses over the planning horizon to 2041 including 96 conventional buses, 16 specialized transit vehicles, 14 supervisor vehicles, two fleet maintenance vehicle and one bus stop maintenance machine. The identified vehicles represent net new acquisitions.

iii. Other Equipment

The other equipment category includes transit signal priority, dynamic bus bays and infrastructure improvements related to Georgian College. Similar to the identified fleet, the equipment acquisitions represent net new infrastructure.

iv. Buildings and Facilities

The buildings and facilities category includes infrastructure that relates to the relocation and expansion of the Allendale Transit Hub, a new terminal facility in Salem and the construction of a Garage and Maintenance facility.

B. Development-Related Capital Program

i. Gross Capital Program

The 2023-2032 gross development-related capital program for Transit Services amounts to \$178.73 million.

ii. Grants, Subsidies and Other Recoveries

In total, \$19.50 million in ICIP funding is anticipated for the proposed Allendale Transit Hub. This amount is therefore reduced from the total DC eligible costs.

iii. Replacement and Benefit to Existing Shares

Approximately a total of \$16.02 million has been identified as a benefit to existing share. The following describes how the BTE shares were calculated for projects.

- **Outstanding Debentures Transit Garage** – only the growth-related shares of the capital costs have been debenture finances, therefore no BTE shares have been identified.
- **Conventional Fleet Additions & Specialized Transit Vehicles** – a BTE share of 15% is applied based on the ridership analysis discussed in Appendix C.1 which represents the share of projects which will benefit existing development in Barrie.
- **Supervisor Vehicles** – are net new acquisitions required to meet the increase need arising from development and have no BTE allocation.

- **Fleet Maintenance and Bus Stop Maintenance Vehicles** a BTE share of 15% is applied based on the ridership analysis discussed in Appendix C.1 which represents the share of projects which will benefit existing development in Barrie.
- **Other Equipment** – includes net new equipment acquisitions need to service future development which are therefore treated as full growth-related.
- **Buildings and Facilities** – net new facilities such as the new terminal in Salem and the Garage and Maintenance Facility are treated as fully growth related as it relates to the construction of new facilities or the expansion of existing buildings. A 53% BTE share has been applied to the Allandale Transit Hub recognizing that it will replace the downtown terminal.

iv. Available DC Reserve Fund

For the purposes of the Transit Services DC calculations, a share of existing reserve funds are assumed to be paying for space, and/or servicing capacity which has paid DCs but has yet to receive new facilities. This is in addition to the requirement of identifying BTE shares and relates to development that occurred prior to the passage of the 2023 DC by-law (“prior growth”).

v. Other Development-Related / Post-Period Benefit Shares

A portion of the eligible costs have been deemed a post-period benefit and will be considered for recovery in subsequent development charge studies. This includes the acquisition of 63 conventional buses, 8 specialized transit vehicles, various supervisor vehicles and one fleet maintenance vehicle which will benefit growth occurring beyond 2032.

The proposed Salem terminal is fully attributed to post-period benefit as it is required beyond the 10-year planning horizon. A further \$53.44 million related to the Transit Garage and Maintenance facility is attributed as a

post-period benefit based on the existing/future capacity of the facility to house transit vehicles. In total, \$94.80 million is identified as a post-period benefit is removed from the DC eligible in-period share.

vi. 2023-2032 DC Eligible Development Related Costs and Residential/Non-Residential Allocation

After these adjustments the total 2022-2032 DC eligible share is reduced to \$47.96 million. This amount is brought forward to the DC calculation.

The development charge eligible cost is allocated 75.6% (\$36.23 million) against residential development, 9.5% (\$4.55 million) against retail development, and 15.0% (\$7.18 million) based on the ratio of forecast growth in population in new units and employment in new floor space. This yields unadjusted development charge rates of \$635.15 per capita, \$12.70 per square metre of retail space and \$7.14 per square metre of non-retail space.

C. Cash Flow Analysis

After cash flow and reserve fund consideration, the residential calculated charge decreases to \$582.21 per capita and the retail and non-retail charges increase slightly to \$12.81 and \$7.24 per square metre, respectively. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the transit development charge:

TRANSIT SERVICES SUMMARY								
2023 - 2032			Unadjusted			Adjusted		
Development-Related Capital Program			Development Charge			Development Charge		
Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non- Retail \$/sq.m	
\$178,731,238	\$47,959,936	\$635.15	\$12.70	\$7.14	\$582.21	\$12.81	\$7.24	

APPENDIX C.2

TABLE C.2-1

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
TRANSIT SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
1.0 TRANSIT SERVICES										
1.1 Debenture Payments - Transit Garage 2015										
1.1.1 Principal Payment	2023 - 2023	\$ 563,415	\$ -	\$ 563,415	0%	\$ -	\$ 563,415	\$ -	\$ 563,415	\$ -
1.1.2 Principal Payment	2024 - 2024	\$ 581,589	\$ -	\$ 581,589	0%	\$ -	\$ 581,589	\$ -	\$ 581,589	\$ -
1.1.3 Principal Payment	2025 - 2025	\$ 600,348	\$ -	\$ 600,348	0%	\$ -	\$ 600,348	\$ -	\$ 600,348	\$ -
1.1.4 Principal Payment	2026 - 2026	\$ 619,713	\$ -	\$ 619,713	0%	\$ -	\$ 619,713	\$ -	\$ 619,713	\$ -
1.1.5 Principal Payment	2027 - 2027	\$ 639,703	\$ -	\$ 639,703	0%	\$ -	\$ 639,703	\$ -	\$ 639,703	\$ -
1.1.6 Principal Payment	2028 - 2028	\$ 660,337	\$ -	\$ 660,337	0%	\$ -	\$ 660,337	\$ -	\$ 660,337	\$ -
1.1.7 Principal Payment	2029 - 2029	\$ 681,637	\$ -	\$ 681,637	0%	\$ -	\$ 681,637	\$ -	\$ 681,637	\$ -
1.1.8 Principal Payment	2030 - 2030	\$ 703,624	\$ -	\$ 703,624	0%	\$ -	\$ 703,624	\$ -	\$ 703,624	\$ -
1.1.9 Principal Payment	2031 - 2031	\$ 726,320	\$ -	\$ 726,320	0%	\$ -	\$ 726,320	\$ -	\$ 726,320	\$ -
1.1.10 Principal Payment	2032 - 2032	\$ 749,748	\$ -	\$ 749,748	0%	\$ -	\$ 749,748	\$ -	\$ 749,748	\$ -
Subtotal Debenture Payments - Transit Garage 2015		\$ 6,526,433	\$ -	\$ 6,526,433		\$ -	\$ 6,526,433	\$ -	\$ 6,526,433	\$ -
1.2 Debenture Payments - Transit Garage 2016										
1.2.1 Principal Payment	2023 - 2023	\$ 407,602	\$ -	\$ 407,602	0%	\$ -	\$ 407,602	\$ -	\$ 407,602	\$ -
1.2.2 Principal Payment	2024 - 2024	\$ 418,020	\$ -	\$ 418,020	0%	\$ -	\$ 418,020	\$ -	\$ 418,020	\$ -
1.2.3 Principal Payment	2025 - 2025	\$ 428,705	\$ -	\$ 428,705	0%	\$ -	\$ 428,705	\$ -	\$ 428,705	\$ -
1.2.4 Principal Payment	2026 - 2026	\$ 439,664	\$ -	\$ 439,664	0%	\$ -	\$ 439,664	\$ -	\$ 439,664	\$ -
Subtotal Debenture Payments - Transit Garage 2016		\$ 1,693,991	\$ -	\$ 1,693,991		\$ -	\$ 1,693,991	\$ -	\$ 1,693,991	\$ -

APPENDIX C.2

TABLE C.2-1

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
TRANSIT SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
1.3 Fleet										
1.3.1 Conventional Fleet Addition (Additional 40 ft. buses) (33)	2023 - 2032	\$ 23,760,000	\$ -	\$ 23,760,000	15%	\$ 3,652,969	\$ 20,107,031	\$ -	\$ 20,107,031	\$ -
1.3.2 Conventional Fleet Addition (Additional 40 ft. buses) (63)	2033 - 2041	\$ 45,360,000	\$ -	\$ 45,360,000	15%	\$ 6,973,850	\$ 38,386,150	\$ -	\$ -	\$ 38,386,150
1.3.3 Specialized Transit Vehicles (8)	2023 - 2029	\$ 2,200,000	\$ -	\$ 2,200,000	15%	\$ 338,238	\$ 1,861,762	\$ -	\$ 1,861,762	\$ -
1.3.4 Specialized Transit Vehicles (8)	2033 - 2041	\$ 2,200,000	\$ -	\$ 2,200,000	15%	\$ 338,238	\$ 1,861,762	\$ -	\$ -	\$ 1,861,762
1.3.5 Supervisor Vehicle - Large Sport Utility Vehicle (1)	2023 - 2032	\$ 51,800	\$ -	\$ 51,800	0%	\$ -	\$ 51,800	\$ -	\$ 51,800	\$ -
1.3.6 Supervisor Vehicle - Small Sport Utility Vehicle (1)	2023 - 2032	\$ 35,000	\$ -	\$ 35,000	0%	\$ -	\$ 35,000	\$ -	\$ 35,000	\$ -
1.3.7 Supervisor Vehicle - Small Sedan (1)	2023 - 2032	\$ 23,000	\$ -	\$ 23,000	0%	\$ -	\$ 23,000	\$ -	\$ 23,000	\$ -
1.3.8 Supervisor Vehicle - Large Sport Utility Vehicle (1)	2033 - 2041	\$ 52,000	\$ -	\$ 52,000	0%	\$ -	\$ 52,000	\$ -	\$ -	\$ 52,000
1.3.9 Supervisor Vehicle - Small Sport Utility Vehicle (4)	2033 - 2041	\$ 138,000	\$ -	\$ 138,000	0%	\$ -	\$ 138,000	\$ -	\$ -	\$ 138,000
1.3.10 Supervisor Vehicle - Small Sedan (6)	2033 - 2041	\$ 138,000	\$ -	\$ 138,000	0%	\$ -	\$ 138,000	\$ -	\$ -	\$ 138,000
1.3.11 Fleet Maintenance Vehicles (1)	2023 - 2032	\$ 58,000	\$ -	\$ 58,000	15%	\$ 8,917	\$ 49,083	\$ -	\$ 40,600	\$ 8,483
1.3.12 Bus Stop Maintenance Machines (4)	2023 - 2032	\$ 800,000	\$ -	\$ 800,000	15%	\$ 122,996	\$ 677,004	\$ -	\$ 677,004	\$ -
1.3.13 Fleet Maintenance Vehicles (1)	2033 - 2041	\$ 115,000	\$ -	\$ 115,000	15%	\$ 17,681	\$ 97,319	\$ -	\$ -	\$ 97,319
Subtotal Fleet		\$ 74,930,800	\$ -	\$ 74,930,800		\$ 11,452,888	\$ 63,477,911	\$ -	\$ 22,796,197	\$ 40,681,714

APPENDIX C.2
TABLE C.2-1

CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
TRANSIT SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2032	Post-Period Benefit*
1.4 Other Equipment										
1.4.1 Transit Signal Priority	2027 - 2028	\$ 3,000,000	\$ -	\$ 3,000,000	0%	\$ -	\$ 3,000,000	\$ -	\$ 3,000,000	\$ -
1.4.2 Transit Dynamic Bus Bays	2027 - 2027	\$ 350,000	\$ -	\$ 350,000	0%	\$ -	\$ 350,000	\$ -	\$ 350,000	\$ -
1.4.3 Georgian College Transit Infrastructure Improvements	2026 - 2026	\$ 250,000	\$ -	\$ 250,000	0%	\$ -	\$ 250,000	\$ -	\$ 250,000	\$ -
Subtotal Other Equipment		\$ 3,600,000	\$ -	\$ 3,600,000		\$ -	\$ 3,600,000	\$ -	\$ 3,600,000	\$ -
1.5 Buildings & Facilities										
1.5.1 Allandale Transit Hub Development (Relocation & Expansion) (6,243 sf)	2024 - 2025	\$ 28,500,000	\$ 19,950,000	\$ 8,550,000	53%	\$ 4,566,300	\$ 3,983,700	\$ -	\$ 3,983,700	\$ -
1.5.2 Terminal Facilities (Salem)	2033 - 2033	\$ 680,000	\$ -	\$ 680,000	0%	\$ -	\$ 680,000	\$ -	\$ -	\$ 680,000
1.5.3 Garage & Maintenance Facility	2029 - 2041	\$ 62,800,000	\$ -	\$ 62,800,000	0%	\$ -	\$ 62,800,000	\$ -	\$ 9,359,615	\$ 53,440,385
Subtotal Buildings & Facilities		\$ 91,980,000	\$ 19,950,000	\$ 72,030,000		\$ 4,566,300	\$ 67,463,700	\$ -	\$ 13,343,315	\$ 54,120,385
TOTAL TRANSIT SERVICES		\$ 178,731,224	\$ 19,950,000	\$ 158,781,224		\$ 16,019,188	\$ 142,762,034	\$ -	\$ 47,959,936	\$ 94,802,099

*Development related costs to be considered for funding from other tools and/or future DC Studies.

** BTE includes costs related to prior growth

Residential Development Charge Calculation		
Residential Share of 2023 - 2032 DC Eligible Costs	75.6%	\$36,235,761
10-Year Growth in Population in New Units		57,051
Unadjusted Development Charge Per Capita		\$635.15
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	9.5%	\$4,547,016
10-Year Growth in Square Metres		357,960
Unadjusted Retail Development Charge Per Square Metre		\$12.70
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	15.0%	\$7,177,159
10-Year Growth in Square Metres		1,004,870
Unadjusted Non-Retail Development Charge Per Square Metre		\$7.14

APPENDIX C.2

TABLE 2-1

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

TRANSIT SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$0.0	\$692.70	\$24.29	(\$510.12)	\$431.75	\$354.70	\$716.55	\$623.31	\$912.00	\$1,395.71	
2023 - 2032 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Transit Services: Non Inflated	\$1,782.6	\$3,287.6	\$3,287.6	\$1,971.5	\$3,180.4	\$2,915.9	\$3,550.5	\$3,349.6	\$3,349.6	\$3,349.6	\$30,024.9
- Transit Garage Debt: Principle	\$425.7	\$439.4	\$453.6	\$468.2	\$483.3	\$498.9	\$515.0	\$531.6	\$548.8	\$566.5	\$4,931.0
- Transit Services: Inflated	\$2,208.3	\$3,727.0	\$3,741.1	\$2,439.7	\$3,663.7	\$3,414.9	\$4,065.5	\$3,881.2	\$3,898.3	\$3,916.0	\$34,955.9
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722	57,051
REVENUE											
- DC Receipts: Inflated	\$3,107.9	\$3,256.1	\$3,409.7	\$3,569.9	\$3,735.2	\$3,905.1	\$4,080.2	\$4,258.1	\$4,440.2	\$2,589.8	\$36,352.2
INTEREST											
- Interest on Opening Balance	\$0.0	\$24.2	\$0.9	(\$28.1)	\$15.1	\$12.4	\$25.1	\$21.8	\$31.9	\$48.8	\$152.2
- Interest on In-year Transactions	\$15.7	(\$12.9)	(\$9.1)	\$19.8	\$1.3	\$8.6	\$0.3	\$6.6	\$9.5	(\$36.5)	\$3.2
- Transit Garage Debt: Interest	(\$222.6)	(\$208.9)	(\$194.7)	(\$180.1)	(\$164.9)	(\$149.4)	(\$133.3)	(\$116.7)	(\$99.5)	(\$81.8)	(\$1,551.7)
TOTAL REVENUE	\$2,901.0	\$3,058.6	\$3,206.7	\$3,381.6	\$3,586.7	\$3,776.7	\$3,972.3	\$4,169.9	\$4,382.1	\$2,520.3	\$34,955.9
CLOSING CASH BALANCE	\$692.7	\$24.3	(\$510.1)	\$431.8	\$354.7	\$716.6	\$623.3	\$912.0	\$1,395.7	\$0.0	

(1) Principal debenture payments not inflated

2023 Adjusted Charge Per Capita

\$582.21

Allocation of Capital Program

Residential Sector	75.6%
Non-Residential Sector	24.4%

Rates for 2023

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

**APPENDIX C-2
TABLE 2-2**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT SERVICES
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

TRANSIT SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$0.0	\$6.00	(\$148.75)	(\$274.67)	(\$190.59)	(\$230.52)	(\$196.21)	(\$211.53)	(\$157.82)	(\$60.04)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Transit Services: Non Inflated	\$223.7	\$412.5	\$412.5	\$247.4	\$399.1	\$365.9	\$445.5	\$420.3	\$420.3	\$420.3	\$3,767.6
- Transit Garage Debt: Principle	\$53.4	\$55.1	\$56.9	\$58.8	\$60.6	\$62.6	\$64.6	\$66.7	\$68.9	\$71.1	\$618.8
- Transit Services: Inflated	\$277.1	\$477.0	\$488.4	\$324.9	\$497.6	\$473.1	\$574.5	\$559.4	\$573.2	\$587.3	\$4,832.6
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	24,230	26,920	29,610	32,300	35,000	37,690	40,380	43,070	45,760	43,000	357,960
REVENUE											
- DC Receipts: Inflated	\$310.5	\$351.8	\$394.7	\$439.2	\$485.4	\$533.2	\$582.7	\$633.9	\$687.0	\$658.4	\$5,076.7
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.1	(\$5.2)	(\$9.6)	(\$6.7)	(\$8.1)	(\$6.9)	(\$7.4)	(\$5.5)	(\$2.1)	(\$51.3)
- Interest on In-year Transactions	\$0.6	(\$3.4)	(\$2.6)	\$2.0	(\$0.3)	\$1.1	\$0.1	\$1.3	\$2.0	\$1.2	\$2.0
- Transit Garage Debt: Interest	(\$27.9)	(\$26.2)	(\$24.4)	(\$22.6)	(\$20.7)	(\$18.7)	(\$16.7)	(\$14.6)	(\$12.5)	(\$10.3)	(\$194.7)
TOTAL REVENUE	\$283.1	\$322.3	\$362.5	\$409.0	\$457.7	\$507.4	\$559.2	\$613.2	\$670.9	\$647.3	\$4,832.6
CLOSING CASH BALANCE	\$6.0	(\$148.8)	(\$274.7)	(\$190.6)	(\$230.5)	(\$196.2)	(\$211.5)	(\$157.8)	(\$60.0)	\$0.0	

2023 Adjusted Charge Per Square Metre **\$12.81**

Allocation of Capital Program	
Residential Sector	75.6%
Retail	9.5%
Non-Retail	15.0%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C-2

TABLE 2-3

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT SERVICES
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

TRANSIT SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
OPENING CASH BALANCE	\$0.0	\$14.19	(\$221.86)	(\$416.50)	(\$285.47)	(\$345.40)	(\$289.36)	(\$309.02)	(\$219.81)	(\$58.70)	
2023 - 2032 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Transit Services: Non Inflated	\$353.1	\$651.2	\$651.2	\$390.5	\$629.9	\$577.6	\$703.2	\$663.4	\$663.4	\$663.4	\$5,947.0
- Transit Garage Debt: Principle	\$84.3	\$87.0	\$89.8	\$92.7	\$95.7	\$98.8	\$102.0	\$105.3	\$108.7	\$112.2	\$976.7
- Transit Services: Inflated	\$437.4	\$753.0	\$770.9	\$512.8	\$785.5	\$746.8	\$906.8	\$883.0	\$904.7	\$927.0	\$7,627.9
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	68,370	75,970	83,560	91,160	98,760	106,360	113,950	121,550	129,140	116,050	1,004,870
REVENUE											
- DC Receipts: Inflated	\$495.1	\$561.1	\$629.5	\$700.5	\$774.1	\$850.4	\$929.3	\$1,011.1	\$1,095.7	\$1,004.3	\$8,051.1
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.5	(\$12.2)	(\$22.9)	(\$15.7)	(\$19.0)	(\$15.9)	(\$17.0)	(\$12.1)	(\$3.2)	(\$117.5)
- Interest on In-year Transactions	\$0.6	(\$3.4)	(\$2.5)	\$1.9	(\$0.2)	\$1.0	\$0.2	\$1.3	\$1.9	\$0.8	\$1.6
- Transit Garage Debt: Interest	(\$44.1)	(\$41.4)	(\$38.6)	(\$35.7)	(\$32.7)	(\$29.6)	(\$26.4)	(\$23.1)	(\$19.7)	(\$16.2)	(\$307.3)
TOTAL REVENUE	\$451.6	\$516.9	\$576.3	\$643.8	\$725.5	\$802.8	\$887.2	\$972.3	\$1,065.8	\$985.7	\$7,627.9
CLOSING CASH BALANCE	\$14.2	(\$221.9)	(\$416.5)	(\$285.5)	(\$345.4)	(\$289.4)	(\$309.0)	(\$219.8)	(\$58.7)	(\$0.0)	

2023 Adjusted Charge Per Square Metre

\$7.24

Allocation of Capital Program

Residential Sector	75.6%
Retail	9.5%
Non-Retail	15.0%

Rates for 2023

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

Appendix C.3

Transit Cost of Growth Analysis

Transit Cost of Growth Analysis

This appendix addresses the capital, operating and asset management plan requirements for Transit Services. Although all Transit assets have a useful life greater than 10 years, the analysis contained in this appendix focuses on the DCA legislated 10-year transit planning horizon (the period immediately following the preparation of the 2023 DC Background Study) of 2023–2032. The analysis focuses on the share of capital assets included in the calculation of the DC rates; however, the non DC-eligible components are also identified.

D. Operating & Capital Cost Impacts and Asset Management Plan Legislative Requirements

Section 10 of the DCA identifies what must be included in a DC Background Study, this appendix deals with two of those requirements for Transit Services, namely:

- s.10 (2) The development charge background study shall include,
 - (c) an examination, for each service to which the development charge by-law would relate, of the long term capital and operating costs for capital infrastructure required for the service;
 - (c.2) an asset management plan prepared in accordance with subsection (3);

Asset management plan

- (3) The asset management plan shall,
 - (a) deal with all assets whose capital costs are proposed to be funded under the development charge by-law;
 - (b) demonstrate that all the assets mentioned in clause (a) are financially sustainable over their full life cycle;
 - (c) contain any other information that is prescribed; and
 - (d) be prepared in a prescribed manner.

In accordance with the DCA amendments that came into effect on January 1, 2016, the DC Background Study must include an Asset Management Plan (AMP). A key function of the AMP is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

In addition to the requirements set out in section 10 of the DCA, the associated regulations, O.Reg. 82/98, identifies additional direction on the contents of the AMP for Transit Services, to be addressed in a DC Background Study. However, the Regulations are silent with respect to the AMP requirements for any other services.

E. Relevant Analysis and City Documents

The City utilizes a range of fiscal planning tools and approaches in examining the funding and maintenance of Transit Services infrastructure. For example, the City prepared a Transit Asset Management Plan in 2019 which addressed the current state of infrastructure and the proposed levels of service to 2028 with considerations to 2041.

In particular, the City as part of its annual budget processes implements and manages the year-to-year expenditure needs and revenue requirements of the program.

F. Transit Services Asset Management Plan Requirements

The following provides an overview of the relevant analysis that fulfills the AMP and long-term capital and operating cost requirements of the legislation. The primary document which addresses this requirement is the City's 2019 Transit AMP.

For the purpose of the AMP analysis, assets have been grouped into the following categories identified in the Transit Services capital program (see

Appendix C.2) and the following useful life assumptions have been applied. The current outstanding debentures are not included in the AMP as it relates to the existing transit garage which has been operational since 2015. The associated AMP requirements are already reflected in the 2019 Transit AMP.

1. Debentures = 0 years
2. Fleet = 10 years
3. Other Equipment = 10-20 years
4. Buildings and Facilities = 40 years

As shown in Table C.3-1, the annual provision of \$2.30 million relates to the Transit assets supported under the 2023 DC by-law. A further \$1.23 million is associated with non-DC related assets. It is noted that the annual contributions are based on assumed theoretical lives and that contributions start the year following the expenditures. It is anticipated that, on average, the actual useful lives of the Transit assets will be longer than the estimates. The earliest point at which contributions will begin is from the initial year of operating the associated asset. The annual contribution at 2033 in Table 3 is the annual contribution for the entire 10-year period, 2023-2032, as the expenditures in 2032 will not trigger asset management contributions until 2033. In addition, the 2033 calculated contribution is the maximum cumulative annual contribution, of any year for all assets over the longest useful life of any specific asset.

Table C.3-1 – Calculated Annual Provision by 2033 for General Services

Service	2023 - 2032 Capital Program		Calculated AMP Annual Provision by 2033	
	DC Related	Non-DC Related*	DC Related	Non-DC Related*
Transit Services	\$47,959,936	\$130,771,287	\$2,297,522	\$1,231,110

** Includes costs that will be recovered under future development charges studies (i.e. other development-related).*

G. AMP Checklist

This section of the appendix addresses the DC Background Study requirements set out in paragraph 1 of s. 8(3) of O.Reg. 82/98. The following provides an overview of the relevant documents and analysis that fulfills the AMP and long-term capital and operating cost requirements of the legislation.

Table C.3-2 provides a checklist of how the AMP analysis for Transit services, as required by the provisions of the DCA, has been addressed.

O.Reg. 82/98 Public Transit DC Requirements

i. Background Study

8.(2) Any background study by the municipality under section 10 of the Act that incorporates the cost of transit services shall set out the following:

Table C.3-2: Transit AMP Checklist

O.Reg. 82/98 Section	Comments
1. The calculations that were used to prepare the estimate for the planned level of service for the transit services, as mentioned in subsection 5.2 (3) of the Act.	Appendix C provides details on this calculation. The City's transit planned level of service largely relates to the expansion of the existing bus transit system.

O.Reg. 82/98 Section	Comments
2. An identification of the portion of the total estimated capital cost relating to the transit services that would benefit, i. the anticipated development over the 10-year period immediately following the preparation of the background study, or ii. the anticipated development after the 10-year period immediately following the preparation of the background study.	Appendix A provides details on the anticipated development over the 10-year planning period. Appendix C.1 provides details as it relates to transit ridership over the 10-year planning period.
3. An identification of the anticipated excess capacity that would exist at the end of the 10-year period immediately following the preparation of the background study.	Appendix C.1 provides details on the excess capacity calculation and ridership forecast over the 10-year planning period.
4. An assessment of ridership forecasts for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study, categorized by development types, and whether the forecasted ridership will be from existing or planned development.	
5. An assessment of the ridership capacity for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study. O. Reg. 428/15, s. 4.	Appendix C.1 provides details on the ridership capacity calculation.

8. (3) If a council of a municipality proposes to impose a development charge in respect of transit services, the asset management plan referred to in subsection 10 (2) (c.2) of the Act shall include the following in respect of those services:

1. A section that sets out the state of local infrastructure and that sets out,

O.Reg. 82/98 Section	Comments
i. the types of assets and their quantity or extent ii. the financial accounting valuation and replacement cost valuation for all assets, iii. the asset age distribution and asset age as a proportion of expected useful life for all assets, and iv. the asset condition based on standard engineering practices for all assets	See Section 2.0 of 2019 Transit AMP ▪ i. Section 2.0, Tables 4-11 ▪ ii. Section 2.0, Tables 4-11 ▪ iii. Section 2.0, Tables 4-11 ▪ iv. Section 2.3

2. A section that sets out the proposed level of service and that,

O.Reg. 82/98 Section	Comments
i. defines the proposed level of service through timeframes and performance measures, ii. discusses any external trends or issues that may affect the proposed level of service or the municipality's ability to meet it, and iii. shows current performance relative to the targets set out.	See Section 3.0 of 2019 Transit AMP ▪ i. Section 3.0 ▪ ii. Section 3.3 and 3.5 ▪ iii. Section 3.5

3. An asset management strategy that,

O.Reg. 82/98 Section	Comments
i. sets out planned actions that will enable the assets to provide the proposed level of service in a sustainable way, while managing risk, at the lowest life cycle cost, ii. is based on an assessment of potential options to achieve the proposed level of service, which assessment compares, life cycle costs, all other relevant direct and indirect costs and benefits, and the risks associated with the potential options,	See Section 4.0 of 2019 Transit AMP ▪ i. Section 4 ▪ ii. Section 4.5 and 4.6
iii. contains a summary of, in relation to achieving the proposed level of service, non-infrastructure solutions maintenance activities, renewal and rehabilitation activities, replacement activities, disposal activities, and expansion activities,	See Section 4.4 of 2019 Transit AMP
iv. discusses the procurement measures that are intended to achieve the proposed level of service	See Section 4.8 of 2019 Transit AMP
v. includes an overview of the risks associated with the strategy and any actions that will be taken in response to those risks	

4. A financial strategy that,

O.Reg. 82/98 Section	Comments
i. of service, categorized by, shows the yearly expenditure forecasts that are proposed to achieve the proposed level A. non-infrastructure solutions, B. maintenance activities, C. renewal and rehabilitation activities, D. replacement activities, E. disposal activities, and F. expansion activities,	See Section 5.0 of 2019 Transit AMP
ii. provides actual expenditures in respect of the categories set out in sub-subparagraphs i A to F from the previous two years, if available, for comparison purposes,	See Section 5.2 of 2019 Transit AMP
iii. gives a breakdown of yearly revenues by source	See Section 5.3 of 2019 Transit AMP
iv. discusses key assumptions and alternative scenarios where appropriate, and	See Section 5.2 and 5.3 of 2019 Transit AMP
v. identifies any funding shortfall relative to financial requirements that cannot be eliminated by revising service levels, asset management or financing strategies, and discusses the impact of the shortfall and how the impact will be managed.	See Section 5.4 of 2019 Transit AMP

8 (4) For the purposes of subsection (3), the proposed level of service may relate to a time after the 10-year period immediately following the preparation of the background study. O. Reg. 428/15, s. 4.

H. Long-Term Capital and Operating Impact

This section provides a brief examination of the long-term operating costs for the capital facilities and infrastructure to be included in the Development Charges By-law for Transit services. This examination is a requirement of the DCA, 1997.

i. Examination of Net Operating Impacts

Table C.3-3 summarizes the anticipated net operating impacts arising from the addition of 33 new buses over the 10-year planning period of 2023-2032 and the new proposed transit facilities. In total, it is anticipated that the City will incur approximately \$980,900 in additional operating costs by 2032.

Table C.3-3 – Estimated Net Operating Cost of the Proposed 2023-2032 Development-Related Capital Program (In Constant 2023 Dollars)

Category	Cost Driver (in 2023 \$)			Additional Operating Costs at 2032	Source and Commentary
	\$	unit measure	Quantity		
Transit					
- Buses	\$24,300	per bus	33	\$801,900	See Note 1
- Allandale Transit Hub	\$0.01	per \$1.00 of infr.	28,500,000	\$85,000	
- Garage and Maintenance Facility	\$0.01	per \$1.00 of infr.	\$62,800,000	\$94,000	Estimated, full operating impact to be completed.
TOTAL ESTIMATED OPERATING COSTS				\$980,900	

Notes:

1) Transit incremental costs based on net (or tax levy) expenditures in the 2022 Budget and the current number of buses

Notes:

1) Post Period operating cost are only shown when a facility is to be fully open and operating by 2032 and a share of the development-related capital has been allocated to growth beyond 2032.

23) Transit incremental costs based on net (or tax levy) expenditures in the 2022 Budget and the current number of buses.

The 2019 Transit AMP shows the system being fully funded over the forecast period. However, if shortfalls arise from anticipate revenues not being realized over the planning period, the difference could be made up through increases in the tax levy, increases to fares and/or alternative revenue sources.

I. AMP Summary

In summary, the asset management plan and long-term capital and operating analysis included in this appendix demonstrates that the City can afford to invest and operate transit infrastructure over the 10-year and long-term planning period. Importantly, the City’s ongoing asset management and long-term financial planning practices will ensure that the projects included in the 2023 DC Background Study are financially sustainable over their full life cycle.

Appendix D

Engineered Services

Technical Appendix

Engineered Services Technical Appendix

The City of Barrie's Infrastructure & Growth Management (IGM) division is responsible for the maintenance, design and construction of City-owned roads, bridges, sidewalks as well as water and wastewater assets including treatment, collection and distribution. The Corporate Asset Management (CAM) team is responsible for delivering master plans associated with those infrastructure assets which provide servicing framework to support and accommodate future growth within the City of Barrie.

In 2019, the City of Barrie completed updates to several Infrastructure Master Plans including: Transportation Master Plan (TMP), Drainage Master Plan (DMP), Water Supply Master Plan (WSMP), Water Distribution and Storage Master Plan (WDSMP), Wastewater Collection Master Plan (WWCMP), and Wastewater Treatment Master Plan (WWTMP). Each document identifies the infrastructure needs required to service growth and intensification to the 2041 planning horizon. The unit costs identified in these documents have been updated to reflect current day cost estimates which are used for the purposes of the 2023 DC Background Study.

The following appendices comprise the citywide engineering related services:

- D.1 Services Related to A Highway: Roads
- D.2 Water Services: Facilities
- D.3 Water Services: Facilities Related Debt
- D.4 Wastewater Services: Facilities
- D.5 Wastewater Services: Facilities Related Debt

Engineering services which are levied on an area-specific basis are discussed further in Appendix E.

Appendix D.1

Services Related to A Highway: Roads

Services Related to A Highway: Roads

This appendix provides a brief outline of the infrastructure included in the Services Related to A Highway: Roads development charge. The development-related projects outlined in this appendix are required to service the demands of new development to 2041. The benefits of the services are considered to be citywide for the purposes of calculating the development charge.

The following discusses the individual components included in the Roads service category. The analysis is set out in the tables which follow.

Table D.1-1	Historical Service Levels and Calculation of 15-Year Average Service Level
Table D.1-2	2023-2041 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs
Table D.1-3	Cash Flow Analysis

A. 15-Year Historical Service Levels and Calculation of Maximum Allowable Funding Envelope

The Roads inventory of capital assets is extensive at a total replacement cost of \$8.75 billion. This includes roads as well as traffic signals, rail crossings, interchanges, bridges, culverts and other related structures.

Table 1 identifies a 15-year average service level for the provision of roads infrastructure of \$41,598.80 per capita and employment. Based on this average service level, the maximum allowable funding envelope is \$5.58 billion (\$41,598.80 per capita and employment multiplied by 134,198 increase in net population and employment from 2023-2041).

Table 1 provides a summary of the level of service and the calculation of the 19-year funding envelope from 2023 to 2041. The calculation of the maximum allowable funding envelope is summarized as follows:

19-Year Funding Envelope Calculation

15-Year Average Service Level (2008 – 2023)	\$41,598.80
Net Pop. and Emp. Growth (2023 – 2041)	134,198
Maximum Allowable Funding Envelope	\$5,582,475,762

The existing facilities have been examined and consideration has been given to whether or not “excess capacity” exists within the City’s infrastructure that may be available to partially meet future servicing requirements. It has been determined that no “uncommitted excess capacity” exists within the City’s roads infrastructure, and as such, no adjustments have been made to the service level calculations.

B. Development-Related Capital Program

i. Gross Capital Program Costs

The total gross cost of the Roads capital program is \$4.00 billion and provides for the undertaking of various new roads, interchanges, roundabouts, road widenings, and streetscape improvements located across the City and within the Salem and Hewitt’s Secondary Plan Areas. The program also includes active transportation (AT) infrastructure such as cycling facilities, multi-use facilities and sidewalks. Other facilities include trail bridges, underpasses and bus stops within or adjacent to the roads right-of-way.

The capital program also makes an adjustment for shares of projects which have previously been funded from development charges. In total, approximately \$84.00 million is reduced from the total gross capital costs.

ii. Grants, Subsidies and Other Recoveries

No grants, subsidies or other recoveries are identified for Roads infrastructure.

iii. Replacement and Benefit to Existing Shares

The Roads program includes a portion that is considered to benefit the existing community. In totality, the benefit to existing share amounts to \$534.46 million and is netted off of the DC eligible costs. A general description of the approach used to determine the benefit to existing shares for different project types is described below:

- **New roads and new road segments** – new road segments do not replace any existing assets and therefore are treated as 100% growth-related with no benefit to existing share adjustment.
- **Interchanges** – the interchanges identified in the Roads capital program are net new assets and are treated as 100% growth-related.
- **Roundabouts** – the roundabouts identified in the Roads capital program do not replace any existing assets and are therefore treated as 100% growth-related.
- **Road widenings** – for projects where an existing road segment is being widening, the benefit to existing share was determined based on the resurfacing/reconstruction of the length of the existing segment. The calculation assumes the road will be resurfaced twice over a 20-year period.
- **Sidewalks** – sidewalks located within the Former Municipal Boundary in the City are attributed a benefit to existing share consistent with most other active transportation infrastructure (see approach discussed below). A nominal benefit to existing share allocation is made to sidewalks within the Secondary Plan Areas recognizing that the increase in need for servicing is primarily driven by development.

- **Active Transportation (AT) Infrastructure** – AT infrastructure is part of an integrated transportation network. The benefit to existing share for most infrastructure is determined based on existing levels of service (2022) and anticipated increases in the AT network to 2041. A nominal benefit to existing share allocation is made to AT within the Secondary Plan Areas recognizing that the increase in need for servicing is primarily driven by development.

iv. Available DC Reserve Funds

In total, \$123.91 million is available in the Roads DC reserve. This amount is applied to projects occurring in the initial years of the planning period and is reduced from the in-period DC recoverable share.

v. Other Development-Related / Post-Period Benefit Shares

Of the DC eligible costs, approximately \$1.06 billion has been identified as a post-period benefit and will be eligible for recovery in subsequent DC Background Studies.

The Roads capital program is based on the City's 2019 TMP, which identifies transportation infrastructure needs to the 2041 planning horizon. Although projects have been planned to accommodate growth occurring to 2041, some project may benefit development beyond this period. However, when the City's TMP is updated and the planning horizon is extended beyond 2041, projects constructed after this time will benefit growth occurring earlier in the planning period. Approximately 30% of the DC eligible costs have been identified as a post-period benefit, informed by the 2051 population and employment forecast and anticipated growth over the 2023-2041 period. As part of subsequent DC Background Study updates, the in-period and post-period allocations will be re-examined based on new capital program information, planning horizons and infrastructure required to meet the increase need for servicing arising from development.

vi. 2023-2041 DC Eligible Development Related Costs

After making adjustments for available DC reserve balance and post-period shares of projects the development charge recoverable share of the capital program of \$2.28 billion. The development-related cost has been allocated 69.1% (\$1.58 billion) to new residential development, 12.2% (\$277.14 million) to new retail development and 18.7% (\$427.45 million) to new non-retail development. The allocation of costs is based on shares of population and employment growth over the planning period. This yields an unadjusted development charge of \$16,692.23 per capita, \$339.24 per square metre of retail gross floor area and \$198.16 of non-retail gross floor area.

C. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The effect of the analysis is an increase in the residential development charge rates to \$17,302.03 per capita. The adjusted retail cash-flow amounts to \$362.93 per square metre of gross floor area and non-retail amounts to \$209.88 per square metre.

The following table summarizes the calculation of the Roads development charge:

SERVICES RELATED TO A HIGHWAY: ROADS SUMMARY								
15-year Hist. Service Level per pop & emp \$41,598.80	2023 - 2032		Unadjusted Development Charge			Adjusted Development Charge		
	Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non- Retail \$/sq.m
	\$4,001,874,395	\$2,280,792,431	\$16,962.23	\$339.24	\$198.16	\$17,302.03	\$362.93	\$209.88

APPENDIX D-1
TABLE 1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY: ROADS

ROADS	# of Kilometres															UNIT COST
Type of Road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	(\$/km)
Arterial Roads (ART)	446	446	447	449	449	449	452	452	452	452	456	454	454	459	459	\$12,006,000
Collector Roads (C/R)	274	274	274	277	280	280	280	280	280	280	281	285	285	285	285	\$8,948,000
Total (km)	720	720	721	726	729	729	732	732	732	732	737	739	739	744	744	
Total (\$000)	\$7,806,428.0	\$7,806,428.0	\$7,818,434.0	\$7,869,290.0	\$7,896,134.0	\$7,896,134.0	\$7,932,152.0	\$7,932,152.0	\$7,932,152.0	\$7,932,152.0	\$7,989,124.0	\$7,995,359.7	\$7,995,359.7	\$8,056,689.5	\$8,056,689.5	

TRAFFIC SIGNALS	# of Traffic Signals															UNIT COST
Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	(\$/unit)
Signalized Intersections	158	167	169	175	186	188	188	193	196	196	196	196	196	196	196	\$378,000
Pedestrian Crossing Traffic Signals	35	40	39	44	41	41	44	45	45	46	46	46	46	46	46	\$118,000
Variable Flashing 40's	1	1	5	6	44	44	44	46	46	46	46	46	46	46	46	\$13,100
Speed Board Advisory	4	4	9	9	10	10	10	10	10	7	7	7	7	7	7	\$5,900
Total (#)	198	212	222	234	281	283	286	294	297	295	295	295	295	295	295	
Total (\$000)	\$63,890.7	\$67,882.7	\$68,602.6	\$71,473.7	\$75,781.4	\$76,537.4	\$76,891.4	\$78,925.6	\$80,059.6	\$80,159.9	\$80,159.9	\$80,159.9	\$80,159.9	\$80,159.9	\$80,159.9	

APPENDIX D-1
TABLE 1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY: ROADS

STRUCTURES Description	# of Items															UNIT COST (\$/Item)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Rail Crossings																
Go Line at Cox Mill	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$2,915,600
BCRY at Lockhart	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$375,400
BCRY at Maplevue	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	\$9,416,700
Tiffin and Highway 400	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$3,199,500
Highway Interchange/Crossing																
Duckworth	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$38,883,100
St Vincent	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$33,173,100
Bayfield	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$38,883,100
Sunnidale	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$33,173,100
Anne	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$33,173,100
Dunlop	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$38,883,100
Tiffin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$33,173,100
Essa	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$38,883,100
Maplevue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$38,883,100
McKay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$33,173,100
Harvie*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	\$88,000,000
Road Bridges																
Dvment's Creek Centennial Park Roadway Bridge	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	\$3,118,700
Bunkers Creek Roadway Bridge	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	\$3,428,200
Lover's Creek Roadway Bridge (Yonge Street)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$6,807,900
Whiskey Creek Brennan Avenue Bridge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$435,900
Painswick Bridge B (Big Bay Point Road)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$12,106,200
Lovers Creek Hurst Drive Bridge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$12,952,500
Hewitts Creek Maplevue Drive Bridge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$888,000
Whiskey Creek Little Avenue Bridge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,040,000
Lovers Creek Lockhart Road Bridge (0.16km West of Huronia)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$653,900
Lovers Creek Lockhart Road Bridge (0.72km East of Bayview)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,206,900
Lovers Creek Big Bay Point Road Bridge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$6,437,900

APPENDIX D-1
TABLE 1

CITY OF BARRIE
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY: ROADS

STRUCTURES Description	# of Items															UNIT COST (\$/Item)
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Culverts (over 3m in width)																
Georgian Creek/Hickling Trail	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	\$804,600
Bear Creek/Mapleview Drive	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$797,800
Sophia Creek Outlet/Bayfield to Lake	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$2,615,500
Dymment's Creek - Culvert at 71 Sproule Drive	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,449,000
Kidds Creek/Bradford to Lake	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$8,920,300
Lover's Creek/Tollendale Mill Road	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,213,600
Sophia Creek/Sophia Street	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,710,100
Dynments Creek/Sarjeant Drive	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$5,224,300
Bunkers Creek/Anne Street South	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,536,500
Hotchkiss Creek/Anne Street South	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$4,271,800
Lover's Creek/Welham Road	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$617,600
Dynment's Creek/Bradford Street	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$3,615,200
Bunkers Creek/Bradford Street	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$797,800
Kidds Creek/Donald Drive	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,509,600
Little Lake Drain/Stanley Street	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$644,500
Kidd's Creek/Wellington Street	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,307,800
Bear Creek/Lougheed Road	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,375,000
Hewitt's Creek/Big Bay Point Road	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,449,000
Hewitt's Creek/Big Bay Point Road	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,548,600
Hewitt's Creek/Big Bay Point Road	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,582,200
Hotchkiss Creek - Lakeshore Drive (Roadway Culvert #6)	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	\$2,756,800
Kidds Creek/Eccles Street North	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$422,500
Dynments Creek/Edgehill Drive	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,146,300
Sophia Drain/Laurie Crescent	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$831,500
Whiskey Creek/McConkey Place	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$797,800
Dyments Drain/Ferndale Drive North	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$624,300
Whiskey Creek/Bayview Drive	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,227,000
Hewitt's Creek/Consort Drive	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$683,500
Sophia Creek/St. Vincent St	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$804,600
Sophia Creek/Grove Street	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,609,100
Hotchkiss Creek - Bradford Street Hybrid Structure	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$10,455,400
Bunker's Creek - Boys Street Hybrid Structure	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$3,621,900
Georgian Drainage - Penetanguishene Road Hybrid Structure	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$4,024,200
Sophia Creek - Berczy Street Hybrid Structure	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,642,800
William's Outlet - Gowan Street Hybrid Structure	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	\$6,853,700
Hewitt's Creek/Big Bay Point Road	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,548,600
Lover's Creek/Mapleview Dr E, West of Country Lane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$10,811,900
Dynments Creek/Anne Street	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$6,385,400
Total (#)	2,065	2,066	2,069	2,070	2,072	2,074	2,077	2,078	2,079	2,080	2,081	2,082	2,083	2,085	2,086	
Total (\$000)	\$498,123.7	\$498,123.7	\$507,734.2	\$507,734.2	\$508,538.8	\$517,955.5	\$524,502.4	\$524,502.4	\$524,502.4	\$524,502.4	\$524,502.4	\$524,502.4	\$524,502.4	\$612,502.4	\$612,502.4	

APPENDIX D-1
TABLE 1

CITY OF BARRIE
CALCULATION OF SERVICE LEVELS
SERVICES RELATED TO A HIGHWAY: ROADS

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Historical Population	131,431	132,957	134,501	136,063	137,121	138,187	139,261	140,343	141,434	142,690	143,958	145,237	146,527	147,829	152,641
Historical Employment	61,563	62,217	62,892	63,590	64,392	65,205	66,030	66,866	67,715	69,210	70,730	72,730	53,890	57,330	65,310
Total Historical Population & Employment	192,994	195,174	197,393	199,653	201,513	203,392	205,291	207,209	209,149	211,900	214,688	217,967	200,417	205,159	217,951

INVENTORY SUMMARY (\$000)

Roads	\$7,806,428.0	\$7,806,428.0	\$7,818,434.0	\$7,869,290.0	\$7,896,134.0	\$7,896,134.0	\$7,932,152.0	\$7,932,152.0	\$7,932,152.0	\$7,932,152.0	\$7,989,124.0	\$7,995,359.7	\$7,995,359.7	\$8,056,689.5	\$8,056,689.5
Traffic Signals	\$63,890.7	\$67,882.7	\$68,602.6	\$71,473.7	\$75,781.4	\$76,537.4	\$76,891.4	\$78,925.6	\$80,059.6	\$80,159.9	\$80,159.9	\$80,159.9	\$80,159.9	\$80,159.9	\$80,159.9
Structures	\$498,123.7	\$498,123.7	\$507,734.2	\$507,734.2	\$508,538.8	\$517,955.5	\$524,502.4	\$524,502.4	\$524,502.4	\$524,502.4	\$524,502.4	\$524,502.4	\$524,502.4	\$612,502.4	\$612,502.4
Total (\$000)	\$8,368,442.4	\$8,372,434.4	\$8,394,770.8	\$8,448,497.9	\$8,480,454.2	\$8,490,626.9	\$8,533,545.8	\$8,535,580.0	\$8,536,714.0	\$8,536,814.3	\$8,593,786.3	\$8,600,021.9	\$8,600,021.9	\$8,749,351.8	\$8,749,351.8

SERVICE LEVEL (\$/population & employment)

Average
Service
Level

Roads	\$40,449.07	\$39,997.27	\$39,608.47	\$39,414.92	\$39,184.24	\$38,822.24	\$38,638.58	\$38,280.92	\$37,925.85	\$37,433.47	\$37,212.72	\$36,681.51	\$39,893.62	\$39,270.47	\$36,965.60	\$38,651.93
Traffic Signals	\$331.05	\$347.81	\$347.54	\$357.99	\$376.06	\$376.30	\$374.55	\$380.90	\$382.79	\$378.29	\$373.38	\$367.76	\$399.97	\$390.72	\$367.79	\$370.19
Structures	\$2,581.03	\$2,552.20	\$2,572.20	\$2,543.09	\$2,523.60	\$2,546.59	\$2,554.92	\$2,531.27	\$2,507.79	\$2,475.24	\$2,443.09	\$2,406.34	\$2,617.06	\$2,985.50	\$2,810.28	\$2,576.68
Total (\$/population & employment)	\$43,361.15	\$42,897.28	\$42,528.21	\$42,316.00	\$42,083.91	\$41,745.14	\$41,568.05	\$41,193.09	\$40,816.43	\$40,287.00	\$40,029.19	\$39,455.61	\$42,910.64	\$42,646.69	\$40,143.66	\$41,598.80

CITY OF BARRIE
CALCULATION OF MAXIMUM ALLOWABLE FUNDING ENVELOPE
SERVICES RELATED TO A HIGHWAY: ROADS

20-Year Funding Envelope Calculation	
10 Year Average Service Level 2008 - 2022	\$41,598.80
Net Population & Employment Growth 2023 - 2041	134,198
Maximum Allowable Funding Envelope	\$5,582,475,762

APPENDIX D-1

TABLE 2

CITY OF BARRIE
SERVICES RELATED TO A HIGHWAY: ROADS
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Length (m)	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement BTE Share			Available DC Reserves	2023- 2041	Post 2041*
						%	\$				
SERVICES RELATED TO A HIGHWAY: ROADS											
1.0 FORMER MUNICIPAL BOUNDARY											
1.1 New Roads											
1.1.1 1101 - Anne-Baldwin Connector: Adelaide Street to Innisfil Street	2031 - 2041	73	\$ 3,553,200	\$ -	\$ 3,553,200	0%	\$ -	\$ 3,553,200	\$ -	\$ 3,553,200	\$ -
1.1.2 1102 - Bryne Drive: Existing North Cul-de-Sac - Existing South Cul-de-sac	2023 - 2030	1,598	\$ 50,997,600	\$ -	\$ 50,997,600	0%	\$ -	\$ 50,997,600	\$ 50,997,600	\$ -	\$ -
1.1.3 1105 - Welham Road: South Cul-de-sac - Lockhart Road	2023 - 2030	745	\$ 14,796,000	\$ -	\$ 14,796,000	0%	\$ -	\$ 14,796,000	\$ 14,796,000	\$ -	\$ -
Subtotal New Roads			\$ 69,346,800	\$ -	\$ 69,346,800		\$ -	\$ 69,346,800	\$ 65,793,600	\$ 3,553,200	\$ -
1.2 Interchanges											
1.2.1 1128 - Dunlop Southbound On Ramp	2031 - 2041		\$ 9,676,800	\$ -	\$ 9,676,800	0%	\$ -	\$ 9,676,800	\$ -	\$ 9,676,800	\$ -
1.2.2 2128 - McKay Interchange	2023 - 2030		\$ 85,896,720	\$ -	\$ 85,896,720	9%	\$ 7,470,695	\$ 78,426,025	\$ 53,429,638	\$ 24,996,387	\$ -
1.2.3 3000 - Maplevue D.D.I.	2031 - 2041		\$ 12,592,800	\$ -	\$ 12,592,800	0%	\$ -	\$ 12,592,800	\$ -	\$ 12,592,800	\$ -
Subtotal Interchanges			\$ 108,166,320	\$ -	\$ 108,166,320		\$ 7,470,695	\$ 100,695,625	\$ 53,429,638	\$ 47,265,987	\$ -
1.3 Roundabouts											
1.3.1 3001 - Ross Street Roundabout - Interim	2023 - 2030		\$ 4,687,200	\$ -	\$ 4,687,200	0%	\$ -	\$ 4,687,200	\$ 4,687,200	\$ -	\$ -
1.3.2 3002 - Ross Street Roundabout - Ultimate	2031 - 2041		\$ 5,270,400	\$ -	\$ 5,270,400	0%	\$ -	\$ 5,270,400	\$ -	\$ -	\$ 5,270,400
Subtotal Roundabouts			\$ 9,957,600	\$ -	\$ 9,957,600		\$ -	\$ 9,957,600	\$ 4,687,200	\$ -	\$ 5,270,400
1.4 Roads Widenings											
1.4.1 1201 - Georgian Drive: Duckworth Street - Johnson Street	2031 - 2041	1,741	\$ 73,537,200	\$ -	\$ 73,537,200	13%	\$ 9,853,149	\$ 63,684,051	\$ -	\$ 63,684,051	\$ -
1.4.2 1204 - Bayfield Street: Cundles Road East - Sophia Street	2031 - 2041	1,703	\$ 157,442,400	\$ -	\$ 157,442,400	17%	\$ 26,921,363	\$ 130,521,037	\$ -	\$ 62,579,589	\$ 67,941,448
1.4.3 1206 - Dunlop Street West: Ferndale Drive North - Tiffin Street	2031 - 2041	1,509	\$ 58,860,000	\$ -	\$ 58,860,000	8%	\$ 4,587,455	\$ 54,272,545	\$ -	\$ 54,272,545	\$ -
1.4.4 1207 - Dunlop Street West: Anne Street - Cedar Pointe Drive	2031 - 2041	1,655	\$ 77,641,200	\$ -	\$ 77,641,200	15%	\$ 11,638,802	\$ 66,002,398	\$ -	\$ 66,002,398	\$ -
1.4.5 1208 - Essa Road: Fairview Road - Highway 400 N-E/W Ramp	2023 - 2030	349	\$ 37,303,200	\$ -	\$ 37,303,200	31%	\$ 11,513,457	\$ 25,789,743	\$ -	\$ 25,789,743	\$ -
1.4.6 1209 - Burton Avenue: Essa Road - Milburn Street	2031 - 2041	905	\$ 35,370,000	\$ -	\$ 35,370,000	7%	\$ 2,561,798	\$ 32,808,202	\$ -	\$ 16,404,101	\$ 16,404,101
1.4.7 1212 - Big Bay Point Road: 150m west of Bayview Drive - Huronia Road	2023 - 2030	1,405	\$ 28,695,600	\$ -	\$ 28,695,600	14%	\$ 3,973,867	\$ 24,721,733	\$ -	\$ 24,721,733	\$ -
1.4.8 1215 - Maplevue Drive: Country Lane - Yonge Street (Phase 1)	2023 - 2030	2,143	\$ 72,608,400	\$ -	\$ 72,608,400	8%	\$ 6,064,098	\$ 66,544,302	\$ -	\$ 66,544,302	\$ -
1.4.9 1215 - Maplevue Drive: Country Lane - Yonge Street (Phase 2)	2031 - 2041	2,143	\$ 55,522,800	\$ -	\$ 55,522,800	0%	\$ -	\$ 55,522,800	\$ -	\$ 55,522,800	\$ -

APPENDIX D-1

TABLE 2

CITY OF BARRIE
SERVICES RELATED TO A HIGHWAY: ROADS
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Length (m)	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement BTE Share			Available DC Reserves	2023- 2041	Post 2041*
						%	\$				
1.4.10 1216 - Essa Road: Osmington Entrance - Fairview Road	2023 - 2030	277	\$ 18,586,800	\$ -	\$ 18,586,800	8%	\$ 1,565,377	\$ 17,021,423	\$ -	\$ 17,021,423	\$ -
1.4.11 1217 - Essa Road: Highway 400 N-E/W Ramp - Ardagh Road/Bryne Drive	2023 - 2030	298	\$ 13,262,400	\$ -	\$ 13,262,400	13%	\$ 1,688,129	\$ 11,574,271	\$ -	\$ 11,574,271	\$ -
1.4.12 1219 - Bryne Drive: Mapleview Drive - Northern Commerce Park Drive	2023 - 2030	326	\$ 18,738,000	\$ -	\$ 18,738,000	11%	\$ 2,130,807	\$ 16,607,193	\$ -	\$ 16,607,193	\$ -
1.4.13 1220 - St. Vincent: Sperling - Bell Farm	2031 - 2041	455	\$ 67,597,200	\$ -	\$ 67,597,200	27%	\$ 18,406,236	\$ 49,190,964	\$ -	\$ 24,595,482	\$ 24,595,482
1.4.14 1221 - Tiffin Street: Lakeshore - Ferndale Drive	2031 - 2041	2,147	\$ 95,731,200	\$ -	\$ 95,731,200	6%	\$ 5,891,288	\$ 89,839,912	\$ -	\$ 44,919,956	\$ 44,919,956
1.4.15 1222 - Lakeshore/Hurst: Tiffin - Bay Lane	2031 - 2041	3,968	\$ 43,167,600	\$ -	\$ 43,167,600	16%	\$ 6,699,220	\$ 36,468,380	\$ -	\$ 18,234,190	\$ 18,234,190
1.4.16 1223 - Huronia Road: Herrell Avenue - Big Bay Point Road	2031 - 2041	631	\$ 24,559,200	\$ -	\$ 24,559,200	7%	\$ 1,784,502	\$ 22,774,698	\$ -	\$ 11,387,349	\$ 11,387,349
1.4.17 1225 - Commerce Park Drive: Bryne Drive - 140m West of Bryne Drive	2031 - 2041	138	\$ 4,784,400	\$ -	\$ 4,784,400	8%	\$ 391,623	\$ 4,392,777	\$ -	\$ 2,196,388	\$ 2,196,388
1.4.18 1508 - Cundles Road East: Livingstone Street East - St. Vincent Street	2031 - 2041	452	\$ 20,671,200	\$ -	\$ 20,671,200	12%	\$ 2,560,277	\$ 18,110,923	\$ -	\$ 9,055,461	\$ 9,055,461
1.4.19 1538 - Fairview Road: Big Bay Point Road - Little Avenue	2031 - 2041	1,356	\$ 49,788,000	\$ -	\$ 49,788,000	8%	\$ 3,836,828	\$ 45,951,172	\$ -	\$ 22,975,586	\$ 22,975,586
1.4.20 1549 - Dunlop Street West: Cedar Pointe Drive - Ferndale Drive	2031 - 2041	565	\$ 27,982,800	\$ -	\$ 27,982,800	14%	\$ 3,997,467	\$ 23,985,333	\$ -	\$ 11,992,667	\$ 11,992,667
1.4.21 1577 - St. Vincent: Bell Farm Road - Grove Street	2031 - 2041	440	\$ 18,554,400	\$ -	\$ 18,554,400	13%	\$ 2,489,909	\$ 16,064,491	\$ -	\$ 8,032,245	\$ 8,032,245
1.4.22 1593 - Essa Road: Burton Avenue - Bradford Street	2023 - 2030	225	\$ 12,484,800	\$ -	\$ 12,484,800	10%	\$ 1,275,062	\$ 11,209,738	\$ -	\$ 11,209,738	\$ -
1.4.23 1596 - Essa Road: Anne Street South - Burton Avenue	2023 - 2030	564	\$ 27,302,400	\$ -	\$ 27,302,400	12%	\$ 3,192,401	\$ 24,109,999	\$ -	\$ 24,109,999	\$ -
1.4.24 1613 - Ferndale Drive: Benson Drive - City Northwest Limits	2023 - 2030	563	\$ 712,800	\$ -	\$ 712,800	0%	\$ -	\$ 712,800	\$ -	\$ 712,800	\$ -
1.4.25 1708 - St. Vincent: Wellington Street - Penetang Street	2031 - 2041	180	\$ 6,231,600	\$ -	\$ 6,231,600	8%	\$ 510,197	\$ 5,721,403	\$ -	\$ 2,860,701	\$ 2,860,701
1.4.26 1719 - Eccles Street South: Dunlop Street West - Perry Street	2031 - 2041	127	\$ 4,438,800	\$ -	\$ 4,438,800	8%	\$ 360,016	\$ 4,078,784	\$ -	\$ 2,039,392	\$ 2,039,392
1.4.27 1720 - Perry Street: Eccles Street South - Innisfil Street	2031 - 2041	79	\$ 2,322,000	\$ -	\$ 2,322,000	10%	\$ 224,726	\$ 2,097,274	\$ -	\$ 1,048,637	\$ 1,048,637
1.4.28 1721 - Innisfil Street: Tiffin Street - Perry Street	2031 - 2041	1,262	\$ 61,462,800	\$ -	\$ 61,462,800	6%	\$ 3,569,976	\$ 57,892,824	\$ -	\$ 28,946,412	\$ 28,946,412
1.4.29 1724 - Sunnidale Road: Wellington Street - Shirley Avenue	2023 - 2030		\$ 6,933,600	\$ -	\$ 6,933,600	59%	\$ 4,058,053	\$ 2,875,547	\$ -	\$ 2,875,547	\$ -
1.4.30 1726 - Anne Street North: Sunnidale Road - Barrie City Limits	2031 - 2041	936	\$ 27,788,400	\$ -	\$ 27,788,400	10%	\$ 2,648,377	\$ 25,140,023	\$ -	\$ 12,570,012	\$ 12,570,012
1.4.31 1730 - Sproule Drive: West cul-de-sac - Ferndale Drive	2031 - 2041	233	\$ 7,257,600	\$ -	\$ 7,257,600	0%	\$ -	\$ 7,257,600	\$ -	\$ 3,628,800	\$ 3,628,800
1.4.32 1731 - Collier Street: Mulcaster Street - Poyntz Street	2031 - 2041	187	\$ 5,410,800	\$ -	\$ 5,410,800	10%	\$ 530,317	\$ 4,880,483	\$ -	\$ 2,440,242	\$ 2,440,242
1.4.33 1301 - Bayview Drive: Little Avenue - Big Bay Point Road	2023 - 2030	1,391	\$ 57,056,400	\$ -	\$ 57,056,400	7%	\$ 3,935,585	\$ 53,120,815	\$ -	\$ 53,120,815	\$ -
1.4.34 1302 - Big Bay Point Road: Loon Avenue - Dean Avenue	2031 - 2041	728	\$ 42,994,800	\$ -	\$ 42,994,800	26%	\$ 11,124,644	\$ 31,870,156	\$ -	\$ 15,935,078	\$ 15,935,078
1.4.35 1303 - Wellington Street West: Bayfield Street - Sunnidale Road	2031 - 2041	574	\$ 19,299,600	\$ -	\$ 19,299,600	8%	\$ 1,625,104	\$ 17,674,496	\$ -	\$ 8,837,248	\$ 8,837,248
1.4.36 1304 - Anne Street North: Dunlop Street West - Wellington Street	2023 - 2030	227	\$ 10,303,200	\$ -	\$ 10,303,200	12%	\$ 1,283,428	\$ 9,019,772	\$ -	\$ 9,019,772	\$ -
1.4.37 1305 - Anne Street South: Jacob Terrace - Essa Road	2031 - 2041	488	\$ 17,863,200	\$ -	\$ 17,863,200	8%	\$ 1,381,224	\$ 16,481,976	\$ -	\$ 8,240,988	\$ 8,240,988
1.4.38 1306 - Anne Street South: Essa Road - Adelaide Street	2031 - 2041	118	\$ 3,380,400	\$ -	\$ 3,380,400	10%	\$ 334,591	\$ 3,045,809	\$ -	\$ 1,522,905	\$ 1,522,905
1.4.39 1307 - Baldwin Lane: Innisfil Street - Bayview Drive	2031 - 2041	608	\$ 18,230,400	\$ -	\$ 18,230,400	9%	\$ 1,721,530	\$ 16,508,870	\$ -	\$ 8,254,435	\$ 8,254,435
1.4.40 1308 - Huronia Road: Yonge Street - Herrell Avenue	2023 - 2030	1,309	\$ 53,784,000	\$ -	\$ 53,784,000	7%	\$ 3,704,119	\$ 50,079,881	\$ -	\$ 50,079,881	\$ -

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TABLE 2

CITY OF BARRIE
SERVICES RELATED TO A HIGHWAY: ROADS
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Length (m)	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement	BTE Share		Available DC Reserves	2023- 2041	Post 2041*
						%	\$				
1.4.41 1311 - Little Avenue: Yonge Street - Hurst Drive	2031 - 2041	586	\$ 17,647,200	\$ -	\$ 17,647,200	9%	\$ 1,658,908	\$ 15,988,292	\$ -	\$ 7,994,146	\$ 7,994,146
1.4.42 1312 - Bryne Drive: South of Essa Road - North Cul-de-sac	2023 - 2030	344	\$ 13,186,800	\$ -	\$ 13,186,800	7%	\$ 973,127	\$ 12,213,673	\$ -	\$ 12,213,673	\$ -
1.4.43 1313 - Bryne Drive: South Cul-de-sac - North of Caplan Avenue	2023 - 2030	148	\$ 5,659,200	\$ -	\$ 5,659,200	7%	\$ 417,618	\$ 5,241,582	\$ -	\$ 5,241,582	\$ -
1.4.44 1315 - Innisfil Street: Tiffin Street - Essa Road	2031 - 2041	379	\$ 12,938,400	\$ -	\$ 12,938,400	8%	\$ 1,071,790	\$ 11,866,610	\$ -	\$ 5,933,305	\$ 5,933,305
1.4.45 1316 - Blake Street: Collier Street - Johnson Street	2031 - 2041	1,787	\$ 50,263,200	\$ -	\$ 50,263,200	10%	\$ 5,055,579	\$ 45,207,621	\$ -	\$ 22,603,810	\$ 22,603,810
1.4.46 1317 - Essa Road: Anne Street South - Osmington Entrance	2023 - 2030	237	\$ 11,707,200	\$ -	\$ 11,707,200	11%	\$ 1,341,130	\$ 10,366,070	\$ -	\$ 10,366,070	\$ -
1.4.47 1318 - Essa Road: Dunn Street - Coughlin Avenue	2023 - 2030	1,793	\$ 60,588,000	\$ -	\$ 60,588,000	8%	\$ 5,073,069	\$ 55,514,931	\$ -	\$ 55,514,931	\$ -
1.4.48 1320 - Fairview Road: Essa Road - Little Avenue	2031 - 2041	597	\$ 21,470,400	\$ -	\$ 21,470,400	16%	\$ 3,377,451	\$ 18,092,949	\$ -	\$ 9,046,475	\$ 9,046,475
1.4.49 1323 - Tiffin Street: Ferndale Drive - Dunlop Street West	2031 - 2041	1,459	\$ 47,379,600	\$ -	\$ 47,379,600	9%	\$ 4,127,059	\$ 43,252,541	\$ -	\$ 21,626,271	\$ 21,626,271
1.4.50 1325 - Minet's Point Road: Lakeshore Drive/Hurst Drive - Yonge Street	2031 - 2041	329	\$ 15,735,600	\$ -	\$ 15,735,600	12%	\$ 1,863,779	\$ 13,871,821	\$ -	\$ 6,935,911	\$ 6,935,911
1.4.51 1326 - Welham Road: Big Bay Point Road - Mapleview Drive East	2031 - 2041	1,468	\$ 40,813,200	\$ -	\$ 40,813,200	10%	\$ 4,152,123	\$ 36,661,077	\$ -	\$ 18,330,538	\$ 18,330,538
1.4.52 1327 - Welham Road: Mapleview Drive East - South Cul-de-sac	2031 - 2041	731	\$ 18,727,200	\$ -	\$ 18,727,200	11%	\$ 2,068,178	\$ 16,659,022	\$ -	\$ 8,329,511	\$ 8,329,511
1.4.53 1329 - Collier Street: Poyntz Street - Blake Street	2031 - 2041	518	\$ 13,878,000	\$ -	\$ 13,878,000	11%	\$ 1,465,511	\$ 12,412,489	\$ -	\$ 6,206,244	\$ 6,206,244
1.4.54 1371 - Bayview Drive: Burton Avenue - Springhome Road	2031 - 2041	484	\$ 14,720,400	\$ -	\$ 14,720,400	9%	\$ 1,368,705	\$ 13,351,695	\$ -	\$ 6,675,848	\$ 6,675,848
1.4.55 1372 - Anne Street North: Wellington Street - Edgehill Drive	2031 - 2041	356	\$ 35,488,800	\$ -	\$ 35,488,800	48%	\$ 17,195,017	\$ 18,293,783	\$ -	\$ 9,146,891	\$ 9,146,891
1.4.56 1373 - Bayview Drive: Salem Road - Mapleview Drive East	2031 - 2041	1,345	\$ 37,681,200	\$ -	\$ 37,681,200	10%	\$ 3,804,524	\$ 33,876,676	\$ -	\$ 16,938,338	\$ 16,938,338
1.4.57 1374 - Huronia Road: Big Bay Point Road - Lockhart Road (Phase 1)	2031 - 2041	2,770	\$ 74,358,000	\$ -	\$ 74,358,000	11%	\$ 7,836,717	\$ 66,521,283	\$ -	\$ 33,260,642	\$ 33,260,642
1.4.58 1374 - Huronia Road: Big Bay Point Road - Lockhart Road (Phase 2)	2031 - 2041	2,770	\$ 54,594,000	\$ -	\$ 54,594,000	0%	\$ -	\$ 54,594,000	\$ -	\$ 27,297,000	\$ 27,297,000
1.4.59 1375 - Bayview Drive: Springhome Road - Little Avenue	2031 - 2041	726	\$ 15,951,600	\$ -	\$ 15,951,600	10%	\$ 1,524,114	\$ 14,427,486	\$ -	\$ 7,213,743	\$ 7,213,743
1.4.60 1376 - Welham Road, Truman, Hamilton: Huronia - Big Bay Point Road	2031 - 2041	1,467	\$ 38,145,600	\$ -	\$ 38,145,600	11%	\$ 4,151,762	\$ 33,993,838	\$ -	\$ 16,996,919	\$ 16,996,919
1.4.61 1378 - Ardagh Road: Patterson - Essa	2031 - 2041	631	\$ 25,509,600	\$ -	\$ 25,509,600	14%	\$ 3,572,424	\$ 21,937,176	\$ -	\$ 10,968,588	\$ 10,968,588
1.4.62 1379 - Bradford: Dunlop Street West - Tiffin Street	2031 - 2041	1,639	\$ 68,396,400	\$ -	\$ 68,396,400	13%	\$ 8,712,191	\$ 59,684,209	\$ -	\$ 29,842,104	\$ 29,842,104
1.4.63 1380 - Little Avenue: Fairview Road - Yonge	2031 - 2041	2,577	\$ 83,289,600	\$ -	\$ 83,289,600	9%	\$ 7,290,117	\$ 75,999,483	\$ -	\$ 37,999,741	\$ 37,999,741
1.4.64 1945 - Hurst Drive: Bay Lane - Cox Mill Road	2031 - 2041	813	\$ 1,911,600	\$ -	\$ 1,911,600	0%	\$ -	\$ 1,911,600	\$ -	\$ 955,800	\$ 955,800
1.4.65 1401 - Penetanguishene Road: Steel Street - Barrie City Limits	2031 - 2041	1,749	\$ 35,445,600	\$ -	\$ 35,445,600	100%	\$ 35,445,600	\$ -	\$ -	\$ -	\$ -
1.4.66 1403 - Miller Drive: Dunlop Street West - Edgehill Drive	2031 - 2041	1,330	\$ 31,579,200	\$ -	\$ 31,579,200	100%	\$ 31,579,200	\$ -	\$ -	\$ -	\$ -
1.4.67 1404 - Hart Drive - Dunlop Street West - Vespra Street	2031 - 2041	838	\$ 21,783,600	\$ -	\$ 21,783,600	50%	\$ 10,891,800	\$ 10,891,800	\$ -	\$ 5,445,900	\$ 5,445,900
1.4.68 1405 - Dymment Road: Vespra Street - Tiffin Street	2031 - 2041	682	\$ 17,269,200	\$ -	\$ 17,269,200	50%	\$ 8,634,600	\$ 8,634,600	\$ -	\$ 4,317,300	\$ 4,317,300
1.4.69 1407 - Churchill Drive: Bayview Drive - Welham Road	2031 - 2041	701	\$ 14,526,000	\$ -	\$ 14,526,000	50%	\$ 7,263,000	\$ 7,263,000	\$ -	\$ 3,631,500	\$ 3,631,500
1.4.70 1409 - Saunders Road: Bayview Drive - Huronia Road	2031 - 2041	1,376	\$ 29,224,800	\$ -	\$ 29,224,800	50%	\$ 14,612,400	\$ 14,612,400	\$ -	\$ 7,306,200	\$ 7,306,200
Subtotal Roads Widening			\$ 2,315,530,800	\$ -	\$ 2,315,530,800		\$ 366,562,492	\$ 1,948,968,308	\$ -	\$ 1,289,905,858	\$ 659,062,449

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DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Length (m)	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement %	BTE Share \$		Available DC Reserves	2023- 2041	Post 2041*
1.5 Streetscape Improvements in Primary Intensification Corridors											
1.5.1 4001 - Dunlop Street: Anne Street - High Street	2031 - 2041	1,500	\$ 10,821,600	\$ -	\$ 10,821,600	0%	\$ -	\$ 10,821,600	\$ -	\$ 5,410,800	\$ 5,410,800
1.5.2 4003 - Burton Avenue: Essa Road - Garden Drive	2031 - 2041	1,500	\$ 4,298,400	\$ -	\$ 4,298,400	0%	\$ -	\$ 4,298,400	\$ -	\$ 2,149,200	\$ 2,149,200
1.5.3 4004 - Yonge Street: Garden Drive - Mapleview Drive East	2031 - 2041	4,500	\$ 32,475,600	\$ -	\$ 32,475,600	0%	\$ -	\$ 32,475,600	\$ -	\$ 16,237,800	\$ 16,237,800
1.5.4 4005 - Bayfield Street: Rose Street - Simcoe Street	2031 - 2041	1,400	\$ 3,931,200	\$ -	\$ 3,931,200	0%	\$ -	\$ 3,931,200	\$ -	\$ 1,965,600	\$ 1,965,600
1.5.5 4006 - Duckworth Street: Bell Farm Road - Codrington Street	2031 - 2041	1,500	\$ 10,821,600	\$ -	\$ 10,821,600	100%	\$ 10,821,600	\$ -	\$ -	\$ -	\$ -
1.5.6 4007 - Codrington Street: Duckworth Street - Berczy Street	2031 - 2041	750	\$ 5,410,800	\$ -	\$ 5,410,800	100%	\$ 5,410,800	\$ -	\$ -	\$ -	\$ -
Subtotal Streetscape Improvements in Primary Intensification Corridors			\$ 67,759,200	\$ -	\$ 67,759,200		\$ 16,232,400	\$ 51,526,800	\$ -	\$ 25,763,400	\$ 25,763,400
2.0 SECONDARY PLAN AREA											
2.1 New Roads											
2.1.1 2101 - Salem Road: East of Highway 400 - West of Highway 400	2031 - 2041		\$ 50,922,000	\$ -	\$ 50,922,000	0%	\$ -	\$ 50,922,000	\$ -	\$ 25,461,000	\$ 25,461,000
2.1.2 2127 - McKay Road - 630m west of Collector 4 - County Road 27/Essa Road	2031 - 2041	890	\$ 39,722,400	\$ -	\$ 39,722,400	0%	\$ -	\$ 39,722,400	\$ -	\$ 32,651,813	\$ 7,070,587
Subtotal New Roads			\$ 90,644,400	\$ -	\$ 90,644,400		\$ -	\$ 90,644,400	\$ -	\$ 58,112,813	\$ 32,531,587
2.2 Roads Widened											
2.2.1 2201 - Big Bay Point Road: Prince William Way - 230m west Collector 11	2031 - 2041	829	\$ 26,017,200	\$ -	\$ 26,017,200	9%	\$ 2,346,170	\$ 23,671,030	\$ -	\$ 11,835,515	\$ 11,835,515
2.2.2 2202 - Mapleview Drive: Yonge Street - Prince William Way	2023 - 2030	1,393	\$ 119,566,800	\$ -	\$ 119,566,800	3%	\$ 3,940,810	\$ 115,625,990	\$ -	\$ 99,888,197	\$ 15,737,792
2.2.3 2203 - Lockhart Road: Bayview Drive - Yonge Street (Phase 1)	2023 - 2030	4,434	\$ 173,502,000	\$ -	\$ 173,502,000	7%	\$ 12,544,926	\$ 160,957,074	\$ -	\$ 160,957,074	\$ -
2.2.4 2203 - Lockhart Road: Bayview Drive - Yonge Street (Phase 2)	2031 - 2041	4,434	\$ 126,954,000	\$ -	\$ 126,954,000	0%	\$ -	\$ 126,954,000	\$ -	\$ 63,477,000	\$ 63,477,000
2.2.5 2204 - McKay Road West: West Boundary of Interchange - Reid Drive (Phase 1)	2023 - 2030	1,103	\$ 22,561,004	\$ -	\$ 22,561,004	14%	\$ 3,121,290	\$ 19,439,714	\$ -	\$ 19,439,714	\$ -
2.2.6 2204 - McKay Road West: West Boundary of Interchange - Reid Drive (Phase 2)	2031 - 2041	1,103	\$ 22,561,004	\$ -	\$ 22,561,004	0%	\$ -	\$ 22,561,004	\$ -	\$ 11,280,502	\$ 11,280,502
2.2.7 2205 - McKay Road East: East Boundary of Interchange - Huronia Road (Phase 1)	2023 - 2030	2,102	\$ 53,038,800	\$ -	\$ 53,038,800	11%	\$ 5,947,771	\$ 47,091,029	\$ -	\$ 41,107,187	\$ 5,983,842
2.2.8 2205 - McKay Road East: East Boundary of Interchange - Huronia Road (Phase 2)	2031 - 2041	2,102	\$ 40,348,800	\$ -	\$ 40,348,800	0%	\$ -	\$ 40,348,800	\$ -	\$ 20,174,400	\$ 20,174,400
2.2.9 2206 - Veterans Drive: Salem Road - 540m South of Salem Road	2023 - 2030	543	\$ 17,874,000	\$ -	\$ 17,874,000	9%	\$ 1,535,103	\$ 16,338,897	\$ -	\$ 16,338,897	\$ -
2.2.10 2207 - Veterans Drive: 540m south of Salem Road - McKay Road West	2023 - 2030	886	\$ 25,498,800	\$ -	\$ 25,498,800	10%	\$ 2,507,781	\$ 22,991,019	\$ -	\$ 22,991,019	\$ -
2.2.11 2208 - Yonge Street: Mapleview Drive East - Madelaine Drive	2023 - 2030	686	\$ 19,267,200	\$ -	\$ 19,267,200	10%	\$ 1,941,187	\$ 17,326,013	\$ -	\$ 17,326,013	\$ -
2.2.12 2209 - Lockhart Road: Yonge Street - Prince William Way	2031 - 2041	1,400	\$ 73,591,200	\$ -	\$ 73,591,200	5%	\$ 3,961,094	\$ 69,630,106	\$ -	\$ 34,815,053	\$ 34,815,053
2.2.13 2212 - Yonge Street: Madelaine Drive - Lockhart Road	2023 - 2030	662	\$ 16,264,800	\$ -	\$ 16,264,800	12%	\$ 1,872,084	\$ 14,392,716	\$ -	\$ 14,392,716	\$ -

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DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Length (m)	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement	BTE Share		Available DC Reserves	2023- 2041	Post 2041*
						%	\$				
2.2.14 2214 - Lockhart Road: East of Highway 400 - Bayview Drive	2031 - 2041	519	\$ 16,696,800	\$ -	\$ 16,696,800	9%	\$ 1,469,461	\$ 15,227,339	\$ -	\$ 7,613,670	\$ 7,613,670
2.2.15 2215 - Salem Road: West of Highway 400 - Veterans Drive	2031 - 2041	866	\$ 27,313,200	\$ -	\$ 27,313,200	9%	\$ 2,450,611	\$ 24,862,589	\$ -	\$ 12,431,294	\$ 12,431,294
2.2.16 2301 - Big Bay Point Road: 230m west of Collector 11 - 200m East of Collector 11	2023 - 2030	620	\$ 17,658,000	\$ -	\$ 17,658,000	10%	\$ 1,753,112	\$ 15,904,888	\$ -	\$ 15,904,888	\$ -
2.2.17 2302 - Mapleview Drive: Prince William Way - 300M West of 20th Sideroad	2023 - 2030	1,505	\$ 41,688,000	\$ -	\$ 41,688,000	10%	\$ 4,259,544	\$ 37,428,456	\$ -	\$ 37,428,456	\$ -
2.2.18 2303 - Salem Road: Veterans Drive - County Road 27	2031 - 2041	3,067	\$ 88,959,600	\$ -	\$ 88,959,600	10%	\$ 8,678,273	\$ 80,281,327	\$ -	\$ 64,462,902	\$ 15,818,425
2.2.19 2305 - Lockhart Road: Prince William Way - 160m east of Collector 11	2031 - 2041	620	\$ 10,616,400	\$ -	\$ 10,616,400	17%	\$ 1,755,155	\$ 8,861,245	\$ -	\$ 4,430,622	\$ 4,430,622
2.2.20 2306 - McKay Road: Reid Drive - 190m east of Collector 4	2031 - 2041	781	\$ 18,338,400	\$ -	\$ 18,338,400	12%	\$ 2,208,554	\$ 16,129,846	\$ -	\$ 12,868,988	\$ 3,260,858
2.2.21 2307 - Essa Road: Former City Limits - C.R. 27	2023 - 2030	2,203	\$ 59,983,200	\$ -	\$ 59,983,200	10%	\$ 6,234,431	\$ 53,748,769	\$ -	\$ 43,082,807	\$ 10,665,962
2.2.22 2308 - Huronia Road: Lockhart Road - Barrie City Limits (Phase 1)	2023 - 2030	2,059	\$ 51,192,000	\$ -	\$ 51,192,000	11%	\$ 5,825,846	\$ 45,366,154	\$ -	\$ 45,366,154	\$ -
2.2.23 2308 - Huronia Road: Lockhart Road - Barrie City Limits (Phase 2)	2031 - 2041	2,059	\$ 38,296,800	\$ -	\$ 38,296,800	0%	\$ -	\$ 38,296,800	\$ -	\$ 19,148,400	\$ 19,148,400
2.2.24 2309 - McKay Road: 190m east of Collector 4 - 290m west of Collector 4	2031 - 2041	485	\$ 10,735,200	\$ -	\$ 10,735,200	13%	\$ 1,371,249	\$ 9,363,951	\$ -	\$ 7,455,063	\$ 1,908,888
2.2.25 2310 - McKay Road: 290m west of Collector 4 - 630 m west of Collector 4	2031 - 2041	337	\$ 8,121,600	\$ -	\$ 8,121,600	12%	\$ 952,878	\$ 7,168,722	\$ -	\$ 5,724,573	\$ 1,444,149
2.2.26 2312 - Veterans Drive: McKay Road West - Barrie City Limits	2023 - 2030	629	\$ 17,010,000	\$ -	\$ 17,010,000	10%	\$ 1,780,668	\$ 15,229,332	\$ -	\$ 15,229,332	\$ -
Subtotal Roads Widened			\$ 1,143,654,807	\$ -	\$ 1,143,654,807		\$ 78,457,998	\$ 1,065,196,809	\$ -	\$ 825,170,436	\$ 240,026,373
2.3 Secondary Plan Area: Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes)											
2.3.1 3003 - 20th Side Road: Big Bay Point Road - Lockhart Road	2031 - 2041	2,765	\$ 58,104,000	\$ -	\$ 58,104,000	13%	\$ 7,824,159	\$ 50,279,841	\$ -	\$ 25,139,920	\$ 25,139,920
2.3.2 3004 - Big Bay Point Road: 200m east of Collector 11 - 20th Sideroad	2031 - 2041	627	\$ 12,614,400	\$ -	\$ 12,614,400	14%	\$ 1,774,968	\$ 10,839,432	\$ -	\$ 5,419,716	\$ 5,419,716
2.3.3 3005 - Mapleview Drive East: 300m wes of 20th Sideroad - 20th Sideroad	2023 - 2030	300	\$ 5,896,800	\$ -	\$ 5,896,800	14%	\$ 847,673	\$ 5,049,127	\$ -	\$ 5,049,127	\$ -
2.3.4 3006 - Lockhart Road: 160m east of Collector 11 - 20th Sideroad	2031 - 2041	1,062	\$ 21,351,600	\$ -	\$ 21,351,600	14%	\$ 3,004,050	\$ 18,347,550	\$ -	\$ 9,173,775	\$ 9,173,775
Subtotal Secondary Plan Area: Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes)			\$ 97,966,800	\$ -	\$ 97,966,800		\$ 13,450,849	\$ 84,515,951	\$ -	\$ 44,782,539	\$ 39,733,412

APPENDIX D-1

TABLE 2

CITY OF BARRIE
SERVICES RELATED TO A HIGHWAY: ROADS
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Length (m)	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement	BTE Share		Available DC Reserves	2023- 2041	Post 2041*
						%	\$				
3.0 ACTIVE TRANSPORTATION - FORMER BOUNDARY											
3.1 Cycling Facilities - Former Barrie											
3.1.1 Signed Routes	2023 - 2030		\$ 85,677	\$ -	\$ 85,677	40%	\$ 34,271	\$ 51,406	\$ -	\$ 51,406	\$ -
3.1.2 Signed Routes	2031 - 2031		\$ 890	\$ -	\$ 890	40%	\$ 356	\$ 534	\$ -	\$ 534	\$ -
3.1.3 Urban Shoulders	2023 - 2030		\$ 85,074	\$ -	\$ 85,074	40%	\$ 34,030	\$ 51,045	\$ -	\$ 51,045	\$ -
3.1.4 Bike Lanes	2023 - 2028		\$ 1,488,387	\$ -	\$ 1,488,387	40%	\$ 595,355	\$ 893,032	\$ -	\$ 893,032	\$ -
3.1.5 Bike Lanes	2029 - 2034		\$ 2,541,213	\$ -	\$ 2,541,213	40%	\$ 1,016,485	\$ 1,524,728	\$ -	\$ 1,524,728	\$ -
3.1.6 Bike Lanes	2035 - 2041		\$ 51,812	\$ -	\$ 51,812	40%	\$ 20,725	\$ 31,087	\$ -	\$ -	\$ 31,087
3.1.7 Buffered Bike Lanes	2023 - 2028		\$ 811,580	\$ -	\$ 811,580	40%	\$ 324,632	\$ 486,948	\$ -	\$ 486,948	\$ -
3.1.8 Buffered Bike Lanes	2029 - 2034		\$ 1,572,800	\$ -	\$ 1,572,800	40%	\$ 629,120	\$ 943,680	\$ -	\$ 943,680	\$ -
3.1.9 Buffered Bike Lanes	2035 - 2041		\$ 6,310	\$ -	\$ 6,310	40%	\$ 2,524	\$ 3,786	\$ -	\$ -	\$ 3,786
3.1.10 Cycle Tracks	2023 - 2028		\$ 1,281,125	\$ -	\$ 1,281,125	40%	\$ 512,450	\$ 768,675	\$ -	\$ 768,675	\$ -
3.1.11 Cycle Tracks	2029 - 2034		\$ 2,116,035	\$ -	\$ 2,116,035	40%	\$ 846,414	\$ 1,269,621	\$ -	\$ 1,269,621	\$ -
3.1.12 Cycle Tracks	2035 - 2041		\$ 16,732,752	\$ -	\$ 16,732,752	40%	\$ 6,693,101	\$ 10,039,651	\$ -	\$ -	\$ 10,039,651
Subtotal Cycling Facilities - Former Barrie			\$ 26,773,654	\$ -	\$ 26,773,654		\$ 10,709,462	\$ 16,064,192	\$ -	\$ 5,989,668	\$ 10,074,524
3.2 Multi-Use Facilities - Former Barrie											
3.2.1 In-Boulevard Pathway	2023 - 2028		\$ 3,785,345	\$ -	\$ 3,785,345	40%	\$ 1,514,138	\$ 2,271,207	\$ -	\$ 2,271,207	\$ -
3.2.2 In-Boulevard Pathway	2029 - 2034		\$ 9,830,795	\$ -	\$ 9,830,795	40%	\$ 3,932,318	\$ 5,898,477	\$ -	\$ 5,898,477	\$ -
3.2.3 In-Boulevard Pathway	2035 - 2041		\$ 9,297,994	\$ -	\$ 9,297,994	40%	\$ 3,719,198	\$ 5,578,797	\$ -	\$ -	\$ 5,578,797
Subtotal Multi-Use Facilities - Former Barrie			\$ 22,914,134	\$ -	\$ 22,914,134		\$ 9,165,654	\$ 13,748,480	\$ -	\$ 8,169,684	\$ 5,578,797
3.3 Sidewalks - Former Barrie											
3.3.1 Sidewalks	2023 - 2028		\$ 12,892,257	\$ -	\$ 12,892,257	40%	\$ 5,156,903	\$ 7,735,354	\$ -	\$ 7,735,354	\$ -
3.3.2 Sidewalks	2029 - 2034		\$ 24,621,812	\$ -	\$ 24,621,812	40%	\$ 9,848,725	\$ 14,773,087	\$ -	\$ 14,773,087	\$ -
3.3.3 Sidewalks	2035 - 2041		\$ 36,295,520	\$ -	\$ 36,295,520	40%	\$ 14,518,208	\$ 21,777,312	\$ -	\$ -	\$ 21,777,312
Subtotal Sidewalks - Former Barrie			\$ 73,809,589	\$ -	\$ 73,809,589		\$ 29,523,836	\$ 44,285,754	\$ -	\$ 22,508,441	\$ 21,777,312

APPENDIX D-1

TABLE 2

CITY OF BARRIE
SERVICES RELATED TO A HIGHWAY: ROADS
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Length (m)	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement	BTE Share		Available	2023-	Post
						%	\$		DC Reserves	2041	2041*
4.0 ACTIVE TRANSPORTATION - SECONDARY PLAN AREA											
4.1 Cycling Facilities - Secondary Plan Area											
4.1.1 Signed Routes	2023 - 2028		\$ 7,650	\$ -	\$ 7,650	5%	\$ 382	\$ 7,267	\$ -	\$ 7,267	\$ -
4.1.2 Signed Routes	2029 - 2034		\$ 1,187	\$ -	\$ 1,187	5%	\$ 59	\$ 1,127	\$ -	\$ 1,127	\$ -
4.1.3 Signed Routes	2035 - 2041		\$ 658	\$ -	\$ 658	5%	\$ 33	\$ 625	\$ -	\$ -	\$ 625
4.1.4 Bike Lanes	2023 - 2028		\$ 78,955	\$ -	\$ 78,955	5%	\$ 3,948	\$ 75,007	\$ -	\$ 75,007	\$ -
4.1.5 Bike Lanes	2029 - 2034		\$ 7,207	\$ -	\$ 7,207	5%	\$ 360	\$ 6,847	\$ -	\$ 6,847	\$ -
4.1.6 Bike Lanes	2035 - 2041		\$ 1,727	\$ -	\$ 1,727	5%	\$ 86	\$ 1,641	\$ -	\$ 1,641	\$ -
4.1.7 Buffered Bike Lanes	2023 - 2028		\$ 1,329,927	\$ -	\$ 1,329,927	5%	\$ 66,496	\$ 1,263,431	\$ -	\$ 1,263,431	\$ -
4.1.8 Buffered Bike Lanes	2029 - 2034		\$ 2,015,855	\$ -	\$ 2,015,855	5%	\$ 100,793	\$ 1,915,062	\$ -	\$ 1,915,062	\$ -
4.1.9 Buffered Bike Lanes	2035 - 2041		\$ 657,587	\$ -	\$ 657,587	5%	\$ 32,879	\$ 624,708	\$ -	\$ -	\$ 624,708
4.1.10 Cycle Tracks	2023 - 2028		\$ 10,895,561	\$ -	\$ 10,895,561	5%	\$ 544,778	\$ 10,350,783	\$ -	\$ 10,350,783	\$ -
4.1.11 Cycle Tracks	2029 - 2034		\$ 7,827,509	\$ -	\$ 7,827,509	5%	\$ 391,375	\$ 7,436,134	\$ -	\$ 7,436,134	\$ -
4.1.12 Cycle Tracks	2035 - 2041		\$ 14,158,714	\$ -	\$ 14,158,714	5%	\$ 707,936	\$ 13,450,778	\$ -	\$ -	\$ 13,450,778
Subtotal Cycling Facilities - Secondary Plan Area			\$ 36,982,537	\$ -	\$ 36,982,537	5%	\$ 1,849,127	\$ 35,133,410	\$ -	\$ 21,057,299	\$ 14,076,111
4.2 Multi-Use Facilities - Secondary Plan Area											
4.2.1 In-Boulevard Pathways	2023 - 2028		\$ 3,415,113	\$ -	\$ 3,415,113	5%	\$ 170,756	\$ 3,244,358	\$ -	\$ 3,244,358	\$ -
4.2.2 In-Boulevard Pathways	2029 - 2034		\$ 384,576	\$ -	\$ 384,576	5%	\$ 19,229	\$ 365,347	\$ -	\$ 365,347	\$ -
4.2.3 In-Boulevard Pathways	2035 - 2041		\$ 5,877,819	\$ -	\$ 5,877,819	5%	\$ 293,891	\$ 5,583,928	\$ -	\$ -	\$ 5,583,928
Subtotal Multi-Use Facilities - Secondary Plan Area			\$ 9,677,509	\$ -	\$ 9,677,509		\$ 483,875	\$ 9,193,633	\$ -	\$ 3,609,705	\$ 5,583,928
4.3 Sidewalks - Secondary Plan Area											
4.3.1 Sidewalks	2023 - 2041		\$ 2,202,001	\$ -	\$ 2,202,001	5%	\$ 110,100	\$ 2,091,901	\$ -	\$ 2,091,901	\$ -
Subtotal Sidewalks - Secondary Plan Area			\$ 2,202,001	\$ -	\$ 2,202,001		\$ 110,100	\$ 2,091,901	\$ -	\$ 2,091,901	\$ -
4.4 Other Active Transportation Facilities											
4.4.1 Outreach Programs	2023 - 2030		\$ 1,119,360	\$ -	\$ 1,119,360	40%	\$ 447,744	\$ 671,616	\$ -	\$ 671,616	\$ -
4.4.2 Bus Stops	2023 - 2028		\$ 2,516,000	\$ -	\$ 2,516,000	0%	\$ -	\$ 2,516,000	\$ -	\$ 2,516,000	\$ -
4.4.3 Bus Stops	2029 - 2034		\$ 1,910,000	\$ -	\$ 1,910,000	0%	\$ -	\$ 1,910,000	\$ -	\$ 1,910,000	\$ -
4.4.4 Bus Stops	2035 - 2041		\$ 2,637,000	\$ -	\$ 2,637,000	0%	\$ -	\$ 2,637,000	\$ -	\$ -	\$ 2,637,000
4.4.5 ITS	2023 - 2028		\$ 1,117,000	\$ -	\$ 1,117,000	0%	\$ -	\$ 1,117,000	\$ -	\$ 1,117,000	\$ -
4.4.6 ITS	2029 - 2034		\$ 471,000	\$ -	\$ 471,000	0%	\$ -	\$ 471,000	\$ -	\$ 471,000	\$ -
4.4.7 ITS	2035 - 2041		\$ 592,000	\$ -	\$ 592,000	0%	\$ -	\$ 592,000	\$ -	\$ -	\$ 592,000
4.4.8 HOV Master arms	2029 - 2041		\$ 121,000	\$ -	\$ 121,000	0%	\$ -	\$ 121,000	\$ -	\$ 121,000	\$ -
Subtotal Other Active Transportation Facilities			\$ 10,483,360	\$ -	\$ 10,483,360		\$ 447,744	\$ 10,035,616	\$ -	\$ 6,806,616	\$ 3,229,000

APPENDIX D-1

TABLE 2

CITY OF BARRIE
SERVICES RELATED TO A HIGHWAY: ROADS
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Length (m)	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs Replacement BTE Share		Total DC Eligible Costs	DC Eligible Costs		
						%	\$		Available DC Reserves	2023- 2041	Post 2041*
5.0 ADJUSTMENT FOR FUNDED SHARES OF PROJECTS											
5.1.1 Prior funded shares of projects	2023 - 2023		\$ (83,995,117)	\$ -	\$ (83,995,117)	0%	\$ -	\$ (83,995,117)	\$ -	\$ (83,995,117)	\$ -
Subtotal Adjustment For Funded Shares Of Projects			\$ (83,995,117)	\$ -	\$ (83,995,117)		\$ -	\$ (83,995,117)	\$ -	\$ (83,995,117)	\$ -
TOTAL SERVICES RELATED TO A HIGHWAY: ROADS			\$4,001,874,395	\$ -	\$4,001,874,395		\$ 534,464,232	\$3,467,410,163	\$ 123,910,438	\$ 2,280,792,431	\$ 1,062,707,293

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation

Residential Share of 2023 - 2041 DC Eligible Costs	69.1%	\$1,576,198,329
Long-Term Growth in Population in New Units		92,924
Unadjusted Development Charge Per Capita		\$16,962.23

Non-Residential Retail Development Charge Calculation

Non-Residential Share of 2023 - 2041 DC Eligible Costs	12.2%	\$277,145,888
Long-Term Growth in Square Metres		816,960
Unadjusted Development Charge Per Square Metre		\$339.24

Non-Residential Non-Retail Development Charge Calculation

Non-Residential Share of 2023 - 2041 DC Eligible Costs	18.7%	\$427,448,215
Long-Term Growth in Square Metres		2,157,070
Unadjusted Development Charge Per Square Metre		\$198.16

2023 - 2041 Net Funding Envelope	\$5,582,475,762
Current Reserve Fund Balance	\$123,910,438

APPENDIX D.1

TABLE 3-1

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
SERVICES RELATED TO A HIGHWAY: ROADS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

SERVICES RELATED TO A HIGHWAY: ROADS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$85,631.4	\$145,008.5	\$149,949.9	\$152,445.1	\$163,153.9	\$177,184.4	\$194,749.1	\$215,319.0	\$239,796.0	\$175,010.0
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$10,703.9	\$10,703.9	\$10,703.9	\$10,703.9	\$10,703.9	\$10,703.9	\$10,703.9	\$10,703.9	\$0.0	\$0.0
- Services Related To A Highway: Roads : Non Inflated	\$26,244.0	\$84,290.9	\$84,290.9	\$84,290.9	\$84,290.9	\$84,290.9	\$84,963.7	\$84,963.7	\$173,404.8	\$173,404.4
- Services Related To A Highway: Roads : Inflated	\$36,947.9	\$96,894.7	\$98,832.6	\$100,809.3	\$102,825.4	\$104,881.9	\$107,737.3	\$109,892.1	\$203,171.3	\$207,234.3
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722
REVENUE										
- DC Receipts: Inflated	\$92,358.2	\$96,764.4	\$101,327.79	\$106,090.1	\$111,002.5	\$116,049.7	\$121,254.5	\$126,541.5	\$131,951.0	\$76,961.7
INTEREST										
- Interest on Opening Balance	\$2,997.1	\$5,075.3	\$0.0	\$5,335.6	\$5,710.4	\$6,201.5	\$6,816.2	\$7,536.2	\$8,392.9	\$6,125.3
- Interest on In-year Transactions	\$969.7	(\$3.6)	\$0.0	\$92.4	\$143.1	\$195.4	\$236.6	\$291.4	(\$1,958.6)	(\$3,582.5)
TOTAL REVENUE	\$96,325.0	\$101,836.1	\$101,327.8	\$111,518.1	\$116,855.9	\$122,446.6	\$128,307.3	\$134,369.0	\$138,385.3	\$79,504.6
CLOSING CASH BALANCE	\$145,008.5	\$149,949.9	\$152,445.1	\$163,153.9	\$177,184.4	\$194,749.1	\$215,319.0	\$239,796.0	\$175,010.0	\$47,280.3

SERVICES RELATED TO A HIGHWAY: ROADS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$86,773.5)	(\$229,195.2)	(\$375,956.1)	(\$329,733.5)	(\$275,449.5)	(\$215,712.6)	(\$150,129.0)	(\$78,354.1)	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Services Related To A Highway: Roads : Non Inflated	\$173,404.4	\$169,198.8	\$15,959.3	\$15,959.3	\$15,959.3	\$15,959.3	\$15,959.3	\$15,959.3	\$1,576,198.3
- Services Related To A Highway: Roads : Inflated	\$215,606.6	\$214,584.9	\$20,645.1	\$21,058.0	\$21,479.1	\$21,908.7	\$22,346.9	\$22,793.8	\$1,941,028.8
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	3,795	3,829	3,860	4,040	4,083	4,127	4,169	4,210	92,924
REVENUE									
- DC Receipts: Inflated	\$81,641.4	\$84,020.3	\$86,394.6	\$92,231.8	\$95,077.8	\$98,024.4	\$101,002.4	\$104,035.6	\$1,902,032.3
INTEREST									
- Interest on Opening Balance	(\$4,772.5)	(\$12,605.7)	(\$20,677.6)	(\$18,135.3)	(\$15,149.7)	(\$11,864.2)	(\$8,257.1)	(\$4,309.5)	(\$39,926.5)
- Interest on In-year Transactions	(\$3,684.0)	(\$3,590.5)	\$1,150.6	\$1,245.5	\$1,288.0	\$1,332.0	\$1,376.5	\$1,421.7	(\$6,708.4)
TOTAL REVENUE	\$73,184.9	\$67,824.1	\$66,867.6	\$75,342.0	\$81,216.0	\$87,492.2	\$94,121.8	\$101,147.9	\$1,855,397.4
CLOSING CASH BALANCE	(\$229,195.2)	(\$375,956.1)	(\$329,733.5)	(\$275,449.5)	(\$215,712.6)	(\$150,129.0)	(\$78,354.1)	(\$0.0)	

2023 Adjusted Charge Per Capita **\$17,302.03**

Allocation of Capital Program

Residential Sector 69.1%
Non-Residential Sector 30.9%

Rates for 2023

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

APPENDIX D.1
TABLE 3-2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
SERVICES RELATED TO A HIGHWAY: ROADS
RETAIL DEVELOPMENT CHARGE
(in \$000)

SERVICES RELATED TO A HIGHWAY: ROADS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$15,056.7	\$17,921.1	\$11,282.2	\$5,309.3	\$64.6	(\$4,382.6)	(\$8,054.4)	(\$11,004.0)	(\$13,013.7)	(\$30,442.1)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$1,882.1	\$1,882.1	\$1,882.1	\$1,882.1	\$1,882.1	\$1,882.1	\$1,882.1	\$1,882.1	\$0.0	\$0.0
- Services Related To A Highway: Roads : Non Inflated	\$4,614.5	\$14,821.0	\$14,821.0	\$14,821.0	\$14,821.0	\$14,821.0	\$14,939.3	\$14,939.3	\$30,490.1	\$30,490.0
- Services Related To A Highway: Roads : Inflated	\$6,496.6	\$17,037.2	\$17,377.9	\$17,725.5	\$18,080.0	\$18,441.6	\$18,943.7	\$19,322.5	\$35,724.0	\$36,438.4
NON-RESIDENTIAL SPACE GROWTH										
- Retail Growth in Square Metres	24,230	26,920	29,610	32,300	35,000	37,690	40,380	43,070	45,760	43,000
REVENUE										
- DC Receipts: Inflated	\$8,793.8	\$9,965.5	\$11,180.6	\$12,440.2	\$13,749.7	\$15,102.6	\$16,504.1	\$17,955.6	\$19,458.6	\$18,650.7
INTEREST										
- Interest on Opening Balance	\$527.0	\$627.2	\$394.9	\$185.8	\$2.3	(\$241.0)	(\$443.0)	(\$605.2)	(\$715.8)	(\$1,674.3)
- Interest on In-year Transactions	\$40.2	(\$194.5)	(\$170.4)	(\$145.3)	(\$119.1)	(\$91.8)	(\$67.1)	(\$37.6)	(\$447.3)	(\$489.2)
TOTAL REVENUE	\$9,361.0	\$10,398.3	\$11,405.0	\$12,480.7	\$13,632.9	\$14,769.7	\$15,994.0	\$17,312.8	\$18,295.6	\$16,487.2
CLOSING CASH BALANCE	\$17,921.1	\$11,282.2	\$5,309.3	\$64.6	(\$4,382.6)	(\$8,054.4)	(\$11,004.0)	(\$13,013.7)	(\$30,442.1)	(\$50,393.3)

SERVICES RELATED TO A HIGHWAY: ROADS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$71,125.5)	(\$92,661.6)	(\$114,061.7)	(\$100,382.2)	(\$84,820.4)	(\$67,235.5)	(\$47,478.0)	(\$25,130.6)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Services Related To A Highway: Roads : Non Inflated	\$30,490.0	\$29,750.5	\$2,806.2	\$2,806.2	\$2,806.2	\$2,806.2	\$2,806.2	\$2,806.2	\$277,145.9
- Services Related To A Highway: Roads : Inflated	\$37,910.5	\$37,730.9	\$3,630.1	\$3,702.7	\$3,776.7	\$3,852.2	\$3,929.3	\$4,007.9	\$341,294.7
NON-RESIDENTIAL SPACE GROWTH									
- Retail Growth in Square Metres	46,000	47,500	49,500	51,000	52,500	54,000	56,000	58,000	816,960
REVENUE									
- DC Receipts: Inflated	\$20,758.0	\$21,863.5	\$23,239.8	\$24,422.9	\$25,644.1	\$26,904.3	\$28,458.7	\$30,064.6	\$253,773.0
INTEREST									
- Interest on Opening Balance	(\$3,911.9)	(\$5,096.4)	(\$6,273.4)	(\$5,521.0)	(\$4,665.1)	(\$3,698.0)	(\$2,611.3)	(\$1,382.2)	(\$25,516.5)
- Interest on In-year Transactions	(\$471.7)	(\$436.4)	\$343.2	\$362.6	\$382.7	\$403.4	\$429.3	\$456.0	(\$2,405.1)
TOTAL REVENUE	\$16,374.4	\$16,330.8	\$17,309.6	\$19,264.5	\$21,361.6	\$23,609.7	\$26,276.7	\$29,138.4	\$225,851.5
CLOSING CASH BALANCE	(\$92,661.6)	(\$114,061.7)	(\$100,382.2)	(\$84,820.4)	(\$67,235.5)	(\$47,478.0)	(\$25,130.6)	\$0.0	

2023 Adjusted Charge Per Square Metre

\$362.93

Allocation of Capital Program

Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%

Rates for 2023

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

APPENDIX D.1

TABLE 3-3

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
SERVICES RELATED TO A HIGHWAY: ROADS
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)

SERVICES RELATED TO A HIGHWAY: ROADS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$23,222.3	\$28,440.7	\$19,147.6	\$11,026.4	\$4,184.4	(\$1,267.5)	(\$5,238.0)	(\$7,872.7)	(\$8,816.6)	(\$33,284.4)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$2,902.8	\$2,902.8	\$2,902.8	\$2,902.8	\$2,902.8	\$2,902.8	\$2,902.8	\$2,902.8	\$0.0	\$0.0
- Services Related To A Highway: Roads : Non Inflated	\$7,117.09	\$22,858.8	\$22,858.8	\$22,858.8	\$22,858.8	\$22,858.8	\$23,041.3	\$23,041.3	\$47,025.5	\$47,025.4
- Services Related To A Highway: Roads : Inflated	\$10,019.9	\$26,276.8	\$26,802.3	\$27,338.4	\$27,885.2	\$28,442.9	\$29,217.2	\$29,801.6	\$55,097.9	\$56,199.7
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	68,370	75,970	83,560	91,160	98,760	106,360	113,950	121,550	129,140	116,050
REVENUE										
- DC Receipts: Inflated	\$14,349.7	\$16,263.7	\$18,246.3	\$20,304.0	\$22,436.6	\$24,646.5	\$26,933.4	\$29,304.3	\$31,756.9	\$29,108.7
INTEREST										
- Interest on Opening Balance	\$812.8	\$995.4	\$670.2	\$385.9	\$146.5	(\$69.7)	(\$288.1)	(\$433.0)	(\$484.9)	(\$1,830.6)
- Interest on In-year Transactions	\$75.8	(\$275.4)	(\$235.3)	(\$193.4)	(\$149.8)	(\$104.4)	(\$62.8)	(\$13.7)	(\$641.9)	(\$745.0)
TOTAL REVENUE	\$15,238.2	\$16,983.7	\$18,681.2	\$20,496.4	\$22,433.2	\$24,472.4	\$26,582.5	\$28,857.7	\$30,630.1	\$26,533.0
CLOSING CASH BALANCE	\$28,440.7	\$19,147.6	\$11,026.4	\$4,184.4	(\$1,267.5)	(\$5,238.0)	(\$7,872.7)	(\$8,816.6)	(\$33,284.4)	(\$62,951.1)

SERVICES RELATED TO A HIGHWAY: ROADS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$93,781.0)	(\$127,054.9)	(\$160,400.8)	(\$141,293.6)	(\$118,291.7)	(\$92,929.2)	(\$64,786.9)	(\$33,848.5)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Services Related To A Highway: Roads : Non Inflated	\$47,025.4	\$45,884.9	\$4,328.0	\$4,328.0	\$4,328.0	\$4,328.0	\$4,328.0	\$4,328.0	\$427,448.2
- Services Related To A Highway: Roads : Inflated	\$58,470.2	\$58,193.2	\$5,598.7	\$5,710.7	\$5,824.9	\$5,941.4	\$6,060.2	\$6,181.4	\$526,386.4
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	119,200	122,250	121,720	129,830	131,500	134,050	136,000	137,700	2,157,070
REVENUE									
- DC Receipts: Inflated	\$31,106.7	\$32,540.7	\$33,047.6	\$35,954.5	\$37,145.3	\$38,622.9	\$39,968.5	\$41,277.4	\$553,702.3
INTEREST									
- Interest on Opening Balance	(\$5,158.0)	(\$6,988.0)	(\$8,822.0)	(\$7,771.2)	(\$6,506.0)	(\$5,111.1)	(\$3,563.3)	(\$1,861.7)	(\$49,339.2)
- Interest on In-year Transactions	(\$752.5)	(\$705.4)	\$480.4	\$529.3	\$548.1	\$571.9	\$593.4	\$614.2	(\$1,199.1)
TOTAL REVENUE	\$25,196.3	\$24,847.2	\$24,705.9	\$28,712.6	\$31,187.4	\$34,083.8	\$36,998.6	\$40,030.0	\$503,164.0
CLOSING CASH BALANCE	(\$127,054.9)	(\$160,400.8)	(\$141,293.6)	(\$118,291.7)	(\$92,929.2)	(\$64,786.9)	(\$33,848.5)	\$0.0	

2023 Adjusted Charge Per Square Metre **\$209.88**

Allocation of Capital Program

Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%

Rates for 2023

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

Appendix D.2

Water Services: Facilities

Water Services: Facilities

This appendix provides a brief outline of the infrastructure included in the Water Services: Facilities development charge. The development-related projects outlined in this appendix are required to service the demands of new development to 2041. The benefits of the services are considered to be City-wide for the purposes of calculating the development charge.

The following discusses the individual components included in the Water Facilities service category.

The analysis is set out in the tables which follow. The tables include:

Table D.2-1	2023-2041 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs
Table D.2-2	Cash Flow Analysis

D. Development-Related Capital Program

i. Gross Capital Program Costs

The capital program includes two projects. The first being Water System Upgrades required to meet new water quality regulations with a total cost of \$2.93 million. The second being the Surface Water Treatment Plant (SWTP) Optimization Implementation for \$10.59 million. The two projects total \$13.51 million.

ii. Grants, Subsidies and Other Recoveries

No grants, subsidies or other recoveries are anticipated for this service. As such, no adjustments have been made.

iii. Replacement and Benefit to Existing Shares

Approximately 57% or \$1.67 million of the Water Systems Upgrades project has been identified as a benefit to existing share and is removed from the DC eligible costs.

iv. Available DC Reserve Funds

An available DC reserve fund balance of \$584,600 is applied to the total DC eligible costs, reducing the in-period DC recoverable share.

v. Other Development-Related / Post-Period Benefit Shares

No post-period benefit allocations have been identified for this service as the infrastructure is required to service development over the planning period.

vi. 2023-2041 DC Eligible Development Related Costs

The total in-period costs included for recovery in the DC calculation amounts to \$11.26 million.

E. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The effect of the analysis is an increase in the residential development charge rates to \$93.52 per capita. The adjusted retail cash-flow amounts to \$2.00 per square metre of gross floor area and non-retail amounts to \$1.16 per square metre.

The following table summarizes the calculation of the Water Services Facilities development charge:

WATER SERVICES - FACILITIES SUMMARY							
2023 - 2032		Unadjusted			Adjusted		
Development-Related Capital Program		Development Charge			Development Charge		
Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non-Retail \$/sq.m
\$13,513,107	\$11,259,995	\$83.74	\$1.67	\$0.98	\$93.52	\$2.00	\$1.16

APPENDIX D.2
TABLE 1

CITY OF BARRIE
WATER SERVICES - FACILITIES
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*
WATER SERVICES - FACILITIES										
1.0 Water Projects										
1.1.1 Water System Upgrades Due to New WQ Regulations	2024 - 2031	\$ 2,927,118	\$ -	\$ 2,927,118	57%	\$ 1,668,457	\$ 1,258,661	\$ 584,655	\$ 674,006	\$ -
1.1.2 SWTP Optimization Implementation	2024 - 2031	\$ 10,585,990	\$ -	\$ 10,585,990	0%	\$ -	\$ 10,585,990	\$ -	\$ 10,585,990	\$ -
Subtotal Water Projects		\$ 13,513,107	\$ -	\$ 13,513,107		\$ 1,668,457	\$ 11,844,650	\$ 584,655	\$ 11,259,995	\$ -
TOTAL WATER SERVICES - FACILITIES		\$ 13,513,107	\$ -	\$ 13,513,107		\$ 1,668,457	\$ 11,844,650	\$ 584,655	\$ 11,259,995	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2041 DC Eligible Costs	69.1%	\$7,781,500
Long-Term Growth in Population in New Units		92,924
Unadjusted Development Charge Per Capita		\$83.74
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	12.2%	\$1,368,236
Long-Term Growth in Square Metres		816,960
Unadjusted Development Charge Per Square Metre		\$1.67
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	18.7%	\$2,110,260
Long-Term Growth in Square Metres		2,157,070
Unadjusted Development Charge Per Square Metre		\$0.98

Current Reserve Fund Balance	\$584,655
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APPENDIX D.2

TABLE 2-1

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - FACILITIES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WATER SERVICES - FACILITIES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$404.0	\$926.1	\$423.6	(\$93.2)	(\$624.8)	(\$1,180.7)	(\$1,761.9)	(\$2,369.3)	(\$3,004.5)	(\$3,668.7)
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$50.5	\$50.5	\$50.5	\$50.5	\$50.5	\$50.5	\$50.5	\$50.5	\$0.0
- Water Services - Facilities : Non Inflated	\$0.0	\$972.7	\$972.7	\$972.7	\$972.7	\$972.7	\$972.7	\$972.7	\$972.7	\$0.0
- Water Services - Facilities : Inflated	\$0.0	\$1,043.7	\$1,064.5	\$1,085.8	\$1,107.5	\$1,129.7	\$1,152.3	\$1,175.3	\$1,198.8	\$0.0
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722
REVENUE										
- DC Receipts: Inflated	\$499.2	\$523.0	\$547.70	\$573.4	\$600.0	\$627.3	\$655.4	\$684.0	\$713.2	\$416.0
INTEREST										
- Interest on Opening Balance	\$14.1	\$32.4	\$0.0	(\$5.1)	(\$34.4)	(\$64.9)	(\$96.9)	(\$130.3)	(\$165.2)	(\$201.8)
- Interest on In-year Transactions	\$8.7	(\$14.3)	\$0.0	(\$14.1)	(\$14.0)	(\$13.8)	(\$13.7)	(\$13.5)	(\$13.4)	\$7.3
TOTAL REVENUE	\$522.1	\$541.1	\$547.7	\$554.2	\$551.7	\$548.5	\$544.8	\$540.2	\$534.6	\$221.5
CLOSING CASH BALANCE	\$926.1	\$423.6	(\$93.2)	(\$624.8)	(\$1,180.7)	(\$1,761.9)	(\$2,369.3)	(\$3,004.5)	(\$3,668.7)	(\$3,447.2)

WATER SERVICES - FACILITIES	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$3,200.7)	(\$2,927.7)	(\$2,626.6)	(\$2,295.9)	(\$1,914.9)	(\$1,497.4)	(\$1,040.6)	(\$542.3)	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Facilities : Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7,781.5
- Water Services - Facilities : Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8,957.7
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	3,795	3,829	3,860	4,040	4,083	4,127	4,169	4,210	92,924
REVENUE									
- DC Receipts: Inflated	\$441.3	\$454.1	\$467.0	\$498.5	\$513.9	\$529.8	\$545.9	\$562.3	\$10,280.8
INTEREST									
- Interest on Opening Balance	(\$176.0)	(\$161.0)	(\$144.5)	(\$126.3)	(\$105.3)	(\$82.4)	(\$57.2)	(\$29.8)	(\$1,724.3)
- Interest on In-year Transactions	\$7.7	\$7.9	\$8.2	\$8.7	\$9.0	\$9.3	\$9.6	\$9.8	(\$3.0)
TOTAL REVENUE	\$273.0	\$301.1	\$330.7	\$381.0	\$417.6	\$456.8	\$498.3	\$542.3	\$8,553.6
CLOSING CASH BALANCE	(\$2,927.7)	(\$2,626.6)	(\$2,295.9)	(\$1,914.9)	(\$1,497.4)	(\$1,040.6)	(\$542.3)	\$0.0	

2023 Adjusted Charge Per Capita \$93.52

Allocation of Capital Program	
Residential Sector	69.1%
Non-Residential Sector	30.9%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX D.2
TABLE 2-2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - FACILITIES
RETAIL DEVELOPMENT CHARGE
(in \$000)

WATER SERVICES - FACILITIES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$71.0	\$122.9	(\$4.9)	(\$134.2)	(\$267.2)	(\$404.1)	(\$544.9)	(\$689.5)	(\$838.0)	(\$990.5)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$8.9	\$8.9	\$8.9	\$8.9	\$8.9	\$8.9	\$8.9	\$8.9	\$0.0
- Water Services - Facilities : Non Inflated	\$0.0	\$171.0	\$171.0	\$171.0	\$171.0	\$171.0	\$171.0	\$171.0	\$171.0	\$0.0
- Water Services - Facilities : Inflated	\$0.0	\$183.5	\$187.2	\$190.9	\$194.7	\$198.6	\$202.6	\$206.7	\$210.8	\$0.0
NON-RESIDENTIAL SPACE GROWTH										
- Retail Growth in Square Metres	24,230	26,920	29,610	32,300	35,000	37,690	40,380	43,070	45,760	43,000
REVENUE										
- DC Receipts: Inflated	\$48.5	\$55.0	\$61.7	\$68.6	\$75.8	\$83.3	\$91.0	\$99.0	\$107.3	\$102.8
INTEREST										
- Interest on Opening Balance	\$2.5	\$4.3	(\$0.3)	(\$7.4)	(\$14.7)	(\$22.2)	(\$30.0)	(\$37.9)	(\$46.1)	(\$54.5)
- Interest on In-year Transactions	\$0.8	(\$3.5)	(\$3.5)	(\$3.4)	(\$3.3)	(\$3.2)	(\$3.1)	(\$3.0)	(\$2.8)	\$1.8
TOTAL REVENUE	\$51.8	\$55.7	\$57.9	\$57.9	\$57.9	\$57.9	\$58.0	\$58.1	\$58.4	\$50.2
CLOSING CASH BALANCE	\$122.9	(\$4.9)	(\$134.2)	(\$267.2)	(\$404.1)	(\$544.9)	(\$689.5)	(\$838.0)	(\$990.5)	(\$940.3)

WATER SERVICES - FACILITIES	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$881.5)	(\$813.5)	(\$735.6)	(\$645.7)	(\$544.2)	(\$430.2)	(\$302.9)	(\$159.9)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Facilities : Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,368.2
- Water Services - Facilities : Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,575.0
NON-RESIDENTIAL SPACE GROWTH									
- Retail Growth in Square Metres	46,000	47,500	49,500	51,000	52,500	54,000	56,000	58,000	816,960
REVENUE									
- DC Receipts: Inflated	\$114.5	\$120.6	\$128.2	\$134.7	\$141.4	\$148.4	\$156.9	\$165.8	\$1,399.4
INTEREST									
- Interest on Opening Balance	(\$48.5)	(\$44.7)	(\$40.5)	(\$35.5)	(\$29.9)	(\$23.7)	(\$16.7)	(\$8.8)	(\$427.2)
- Interest on In-year Transactions	\$2.0	\$2.1	\$2.2	\$2.4	\$2.5	\$2.6	\$2.7	\$2.9	(\$12.4)
TOTAL REVENUE	\$68.0	\$77.9	\$89.9	\$101.5	\$114.0	\$127.3	\$143.0	\$159.9	\$959.8
CLOSING CASH BALANCE	(\$813.5)	(\$735.6)	(\$645.7)	(\$544.2)	(\$430.2)	(\$302.9)	(\$159.9)	\$0.0	

2023 Adjusted Charge Per Square Metre

\$2.00

Allocation of Capital Program

Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%

Rates for 2023

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

**APPENDIX D.2
TABLE 2-3**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - FACILITIES
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)**

WATER SERVICES - FACILITIES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$109.6	\$193.9	\$2.0	(\$191.2)	(\$389.3)	(\$592.3)	(\$800.1)	(\$1,012.6)	(\$1,229.8)	(\$1,451.7)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balanc	\$0.0	\$13.7	\$13.7	\$13.7	\$13.7	\$13.7	\$13.7	\$13.7	\$13.7	\$0.0
- Water Services - Facilities : Non Inflated	\$0.0	\$263.8	\$263.8	\$263.8	\$263.8	\$263.8	\$263.8	\$263.8	\$263.8	\$0.0
- Water Services - Facilities : Inflated	\$0.0	\$283.0	\$288.7	\$294.5	\$300.4	\$306.4	\$312.5	\$318.7	\$325.1	\$0.0
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	68,370	75,970	83,560	91,160	98,760	106,360	113,950	121,550	129,140	116,050
REVENUE										
- DC Receipts: Inflated	\$79.1	\$89.6	\$100.6	\$111.9	\$123.7	\$135.9	\$148.5	\$161.5	\$175.0	\$160.4
INTEREST										
- Interest on Opening Balance	\$3.8	\$6.8	\$0.1	(\$10.5)	(\$21.4)	(\$32.6)	(\$44.0)	(\$55.7)	(\$67.6)	(\$79.8)
- Interest on In-year Transactions	\$1.4	(\$5.3)	(\$5.2)	(\$5.0)	(\$4.9)	(\$4.7)	(\$4.5)	(\$4.3)	(\$4.1)	\$2.8
TOTAL REVENUE	\$84.3	\$91.1	\$95.5	\$96.4	\$97.4	\$98.6	\$99.9	\$101.5	\$103.3	\$83.4
CLOSING CASH BALANCE	\$193.9	\$2.0	(\$191.2)	(\$389.3)	(\$592.3)	(\$800.1)	(\$1,012.6)	(\$1,229.8)	(\$1,451.7)	(\$1,368.2)

WATER SERVICES - FACILITIES	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$1,271.4)	(\$1,166.9)	(\$1,048.5)	(\$920.8)	(\$769.8)	(\$603.9)	(\$420.5)	(\$219.4)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Facilities : Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,110.3
- Water Services - Facilities : Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,429.2
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	119,200	122,250	121,720	129,830	131,500	134,050	136,000	137,700	2,157,070
REVENUE									
- DC Receipts: Inflated	\$171.5	\$179.4	\$182.2	\$198.2	\$204.7	\$212.9	\$220.3	\$227.5	\$2,186.6
INTEREST									
- Interest on Opening Balance	(\$69.9)	(\$64.2)	(\$57.7)	(\$50.6)	(\$42.3)	(\$33.2)	(\$23.1)	(\$12.1)	(\$618.7)
- Interest on In-year Transactions	\$3.0	\$3.1	\$3.2	\$3.5	\$3.6	\$3.7	\$3.9	\$4.0	(\$18.1)
TOTAL REVENUE	\$104.5	\$118.3	\$127.7	\$151.0	\$166.0	\$183.4	\$201.0	\$219.4	\$1,549.8
CLOSING CASH BALANCE	(\$1,166.9)	(\$1,048.5)	(\$920.8)	(\$769.8)	(\$603.9)	(\$420.5)	(\$219.4)	\$0.0	

2023 Adjusted Charge Per Square Metre

\$1.16

Allocation of Capital Program

Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%

Rates for 2023

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

Appendix D.3

Water Services: Facilities Related Debt

Water Services: Facilities Related Debt

This appendix provides a brief outline of the infrastructure included in the Water Services: Facilities Related Debt development charge. The development-related projects outlined in this appendix are required to service the demands of new development to 2041. The benefits of the services are considered to be City-wide for the purposes of calculating the development charge.

The following discusses the individual components included in the Water Facilities service category. The analysis is set out in the tables which follow. The tables include:

Table D.3-1 2023-2041 Development-Related Capital Forecast and
Calculation of the Discounted Growth-Related Net Capital Costs

Table D.3-2 Cash Flow Analysis

A. Development-Related Capital Program

i. Gross Capital Program Costs

The capital program for Water Facilities Related Debt includes the recovery of a negative reserve fund balance of \$32.02 million as well as principal payments associated with two debentures for the Surface Water Treatment Plant (SWTP) issued in 2011 (SWTP 2011-036, \$60.24 million) and 2012 (SWTP 2012-074, \$59.35 million), respectively. The debenture financed portion of the SWTP project is required to service development occurring to 2041. Debentures payments which extend beyond 2041 are included for recovery through the development charges calculation, but have been net present valued, discounted to present day. The associated interest costs related to the debentures amount to \$58.44 million for SWTP 2011-036 and \$36.89 million for SWTP 2012-0741 and have been included in cash flow analysis.

ii. Grants, Subsidies and Other Recoveries

No grants, subsidies or other recoveries are anticipated for this service. As such, no adjustments have been made.

iii. Replacement and Benefit to Existing Shares

Only the growth-related shares of the SWTP have been included in the capital program, therefore no benefit to existing shares have been identified.

iv. Available DC Reserve Funds

The City has constructed works in advance of growth occurring, therefore the DC reserve is in a deficit position.

v. Other Development-Related / Post-Period Benefit Shares

No post-period benefit allocations have been identified for this service as the infrastructure is required to service development over the planning period.

vi. 2023-2041 DC Eligible Development Related Costs

The in-period DC eligible cost for Water Services: Related Debt amounts to \$151.70 million.

B. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections as well as the interest payments associated with debenture SWTP 2011-036 and SWTP 2012-0741. As noted on Table 2, the DC eligible costs are not inflated as the entirety of the capital program relates to debentures.

The effect of the analysis is an increase in the residential development charge rates to \$1,788.49 per capita. The adjusted retail cash-flow amounts

to \$38.56 per square metre of gross floor area and non-retail amounts to \$22.31 per square metre.

The following table summarizes the calculation of the Water Services: Facilities Related Debt development charge:

WATER SERVICES - FACILITIES RELATED DEBT SUMMARY							
2023 - 2032		Unadjusted			Adjusted		
Development-Related Capital Program		Development Charge			Development Charge		
Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non-Retail \$/sq.m
\$151,602,258	\$151,602,258	\$1,127.46	\$22.55	\$13.17	\$1,788.49	\$38.56	\$22.31

APPENDIX D.3

TABLE 1

CITY OF BARRIE
WATER SERVICES - FACILITIES RELATED DEBT
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
1.0 WATER SERVICES - FACILITIES RELATED DEBT										
1.1 Recovery of Negative Reserve Fund Balance										
1.1.1 Balance as at December 31, 2022	2023 - 2023	\$ 32,016,295	\$ -	\$ 32,016,295	0%	\$ -	\$ 32,016,295	\$ -	\$ 32,016,295	\$ -
Subtotal Recovery of Negative Reserve Fund Balance		\$ 32,016,295	\$ -	\$ 32,016,295		\$ -	\$ 32,016,295	\$ -	\$ 32,016,295	\$ -
1.2 Debenture Payments - SWTP 2011-036¹										
1.2.1 Principal Payment	2023 - 2023	\$ 1,067,065	\$ -	\$ 1,067,065	0%	\$ -	\$ 1,067,065	\$ -	\$ 1,067,065	\$ -
1.2.2 Principal Payment	2024 - 2024	\$ 1,121,960	\$ -	\$ 1,121,960	0%	\$ -	\$ 1,121,960	\$ -	\$ 1,121,960	\$ -
1.2.3 Principal Payment	2025 - 2025	\$ 1,179,679	\$ -	\$ 1,179,679	0%	\$ -	\$ 1,179,679	\$ -	\$ 1,179,679	\$ -
1.2.4 Principal Payment	2026 - 2026	\$ 1,240,368	\$ -	\$ 1,240,368	0%	\$ -	\$ 1,240,368	\$ -	\$ 1,240,368	\$ -
1.2.5 Principal Payment	2027 - 2027	\$ 1,304,179	\$ -	\$ 1,304,179	0%	\$ -	\$ 1,304,179	\$ -	\$ 1,304,179	\$ -
1.2.6 Principal Payment	2028 - 2028	\$ 1,371,273	\$ -	\$ 1,371,273	0%	\$ -	\$ 1,371,273	\$ -	\$ 1,371,273	\$ -
1.2.7 Principal Payment	2029 - 2029	\$ 1,441,818	\$ -	\$ 1,441,818	0%	\$ -	\$ 1,441,818	\$ -	\$ 1,441,818	\$ -
1.2.8 Principal Payment	2030 - 2030	\$ 1,515,993	\$ -	\$ 1,515,993	0%	\$ -	\$ 1,515,993	\$ -	\$ 1,515,993	\$ -
1.2.9 Principal Payment	2031 - 2031	\$ 1,593,983	\$ -	\$ 1,593,983	0%	\$ -	\$ 1,593,983	\$ -	\$ 1,593,983	\$ -
1.2.10 Principal Payment	2032 - 2032	\$ 1,675,986	\$ -	\$ 1,675,986	0%	\$ -	\$ 1,675,986	\$ -	\$ 1,675,986	\$ -
1.2.11 Principal Payment	2033 - 2033	\$ 1,762,207	\$ -	\$ 1,762,207	0%	\$ -	\$ 1,762,207	\$ -	\$ 1,762,207	\$ -
1.2.12 Principal Payment	2034 - 2034	\$ 1,852,864	\$ -	\$ 1,852,864	0%	\$ -	\$ 1,852,864	\$ -	\$ 1,852,864	\$ -
1.2.13 Principal Payment	2035 - 2035	\$ 1,948,185	\$ -	\$ 1,948,185	0%	\$ -	\$ 1,948,185	\$ -	\$ 1,948,185	\$ -
1.2.14 Principal Payment	2036 - 2036	\$ 2,048,410	\$ -	\$ 2,048,410	0%	\$ -	\$ 2,048,410	\$ -	\$ 2,048,410	\$ -
1.2.15 Principal Payment	2037 - 2037	\$ 2,153,791	\$ -	\$ 2,153,791	0%	\$ -	\$ 2,153,791	\$ -	\$ 2,153,791	\$ -
1.2.16 Principal Payment	2038 - 2038	\$ 2,264,593	\$ -	\$ 2,264,593	0%	\$ -	\$ 2,264,593	\$ -	\$ 2,264,593	\$ -
1.2.17 Principal Payment	2039 - 2039	\$ 2,381,095	\$ -	\$ 2,381,095	0%	\$ -	\$ 2,381,095	\$ -	\$ 2,381,095	\$ -
1.2.18 Principal Payment	2040 - 2040	\$ 2,503,591	\$ -	\$ 2,503,591	0%	\$ -	\$ 2,503,591	\$ -	\$ 2,503,591	\$ -
1.2.19 Principal Payment - 2041-2051	2041 - 2041	\$ 29,809,679	\$ -	\$ 29,809,679	0%	\$ -	\$ 29,809,679	\$ -	\$ 29,809,679	\$ -
Subtotal Debenture Payments - SWTP 2011-0361		\$ 60,236,722	\$ -	\$ 60,236,722		\$ -	\$ 60,236,722	\$ -	\$ 60,236,722	\$ -

APPENDIX D.3

TABLE 1

CITY OF BARRIE
WATER SERVICES - FACILITIES RELATED DEBT
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
1.2 Debenture Payments - SWTP 2012-074¹										
1.2.1 Principal Payment	2023 - 2023	\$ 1,094,427	\$ -	\$ 1,094,427	0%	\$ -	\$ 1,094,427	\$ -	\$ 1,094,427	\$ -
1.2.2 Principal Payment	2024 - 2024	\$ 1,138,977	\$ -	\$ 1,138,977	0%	\$ -	\$ 1,138,977	\$ -	\$ 1,138,977	\$ -
1.2.3 Principal Payment	2025 - 2025	\$ 1,185,341	\$ -	\$ 1,185,341	0%	\$ -	\$ 1,185,341	\$ -	\$ 1,185,341	\$ -
1.2.4 Principal Payment	2026 - 2026	\$ 1,233,591	\$ -	\$ 1,233,591	0%	\$ -	\$ 1,233,591	\$ -	\$ 1,233,591	\$ -
1.2.5 Principal Payment	2027 - 2027	\$ 1,283,806	\$ -	\$ 1,283,806	0%	\$ -	\$ 1,283,806	\$ -	\$ 1,283,806	\$ -
1.2.6 Principal Payment	2028 - 2028	\$ 1,336,064	\$ -	\$ 1,336,064	0%	\$ -	\$ 1,336,064	\$ -	\$ 1,336,064	\$ -
1.2.7 Principal Payment	2029 - 2029	\$ 1,390,450	\$ -	\$ 1,390,450	0%	\$ -	\$ 1,390,450	\$ -	\$ 1,390,450	\$ -
1.2.8 Principal Payment	2030 - 2030	\$ 1,447,050	\$ -	\$ 1,447,050	0%	\$ -	\$ 1,447,050	\$ -	\$ 1,447,050	\$ -
1.2.9 Principal Payment	2031 - 2031	\$ 1,505,953	\$ -	\$ 1,505,953	0%	\$ -	\$ 1,505,953	\$ -	\$ 1,505,953	\$ -
1.2.10 Principal Payment	2032 - 2032	\$ 1,567,255	\$ -	\$ 1,567,255	0%	\$ -	\$ 1,567,255	\$ -	\$ 1,567,255	\$ -
1.2.11 Principal Payment	2033 - 2033	\$ 1,631,051	\$ -	\$ 1,631,051	0%	\$ -	\$ 1,631,051	\$ -	\$ 1,631,051	\$ -
1.2.12 Principal Payment	2034 - 2034	\$ 1,697,445	\$ -	\$ 1,697,445	0%	\$ -	\$ 1,697,445	\$ -	\$ 1,697,445	\$ -
1.2.13 Principal Payment	2035 - 2035	\$ 1,766,541	\$ -	\$ 1,766,541	0%	\$ -	\$ 1,766,541	\$ -	\$ 1,766,541	\$ -
1.2.14 Principal Payment	2036 - 2036	\$ 1,838,450	\$ -	\$ 1,838,450	0%	\$ -	\$ 1,838,450	\$ -	\$ 1,838,450	\$ -
1.2.15 Principal Payment	2037 - 2037	\$ 1,913,286	\$ -	\$ 1,913,286	0%	\$ -	\$ 1,913,286	\$ -	\$ 1,913,286	\$ -
1.2.16 Principal Payment	2038 - 2038	\$ 1,991,168	\$ -	\$ 1,991,168	0%	\$ -	\$ 1,991,168	\$ -	\$ 1,991,168	\$ -
1.2.17 Principal Payment	2039 - 2039	\$ 2,072,221	\$ -	\$ 2,072,221	0%	\$ -	\$ 2,072,221	\$ -	\$ 2,072,221	\$ -
1.2.18 Principal Payment	2040 - 2040	\$ 2,156,573	\$ -	\$ 2,156,573	0%	\$ -	\$ 2,156,573	\$ -	\$ 2,156,573	\$ -
1.2.19 Principal Payment - 2041-2042	2041 - 2041	\$ 31,099,591	\$ -	\$ 31,099,591	0%	\$ -	\$ 31,099,591	\$ -	\$ 31,099,591	\$ -
Subtotal Debenture Payments - SWTP 2012-0741		\$ 59,349,242	\$ -	\$ 59,349,242		\$ -	\$ 59,349,242	\$ -	\$ 59,349,242	\$ -
TOTAL WATER SERVICES - FACILITIES RELATED DEBT		\$ 151,602,258	\$ -	\$ 151,602,258		\$ -	\$ 151,602,258	\$ -	\$ 151,602,258	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

(1)Includes principal payments only, interest payments to be included in cash flow analysis

SWTP 2011-0361 total interest payments 2023-2051 = \$58.44M

SWTP 2012-0741 total interest payments 2023-2041 = \$36.8M

Residential Development Charge Calculation		
Residential Share of 2023 - 2041 DC Eligible Costs	69.1%	\$104,768,511
Long-Term Growth in Population in New Units		92,924
Unadjusted Development Charge Per Capita		\$1,127.46
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	12.2%	\$18,421,642
Long-Term Growth in Square Metres		816,960
Unadjusted Development Charge Per Square Metre		\$22.55
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	18.7%	\$28,412,105
Long-Term Growth in Square Metres		2,157,070
Unadjusted Development Charge Per Square Metre		\$13.17

Current Reserve Fund Balance	(\$32,016,295)
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APPENDIX D.3

TABLE 2-1

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - FACILITIES RELATED DEBT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WATER SERVICES - FACILITIES RELATED DEBT	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$22,125.7)	(\$41,779.9)	(\$39,399.2)	(\$34,242.0)	(\$30,468.5)	(\$25,972.2)	(\$20,699.1)	(\$14,590.2)	(\$7,590.7)	\$361.0
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Facilities Related Debt: Non Inflated	\$23,619.4	\$1,562.5	\$1,634.4	\$1,709.7	\$1,788.5	\$1,871.0	\$1,957.3	\$2,047.7	\$2,142.3	\$2,241.3
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722
REVENUE										
- DC Receipts: Inflated	\$9,546.9	\$10,002.4	\$10,474.11	\$10,966.4	\$11,474.2	\$11,995.9	\$12,533.9	\$13,080.4	\$13,639.6	\$7,955.4
INTEREST										
- Interest on Opening Balance	(\$1,216.9)	(\$2,297.9)	\$0.0	(\$1,883.3)	(\$1,675.8)	(\$1,428.5)	(\$1,138.5)	(\$802.5)	(\$417.5)	\$12.6
- Interest on In-year Transactions	(\$387.0)	\$147.7	\$154.7	\$162.0	\$169.5	\$177.2	\$185.1	\$193.1	\$201.2	\$100.0
- Interest on Debenture Payments	(\$3,977.82)	(\$3,909.1)	(\$3,837.2)	(\$3,761.9)	(\$3,683.1)	(\$3,600.6)	(\$3,514.3)	(\$3,423.9)	(\$3,329.3)	(\$3,230.3)
TOTAL REVENUE	\$3,965.2	\$3,943.1	\$6,791.6	\$5,483.2	\$6,284.8	\$7,144.0	\$8,066.3	\$9,047.1	\$10,094.0	\$4,837.8
CLOSING CASH BALANCE	(\$41,779.9)	(\$39,399.2)	(\$34,242.0)	(\$30,468.5)	(\$25,972.2)	(\$20,699.1)	(\$14,590.2)	(\$7,590.7)	\$361.0	\$2,957.5

WATER SERVICES - FACILITIES RELATED DEBT	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	\$5,889.2	\$9,167.7	\$12,809.1	\$16,825.6	\$21,594.5	\$26,827.3	\$32,550.8	\$38,785.3	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Facilities Related Debt: Non Inflated	\$2,453.5	\$2,567.2	\$2,686.1	\$2,810.7	\$2,941.0	\$3,077.6	\$3,220.5	\$42,092.9	\$104,768.5
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	3,795	3,829	3,860	4,040	4,083	4,127	4,169	4,210	92,924
REVENUE									
- DC Receipts: Inflated	\$8,439.2	\$8,685.1	\$8,930.5	\$9,533.9	\$9,828.1	\$10,132.6	\$10,440.5	\$10,754.0	\$196,610.3
INTEREST									
- Interest on Opening Balance	\$206.1	\$320.9	\$448.3	\$588.9	\$755.8	\$939.0	\$1,139.3	\$1,357.5	(\$4,988.9)
- Interest on In-year Transactions	\$104.7	\$107.1	\$109.3	\$117.7	\$120.5	\$123.5	\$126.3	(\$861.8)	\$1,153.1
- Interest on Debenture Payments	(\$3,018.0)	(\$2,904.4)	(\$2,785.5)	(\$2,660.9)	(\$2,530.5)	(\$2,394.0)	(\$2,251.1)	(\$7,942.1)	(\$65,880.4)
TOTAL REVENUE	\$5,732.0	\$6,208.6	\$6,702.6	\$7,579.5	\$8,173.9	\$8,801.1	\$9,455.1	\$3,307.6	\$126,894.2
CLOSING CASH BALANCE	\$9,167.7	\$12,809.1	\$16,825.6	\$21,594.5	\$26,827.3	\$32,550.8	\$38,785.3	(\$0.0)	

(1) DC eligible costs are not inflated as entire capital program relates to debt payments

2023 Adjusted Charge Per Capita	\$1,788.49
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Allocation of Capital Program	
Residential Sector	69.1%
Non-Residential Sector	30.9%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX D.3
TABLE 2-2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - FACILITIES RELATED DEBT
RETAIL DEVELOPMENT CHARGE
(in \$000)

WATER SERVICES - FACILITIES RELATED DEBT	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$3,890.4)	(\$8,110.9)	(\$8,446.5)	(\$8,669.3)	(\$8,768.5)	(\$8,731.8)	(\$8,547.0)	(\$8,200.8)	(\$7,678.9)	(\$6,966.1)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Facilities Related Debt:Non-Inflated	\$4,153.0	\$274.7	\$287.4	\$300.6	\$314.5	\$329.0	\$344.2	\$360.0	\$376.7	\$394.1
NON-RESIDENTIAL SPACE GROWTH										
- Retail Growth in Square Metres	24,230	26,920	29,610	32,300	35,000	37,690	40,380	43,070	45,760	43,000
REVENUE										
- DC Receipts: Inflated	\$934.4	\$1,058.9	\$1,188.0	\$1,321.9	\$1,461.0	\$1,604.8	\$1,753.7	\$1,907.9	\$2,067.6	\$1,981.8
INTEREST										
- Interest on Opening Balance	(\$214.0)	(\$446.1)	(\$464.6)	(\$476.8)	(\$482.3)	(\$480.2)	(\$470.1)	(\$451.0)	(\$422.3)	(\$383.1)
- Interest on In-year Transactions	(\$88.5)	\$13.7	\$15.8	\$17.9	\$20.1	\$22.3	\$24.7	\$27.1	\$29.6	\$27.8
- Interest on Debenture Payments	(\$699.4)	(\$687.3)	(\$674.7)	(\$661.5)	(\$647.6)	(\$633.1)	(\$617.9)	(\$602.0)	(\$585.4)	(\$568.0)
TOTAL REVENUE	(\$67.5)	(\$60.8)	\$64.5	\$201.5	\$351.2	\$513.7	\$690.3	\$881.9	\$1,089.5	\$1,058.4
CLOSING CASH BALANCE	(\$8,110.9)	(\$8,446.5)	(\$8,669.3)	(\$8,768.5)	(\$8,731.8)	(\$8,547.0)	(\$8,200.8)	(\$7,678.9)	(\$6,966.1)	(\$6,301.8)

WATER SERVICES - FACILITIES RELATED DEBT	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$5,489.1)	(\$4,516.4)	(\$3,370.9)	(\$2,014.1)	(\$455.0)	\$1,321.4	\$3,304.9	\$5,525.4	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Facilities Related Debt:Non-Inflated	\$431.4	\$451.4	\$472.3	\$494.2	\$517.1	\$541.1	\$566.3	\$7,401.3	\$18,421.6
NON-RESIDENTIAL SPACE GROWTH									
- Retail Growth in Square Metres	46,000	47,500	49,500	51,000	52,500	54,000	56,000	58,000	816,960
REVENUE									
- DC Receipts: Inflated	\$2,205.7	\$2,323.2	\$2,469.4	\$2,595.1	\$2,724.9	\$2,858.8	\$3,024.0	\$3,194.6	\$26,965.3
INTEREST									
- Interest on Opening Balance	(\$301.9)	(\$248.4)	(\$185.4)	(\$110.8)	(\$25.0)	\$46.2	\$115.7	\$193.4	(\$5,483.6)
- Interest on In-year Transactions	\$31.0	\$32.8	\$34.9	\$36.8	\$38.6	\$40.6	\$43.0	(\$115.7)	\$275.3
- Interest on Debenture Payments	(\$530.7)	(\$510.7)	(\$489.8)	(\$467.9)	(\$444.9)	(\$420.9)	(\$395.8)	(\$1,396.5)	(\$8,925.7)
TOTAL REVENUE	\$1,404.2	\$1,596.8	\$1,829.2	\$2,053.2	\$2,293.5	\$2,524.6	\$2,786.8	\$1,875.8	\$12,831.2
CLOSING CASH BALANCE	(\$4,516.4)	(\$3,370.9)	(\$2,014.1)	(\$455.0)	\$1,321.4	\$3,304.9	\$5,525.4	(\$0.0)	

(1) DC eligible costs are not inflated as entire capital program relates to debt payments

2023 Adjusted Charge Per Square Metre \$38.56

Allocation of Capital Program	
Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX D.3
TABLE 2-3

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - FACILITIES RELATED DEBT
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)

WATER SERVICES - FACILITIES RELATED DEBT	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$6,000.2)	(\$12,422.9)	(\$12,838.1)	(\$13,061.9)	(\$13,075.9)	(\$12,860.3)	(\$12,394.1)	(\$11,655.3)	(\$10,619.9)	(\$9,262.6)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Facilities Related Debt:Non-Inflated	\$6,405.3	\$423.7	\$443.2	\$463.7	\$485.0	\$507.4	\$530.8	\$555.3	\$581.0	\$607.8
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	68,370	75,970	83,560	91,160	98,760	106,360	113,950	121,550	129,140	116,050
REVENUE										
- DC Receipts: Inflated	\$1,525.6	\$1,729.1	\$1,939.9	\$2,158.6	\$2,385.4	\$2,620.3	\$2,863.5	\$3,115.5	\$3,376.3	\$3,094.7
INTEREST										
- Interest on Opening Balance	(\$330.0)	(\$683.3)	(\$706.1)	(\$718.4)	(\$719.2)	(\$707.3)	(\$681.7)	(\$641.0)	(\$584.1)	(\$509.4)
- Interest on In-year Transactions	(\$134.2)	\$22.8	\$26.2	\$29.7	\$33.3	\$37.0	\$40.8	\$44.8	\$48.9	\$43.5
- Interest on Debenture Payments	(\$1,078.7)	(\$1,060.1)	(\$1,040.6)	(\$1,020.2)	(\$998.8)	(\$976.4)	(\$953.0)	(\$928.5)	(\$902.9)	(\$876.0)
TOTAL REVENUE	(\$17.3)	\$8.6	\$219.4	\$449.7	\$700.6	\$973.5	\$1,269.6	\$1,590.8	\$1,938.2	\$1,752.8
CLOSING CASH BALANCE	(\$12,422.9)	(\$12,838.1)	(\$13,061.9)	(\$13,075.9)	(\$12,860.3)	(\$12,394.1)	(\$11,655.3)	(\$10,619.9)	(\$9,262.6)	(\$8,117.7)

WATER SERVICES - FACILITIES RELATED DEBT	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$6,739.3)	(\$5,240.4)	(\$3,504.5)	(\$1,618.9)	\$684.4	\$3,228.8	\$6,021.4	\$9,056.7	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Facilities Related Debt:Non-Inflated	\$665.4	\$696.2	\$728.4	\$762.2	\$797.6	\$834.6	\$873.4	\$11,415.1	\$28,412.1
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	119,200	122,250	121,720	129,830	131,500	134,050	136,000	137,700	2,157,070
REVENUE									
- DC Receipts: Inflated	\$3,307.1	\$3,459.6	\$3,513.5	\$3,822.5	\$3,949.1	\$4,106.2	\$4,249.3	\$4,388.5	\$42,174.3
INTEREST									
- Interest on Opening Balance	(\$370.7)	(\$288.2)	(\$192.7)	(\$89.0)	\$24.0	\$113.0	\$210.8	\$317.0	(\$7,667.7)
- Interest on In-year Transactions	\$46.2	\$48.4	\$48.7	\$53.6	\$55.2	\$57.3	\$59.1	(\$193.2)	\$435.7
- Interest on Debenture Payments	(\$818.5)	(\$787.6)	(\$755.4)	(\$721.6)	(\$686.3)	(\$649.2)	(\$610.5)	(\$2,153.8)	(\$13,766.3)
TOTAL REVENUE	\$2,164.3	\$2,432.1	\$2,614.1	\$3,065.4	\$3,342.0	\$3,627.3	\$3,908.7	\$2,358.4	\$21,176.0
CLOSING CASH BALANCE	(\$5,240.4)	(\$3,504.5)	(\$1,618.9)	\$684.4	\$3,228.8	\$6,021.4	\$9,056.7	(\$0.0)	

(1) DC eligible costs are not inflated as entire capital program relates to debt payments

2023 Adjusted Charge Per Square Metre	\$22.31
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Allocation of Capital Program	
Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix D.4

Wastewater Services: Facilities

Wastewater Services: Facilities

This appendix provides a brief outline of the infrastructure included in the Wastewater Services: Facilities development charge. The development-related projects outlined in this appendix are required to service the demands of new development to 2041. The benefits of the services are considered to be City-wide for the purposes of calculating the development charge.

The following discusses the individual components included in the Wastewater Facilities service category. The analysis is set out in the tables which follow. The tables include:

Table D.4-1	2023-2041 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs
Table D.4-2	Cash Flow Analysis

C. Development-Related Capital Program

i. Gross Capital Program Costs

The capital program includes costs relating to wastewater facilities totalling \$384.43 million which includes peak attenuation system, wastewater facility primary digesters (2), biosolids thickening systems (2), MBR retrofits and a Scheduled EA for plant expansion.

Additional projects related to Wastewater Treatment Facility Primary Treatment Upgrades is also included for a total of \$143.65 million. These projects include a new raw sewage pumping station, primary clarifiers, grit tank and screw conveyor and MBR related costs.

The capital program also makes an adjustment for shares of projects which have previously been funded from development charges. In total, approximately \$3.52 million is reduced from the total gross capital costs.

ii. Grants, Subsidies and Other Recoveries

There is no anticipated grants, subsidies or other recoveries for this services. As such, no deduction is made.

iii. Replacement and Benefit to Existing Shares

Approximately \$93.06 million is identified as a benefit to existing share and is removed from the total DC eligible costs. Approximately \$18.33 million relates to the Peak Attenuation System and is consistent with the share identified in the 2019 DC Background Study. A further \$74.72 million relates to the MBR retrofit and is based on the existing verses future designed phosphorus flows.

iv. Available DC Reserve Funds

In total, \$40.70 million is available in the Wastewater Services DC reserve fund. This amount is reduced from the DC eligible shares of projects occurring in the initial years of the planning period.

v. Other Development-Related / Post-Period Benefit Shares

A further \$22.55 million in post-period shares have been identified and relates to shares of projects that are oversized and will service growth occurring beyond 2041. These projects will be included for recovery in subsequent DC Background Studies.

vi. 2023-2041 DC Eligible Development Related Costs

After adjusting for benefit to existing shares, the available DC reserve fund balance and post-period allocation, the total DC eligible amount included for recovery over the 2023-2041 period is reduced to \$368.25 million.

D. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The effect of the analysis is an decrease in the residential development charge rates to \$2,701.30 per capita. The adjusted retail cash-flow amounts to \$56.61 per square metre of gross floor area and non-retail amounts to \$32.73 per square metre.

The following table summarizes the calculation of the Wastewater Services Facilities development charge:

WASTEWATER SERVICES - FACILITIES SUMMARY							
2023 - 2032 Development-Related Capital Program		Unadjusted Development Charge			Adjusted Development Charge		
Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non-Retail \$/sq.m
\$524,555,940	\$368,245,971	\$2,738.64	\$54.77	\$31.99	\$2,701.30	\$56.61	\$32.73

APPENDIX D.4

TABLE 1

CITY OF BARRIE
WASTEWATER SERVICES - FACILITIES
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
WASTEWATER SERVICES - FACILITIES										
1.0 Wastewater Facilities										
1.1.1 Peak Attenuation System	2025 - 2025	\$ 31,073,455	\$ -	\$ 31,073,455	59%	\$ 18,333,000	\$ 12,740,455	\$ 12,740,455	\$ -	\$ -
1.1.2 Wastewater Treatment Facility Additional Primary Digester	2023 - 2029	\$ 38,009,334	\$ -	\$ 38,009,334	0%	\$ -	\$ 38,009,334	\$ 27,963,385	\$ 10,045,950	\$ -
1.1.3 Wastewater Treatment Facility Additional Primary Digester	2034 - 2064	\$ 38,009,334	\$ -	\$ 38,009,334	0%	\$ -	\$ 38,009,334	\$ -	\$ 21,447,690	\$ 16,561,644
1.1.4 Wastewater Treatment Facility Biosolids Thickening System	2024 - 2041	\$ 56,260,303	\$ -	\$ 56,260,303	0%	\$ -	\$ 56,260,303	\$ -	\$ 56,260,303	\$ -
1.1.5 Wastewater Treatment Facility Biosolids Thickening System	2046 - 2046	\$ 5,988,105	\$ -	\$ 5,988,105	0%	\$ -	\$ 5,988,105	\$ -	\$ -	\$ 5,988,105
1.1.6 MBR Retrofit Project @ Consultant Class 3 Estimate for 76 MLD	2023 - 2031	\$ 209,947,848	\$ -	\$ 209,947,848	36%	\$ 74,723,380	\$ 135,224,468	\$ -	\$ 135,224,468	\$ -
1.1.7 Schedule C EA for Plant Expansion from 76 MLD to 96 MLD	2024 - 2031	\$ 5,132,165	\$ -	\$ 5,132,165	0%	\$ -	\$ 5,132,165	\$ -	\$ 5,132,165	\$ -
Subtotal Wastewater Facilities		\$ 384,420,545	\$ -	\$ 384,420,545		\$ 93,056,380	\$ 291,364,165	\$ 40,703,840	\$ 228,110,576	\$ 22,549,749
2.0 Wastewater Treatment Facility Primary Treatment Upgrades										
2.1.1 Wastewater Treatment Facility New Raw Sewage Pumping Station	2031 - 2041	\$ 52,528,035	\$ -	\$ 52,528,035	0%	\$ -	\$ 52,528,035	\$ -	\$ 52,528,035	\$ -
2.1.2 Primary Clarifiers	2031 - 2041	\$ 23,571,676	\$ -	\$ 23,571,676	0%	\$ -	\$ 23,571,676	\$ -	\$ 23,571,676	\$ -
2.1.3 Grit Tank and Screw Conveyor	2031 - 2041	\$ 7,673,442	\$ -	\$ 7,673,442	0%	\$ -	\$ 7,673,442	\$ -	\$ 7,673,442	\$ -
2.1.4 Cost of M.B.R. to go to 96 M.L.D. (Includes U.V.)	2031 - 2041	\$ 59,881,047	\$ -	\$ 59,881,047	0%	\$ -	\$ 59,881,047	\$ -	\$ 59,881,047	\$ -
Subtotal Wastewater Treatment Facility Primary Treatment Upgrades		\$ 143,654,200	\$ -	\$ 143,654,200		\$ -	\$ 143,654,200	\$ -	\$ 143,654,200	\$ -
3.0 ADJUSTMENT FOR FUNDED SHARES OF PROJECTS										
3.1.1 Prior funded shares of projects	2023 - 2023	\$ (3,518,806)	\$ -	\$ (3,518,806)	0%	\$ -	\$ (3,518,806)	\$ -	\$ (3,518,806)	\$ -
Subtotal ADJUSTMENT FOR FUNDED SHARES OF PROJECTS		\$ (3,518,806)	\$ -	\$ (3,518,806)		\$ -	\$ (3,518,806)	\$ -	\$ (3,518,806)	\$ -
TOTAL WASTEWATER SERVICES - FACILITIES		\$ 524,555,940	\$ -	\$ 524,555,940		\$ 93,056,380	\$ 431,499,559	\$ 40,703,840	\$ 368,245,971	\$ 22,549,749

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2041 DC Eligible Costs	69.1%	\$254,485,536
Long-Term Growth in Population in New Units		92,924
Unadjusted Development Charge Per Capita		\$2,738.64
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	12.2%	\$44,746,666
Long-Term Growth in Square Metres		816,960
Unadjusted Development Charge Per Square Metre		\$54.77
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	18.7%	\$69,013,769
Long-Term Growth in Square Metres		2,157,070
Unadjusted Development Charge Per Square Metre		\$31.99

Current Reserve Fund Balance \$40,703,840

**APPENDIX D.4
TABLE 2**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - FACILITIES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

WASTEWATER SERVICES - FACILITIES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$28,129.4	\$31,876.9	\$30,972.1	\$20,216.3	\$19,690.6	\$19,569.4	\$19,881.4	\$20,658.7	\$26,305.3	\$21,894.0
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$2,760.7	\$2,760.7	\$11,565.3	\$2,760.7	\$2,760.7	\$2,760.7	\$2,760.7	\$0.0	\$0.0	\$0.0
- Wastewater Services - Facilities : Non Inflated	\$8,943.4	\$13,978.5	\$13,978.5	\$13,978.5	\$13,978.5	\$13,978.5	\$13,978.5	\$12,986.7	\$22,011.8	\$11,185.1
- Wastewater Services - Facilities : Inflated	\$11,704.1	\$17,074.0	\$26,575.8	\$17,763.7	\$18,119.0	\$18,481.4	\$18,851.0	\$14,917.6	\$25,790.3	\$13,367.2
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722
REVENUE										
- DC Receipts: Inflated	\$14,419.6	\$15,107.5	\$15,819.95	\$16,563.5	\$17,330.4	\$18,118.4	\$18,931.0	\$19,756.5	\$20,601.0	\$12,015.8
INTEREST										
- Interest on Opening Balance	\$984.5	\$1,115.7	\$0.0	\$707.6	\$689.2	\$684.9	\$695.8	\$723.1	\$920.7	\$766.3
- Interest on In-year Transactions	\$47.5	(\$54.1)	\$0.0	(\$33.0)	(\$21.7)	(\$10.0)	\$1.4	\$84.7	(\$142.7)	(\$37.2)
TOTAL REVENUE	\$15,451.6	\$16,169.1	\$15,819.9	\$17,238.0	\$17,997.9	\$18,793.4	\$19,628.3	\$20,564.2	\$21,379.0	\$12,744.9
CLOSING CASH BALANCE	\$31,876.9	\$30,972.1	\$20,216.3	\$19,690.6	\$19,569.4	\$19,881.4	\$20,658.7	\$26,305.3	\$21,894.0	\$21,271.6

WASTEWATER SERVICES - FACILITIES	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	\$20,728.3	\$17,894.1	\$15,009.1	\$12,064.2	\$9,606.0	\$7,164.8	\$4,750.4	\$2,361.3	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Wastewater Services - Facilities : Non Inflated	\$13,037.8	\$13,037.8	\$13,037.8	\$13,037.8	\$13,037.8	\$13,037.8	\$13,037.8	\$13,037.8	\$254,485.5
- Wastewater Services - Facilities : Inflated	\$16,210.9	\$16,535.1	\$16,865.8	\$17,203.1	\$17,547.2	\$17,898.1	\$18,256.1	\$18,621.2	\$335,416.3
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	3,795	3,829	3,860	4,040	4,083	4,127	4,169	4,210	92,924
REVENUE									
- DC Receipts: Inflated	\$12,746.4	\$13,117.8	\$13,488.5	\$14,399.8	\$14,844.2	\$15,304.2	\$15,769.1	\$16,242.7	\$296,957.5
INTEREST									
- Interest on Opening Balance	\$725.5	\$626.3	\$525.3	\$422.2	\$336.2	\$250.8	\$166.3	\$82.6	\$11,167.5
- Interest on In-year Transactions	(\$95.3)	(\$94.0)	(\$92.9)	(\$77.1)	(\$74.3)	(\$71.3)	(\$68.4)	(\$65.4)	(\$838.2)
TOTAL REVENUE	\$13,376.6	\$13,650.1	\$13,920.9	\$14,745.0	\$15,106.0	\$15,483.6	\$15,867.0	\$16,260.0	\$307,286.9
CLOSING CASH BALANCE	\$17,894.1	\$15,009.1	\$12,064.2	\$9,606.0	\$7,164.8	\$4,750.4	\$2,361.3	\$0.0	

2023 Adjusted Charge Per Capita	\$2,701.30
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Allocation of Capital Program	
Residential Sector	69.1%
Non-Residential Sector	30.9%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**APPENDIX D.4
TABLE 2**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - FACILITIES
RETAIL DEVELOPMENT CHARGE
(in \$000)**

WASTEWATER SERVICES - FACILITIES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$4,946.0	\$4,414.0	\$3,081.0	\$179.3	(\$1,029.9)	(\$2,156.4)	(\$3,193.5)	(\$4,129.8)	(\$4,176.1)	(\$5,946.6)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$485.4	\$485.4	\$2,033.5	\$485.4	\$485.4	\$485.4	\$485.4	\$0.0	\$0.0	\$0.0
- Wastewater Services - Facilities : Non Inflated	\$1,572.5	\$2,457.9	\$2,457.9	\$2,457.9	\$2,457.9	\$2,457.9	\$2,457.9	\$2,283.5	\$3,870.4	\$1,966.7
- Wastewater Services - Facilities : Inflated	\$2,057.9	\$3,002.1	\$4,672.9	\$3,123.4	\$3,185.9	\$3,249.6	\$3,314.6	\$2,623.0	\$4,534.8	\$2,350.4
NON-RESIDENTIAL SPACE GROWTH										
- Retail Growth in Square Metres	24,230	26,920	29,610	32,300	35,000	37,690	40,380	43,070	45,760	43,000
REVENUE										
- DC Receipts: Inflated	\$1,371.7	\$1,554.4	\$1,743.9	\$1,940.4	\$2,144.7	\$2,355.7	\$2,574.3	\$2,800.7	\$3,035.2	\$2,909.1
INTEREST										
- Interest on Opening Balance	\$173.1	\$154.5	\$107.8	\$6.3	(\$56.6)	(\$118.6)	(\$175.6)	(\$227.1)	(\$229.7)	(\$327.1)
- Interest on In-year Transactions	(\$18.9)	(\$39.8)	(\$80.5)	(\$32.5)	(\$28.6)	(\$24.6)	(\$20.4)	\$3.1	(\$41.2)	\$9.8
TOTAL REVENUE	\$1,525.9	\$1,669.1	\$1,771.2	\$1,914.2	\$2,059.4	\$2,212.5	\$2,378.3	\$2,576.7	\$2,764.2	\$2,591.9
CLOSING CASH BALANCE	\$4,414.0	\$3,081.0	\$179.3	(\$1,029.9)	(\$2,156.4)	(\$3,193.5)	(\$4,129.8)	(\$4,176.1)	(\$5,946.6)	(\$5,705.2)

WASTEWATER SERVICES - FACILITIES	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$5,333.7)	(\$5,232.8)	(\$5,009.0)	(\$4,613.5)	(\$4,068.9)	(\$3,362.1)	(\$2,479.1)	(\$1,365.0)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Wastewater Services - Facilities : Non Inflated	\$2,292.5	\$2,292.5	\$2,292.5	\$2,292.5	\$2,292.5	\$2,292.5	\$2,292.5	\$2,292.5	\$44,746.7
- Wastewater Services - Facilities : Inflated	\$2,850.4	\$2,907.4	\$2,965.5	\$3,024.9	\$3,085.4	\$3,147.1	\$3,210.0	\$3,274.2	\$58,976.9
NON-RESIDENTIAL SPACE GROWTH									
- Retail Growth in Square Metres	46,000	47,500	49,500	51,000	52,500	54,000	56,000	58,000	816,960
REVENUE									
- DC Receipts: Inflated	\$3,237.8	\$3,410.3	\$3,625.0	\$3,809.5	\$4,000.0	\$4,196.5	\$4,439.0	\$4,689.5	\$39,583.6
INTEREST									
- Interest on Opening Balance	(\$293.4)	(\$287.8)	(\$275.5)	(\$253.7)	(\$223.8)	(\$184.9)	(\$136.4)	(\$75.1)	(\$2,117.3)
- Interest on In-year Transactions	\$6.8	\$8.8	\$11.5	\$13.7	\$16.0	\$18.4	\$21.5	\$24.8	(\$221.1)
TOTAL REVENUE	\$2,951.3	\$3,131.3	\$3,361.0	\$3,569.5	\$3,792.2	\$4,030.0	\$4,324.2	\$4,639.2	\$37,245.3
CLOSING CASH BALANCE	(\$5,232.8)	(\$5,009.0)	(\$4,613.5)	(\$4,068.9)	(\$3,362.1)	(\$2,479.1)	(\$1,365.0)	\$0.0	

2023 Adjusted Charge Per Square Metre	\$56.61
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Allocation of Capital Program	
Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**APPENDIX D.4
TABLE 2**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - FACILITIES
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)**

WASTEWATER SERVICES - FACILITIES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$7,628.4	\$6,933.4	\$5,024.5	\$718.8	(\$952.4)	(\$2,458.4)	(\$3,794.1)	(\$4,939.9)	(\$4,678.0)	(\$7,033.0)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$748.7	\$748.7	\$3,136.4	\$748.7	\$748.7	\$748.7	\$748.7	\$0.0	\$0.0	\$0.0
- Wastewater Services - Facilities : Non Inflated	\$2,425.4	\$3,790.8	\$3,790.8	\$3,790.8	\$3,790.8	\$3,790.8	\$3,790.8	\$3,521.9	\$5,969.4	\$3,033.3
- Wastewater Services - Facilities : Inflated	\$3,174.0	\$4,630.3	\$7,207.1	\$4,817.3	\$4,913.7	\$5,012.0	\$5,112.2	\$4,045.5	\$6,994.1	\$3,625.0
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	68,370	75,970	83,560	91,160	98,760	106,360	113,950	121,550	129,140	116,050
REVENUE										
- DC Receipts: Inflated	\$2,237.8	\$2,536.3	\$2,845.5	\$3,166.4	\$3,498.9	\$3,843.6	\$4,200.2	\$4,570.0	\$4,952.4	\$4,539.4
INTEREST										
- Interest on Opening Balance	\$267.0	\$242.7	\$175.9	\$25.2	(\$52.4)	(\$135.2)	(\$208.7)	(\$271.7)	(\$257.3)	(\$386.8)
- Interest on In-year Transactions	(\$25.7)	(\$57.6)	(\$119.9)	(\$45.4)	(\$38.9)	(\$32.1)	(\$25.1)	\$9.2	(\$56.1)	\$16.0
TOTAL REVENUE	\$2,479.0	\$2,721.4	\$2,901.4	\$3,146.1	\$3,407.7	\$3,676.2	\$3,966.5	\$4,307.4	\$4,639.0	\$4,168.6
CLOSING CASH BALANCE	\$6,933.4	\$5,024.5	\$718.8	(\$952.4)	(\$2,458.4)	(\$3,794.1)	(\$4,939.9)	(\$4,678.0)	(\$7,033.0)	(\$6,489.4)

WASTEWATER SERVICES - FACILITIES	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$5,739.0)	(\$5,591.9)	(\$5,298.6)	(\$5,000.0)	(\$4,316.8)	(\$3,502.0)	(\$2,504.8)	(\$1,337.9)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7,628.4
- Wastewater Services - Facilities : Non Inflated	\$3,535.7	\$3,535.7	\$3,535.7	\$3,535.7	\$3,535.7	\$3,535.7	\$3,535.7	\$3,535.7	\$69,013.8
- Wastewater Services - Facilities : Inflated	\$4,396.2	\$4,484.1	\$4,573.8	\$4,665.3	\$4,758.6	\$4,853.8	\$4,950.9	\$5,049.9	\$90,961.3
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	119,200	122,250	121,720	129,830	131,500	134,050	136,000	137,700	2,157,070
REVENUE									
- DC Receipts: Inflated	\$4,851.0	\$5,074.7	\$5,153.7	\$5,607.0	\$5,792.7	\$6,023.2	\$6,233.0	\$6,437.1	\$61,862.7
INTEREST									
- Interest on Opening Balance	(\$315.6)	(\$307.6)	(\$291.4)	(\$275.0)	(\$237.4)	(\$192.6)	(\$137.8)	(\$73.6)	(\$2,147.9)
- Interest on In-year Transactions	\$8.0	\$10.3	\$10.1	\$16.5	\$18.1	\$20.5	\$22.4	\$24.3	(\$311.8)
TOTAL REVENUE	\$4,543.3	\$4,777.4	\$4,872.4	\$5,348.5	\$5,573.4	\$5,851.0	\$6,117.7	\$6,387.8	\$59,403.0
CLOSING CASH BALANCE	(\$5,591.9)	(\$5,298.6)	(\$5,000.0)	(\$4,316.8)	(\$3,502.0)	(\$2,504.8)	(\$1,337.9)	\$0.0	

2023 Adjusted Charge Per Square Metre	\$32.73
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Allocation of Capital Program	
Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix D.5

Wastewater Services: Facilities Related Debt

Wastewater Services: Facilities Related Debt

This appendix provides a brief outline of the infrastructure included in the Wastewater Services: Facilities Related Debt development charge. The development-related projects outlined in this appendix are required to service the demands of new development to 2041. The benefits of the services are considered to be Citywide for the purposes of calculating the development charge.

The following discusses the individual components included in the Wastewater Facilities Related Debt service category. The analysis is set out in the tables which follow. The tables include:

Table D.5-1	2023-2041 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs
Table D.5-2	Cash Flow Analysis

E. Development-Related Capital Program

i. Gross Capital Program Costs

The capital program for Wastewater Facilities Related Debt includes the recovery of a negative reserve fund balance of \$47.69 million as well as principal payments associated with five debentures associated with the Wastewater Treatment Facility. These debentures include:

- WPCC 2010-071 = \$36.85 million (principal)
- Oro Biosolids 2013-009 = \$13.70 million (principal)
- WPCC - Green Municipal Fund 2013-177 = \$1.20 million (principal)
- WPCC Expansion 2015 - 2016-010 = \$7.42 million (principal)
- WPCC 2017-131 = \$1.68 million (principal)

The associated interest costs related to the debentures amounts to \$12.65 million and have been included in cash flow analysis.

The total gross cost of the capital program amounts to \$108.53 million.

ii. Grants, Subsidies and Other Recoveries

There is no anticipated grants, subsidies or other recoveries for this services. As such, no deduction is made.

iii. Replacement and Benefit to Existing Shares

Only the growth-related shares of the Wastewater Treatment Plant have been included in the capital program, therefore no benefit to existing shares have been identified.

iv. Available DC Reserve Funds

The City has constructed works in advance of growth occurring, therefore the DC reserve is in a deficit position.

v. Other Development-Related / Post-Period Benefit Shares

No post-period benefit allocations have been identified for this service as the infrastructure is required to service development over the planning period.

vi. 2023-2041 DC Eligible Development Related Costs

The total in-period DC eligible costs included in the DC rate calculation is \$108.53 million.

F. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections as well as the interest payments associated

with Wastewater Treatment Plant debentures. As noted on Table 2, the DC eligible costs are not inflated as the entirety of the capital program relates to debentures.

The effect of the analysis is an increase in the residential development charge rates to \$1,468.72 per capita. The adjusted retail cash-flow amounts to \$32.43 per square metre of gross floor area and non-retail amounts to \$18.75 per square metre.

The following table summarizes the calculation of the Wastewater Facilities Related Debt development charge:

WASTEWATER SERVICES - FACILITIES RELATED DEBT SUMMARY								
2023 - 2032		Unadjusted			Adjusted			
Development-Related Capital Program		Development Charge			Development Charge			
Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non-Retail \$/sq.m	
\$108,531,328	\$108,531,328	\$807.15	\$16.14	\$9.43	\$1,468.72	\$32.43	\$18.75	

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TABLE 1

CITY OF BARRIE
WASTEWATER SERVICES - FACILITIES RELATED DEBT
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*
WASTEWATER SERVICES - FACILITIES RELATED DEBT										
1.1 Recovery of Negative Reserve Fund Balance										
1.1.1 Balance as at December 31, 2022	2023 - 2023	\$ 47,692,059	\$ -	\$ 47,692,059	0%	\$ -	\$ 47,692,059	\$ -	\$ 47,692,059	\$ -
Subtotal Recovery of Negative Reserve Fund Balance		\$ 47,692,059	\$ -	\$ 47,692,059		\$ -	\$ 47,692,059	\$ -	\$ 47,692,059	\$ -
1.2 Debentures - WPCC 2010-071 ¹										
1.2.1 Principal Payment	2023 - 2023	\$ 4,172,853	\$ -	\$ 4,172,853	0%	\$ -	\$ 4,172,853	\$ -	\$ 4,172,853	\$ -
1.2.2 Principal Payment	2024 - 2024	\$ 4,380,683	\$ -	\$ 4,380,683	0%	\$ -	\$ 4,380,683	\$ -	\$ 4,380,683	\$ -
1.2.3 Principal Payment	2025 - 2025	\$ 4,598,864	\$ -	\$ 4,598,864	0%	\$ -	\$ 4,598,864	\$ -	\$ 4,598,864	\$ -
1.2.4 Principal Payment	2026 - 2026	\$ 4,827,911	\$ -	\$ 4,827,911	0%	\$ -	\$ 4,827,911	\$ -	\$ 4,827,911	\$ -
1.2.5 Principal Payment	2027 - 2027	\$ 5,068,366	\$ -	\$ 5,068,366	0%	\$ -	\$ 5,068,366	\$ -	\$ 5,068,366	\$ -
1.2.6 Principal Payment	2028 - 2028	\$ 5,320,796	\$ -	\$ 5,320,796	0%	\$ -	\$ 5,320,796	\$ -	\$ 5,320,796	\$ -
1.2.7 Principal Payment	2029 - 2029	\$ 5,585,800	\$ -	\$ 5,585,800	0%	\$ -	\$ 5,585,800	\$ -	\$ 5,585,800	\$ -
1.2.8 Principal Payment	2030 - 2030	\$ 2,896,375	\$ -	\$ 2,896,375	0%	\$ -	\$ 2,896,375	\$ -	\$ 2,896,375	\$ -
Subtotal Debentures - WPCC 2010-071 1		\$ 36,851,648	\$ -	\$ 36,851,648		\$ -	\$ 36,851,648	\$ -	\$ 36,851,648	\$ -

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TABLE 1

CITY OF BARRIE
WASTEWATER SERVICES - FACILITIES RELATED DEBT
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*
1.3 Debentures - Oro Biosolids 2013-009¹										
1.3.1 Principal Payment	2023 - 2023	\$ 1,033,059	\$ -	\$ 1,033,059	0%	\$ -	\$ 1,033,059	\$ -	\$ 1,033,059	\$ -
1.3.2 Principal Payment	2024 - 2024	\$ 1,070,058	\$ -	\$ 1,070,058	0%	\$ -	\$ 1,070,058	\$ -	\$ 1,070,058	\$ -
1.3.3 Principal Payment	2025 - 2025	\$ 1,108,382	\$ -	\$ 1,108,382	0%	\$ -	\$ 1,108,382	\$ -	\$ 1,108,382	\$ -
1.3.4 Principal Payment	2026 - 2026	\$ 1,148,079	\$ -	\$ 1,148,079	0%	\$ -	\$ 1,148,079	\$ -	\$ 1,148,079	\$ -
1.3.5 Principal Payment	2027 - 2027	\$ 1,189,198	\$ -	\$ 1,189,198	0%	\$ -	\$ 1,189,198	\$ -	\$ 1,189,198	\$ -
1.3.6 Principal Payment	2028 - 2028	\$ 1,231,789	\$ -	\$ 1,231,789	0%	\$ -	\$ 1,231,789	\$ -	\$ 1,231,789	\$ -
1.3.7 Principal Payment	2029 - 2029	\$ 1,275,906	\$ -	\$ 1,275,906	0%	\$ -	\$ 1,275,906	\$ -	\$ 1,275,906	\$ -
1.3.8 Principal Payment	2030 - 2030	\$ 1,321,602	\$ -	\$ 1,321,602	0%	\$ -	\$ 1,321,602	\$ -	\$ 1,321,602	\$ -
1.3.9 Principal Payment	2031 - 2031	\$ 2,172,158	\$ -	\$ 2,172,158	0%	\$ -	\$ 2,172,158	\$ -	\$ 2,172,158	\$ -
1.3.10 Principal Payment	2032 - 2032	\$ 1,417,964	\$ -	\$ 1,417,964	0%	\$ -	\$ 1,417,964	\$ -	\$ 1,417,964	\$ -
1.3.11 Principal Payment	2033 - 2033	\$ 727,914	\$ -	\$ 727,914	0%	\$ -	\$ 727,914	\$ -	\$ 727,914	\$ -
Subtotal Debentures - Oro Biosolids 2013-0091		\$ 13,696,110	\$ -	\$ 13,696,110		\$ -	\$ 13,696,110	\$ -	\$ 13,696,110	\$ -
1.4 Debentures - WPCC - Green Municipal Fund 2013-177 ¹										
1.4.1 Principal Payment	2023 - 2023	\$ 98,362	\$ -	\$ 98,362	0%	\$ -	\$ 98,362	\$ -	\$ 98,362	\$ -
1.4.2 Principal Payment	2024 - 2024	\$ 100,334	\$ -	\$ 100,334	0%	\$ -	\$ 100,334	\$ -	\$ 100,334	\$ -
1.4.3 Principal Payment	2025 - 2025	\$ 102,358	\$ -	\$ 102,358	0%	\$ -	\$ 102,358	\$ -	\$ 102,358	\$ -
1.4.4 Principal Payment	2026 - 2026	\$ 104,413	\$ -	\$ 104,413	0%	\$ -	\$ 104,413	\$ -	\$ 104,413	\$ -
1.4.5 Principal Payment	2027 - 2027	\$ 106,511	\$ -	\$ 106,511	0%	\$ -	\$ 106,511	\$ -	\$ 106,511	\$ -
1.4.6 Principal Payment	2028 - 2028	\$ 108,649	\$ -	\$ 108,649	0%	\$ -	\$ 108,649	\$ -	\$ 108,649	\$ -
1.4.7 Principal Payment	2029 - 2029	\$ 110,838	\$ -	\$ 110,838	0%	\$ -	\$ 110,838	\$ -	\$ 110,838	\$ -
1.4.8 Principal Payment	2030 - 2030	\$ 113,064	\$ -	\$ 113,064	0%	\$ -	\$ 113,064	\$ -	\$ 113,064	\$ -
1.4.9 Principal Payment	2031 - 2031	\$ 115,337	\$ -	\$ 115,337	0%	\$ -	\$ 115,337	\$ -	\$ 115,337	\$ -
1.4.10 Principal Payment	2032 - 2032	\$ 117,652	\$ -	\$ 117,652	0%	\$ -	\$ 117,652	\$ -	\$ 117,652	\$ -
1.4.11 Principal Payment	2033 - 2033	\$ 120,020	\$ -	\$ 120,020	0%	\$ -	\$ 120,020	\$ -	\$ 120,020	\$ -
Subtotal Debentures - WPCC - Green Municipal Fund 2013-177 1		\$ 1,197,537	\$ -	\$ 1,197,537		\$ -	\$ 1,197,537	\$ -	\$ 1,197,537	\$ -

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TABLE 1

CITY OF BARRIE
WASTEWATER SERVICES - FACILITIES RELATED DEBT
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*
1.5 Debentures - WPCC Expansion 2015 - 2016-010¹										
1.5.1 Principal Payment	2023 - 2023	\$ 447,049	\$ -	\$ 447,049	0%	\$ -	\$ 447,049	\$ -	\$ 447,049	\$ -
1.5.2 Principal Payment	2024 - 2024	\$ 461,469	\$ -	\$ 461,469	0%	\$ -	\$ 461,469	\$ -	\$ 461,469	\$ -
1.5.3 Principal Payment	2025 - 2025	\$ 476,354	\$ -	\$ 476,354	0%	\$ -	\$ 476,354	\$ -	\$ 476,354	\$ -
1.5.4 Principal Payment	2026 - 2026	\$ 491,720	\$ -	\$ 491,720	0%	\$ -	\$ 491,720	\$ -	\$ 491,720	\$ -
1.5.5 Principal Payment	2027 - 2027	\$ 507,581	\$ -	\$ 507,581	0%	\$ -	\$ 507,581	\$ -	\$ 507,581	\$ -
1.5.6 Principal Payment	2028 - 2028	\$ 523,953	\$ -	\$ 523,953	0%	\$ -	\$ 523,953	\$ -	\$ 523,953	\$ -
1.5.7 Principal Payment	2029 - 2029	\$ 540,854	\$ -	\$ 540,854	0%	\$ -	\$ 540,854	\$ -	\$ 540,854	\$ -
1.5.8 Principal Payment	2030 - 2030	\$ 558,299	\$ -	\$ 558,299	0%	\$ -	\$ 558,299	\$ -	\$ 558,299	\$ -
1.5.9 Principal Payment	2031 - 2031	\$ 576,308	\$ -	\$ 576,308	0%	\$ -	\$ 576,308	\$ -	\$ 576,308	\$ -
1.5.10 Principal Payment	2032 - 2032	\$ 594,897	\$ -	\$ 594,897	0%	\$ -	\$ 594,897	\$ -	\$ 594,897	\$ -
1.5.11 Principal Payment	2033 - 2033	\$ 614,086	\$ -	\$ 614,086	0%	\$ -	\$ 614,086	\$ -	\$ 614,086	\$ -
1.5.12 Principal Payment	2034 - 2034	\$ 633,894	\$ -	\$ 633,894	0%	\$ -	\$ 633,894	\$ -	\$ 633,894	\$ -
1.5.13 Principal Payment	2035 - 2035	\$ 654,341	\$ -	\$ 654,341	0%	\$ -	\$ 654,341	\$ -	\$ 654,341	\$ -
1.5.14 Principal Payment	2036 - 2036	\$ 335,043	\$ -	\$ 335,043	0%	\$ -	\$ 335,043	\$ -	\$ 335,043	\$ -
Subtotal Debentures - WPCC Expansion 2015 - 2016-010 1		\$ 7,415,849	\$ -	\$ 7,415,849		\$ -	\$ 7,415,849	\$ -	\$ 7,415,849	\$ -
1.6 Debentures - WPCC 2017-131¹										
1.6.1 Principal Payment	2023 - 2023	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.2 Principal Payment	2024 - 2024	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.3 Principal Payment	2025 - 2025	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.4 Principal Payment	2026 - 2026	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.5 Principal Payment	2027 - 2027	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.6 Principal Payment	2028 - 2028	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.7 Principal Payment	2029 - 2029	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.8 Principal Payment	2030 - 2030	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -

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TABLE 1

CITY OF BARRIE
WASTEWATER SERVICES - FACILITIES RELATED DEBT
DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
1.6.9 Principal Payment	2031 - 2031	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.10 Principal Payment	2032 - 2032	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.11 Principal Payment	2033 - 2033	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.12 Principal Payment	2034 - 2034	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.13 Principal Payment	2035 - 2035	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.14 Principal Payment	2036 - 2036	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -
1.6.15 Principal Payment	2037 - 2037	\$ 103,125	\$ -	\$ 103,125	0%	\$ -	\$ 103,125	\$ -	\$ 103,125	\$ -
Subtotal Debentures - WPCC 2017-131 1		\$ 1,678,125	\$ -	\$ 1,678,125		\$ -	\$ 1,678,125	\$ -	\$ 1,678,125	\$ -
TOTAL WASTEWATER SERVICES - FACILITIES RELATED DEBT		\$ 108,531,328	\$ -	\$ 108,531,328		\$ -	\$ 108,531,328	\$ -	\$ 108,531,328	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

(1)Includes principal payments only, interest payments included in cash flow analysis

WPCC 2010-071 total interest payments = \$7.66M

Oro Biosolids 2013-0091 total interest payments = \$2.66M

WPCC - Green Municipal Fund 2013-177 total interest payments = \$142,000

WPCC Expansion 2015 - 2016-010 total interest payments = \$1.77M

WPCC 2017-131 total interest payments = \$400,500

Residential Development Charge Calculation		
Residential Share of 2023 - 2041 DC Eligible Costs	69.1%	\$75,003,273
Long-Term Growth in Population in New Units		92,924
Unadjusted Development Charge Per Capita		\$807.15
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	12.2%	\$13,187,965
Long-Term Growth in Square Metres		816,960
Unadjusted Development Charge Per Square Metre		\$16.14
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	18.7%	\$20,340,090
Long-Term Growth in Square Metres		2,157,070
Unadjusted Development Charge Per Square Metre		\$9.43

Current Reserve Fund Balance	(\$47,692,059)
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APPENDIX D.5

TABLE 2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - FACILITIES RELATED DEBT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WASTEWATER SERVICES - FACILITIES RELATED DEBT	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$32,958.8)	(\$66,486.3)	(\$67,650.7)	(\$64,765.0)	(\$65,031.0)	(\$64,888.5)	(\$64,303.6)	(\$63,238.4)	(\$59,572.9)	(\$53,715.8)
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Facilities Related Debt: Non Inflated	\$37,011.1	\$4,232.9	\$4,421.8	\$4,619.6	\$4,826.6	\$5,043.2	\$5,270.1	\$3,456.6	\$2,056.8	\$1,550.1
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	5,338	5,483	5,629	5,778	5,927	6,075	6,223	6,367	6,509	3,722
REVENUE										
- DC Receipts: Inflated	\$7,840.0	\$8,214.1	\$8,601.45	\$9,005.7	\$9,422.7	\$9,851.2	\$10,293.0	\$10,741.8	\$11,201.0	\$6,533.1
INTEREST										
- Interest on Opening Balance	(\$1,812.7)	(\$3,656.7)	\$0.0	(\$3,562.1)	(\$3,576.7)	(\$3,568.9)	(\$3,536.7)	(\$3,478.1)	(\$3,276.5)	(\$2,954.4)
- Interest on In-year Transactions	(\$802.2)	\$69.7	\$73.1	\$76.8	\$80.4	\$84.1	\$87.9	\$127.5	\$160.0	\$87.2
- Interest on Debenture Payments	(\$1,741.47)	(\$1,558.6)	(\$1,367.1)	(\$1,166.8)	(\$957.4)	(\$738.3)	(\$508.9)	(\$269.0)	(\$170.6)	(\$119.8)
TOTAL REVENUE	\$3,483.6	\$3,068.4	\$7,307.5	\$4,353.6	\$4,969.1	\$5,628.2	\$6,335.3	\$7,122.1	\$7,913.9	\$3,546.1
CLOSING CASH BALANCE	(\$66,486.3)	(\$67,650.7)	(\$64,765.0)	(\$65,031.0)	(\$64,888.5)	(\$64,303.6)	(\$63,238.4)	(\$59,572.9)	(\$53,715.8)	(\$51,719.8)

WASTEWATER SERVICES - FACILITIES RELATED DEBT	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$48,889.3)	(\$45,092.4)	(\$40,879.0)	(\$35,987.2)	(\$30,073.8)	(\$23,515.7)	(\$16,342.4)	(\$8,517.4)	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Wastewater Services - Facilities Related Debt: Non Inflated	\$515.8	\$529.9	\$309.3	\$71.3	\$0.0	\$0.0	\$0.0	\$0.0	\$75,003.3
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	3,795	3,829	3,860	4,040	4,083	4,127	4,169	4,210	92,924
REVENUE									
- DC Receipts: Inflated	\$6,930.3	\$7,132.3	\$7,333.8	\$7,829.3	\$8,070.9	\$8,321.0	\$8,573.8	\$8,831.3	\$161,458.5
INTEREST									
- Interest on Opening Balance	(\$2,688.9)	(\$2,480.1)	(\$2,248.3)	(\$1,979.3)	(\$1,654.1)	(\$1,293.4)	(\$898.8)	(\$468.5)	(\$45,978.7)
- Interest on In-year Transactions	\$112.3	\$115.5	\$122.9	\$135.8	\$141.2	\$145.6	\$150.0	\$154.5	\$1,221.3
- Interest on Debenture Payments	(\$41.0)	(\$24.4)	(\$7.3)	(\$1.1)	\$0.0	\$0.0	\$0.0	\$0.0	(\$8,738.9)
TOTAL REVENUE	\$4,312.7	\$4,743.4	\$5,201.1	\$5,984.7	\$6,558.1	\$7,173.3	\$7,825.0	\$8,517.4	\$107,962.1
CLOSING CASH BALANCE	(\$45,092.4)	(\$40,879.0)	(\$35,987.2)	(\$30,073.8)	(\$23,515.7)	(\$16,342.4)	(\$8,517.4)	\$0.0	

(1) DC eligible costs are not inflated as entire capital program relates to debt payments

2023 Adjusted Charge Per Capita	\$1,468.72
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Allocation of Capital Program	
Residential Sector	69.1%
Non-Residential Sector	30.9%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX D.5
TABLE 2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - FACILITIES RELATED DEBT
RETAIL DEVELOPMENT CHARGE
(in \$000)

WASTEWATER SERVICES - FACILITIES RELATED DEBT	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$5,795.2)	(\$12,299.4)	(\$13,101.1)	(\$13,836.5)	(\$14,498.1)	(\$15,077.1)	(\$15,565.2)	(\$15,953.0)	(\$15,863.5)	(\$15,364.7)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Facilities Related Debt:Non-Inflate	\$6,507.7	\$744.3	\$777.5	\$812.3	\$848.7	\$886.8	\$926.6	\$607.8	\$361.7	\$272.6
NON-RESIDENTIAL SPACE GROWTH										
- Retail Growth in Square Metres	24,230	26,920	29,610	32,300	35,000	37,690	40,380	43,070	45,760	43,000
REVENUE										
- DC Receipts: Inflated	\$785.8	\$890.5	\$999.1	\$1,111.7	\$1,228.7	\$1,349.6	\$1,474.8	\$1,604.5	\$1,738.9	\$1,666.7
INTEREST										
- Interest on Opening Balance	(\$318.7)	(\$676.5)	(\$720.6)	(\$761.0)	(\$797.4)	(\$829.2)	(\$856.1)	(\$877.4)	(\$872.5)	(\$845.1)
- Interest on In-year Transactions	(\$157.4)	\$2.6	\$3.9	\$5.2	\$6.7	\$8.1	\$9.6	\$17.4	\$24.1	\$24.4
- Interest on Debenture Payments	(\$306.2)	(\$274.0)	(\$240.4)	(\$205.2)	(\$168.3)	(\$129.8)	(\$89.5)	(\$47.3)	(\$30.0)	(\$21.1)
TOTAL REVENUE	\$3.5	(\$57.4)	\$42.1	\$150.7	\$269.6	\$398.6	\$538.9	\$697.3	\$860.5	\$824.9
CLOSING CASH BALANCE	(\$12,299.4)	(\$13,101.1)	(\$13,836.5)	(\$14,498.1)	(\$15,077.1)	(\$15,565.2)	(\$15,953.0)	(\$15,863.5)	(\$15,364.7)	(\$14,812.4)

WASTEWATER SERVICES - FACILITIES RELATED DEBT	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$14,043.5)	(\$13,027.9)	(\$11,855.6)	(\$10,451.2)	(\$8,818.3)	(\$6,971.6)	(\$4,908.8)	(\$2,591.1)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Facilities Related Debt:Non-Inflate	\$90.7	\$93.2	\$54.4	\$12.5	\$0.0	\$0.0	\$0.0	\$0.0	\$13,188.0
NON-RESIDENTIAL SPACE GROWTH									
- Retail Growth in Square Metres	46,000	47,500	49,500	51,000	52,500	54,000	56,000	58,000	816,960
REVENUE									
- DC Receipts: Inflated	\$1,855.0	\$1,953.8	\$2,076.7	\$2,182.5	\$2,291.6	\$2,404.2	\$2,543.1	\$2,686.6	\$22,677.6
INTEREST									
- Interest on Opening Balance	(\$772.4)	(\$716.5)	(\$652.1)	(\$574.8)	(\$485.0)	(\$383.4)	(\$270.0)	(\$142.5)	(\$11,084.9)
- Interest on In-year Transactions	\$30.9	\$32.6	\$35.4	\$38.0	\$40.1	\$42.1	\$44.5	\$47.0	\$108.8
- Interest on Debenture Payments	(\$7.2)	(\$4.3)	(\$1.3)	(\$0.2)	\$0.0	\$0.0	\$0.0	\$0.0	(\$1,536.6)
TOTAL REVENUE	\$1,106.2	\$1,265.5	\$1,458.8	\$1,645.4	\$1,846.7	\$2,062.8	\$2,317.6	\$2,591.1	\$10,164.9
CLOSING CASH BALANCE	(\$13,027.9)	(\$11,855.6)	(\$10,451.2)	(\$8,818.3)	(\$6,971.6)	(\$4,908.8)	(\$2,591.1)	\$0.0	

(1) DC eligible costs are not inflated as entire capital program relates to debt payments

2023 Adjusted Charge Per Square Metre	\$32.43
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Allocation of Capital Program	
Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**APPENDIX D.5
TABLE 2**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - FACILITIES RELATED DEBT
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)**

WASTEWATER SERVICES - FACILITIES RELATED DEBT	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$8,938.1)	(\$18,897.8)	(\$20,049.5)	(\$21,084.5)	(\$21,989.6)	(\$22,751.0)	(\$23,353.8)	(\$23,782.2)	(\$23,453.3)	(\$22,470.3)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Facilities Related Debt:Non-Inflated	\$10,037.0	\$1,147.9	\$1,199.1	\$1,252.8	\$1,308.9	\$1,367.7	\$1,429.2	\$937.4	\$557.8	\$420.4
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	68,370	75,970	83,560	91,160	98,760	106,360	113,950	121,550	129,140	116,050
REVENUE										
- DC Receipts: Inflated	\$1,281.9	\$1,452.9	\$1,630.1	\$1,813.9	\$2,004.4	\$2,201.8	\$2,406.1	\$2,617.9	\$2,837.0	\$2,600.5
INTEREST										
- Interest on Opening Balance	(\$491.6)	(\$1,039.4)	(\$1,102.7)	(\$1,159.6)	(\$1,209.4)	(\$1,251.3)	(\$1,284.5)	(\$1,308.0)	(\$1,289.9)	(\$1,235.9)
- Interest on In-year Transactions	(\$240.8)	\$5.3	\$7.5	\$9.8	\$12.2	\$14.6	\$17.1	\$29.4	\$39.9	\$38.2
- Interest on Debenture Payments	(\$472.3)	(\$422.7)	(\$370.7)	(\$316.4)	(\$259.6)	(\$200.2)	(\$138.0)	(\$73.0)	(\$46.3)	(\$32.5)
TOTAL REVENUE	\$77.3	(\$3.8)	\$164.1	\$347.6	\$547.5	\$764.9	\$1,000.8	\$1,266.4	\$1,540.7	\$1,370.2
CLOSING CASH BALANCE	(\$18,897.8)	(\$20,049.5)	(\$21,084.5)	(\$21,989.6)	(\$22,751.0)	(\$23,353.8)	(\$23,782.2)	(\$23,453.3)	(\$22,470.3)	(\$21,520.4)

WASTEWATER SERVICES - FACILITIES RELATED DEBT	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$20,233.0)	(\$18,671.7)	(\$16,893.5)	(\$14,906.0)	(\$12,477.5)	(\$9,787.3)	(\$6,814.8)	(\$3,556.5)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Facilities Related Debt:Non-Inflated	\$139.9	\$143.7	\$83.9	\$19.3	\$0.0	\$0.0	\$0.0	\$0.0	\$20,340.1
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	119,200	122,250	121,720	129,830	131,500	134,050	136,000	137,700	2,157,070
REVENUE									
- DC Receipts: Inflated	\$2,779.0	\$2,907.1	\$2,952.3	\$3,212.0	\$3,318.4	\$3,450.4	\$3,570.6	\$3,687.6	\$35,438.6
INTEREST									
- Interest on Opening Balance	(\$1,112.8)	(\$1,026.9)	(\$929.1)	(\$819.8)	(\$686.3)	(\$538.3)	(\$374.8)	(\$195.6)	(\$16,444.7)
- Interest on In-year Transactions	\$46.2	\$48.4	\$50.2	\$55.9	\$58.1	\$60.4	\$62.5	\$64.5	\$176.7
- Interest on Debenture Payments	(\$11.1)	(\$6.6)	(\$2.0)	(\$0.3)	\$0.0	\$0.0	\$0.0	\$0.0	(\$2,369.9)
TOTAL REVENUE	\$1,701.2	\$1,921.9	\$2,071.4	\$2,447.8	\$2,690.2	\$2,972.5	\$3,258.3	\$3,556.5	\$16,800.6
CLOSING CASH BALANCE	(\$18,671.7)	(\$16,893.5)	(\$14,906.0)	(\$12,477.5)	(\$9,787.3)	(\$6,814.8)	(\$3,556.5)	\$0.0	

(1) DC eligible costs are not inflated as entire capital program relates to debt payments

2023 Adjusted Charge Per Square Metre	\$18.75
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Allocation of Capital Program	
Residential Sector	69.1%
Retail Sector	12.2%
Non-Retail Sector	18.7%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix E

Area Specific Development Charge Services

Area Specific Development Charge

Services Technical Appendix

This appendix provides an overview of the area-specific development-related capital forecast and development charges calculation. The area-specific charges relate to services provided within the City's Former Municipal Boundary and the Secondary Plan Areas of Salem and Hewitt's (see Map 1).

These areas represent a reasonable basis on which to calculate the area-specific development charges so that the costs are fairly attributed to the areas that will benefit from them. The following services are charged on an area-specific basis in the two benefitting areas in the City of Barrie and are discussed in this appendix:

Former Municipal Boundary

- E.1 Stormwater Drainage and Control Services
- E.2 Water Services – Distribution Systems
- E.3 Wastewater Services – Collection Systems

Secondary Plan Area: Salem & Hewitt's

- E.4 Water Services – Distribution Systems
- E.5 Wastewater Services – Collection Systems



Appendix E.1

Former Municipal Boundary: Stormwater Drainage and Control Services

Stormwater Drainage and Control Services

This appendix provides a brief outline of the infrastructure included in the Stormwater Drainage and Control Services development charge for the Former Municipal Boundary in the City of Barrie. The City has a responsibility to mitigate flooding and protect bodies of water from any harmful stormwater runoff.

The development-related projects outlined in this appendix are required to service the demands of new development to 2041. The benefits of the services are considered to be specific to development occurring within the Former Municipal Boundary for the purposes of calculating the development charge.

The following sections describe the individual components included in the Stormwater Drainage and Control Services category. The analysis is set out in the tables which follow. The tables include:

Table E.1-1 2023-2041 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs

Table E.1-2 Cash Flow Analysis

A. Development-Related Capital Program

i. Gross Capital Program Costs

The total gross cost of the Stormwater Drainage capital program is \$455.30 million and provides for the undertaking of various pond retrofits, culverts, watercourse improvements and other infrastructure located across the Former Municipal Boundary.

The capital program also makes an adjustment for shares of projects which have previously been funded from development charges. In total, approximately \$6.93 million is reduced from the total gross capital costs.

ii. Grants, Subsidies and Other Recoveries

No grants, subsidies or other recoveries are identified for Roads infrastructure.

iii. Replacement and Benefit to Existing Shares

The capital program includes a portion that is considered to benefit the existing community. In totality, the benefit to existing share amounts to \$340.47 million and is netted off of the DC eligible costs and have been calculated based on shares of population and employment growth in the Former Municipal Boundary over the planning period to 2041.

iv. Available DC Reserve Funds

In total, \$4.84 million is available in the Stormwater Drainage DC reserve. The reserve fund balance associated with the Whiskey Creek Stormwater Ponds and Downstream Conveyance Works has been combined with Former Boundary - Stormwater Drainage and Control Services reserve fund for the purposes of the development charge rate calculation as the Whiskey Creek area-specific charge as been removed as part of this study

The available reserve fund balance is applied to projects occurring in the initial years of the planning period and is reduced from the in-period DC recoverable share.

v. Other Development-Related / Post-Period Benefit Shares

The projects included in the capital program are required to service growth over the planning horizon. Therefore, no post-period shares of projects have been identified.

vi. 2023-2041 DC Eligible Development Related Costs

After making adjustments for available DC reserve balance and the development charge recoverable share of the capital program is \$109.99 million.

The development-related cost has been allocated 80.9% (\$89.04 million) to new residential development, 7.9% (\$8.74 million) to new retail development and 11.1% (\$12.22 million) to new non-retail development. The allocation of costs is based on shares of population and employment growth over the planning period. This yields an unadjusted development charge of \$1,838.22 per capita, \$14.27 per square metre of retail gross floor area and \$9.91 of non-retail gross floor area.

B. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The effect of the analysis is a decrease in the residential development charge rates to \$1,832.10 per capita. The adjusted retail cash-flow amounts to \$14.69 per square metre of gross floor area and non-retail amounts to \$10.04 per square metre.

The following table summarizes the calculation of the Stormwater Drainage and Control development charge:

STORMWATER DRAINAGE AND CONTROL SERVICES SUMMARY							
2023 - 2041		Unadjusted				Adjusted	
Development-Related Capital Program		Development Charge				Development Charge	
Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non- Retail \$/sq.m
\$455,298,705	\$109,992,704	\$1,838.22	\$14.27	\$9.91	\$1,832.10	\$14.69	\$10.04

APPENDIX E.1

TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
FORMER CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
STORMWATER DRAINAGE AND CONTROL SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*
STORMWATER DRAINAGE AND CONTROL SERVICES										
1.0 Stormwater Drainage and Ponds										
1.1.1 Kidds Creek Pond Retrofit (KD06)	2023 - 2023	\$ 6,924,877	\$ -	\$ 6,924,877	74%	\$ 5,100,698	\$ 1,824,179	\$ 1,824,179	\$ -	\$ -
1.1.2 Kidds Creek Pond Retrofit (KD05)	2023 - 2041	\$ 2,384,994	\$ -	\$ 2,384,994	74%	\$ 1,756,729	\$ 628,265	\$ 628,265	\$ -	\$ -
1.1.3 Kidds Creek Pond Retrofit (KD03)	2023 - 2023	\$ 2,814,506	\$ -	\$ 2,814,506	74%	\$ 2,073,097	\$ 741,409	\$ 741,409	\$ -	\$ -
1.1.4 Kidds Creek Watercourse Improvements - Lillian Outfall to Cundles	2023 - 2023	\$ 2,486,122	\$ -	\$ 2,486,122	74%	\$ 1,831,218	\$ 654,904	\$ 654,904	\$ -	\$ -
1.1.5 Kidds Creek Culvert Replacement - Cundles Road, 400 m west of Coulter	2031 - 2041	\$ 3,199,727	\$ -	\$ 3,199,727	74%	\$ 2,356,842	\$ 842,885	\$ -	\$ 842,885	\$ -
1.1.6 Kidds Creek Watercourse Improvements - Cundles to Hwy 400	2031 - 2041	\$ 2,790,924	\$ -	\$ 2,790,924	74%	\$ 2,055,727	\$ 735,197	\$ -	\$ 735,197	\$ -
1.1.7 Kidds Creek Culvert Replacement - Thomson Street, 75 m south of Wellington	2023 - 2025	\$ 2,307,325	\$ -	\$ 2,307,325	74%	\$ 1,699,520	\$ 607,805	\$ -	\$ 607,805	\$ -
1.1.8 Kidds Creek Trunk Sewer - High Flow Diversion, Thomson St, Florence St, Park St, Eccles	2023 - 2025	\$ 3,072,399	\$ -	\$ 3,072,399	74%	\$ 2,263,055	\$ 809,344	\$ -	\$ 809,344	\$ -
1.1.9 Kidds Creek Watercourse Improvements - Thomas St to Eccles St.	2031 - 2041	\$ 2,349,824	\$ -	\$ 2,349,824	74%	\$ 1,730,824	\$ 619,000	\$ -	\$ 619,000	\$ -
1.1.10 Kidds Creek Culvert Replacement - Wellington St, 100 m West of Eccles	2031 - 2041	\$ 288,211	\$ -	\$ 288,211	74%	\$ 212,289	\$ 75,922	\$ -	\$ 75,922	\$ -
1.1.11 Kidds Creek Watercourse Improvements - Eccles St. to Donald Street to Eccles Street	2031 - 2041	\$ 2,577,915	\$ -	\$ 2,577,915	74%	\$ 1,898,830	\$ 679,085	\$ -	\$ 679,085	\$ -
1.1.12 Kidds Creek Watercourse Improvements - Eccles St. to Dunlop Street	2031 - 2041	\$ 3,891,006	\$ -	\$ 3,891,006	74%	\$ 2,866,021	\$ 1,024,985	\$ -	\$ 1,024,985	\$ -
1.1.13 Kidds Creek Culvert Replacement - Dunlop Street, 30 m west of Parkside Dr	2023 - 2024	\$ 6,260,086	\$ -	\$ 6,260,086	74%	\$ 4,611,028	\$ 1,649,058	\$ 988,329	\$ 660,729	\$ -
1.1.14 Kidds Creek Watercourse Improvements - Dunlop St. to Bradford St.	2023 - 2024	\$ 1,395,621	\$ -	\$ 1,395,621	74%	\$ 1,027,981	\$ 367,640	\$ -	\$ 367,640	\$ -
1.1.15 Kidds Creek Trunk Sewer - Extension across Bradford St.	2023 - 2024	\$ 3,840,213	\$ -	\$ 3,840,213	74%	\$ 2,828,609	\$ 1,011,604	\$ -	\$ 1,011,604	\$ -
1.1.16 Bunkers Creek Pond Retrofit (BK03)	2031 - 2041	\$ 4,877,385	\$ -	\$ 4,877,385	74%	\$ 3,592,564	\$ 1,284,821	\$ -	\$ 1,284,821	\$ -
1.1.17 Bunkers Creek Trunk Sewer - High Flow Diversion, Anne Street from BK03 to Edgehill Dr.	2031 - 2041	\$ 9,619,715	\$ -	\$ 9,619,715	74%	\$ 7,085,651	\$ 2,534,064	\$ -	\$ 2,534,064	\$ -
1.1.18 Bunkers Creek Watercourse Improvements - Shirley Ave to Hwy 400	2031 - 2041	\$ 1,596,101	\$ -	\$ 1,596,101	74%	\$ 1,175,650	\$ 420,451	\$ -	\$ 420,451	\$ -
1.1.19 Bunkers Creek Watercourse Improvements - Edgehill outfall to Highway 400	2031 - 2041	\$ 609,869	\$ -	\$ 609,869	74%	\$ 449,214	\$ 160,655	\$ -	\$ 160,655	\$ -
1.1.20 Bunkers Creek Trunk Sewer - Dunlop Street, Anne Street	2031 - 2041	\$ 5,285,371	\$ -	\$ 5,285,371	74%	\$ 3,893,077	\$ 1,392,294	\$ -	\$ 1,392,294	\$ -
1.1.21 Bunkers Creek Watercourse Improvements - Anne St to Innisfil St	2031 - 2041	\$ 1,639,166	\$ -	\$ 1,639,166	74%	\$ 1,207,370	\$ 431,796	\$ -	\$ 431,796	\$ -
1.1.22 Bunkers Creek Habitat Improvement Project - Milligan's Pond	2023 - 2023	\$ 3,488,628	\$ -	\$ 3,488,628	74%	\$ 2,569,640	\$ 918,988	\$ -	\$ 918,988	\$ -
1.1.23 St	2023 - 2023	\$ 2,163,495	\$ -	\$ 2,163,495	74%	\$ 1,593,579	\$ 569,916	\$ -	\$ 569,916	\$ -
1.1.24 Bunkers Creek Watercourse Improvements - Bradford St to Lakeshore Dr.	2031 - 2041	\$ 5,198,095	\$ -	\$ 5,198,095	74%	\$ 3,828,792	\$ 1,369,303	\$ -	\$ 1,369,303	\$ -
1.1.25 Bunkers Creek Watercourse Improvements - Sproul Dr to Industrial Dr	2031 - 2041	\$ 1,312,503	\$ -	\$ 1,312,503	74%	\$ 966,758	\$ 345,745	\$ -	\$ 345,745	\$ -
1.1.26 Dyments Creek Pond Construction - West of Ferndale Industrial Drive	2024 - 2024	\$ 10,720,523	\$ -	\$ 10,720,523	74%	\$ 7,896,479	\$ 2,824,044	\$ -	\$ 2,824,044	\$ -
1.1.27 Dyments Creek Watercourse Improvements - Dunlop St to Ferndale Drive	2031 - 2041	\$ 6,499,125	\$ -	\$ 6,499,125	74%	\$ 4,787,099	\$ 1,712,026	\$ -	\$ 1,712,026	\$ -

APPENDIX E.1

TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
FORMER CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
STORMWATER DRAINAGE AND CONTROL SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*
1.1.28 Dyments Creek Culvert Replacement - Ferndale Dr, 90m south of Dunlop	2031 - 2041	\$ 3,172,700	\$ -	\$ 3,172,700	74%	\$ 2,336,934	\$ 835,766	\$ -	\$ 835,766	\$ -
1.1.29 Dyments Creek Watercourse Improvements - Ferndale Dr to Sergeant Dr	2031 - 2041	\$ 7,071,475	\$ -	\$ 7,071,475	74%	\$ 5,208,678	\$ 1,862,797	\$ -	\$ 1,862,797	\$ -
1.1.30 Dyments Creek Trunk Sewer Improvements - Sarjeant Dr, Dunlop St to outfall	2031 - 2041	\$ 11,112,287	\$ -	\$ 11,112,287	74%	\$ 8,185,043	\$ 2,927,244	\$ -	\$ 2,927,244	\$ -
1.1.31 Dyments Creek Culvert Replacement - Hwy 400 and Hart Dr - Hart Culvert	2027 - 2027	\$ 3,817,658	\$ -	\$ 3,817,658	74%	\$ 2,811,995	\$ 1,005,663	\$ -	\$ 1,005,663	\$ -
1.1.32 Dyments Creek Culvert Replacement - Hwy 400 and Hart Dr - Channel Works	2031 - 2041	\$ 1,374,283	\$ -	\$ 1,374,283	74%	\$ 1,012,264	\$ 362,019	\$ -	\$ 362,019	\$ -
1.1.33 Dyments Creek Culvert Replacement - George St. 375m west of Anne St.	2027 - 2027	\$ 2,282,278	\$ -	\$ 2,282,278	74%	\$ 1,681,071	\$ 601,207	\$ -	\$ 601,207	\$ -
1.1.34 Dyments Creek Watercourse Improvements - George St to Victoria St.	2031 - 2041	\$ 2,090,357	\$ -	\$ 2,090,357	74%	\$ 1,539,707	\$ 550,650	\$ -	\$ 550,650	\$ -
1.1.35 Dyments Creek Pond Retrofits (DY01) - including removing Victoria culvert	2025 - 2025	\$ 8,860,377	\$ -	\$ 8,860,377	74%	\$ 6,526,340	\$ 2,334,037	\$ -	\$ 2,334,037	\$ -
1.1.36 Dyments Creek Culvert Replacement - Anne St to John St to outfall	2026 - 2026	\$ 8,542,507	\$ -	\$ 8,542,507	74%	\$ 6,292,205	\$ 2,250,302	\$ -	\$ 2,250,302	\$ -
1.1.37 Dyments Creek Watercourse Improvements - John St to Innisfil St	2031 - 2041	\$ 212,036	\$ -	\$ 212,036	74%	\$ 156,181	\$ 55,855	\$ -	\$ 55,855	\$ -
1.1.38 Dyments Creek Culvert Replacement - Sanford Street, 175m south of John St	2023 - 2024	\$ 7,666,423	\$ -	\$ 7,666,423	74%	\$ 5,646,903	\$ 2,019,520	\$ -	\$ 2,019,520	\$ -
1.1.39 Dyments Creek Watercourse Improvements - Bradford St to Ellen St	2023 - 2023	\$ 2,171,249	\$ -	\$ 2,171,249	74%	\$ 1,599,289	\$ 571,960	\$ -	\$ 571,960	\$ -
1.1.40 Hotchkiss Creek Culvert Replacement - Mayfair Dr, 180m east of Florence Park Rd	2031 - 2041	\$ 486,208	\$ -	\$ 486,208	74%	\$ 358,129	\$ 128,079	\$ -	\$ 128,079	\$ -
1.1.41 Hotchkiss Creek Stormwater Pond - 85 Morrow Road	2031 - 2041	\$ 11,565,140	\$ -	\$ 11,565,140	74%	\$ 8,518,604	\$ 3,046,536	\$ -	\$ 3,046,536	\$ -
1.1.42 Hotchkiss Creek Stormwater Pond - Hwy 400 to Wood St	2023 - 2024	\$ 19,020,347	\$ -	\$ 19,020,347	74%	\$ 14,009,930	\$ 5,010,417	\$ -	\$ 5,010,417	\$ -
1.1.43 Hotchkiss Creek Stormwater Pond - Wood St to Jacob's Terr.	2023 - 2024	\$ 1,644,683	\$ -	\$ 1,644,683	74%	\$ 1,211,434	\$ 433,249	\$ -	\$ 433,249	\$ -
1.1.44 Hotchkiss Creek Culvert Replacement - BCRY, Jacob's Terr to Tiffin St	2023 - 2024	\$ 4,918,651	\$ -	\$ 4,918,651	74%	\$ 3,622,960	\$ 1,295,691	\$ -	\$ 1,295,691	\$ -
1.1.45 Hotchkiss Creek Watercourse Improvements - Tiffin to Anne St	2031 - 2041	\$ 5,336,730	\$ -	\$ 5,336,730	74%	\$ 3,930,907	\$ 1,405,823	\$ -	\$ 1,405,823	\$ -
1.1.46 Hotchkiss Creek Culvert Replacement - Anne St, 60m north of Tiffin St	2026 - 2027	\$ 3,189,887	\$ -	\$ 3,189,887	74%	\$ 2,349,594	\$ 840,293	\$ -	\$ 840,293	\$ -
1.1.47 Hotchkiss Creek Watercourse Improvements - Anne St to 100m east of Anne St	2031 - 2041	\$ 4,013,376	\$ -	\$ 4,013,376	74%	\$ 2,956,156	\$ 1,057,220	\$ -	\$ 1,057,220	\$ -
1.1.48 Hotchkiss Creek Watercourse Improvements - Innisfil St to Bradford St	2031 - 2041	\$ 973,916	\$ -	\$ 973,916	74%	\$ 717,363	\$ 256,553	\$ -	\$ 256,553	\$ -
1.1.49 Hotchkiss Creek Trunk Sewer - Essa Rd, Innisfil St to 250m south of Anne	2031 - 2041	\$ 2,781,710	\$ -	\$ 2,781,710	74%	\$ 2,048,941	\$ 732,769	\$ -	\$ 732,769	\$ -
1.1.50 Whiskey Creek Watercourse Improvements - Bayview Dr to 279 Bayview Dr property	2027 - 2027	\$ 2,344,737	\$ -	\$ 2,344,737	74%	\$ 1,727,077	\$ 617,660	\$ -	\$ 617,660	\$ -
1.1.51 Whiskey Creek Watercourse Improvements - Around 279 Bayview Dr.	2027 - 2027	\$ 10,968,383	\$ -	\$ 10,968,383	74%	\$ 8,079,047	\$ 2,889,336	\$ -	\$ 2,889,336	\$ -
1.1.52 Whiskey Creek Stormwater Pond - Emergency Campus Pond, south of Chieftain Cres	2031 - 2041	\$ 1,772,888	\$ -	\$ 1,772,888	74%	\$ 1,305,866	\$ 467,022	\$ -	\$ 467,022	\$ -
1.1.53 Whiskey Creek Watercourse Improvements - Bayview Dr, 160m north of Mollard Crt	2027 - 2027	\$ 642,469	\$ -	\$ 642,469	74%	\$ 473,227	\$ 169,242	\$ -	\$ 169,242	\$ -
1.1.54 Whiskey Creek Watercourse Improvements - Bayview Dr, South of Wilson Crt	2027 - 2027	\$ 385,906	\$ -	\$ 385,906	74%	\$ 284,249	\$ 101,657	\$ -	\$ 101,657	\$ -
1.1.55 Whiskey Creek Culvert Replacement - BCRY, 50m south of Little Ave	2031 - 2041	\$ 1,043,747	\$ -	\$ 1,043,747	74%	\$ 768,799	\$ 274,948	\$ -	\$ 274,948	\$ -
1.1.56 Whiskey Creek Watercourse Improvements - Little Ave to WK01	2027 - 2027	\$ 1,368,537	\$ -	\$ 1,368,537	74%	\$ 1,008,031	\$ 360,506	\$ -	\$ 360,506	\$ -
1.1.57 Whiskey Creek Pond Retrofit (WK01)	2031 - 2041	\$ 1,919,427	\$ -	\$ 1,919,427	74%	\$ 1,413,804	\$ 505,623	\$ -	\$ 505,623	\$ -
1.1.58 Whiskey Creek Watercourse Improvements - Little Ave to 200m north	2031 - 2041	\$ 5,194,694	\$ -	\$ 5,194,694	74%	\$ 3,826,287	\$ 1,368,407	\$ -	\$ 1,368,407	\$ -
1.1.59 Whiskey Creek Watercourse Improvements - Hurst Dr to The Boulevard	2031 - 2041	\$ 2,960,310	\$ -	\$ 2,960,310	74%	\$ 2,180,493	\$ 779,817	\$ -	\$ 779,817	\$ -

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TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
FORMER CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
STORMWATER DRAINAGE AND CONTROL SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*
1.1.60 Whiskey Creek Culvert Replacement - The Boulevard, 20m east of White Oaks Rd	2025 - 2025	\$ 2,842,368	\$ -	\$ 2,842,368	74%	\$ 2,093,620	\$ 748,748	\$ -	\$ 748,748	\$ -
1.1.61 Whiskey Creek Watercourse Improvements - The Boulevard to Brennan Ave	2025 - 2025	\$ 3,410,032	\$ -	\$ 3,410,032	74%	\$ 2,511,748	\$ 898,284	\$ -	\$ 898,284	\$ -
1.1.62 Whiskey Creek Culvert Replacement - Brennan Ave, 20m east of White Oaks Rd	2024 - 2024	\$ 2,663,766	\$ -	\$ 2,663,766	74%	\$ 1,962,066	\$ 701,700	\$ -	\$ 701,700	\$ -
1.1.63 Whiskey Creek Watercourse Improvements - Brennan Ave to Lake Simcoe	2023 - 2023	\$ 3,445,445	\$ -	\$ 3,445,445	74%	\$ 2,537,832	\$ 907,613	\$ -	\$ 907,613	\$ -
1.1.64 Lovers Creek Pond Retrofit (LV17)	2031 - 2041	\$ 871,521	\$ -	\$ 871,521	74%	\$ 641,941	\$ 229,580	\$ -	\$ 229,580	\$ -
1.1.65 Lovers Creek Pond Retrofit (LV07)	2031 - 2041	\$ 6,391,713	\$ -	\$ 6,391,713	74%	\$ 4,707,982	\$ 1,683,731	\$ -	\$ 1,683,731	\$ -
1.1.66 Lovers Creek Culvert Replacement - BCRY at Lockhard Rd.	2031 - 2041	\$ 2,541,630	\$ -	\$ 2,541,630	74%	\$ 1,872,103	\$ 669,527	\$ -	\$ 669,527	\$ -
1.1.67 Lovers Creek Pond Retrofit (LV05)	2023 - 2023	\$ 3,490,113	\$ -	\$ 3,490,113	74%	\$ 2,570,733	\$ 919,380	\$ -	\$ 919,380	\$ -
1.1.68 Lovers Creek Culvert Replacement - BCRY, 60m south of Mapleview	2031 - 2041	\$ 1,714,523	\$ -	\$ 1,714,523	74%	\$ 1,262,876	\$ 451,647	\$ -	\$ 451,647	\$ -
1.1.69 Lovers Creek Culvert Replacement - Ellis Dr, 120m west of Welham Rd	2031 - 2041	\$ 859,044	\$ -	\$ 859,044	74%	\$ 632,751	\$ 226,293	\$ -	\$ 226,293	\$ -
1.1.70 Lovers Creek Pond Retrofit (LV02)	2031 - 2041	\$ 3,997,472	\$ -	\$ 3,997,472	74%	\$ 2,944,442	\$ 1,053,030	\$ -	\$ 1,053,030	\$ -
1.1.71 Lovers Creek Pond Retrofit (LV03)	2031 - 2041	\$ 694,312	\$ -	\$ 694,312	74%	\$ 511,413	\$ 182,899	\$ -	\$ 182,899	\$ -
1.1.72 Lovers Creek Trunk Sewer - Esther Dr. Dean Ave to SWM pond LV19	2031 - 2041	\$ 22,091,789	\$ -	\$ 22,091,789	74%	\$ 16,272,280	\$ 5,819,509	\$ -	\$ 5,819,509	\$ -
1.1.73 Lovers Creek Watercourse Improvements - LV13 to Metrolinx	2023 - 2023	\$ 2,120,890	\$ -	\$ 2,120,890	74%	\$ 1,562,197	\$ 558,693	\$ -	\$ 558,693	\$ -
1.1.74 Lovers Creek Watercourse Improvements - 50m upstream of Tollendal Mill Rd.	2023 - 2023	\$ 2,692,274	\$ -	\$ 2,692,274	74%	\$ 1,983,064	\$ 709,210	\$ -	\$ 709,210	\$ -
1.1.75 Lovers Creek Culvert Replacement - Tollendale Mill Rd, 150m west of Cox Mill Rd	2023 - 2023	\$ 1,942,428	\$ -	\$ 1,942,428	74%	\$ 1,430,746	\$ 511,682	\$ -	\$ 511,682	\$ -
1.1.76 Hewitts Creek Trunk Sewer - Princess Margert and Camelot Sq	2031 - 2041	\$ 4,554,652	\$ -	\$ 4,554,652	74%	\$ 3,354,847	\$ 1,199,805	\$ -	\$ 1,199,805	\$ -
1.1.77 Georgian Creek Trunk Sewer - Johnson St, Grove St, Hickling Trail	2031 - 2041	\$ 18,727,354	\$ -	\$ 18,727,354	74%	\$ 13,794,118	\$ 4,933,236	\$ -	\$ 4,933,236	\$ -
1.1.78 Georgian Creek Trunk Sewer - Harrogate Crt, Johnson St, Cheltenham Rd, Larkin Dr, Quinlan Rd	2031 - 2041	\$ 23,466,192	\$ -	\$ 23,466,192	74%	\$ 17,284,632	\$ 6,181,560	\$ -	\$ 6,181,560	\$ -
1.1.79 Georgian Creek Culvert Replacement - Penetanguishine Rd, 360m north of Grove	2031 - 2041	\$ 929,269	\$ -	\$ 929,269	74%	\$ 684,477	\$ 244,792	\$ -	\$ 244,792	\$ -
1.1.80 Little Lake Watershed Trunk Sewer - Cardinal Rd, Simpson St to LT01	2031 - 2041	\$ 10,559,637	\$ -	\$ 10,559,637	74%	\$ 7,777,974	\$ 2,781,663	\$ -	\$ 2,781,663	\$ -
1.1.81 Little Lake Watershed Pond Retrofit (LT01)	2031 - 2041	\$ 12,298,560	\$ -	\$ 12,298,560	74%	\$ 9,058,823	\$ 3,239,737	\$ -	\$ 3,239,737	\$ -
1.1.82 Ridge Rd	2031 - 2041	\$ 230,059	\$ -	\$ 230,059	74%	\$ 169,456	\$ 60,603	\$ -	\$ 60,603	\$ -

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TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
FORMER CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
STORMWATER DRAINAGE AND CONTROL SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*
1.1.83 Bear Creek Pond Retrofit (BR08B)	2031 - 2041	\$ 1,533,815	\$ -	\$ 1,533,815	74%	\$ 1,129,772	\$ 404,043	\$ -	\$ 404,043	\$ -
1.1.84 Bear Creek Culvert Replacement - Ardagh Rd, 260m west of Ferndale Dr	2031 - 2041	\$ 663,800	\$ -	\$ 663,800	74%	\$ 488,939	\$ 174,861	\$ -	\$ 174,861	\$ -
1.1.85 Bear Creek Watercourse Improvements - Ardagh Rd to McKenzie Cres	2031 - 2041	\$ 447,396	\$ -	\$ 447,396	74%	\$ 329,541	\$ 117,855	\$ -	\$ 117,855	\$ -
1.1.86 Bear Creek Culvert Replacement - County Rd 27, north of rail	2031 - 2041	\$ 147,170	\$ -	\$ 147,170	74%	\$ 108,402	\$ 38,768	\$ -	\$ 38,768	\$ -
1.1.87 Johnson Drainage Area Trunk Sewer - Johnston Street , Steel St to Lake Simcoe	2031 - 2041	\$ 9,334,302	\$ -	\$ 9,334,302	74%	\$ 6,875,422	\$ 2,458,880	\$ -	\$ 2,458,880	\$ -
1.1.88 Nelson Drainage Area Trunk Sewer - Blake St, Downsview Dr to Puget St.	2031 - 2041	\$ 815,433	\$ -	\$ 815,433	74%	\$ 600,628	\$ 214,805	\$ -	\$ 214,805	\$ -
1.1.89 Sophia Creek Pond Retrofit (SP03)	2023 - 2023	\$ 3,806,921	\$ -	\$ 3,806,921	74%	\$ 2,804,086	\$ 1,002,835	\$ -	\$ 1,002,835	\$ -
1.1.90 Sophia Creek Pond Retrofit (SP01)	2023 - 2023	\$ 9,851,580	\$ -	\$ 9,851,580	74%	\$ 7,256,437	\$ 2,595,143	\$ -	\$ 2,595,143	\$ -
1.1.91 Sophia Creek Watercourse Improvement - Howard to Lay	2031 - 2041	\$ 241,591	\$ -	\$ 241,591	74%	\$ 177,950	\$ 63,641	\$ -	\$ 63,641	\$ -
1.1.92 Sophia Creek Watercourse Improvement (D/S of Lay St.)	2031 - 2041	\$ 242,522	\$ -	\$ 242,522	74%	\$ 178,636	\$ 63,886	\$ -	\$ 63,886	\$ -
1.1.93 Sophia Creek Watercourse Improvement - U/S & D/S of Grove St.	2031 - 2031	\$ 1,746,478	\$ -	\$ 1,746,478	74%	\$ 1,286,414	\$ 460,064	\$ -	\$ 460,064	\$ -
1.1.94 Sophia Creek Watercourse Improvement - Ottaway Ave. to Laurie Cres.	2031 - 2041	\$ 2,991,286	\$ -	\$ 2,991,286	74%	\$ 2,203,309	\$ 787,977	\$ -	\$ 787,977	\$ -
1.1.95 Sophia Creek Watercourse Improvement - Grove St. to Parkdale Cres.	2031 - 2041	\$ 226,030	\$ -	\$ 226,030	74%	\$ 166,489	\$ 59,541	\$ -	\$ 59,541	\$ -
1.1.96 Sophia Creek Watercourse Improvement - Berczy St. to Queen St.	2031 - 2041	\$ 6,059,933	\$ -	\$ 6,059,933	74%	\$ 4,463,601	\$ 1,596,332	\$ -	\$ 1,596,332	\$ -
1.1.97 Sophia Creek Culvert Improvement - St. Vincent St, 60m north of Grove	2031 - 2041	\$ 1,537,207	\$ -	\$ 1,537,207	74%	\$ 1,132,269	\$ 404,938	\$ -	\$ 404,938	\$ -
1.1.98 Sophia Creek Culvert Improvement - Grove St, 230m east of St. Vincent	2031 - 2041	\$ 753,805	\$ -	\$ 753,805	74%	\$ 555,235	\$ 198,570	\$ -	\$ 198,570	\$ -
1.1.99 Sophia Creek Culvert Improvement - Grove St, 60m east of St. Vincent	2031 - 2041	\$ 653,513	\$ -	\$ 653,513	74%	\$ 481,362	\$ 172,151	\$ -	\$ 172,151	\$ -
1.1.100 Sophia Creek Culvert Improvement - Lay St at Highview	2031 - 2041	\$ 1,360,203	\$ -	\$ 1,360,203	74%	\$ 1,001,893	\$ 358,310	\$ -	\$ 358,310	\$ -
1.1.101 Sophia Creek Culvert Improvement - Howard Cres, 40m south of Highview Rd.	2031 - 2041	\$ 851,638	\$ -	\$ 851,638	74%	\$ 627,296	\$ 224,342	\$ -	\$ 224,342	\$ -
1.1.102 Sophia Creek Culvert Improvement - Ottaway Ave, 60m east of Currie St.	2031 - 2041	\$ 979,566	\$ -	\$ 979,566	74%	\$ 721,525	\$ 258,041	\$ -	\$ 258,041	\$ -
1.1.103 Sophia Creek Culvert Improvement - Rose St, 60m east of Currie St.	2031 - 2041	\$ 1,076,805	\$ -	\$ 1,076,805	74%	\$ 793,149	\$ 283,656	\$ -	\$ 283,656	\$ -
1.1.104 Sophia Creek Culvert Improvement - Laurie Cres. South of Rose	2031 - 2041	\$ 2,170,424	\$ -	\$ 2,170,424	74%	\$ 1,598,682	\$ 571,742	\$ -	\$ 571,742	\$ -
1.1.105 Sophia Creek Culvert Improvement - Wellington St. at Berczy	2031 - 2041	\$ 1,278,304	\$ -	\$ 1,278,304	74%	\$ 941,568	\$ 336,736	\$ -	\$ 336,736	\$ -
1.1.106 Sophia Creek Culvert Improvement - Berczy St. north of Wellington	2031 - 2041	\$ 1,446,818	\$ -	\$ 1,446,818	74%	\$ 1,065,691	\$ 381,127	\$ -	\$ 381,127	\$ -
1.1.107 Sophia Creek Culvert Improvement - Davidson St. & Gunn St.	2031 - 2041	\$ 4,289,752	\$ -	\$ 4,289,752	74%	\$ 3,159,728	\$ 1,130,024	\$ -	\$ 1,130,024	\$ -
1.1.108 Sophia Creek Culvert Improvement - Parkdale Cres. 40 east of Davidson St.	2031 - 2041	\$ 1,214,640	\$ -	\$ 1,214,640	74%	\$ 894,674	\$ 319,966	\$ -	\$ 319,966	\$ -
1.1.109 Sophia Creek Culvert Improvement - Grove St. 135m east of Davidson St.	2031 - 2031	\$ 1,704,440	\$ -	\$ 1,704,440	74%	\$ 1,255,449	\$ 448,991	\$ -	\$ 448,991	\$ -
1.1.110 Sophia Creek Culvert Improvement - Bothwell Cres. 60m north of Grove St.	2031 - 2041	\$ 2,588,902	\$ -	\$ 2,588,902	74%	\$ 1,906,923	\$ 681,979	\$ -	\$ 681,979	\$ -
1.1.111 Sophia Creek Trunk Sewer - Owen St and Clapperton St	2031 - 2041	\$ 27,022,049	\$ -	\$ 27,022,049	74%	\$ 19,903,791	\$ 7,118,258	\$ -	\$ 7,118,258	\$ -
1.1.112 Sophia Creek Trunk Sewer - Sophia St, from Maple St to Toronto St	2023 - 2023	\$ 1,301,695	\$ -	\$ 1,301,695	74%	\$ 958,797	\$ 342,898	\$ -	\$ 342,898	\$ -
1.1.113 2A - Bryne Drive Culvert (Whiskey Creek DC)	2023 - 2023	\$ 859,772	\$ -	\$ 859,772	74%	\$ 633,287	\$ 226,485	\$ -	\$ 226,485	\$ -
Subtotal Stormwater Drainage and Ponds		\$ 462,231,933	\$ -	\$ 462,231,933		\$ 340,468,915	\$ 121,763,018	\$ 4,837,086	\$ 116,925,932	\$ -

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TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
FORMER CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
STORMWATER DRAINAGE AND CONTROL SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
2.0 Adjustment For Funded Shares Of Projects										
1.1.1 Prior funded shares of projects	2023 - 2023	\$ (6,933,228)	\$ -	\$ (6,933,228)	0%	\$ -	\$ (6,933,228)	\$ -	\$ (6,933,228)	\$ -
Subtotal Adjustment For Funded Shares Of Projects		\$ (6,933,228)	\$ -	\$ (6,933,228)		\$ -	\$ (6,933,228)	\$ -	\$ (6,933,228)	\$ -
TOTAL STORMWATER DRAINAGE AND CONTROL SERVICES		\$ 455,298,705	\$ -	\$ 455,298,705		\$ 340,468,915	\$ 114,829,790	\$ 4,837,086	\$ 109,992,704	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2041 DC Eligible Costs	80.9%	\$89,035,869
Long-Term Growth in Population in New Units		48,436
Unadjusted Development Charge Per Capita		\$1,838.22
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	7.9%	\$8,740,885
Long-Term Growth in Square Metres		612,700
Unadjusted Development Charge Per Square Metre		\$14.27
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	11.1%	\$12,215,949
Long-Term Growth in Square Metres		1,233,120
Unadjusted Development Charge Per Square Metre		\$9.91

Current Reserve Fund Balance	\$4,837,086
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TABLE 2-1

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
STORMWATER DRAINAGE AND CONTROL SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

STORMWATER DRAINAGE AND CONTROL SERVIC	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$3,915.5	(\$1,608.4)	(\$4,792.2)	(\$3,683.4)	(\$1,884.9)	(\$1,852.7)	\$3,395.4	\$7,361.1	\$12,495.3	\$7,894.8
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$3,033.7	\$426.8	\$26.8	\$26.8	\$26.8	\$26.8	\$26.8	\$26.8	\$26.8	\$26.8
- Stormwater Drainage And Control Services : Non Infl	\$7,101.80	\$7,607.0	\$3,604.9	\$2,161.6	\$4,990.7	\$0.0	\$0.0	\$0.0	\$6,448.0	\$5,712.2
- Stormwater Drainage And Control Services : Inflated	\$10,135.5	\$8,194.5	\$3,778.4	\$2,322.4	\$5,431.1	\$29.6	\$30.1	\$30.7	\$7,586.2	\$6,858.6
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	2,525	2,773	2,564	2,206	2,806	2,614	1,847	2,292	1,250	2,294
REVENUE										
- DC Receipts: Inflated	\$4,626.0	\$5,182.0	\$4,887.27	\$4,289.0	\$5,564.6	\$5,287.6	\$3,810.8	\$4,823.5	\$2,683.2	\$5,022.8
INTEREST										
- Interest on Opening Balance	\$137.0	(\$88.5)	\$0.0	(\$202.6)	(\$103.7)	(\$101.9)	\$118.8	\$257.6	\$437.3	\$276.3
- Interest on In-year Transactions	(\$151.5)	(\$82.8)	\$0.0	\$34.4	\$2.3	\$92.0	\$66.2	\$83.9	(\$134.8)	(\$50.5)
TOTAL REVENUE	\$4,611.6	\$5,010.7	\$4,887.3	\$4,120.8	\$5,463.3	\$5,277.7	\$3,995.8	\$5,165.0	\$2,985.7	\$5,248.6
CLOSING CASH BALANCE	(\$1,608.4)	(\$4,792.2)	(\$3,683.4)	(\$1,884.9)	(\$1,852.7)	\$3,395.4	\$7,361.1	\$12,495.3	\$7,894.8	\$6,284.9

STORMWATER DRAINAGE AND CONTROL SERVICI	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	\$4,833.3	\$3,625.1	\$2,647.9	\$2,116.1	\$1,379.3	\$608.1	\$23.6	(\$140.2)	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Stormwater Drainage And Control Services : Non Infl	\$5,712.2	\$5,712.2	\$5,712.2	\$5,712.2	\$5,712.2	\$5,712.2	\$5,712.2	\$5,712.2	\$89,035.9
- Stormwater Drainage And Control Services : Inflated	\$7,135.6	\$7,278.4	\$7,423.9	\$7,572.4	\$7,723.9	\$7,878.3	\$8,035.9	\$8,196.6	\$112,637.9
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	2,544	2,670	2,876	2,806	2,809	2,898	3,070	3,188	48,436
REVENUE									
- DC Receipts: Inflated	\$5,795.2	\$6,203.9	\$6,816.2	\$6,783.3	\$6,926.3	\$7,288.7	\$7,875.7	\$8,342.0	\$107,576.8
INTEREST									
- Interest on Opening Balance	\$169.2	\$126.9	\$92.7	\$74.1	\$48.3	\$21.3	\$0.8	(\$7.7)	\$1,476.0
- Interest on In-year Transactions	(\$36.9)	(\$29.5)	(\$16.7)	(\$21.7)	(\$21.9)	(\$16.2)	(\$4.4)	\$2.5	(\$330.4)
TOTAL REVENUE	\$5,927.5	\$6,301.2	\$6,892.1	\$6,835.6	\$6,952.7	\$7,293.8	\$7,872.1	\$8,336.8	\$108,722.4
CLOSING CASH BALANCE	\$3,625.1	\$2,647.9	\$2,116.1	\$1,379.3	\$608.1	\$23.6	(\$140.2)	\$0.0	

2023 Adjusted Charge Per Capita **\$1,832.10**

Allocation of Capital Program

Residential Sector 80.9%
Non-Residential Sector 19.1%

Rates for 2023

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

APPENDIX E.1
TABLE 2-2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
STORMWATER DRAINAGE AND CONTROL SERVICES
RETAIL DEVELOPMENT CHARGE
(in \$000)

STORMWATER DRAINAGE AND CONTROL SERVICES	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$384.4	(\$368.3)	(\$925.2)	(\$1,031.8)	(\$961.9)	(\$1,162.3)	(\$793.7)	(\$364.3)	\$130.1	(\$64.2)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$297.82	\$41.9	\$2.6	\$2.6	\$2.6	\$2.6	\$2.6	\$2.6	\$2.6	\$2.6
- Stormwater Drainage And Control Services : Non Inflated	\$697.2	\$746.8	\$353.9	\$212.2	\$490.0	\$0.0	\$0.0	\$0.0	\$633.0	\$560.8
- Stormwater Drainage And Control Services : Inflated	\$995.0	\$804.5	\$370.9	\$228.0	\$533.2	\$2.9	\$3.0	\$3.0	\$744.8	\$673.3
NON-RESIDENTIAL SPACE GROWTH										
- Growth in Square Metres	16,974	18,829	20,719	22,609	24,499	26,388	28,278	30,133	32,023	30,098
REVENUE										
- DC Receipts: Inflated	\$249.4	\$282.2	\$316.7	\$352.5	\$389.6	\$428.0	\$467.9	\$508.5	\$551.2	\$528.5
INTEREST										
- Interest on Opening Balance	\$13.5	(\$20.3)	(\$50.9)	(\$56.8)	(\$52.9)	(\$63.9)	(\$43.7)	(\$20.0)	\$4.6	(\$3.5)
- Interest on In-year Transactions	(\$20.5)	(\$14.4)	(\$1.5)	\$2.2	(\$3.9)	\$7.4	\$8.1	\$8.8	(\$5.3)	(\$4.0)
TOTAL REVENUE	\$242.3	\$247.5	\$264.3	\$297.9	\$332.8	\$371.6	\$432.4	\$497.4	\$550.5	\$521.0
CLOSING CASH BALANCE	(\$368.3)	(\$925.2)	(\$1,031.8)	(\$961.9)	(\$1,162.3)	(\$793.7)	(\$364.3)	\$130.1	(\$64.2)	(\$216.6)

STORMWATER DRAINAGE AND CONTROL SERVICES	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$288.1)	(\$342.5)	(\$378.0)	(\$385.1)	(\$369.0)	(\$327.4)	(\$258.0)	(\$150.1)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Stormwater Drainage And Control Services : Non Inflated	\$560.8	\$560.8	\$560.8	\$560.8	\$560.8	\$560.8	\$560.8	\$560.8	\$8,740.9
- Stormwater Drainage And Control Services : Inflated	\$700.5	\$714.5	\$728.8	\$743.4	\$758.3	\$773.4	\$788.9	\$804.7	\$11,058.0
NON-RESIDENTIAL SPACE GROWTH									
- Growth in Square Metres	36,294	37,477	39,055	40,239	41,422	42,606	44,184	45,762	612,699
REVENUE									
- DC Receipts: Inflated	\$663.0	\$698.3	\$742.3	\$780.1	\$819.1	\$859.3	\$909.0	\$960.3	\$7,587.0
INTEREST									
- Interest on Opening Balance	(\$15.8)	(\$18.8)	(\$20.8)	(\$21.2)	(\$20.3)	(\$18.0)	(\$14.2)	(\$8.3)	(\$382.5)
- Interest on In-year Transactions	(\$1.0)	(\$0.4)	\$0.2	\$0.6	\$1.1	\$1.5	\$2.1	\$2.7	(\$25.2)
TOTAL REVENUE	\$646.1	\$679.0	\$721.7	\$759.5	\$799.8	\$842.8	\$896.9	\$954.7	\$7,179.3
CLOSING CASH BALANCE	(\$342.5)	(\$378.0)	(\$385.1)	(\$369.0)	(\$327.4)	(\$258.0)	(\$150.1)	\$0.0	

2023 Adjusted Charge Per Square Metre

\$14.69

Allocation of Capital Program

Residential Sector	80.9%
Retail Sector	7.9%
Non-Retail Sector	11.1%

Rates for 2023

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

**APPENDIX E.1
TABLE 2-3**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
STORMWATER DRAINAGE AND CONTROL SERVICES
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)**

STORMWATER DRAINAGE AND CONTROL	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	\$537.2	(\$466.7)	(\$1,187.5)	(\$1,269.4)	(\$1,094.9)	(\$1,285.8)	(\$670.3)	\$43.0	\$860.8	\$719.3
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balanc	\$416.23	\$58.6	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7
- Stormwater Drainage And Control Services : No	\$974.4	\$1,043.7	\$494.6	\$296.6	\$684.7	\$0.0	\$0.0	\$0.0	\$884.7	\$783.7
- Stormwater Drainage And Control Services : Inf	\$1,390.6	\$1,124.3	\$518.4	\$318.6	\$745.2	\$4.1	\$4.1	\$4.2	\$1,040.9	\$941.0
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	39,366	43,729	48,092	52,440	56,863	61,211	65,574	69,937	74,285	67,169
REVENUE										
- DC Receipts: Inflated	\$395.2	\$447.8	\$502.3	\$558.7	\$617.9	\$678.5	\$741.4	\$806.5	\$873.8	\$805.9
INTEREST										
- Interest on Opening Balance	\$18.8	(\$25.7)	(\$65.3)	(\$69.8)	(\$60.2)	(\$70.7)	(\$36.9)	\$1.5	\$30.1	\$25.2
- Interest on In-year Transactions	(\$27.4)	(\$18.6)	(\$0.4)	\$4.2	(\$3.5)	\$11.8	\$12.9	\$14.0	(\$4.6)	(\$3.7)
TOTAL REVENUE	\$386.6	\$403.5	\$436.6	\$493.1	\$554.2	\$619.6	\$717.4	\$822.1	\$899.4	\$827.4
CLOSING CASH BALANCE	(\$466.7)	(\$1,187.5)	(\$1,269.4)	(\$1,094.9)	(\$1,285.8)	(\$670.3)	\$43.0	\$860.8	\$719.3	\$605.7

STORMWATER DRAINAGE AND CONTROL	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	\$487.4	\$364.4	\$256.2	\$145.5	\$82.5	\$33.7	\$5.8	(\$6.6)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Stormwater Drainage And Control Services : No	\$783.7	\$783.7	\$783.7	\$783.7	\$783.7	\$783.7	\$783.7	\$783.7	\$12,215.9
- Stormwater Drainage And Control Services : Inf	\$979.0	\$998.6	\$1,018.6	\$1,039.0	\$1,059.7	\$1,080.9	\$1,102.5	\$1,124.6	\$15,454.2
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	67,510	69,185	69,461	73,430	74,704	76,376	77,553	78,908	1,233,126
REVENUE									
- DC Receipts: Inflated	\$842.7	\$880.9	\$902.1	\$972.7	\$1,009.4	\$1,052.6	\$1,090.2	\$1,131.5	\$10,850.7
INTEREST									
- Interest on Opening Balance	\$17.1	\$12.8	\$9.0	\$5.1	\$2.9	\$1.2	\$0.2	(\$0.4)	(\$187.9)
- Interest on In-year Transactions	(\$3.7)	(\$3.2)	(\$3.2)	(\$1.8)	(\$1.4)	(\$0.8)	(\$0.3)	\$0.1	(\$31.0)
TOTAL REVENUE	\$856.0	\$890.4	\$907.9	\$976.0	\$1,010.9	\$1,053.0	\$1,090.1	\$1,131.2	\$10,631.7
CLOSING CASH BALANCE	\$364.4	\$256.2	\$145.5	\$82.5	\$33.7	\$5.8	(\$6.6)	\$0.0	

2023 Adjusted Charge Per Square Metre **\$10.04**

Allocation of Capital Program

Residential Sector	80.9%
Retail Sector	7.9%
Non-Retail Sector	11.1%

Rates for 2023

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

Appendix E.2

Former Municipal Boundary: Water Services – Distribution Systems

Water Services – Distribution Systems

This appendix provides a brief outline of the infrastructure included in the Water Services - Distribution Systems development charge. The development-related projects outlined in this appendix are required to service the demands of new development to 2041 located within the Former Municipal Boundary and are therefore calculated on an area-specific basis.

The following sections describe the individual components included in the Water Services - Distribution Systems service category. The analysis is set out in the tables which follow.

Table E.2-1 2023-2041 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs

Table E.2-2 Cash Flow Analysis

A. Development-Related Capital Program

i. Gross Capital Program Costs

The capital program includes for the recovery of a negative reserve fund balance (\$6.20 million), water distribution projects (\$48.05 million) and an adjustment for shares of projects which have previously been funded from development charges (\$6.16 million). The total gross cost of the capital program amounts to \$47.71 million.

ii. Grants, Subsidies and Other Recoveries

No grants, subsidies or other recoveries have been identified for this service, therefore no adjustments are made.

iii. Replacement and Benefit to Existing Shares

In total, \$11.76 million has been identified as a benefit to existing or replacement shares for projects and is removed from the total DC eligible costs. If an existing pipe is to be replaced as part of a proposed project, the benefit to existing shares are determined based on the age of the existing pipe and the estimated useful life as well as the cost to replace the existing pipe at the current standard. New water linear assets have no benefit to existing share given these projects would not be constructed in absence of growth and are needed to service future development.

iv. Available DC Reserve Funds

The current reserve fund balance is in a deficit position of \$5.82 million and is included for recovery in the capital program.

v. Other Development-Related / Post-Period Benefit Shares

The projects included in the capital program are required to service growth over the planning horizon. Therefore, no post-period shares of projects have been identified.

vi. 2023-2041 DC Eligible Development Related Costs

After adjusting for ineligible shares of projects, the total DC eligible in-period recoverable capital costs amount to \$36.75 million and is included for recovery in the DC rate calculation.

B. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The effect of the analysis is an increase in the development charge rates as a result of the capital program being largely front-ended. The adjusted residential charge amounts to \$665.94 per

capita, the retail cash-flow amounts to \$14.34 per square metre of gross floor area and non-retail amounts to \$8.74 per square metre.

The following table summarizes the calculation of the Water Services – Distribution Systems development charge:

2023 - 2041		WATER SERVICES - DISTRIBUTION SYSTEMS SUMMARY				Adjusted	
Development-Related Capital Program		\$ /capita	Unadjusted Development Charge		\$ /capita	Development Charge	
Total	Net DC Recoverable		Retail \$/sq.m	Non-Retail\$/sq.m		Retail \$/sq.m	Non- Retail \$/sq.m
\$47,709,340	\$35,951,230	\$472.81	\$9.46	\$5.88	\$665.94	\$14.34	\$8.74

APPENDIX E.2

TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
FORMER CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
WATER SERVICES - DISTRIBUTION SYSTEMS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*	
WATER SERVICES - DISTRIBUTION SYSTEMS											
1.0 Recovery of Negative Reserve Fund Balance											
1.1.1 Balance as of December 31, 2022	2023 - 2023	\$ 5,819,498	\$ -	\$ 5,819,498	0%	\$ -	\$ 5,819,498	\$ -	\$ 5,819,498	\$ -	
Subtotal Recovery of Negative Reserve Fund Balance		\$ 5,819,498	\$ -	\$ 5,819,498		\$ -	\$ 5,819,498	\$ -	\$ 5,819,498	\$ -	
2.0 Water Distribution Projects											
2.1.1 0569 Sunnisdale Road - Wellington Street North to Letitia Street; Zone 2N Reinforcement (ZONE1NEW-25)	2023 - 2023	\$ 12,950,280	\$ -	\$ 12,950,280	8%	\$ 1,011,445	\$ 11,938,835	\$ -	\$ 11,938,835	\$ -	
2.1.2 Poyntz Street - Dunlop Street East north to Worsley Street (2013); Zone 1 Reinforcement (existing 250mm/300mm pipes) (400mm) (ZONE1NEW-17)	2023 - 2023	\$ 1,141,560	\$ -	\$ 1,141,560	64%	\$ 730,408	\$ 411,152	\$ -	\$ 411,152	\$ -	
2.1.3 Poyntz Street - Worsley Street north to Berczy Street; Zone 1 Reinforcement (existing 300mm pipe) (400mm) (ZONE1NEW-36)	2023 - 2023	\$ 889,920	\$ -	\$ 889,920	71%	\$ 632,989	\$ 256,931	\$ -	\$ 256,931	\$ -	
2.1.4 Tiffin Street - Ferndale Drive North east to Patterson Road (2012); Zone 1 Reinforcement (existing 300mm pipe) (400mm pipe) (ZONE1NEW-31)	2023 - 2023	\$ 2,214,000	\$ -	\$ 2,214,000	0%	\$ -	\$ 2,214,000	\$ -	\$ 2,214,000	\$ -	
2.1.5 Duckworth Street - St Vincent Street north to Codrington Street (2015); Zone 2N Reinforcement (no existing pipe along road, a 150mm/200mm pipe route along 2 roads to pipe outlet) (300mm) (ZONE2NNEW-12E)	2023 - 2023	\$ 452,520	\$ -	\$ 452,520	3%	\$ 13,854	\$ 438,666	\$ -	\$ 438,666	\$ -	
2.1.6 Duckworth Street - Codrington Street north to Napier Street (2015); Zone 2N Reinforcement (existing 100mm/150mm pipe) (300mm) (ZONE2NNEW-13)	2023 - 2023	\$ 942,840	\$ -	\$ 942,840	4%	\$ 36,524	\$ 906,316	\$ -	\$ 906,316	\$ -	
2.1.7 Duckworth Street - Napier Street north to Steel Street (2015); Zone 2N Reinforcement (existing 150mm pipe) (300mm) (ZONE2NNEW-14)	2023 - 2023	\$ 1,395,360	\$ -	\$ 1,395,360	14%	\$ 197,896	\$ 1,197,464	\$ -	\$ 1,197,464	\$ -	
2.1.8 Duckworth Street - Steel Street north to Grove Street East (2015); Zone 2N Reinforcement (existing 150mm/200mm pipe) (ZONE2NNEW-16)	2023 - 2023	\$ 1,739,880	\$ -	\$ 1,739,880	51%	\$ 893,096	\$ 846,784	\$ -	\$ 846,784	\$ -	
2.1.9 Duckworth Street - Grove Street East north to Bernick Drive (2011); Zone 2N Reinforcement (existing 150mm/200mm pipe) - Proposed 300mm (ZONE2NNEW-5)	2023 - 2023	\$ 1,576,800	\$ -	\$ 1,576,800	39%	\$ 617,227	\$ 959,573	\$ -	\$ 959,573	\$ -	
2.1.10 Harvie Road Pumping Station Interconnection (400mm) (0417)	2023 - 2023	\$ 32,400	\$ -	\$ 32,400	0%	\$ -	\$ 32,400	\$ -	\$ 32,400	\$ -	
2.1.11 Cundles Road East - St Vincent St east 300m; Zone 2N Reinforcement (existing 200mm pipe) (300mm) (ZONE2NNEW-20)	2023 - 2023	\$ 1,087,560	\$ -	\$ 1,087,560	58%	\$ 628,676	\$ 458,884	\$ -	\$ 458,884	\$ -	
2.1.12 Bayview Drive - Big Bay Point Road north to Little Avenue (2014); Zone 2S Reinforcement (existing 300mm pipe) (ZONE2SNEW-2)	2023 - 2023	\$ 6,390,360	\$ -	\$ 6,390,360	47%	\$ 2,989,092	\$ 3,401,268	\$ -	\$ 3,401,268	\$ -	
2.1.13 Little Avenue - Garden Drive east to Huronia Road (2021); Zone 3S Reinforcement (existing 300mm pipe) (400mm) (ZONE2SNEW-38)	2023 - 2023	\$ 630,720	\$ -	\$ 630,720	45%	\$ 284,814	\$ 345,906	\$ -	\$ 345,906	\$ -	
2.1.14 Tiffin Street - Patterson Road east to Dymont Road (2012); Zone 1 Reinforcement (existing 300mm pipe) (ZONE1NEW-32)	2031 - 2041	\$ 821,880	\$ -	\$ 821,880	16%	\$ 134,141	\$ 687,739	\$ -	\$ 687,739	\$ -	
2.1.15 Tiffin Street – Dymont Road East to Anne Street South; Zone 1 Reinforcement (upsizing existing 300 mm) (ZONE1NEW-33)	2031 - 2041	\$ 3,697,920	\$ -	\$ 3,697,920	24%	\$ 892,248	\$ 2,805,672	\$ -	\$ 2,805,672	\$ -	
2.1.16 Miller Drive - Sproule Drive north to Edgehill Drive (2013); Zone 1 Reinforcement (existing 150mm pipe) (ZONE1NEW-34)	2031 - 2041	\$ 2,066,040	\$ -	\$ 2,066,040	41%	\$ 840,924	\$ 1,225,116	\$ -	\$ 1,225,116	\$ -	
2.1.17 Dunlop Street E - Mulcaster Street east to Poyntz Street; Zone 1 Reinforcement (existing 250mm pipe) (ZONE1NEW-43A)	2023 - 2023	\$ 799,200	\$ -	\$ 799,200	0%	\$ -	\$ 799,200	\$ -	\$ 799,200	\$ -	
2.1.18 Berczy Street - Euglina Street north to Codrington Pumping Station (2013); Zone 1 Reinforcement (existing 300mm pipe) (ZONE2NNEW-12)	2023 - 2023	\$ 639,360	\$ -	\$ 639,360	61%	\$ 389,114	\$ 250,246	\$ -	\$ 250,246	\$ -	

APPENDIX E.2
TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
FORMER CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
WATER SERVICES - DISTRIBUTION SYSTEMS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
2.1.19 Eugina Street – Berczy Street East to Albert Street; Zone 2N Reinforcement (upsizing existing 100 mm) (ZONE2NNEW-12A)	2023 - 2023	\$ 543,240	\$ -	\$ 543,240	63%	\$ 344,329	\$ 198,911	\$ -	\$ 198,911	\$ -
2.1.20 Eugina Street - Albert Street east to Dundonald Street (2013) Zone 2N Reinforcement (existing 100mm pipe) (ZONE2NNEW-12B)	2023 - 2023	\$ 652,320	\$ -	\$ 652,320	51%	\$ 335,046	\$ 317,274	\$ -	\$ 317,274	\$ -
2.1.21 Eugina Street - Dundonald Street east to St Vincent Street (2013); Zone 2N Reinforcement (existing 150mm pipe) (ZONE2NNEW-12C)	2023 - 2023	\$ 1,269,000	\$ -	\$ 1,269,000	62%	\$ 786,287	\$ 482,713	\$ -	\$ 482,713	\$ -
2.1.22 Eugina Street - St. Vincent Street west 5 metres (2013); Zone 2N Reinforcement (existing 150mm pipe) (ZONE2NNEW-12D)	2023 - 2023	\$ 18,360	\$ -	\$ 18,360	0%	\$ -	\$ 18,360	\$ -	\$ 18,360	\$ -
2.1.23 Stanford Street cul-de-sac connection pipe to Short Street cul-de-sac (2021); Zone 1 Reinforcement (ZONE1NEW-35)	2031 - 2041	\$ 617,760	\$ -	\$ 617,760	0%	\$ -	\$ 617,760	\$ -	\$ 617,760	\$ -
2.1.24 Innisfil BPS to Little Ave and Bayview (400mm); Zone 2S Reinforcement (ZONE2SNEW-210)	2024 - 2041	\$ 5,477,760	\$ -	\$ 5,477,760	0%	\$ -	\$ 5,477,760	\$ -	\$ 5,477,760	\$ -
Subtotal Water Distribution Projects		\$ 48,047,040	\$ -	\$ 48,047,040		\$ 11,758,110	\$ 36,288,930	\$ -	\$ 36,288,930	\$ -
3.0 Adjustment For Funded Shares Of Projects										
3.1.1 Prior funded shares of projects	2023 - 2023	\$ (6,157,198)	\$ -	\$ (6,157,198)	0%	\$ -	\$ (6,157,198)	\$ -	\$ (6,157,198)	\$ -
Subtotal Adjustment For Funded Shares Of Projects		\$ (6,157,198)	\$ -	\$ (6,157,198)		\$ -	\$ (6,157,198)	\$ -	\$ (6,157,198)	\$ -
TOTAL WATER SERVICES - DISTRIBUTION SYSTEMS		\$ 47,709,340	\$ -	\$ 47,709,340		\$ 11,758,110	\$ 35,951,230	\$ -	\$ 35,951,230	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2041 DC Eligible Costs	63.7%	\$22,901,137
Long-Term Growth in Population in New Units		48,436
Unadjusted Development Charge Per Capita		\$472.81
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	16.1%	\$5,793,842
Long-Term Growth in Square Metres		612,700
Unadjusted Development Charge Per Square Metre		\$9.46
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	20.2%	\$7,256,251
Long-Term Growth in Square Metres		1,233,120
Unadjusted Development Charge Per Square Metre		\$5.88

Current Reserve Fund Balance	(\$5,819,498)
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APPENDIX E.2

TABLE 2-1

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - DISTRIBUTION SYSTEMS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WATER SERVICES - DISTRIBUTION SYSTEMS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$3,707.1)	(\$18,636.1)	(\$17,945.7)	(\$16,370.9)	(\$15,894.4)	(\$14,924.0)	(\$14,007.0)	(\$13,590.1)	(\$12,780.2)	(\$13,090.2)
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Distribution Systems: Non Inflated	\$16,012.53	\$193.9	\$193.9	\$193.9	\$193.9	\$193.9	\$193.9	\$193.9	\$502.9	\$502.9
- Water Services - Distribution Systems: Inflated	\$16,012.5	\$197.7	\$201.7	\$205.7	\$209.8	\$214.0	\$218.3	\$222.7	\$589.2	\$601.0
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	2,525	2,773	2,564	2,206	2,806	2,614	1,847	2,292	1,250	2,294
REVENUE										
- DC Receipts: Inflated	\$1,681.5	\$1,883.6	\$1,776.46	\$1,559.0	\$2,022.7	\$1,922.0	\$1,385.2	\$1,753.3	\$975.3	\$1,825.7
INTEREST										
- Interest on Opening Balance	(\$203.9)	(\$1,025.0)	\$0.0	(\$900.4)	(\$874.2)	(\$820.8)	(\$770.4)	(\$747.5)	(\$702.9)	(\$720.0)
- Interest on In-year Transactions	(\$394.1)	\$29.5	\$0.0	\$23.7	\$31.7	\$29.9	\$20.4	\$26.8	\$6.8	\$21.4
TOTAL REVENUE	\$1,083.5	\$888.1	\$1,776.5	\$682.3	\$1,180.2	\$1,131.0	\$635.2	\$1,032.6	\$279.2	\$1,127.2
CLOSING CASH BALANCE	(\$18,636.1)	(\$17,945.7)	(\$16,370.9)	(\$15,894.4)	(\$14,924.0)	(\$14,007.0)	(\$13,590.1)	(\$12,780.2)	(\$13,090.2)	(\$12,564.0)

WATER SERVICES - DISTRIBUTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$11,893.1)	(\$11,040.1)	(\$10,001.7)	(\$8,692.8)	(\$7,337.3)	(\$5,867.8)	(\$4,197.2)	(\$2,231.7)	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Distribution Systems: Non Inflated	\$502.9	\$502.9	\$502.9	\$502.9	\$502.9	\$502.9	\$502.9	\$502.9	\$22,901.1
- Water Services - Distribution Systems: Inflated	\$625.3	\$637.8	\$650.5	\$663.5	\$676.8	\$690.3	\$704.1	\$718.2	\$24,652.3
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	2,544	2,670	2,876	2,806	2,809	2,898	3,070	3,188	48,436
REVENUE									
- DC Receipts: Inflated	\$2,106.5	\$2,255.0	\$2,477.6	\$2,465.6	\$2,517.6	\$2,649.3	\$2,862.7	\$3,032.2	\$39,102.7
INTEREST									
- Interest on Opening Balance	(\$654.1)	(\$607.2)	(\$550.1)	(\$478.1)	(\$403.5)	(\$322.7)	(\$230.8)	(\$122.7)	(\$10,825.4)
- Interest on In-year Transactions	\$25.9	\$28.3	\$32.0	\$31.5	\$32.2	\$34.3	\$37.8	\$40.5	\$82.0
TOTAL REVENUE	\$1,478.3	\$1,676.1	\$1,959.5	\$2,019.1	\$2,146.3	\$2,360.9	\$2,669.6	\$2,950.0	\$28,359.4
CLOSING CASH BALANCE	(\$11,040.1)	(\$10,001.7)	(\$8,692.8)	(\$7,337.3)	(\$5,867.8)	(\$4,197.2)	(\$2,231.7)	\$0.0	

2023 Adjusted Charge Per Capita \$665.94

Allocation of Capital Program
Residential Sector 63.7%
Non-Residential Sector 36.3%

Rates for 2023
Inflation Rate 2.0%
Interest Rate on Positive Balances 3.5%
Interest Rate on Negative Balances 5.5%

APPENDIX E.2
TABLE 2-2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - DISTRIBUTION SYSTEMS
RETAIL DEVELOPMENT CHARGE
(in \$000)

WATER SERVICES - DISTRIBUTION SYSTEMS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$937.9)	(\$4,901.8)	(\$4,942.2)	(\$4,951.4)	(\$4,926.7)	(\$4,864.8)	(\$4,762.4)	(\$4,615.9)	(\$4,422.1)	(\$4,269.6)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Distribution Systems: Non Inflated	\$4,051.1	\$49.0	\$49.0	\$49.0	\$49.0	\$49.0	\$49.0	\$49.0	\$127.2	\$127.2
- Water Services - Distribution Systems: Inflated	\$4,051.1	\$50.0	\$51.0	\$52.0	\$53.1	\$54.1	\$55.2	\$56.3	\$149.1	\$152.0
NON-RESIDENTIAL SPACE GROWTH										
- Growth in Square Metres	16,974	18,829	20,719	22,609	24,499	26,388	28,278	30,133	32,023	30,098
REVENUE										
- DC Receipts: Inflated	\$243.4	\$275.4	\$309.1	\$344.0	\$380.2	\$417.7	\$456.6	\$496.3	\$538.0	\$515.7
INTEREST										
- Interest on Opening Balance	(\$51.6)	(\$269.6)	(\$271.8)	(\$272.3)	(\$271.0)	(\$267.6)	(\$261.9)	(\$253.9)	(\$243.2)	(\$234.8)
- Interest on In-year Transactions	(\$104.7)	\$3.9	\$4.5	\$5.1	\$5.7	\$6.4	\$7.0	\$7.7	\$6.8	\$6.4
TOTAL REVENUE	\$87.1	\$9.7	\$41.8	\$76.8	\$115.0	\$156.5	\$201.7	\$250.1	\$301.6	\$287.3
CLOSING CASH BALANCE	(\$4,901.8)	(\$4,942.2)	(\$4,951.4)	(\$4,926.7)	(\$4,864.8)	(\$4,762.4)	(\$4,615.9)	(\$4,422.1)	(\$4,269.6)	(\$4,134.4)

WATER SERVICES - DISTRIBUTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$3,895.2)	(\$3,612.0)	(\$3,281.4)	(\$2,892.3)	(\$2,447.5)	(\$1,943.1)	(\$1,374.3)	(\$728.6)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Distribution Systems: Non Inflated	\$127.2	\$127.2	\$127.2	\$127.2	\$127.2	\$127.2	\$127.2	\$127.2	\$5,793.8
- Water Services - Distribution Systems: Inflated	\$158.2	\$161.4	\$164.6	\$167.9	\$171.2	\$174.7	\$178.1	\$181.7	\$6,236.9
NON-RESIDENTIAL SPACE GROWTH									
- Growth in Square Metres	36,294	37,477	39,055	40,239	41,422	42,606	44,184	45,762	612,699
REVENUE									
- DC Receipts: Inflated	\$647.0	\$681.5	\$724.4	\$761.3	\$799.3	\$838.6	\$887.1	\$937.1	\$7,404.3
INTEREST									
- Interest on Opening Balance	(\$214.2)	(\$198.7)	(\$180.5)	(\$159.1)	(\$134.6)	(\$106.9)	(\$75.6)	(\$40.1)	(\$3,377.5)
- Interest on In-year Transactions	\$8.6	\$9.1	\$9.8	\$10.4	\$11.0	\$11.6	\$12.4	\$13.2	(\$5.3)
TOTAL REVENUE	\$441.4	\$491.9	\$553.7	\$612.6	\$675.7	\$743.4	\$823.9	\$910.3	\$4,021.5
CLOSING CASH BALANCE	(\$3,612.0)	(\$3,281.4)	(\$2,892.3)	(\$2,447.5)	(\$1,943.1)	(\$1,374.3)	(\$728.6)	(\$0.0)	

2023 Adjusted Charge Per Square Metre

\$14.34

Allocation of Capital Program

Residential Sector	63.7%
Retail Sector	16.1%
Non-Retail Sector	20.2%

Rates for 2023

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

**APPENDIX E.2
TABLE 2-3**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - DISTRIBUTION SYSTEMS
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)**

WATER SERVICES - DISTRIBUTION SYSTEMS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$1,174.6)	(\$6,098.7)	(\$6,101.1)	(\$6,056.6)	(\$5,961.0)	(\$5,809.0)	(\$5,596.3)	(\$5,317.6)	(\$4,967.2)	(\$4,656.2)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balanc	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Distribution Systems: Non Infl	\$5,073.6	\$61.4	\$61.4	\$61.4	\$61.4	\$61.4	\$61.4	\$61.4	\$159.3	\$159.3
- Water Services - Distribution Systems: Inflated	\$5,073.6	\$62.7	\$63.9	\$65.2	\$66.5	\$67.8	\$69.2	\$70.6	\$186.7	\$190.4
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	39,366	43,729	48,092	52,440	56,863	61,211	65,574	69,937	74,285	67,169
REVENUE										
- DC Receipts: Inflated	\$344.2	\$389.9	\$437.4	\$486.5	\$538.1	\$590.8	\$645.6	\$702.3	\$760.9	\$701.8
INTEREST										
- Interest on Opening Balance	(\$64.6)	(\$335.4)	(\$335.6)	(\$333.1)	(\$327.9)	(\$319.5)	(\$307.8)	(\$292.5)	(\$273.2)	(\$256.1)
- Interest on In-year Transactions	(\$130.1)	\$5.7	\$6.5	\$7.4	\$8.3	\$9.2	\$10.1	\$11.1	\$10.0	\$8.9
TOTAL REVENUE	\$149.5	\$60.2	\$108.4	\$160.8	\$218.5	\$280.5	\$347.9	\$420.9	\$497.8	\$454.6
CLOSING CASH BALANCE	(\$6,098.7)	(\$6,101.1)	(\$6,056.6)	(\$5,961.0)	(\$5,809.0)	(\$5,596.3)	(\$5,317.6)	(\$4,967.2)	(\$4,656.2)	(\$4,392.0)

WATER SERVICES - DISTRIBUTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$4,101.0)	(\$3,781.5)	(\$3,414.6)	(\$3,012.8)	(\$2,530.5)	(\$1,993.6)	(\$1,393.1)	(\$730.8)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Distribution Systems: Non Infl	\$159.3	\$159.3	\$159.3	\$159.3	\$159.3	\$159.3	\$159.3	\$159.3	\$7,256.3
- Water Services - Distribution Systems: Inflated	\$198.1	\$202.1	\$206.1	\$210.2	\$214.4	\$218.7	\$223.1	\$227.6	\$7,811.1
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	67,510	69,185	69,461	73,430	74,704	76,376	77,553	78,908	1,233,126
REVENUE									
- DC Receipts: Inflated	\$733.8	\$767.1	\$785.6	\$847.0	\$879.0	\$916.6	\$949.4	\$985.3	\$9,448.7
INTEREST									
- Interest on Opening Balance	(\$225.6)	(\$208.0)	(\$187.8)	(\$165.7)	(\$139.2)	(\$109.6)	(\$76.6)	(\$40.2)	(\$3,874.2)
- Interest on In-year Transactions	\$9.4	\$9.9	\$10.1	\$11.1	\$11.6	\$12.2	\$12.7	\$13.3	(\$3.2)
TOTAL REVENUE	\$517.7	\$569.0	\$607.9	\$692.5	\$751.4	\$819.2	\$885.5	\$958.3	\$5,571.3
CLOSING CASH BALANCE	(\$3,781.5)	(\$3,414.6)	(\$3,012.8)	(\$2,530.5)	(\$1,993.6)	(\$1,393.1)	(\$730.8)	(\$0.0)	

2023 Adjusted Charge Per Square Metre	\$8.74
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Allocation of Capital Program	
Residential Sector	63.7%
Retail Sector	16.1%
Non-Retail Sector	20.2%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix E.3

Former Municipal Boundary: Wastewater Services – Collection Systems

Wastewater Services – Collection Systems

This appendix provides a brief outline of the infrastructure included in the Wastewater Services – Collection Systems development charge. The development-related projects outlined in this appendix are required to service the demands of new development within the Former Municipal Boundary to 2041.

The following describes the components included in the Wastewater Services – Collection Systems service category. The analysis is set out in the tables which follow. The tables include:

Table E.3-1	2023-2041 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs
Table E.2-2	Cash Flow Analysis

A. Development-Related Capital Program

i. Gross Capital Program Costs

The capital program includes for the recovery of a negative reserve fund balance (\$3.63 million), wastewater collection projects (\$158.51 million) and an adjustment for shares of projects which have previously been funded from development charges (\$2.90 million). The total gross cost of the capital program amounts to \$159.23 million.

ii. Grants, Subsidies and Other Recoveries

No grants, subsidies or other recoveries have been identified for this service, therefore no adjustments are made.

iii. Replacement and Benefit to Existing Shares

In total, \$28.52 million has been identified as a benefit to existing or replacement shares for projects and is removed from the total DC eligible costs. If an existing pipe is to be replaced as part of a proposed project, the benefit to existing shares are determined based on the age of the existing pipe and the estimated useful life as well as the cost to replace the existing pipe at the current standard. New wastewater linear assets have no benefit to existing share given these projects would not be constructed in absence of growth and are needed to service future development.

iv. Available DC Reserve Funds

The current reserve fund balance is in a deficit position of \$3.63 million and is included for recovery in the capital program.

v. Other Development-Related / Post-Period Benefit Shares

The projects included in the capital program are required to service growth over the planning horizon. Therefore, no post-period shares of projects have been identified.

vi. 2023-2041 DC Eligible Development Related Costs

After adjusting for ineligible shares of projects, the total DC eligible in-period recoverable capital costs amount to \$130.71 million and is included for recovery in the DC rate calculation.

B. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The adjusted residential charge amounts to \$1,758.66 per capita, the retail cash-flow amounts to \$36.25 per square metre of gross floor area and non-retail amounts to \$22.32 per square metre.

The following table summarizes the calculation of the Wastewater Services – Collection Systems development charge:

WASTEWATER SERVICES - COLLECTION SYSTEMS SUMMARY								
2023 - 2041			Unadjusted			Adjusted		
Development-Related Capital Program			Development Charge			Development Charge		
Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non - Retail \$/sq.m	
\$159,230,050	\$159,230,050	\$1,719.05	\$34.38	\$21.39	\$1,758.66	\$36.25	\$22.32	

APPENDIX E.3

TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
FORMER CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
WASTEWATER SERVICES - COLLECTION SYSTEMS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*	
WASTEWATER SERVICES - COLLECTION SYSTEMS											
1.0 Recovery of Negative Reserve Fund Balance											
1.1.1 Balance as of December 31, 2022	2023 - 2023	\$ 3,625,232	\$ -	\$ 3,625,232	0%	\$ -	\$ 3,625,232	\$ -	\$ 3,625,232	\$ -	
Subtotal Recovery of Negative Reserve Fund Balance		\$ 3,625,232	\$ -	\$ 3,625,232		\$ -	\$ 3,625,232	\$ -	\$ 3,625,232	\$ -	
2.0 Wastewater Collection Systems											
2.1.1 Flow Monitoring Program for I/I investigation, Project WC2018-04	2023 - 2041	\$ 10,000,000	\$ -	\$ 10,000,000	0%	\$ -	\$ 10,000,000	\$ -	\$ 10,000,000	\$ -	
2.1.2 Tiffin Street sanitary sewer, sewer replacement to meet City's level of service requirements with future growth, replace 114m of existing 450mm with new 600mm, typical depth =6.5m	2032 - 2041	\$ 663,389	\$ -	\$ 663,389	20%	\$ 135,060	\$ 528,329	\$ -	\$ 528,329	\$ -	
2.1.3 Stunden Lane sanitary sewer, Sewer replacement to meet City's level of service requirements with future growth, replace 281m of existing 375 with new 525mm, typical depth=9.5m	2032 - 2041	\$ 2,059,724	\$ -	\$ 2,059,724	29%	\$ 587,864	\$ 1,471,860	\$ -	\$ 1,471,860	\$ -	
2.1.4 Lakeshore South Trunk Sewer, sewer twin to meet City's level of service requirements with future growth, twin 754m of existing 900mm with new 1050mm, typical depth=11m	2032 - 2041	\$ 81,673,624	\$ -	\$ 81,673,624	11%	\$ 9,049,058	\$ 72,624,566	\$ -	\$ 72,624,566	\$ -	
2.1.5 Easement south of Tiffin sanitary sewer, sewer replacement to meet City's level of service requirements with future growth, replace 707m of existing 600mm with new 750mm, typical depth=5.5m	2032 - 2041	\$ 5,214,765	\$ -	\$ 5,214,765	26%	\$ 1,342,573	\$ 3,872,192	\$ -	\$ 3,872,192	\$ -	
2.1.6 Mapleview Drive West, Veterans to Hwy, sewer replacement to meet City's level of service requirements with future growth, replace 1347m of existing 600mm with new 675mm, typical depth=9m	2032 - 2041	\$ 11,262,703	\$ -	\$ 11,262,703	32%	\$ 3,610,549	\$ 7,652,154	\$ -	\$ 7,652,154	\$ -	
2.1.7 Brock Street sanitary sewer, sewer replacement to meet City's level of service requirements for future growth, replace 1609m of existing 750mm with new 900mm, typical depth=5m	2032 - 2041	\$ 12,693,102	\$ -	\$ 12,693,102	55%	\$ 7,011,071	\$ 5,682,031	\$ -	\$ 5,682,031	\$ -	
2.1.8 Brock Street sanitary sewer, sewer replacement to meet City's level of service requirements for future growth, replace 119m of existing 825mm with new 900mm, typical depth=6m	2032 - 2041	\$ 1,016,304	\$ -	\$ 1,016,304	55%	\$ 561,358	\$ 454,946	\$ -	\$ 454,946	\$ -	
2.1.9 Kierland Road sanitary sewer, sewer replacement to meet City's level of service requirements for future growth, replace 446m of existing 525mm with new 600mm, typical depth=5.5m	2032 - 2041	\$ 2,377,469	\$ -	\$ 2,377,469	33%	\$ 789,506	\$ 1,587,963	\$ -	\$ 1,587,963	\$ -	
2.1.10 Patterson Road sanitary sewer, sewer replacement to meet City's level of service requirements for future growth, replace 10m of existing 250mm with new 300mm, typical depth=4m	2032 - 2041	\$ 30,418	\$ -	\$ 30,418	11%	\$ 3,489	\$ 26,929	\$ -	\$ 26,929	\$ -	
2.1.11 Tiffin Street Sanitary Sewer, sewer replacement to meet City's level of service under existing conditions, replace 1352m of existing 600mm with new 900mm, typical depth=7.5m	2023 - 2023	\$ 12,936,299	\$ -	\$ 12,936,299	31%	\$ 3,975,158	\$ 8,961,141	\$ -	\$ 8,961,141	\$ -	
2.1.12 Tiffin Street sanitary sewer, sewer replacement to meet City's level of service under existing conditions, replace 240m of 750mm with new 900mm, typical depth=7m	2023 - 2023	\$ 2,214,152	\$ -	\$ 2,214,152	0%	\$ -	\$ 2,214,152	\$ -	\$ 2,214,152	\$ -	
2.1.13 Sanitary sewer downstream of Minets Point PS, (on White Oaks Drive and easement from White Oaks Drive to Lakeshore) sewer replacement to meet City's level of service requirements under existing conditions, replace 220m of existing 250mm with new 375mm, typical depth=6m	2023 - 2023	\$ 1,020,740	\$ -	\$ 1,020,740	24%	\$ 240,066	\$ 780,674	\$ -	\$ 780,674	\$ -	
2.1.14 Mapleview Drive sanitary sewer east of Holly PS, sewer replacement to meet City's level of service requirements under existing conditions, replace 28m of existing 450mm with new 525mm, typical depth=4m	2023 - 2023	\$ 462,605	\$ -	\$ 462,605	32%	\$ 147,965	\$ 314,640	\$ -	\$ 314,640	\$ -	
2.1.15 Monitoring and assessment of Penetanguishene Sideroad sanitary sewer, downstream of PS1, to confirm need for sewer replacement to meet City's level of service requirements	2023 - 2023	\$ 392,209	\$ -	\$ 392,209	0%	\$ -	\$ 392,209	\$ -	\$ 392,209	\$ -	

APPENDIX E.3

TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
FORMER CITY OF BARRIE
DEVELOPMENT-RELATED CAPITAL PROGRAM
WASTEWATER SERVICES - COLLECTION SYSTEMS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
2.1.16 Penvil Trail sanitary sewer, sewer replacement to meet City's level of service requirements under existing conditions, replace 737m of existing 250mm with new 375mm, typical depth=3.5m, replace 212m of existing 375mm with new 450mm (typical depth of 7.5m), replace 64m of existing 250mm with new 300mm (typical depth of 3.5m)	2023 - 2023	\$ 2,689,098	\$ -	\$ 2,689,098	12%	\$ 331,314	\$ 2,357,784	\$ -	\$ 2,357,784	\$ -
2.1.17 Bear Eco sanitary sewer, sewer replacement to meet City's level of service requirements under existing conditions, replace 840m of existing 250mm sanitary sewer with new 375mm, typical depth=5.5m	2023 - 2023	\$ 3,233,429	\$ -	\$ 3,233,429	18%	\$ 587,261	\$ 2,646,168	\$ -	\$ 2,646,168	\$ -
2.1.18 Monitoring and assessment of Loughed Road sanitary sewer (375mm) to confirm need for sewer replacement to meet City's level of service requirements	2023 - 2023	\$ 108,000	\$ -	\$ 108,000	0%	\$ -	\$ 108,000	\$ -	\$ 108,000	\$ -
2.1.19 Monitoring and assessment of Montserrand Street sanitary sewer (300mm) to confirm need for sewer replacement to meet City's level of service requirements	2023 - 2023	\$ 108,000	\$ -	\$ 108,000	0%	\$ -	\$ 108,000	\$ -	\$ 108,000	\$ -
2.1.20 Ardagh Street, Essa to Morrow, replace 220m of existing 250mm diameter sanitary sewer with new 300mm diameter (typical depth of 3.5m)	2023 - 2023	\$ 645,505	\$ -	\$ 645,505	23%	\$ 146,108	\$ 499,397	\$ -	\$ 499,397	\$ -
2.1.21 Morrow Road, Ardagh to 2017 construction limits, replace 595m of existing 250mm diameter sanitary sewer with new 375mm diameter (typical depth of 3.5m)	2023 - 2023	\$ 2,170,981	\$ -	\$ 2,170,981	0%	\$ -	\$ 2,170,981	\$ -	\$ 2,170,981	\$ -
2.1.22 Monitoring and assessment of Duckworth Street sanitary sewer (375mm) to confirm need for sewer replacement to meet City's level of service requirements	2023 - 2023	\$ 108,000	\$ -	\$ 108,000	0%	\$ -	\$ 108,000	\$ -	\$ 108,000	\$ -
2.1.23 Pumping Station 1 Improvements, increase storage by 95m3	2032 - 2041	\$ 882,229	\$ -	\$ 882,229	0%	\$ -	\$ 882,229	\$ -	\$ 882,229	\$ -
2.1.24 PS 1 Improvements - Twin 253m of 400mm diameter forcemain	2023 - 2023	\$ 1,906,721	\$ -	\$ 1,906,721	0%	\$ -	\$ 1,906,721	\$ -	\$ 1,906,721	\$ -
2.1.25 PS2 Improvements - Twin 343m - 250mm diameter forcemain	2023 - 2023	\$ 1,193,078	\$ -	\$ 1,193,078	0%	\$ -	\$ 1,193,078	\$ -	\$ 1,193,078	\$ -
2.1.26 PS 12 Improvements Capacity Increase at Tynedale PS (PS12), to firm capacity of 15 L/s	2032 - 2041	\$ 357,178	\$ -	\$ 357,178	0%	\$ -	\$ 357,178	\$ -	\$ 357,178	\$ -
2.1.27 PS 12 Improvements -Twin 375m-100mm diameter forcemain	2023 - 2023	\$ 1,086,988	\$ -	\$ 1,086,988	0%	\$ -	\$ 1,086,988	\$ -	\$ 1,086,988	\$ -
Subtotal Wastewater Collection Systems		\$ 158,506,710	\$ -	\$ 158,506,710		\$ 28,518,400	\$ 129,988,310	\$ -	\$ 129,988,310	\$ -
3.0 Adjustment For Funded Shares Of Projects										
3.1.1 Prior funded shares of projects	2023 - 2023	\$ (2,901,891)	\$ -	\$ (2,901,891)	0%	\$ -	\$ (2,901,891)	\$ -	\$ (2,901,891)	\$ -
Subtotal Adjustment For Funded Shares Of Projects		\$ (2,901,891)	\$ -	\$ (2,901,891)		\$ -	\$ (2,901,891)	\$ -	\$ (2,901,891)	\$ -
TOTAL WASTEWATER SERVICES - COLLECTION SYSTEMS		\$ 159,230,050	\$ -	\$ 159,230,050		\$ 28,518,400	\$ 130,711,650	\$ -	\$ 130,711,650	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2041 DC Eligible Costs	63.7%	\$83,264,062
Long-Term Growth in Population in New Units		48,436
Unadjusted Development Charge Per Capita		\$1,719.05
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	16.1%	\$21,065,278
Long-Term Growth in Square Metres		612,700
Unadjusted Development Charge Per Square Metre		\$34.38
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	20.2%	\$26,382,310
Long-Term Growth in Square Metres		1,233,120
Unadjusted Development Charge Per Square Metre		\$21.39

Current Reserve Fund Balance	(\$3,625,232)
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APPENDIX E.3

TABLE 2-1

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - COLLECTION SYSTEMS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WASTEWATER SERVICES - COLLECTION SYSTEM	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$2,309.3)	(\$14,955.0)	(\$11,064.2)	(\$6,721.6)	(\$3,264.2)	\$1,622.1	\$6,466.7	\$10,030.9	\$14,701.4	\$17,437.0
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Collection Systems: Non Infl	\$16,624.31	\$335.3	\$335.3	\$335.3	\$335.3	\$335.3	\$335.3	\$335.3	\$335.3	\$6,395.8
- Wastewater Services - Collection Systems: Inflated	\$16,624.3	\$342.0	\$348.8	\$355.8	\$362.9	\$370.2	\$377.6	\$385.1	\$392.8	\$7,643.5
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	2,525	2,773	2,564	2,206	2,806	2,614	1,847	2,292	1,250	2,294
REVENUE										
- DC Receipts: Inflated	\$4,440.6	\$4,974.3	\$4,691.39	\$4,117.1	\$5,341.6	\$5,075.6	\$3,658.1	\$4,630.2	\$2,575.7	\$4,821.5
INTEREST										
- Interest on Opening Balance	(\$127.0)	(\$822.5)	\$0.0	(\$369.7)	(\$179.5)	\$56.8	\$226.3	\$351.1	\$514.5	\$610.3
- Interest on In-year Transactions	(\$335.1)	\$81.1	\$0.0	\$65.8	\$87.1	\$82.3	\$57.4	\$74.3	\$38.2	(\$77.6)
TOTAL REVENUE	\$3,978.6	\$4,232.8	\$4,691.4	\$3,813.2	\$5,249.2	\$5,214.7	\$3,941.8	\$5,055.6	\$3,128.4	\$5,354.1
CLOSING CASH BALANCE	(\$14,955.0)	(\$11,064.2)	(\$6,721.6)	(\$3,264.2)	\$1,622.1	\$6,466.7	\$10,030.9	\$14,701.4	\$17,437.0	\$15,147.6

WASTEWATER SERVICES - COLLECTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	\$12,962.4	\$10,961.0	\$9,129.1	\$7,670.4	\$5,958.2	\$4,153.7	\$2,466.5	\$1,118.9	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Wastewater Services - Collection Systems: Non Infla	\$6,395.8	\$6,395.8	\$6,395.8	\$6,395.8	\$6,395.8	\$6,395.8	\$6,395.8	\$6,395.8	\$83,264.1
- Wastewater Services - Collection Systems: Inflated	\$7,952.3	\$8,111.4	\$8,273.6	\$8,439.1	\$8,607.9	\$8,780.0	\$8,955.6	\$9,134.7	\$103,253.9
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	2,544	2,670	2,876	2,806	2,809	2,898	3,070	3,188	48,436
REVENUE									
- DC Receipts: Inflated	\$5,562.9	\$5,955.2	\$6,543.0	\$6,511.4	\$6,648.7	\$6,996.5	\$7,560.0	\$8,007.6	\$103,265.1
INTEREST									
- Interest on Opening Balance	\$453.7	\$383.6	\$319.5	\$268.5	\$208.5	\$145.4	\$86.3	\$39.2	\$2,695.2
- Interest on In-year Transactions	(\$65.7)	(\$59.3)	(\$47.6)	(\$53.0)	(\$53.9)	(\$49.0)	(\$38.4)	(\$31.0)	(\$397.0)
TOTAL REVENUE	\$5,950.9	\$6,279.5	\$6,814.9	\$6,726.8	\$6,803.4	\$7,092.9	\$7,608.0	\$8,015.8	\$105,563.2
CLOSING CASH BALANCE	\$10,961.0	\$9,129.1	\$7,670.4	\$5,958.2	\$4,153.7	\$2,466.5	\$1,118.9	\$0.0	

2023 Adjusted Charge Per Capita **\$1,758.66**

Allocation of Capital Program

Residential Sector 63.7%
Non-Residential Sector 36.3%

Rates for 2023

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

APPENDIX E.3
TABLE 2-2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - COLLECTION SYSTEMS
RETAIL DEVELOPMENT CHARGE
(in \$000)

WASTEWATER SERVICES - COLLECTION SYSTEMS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$584.2)	(\$4,305.6)	(\$3,922.0)	(\$3,432.4)	(\$2,827.8)	(\$2,098.6)	(\$1,234.6)	(\$225.1)	\$940.2	\$2,255.9
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Collection Systems: Non Inflated	\$4,205.8	\$84.8	\$84.8	\$84.8	\$84.8	\$84.8	\$84.8	\$84.8	\$84.8	\$1,618.1
- Wastewater Services - Collection Systems: Inflated	\$4,205.8	\$86.5	\$88.2	\$90.0	\$91.8	\$93.6	\$95.5	\$97.4	\$99.4	\$1,933.8
NON-RESIDENTIAL SPACE GROWTH										
- Growth in Square Metres	16,974	18,829	20,719	22,609	24,499	26,388	28,278	30,133	32,023	30,098
REVENUE										
- DC Receipts: Inflated	\$615.3	\$696.2	\$781.4	\$869.8	\$961.3	\$1,056.2	\$1,154.5	\$1,254.8	\$1,360.2	\$1,304.0
INTEREST										
- Interest on Opening Balance	(\$32.1)	(\$236.8)	(\$215.7)	(\$188.8)	(\$155.5)	(\$115.4)	(\$67.9)	(\$12.4)	\$32.9	\$79.0
- Interest on In-year Transactions	(\$98.7)	\$10.7	\$12.1	\$13.6	\$15.2	\$16.8	\$18.5	\$20.3	\$22.1	(\$17.3)
TOTAL REVENUE	\$484.5	\$470.1	\$577.9	\$694.6	\$821.0	\$957.6	\$1,105.1	\$1,262.7	\$1,415.1	\$1,365.6
CLOSING CASH BALANCE	(\$4,305.6)	(\$3,922.0)	(\$3,432.4)	(\$2,827.8)	(\$2,098.6)	(\$1,234.6)	(\$225.1)	\$940.2	\$2,255.9	\$1,687.8

WASTEWATER SERVICES - COLLECTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	\$1,314.4	\$974.1	\$670.0	\$424.6	\$223.5	\$70.2	(\$31.1)	(\$56.3)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Wastewater Services - Collection Systems: Non Inflated	\$1,618.1	\$1,618.1	\$1,618.1	\$1,618.1	\$1,618.1	\$1,618.1	\$1,618.1	\$1,618.1	\$21,065.3
- Wastewater Services - Collection Systems: Inflated	\$2,011.9	\$2,052.1	\$2,093.2	\$2,135.0	\$2,177.7	\$2,221.3	\$2,265.7	\$2,311.0	\$26,122.6
NON-RESIDENTIAL SPACE GROWTH									
- Growth in Square Metres	36,294	37,477	39,055	40,239	41,422	42,606	44,184	45,762	612,699
REVENUE									
- DC Receipts: Inflated	\$1,635.9	\$1,723.0	\$1,831.5	\$1,924.8	\$2,021.0	\$2,120.3	\$2,242.8	\$2,369.4	\$18,720.5
INTEREST									
- Interest on Opening Balance	\$46.0	\$34.1	\$23.5	\$14.9	\$7.8	\$2.5	(\$1.7)	(\$3.1)	(\$735.3)
- Interest on In-year Transactions	(\$10.3)	(\$9.0)	(\$7.2)	(\$5.8)	(\$4.3)	(\$2.8)	(\$0.6)	\$1.0	(\$30.6)
TOTAL REVENUE	\$1,671.6	\$1,748.1	\$1,847.8	\$1,933.8	\$2,024.5	\$2,120.0	\$2,240.5	\$2,367.3	\$17,954.5
CLOSING CASH BALANCE	\$974.1	\$670.0	\$424.6	\$223.5	\$70.2	(\$31.1)	(\$56.3)	\$0.0	

2023 Adjusted Charge Per Square Metre	\$36.25
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Allocation of Capital Program	
Residential Sector	63.7%
Retail Sector	16.1%
Non-Retail Sector	20.2%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**APPENDIX E.3
TABLE 2-3**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - COLLECTION SYSTEMS
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)**

WASTEWATER SERVICES - COLLECTION SYST	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$731.7)	(\$5,281.5)	(\$4,669.3)	(\$3,902.3)	(\$2,967.9)	(\$1,850.4)	(\$536.8)	\$988.9	\$2,723.7	\$4,668.9
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balanc	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Collection Systems: Non	\$5,267.4	\$106.2	\$106.2	\$106.2	\$106.2	\$106.2	\$106.2	\$106.2	\$106.2	\$2,026.5
- Wastewater Services - Collection Systems: Infl	\$5,267.4	\$108.4	\$110.5	\$112.7	\$115.0	\$117.3	\$119.6	\$122.0	\$124.5	\$2,421.9
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	39,366	43,729	48,092	52,440	56,863	61,211	65,574	69,937	74,285	67,169
REVENUE										
- DC Receipts: Inflated	\$878.6	\$995.5	\$1,116.7	\$1,242.0	\$1,373.7	\$1,508.3	\$1,648.1	\$1,793.0	\$1,942.5	\$1,791.6
INTEREST										
- Interest on Opening Balance	(\$40.2)	(\$290.5)	(\$256.8)	(\$214.6)	(\$163.2)	(\$101.8)	(\$29.5)	\$34.6	\$95.3	\$163.4
- Interest on In-year Transactions	(\$120.7)	\$15.5	\$17.6	\$19.8	\$22.0	\$24.3	\$26.7	\$29.2	\$31.8	(\$17.3)
TOTAL REVENUE	\$717.6	\$720.5	\$877.5	\$1,047.1	\$1,232.5	\$1,430.9	\$1,645.4	\$1,856.8	\$2,069.7	\$1,937.6
CLOSING CASH BALANCE	(\$5,281.5)	(\$4,669.3)	(\$3,902.3)	(\$2,967.9)	(\$1,850.4)	(\$536.8)	\$988.9	\$2,723.7	\$4,668.9	\$4,184.7

WASTEWATER SERVICES - COLLECTION SYST	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	\$3,675.2	\$3,139.7	\$2,621.0	\$2,079.7	\$1,626.9	\$1,187.1	\$774.6	\$376.3	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Wastewater Services - Collection Systems: Non	\$2,026.5	\$2,026.5	\$2,026.5	\$2,026.5	\$2,026.5	\$2,026.5	\$2,026.5	\$2,026.5	\$26,382.3
- Wastewater Services - Collection Systems: Infl	\$2,519.7	\$2,570.1	\$2,621.5	\$2,673.9	\$2,727.4	\$2,782.0	\$2,837.6	\$2,894.3	\$32,716.1
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	67,510	69,185	69,461	73,430	74,704	76,376	77,553	78,908	1,233,126
REVENUE									
- DC Receipts: Inflated	\$1,873.4	\$1,958.3	\$2,005.4	\$2,162.4	\$2,243.9	\$2,340.0	\$2,423.6	\$2,515.3	\$24,121.4
INTEREST									
- Interest on Opening Balance	\$128.6	\$109.9	\$91.7	\$72.8	\$56.9	\$41.5	\$27.1	\$13.2	(\$253.8)
- Interest on In-year Transactions	(\$17.8)	(\$16.8)	(\$16.9)	(\$14.1)	(\$13.3)	(\$12.2)	(\$11.4)	(\$10.4)	(\$34.1)
TOTAL REVENUE	\$1,984.3	\$2,051.4	\$2,080.2	\$2,221.1	\$2,287.6	\$2,369.4	\$2,439.3	\$2,518.0	\$23,833.4
CLOSING CASH BALANCE	\$3,139.7	\$2,621.0	\$2,079.7	\$1,626.9	\$1,187.1	\$774.6	\$376.3	\$0.0	

2023 Adjusted Charge Per Square Metre **\$22.32**

Allocation of Capital Program

Residential Sector	63.7%
Retail Sector	16.1%
Non-Retail Sector	20.2%

Rates for 2023

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

Appendix E.4

Secondary Plan Areas: Water Services – Distribution Systems

Water Services – Distribution Systems

This appendix provides a brief outline of the infrastructure included in the Water Services – Distribution Systems development charge for the Secondary Plan Areas of Salem & Hewitt’s. The development-related projects outlined in this appendix are required to service the demands of new development to 2041 in the Secondary Plan Area.

The following sections describe the individual components included in the Water Services – Distribution Systems service category. The analysis is set out in the tables which follow. The tables include:

Table E.4-1	2023-2041 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs
Table E.4-2	Cash Flow Analysis

A. Development-Related Capital Program

i. Gross Capital Program Costs

The capital program includes for the recovery of a negative reserve fund balance (\$12.98 million), linear assets related to water distribution (\$226.25 million), and an adjustment for shares of projects which have previously been funded from development charges (\$12.75 million). The total capital program amounts to \$226.37 million.

ii. Grants, Subsidies and Other Recoveries

No grants, subsidies or other recoveries have been identified for this service, therefore no adjustments are made.

iii. Replacement and Benefit to Existing Shares

The water distribution assets identified in the capital program are required to service growth in the Secondary Plan Areas to 2041. As the program includes net new assets required to service this development, no benefit to existing or replacement shares have been identified.

iv. Available DC Reserve Funds

The current reserve fund balance is in a deficit position of \$12.87 million and is included for recovery in the capital program.

v. Other Development-Related / Post-Period Benefit Shares

The projects included in the capital program are required to service growth over the planning horizon. Therefore, no post-period shares of projects have been identified.

vi. 2023-2041 DC Eligible Development Related Costs

The total DC eligible in-period recoverable capital costs amount to \$226.37 million and is included for recovery in the DC rate calculation.

B. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The effect of the analysis is an increase in the development charge rates as a result of the capital program being largely front-ended. The adjusted residential charge amounts to \$4,645.42 per capita, the retail cash-flow amounts to \$103.25 per square metre of gross floor area and non-retail amounts to \$41.92 per square metre.

The following table summarizes the calculation of the Water Services – Distribution Systems development charge:

WATER SERVICES - DISTRIBUTION SYSTEMS SUMMARY							
2023 - 2041		Unadjusted				Adjusted	
Development-Related Capital Program		Development Charge				Development Charge	
Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non- Retail \$/sq.m
\$226,371,932	\$226,371,932	\$3,874.64	\$77.49	\$41.32	\$4,645.42	\$103.25	\$41.92

APPENDIX E.4

TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
SECONDARY PLAN AREAS SALEM & HEWITTS
DEVELOPMENT-RELATED CAPITAL PROGRAM
WATER SERVICES - DISTRIBUTION SYSTEMS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
WATER SERVICES - DISTRIBUTION SYSTEMS										
1.0 Recovery of Negative Reserve Fund Balance										
1.1.1 Balance as of December 31, 2022	2023 - 2023	\$ 12,871,887	\$ -	\$ 12,871,887	0%	\$ -	\$ 12,871,887	\$ -	\$ 12,871,887	\$ -
Subtotal Recovery of Negative Reserve Fund Balance		\$ 12,871,887	\$ -	\$ 12,871,887		\$ -	\$ 12,871,887	\$ -	\$ 12,871,887	\$ -
2.0 Water Distribution Systems										
2.1.1 Essa Road - Mapleview Drive West south to Athabaska Road (ANNEX-11104)	2023 - 2024	\$ 3,336,747	\$ -	\$ 3,336,747	0%	\$ -	\$ 3,336,747	\$ -	\$ 3,336,747	\$ -
2.1.2 Essa Road - Athabaska Road south to Street A (400mm) (ANNEX-11105)	2023 - 2024	\$ 2,112,615	\$ -	\$ 2,112,615	0%	\$ -	\$ 2,112,615	\$ -	\$ 2,112,615	\$ -
2.1.3 Essa Road - Street A south to Salem Road (400mm) (ANNEX-11106)	2023 - 2024	\$ 1,382,085	\$ -	\$ 1,382,085	0%	\$ -	\$ 1,382,085	\$ -	\$ 1,382,085	\$ -
2.1.4 Essa Road - Salem Road south to Street L (ANNEX-11146)	2023 - 2024	\$ 1,125,412	\$ -	\$ 1,125,412	0%	\$ -	\$ 1,125,412	\$ -	\$ 1,125,412	\$ -
2.1.5 Essa Road - Street L south to McKay Road West (ANNEX-11309)	2024 - 2041	\$ 4,126,510	\$ -	\$ 4,126,510	0%	\$ -	\$ 4,126,510	\$ -	\$ 4,126,510	\$ -
2.1.6 Salem Road - Essa Road east to Street B (ANNEX-11110)	2023 - 2024	\$ 4,481,903	\$ -	\$ 4,481,903	0%	\$ -	\$ 4,481,903	\$ -	\$ 4,481,903	\$ -
2.1.7 Salem Road - Street B east to Reid Drive (ANNEX-11111)	2023 - 2024	\$ 6,245,774	\$ -	\$ 6,245,774	0%	\$ -	\$ 6,245,774	\$ -	\$ 6,245,774	\$ -
2.1.8 Salem Road - Reid Drive east to Veterans Drive (ANNEX-11112)	2023 - 2024	\$ 3,980,354	\$ -	\$ 3,980,354	0%	\$ -	\$ 3,980,354	\$ -	\$ 3,980,354	\$ -
Salem/Lockhart Road - Salem Road Reservoir & Pumping Station east to Huronia Road - Proposed	2024 - 2031	\$ 27,446,040	\$ -	\$ 27,446,040	0%	\$ -	\$ 27,446,040	\$ -	\$ 27,446,040	\$ -
2.1.9 750mm (ANNEX-11230)	-					\$ -				
2.1.10 Salem Road - Veterans Drive east to Salem Road Reservoir & Pumping Station (ANNEX-11235)	2024 - 2031	\$ 4,511,160	\$ -	\$ 4,511,160	0%	\$ -	\$ 4,511,160	\$ -	\$ 4,511,160	\$ -
2.1.11 Salem Road Reservoir (ANNEX11250)	2024 - 2031	\$ 62,247,960	\$ -	\$ 62,247,960	0%	\$ -	\$ 62,247,960	\$ -	\$ 62,247,960	\$ -
2.1.12 Veterans Drive - Salem Road south to Street D (ANNEX - 11121)	2023 - 2024	\$ 5,347,689	\$ -	\$ 5,347,689	0%	\$ -	\$ 5,347,689	\$ -	\$ 5,347,689	\$ -
2.1.13 Veterans Drive - Street D south to Street E (ANNEX-11124)	2023 - 2024	\$ 3,510,696	\$ -	\$ 3,510,696	0%	\$ -	\$ 3,510,696	\$ -	\$ 3,510,696	\$ -
2.1.14 Veterans Drive - Street E south to McKay Road West (ANNEX-11127)	2023 - 2024	\$ 2,898,366	\$ -	\$ 2,898,366	0%	\$ -	\$ 2,898,366	\$ -	\$ 2,898,366	\$ -
2.1.15 McKay Road West - 165 metres west of Reid Drive east to Reid Drive (ANNEX-11129)	2023 - 2023	\$ 663,120	\$ -	\$ 663,120	0%	\$ -	\$ 663,120	\$ -	\$ 663,120	\$ -
McKay Road West - Veterans Drive east 410 metres to Hwy 400 proposed western interchange	2023 - 2024	\$ 3,944,704	\$ -	\$ 3,944,704	0%	\$ -	\$ 3,944,704	\$ -	\$ 3,944,704	\$ -
2.1.16 boundary (ANNEX-11144)	-					\$ -				
2.1.17 McKay Road West - Street F east 620 metres (ANNEX-115997)	2023 - 2023	\$ 2,491,560	\$ -	\$ 2,491,560	0%	\$ -	\$ 2,491,560	\$ -	\$ 2,491,560	\$ -
2.1.18 McKay Road West - Essa Road east to Street C (ANNEX-11308)	2024 - 2041	\$ 1,667,520	\$ -	\$ 1,667,520	0%	\$ -	\$ 1,667,520	\$ -	\$ 1,667,520	\$ -
2.1.19 McKay Road West - Hwy 400 interchange east to Street K (ANNEX-11420)	2024 - 2041	\$ 1,104,840	\$ -	\$ 1,104,840	0%	\$ -	\$ 1,104,840	\$ -	\$ 1,104,840	\$ -
2.1.20 McKay Road West - Reid Drive east to Veterans Drive (ANNEX-11128)	2023 - 2023	\$ -	\$ -	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -

APPENDIX E.4

TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
SECONDARY PLAN AREAS SALEM & HEWITTS
DEVELOPMENT-RELATED CAPITAL PROGRAM
WATER SERVICES - DISTRIBUTION SYSTEMS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
McKay Road West - 410 metres east of Veterans (Hwy 400 proposed western interchange boundary)	2023 - 2023	\$ 3,972,240	\$ -	\$ 3,972,240	0%	\$ -	\$ 3,972,240	\$ -	\$ 3,972,240	\$ -
2.1.21 east to Hwy 400 proposed eastern interchange boundary (ANNEX-11145)	-					\$ -				
2.1.22 McKay Road West - Street G east to Street F (ANNEX-11201)	2024 - 2031	\$ 784,080	\$ -	\$ 784,080	0%	\$ -	\$ 784,080	\$ -	\$ 784,080	\$ -
2.1.23 McKay Road West - Street H east to Street G (ANNEX-11204)	2024 - 2031	\$ 843,480	\$ -	\$ 843,480	0%	\$ -	\$ 843,480	\$ -	\$ 843,480	\$ -
2.1.24 McKay Road West - Street I east to Street H (ANNEX-11301)	2032 - 2041	\$ 2,812,320	\$ -	\$ 2,812,320	0%	\$ -	\$ 2,812,320	\$ -	\$ 2,812,320	\$ -
2.1.25 McKay Road West - Street C east to Street I (ANNEX-11303)	2032 - 2041	\$ 803,520	\$ -	\$ 803,520	0%	\$ -	\$ 803,520	\$ -	\$ 803,520	\$ -
2.1.26 Maplevue Drive East - Madelaine Drive east to Royal Jubilee Drive (ANNEX-11151)	2023 - 2025	\$ 20,866,890	\$ -	\$ 20,866,890	0%	\$ -	\$ 20,866,890	\$ -	\$ 20,866,890	\$ -
2.1.27 Maplevue Drive East - Huronia Road east to Madelaine Drive (600mm) (ANNEX-11235)	2023 - 2023	\$ 16,530,480	\$ -	\$ 16,530,480	0%	\$ -	\$ 16,530,480	\$ -	\$ 16,530,480	\$ -
2.1.28 Lockhart Road from Priscilla's PI to Street P (400mm pipe - 3km) (ANNEX-12220)	2023 - 2024	\$ 12,054,960	\$ -	\$ 12,054,960	0%	\$ -	\$ 12,054,960	\$ -	\$ 12,054,960	\$ -
2.1.29 Lockhart Road from Street P to Street M (400mm pipe - 1.4km) (ANNEX-12331)	2024 - 2031	\$ 5,625,720	\$ -	\$ 5,625,720	0%	\$ -	\$ 5,625,720	\$ -	\$ 5,625,720	\$ -
2.1.30 Big Bay Point Road - Street N east to 20 Sideroad (ANNEX-12501)	2023 - 2024	\$ 2,671,920	\$ -	\$ 2,671,920	0%	\$ -	\$ 2,671,920	\$ -	\$ 2,671,920	\$ -
2.1.31 Big Bay Point Road - 210 metres east of The Queensway east to Street M (ANNEX-12110)	2023 - 2023	\$ 1,342,596	\$ -	\$ 1,342,596	0%	\$ -	\$ 1,342,596	\$ -	\$ 1,342,596	\$ -
2.1.32 Big Bay Point Road - Street M east to Street N (ANNEX-12115)	2023 - 2023	\$ 984,960	\$ -	\$ 984,960	0%	\$ -	\$ 984,960	\$ -	\$ 984,960	\$ -
2.1.33 Huronia Road - Maplevue Drive East south to Lockhart Road (ANNEX-11231)	2024 - 2031	\$ 14,327,280	\$ -	\$ 14,327,280	0%	\$ -	\$ 14,327,280	\$ -	\$ 14,327,280	\$ -
Subtotal Water Distribution Systems		\$ 226,245,499	\$ -	\$ 226,245,499		\$ -	\$ 226,245,499	\$ -	\$ 226,245,499	\$ -
3.0 Adjustment For Funded Shares Of Projects										
3.1.1 Prior funded shares of projects	2023 - 2041	\$ (12,745,454)	\$ -	\$ (12,745,454)	0%	\$ -	\$ (12,745,454)	\$ -	\$ (12,745,454)	\$ -
Subtotal Adjustment For Funded Shares Of Projects		\$ (12,745,454)	\$ -	\$ (12,745,454)		\$ -	\$ (12,745,454)	\$ -	\$ (12,745,454)	\$ -
TOTAL WATER SERVICES - DISTRIBUTION SYSTEMS		\$ 226,371,932	\$ -	\$ 226,371,932		\$ -	\$ 226,371,932	\$ -	\$ 226,371,932	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation			
Residential Share of 2023 - 2041 DC Eligible Costs	###	\$172,367,208	
Long-Term Growth in Population in New Units		44,486	
Unadjusted Development Charge Per Capita		\$3,874.64	
Non-Residential Retail Development Charge Calculation			
Non-Residential Share of 2023 - 2041 DC Eligible Costs	7.0%	\$15,827,902	
Long-Term Growth in Square Metres		204,250	
Unadjusted Development Charge Per Square Metre		\$77.49	
Non-Residential Non-Retail Development Charge Calculation			
Non-Residential Share of 2023 - 2041 DC Eligible Costs	###	\$38,176,822	
Long-Term Growth in Square Metres		923,885	
Unadjusted Development Charge Per Square Metre		\$41.32	

Current Reserve Fund Balance (\$12,871,887)

**APPENDIX E.4
TABLE 2-1**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - DISTRIBUTION SYSTEMS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

WATER SERVICES - DISTRIBUTION SYSTEMS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$9,801.1)	(\$53,005.0)	(\$80,787.0)	(\$82,721.6)	(\$81,017.3)	(\$81,401.5)	(\$79,956.4)	(\$73,426.7)	(\$67,959.1)	(\$55,454.6)
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Distribution Systems: Non Inflated	\$54,585.86	\$36,311.2	\$16,097.7	\$10,801.4	\$10,801.4	\$10,801.4	\$10,801.4	\$10,801.4	\$10,801.4	\$56.4
- Water Services - Distribution Systems: Inflated	\$54,585.9	\$37,037.4	\$16,748.0	\$11,462.6	\$11,691.8	\$11,925.7	\$12,164.2	\$12,407.5	\$12,655.6	\$67.4
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	2,812	2,709	3,065	3,572	3,121	3,460	4,378	4,076	5,258	1,428
REVENUE										
- DC Receipts: Inflated	\$13,062.9	\$12,836.1	\$14,813.44	\$17,609.1	\$15,693.5	\$17,746.1	\$22,903.5	\$21,750.1	\$28,618.5	\$7,927.8
INTEREST										
- Interest on Opening Balance	(\$539.1)	(\$2,915.3)	\$0.0	(\$4,549.7)	(\$4,455.9)	(\$4,477.1)	(\$4,397.6)	(\$4,038.5)	(\$3,737.7)	(\$3,050.0)
- Interest on In-year Transactions	(\$1,141.9)	(\$665.5)	\$0.0	\$107.6	\$70.0	\$101.9	\$187.9	\$163.5	\$279.4	\$137.6
TOTAL REVENUE	\$11,382.0	\$9,255.3	\$14,813.4	\$13,167.0	\$11,307.6	\$13,370.8	\$18,693.8	\$17,875.1	\$25,160.1	\$5,015.4
CLOSING CASH BALANCE	(\$53,005.0)	(\$80,787.0)	(\$82,721.6)	(\$81,017.3)	(\$81,401.5)	(\$79,956.4)	(\$73,426.7)	(\$67,959.1)	(\$55,454.6)	(\$50,506.6)

WATER SERVICES - DISTRIBUTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$45,547.0)	(\$40,765.4)	(\$36,132.4)	(\$32,171.1)	(\$26,326.3)	(\$19,753.2)	(\$12,943.6)	(\$6,462.1)	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Distribution Systems: Non Inflated	\$56.4	\$56.4	\$56.4	\$56.4	\$56.4	\$56.4	\$56.4	\$56.4	\$172,367.2
- Water Services - Distribution Systems: Inflated	\$70.1	\$71.5	\$72.9	\$74.4	\$75.9	\$77.4	\$78.9	\$80.5	\$181,416.4
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	1,252	1,159	985	1,233	1,273	1,229	1,099	1,022	44,486
REVENUE									
- DC Receipts: Inflated	\$7,231.5	\$6,828.3	\$5,919.2	\$7,557.7	\$7,959.0	\$7,837.5	\$7,148.7	\$6,780.8	\$237,896.8
INTEREST									
- Interest on Opening Balance	(\$2,505.1)	(\$2,242.1)	(\$1,987.3)	(\$1,769.4)	(\$1,447.9)	(\$1,086.4)	(\$711.9)	(\$355.4)	(\$47,044.3)
- Interest on In-year Transactions	\$125.3	\$118.2	\$102.3	\$131.0	\$138.0	\$135.8	\$123.7	\$117.3	\$365.0
TOTAL REVENUE	\$4,851.8	\$4,704.4	\$4,034.2	\$5,919.3	\$6,649.0	\$6,886.9	\$6,560.5	\$6,542.6	\$191,217.5
CLOSING CASH BALANCE	(\$40,765.4)	(\$36,132.4)	(\$32,171.1)	(\$26,326.3)	(\$19,753.2)	(\$12,943.6)	(\$6,462.1)	(\$0.0)	

2023 Adjusted Charge Per Capita	\$4,645.42
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Allocation of Capital Program	
Residential Sector	76.1%
Non-Residential Sector	23.9%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX E.4
TABLE 2-2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - DISTRIBUTION SYSTEMS
RETAIL DEVELOPMENT CHARGE
(in \$000)

WATER SERVICES - DISTRIBUTION SYSTEMS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$900.0)	(\$5,330.0)	(\$8,242.2)	(\$9,294.5)	(\$9,796.3)	(\$10,233.4)	(\$10,599.6)	(\$10,887.4)	(\$11,084.3)	(\$11,185.6)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Distribution Systems: Non Inflated	\$5,012.4	\$3,334.3	\$1,478.2	\$991.9	\$991.9	\$991.9	\$991.9	\$991.9	\$991.9	\$5.2
- Water Services - Distribution Systems: Inflated	\$5,012.4	\$3,401.0	\$1,537.9	\$1,052.6	\$1,073.6	\$1,095.1	\$1,117.0	\$1,139.3	\$1,162.1	\$6.2
NON-RESIDENTIAL SPACE GROWTH										
- Growth in Square Metres	7,256	8,091	8,891	9,691	10,501	11,302	12,102	12,937	13,737	12,902
REVENUE										
- DC Receipts: Inflated	\$749.2	\$852.1	\$955.0	\$1,061.8	\$1,173.6	\$1,288.3	\$1,407.1	\$1,534.3	\$1,661.7	\$1,592.0
INTEREST										
- Interest on Opening Balance	(\$49.5)	(\$293.2)	(\$453.3)	(\$511.2)	(\$538.8)	(\$562.8)	(\$583.0)	(\$598.8)	(\$609.6)	(\$615.2)
- Interest on In-year Transactions	(\$117.2)	(\$70.1)	(\$16.0)	\$0.2	\$1.7	\$3.4	\$5.1	\$6.9	\$8.7	\$27.8
TOTAL REVENUE	\$582.4	\$488.8	\$485.7	\$550.8	\$636.5	\$728.9	\$829.2	\$942.4	\$1,060.9	\$1,004.5
CLOSING CASH BALANCE	(\$5,330.0)	(\$8,242.2)	(\$9,294.5)	(\$9,796.3)	(\$10,233.4)	(\$10,599.6)	(\$10,887.4)	(\$11,084.3)	(\$11,185.6)	(\$10,187.3)

WATER SERVICES - DISTRIBUTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$9,551.5)	(\$8,815.6)	(\$7,971.8)	(\$6,997.6)	(\$5,897.8)	(\$4,663.0)	(\$3,283.5)	(\$1,733.3)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Distribution Systems: Non Inflated	\$5.2	\$5.2	\$5.2	\$5.2	\$5.2	\$5.2	\$5.2	\$5.2	\$15,827.9
- Water Services - Distribution Systems: Inflated	\$6.4	\$6.6	\$6.7	\$6.8	\$7.0	\$7.1	\$7.2	\$7.4	\$16,658.9
NON-RESIDENTIAL SPACE GROWTH									
- Growth in Square Metres	9,706	10,023	10,445	10,761	11,078	11,394	11,816	12,238	204,261
REVENUE									
- DC Receipts: Inflated	\$1,246.0	\$1,312.4	\$1,395.0	\$1,466.0	\$1,539.3	\$1,614.9	\$1,708.2	\$1,804.6	\$18,876.2
INTEREST									
- Interest on Opening Balance	(\$525.3)	(\$484.9)	(\$438.4)	(\$384.9)	(\$324.4)	(\$256.5)	(\$180.6)	(\$95.3)	(\$7,209.2)
- Interest on In-year Transactions	\$21.7	\$22.9	\$24.3	\$25.5	\$26.8	\$28.1	\$29.8	\$31.5	(\$34.6)
TOTAL REVENUE	\$742.3	\$850.4	\$980.9	\$1,106.6	\$1,241.8	\$1,386.6	\$1,557.4	\$1,740.7	\$11,632.4
CLOSING CASH BALANCE	(\$8,815.6)	(\$7,971.8)	(\$6,997.6)	(\$5,897.8)	(\$4,663.0)	(\$3,283.5)	(\$1,733.3)	(\$0.0)	

2023 Adjusted Charge Per Square Metre

\$103.25

Allocation of Capital Program

Residential Sector	76.1%
Retail Sector	7.0%
Non-Retail Sector	16.9%

Rates for 2023

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

**APPENDIX E.4
TABLE 2-3**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WATER SERVICES - DISTRIBUTION SYSTEMS
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)**

WATER SERVICES - DISTRIBUTION SYSTEMS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$2,170.8)	(\$13,016.9)	(\$20,240.4)	(\$23,009.8)	(\$24,486.9)	(\$25,843.1)	(\$27,069.3)	(\$28,149.5)	(\$29,067.0)	(\$29,805.2)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balanc	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Services - Distribution Systems: Non Infl	\$12,090.0	\$8,042.4	\$3,565.4	\$2,392.4	\$2,392.4	\$2,392.4	\$2,392.4	\$2,392.4	\$2,392.4	\$12.5
- Water Services - Distribution Systems: Inflated	\$12,090.0	\$8,203.2	\$3,709.4	\$2,538.8	\$2,589.6	\$2,641.4	\$2,694.2	\$2,748.1	\$2,803.0	\$14.9
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	39,366	43,729	48,092	52,440	56,863	61,211	65,574	69,937	74,285	67,169
REVENUE										
- DC Receipts: Inflated	\$1,650.3	\$1,869.9	\$2,097.6	\$2,333.0	\$2,580.3	\$2,833.2	\$3,095.8	\$3,367.9	\$3,648.8	\$3,365.2
INTEREST										
- Interest on Opening Balance	(\$119.4)	(\$715.9)	(\$1,113.2)	(\$1,265.5)	(\$1,346.8)	(\$1,421.4)	(\$1,488.8)	(\$1,548.2)	(\$1,598.7)	(\$1,639.3)
- Interest on In-year Transactions	(\$287.1)	(\$174.2)	(\$44.3)	(\$5.7)	(\$0.3)	\$3.4	\$7.0	\$10.8	\$14.8	\$58.6
TOTAL REVENUE	\$1,243.8	\$979.8	\$940.0	\$1,061.8	\$1,233.3	\$1,415.2	\$1,614.1	\$1,830.5	\$2,064.9	\$1,784.6
CLOSING CASH BALANCE	(\$13,016.9)	(\$20,240.4)	(\$23,009.8)	(\$24,486.9)	(\$25,843.1)	(\$27,069.3)	(\$28,149.5)	(\$29,067.0)	(\$29,805.2)	(\$28,035.5)

WATER SERVICES - DISTRIBUTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$26,091.8)	(\$23,962.1)	(\$21,553.4)	(\$18,922.4)	(\$15,847.0)	(\$12,447.0)	(\$8,676.6)	(\$4,539.5)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Water Services - Distribution Systems: Non Infl	\$12.5	\$12.5	\$12.5	\$12.5	\$12.5	\$12.5	\$12.5	\$12.5	\$38,176.8
- Water Services - Distribution Systems: Inflated	\$15.5	\$15.8	\$16.2	\$16.5	\$16.8	\$17.1	\$17.5	\$17.8	\$40,181.1
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	67,510	69,185	69,461	73,430	74,704	76,376	77,553	78,908	1,233,126
REVENUE									
- DC Receipts: Inflated	\$3,519.0	\$3,678.4	\$3,766.9	\$4,061.8	\$4,214.9	\$4,395.5	\$4,552.5	\$4,724.6	\$45,309.0
INTEREST									
- Interest on Opening Balance	(\$1,435.1)	(\$1,317.9)	(\$1,185.4)	(\$1,040.7)	(\$871.6)	(\$684.6)	(\$477.2)	(\$249.7)	(\$18,778.3)
- Interest on In-year Transactions	\$61.3	\$64.1	\$65.6	\$70.8	\$73.5	\$76.6	\$79.4	\$82.4	(\$95.0)
TOTAL REVENUE	\$2,145.2	\$2,424.6	\$2,647.1	\$3,091.9	\$3,416.8	\$3,787.5	\$4,154.6	\$4,557.3	\$26,435.6
CLOSING CASH BALANCE	(\$23,962.1)	(\$21,553.4)	(\$18,922.4)	(\$15,847.0)	(\$12,447.0)	(\$8,676.6)	(\$4,539.5)	(\$0.0)	

2023 Adjusted Charge Per Square Metre

\$41.92

Allocation of Capital Program

Residential Sector	76.1%
Retail Sector	7.0%
Non-Retail Sector	16.9%

Rates for 2023

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

Appendix E.5

Secondary Plan Areas: Wastewater Services – Collection Systems

Wastewater Services – Collection Systems

This appendix provides a brief outline of the infrastructure included in the Wastewater Services – Collection Systems development charge for the Secondary Plan Areas of Salem & Hewitt’s in the City. The development-related projects outlined in this appendix are required to service the demands of new development to 2041 in the Secondary Plan Areas.

The following discusses the individual components included in the Wastewater Services – Collection Systems service category. The analysis is set out in the tables which follow. The tables include:

Table E.5-1	2023-2041 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs
Table E.5-2	Cash Flow Analysis

A. Development-Related Capital Program

i. Gross Capital Program Costs

The capital program includes for the recovery of a negative reserve fund balance (\$22.35 million), linear assets related to wastewater collection (\$179.36 million), and an adjustment for shares of projects which have previously been funded from development charges (\$11.36 million). The total capital program amounts to \$190.35 million.

ii. Grants, Subsidies and Other Recoveries

No grants, subsidies or other recoveries have been identified for this service, therefore no adjustments are made.

iii. Replacement and Benefit to Existing Shares

Similar to the water distribution assets described in Appendix E.4, the wastewater collection assets identified in the capital program are required to service growth in the Secondary Plan Areas to 2041. As the program includes net new assets required to service this development, no benefit to existing or replacement shares have been identified.

iv. Available DC Reserve Funds

The current reserve fund balance is in a deficit position of \$22.35 million and is included for recovery in the capital program.

v. Other Development-Related / Post-Period Benefit Shares

The projects included in the capital program are required to service growth over the planning horizon. Therefore, no post-period shares of projects have been identified.

vi. 2023-2041 DC Eligible Development Related Costs

The total DC eligible in-period recoverable capital costs amount to \$190.35 million and is included for recovery in the DC rate calculation.

B. Cash Flow Analysis

The long-term cash-flow analysis takes into consideration expenditure timing and revenue projections. The effect of the analysis is an increase in the development charge rates as a result of the capital program being largely front-ended. The adjusted residential charge amounts to \$4,055.49 per capita, the retail cash-flow amounts to \$89.99 per square metre of gross floor area and non-retail amounts to \$36.54 per square metre.

The following table summarizes the calculation of the Wastewater Services – Collection Systems development charge:

WASTEWATER SERVICES - COLLECTION SYSTEMS SUMMARY								
2023 - 2041			Unadjusted			Adjusted		
Development-Related Capital Program			Development Charge			Development Charge		
Total	Net DC Recoverable	\$/capita	Retail \$/sq.m	Non-Retail\$/sq.m	\$/capita	Retail \$/sq.m	Non- Retail \$/sq.m	
\$190,348,417	\$190,348,417	\$3,258.05	\$65.16	\$34.75	\$4,055.49	\$89.99	\$36.54	

APPENDIX E.5

TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
SECONDARY PLAN AREAS SALEM & HEWITTS
DEVELOPMENT-RELATED CAPITAL PROGRAM
WASTEWATER SERVICES - COLLECTION SYSTEMS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023- 2041	Post 2041*	
WASTEWATER SERVICES - COLLECTION SYSTEMS											
1.0 Recovery of Negative Reserve Fund Balance											
1.1.1 Balance as of December 31, 2022	2023 - 2023	\$ 22,347,618	\$ -	\$ 22,347,618	0%	\$ -	\$ 22,347,618	\$ -	\$ 22,347,618	\$ -	
Subtotal Recovery of Negative Reserve Fund Balance		\$ 22,347,618	\$ -	\$ 22,347,618		\$ -	\$ 22,347,618	\$ -	\$ 22,347,618	\$ -	
2.0 Wastewater Services - Collection Systems											
2.1.1 Construction of 1213m of 600mm on McKay Road (Project 21102a) (typical depth = 12m)	2023 - 2024	\$ 9,616,156	\$ -	\$ 9,616,156	0%	\$ -	\$ 9,616,156	\$ -	\$ 9,616,156	\$ -	
2.1.2 Construction of 1196m of 600mm on McKay (project 21102b) from Veterans east, typical depth=13m	2023 - 2024	\$ 26,579,655	\$ -	\$ 26,579,655	0%	\$ -	\$ 26,579,655	\$ -	\$ 26,579,655	\$ -	
2.1.3 Construction of 1852m of 600mm on McKay (Project 21102b2) from end of 21102b to Huronia Road,	2025 - 2026	\$ 40,685,760	\$ -	\$ 40,685,760	0%	\$ -	\$ 40,685,760	\$ -	\$ 40,685,760	\$ -	
2.1.4 Construct 1425m of 750mm on Huronia Road (Project 21103), typical depth of 6m	2025 - 2026	\$ 16,753,150	\$ -	\$ 16,753,150	0%	\$ -	\$ 16,753,150	\$ -	\$ 16,753,150	\$ -	
2.1.5 Construct 640m of new 525mm on Huronia Road (Project 21401)	2023 - 2024	\$ 9,295,485	\$ -	\$ 9,295,485	0%	\$ -	\$ 9,295,485	\$ -	\$ 9,295,485	\$ -	
2.1.6 New West Annex PS, capacity 100 L/s (Project 21301)	2024 - 2031	\$ 25,218,112	\$ -	\$ 25,218,112	0%	\$ -	\$ 25,218,112	\$ -	\$ 25,218,112	\$ -	
2.1.7 New forcemain from West Annex PS, 180m of 250mm forcemain (Project 21302)	2024 - 2031	\$ 1,391,344	\$ -	\$ 1,391,344	0%	\$ -	\$ 1,391,344	\$ -	\$ 1,391,344	\$ -	
2.1.8 Mapleview Drive East Trunk Sewer - East Annex SPS Discharge to Hewitts Creek Trunk (Project	2024 - 2025	\$ 3,406,133	\$ -	\$ 3,406,133	0%	\$ -	\$ 3,406,133	\$ -	\$ 3,406,133	\$ -	
2.1.9 Extension to existing Hewitts Creek Trunk Sewer Project, 550m - 525mm 22101	2024 - 2025	\$ 4,205,215	\$ -	\$ 4,205,215	0%	\$ -	\$ 4,205,215	\$ -	\$ 4,205,215	\$ -	
2.1.10 Extension to existing Hewitts Creek Trunk Sewer, 640m - 450mm, typical depth 5m, project 22301	2024 - 2025	\$ 3,986,294	\$ -	\$ 3,986,294	0%	\$ -	\$ 3,986,294	\$ -	\$ 3,986,294	\$ -	
2.1.11 New East Annex Pumping Station, Project 22302	2032 - 2041	\$ 25,218,112	\$ -	\$ 25,218,112	0%	\$ -	\$ 25,218,112	\$ -	\$ 25,218,112	\$ -	
2.1.12 New Twin Forcemain from East Annex PS, 730m of 250mm fm, Project 22303	2032 - 2041	\$ 5,078,406	\$ -	\$ 5,078,406	0%	\$ -	\$ 5,078,406	\$ -	\$ 5,078,406	\$ -	
2.1.13 Expand capacity at West Annex PS, Project 21402	2032 - 2041	\$ 904,886	\$ -	\$ 904,886	0%	\$ -	\$ 904,886	\$ -	\$ 904,886	\$ -	
2.1.14 Expand capacity at East Annex PS, Project 21401	2032 - 2041	\$ 904,886	\$ -	\$ 904,886	0%	\$ -	\$ 904,886	\$ -	\$ 904,886	\$ -	
Decommissioning of PS#4 and construction of 750m of 300mm diameter sanitary sewer on Lockhart	2032 - 2041	\$ 2,795,331	\$ -	\$ 2,795,331	0%	\$ -	\$ 2,795,331	\$ -	\$ 2,795,331	\$ -	
2.1.15 (SAP26003 to SAP08001), typical depth =5m											
Construction of 552m of 450mm diameter sanitary on McKay Road from West Annex PS forcemain	2024 - 2031	\$ 3,322,522	\$ -	\$ 3,322,522	0%	\$ -	\$ 3,322,522	\$ -	\$ 3,322,522	\$ -	
2.1.16 discharge to Project 21102. Typical depth 6.5m (677 to 702)											
Subtotal Wastewater Services - Collection Systems		\$ 179,361,447	\$ -	\$ 179,361,447		\$ -	\$ 179,361,447	\$ -	\$ 179,361,447	\$ -	

APPENDIX E.5

TABLE 1

CITY OF BARRIE
AREA-SPECIFIC DEVELOPMENT CHARGES
SECONDARY PLAN AREAS SALEM & HEWITTS
DEVELOPMENT-RELATED CAPITAL PROGRAM
WASTEWATER SERVICES - COLLECTION SYSTEMS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Available DC Reserves	2023-2041	Post 2041*
3.0 Adjustment For Funded Shares Of Projects										
3.1.1 Prior funded shares of projects	2023 - 2041	\$ (11,360,648)	\$ -	\$ (11,360,648)	0%	\$ -	\$ (11,360,648)	\$ -	\$ (11,360,648)	\$ -
Subtotal Adjustment For Funded Shares Of Projects		\$ (11,360,648)	\$ -	\$ (11,360,648)		\$ -	\$ (11,360,648)	\$ -	\$ (11,360,648)	\$ -
TOTAL WASTEWATER SERVICES - COLLECTION SYSTEMS		\$ 190,348,417	\$ -	\$ 190,348,417		\$ -	\$ 190,348,417	\$ -	\$ 190,348,417	\$ -

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Residential Development Charge Calculation		
Residential Share of 2023 - 2041 DC Eligible Costs	###	\$144,937,692
Long-Term Growth in Population in New Units		44,486
Unadjusted Development Charge Per Capita		\$3,258.05
Non-Residential Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	7.0%	\$13,309,142
Long-Term Growth in Square Metres		204,250
Unadjusted Development Charge Per Square Metre		\$65.16
Non-Residential Non-Retail Development Charge Calculation		
Non-Residential Share of 2023 - 2041 DC Eligible Costs	###	\$32,101,584
Long-Term Growth in Square Metres		923,885
Unadjusted Development Charge Per Square Metre		\$34.75

Current Reserve Fund Balance	(\$22,347,618)
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APPENDIX E.5

TABLE 2-1

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - COLLECTION SYSTEMS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

WASTEWATER SERVICES - COLLECTION SYSTEM	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$17,016.2)	(\$41,046.4)	(\$57,077.5)	(\$73,980.8)	(\$88,708.7)	(\$82,283.6)	(\$73,734.7)	(\$60,188.0)	(\$46,975.7)	(\$26,991.5)
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Collection Systems: Non Infl	\$33,880.25	\$24,128.3	\$28,677.0	\$24,261.6	\$2,393.6	\$2,393.6	\$2,393.6	\$2,393.6	\$2,393.6	\$2,202.2
- Wastewater Services - Collection Systems: Inflated	\$33,880.2	\$24,610.9	\$29,835.5	\$25,746.6	\$2,590.9	\$2,642.7	\$2,695.6	\$2,749.5	\$2,804.5	\$2,631.9
NEW RESIDENTIAL DEVELOPMENT										
- Population Growth in New Units	2,812	2,709	3,065	3,572	3,121	3,460	4,378	4,076	5,258	1,428
REVENUE										
- DC Receipts: Inflated	\$11,404.0	\$11,206.0	\$12,932.25	\$15,372.9	\$13,700.5	\$15,492.5	\$19,994.9	\$18,988.0	\$24,984.2	\$6,921.1
INTEREST										
- Interest on Opening Balance	(\$935.9)	(\$2,257.6)	\$0.0	(\$4,068.9)	(\$4,879.0)	(\$4,525.6)	(\$4,055.4)	(\$3,310.3)	(\$2,583.7)	(\$1,484.5)
- Interest on In-year Transactions	(\$618.1)	(\$368.6)	\$0.0	(\$285.3)	\$194.4	\$224.9	\$302.7	\$284.2	\$388.1	\$75.1
TOTAL REVENUE	\$9,850.0	\$8,579.9	\$12,932.3	\$11,018.7	\$9,016.0	\$11,191.7	\$16,242.3	\$15,961.8	\$22,788.7	\$5,511.6
CLOSING CASH BALANCE	(\$41,046.4)	(\$57,077.5)	(\$73,980.8)	(\$88,708.7)	(\$82,283.6)	(\$73,734.7)	(\$60,188.0)	(\$46,975.7)	(\$26,991.5)	(\$24,111.8)

WASTEWATER SERVICES - COLLECTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$21,353.6)	(\$18,890.5)	(\$16,705.9)	(\$15,265.5)	(\$12,348.4)	(\$8,973.5)	(\$5,581.2)	(\$2,675.7)	
2023 - 2041 RESIDENTIAL FUNDING REQUIREMENTS									
- Wastewater Services - Collection Systems: Non Infla	\$2,202.2	\$2,202.2	\$2,202.2	\$2,202.2	\$2,202.2	\$2,202.2	\$2,202.2	\$2,202.2	\$144,937.7
- Wastewater Services - Collection Systems: Inflated	\$2,738.2	\$2,793.0	\$2,848.8	\$2,905.8	\$2,963.9	\$3,023.2	\$3,083.7	\$3,145.3	\$156,375.0
NEW RESIDENTIAL DEVELOPMENT									
- Population Growth in New Units	1,252	1,159	985	1,233	1,273	1,229	1,099	1,022	44,486
REVENUE									
- DC Receipts: Inflated	\$6,313.2	\$5,961.1	\$5,167.5	\$6,597.9	\$6,948.2	\$6,842.2	\$6,240.9	\$5,919.7	\$207,685.8
INTEREST									
- Interest on Opening Balance	(\$1,174.5)	(\$1,039.0)	(\$918.8)	(\$839.6)	(\$679.2)	(\$493.5)	(\$307.0)	(\$147.2)	(\$35,025.7)
- Interest on In-year Transactions	\$62.6	\$55.4	\$40.6	\$64.6	\$69.7	\$66.8	\$55.3	\$48.6	\$731.2
TOTAL REVENUE	\$5,201.3	\$4,977.6	\$4,289.3	\$5,823.0	\$6,338.8	\$6,415.5	\$5,989.1	\$5,821.1	\$173,391.2
CLOSING CASH BALANCE	(\$18,890.5)	(\$16,705.9)	(\$15,265.5)	(\$12,348.4)	(\$8,973.5)	(\$5,581.2)	(\$2,675.7)	\$0.0	

2023 Adjusted Charge Per Capita **\$4,055.49**

Allocation of Capital Program

Residential Sector 76.1%
Non-Residential Sector 23.9%

Rates for 2023

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

APPENDIX E.5
TABLE 2-2

CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - COLLECTION SYSTEMS
RETAIL DEVELOPMENT CHARGE
(in \$000)

WASTEWATER SERVICES - COLLECTION SYSTEMS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$1,562.5)	(\$4,174.2)	(\$5,962.8)	(\$8,250.5)	(\$10,182.6)	(\$9,944.0)	(\$9,595.2)	(\$9,126.9)	(\$8,525.1)	(\$7,782.3)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balance)	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Collection Systems: Non Inflated	\$3,111.1	\$2,215.6	\$2,633.3	\$2,227.9	\$219.8	\$219.8	\$219.8	\$219.8	\$219.8	\$202.2
- Wastewater Services - Collection Systems: Inflated	\$3,111.1	\$2,259.9	\$2,739.7	\$2,364.2	\$237.9	\$242.7	\$247.5	\$252.5	\$257.5	\$241.7
NON-RESIDENTIAL SPACE GROWTH										
- Growth in Square Metres	7,256	8,091	8,891	9,691	10,501	11,302	12,102	12,937	13,737	12,902
REVENUE										
- DC Receipts: Inflated	\$653.0	\$742.7	\$832.4	\$925.5	\$1,022.9	\$1,122.9	\$1,226.4	\$1,337.3	\$1,448.4	\$1,387.5
INTEREST										
- Interest on Opening Balance	(\$85.9)	(\$229.6)	(\$328.0)	(\$453.8)	(\$560.0)	(\$546.9)	(\$527.7)	(\$502.0)	(\$468.9)	(\$428.0)
- Interest on In-year Transactions	(\$67.6)	(\$41.7)	(\$52.5)	(\$39.6)	\$13.7	\$15.4	\$17.1	\$19.0	\$20.8	\$20.1
TOTAL REVENUE	\$499.4	\$471.4	\$452.0	\$432.1	\$476.6	\$591.4	\$715.8	\$854.3	\$1,000.3	\$979.6
CLOSING CASH BALANCE	(\$4,174.2)	(\$5,962.8)	(\$8,250.5)	(\$10,182.6)	(\$9,944.0)	(\$9,595.2)	(\$9,126.9)	(\$8,525.1)	(\$7,782.3)	(\$7,044.4)

WASTEWATER SERVICES - COLLECTION SYSTEMS	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$6,634.6)	(\$6,150.3)	(\$5,585.6)	(\$4,921.8)	(\$4,163.9)	(\$3,304.7)	(\$2,336.7)	(\$1,238.4)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Wastewater Services - Collection Systems: Non Inflated	\$202.2	\$202.2	\$202.2	\$202.2	\$202.2	\$202.2	\$202.2	\$202.2	\$13,309.1
- Wastewater Services - Collection Systems: Inflated	\$251.4	\$256.5	\$261.6	\$266.8	\$272.2	\$277.6	\$283.2	\$288.8	\$14,359.4
NON-RESIDENTIAL SPACE GROWTH									
- Growth in Square Metres	9,706	10,023	10,445	10,761	11,078	11,394	11,816	12,238	204,261
REVENUE									
- DC Receipts: Inflated	\$1,086.0	\$1,143.9	\$1,215.9	\$1,277.7	\$1,341.7	\$1,407.6	\$1,488.9	\$1,572.9	\$16,452.5
INTEREST									
- Interest on Opening Balance	(\$364.9)	(\$338.3)	(\$307.2)	(\$270.7)	(\$229.0)	(\$181.8)	(\$128.5)	(\$68.1)	(\$5,799.4)
- Interest on In-year Transactions	\$14.6	\$15.5	\$16.7	\$17.7	\$18.7	\$19.8	\$21.1	\$22.5	(\$17.0)
TOTAL REVENUE	\$735.7	\$821.2	\$925.4	\$1,024.7	\$1,131.4	\$1,245.6	\$1,381.5	\$1,527.3	\$10,636.2
CLOSING CASH BALANCE	(\$6,150.3)	(\$5,585.6)	(\$4,921.8)	(\$4,163.9)	(\$3,304.7)	(\$2,336.7)	(\$1,238.4)	\$0.0	

2023 Adjusted Charge Per Square Metre	\$89.99
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Allocation of Capital Program	
Residential Sector	76.1%
Retail Sector	7.0%
Non-Retail Sector	16.9%
Rates for 2023	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**APPENDIX E.5
TABLE 2-3**

**CITY OF BARRIE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTEWATER SERVICES - COLLECTION SYSTEMS
NON-RETAIL DEVELOPMENT CHARGE
(in \$000)**

WASTEWATER SERVICES - COLLECTION SYST	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPENING CASH BALANCE	(\$3,768.8)	(\$10,208.5)	(\$14,696.2)	(\$20,415.8)	(\$25,308.7)	(\$24,996.2)	(\$24,453.9)	(\$23,660.8)	(\$22,594.9)	(\$21,233.8)
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS										
- Prior Growth (Funding from DC Reserve Balanc	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Wastewater Services - Collection Systems: Non	\$7,504.0	\$5,344.1	\$6,351.5	\$5,373.6	\$530.2	\$530.2	\$530.2	\$530.2	\$530.2	\$487.8
- Wastewater Services - Collection Systems: Infl	\$7,504.0	\$5,451.0	\$6,608.1	\$5,702.5	\$573.9	\$585.3	\$597.0	\$609.0	\$621.2	\$582.9
NON-RESIDENTIAL SPACE GROWTH										
- Non-Retail Growth in Square Metres	39,366	43,729	48,092	52,440	56,863	61,211	65,574	69,937	74,285	67,169
REVENUE										
- DC Receipts: Inflated	\$1,438.4	\$1,629.8	\$1,828.3	\$2,033.4	\$2,249.0	\$2,469.4	\$2,698.3	\$2,935.4	\$3,180.3	\$2,933.2
INTEREST										
- Interest on Opening Balance	(\$207.3)	(\$561.5)	(\$808.3)	(\$1,122.9)	(\$1,392.0)	(\$1,374.8)	(\$1,345.0)	(\$1,301.3)	(\$1,242.7)	(\$1,167.9)
- Interest on In-year Transactions	(\$166.8)	(\$105.1)	(\$131.4)	(\$100.9)	\$29.3	\$33.0	\$36.8	\$40.7	\$44.8	\$41.1
TOTAL REVENUE	\$1,064.3	\$963.2	\$888.5	\$809.7	\$886.4	\$1,127.6	\$1,390.1	\$1,674.8	\$1,982.4	\$1,806.4
CLOSING CASH BALANCE	(\$10,208.5)	(\$14,696.2)	(\$20,415.8)	(\$25,308.7)	(\$24,996.2)	(\$24,453.9)	(\$23,660.8)	(\$22,594.9)	(\$21,233.8)	(\$20,010.3)

WASTEWATER SERVICES - COLLECTION SYST	2034	2035	2036	2037	2038	2039	2040	2041	TOTAL
OPENING CASH BALANCE	(\$18,664.2)	(\$17,187.0)	(\$15,499.5)	(\$13,653.3)	(\$11,456.8)	(\$9,016.8)	(\$6,295.9)	(\$3,299.8)	
2023 - 2041 NON-RESIDENTIAL FUNDING REQUIREMENTS									
- Wastewater Services - Collection Systems: Non	\$487.8	\$487.8	\$487.8	\$487.8	\$487.8	\$487.8	\$487.8	\$487.8	\$32,101.6
- Wastewater Services - Collection Systems: Infl	\$606.5	\$618.6	\$631.0	\$643.6	\$656.5	\$669.6	\$683.0	\$696.6	\$34,634.8
NON-RESIDENTIAL SPACE GROWTH									
- Non-Retail Growth in Square Metres	67,510	69,185	69,461	73,430	74,704	76,376	77,553	78,908	1,233,126
REVENUE									
- DC Receipts: Inflated	\$3,067.1	\$3,206.1	\$3,283.3	\$3,540.3	\$3,673.8	\$3,831.1	\$3,967.9	\$4,118.0	\$39,491.5
INTEREST									
- Interest on Opening Balance	(\$1,026.5)	(\$945.3)	(\$852.5)	(\$750.9)	(\$630.1)	(\$495.9)	(\$346.3)	(\$181.5)	(\$15,199.3)
- Interest on In-year Transactions	\$43.1	\$45.3	\$46.4	\$50.7	\$52.8	\$55.3	\$57.5	\$59.9	(\$51.0)
TOTAL REVENUE	\$2,083.7	\$2,306.1	\$2,477.2	\$2,840.1	\$3,096.4	\$3,390.5	\$3,679.2	\$3,996.4	\$24,241.1
CLOSING CASH BALANCE	(\$17,187.0)	(\$15,499.5)	(\$13,653.3)	(\$11,456.8)	(\$9,016.8)	(\$6,295.9)	(\$3,299.8)	(\$0.0)	

2023 Adjusted Charge Per Square Metre

\$36.54

Allocation of Capital Program

Residential Sector	76.1%
Retail Sector	7.0%
Non-Retail Sector	16.9%

Rates for 2023

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

Appendix F

Reserve Fund Balances

Development Charges Reserve Fund

Unallocated Balances

The DCA requires that a reserve fund be established for each service for which development charges are collected. Table F-1 presents the uncommitted reserve fund balances that are available to fund the growth-related net capital costs identified in this study. The opening balances of the development charges reserve funds are as of December 31, 2022 since the first capital year of the study is 2023.

As shown on Table F-1, the December 31, 2022 total reserve fund balance was in a positive position of \$79.24 million. The application of each of the reserve funds is discussed in the appendix section related to each service. In the services where the balance is negative, the deficit is recovered up to the limitations allowable under the legislation.

The reserve fund balance associated with the Whiskey Creek Stormwater Ponds and Downstream Conveyance Works has been combined with Former Boundary - Stormwater Drainage And Control Services reserve fund for the purposes of the development charge rate calculation as the Whiskey Creek area-specific charge has been removed as part of this study.

APPENDIX F

TABLE 1

**DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
AS AT DECEMBER 31, 2022**

Service	Reserve Fund Balance
CITY-WIDE DEVELOPMENT CHARGES	
Library Services	\$3,169,263
Protection Services	(\$3,709,723)
Parks And Recreation	\$31,241,495
Services Related To A Highway: Public Works And Fleet	\$3,176,665
Transit Services	\$1,420,104
Long Term Care Services	\$100,532
Ambulance Services	(\$3,071,129)
Waste Diversion Services	\$1,253,848
Services Related To A Highway: Roads	\$123,910,438
Water Services - Facilities	\$584,655
Water Services - Facilities Related Debt	(\$32,016,295)
Wastewater Services - Facilities	\$40,703,840
Wastewater Services - Facilities Related Debt	(\$47,692,059)
AREA-SPECIFIC: FORMER CITY OF BARRIE	
Stormwater Drainage And Control Services	\$3,078,345
Water Services - Distribution Systems	(\$5,819,498)
Wastewater Services - Collection Systems	(\$3,625,232)
AREA-SPECIFIC: SALEM & HEWITT'S SECONDARY PLAN AREA	
Water Services - Distribution Systems	(\$12,871,887)
Wastewater Services - Collection Systems	(\$22,347,618)
AREA-SPECIFIC: WHISKEY CREEK ¹	
Stormwater Ponds	\$957,133
Downstream Conveyance Works	\$801,608
TOTAL DEVELOPMENT CHARGE RESERVES	\$79,244,485

¹ Whiskey Creek reserve fund balances have been combined with the Area-Specific Former City of Barrie Stormwater Drainage and Control Services reserve for the purposes of this study.

Appendix G
Cost of Growth – All Services
Excluding Transit

Cost of Growth Analysis – All Services Excluding Transit

Asset Management Plan

The DCA requires that municipalities complete an Asset Management Plan before passing a development charges by-law. A key function of the Asset Management Plan, as required by the legislation, is to demonstrate that all assets 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 for eligible DC services considered as part of the study are outlined in Table G-1 and Table G-2. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. The exception 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.

- For assets that have been constructed (i.e. recovery of past debenture commitments) it is assumed that the related contribution is already included within the City's annual provision (see below for additional details). As such, these projects are identified as "not applicable" in the table.

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

Table G-1 – Summary of Municipal Assets Considered City-wide for General Services (Excluding Transit)

Service	Estimated Useful Life
Library Services	
Buildings	40 years
Materials and Equipment	7 years
Protection Services	
Buildings	40 years
Vehicles	10-20 years
Equipment	8 years
Parks and Recreation	
Parkland Development	20 years
Recreation Facilities	50 years
Fleet	7-10 years
Services Related to a Highway: Public Works and Fleet	
Buildings	40 years
Fleet	7-10 years
Equipment	7 years

Service	Estimated Useful Life
Ambulance Services	
Stations	40 years
Fleet	10 years
Waste Diversion Services	
Facilities and Land	40 years
Vehicles and Equipment	20 years
Long Term Care	
Buildings	40 years
Waste Diversion	
Buildings	40 years
Equipment	10 years

Table G-2 – Summary of Municipal Assets Considered for Engineered Services

Service	Estimated Useful Life
Services Related to a Highway: Roads	
Roads	60 years
Intersection Improvement	60 years
Sidewalks	50 years
Cycling Facilities	35 years
Multi-Use Facilities	20 years
Bus Stops	15 years
Wastewater	
Debentures	0 years
Peak Attenuation System	10 years
Primary Digester	50 years
Biosolids Thickening System	45 years
Treatment Facility	40 years
Primary Clarifiers	50 years
Collection System (Linear Infrastructure)	80 years

Service	Estimated Useful Life
Water	
Water System Upgrades	50 years
Watermains	50 years
Wells	50 years
Buildings	50 years
Pumps	20 years
Distribution	60 years
Stormwater	
Stormwater Pipes	50 years
Buildings	50 years
Ponds	60 years

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 growth-related and are therefore not eligible for funding through development charge revenues or other developer contributions.

Based on the information obtained from City's current Asset Management Plans and city staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated for both the general and engineered services, excluding transit related infrastructure. 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 per cent) and interest (3.5 per cent).

Consistent with the requirements of the DCA, assets that are proposed to be funded under the development charges by-law have been included in the analysis. As a result, the total calculated annual provision for development charge related infrastructure has been netted down to consider the replacement of existing infrastructure or benefit-to-existing development. However, for reference, the annual replacement provisions associated with the non-development charge funded costs, including costs related to the benefit-to-existing and post-period benefit have also been calculated.

Table G-3 and G-4 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2023-2032 and 2023-2041 DC recoverable portion. The year 2033 and 2042 have been included to calculate the annual contribution for the 2023-2032 and 2023-2041 periods as the expenditures in 2032 and 2041 will not trigger asset management contributions until 2033 and 2042, respectively. As shown in Table G-3, by 2033, the City will need to fund an additional \$5.90 million per annum in order to properly fund the full life cycle costs of the new assets related to the general services supported under the development charges by-law.

Table G-4 provides a separate analysis of the annual provisions required for the engineered services capital program as the program extends to 2041. As shown in Table G-4, the annual provision in 2042 amounts to \$18.24 million.

Table G-3 – Calculated Annual Provision by 2033 for General Services

Service	2023 - 2032 Capital Program		Calculated AMP Annual Provision by 2033	
	DC Related	Non-DC Related*	DC Related	Non-DC Related*
Library Services	\$24,837,990	\$18,012,010	\$1,095,778	\$205,829
Protection Services	\$47,454,402	\$24,220,921	\$1,256,719	\$287,391
Parks And Recreation	\$254,253,838	\$181,478,776	\$2,266,162	\$3,645,187
Services Related To A Highway: Public Works And Fleet	\$46,188,926	\$82,436,074	\$878,437	\$1,210,569
Ambulance Services	\$7,043,806	\$27,792,106	\$89,748	\$851,924
Long Term Care Services	\$2,447,924	\$83,835,755	\$27,973	\$958,018
Waste Diversion Services	\$22,180,152	\$1,253,848	\$284,244	\$14,328
TOTAL	\$404,407,038	\$419,029,490	\$5,899,061	\$7,173,247

* Includes costs that will be recovered under future development charges studies (i.e. other development-related).

Table G-4 – Calculated Annual Provision for 2042 for Engineered Services

Service	2023 - 2041 Capital Program		Calculated AMP Annual Provision by 2042	
	DC Related	Non-DC Related*	DC Related	Non-DC Related*
City-Wide Services				
Services Related To A Highway: Roads	\$2,280,792,431	\$1,721,081,963	\$12,564,298	\$9,692,010
Water Services - Facilities	\$11,259,995	\$2,253,112	\$83,049	\$16,618
Wastewater Services - Facilities	\$368,245,971	\$156,309,969	\$3,015,870	\$3,438,697
Former City of Barrie				
Stormwater Drainage And Control Services	\$109,992,704	\$345,306,001	\$573,758	\$1,694,598
Water Services - Distribution Systems	\$35,951,230	\$11,758,110	\$178,416	\$57,809
Wastewater Services - Collection Systems	\$130,711,650	\$28,518,400	\$299,524	\$65,713
Salem & Hewitt's Secondary Plan Areas				
Water Services - Distribution Systems	\$226,371,932	\$0	\$1,112,346	\$0
Wastewater Services - Collection Systems	\$190,348,417	\$0	\$413,292	\$0
TOTAL	\$3,353,674,331	\$2,265,227,555	\$18,240,552	\$14,965,446

* Includes costs that will be recovered under future development charges studies (i.e. other development-related).

Financial Sustainability of the Program

Future Revenue Growth

The calculated annual funding provision should be considered within the context of the City's projected growth. Over the next ten years (to 2032) the City is projected to increase by approximately 25,000 households. In addition, the City will also add nearly 18,460 new employees that will result in approximately 1.36 million square metres of additional non-residential building space.

By 2041, there will be an increase of nearly 42,500 new households. In addition, the City will also add nearly 41,540 new employees that will result in approximately 2.97 million square metres of additional non-residential building space. This growth will have the effect of increasing the overall assessment base and additional user fee 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 the City's reserves for the future replacement of these assets.

Long-Term Capital and Operating Impact Analysis

As shown in Table G-5, by 2032, the City's net operating costs are estimated to increase by \$24.04 million for property tax supported services. Increases in net operating costs will be experienced as new facilities such as community centres are opened. Table G-6 shows that by 2041, the City's net operating costs for engineered services will increase by \$6.82 million. Operating and maintenance costs will also increase as additions to the City's road network are made.

Table G-7 summarizes the components of the development-related capital forecast that will require funding from non-DC sources. In total, \$1.13 billion will need to be financed from non-DC sources over the 2023-2032 and 2023-2041 planning period. In addition, \$1.25 billion in interim DC financing related to post-period shares of projects may be required or these costs may be recovered from other growth funding tools.

The share of the development-related capital forecast requiring funding from non-DC sources of \$1.13 billion is related to replacement of existing City facilities with newer and larger facilities that will benefit the existing community. Council is made aware of these factors so that they understand the operating and capital costs that will not be covered by DCs as it adopts the development-related capital forecast set out in the study.

The Program is Deemed Financially Sustainable

In summary, the asset management plan and long-term capital and operating analysis included in this appendix demonstrates that the City can afford to invest and operate the identified general and engineered services infrastructure over the 10-year and long-term planning period.

In addition, as part of the annual budget update the City also contributes to asset replacement reserves and spends on yearly asset replacement needs as needed.

Through this annual exercise, staff identify the required funding and propose mitigating measures in order to ensure there are sufficient funds in reserves over the long term. Life-cycle funding methodologies are also reviewed in order to ensure that the City is continuing to implement financially sustainable practices for funding the eventual replacement of assets.

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 G-5

CITY OF BARRIE
 COST OF GROWTH ANALYSIS ALL SERVICES EXCLUDING TRANSIT
 ESTIMATED NET OPERATING COST OF THE PROPOSED
 2023-2032 DEVELOPMENT-RELATED CAPITAL PROGRAM
 (in constant 2023 dollars)

Category	Cost Driver (in 2023 \$)			Additional Operating Costs at 2032	Source and Commentary (1)
	\$	unit measure	Quantity		
Library Services				\$4,944,077	
- Buildings, Land and Furnishings	\$110	per sq.ft. of new library space	45,000	\$4,944,077	Based on 2021 FIR and 2023 Capital Program
Protection Services				\$2,900,000	
- Buildings, Land and Furnishings	\$100	per sq.ft. of new fire and police station space	29,000	\$2,900,000	Based on operating assumptions in comparable municipalities and 2023 Capital Program
Parks And Recreation				\$11,281,579	
- Buildings, Land & Furnishings	\$23	per sq.ft. of new recreation space	383,100	\$8,935,499	Based on 2021 FIR and 2023 Capital Program
- Park Development and Facilities	\$22.00	per \$1,000 of total infrastructure value	\$ 106,640	\$2,346,080	Based on 2021 FIR and 2023 Capital Program
Services Related To A Highway: Public Works And Fleet				\$2,566,800	
- Buildings, Land and Fleet	\$20	per \$1,000 of total infrastructure value	\$ 128,340	\$2,566,800	Based on operating assumptions in comparable municipalities and 2023 Capital Program
Waste Diversion Services				\$2,345,607	
	\$94	per household infrastructure value	\$ 25,008.0	\$2,345,607	Based on 2021 FIR and 2023 Capital Program
TOTAL ESTIMATED OPERATING COSTS				\$24,038,063	

TABLE G-6

CITY OF BARRIE
 COST OF GROWTH ANALYSIS ALL SERVICES EXCLUDING TRANSIT
 ESTIMATED NET OPERATING COST OF THE PROPOSED
 2023-2041 DEVELOPMENT-RELATED CAPITAL PROGRAM
 (in constant 2023 dollars)

Category	Cost Driver (in 2023 \$)			Additional Operating Costs at 2041	Source and Commentary (Note 1)
	\$	unit measure	Quantity		
Services Related To A Highway: Roads				\$6,815,164	
- Development-Related Roads Infrastructure	\$160	per household	42,505	\$6,815,164	Based on 2021 FIR and 2023 Capital Program
TOTAL ESTIMATED OPERATING COSTS				\$6,815,164	

TABLE G-7

CITY OF BARRIE
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES

General Services	Development-Related Capital Program (2023 - 2032)				Total DC Eligible Costs for Recovery (\$000)
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Available DC Reserves (\$000)	Post-Period Benefit* (\$000)	
1 LIBRARY SERVICES	\$42,850.0	\$1,350.0	\$3,169.3	\$13,492.7	\$24,838.0
2 PROTECTION SERVICES	\$71,675.3	\$24,220.9	\$0.0	\$0.0	\$47,454.4
3 PARKS AND RECREATION	\$435,732.6	\$33,897.4	\$31,241.5	\$116,339.9	\$254,253.8
4 SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS AND FLEET	\$128,625.0	\$49,245.8	\$3,176.7	\$30,013.6	\$46,188.9
5 LONG TERM CARE SERVICES	\$8,466.1	\$5,917.6	\$100.5	\$0.0	\$2,447.9
6 AMBULANCE SERVICES	\$18,370.5	\$4,216.7	\$0.0	\$7,109.9	\$7,043.8
7 WASTE DIVERSION SERVICES	\$23,434.0	\$0.0	\$1,253.8	\$0.0	\$22,180.2
TOTAL GENERAL SERVICES	\$729,153.5	\$118,848.5	\$38,941.8	\$166,956.2	\$404,407.0

*Development related costs to be considered for funding from other tools and/or future DC Studies.

Engineered Services	Development-Related Capital Program (2023 - 2041)				Total DC Eligible Costs for Recovery (\$000)
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Available DC Reserves (\$000)	Post-Period Benefit* (\$000)	
CITY-WIDE SERVICES					
1 SERVICES RELATED TO A HIGHWAY: ROADS	\$4,001,874.4	\$534,464.2	\$123,910.4	\$1,062,707.3	\$2,280,792.4
2 WATER SERVICES - FACILITIES	\$13,513.1	\$1,668.5	\$584.7	\$0.0	\$11,260.0
3 WATER SERVICES - FACILITIES RELATED DEBT	\$151,602.3	\$0.0	\$0.0	\$0.0	\$151,602.3
4 WASTEWATER SERVICES - FACILITIES	\$524,555.9	\$93,056.4	\$40,703.8	\$22,549.7	\$368,246.0
5 WASTEWATER SERVICES - FACILITIES RELATED DEBT	\$108,531.3	\$0.0	\$0.0	\$0.0	\$108,531.3
TOTAL CITY-WIDE SERVICES	\$4,800,077.0	\$629,189.1	\$165,198.9	\$1,085,257.0	\$2,920,432.0
FORMER CITY OF BARRIE					
1 STORMWATER DRAINAGE AND CONTROL SERVICES	\$455,298.7	\$340,468.9	\$4,837.1	\$0.0	\$109,992.7
2 WATER SERVICES - DISTRIBUTION SYSTEMS	\$47,709.3	\$11,758.1	\$0.0	\$0.0	\$35,951.2
3 WASTEWATER SERVICES - COLLECTION SYSTEMS	\$159,230.1	\$28,518.4	\$0.0	\$0.0	\$130,711.7
TOTAL FORMER CITY OF BARRIE	\$662,238.1	\$380,745.4	\$4,837.1	\$0.0	\$276,655.6
SALEM & HEWITT'S SECONDARY PLAN AREAS					
1 WATER SERVICES - DISTRIBUTION SYSTEMS	\$226,371.9	\$0.0	\$0.0	\$0.0	\$226,371.9
2 WASTEWATER SERVICES - COLLECTION SYSTEMS	\$190,348.4	\$0.0	\$0.0	\$0.0	\$190,348.4
TOTAL SALEM & HEWITT'S SECONDARY PLAN AREAS	\$416,720.3	\$0.0	\$0.0	\$0.0	\$416,720.3
TOTAL ENGINEERED SERVICES	\$5,879,035.5	\$1,009,934.5	\$170,036.0	\$1,085,257.0	\$3,613,807.9

*Development related costs to be considered for funding from other tools and/or future DC Studies.

TOTAL GENERAL AND ENGINEERED SERVICES	\$6,608,188.9	\$1,128,783.0	\$208,977.8	\$1,252,213.2	\$4,018,215.0
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Appendix H

Local Service Guidelines

Local Service Guidelines

The following guidelines set out in general terms the size and nature of engineered infrastructure that is included in the City of Barrie Development Charge Study or projects which are considered to be a local developer responsibility. Projects eligible to be funded in part by development charges include the following criteria:

- The project will be required to be listed in the most current City of Barrie Development Charges Study.
- If any infrastructure that does not add any additional capacity over and above the capacity requirement for that development, are assumed to be the sole responsibility of the developer.
- Infrastructure that provides servicing or capacity for more than one development is not necessarily fully or partially funded from development charges. If a project is considered fully or partially local in nature, the City will require the benefiting land owners to fund the works directly.

The following policy guidelines are general principles by which staff will be guided in considering development applications. Each application will be considered on its own merits having regard to, among other factors, the nature, type and location of the development in any existing or proposed development in its surrounding area. These policy guidelines, the location and type of services required and their relationship to the proposed development and to existing and proposed development in the area, and subsection 59(2) of the *Development Charges Act, 1997*, will also be assessed.

These local service policy guidelines are subject to review and amendment by the City which may be independent of an amendment or update to the City's development charge by-laws.

The detailed engineering requirements for all work and/or development are governed by the City of Barrie Official Plan, or if not specified in the Official Plan, by the approved detailed engineering standards and/or related master plans.

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 land owner or developer. The issue of "local services" is being specifically considered for the services outlined in the following sections.

1. Definitions

Arterial Road - As defined in the City of Barrie Official Plan as amended.

AT – Active Transportation

BPS – Booster Pump Station

BTE – Benefit to Existing development

Collector Road - As defined in the City of Barrie Official Plan and includes both minor and major collectors.

Community Park – Community level parks providing facilities for both organized and non-organized sports as well as active and passive recreation activities. Access is focused on Automobile, Cycling and Pedestrian movement.

DCs – Development Charges.

DCA – Development Charges Act, 1997, S.O. 1997, c.27, as amended.

Direct Access – new or upgraded infrastructure required to provide access from the external Road or active transportation network to the area of a Development.

District Park – Generally associated with Facilities, these parks serve multiple neighbourhood communities with a focus on structured sports while providing both active and passive recreation opportunities. Facilities are generally focused on access via public transit, automobiles and cycling.

Former Barrie Municipal Boundary (Former Barrie) – land within Barrie outside of the Salem and Hewitt's Secondary Plan Areas.

Hazel in LSRCA – refers to Ontario Regulation 179/06 Lake Simcoe Region Conservation Authority: Regulation of Development, Interference with Wetlands and Alteration to Shorelines and Watercourses: 11 (1). The applicable flood event standards used to determine the maximum susceptibility to flooding of lands or areas within the watersheds in the area of jurisdiction of the Authority are the Hurricane Hazel Flood Event Standard, the Timmins Flood Event Standard, the 100 year Flood Event Standard and the 100 year flood level plus wave uprush, described in Schedule 1. O. Reg. 179/06, s. 11 (1).

Highway – includes a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the general public for the passage of vehicles and includes the area between the lateral property lines thereof.

HOV – High Occupancy Vehicles

Lanes – As defined in the City of Barrie Official Plan

LID – Low Impact Development (L.I.D.) is a stormwater management approach that manages rainfall at the source using uniformly distributed decentralized micro-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

Local Benefit – infrastructure to be paid for by the developer. Direct developer responsibility under s.59 of DCA (as a local service).

Local Road – As defined in the City of Barrie Official Plan as amended.

LSRCA – Lake Simcoe Region Conservation Authority.

Natural Heritage System (NHS) – A system made up of natural heritage features and areas, and linkages intended to provide connectivity and support natural processes which are necessary to maintain biological and

geological diversity, natural functions, viable populations of indigenous species and ecosystems. Also referred to as Open Space and Environmentally Protected Lands in the City's zoning bylaw.

Neighbourhood Park - Serves as a neighbourhood focal point with a primary focus on children and youth as well as providing additional opportunities for residents within walking distance of the park (800m).

NVCA – Nottawasaga Valley Conservation Authority.

OP – Official Plan.

Pathways – Pedestrian circulation within a Park Block which provide for internal circulation and access. Pathways are generally 3.0m in width and are paved.

Regional Park - Recreation areas which serve passive and active recreation activities that serve a level of interest greater than the local community.

Regulatory Storm – the greater of the regional (Hazel in LSRCA and Timmins in NVCA) or 100 year storm.

Roadways – Sidewalks and multi-use pathways within the road network.

ROW – Right-of-Way.

SWMF - Stormwater Management Facility.

TDM – Travel Demand Management.

Timmins in NVCA – refers to Ontario Regulation 172/06 Nottawasaga Valley Conservation Authority: Regulation of Development Interference with Wetlands and Alterations to Shorelines and Watercourses Section 11 – Flood event standards 11. The applicable flood event standards used to determine the maximum susceptibility to flooding of lands or areas within the watersheds in the area of jurisdiction of the Authority are Timmins Storm

Flood Event Standards, the 100 Year Flood Event Standard and the 100-year flood level plus wave uprush, described in Schedule 1.0. Reg. 172/06, s.11.

TMP – 2019 Transportation Master Plan, or the most current TMP update

Trails – Pedestrian circulation within an Open Space or Environmentally Protected designation which can vary in surface material and width. Trails may also link one or more park block designations with a common linkage that can form part of the internal park circulation such as the water front trails. In this case a pathway can be part of a larger trail network. The following are the Trail Hierarchy Classifications based on the recommendations of the 2019 Transportation Master Plan:

- Type 1 Trail / Waterfront Multi-Use - The general function of this trail system is for recreation, leisure and active transportation including commuting functions by providing access to and along the public waterfront. The ease of use rating is 'Easy' with a very high anticipated level of use on weekends and during peak tourist seasons, celebrations and events.
- Type 2 Trail / Multi-Use Trail - The general function of this trail system is for recreation, leisure and active transportation including commuting functions, providing access to key destinations such as community centres, parks, key commercial areas, schools etc. Includes loops in neighbourhood parks and access to park facilities/features. The ease of use rating is 'Easy' with a high anticipated level of use.
- Type 3 Trail / Recreational Trail – Primarily used for recreation and leisure where active transportation is not a key function but connections to active transportation routes may be facilitated. Generally located in lands designated as Open Space or Environmentally Protected with an ease of use rating ranging from 'Easy' to 'Moderate' including an anticipated level of use rating of 'Moderate'.

- Type 4 Trail / Natural Trail – Intended to provide recreation and leisure opportunities to escape the urban environment and experience natural settings within non-programmed open space and environmentally protected lands. These trail systems have a general ease of use rating of ‘Moderate’ to ‘Hard’ with low to moderate anticipated levels of use.
- Type 5 Trail / Stormwater Management Facility (SWMF) – Where feasible SWMFs will be unfenced and serve as key connection points to existing and proposed trail networks. Ease of use rating is ‘Moderate’ with low to moderate anticipated levels of use.

Village Square – Located within walking distance of residents and provide a social gathering place within neighborhoods. Often these types of facilities provide shade, playgrounds and small urban plazas.

2. Transportation

A highway and services related to a highway are intended for the transportation of people and goods via many different modes including, but not limited to, passenger automobiles, commercial vehicles, transit vehicles, cycling, and walking.

A highway shall consist of all land, services, and infrastructure built to support this movement of people and goods regardless of mode of transportation. As the City continues to grow, it will experience higher-density mixed uses in more compact built form in green field areas and within intensification nodes and corridors in existing settlement areas. This new consideration is supported by highways that accommodate and promote walking, cycling and transit use over auto use and has been identified by the City's TMP and OP.

The overall vision is to create a City which is highly walkable and in which it is easy and convenient to walk, cycle or take transit. The TMP has set targets to reduce trips made by single occupant vehicles; increase trips made by transit; and increase active transportation trips, including cycling and walking.

A. Roads Former Barrie

The costs of the following road items shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in Former Barrie:

- All roads within the City of Barrie not identified as arterial or collector roads in the City of Barrie OP and not included in the DC, inclusive of all land and associated infrastructure related to or within the area needed to

support development or required to link with the area to which the development plan relates is a local service.

- Where roadway improvements (or new construction) are required on arterial or collector roads to support a specific development or required to link the development area with the existing road network, these road improvements are a local service.

The costs of the following road items shall be paid through development charges in Former Barrie:

- New arterial or collector roads external to a Development, not required to provide direct access and which are included in the current DC Study.
 - Upgrades to existing arterial or collector roads external to a Development that are not required to provide direct access.
 - Foreseeable intersection improvements, traffic signals and traffic control systems on existing roads that are not required to provide direct access.

B. Roads: Salem and Hewitt's Secondary Planning Areas

The costs of the following road items shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in the Salem and Hewitt's Secondary Planning Areas:

- All roads, other than those designated as arterial roads within the City of Barrie OP, inclusive of all land and associated infrastructure related to or within the area needed to support development or required to link with the area to which the development plan relates is a local service.
- Where roadway improvements are required on arterial roadways to support a specific development or required to link the development area with the existing community, these road improvements are a local service.

The costs of the following road items shall be paid through development charges in the Salem and Hewitt's Secondary Planning Areas:

- New Arterial Roads.
- New Arterial Roads external to a Development, not required to provide Direct Access and which are included in the current DC Study.
- Upgrades to existing Arterial Roads external to a Development that are not required to provide Direct Access.
- Foreseeable intersection improvements, traffic signals and traffic control systems on existing Roads that are not required to provide Direct Access.

C. Traffic Control Systems and Intersection Improvements

The costs of the following traffic control systems and intersection improvements shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Intersection improvements to and/or signalization of all roads, private entrances or entrances necessitated by development on any local, collector or arterial road is considered local benefit.
- New or upgraded traffic control systems intended to service a development are considered to be a local benefit.

The costs of the following traffic control systems and intersection improvements infrastructure shall be paid through DCs in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable traffic control systems and intersection improvements on existing or proposed roads, outside of the proposed development, that

are not required to provide Direct Access and which are included in the current DC Study.

D. Streetlights

The costs of the following streetlight items shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Streetlights needed along any roads within or adjacent a specific development not included in the DC Study are considered to be a local benefit.
- Streetlights at any intersections necessitated by a specific development are considered to be a local benefit.

The costs of the following streetlight infrastructure shall be paid through DC in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable streetlights on existing or proposed roads, outside of the proposed development and which are included in the current DC Study.

E. Cycling

The costs of the following cycling infrastructure items shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Bike paths/lanes within a specific development are considered to be a local benefit.

- Bike paths/lanes external to a development and not included in the D.C., which are necessary to connect the development to public spaces and/or other bike infrastructure, are considered to be a local benefit.
- Temporary bike paths/lanes within or external to a specific development necessitated by proposed development are considered to be a local benefit.

The costs of the following cycling infrastructure shall be paid through development charges in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable cycling infrastructure on existing or proposed roads, outside of the proposed development and which are included in the current DC Study.

F. Sidewalks

The costs of the following sidewalk infrastructure items shall be direct developer responsibilities as a local service provision under s. 59 of the D.C.A. in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Sidewalks on all road internal to the development are considered to be a local benefit.
- Sidewalks on all roads external to a development necessitated by proposed development is considered to be a local benefit.
- Temporary sidewalks within or external to a specific development necessitated by proposed developed are considered to be a local benefit.

The costs of the following sidewalk infrastructure shall be paid through development charges in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable sidewalk infrastructure on existing or proposed roads, outside of the proposed development and which are included in the current DC Study.

G. Transportation Demand Management

The costs of the following transportation demand management infrastructure items shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Bike share expansions within existing service areas and in new service areas; cycling amenities including bike racks, lockers, shelters and fix-it stations; pedestrian amenities (e.g. benches); and sustainable mobility programs (e.g. Smart Commute, TDM for higher density developments) necessitated by proposed development and not included in the DC are considered to be a local benefit.

The costs of the following transportation demand management infrastructure shall be paid through development charges in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable transportation demand management infrastructure on existing or proposed roads, outside of the proposed development and which are included in the current DC Study.

H. Noise Abatement Measures

The costs of the following noise abatement measure infrastructure items shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Noise abatement measures required to mitigate noise impacts from existing or future local, collector, arterial roads, Hwy 400 or the railway either external or internal to development not in the current DCs where it is a requirement of, or within the area needed to support the development are considered local benefit.

The costs of the following noise abatement measure infrastructure shall be paid through development charges in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable noise abatement measure infrastructure on existing or proposed roads, outside of the proposed development and which are included in the current DC Study.

I. Transit Infrastructure

The costs of the following transit infrastructure items shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Transit node, transit priority measures (e.g., queue jump lanes transit signal priority) bus bays, accessible amenities (including bus pads and shelters with interior heating/benches/next bus electronic signs) and any other bus service stop infrastructure located within local, collector or arterial road corridors, and including transit stations or terminals necessitated by proposed development and not included in the current DC are considered to be local benefit.

The costs of the following transit infrastructure shall be paid through development charges in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable transit infrastructure on existing or proposed roads, outside of the proposed development and which are included in the current DC Study.

J. Transportation Studies

The costs of the following Transportation Studies shall be direct developer responsibilities as a local service provision under s. 59 of the D.C.A. in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Transportation Studies (including traffic impact studies) undertaken for a specific development are considered to be local benefit.

K. Land Acquisition

The costs of the following land acquisition shall be direct developer responsibilities as a local service provision under s. 59 of the D.C.A. in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Land Acquisition to widen existing roads or proposed roads (as identified in the OP or the TMP, updated from time to time) shall be secured as a required dedication as part of development approval.
- Land acquisition within or adjacent to the proposed development beyond dedication requirements to achieve transportation corridors as services related to highways including intersection improvements, grade separation infrastructure for the movement of pedestrians, alignment shifts, cyclists, public transit and/or railway shall be a direct developer responsibility.
- Where land acquisition is required in excess of the ROW as identified in the OP, to accommodate external utilities including, but not limited to,

cable, gas, hydro, and telephone, are deemed a local benefit and shall be a direct developer responsibility.

The costs of the following land acquisition shall be paid through DCs in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable land acquisition on existing or proposed roads, outside of the proposed development and which are included in the current DC Study.

L. Traffic Calming

The costs of the following traffic calming infrastructure shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Traffic calming measures required to mitigate impacts from proposed development either external or internal to development not in the current DCs needed to support the development are considered to be a local benefit.

The costs of the following traffic calming infrastructure shall be paid through development charges in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable traffic calming infrastructure on existing or proposed roads, outside of the proposed development and which are included in the current DC Study.

3. Stormwater Drainage Systems

Stormwater minor drainage systems are designed to accommodate drainage to avoid property damage and flooding as well as to minimize impacts from 1 in 5-year rainfall events. Minor systems are typically comprised of underground piping, manholes, catch basins, LID and outfall structures in addition to a rural type drainage system consisting of ditches and culverts.

Stormwater major drainage systems are designed and implemented for flood control to avoid loss of life, injuries, and significant damage to property from events greater than 1 in 5-year return producing unusual high intensity rainfall and/or large volume run-off.

Major systems can be large diameter underground piping, open channels, road overland flow route, stormwater facilities, natural streams, or any combination thereof, capable of conveying run-off, from events up to and including a regulatory storm, to the ultimate receiving stream or water body.

The costs of the following minor and major drainage systems shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Minor drainage systems internal or external to a proposed development, needed to support development to safely convey these flows to a suitable outlet, is considered to be a local benefit.
- Major drainage infrastructure internal or external to a proposed development, needed to support development to safely convey these flows to a suitable outlet, not included in the current DC is considered to be a local benefit.

- Major drainage infrastructure in the current DC that needs to be upsized due to changes in upstream catchment area to support the proposed development is considered to be a local benefit.
- The construction of temporary drainage infrastructure is considered to be a local benefit
- Installation of private drain connections or private systems is considered to be a local benefit.
- Stormwater facilities for quality, volume and/or quantity management, including downstream erosion works, inclusive of land and all associated infrastructure, such as storm water facility planting and appurtenances, maintenance access roads/trails and perimeter fencing is considered to be a local benefit.
- Land to oversize proposed stormwater management facilities to accommodate runoff from new, widened, extended or upgraded municipal local, collector or arterial roads is considered to be a local benefit.
- Erosion works, inclusive of all restoration requirements, related to a proposed development is considered to be a local benefit.
- Monitoring works related to a proposed development is considered to be a local benefit.
- LID features such as infiltration galleries, bioswales, stormceptors, oil and grit separators, rain gardens and permeable pavements related to a proposed development is considered to be a local benefit.
- Any watercourse realignment and/or enclosures within its development limits is considered to be a local benefit.

- Conveyance of upstream existing external flows through a development is considered to be a local benefit.
- Drainage Studies undertaken for a specific development are considered to be a local benefit.
- Watercourses enclosed by a development which needs to be upsized to accommodate increased runoff from upstream development is considered to be a local benefit.

The costs of the following minor and major drainage infrastructure shall be paid through development charges in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Foreseeable minor and major drainage infrastructure on existing or proposed roads or as a standalone drainage project, outside of the proposed development, which are included in the current DC Study. For greater certainty, direct connects to a development are considered a local service.
- Watercourse works to accommodate runoff external to the development which included in the current DC Study.
- Updates to the City-Wide Master Drainage Plan or related studies.
- Oversizing costs of minor or major drainage infrastructure proposed by a development and included in the current DCs.

The costs of minor drainage system and stormwater quality control infrastructure associated with arterial transportation improvements (within project limits) in the Hewitt's and Salem and Hewitt's Secondary Planning Areas have been included in the road costs and shall be paid through DCs.

4. Water and Wastewater

A. Water Distribution Systems

Water distribution system infrastructure includes local watermains, transmission watermains, booster pump stations, valves, fire hydrants, chambers, PRVs, water reservoirs and other related accessories.

The costs of the following water distribution system infrastructure shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- All required local water infrastructure internal to a development less than 400mm in size is considered to be a local benefit.
- All water infrastructure external to the development, less than 400mm in size, required to provide system security and redundancy is considered to be a local benefit.
- All service connections within a development and connections from external municipal watermains to a development are considered to be a local benefit.
- If external services are required by two or more developments, the developer for the first development will be responsible for the cost of the external services and may enter into front-ending/cost-sharing agreements with other developers independent of the City of Barrie.
- Temporary watermains, water booster pumping stations and/or reservoir required to service a development are considered to be a local benefit.
- Water Distribution Studies undertaken for a specific development are considered to be local benefit.

The costs of the following water distribution infrastructure shall be paid through DCs in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Transmission watermain 400mm and greater which are included in the current DCs.
- Water reservoirs, BPS and water infrastructure not required for a specific development and which are included in the current DCs.
- Updates to the Water Distribution and Storage Master Plan or related studies.

B. Wastewater Collection Systems

Wastewater collection system infrastructure includes local wastewater sewers, trunk wastewater sewers, maintenance holes, pump stations and other related accessories.

The costs of the following wastewater collection system infrastructure shall be direct developer responsibilities as a local service provision under s. 59 of the DCA in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- All required local wastewater collection system infrastructure internal to a development 375 mm and less in size is considered to be a local benefit.
- All wastewater infrastructure external to the development, 375 mm and less in size, required to service a development is considered to be a local benefit.
- All service connections within a development are considered to be a local benefit.

- If external services are required by two or more developments, the developer for the first development will be responsible for the cost of the external services and may enter into front-ending/cost-sharing agreements with other developers independent of the City of Barrie.
- Temporary wastewater infrastructure required to service a development is considered to be a local benefit.
- Wastewater Collection Studies undertaken for a specific development are considered to be local benefit.

The costs of the following wastewater collection system infrastructure shall be paid through DCs in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas:

- Trunk wastewater sewers greater than 375 mm which are included in the current DCs.
- Pump Stations not required for a specific development and which are included in the current DCs.
- Updates to the Wastewater Collection Master Plan or related studies.

C. Municipal Water Supply

All water supply costs shall be paid through DCs in both the Former Barrie and the Salem and Hewitt's Secondary Planning Areas.

D. Municipal Wastewater Treatment

All wastewater treatment costs shall be paid through development charges in both Former Barrie and the Salem and Hewitt's Secondary Planning Areas.

5. Parkland Development

Parkland Development includes for the development of recreational trails and parkland.

A. Recreational Trails

All recreational trails and multi-use pathways with trail classifications Type 3, Type 4 and Type 5 as identified in the Trails Master Plan, or as part of the City's capital budgeting process, including the associated infrastructure (structures, crossings and appurtenances) within the development area or required connections to a major multi-use trail network or surrounding community facilities and parklands are the direct responsibility of the developer.

All major community recreational multi-use pathways classified as Type 1 and Type 2, including the associated infrastructure (structures, crossings and appurtenances), that service the city-wide active transportation network in accordance with the current Trails Master Plan, or any successor thereto, shall be paid through development charges.

B. Parkland

- Parkland Development for Regional Parks, District Parks, Community Parks, Neighbourhood Parks and Village Squares: responsibility to provide up to base condition is a direct developer responsibility as a local service provision under s. 59 of the DCA including, but not limited to, the following:
 - Clearing and grubbing;
 - Topsoil Stripping and stockpiling, (topsoil or any fill or soils shall not be stockpiled on parkland without the approval of the City);

- Parkland shall be free of any contaminated soil or subsoil;
- Servicing - Water, Hydro, Stormwater, Sanitary, Electrical, Fibre/phone, catch basins, meter and meter boxes to a point just inside the property line as per City requirements. This includes providing for catch basins, manholes, access boxes and meter boxes within the park property;
- Fine grading of the sub-base (pre-grading) and the supply of topsoil to the required depth as per City requirements;
- Developer shall be responsible for the cost to excavate, remove from site and replace any unsuitable base (sub-grade) material;
- Parkland shall not be mined for engineering fill and replaced with fill or topsoil;
- Parkland shall be conveyed free and clear of all encumbrances;
- When parkland parcels cannot be developed in a timely manner, they shall be graded to ensure positive drainage and seeded to minimize erosion and dust;
- Temporary fencing is required where there is no permanent fence to prevent illegal dumping;
- Temporary Park sign advising future residents that the site is a future park;
- Perimeter fencing of parkland to the City standard located on the public property side of the property line adjacent land uses (residential, industrial, commercial, open space or environmentally protected) as required by the City; and
- Required heritage features within the park as set out within the Planning approval conditions.

Facilities within parkland are included in the D.C.

6. Natural Heritage Systems (N.H.S.)

NHS includes engineered and in situ stream corridors, natural buffers for woodlots, wetland remnants, etc. as well as sub watersheds within the boundaries of the City.

Direct developer responsibility as a local service provision under s. 59 of the DCA, includes but is not limited to the following:

- Riparian planting and landscaping requirements (as required by the City or authorities having jurisdiction), as a result of road construction or other municipal works required to be installed or constructed by the developer within in the NHS.
- Perimeter fencing of the NHS to the City standard located on the public property side of the property line adjacent land uses (residential, industrial, commercial) as required by the City is a direct developer responsibility as a local service provision under s. 59 of the DCA.

Appendix I

Approved 2023 DC By-law



BY-LAW NUMBER 2023-074

A By-law of The Corporation of the City of Barrie to establish municipal-wide development charges for the City of Barrie and to repeal By-laws 2019-055, 2021-059 and all amendments thereto.

WHEREAS pursuant to subsection 2(1) of the *Development Charges Act, 1997*, c.27, as amended, a council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services arising from development if the development of the land requires certain consents, approvals, amendments, conveyances or issuance of a building permit;

AND WHEREAS, on June 21, 2023, the Council of The Corporation of the City of Barrie approved the City of Barrie Development Charge Background Study dated April 21, 2023, as required by s.10 of the *Development Charges Act, 1997*, which indicates that the development of land within the City of Barrie will increase the need for services;

AND WHEREAS a public meeting has been held, on May 10, 2023, before passage of this by-law with notice given and sufficient information made available to the public pursuant to s.12 of the *Development Charges Act, 1997*;

AND WHEREAS the Council adopted motion 23-G-155 on June 21, 2023, directed that development charges be imposed on land under development or redevelopment within the geographical limits of the municipality as provided in this By-law;

AND WHEREAS the Council of The Corporation of the City of Barrie deems it expedient to pass such a by-law;

AND WHEREAS, on June 21, 2023, the Council of The Corporation of the City of Barrie approved the City of Barrie Development Charge Background Study dated April 21, 2023 indicating that it intends that the increase in the need for services to service the anticipated development will be met;

AND WHEREAS, on June 21, 2023, the Council determined that no further public meetings were required under s.12 of the *Development Charges Act, 1997*.

NOW THEREFORE the Council of The Corporation of the City of Barrie enacts as follows:

Definitions

1. In this By-law;

"Act" means the *Development Charges Act, 1997*, S.O. 1997, c. 27, as amended or superseded;

"accessory building" means a building or structure that is naturally and normally incidental to or subordinate in purpose or both, and exclusively devoted to a principal use, building or structure provided that it:

- a) does not contain any water or sewage services;
- b) is used only for accessory storage;
- c) contains an accessory use to an existing industrial use in the principal building on the same lot; and
- d) does not exceed 25% of the existing principal building or 500m² whichever is less.

"accessory dwelling" means a self-contained residential unit that is subordinate in purpose to another residential dwelling unit upon the same lot;

"ancillary dwelling", means a residential building that would be ancillary to a detached dwelling, semi-detached dwelling, or row dwelling and includes an accessory dwelling.

"ancillary structure" has the same meaning as an ancillary dwelling.

"apartment dwelling unit" means any residential dwelling unit within a building containing more than four dwelling units where the residential units are connected by an interior corridor, but does not include special care/special need dwelling unit. Despite the foregoing, an apartment dwelling includes stacked townhouse dwellings;

“back-to-back townhouse dwelling” means a building containing four or more dwelling units separated vertically by a common wall, including a rear common wall, that do not have rear yards.

“bedroom” means a room which can be used as sleeping quarters but does not include a kitchen, bathroom, living room or dining room, but may include a den or study;

“City” means the Corporation of the City of Barrie;

“class” means a grouping of services combined to create a single service for the purposes of this By-law and as provided in Section 7 of the *Development Charges Act*.

“common area” means an area generally available for use by all occupants. Development charges for common areas in non-residential developments will be calculated at the rate in effect that corresponds with the predominant use of the development. Common areas in residential developments and mixed use developments are exempt from development charges.

“detached dwelling unit” has the same meaning as a “single detached dwelling unit” for the purposes of this by-law.

“dwelling unit” means a suite operated as a housekeeping unit used or intended to be used as a domicile by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities and shall include mobile homes;

“Development Charges Act” means the *Development Charges Act, 1997*, S.O. 1997, c. 27, as amended or superseded;

“existing industrial building” means a building used for or in connection with,

- a) manufacturing, producing, processing, storing or distributing something,
- b) research or development in connection with manufacturing, producing or processing something,
- c) retail sales by a manufacturer, producer or processor of something they manufactured, produced or processed, if the retail sales are at the site where the manufacturing, producing or processing takes place,
- d) office or administrative purposes, if they are,
 - (i) carried out with respect to manufacturing, producing, processing, storage or distributing of something, and
 - (ii) in or attached to the building or structure used for that manufacturing, producing, processing, storage or distribution.

provided that such industrial building or buildings existed on a lot in the City of Barrie;

“gross floor area (gfa)” means the sum total of the total areas of the floors whether above or below grade, measured between the exterior faces of the exterior walls, including part walls, of the building or from the center line of a common wall separating two uses and;

- (i) includes the area of a mezzanine as defined in the Ontario Building Code;
- (ii) excludes those areas used exclusively for parking garages or structures; and
- (iii) includes those areas covered by roofs or roof-like structures, but does not include a canopy or seasonal patios associated with a restaurant;

“hospice” means a building or portion of a mixed-use building designed and intended to provide palliative care and emotional support to the terminally ill in a home or homelike setting so that quality of life is maintained, and family members may be active participants in care.

“industrial use” means a use in connection with,

- a) manufacturing, producing, processing, storing or distributing something,
- b) research or development in connection with manufacturing, producing or processing something,
- c) retail sales by a manufacturer, producer or processor of something they manufactured, produced or processed, if the retail sales are at the site where the manufacturing, producing or processing takes place,
- d) office or administrative purposes, if they are,
 - (i) carried out with respect to manufacturing, producing, processing, storage or distributing of something, and
 - (ii) in or attached to the building or structure used for that manufacturing, producing, processing, storage or distribution.

provided that such industrial building or buildings existed on a lot in the City of Barrie;

“institutional development” means development of a building or structure intended for use:

- (i) As a long-term care home within the meaning of Subsection 2 (1) of the *Long-Term Care Homes Act, 2007*;
- (ii) As a retirement home within the meaning of Subsection 2 (1) of the *Retirement Homes Act, 2010*;
- (iii) By any of the following post-secondary institutions for the objects of the institution:
 - 1. A university in Ontario that receives direct, regular, and ongoing operating funding from the Government of Ontario,
 - 2. A college or university federated or affiliated with a university described in subclause (1), or
 - 3. An Indigenous Institute prescribed for the purposes of Section 6 of the *Indigenous Institutes Act, 2017*;
- (iv) As a memorial home, clubhouse, or athletic grounds by an Ontario branch of the Royal Canadian Legion; or
- (v) As a hospice to provide end of life care.

“institutional use” means, notwithstanding any other provisions of this By-law, lands, buildings or structures used or designed or intended for use by an organized body, society or religious group for promoting a public or non-profit purpose;

“interest rate” means a rate equal to the average prime rate on,

- i. October 15 of the previous year, if the adjustment date is January 1,
- ii. January 15 of the same year, if the adjustment date is April 1,
- iii. April 15 of the same year, if the adjustment date is July 1, and
- iv. July 15 of the same year, if the adjustment date is October 1.

The base rate of interest in effect on a particular date shall be,

- i. the base rate for the particular date, if the particular date is an adjustment date, and
- ii. the base rate for the last adjustment date before the particular date, otherwise.

The rate of interest that will be charged shall be an annual interest rate that is one percentage point higher than the base rate of interest in effect for that day.

“live/work unit” means a unit which contains separate residential and non-residential areas intended for both residential and non-residential uses concurrently and shares a common wall or floor with direct access between the residential and non-residential areas.

“local board” has the meaning set out in Section 1 of the *Development Charges Act*;

“mixed-use buildings” means land, buildings or structures used, or designed or intended for use, for a combination of non-residential and residential uses, including, but not limited to a live/work unit;

“mobile home” means a Building recognized in the Building Code as a “Mobile Home” in accordance with the standard for mobile homes in CSA Z240.2.1 “Structural requirements for Manufactured Homes” or CSA A277 “Procedures for Factory Certification of Buildings”.

“non-profit housing development” means the development of a building or structure intended for use as a residential premises (including emergency transitional housing) and developed by,

- (a) a corporation to which the *Not-for-Profit Corporations Act, 2010* applies, that is in good standing under that Act and whose primary object is to provide housing,
- (b) a corporation without share capital to which the *Canada Not-for-profit Corporations Act* applies, that is in good standing under that Act and whose primary object is to provide housing, or
- (c) a non-profit housing co-operative that is in good standing under the *Co-operative Corporations Act, 2022*, c. 21, Sched. 3, s. 4.

“non profit institution” means:

- (a) a “registered charity” as defined in subsection 248(1) of the *Income Tax Act*, R.S.C. 1985, c. 1 (5th Supp.), as amended;
- (b) a corporation that is a non-profit organization for the purposes of paragraph 57(l)(b) of the *Corporations Tax Act*, R.S.O. 1990, c. C.40; or

- (c) a "religious organization" as defined in subsection 1(1) of the *Religious Organizations' Lands Act*, R.S.O. 1990, c. R.23;

"non-residential (or a non-residential use)" means lands, buildings, or structures, or portions thereof designed, adopted or used for any purpose other than residential use and includes the non-residential portion of a live/work unit;

"non-retail uses" means all non-residential uses other than retail uses and shall include offices, self-storage, hotels and motels;

"office" means lands, buildings or structures used or designed or intended for use for the practice of a profession, the carrying on of a business or occupation or the conduct of a non-profit organization and shall include but not be limited to the office of a physician, lawyer, dentist, architect, engineer, accountant, real estate or insurance agency, veterinarian, surveyor, appraiser, financial institution, contractor, builder, and developer;

"Official Plan" means the Official Plan of the City and any amendments thereto;

"Ontario Building Code" means the *Building Code Act*, 1992, S.O. 1992, c.23 as amended or superseded;

"other multiple dwelling units" means all dwelling units other than single detached dwelling units, semi-detached dwelling units, and apartment dwelling units. It does include, but is not limited to, back-to-back townhouse dwellings, row dwellings and the residential component of live/work units;

"owner" means the owner of land or a person who has made application for an approval for the development of land;

"parking structure/garage" means a building provided exclusively for the purpose of vehicle parking;

"Planning Act" means the *Planning Act*, R.S.O. 1990, c. P.13, as amended or superseded;

"predominant use" means use of a development that is greater than 50% of GFA. GFA for the purpose of calculating predominant use considers only the non-residential use excluding any common area and residential uses. For clarity, the calculation compares the GFA values of retail versus non-residential/non-retail uses.

"rental housing" means development of a building or structure with four or more dwelling units all of which are intended for use as rented residential premises;

"residential development" means land, buildings or portions thereof used, designed or intended to be used as living accommodations for one or more individuals, and shall include a single detached dwelling, a semi-detached dwelling, an other multiple dwelling unit, an apartment dwelling unit, a special care/special dwelling unit, an accessory dwelling, and the residential portion of a mixed-use building;

"residential use" means lands, buildings, or structures designed or intended to be used as living accommodation for one or more individuals;

"retail use" means land, buildings or portions thereof used, designed or intended for use for the purpose of:

- (i) offering foods, wares, merchandise, substances, articles or things for sale directly or
- (ii) providing entertainment to the public and includes the rental of wares, merchandise, substances, article or things
- (iii) offices and storage in connection with or related or ancillary to such retail uses.

Retail uses include, but are not limited to:

- (iv) conventional restaurants, fast food restaurants, concert halls, theatres, cinemas, movie houses, automotive fuel stations with or without service facilities, specialty automotive shops, auto repairs, collision services, car or truck washes, auto dealerships, shopping centres, including more than two stores attached and under one ownership, department/discount stores, banks and similar financial institutions, including credit unions (excluding freestanding bank kiosks), warehouse clubs and retail warehouses;

"retail warehouse" means the storage of a seller's inventory and/or the place where online orders are fulfilled. Retail warehouses typically serve functions in the retail supply chain, from storage to packaging and delivering goods to consumers.

"school board" means a board as defined in Section 1(1) of the *Education Act*;

"semi-detached dwelling unit" means a dwelling unit in a residential building consisting of two dwelling units having one vertical wall, but no other parts, attached to another dwelling unit where the residential units are not connected by an interior corridor;

“services” means services designated in this By-law;

“shell building” means, for the purpose of this by-law, a non-residential building or structure for which at the time a building permit is ready to be issued, the use of the non-residential building or units within the building or structure has not been determined.

“single detached dwelling unit” means a residential building consisting of one dwelling unit and not attached to another structure.

“special care/special need dwelling unit” means a unit intended for residential use, in a building containing more than three (3) such units, which units have a common enclosed entrance, where the occupants have the right to use in common halls, stairs, yards, common rooms and accessory buildings, which units may or may not have exclusive sanitary and/or culinary facilities and are designed to accommodate individuals with special needs, including an independent long-term living arrangement, where support for services such as meal preparation, grocery shopping, laundry, housekeeping, nursing, respite care and attendant services are provided at various levels;

“stacked townhouse dwelling” means a building containing two or more dwelling units where each dwelling unit is separated horizontally and/or vertically from another dwelling unit by a common wall or floor.

“temporary building or structure” means a building or structure which is designed, used or intended for non-residential uses that is constructed, erected or placed upon lands and which is demolished or removed from the lands within three (3) years of building permit issuance (or such extended term permitted by the City) and includes, but is not limited to, sales offices, office trailers, industrial tents, and temporary or seasonal structures such as tents, awnings and environmental coverings.

2. Designation of Services

The services for which development charges are imposed under this By-law are as follows:

- a) Protection
- b) Services Related to a Highway – Roads and Related
- c) Services Related to a Highway - Public Works and Fleet
- d) Transit
- e) Parks and Recreation
- f) Library Services
- g) Ambulance Services
- h) Long-term Care
- i) Waste Diversion
- j) Water Services – Facilities
- k) Water Services – Facilities Related Debt
- l) Wastewater Services – Facilities
- m) Wastewater Services – Facilities Related Debt
- n) Water Services – Distribution Systems – Salem & Hewitt's Secondary Plan Areas
- o) Wastewater Services – Collection Systems – Salem & Hewitt's Secondary Plan Areas
- p) Water Services – Distribution Systems – Former City Municipal Boundary Areas
- q) Wastewater Services – Collection Systems – Former City Municipal Boundary Areas
- r) Stormwater Drainage and Control Services – Former City Municipal Boundary Areas

3. Lands Affected

Where permitted pursuant to the provisions of the *Development Charges Act*, 1997, and not otherwise prohibited by such Act, or otherwise exempted by the provisions of this By-law, this By-law applies to all land, buildings and structures within the City of Barrie.

4. Approvals for Development

- a) Development Charges shall be imposed on all land, buildings or structures that are developed for Residential or Non-Residential Uses if the Development requires:
 - (i) the passing of a Zoning By-law or of an amendment to a Zoning By-law under section 34 of the Planning Act;
 - (ii) the approval of a minor variance under section 45 of the Planning Act;
 - (iii) a conveyance of land to which a by-law passed under subsection 50(7) of the Planning Act applies;
 - (iv) the approval of a plan of subdivision under section 51 of the Planning Act;

- (v) a consent under section 53 of the Planning Act;
 - (vi) the approval of a description under section 9 of the Condominium Act, S.O. 1998, c. C.19, as amended, or any successor thereof; or
 - (vii) the issuing of a permit under the Building Code Act in relation to a building or structure.
- b) No more than one development charge for each Service designated in section 2 shall be imposed upon any land, buildings or structures to which this By-law applies even though two or more of the actions described in section 4(a) are required before the land, buildings or structures can be developed.
 - c) Despite section 4(b), if two or more of the actions described in section 4(a) occur at different times, and if the subsequent action has the effect of increasing the need for municipal services as designated in this by-law, an additional development charge shall be calculated in accordance with the provisions of this by-law.

5. Calculation of Development Charges

- a) Subject to the provisions of this by-law, development charges against land shall be calculated and collected in accordance with the rates set out in Schedule B as applicable.
- b) The development charge with respect to the use of any land, buildings or structures shall be calculated as follows:
 - i. in the case of residential development or redevelopment, or the residential portion of a mixed-use development, based upon the number and type of dwelling units;
 - ii. in the case of non-residential development or redevelopment, or the non-residential portion of a mixed-use development or redevelopment, based on the gross floor area of such development or redevelopment.
- c) If at the time a building permit is ready to be issued for a Shell Building and the use of a non-residential building or units within the non-residential building has not been determined, the Treasurer or his/her designate may, in their discretion, and at the request of the owner, permit the owner to pay the lower development charges where the owner agrees to:
 - i. enter into a deferral agreement with the City to defer an amount of development charges equivalent to the difference between the probable lower charge and higher charge applicable to the development, on terms satisfactory to the Treasurer or his/her designate;
 - a) Where the Treasurer or his/her designate, determines that the building or unit within the building has a first use subject to the lower development charges that portion of the deferral agreement will be revoked.
 - b) Where the Treasurer or his/her designate, determines that the building or unit within the building has a first use subject to development charges that are higher than the lower development charges, the City's terms and conditions of the deferral agreement will become effective.

6. Phase-in of Development Charges

Development charges shall be phased in accordance with the requirements of the Act.

7. Amount of Development Charges

a) Residential

The Development Charges set out in Schedule B shall be imposed on Residential Uses of land, buildings or structures, including a Dwelling Unit accessory to a Non-Residential Use and, in the case of a mixed use building or structure, on the Residential Uses in the mixed use building or structure, including the residential component of a Live/Work unit, according to the type of residential unit and calculated with respect to each of the Services according to the type of Residential Use.

b) Non-Residential

The Development Charges set out in Schedule B shall be imposed on Non-Residential Uses of land, buildings or structures and in the case of a mixed-use building, on the non-residential component of the mixed-use building, including the non-residential component of a Live/Work unit, according to the type and gross floor area of the non-residential component.

8. Timing of Calculation and Payment of Development Charges

- a) Subject to the exemptions set out in this By-law or by statute or regulation, development charges shall be calculated and payable in full in money or by provision of services as may be agreed upon, or by credit granted by the Development Charges Act, 1997 on the date that the first building permit including a conditional permit is issued in relation to a building or structure on land to which a development charge applies with respect to any new or additional gross floor area or any additional dwelling units, or in a manner or at a time otherwise lawfully agreed upon.
- b) Where development charges apply to land in relation to which a building permit is required, the building permit shall not be issued until the development charge has been paid in full.
- c) Notwithstanding subsections (a) and (b), the calculation and payment of development charges may be deferred for any permit or conditional permit that authorizes the construction of only the underground portions of a building.
- d) Notwithstanding subsections (a), (b), and (c), a residential development charge with respect to:
 - (i) Services Related to a Highway (formerly Roads);
 - (ii) Water Services – Facilities;
 - (iii) Water Services - Facility Related Debt;
 - (iv) Wastewater Services – Facilities;
 - (v) Wastewater Services - Facilities Related Debt;
 - (vi) Former City Municipal Boundary Areas (where applicable):
 - a. Stormwater Drainage and Control Services
 - b. Water Services – Distribution Systems
 - c. Wastewater Services – Collection Systems
 - (vii) Salem & Hewitt's Secondary Plan Areas (where applicable):
 - a. Water Services – Distribution Systems
 - b. Wastewater Services – Collection Systems,

as set out in Schedule "B" attached, are payable, with respect to an approval of a plan of subdivision, immediately upon entering into the subdivision agreement, based upon the number and type of residential lots created.

- e) Development Charges will be calculated at the current rate in effect on the day prior to issuance of the building permit or revision to building permit
- f) If construction has not begun after 24 months from the date of issuance of a building permit (conditional or full), a top-up to the rate in effect at that time will apply
- g) Notwithstanding section 8 (a), development charges for rental housing and institutional developments in accordance with Section 26.1 of the *Development Charges Act, 1997*, are due inclusive of interest established from the date the development charge would have been payable in accordance with section 26 of the *Development Charges Act, 1997*, in 6 equal annual payments beginning on the date that is the earlier of:
 - i. the date of the issuance of a permit under the *Building Code Act, 1992* authorizing occupation of the building; and
 - ii. the date the building is first occupied.

and continuing on the following five anniversaries of that date.

- i) Where the development of land results from the approval of a site plan or zoning by-law amendment application received on or after January 1, 2020, and the approval of the application occurred within two years of building permit issuance, the development charges under section 7 shall be calculated on the rates set out in Schedule B on the date of the planning application, including interest. Where both planning applications apply, development charges under section 7 shall be calculated on the rates in effect on the day of the later planning application, including interest.

9. Indexing of Development Charges

The development charges set out in Schedule B of this By-law shall be adjusted annually without amendment to this By-law, commencing on January 1, 2024, by the percentage change during the preceding year, as recorded in the Statistics Canada's Construction Cost Index (3rd Quarter - non-residential building – table 18-10- 0135-01), as may be amended or replaced from time to time.

10. Accounting for Development Charges

- a) Any development charges paid pursuant to this By-law shall be maintained separately from all other revenues or receipts of the City.
- b) The Treasurer of the City shall maintain these monies in separate reserve funds as set out in section 2 "Designation of Services" of this By-law for the services identified in this By-law and shall only permit the monies to be expended in accordance with the provisions of s.35 of the *Development Charges Act, 1997*:

- c) The Treasurer shall provide the Council with an annual statement, on a date directed by the Council, in respect of the reserve funds established under this By-law. This statement shall contain the required information, as set out in s.s.12(1) of O.Reg. 82/98.

11. Exemptions and Discounts

- a) Notwithstanding the provisions of this By-law, development charges shall not be imposed with respect to developments or portions of developments as follows:
 - (i) The enlargement to an existing residential dwelling unit;
 - (ii) One or two additional dwelling units in an existing or to be constructed single detached dwelling or prescribed ancillary structure to the existing residential building;
 - (iii) The creation of additional dwelling units equal to the greater of one or 1% of the existing dwelling units in an existing residential rental building containing four or more dwelling units or prescribed ancillary structure to the existing residential building;
 - (iv) The creation of one additional dwelling unit in any other existing or to be constructed residential building, such as a semi-detached or row dwelling or prescribed ancillary structure to the existing residential building; or
 - (v) Notwithstanding subsection (ii) above, development charges shall be imposed if the total gross floor area of the additional one or two units exceeds the gross floor area of the existing dwelling unit.
 - (vi) Notwithstanding subsection (iv) above, development charges shall be imposed if the additional unit has a gross floor area greater than:
 - (a) In the case of a semi-detached or row dwelling, the gross floor area of the existing smallest dwelling unit; and
 - (b) In the case of any other residential building, the gross floor area of the smallest dwelling unit already contained in the residential building.
 - (viii) Land owned by and used for the purposes of The Corporation of the City of Barrie, any other municipality, the Simcoe County District School Board, the Simcoe-Muskoka Catholic District School Board (and any other school board defined in section 1(1) of the *Education Act*), or any local board or commission;
 - (ix) Non-profit housing development.
 - (x) Inclusionary zoning residential units in respect of residential units that are affordable housing units required to be included in a development or redevelopment pursuant to a by-law passed under section 34 of the *Planning Act* to give effect to the policies described in subsection 16 (4) of that Act. 2022, c. 21, Sched. 3, s. 4 .
 - (x) Temporary Buildings or Structures shall be exempt from the provisions of this By-law. In the event that a Temporary Building or Structure becomes protracted, it shall be deemed not to be nor ever to have been a Temporary Building or Structure, and the Development Charges rate acquired to be paid under this By-law shall become payable on the date the Temporary Building or Structure becomes Protracted.
 - (xi) Institutional development of land, buildings or structures owned by a College of applied arts and technology established pursuant to the *Ministry of Training, Colleges and Universities Act*, R.S.O. 1990, c. M. 19, and used for teaching-related purposes on lands owned by and used for the purposes of the College but does not include student residences;
 - (xii) Institutional development of land, buildings or structures owned by a university established by an Act of the Legislative Assembly of Ontario, and used for teaching-related purposes on lands owned by and used for the purposes of the University, but does not include student residences;
 - (xiii) No development charge shall be imposed on development constituting one or more enlargements of an existing industrial building as defined herein, where attached, up to a maximum of fifty percent (50%) of its gross floor area of the existing industrial building.
 - a) Where a proposed enlargement exceeds fifty percent (50%) of the gross floor area of an existing industrial building, development charges are payable on the amount by which the proposed enlargement exceeds fifty percent (50%) of the gross floor area before the enlargement.

- b) The cumulative total of the gross floor area previously exempted hereunder shall not be included in the determination of the amount of the exemption applicable to any subsequent enlargement and shall be calculated on the basis of the site as it existed on the date immediately prior to the first exemption hereunder.
 - c) Where a subdivision of the site subsequent to any enlargement previously exempted hereunder results in the existing industrial building being on a lot separate from the development previously, further exemptions, if any, pertaining to the existing industrial building shall be calculated on the basis of the site as it existed on the date immediately prior to the first exemption hereunder.
- b) If a development involves the demolition of and replacement of a building or structure within 60 months of the demolition permit being issued, or the conversion from one principal use to another, the developer shall be allowed a credit equivalent to:
- (i) the number of dwelling units demolished/converted multiplied by the applicable residential development charge in place at the time the development charge is payable; and/or
 - (ii) the gross floor area of the building demolished/converted multiplied by the current non-residential development charge in place at the time the development charge is payable. The credit can, in no case, exceed the amount of the development charge that would otherwise be payable;

provided that such amounts shall not exceed, in total, the amount of the Development Charges otherwise payable with respect to the Redevelopment. For greater certainty, any amount of the reductions set out above that exceed the amount of Development Charges otherwise payable with respect to the Redevelopment shall be reduced to zero and shall not be transferred to any other Development or Redevelopment.

- c) Where a building or structure ("former premises") is released by another building or structure on the same site prior to demolition of the former premises, the owner of the building or structure who has paid a development charge on the construction of the replacement building may submit a request to the Treasurer of the Finance Department for a refund from the development charge reserve funds for all or part of the development charge paid under this by-law, or a predecessor by-law. The refund shall be granted so long as:
- (i) the former premises is lawfully demolished or removed from the land within thirty-six (36) months from the date the interior final inspection process has been closed by the Chief Building Official or an occupancy permit has been issued where applicable for the replacement building or structure; and
 - (ii) the replacement building uses the existing municipal service which serviced the former premises.

The refund shall be calculated by determining the development charge that would be payable at the current rate at the time the demolition permit is issued, in respect of the former premises (by using the applicable current rate for the particular type of non-residential premises or dwelling units demolished) as if those former premises were currently being constructed, erected or placed for the first time. The refund shall be paid after confirmation that the former premises have been demolished.

- d) The following designated categories of uses are subject to discounted development charges as noted below:
- (i) notwithstanding the table of development charges set out Schedule B, development of lands owned by a non-profit institution for institutional uses by the non-profit institution for their own purposes as to 50% of the development charge chargeable;
 - (ii) notwithstanding the table of development charges set out in Schedule B, one accessory building to an existing industrial building be charged \$35.43 per square metre subject to indexing in accordance with Section "9" "Indexing of Development Charges";
 - (iii) notwithstanding the table of development charges set out in Schedule B, in the case of rental housing development, the development charge for a residential unit intended for use as a rental residential premises with three or more bedrooms shall be reduced by 25%;
 - (iv) notwithstanding the table of development charges set out in Schedule B, in the case of rental housing development, the development charge for a residential unit intended for use as a rental residential premises with two bedrooms shall be reduced by 20%;
 - (v) notwithstanding the table of development charges set out in Schedule B, in the case of rental housing development, the development charge for a residential unit intended for use as a rental residential premises not referred to in section (iii) or (iv) above shall be reduced by 15%.

12. By-law Registration

A certified copy of this By-law may be registered on title to any land to which this by-law applies.

13. By-law Administration

This By-law shall be administered by the Treasurer of The Corporation of the City of Barrie.

14. Short Title

This By-law may be referred to as the Barrie City-Wide and Area Specific Development Charges By-law.

15. Date By-law Effective

This By-law comes into force on the date following the date of its passage by the Council of the Corporation of the City of Barrie.

16. Headings

The headings in this By-law form no part of this By-law and shall be deemed to be inserted for convenience of reference only.

17. Severability

In the event any provision or part thereof of this By-law is found by a Court of competent jurisdiction to be ultra vires, such provision or part thereof shall be deemed to be severed and the remaining portion of such provision and all other provisions of this By-law shall remain in full force and effect.

18. Schedules

The following schedules shall form part of this By-law:

Schedule A	Components of Services Designated in Section 2
Schedule B	Residential and Non-Residential Development Charges
Schedule C	Map of Former City Municipal Boundary Areas
Schedule D	Map of Salem Secondary Plan Area
Schedule E	Map of Hewitt's Secondary Plan Area

19. By-laws 2019-055 and 2021-059

By-laws 2019-055 and 2021-059 and all amendments thereto are hereby repealed on the date this By-law comes into effect.

20. Expiry

This By-law shall expire and be deemed to be repealed on June 21, 2033, unless repealed earlier.

READ a first and second time this 21st day of June 2023.

READ a third time and finally passed this 21st day of June 2023.

THE CORPORATION OF THE CITY OF BARRIE


MAYOR - A. NUTTALL


CITY CLERK - WENDY GOOKE

By-law Number 2023-074

SCHEDULE "A"
COMPONENTS OF SERVICES/CLASSES OF SERVICES
DESIGNATED IN SUBSECTION 2.1

Area Specific – Former City Municipal Boundary Areas

Stormwater Drainage and Control Services

Water Services

Distribution Systems

Wastewater Services

Collection Systems

Area Specific - Salem & Hewitt's Secondary Plan Areas

Water Services

Distribution Systems

Wastewater Services

Collection Systems

Municipal Wide D.C.-Eligible Services

Water Services

Facilities

Facilities Related Debt

Wastewater Services

Facilities

Facilities Related Debt

Services Related to a Highway

Roads

Transit

Transit Facilities

Transit Vehicles

Transit Shelters

Library Services

Public Facilities

Library Collection Materials

Parks and Recreation

Parkland Development

Parks Vehicles and Equipment

Waste Diversion

Waste Diversion Facilities

Waste Diversion Vehicles & Equipment

Waste Diversion Carts & Containers

Long Term Care

Long-term Care Facilities

Ambulance Services

Facilities, Vehicles and Equipment

Municipal-Wide D.C.-Eligible Classes

Public Works

Services Related to a Highway

Water Services

Wastewater Services

Stormwater Services

Protection

Fire Facilities

Fire Vehicles

Fire Small Equipment and Gear

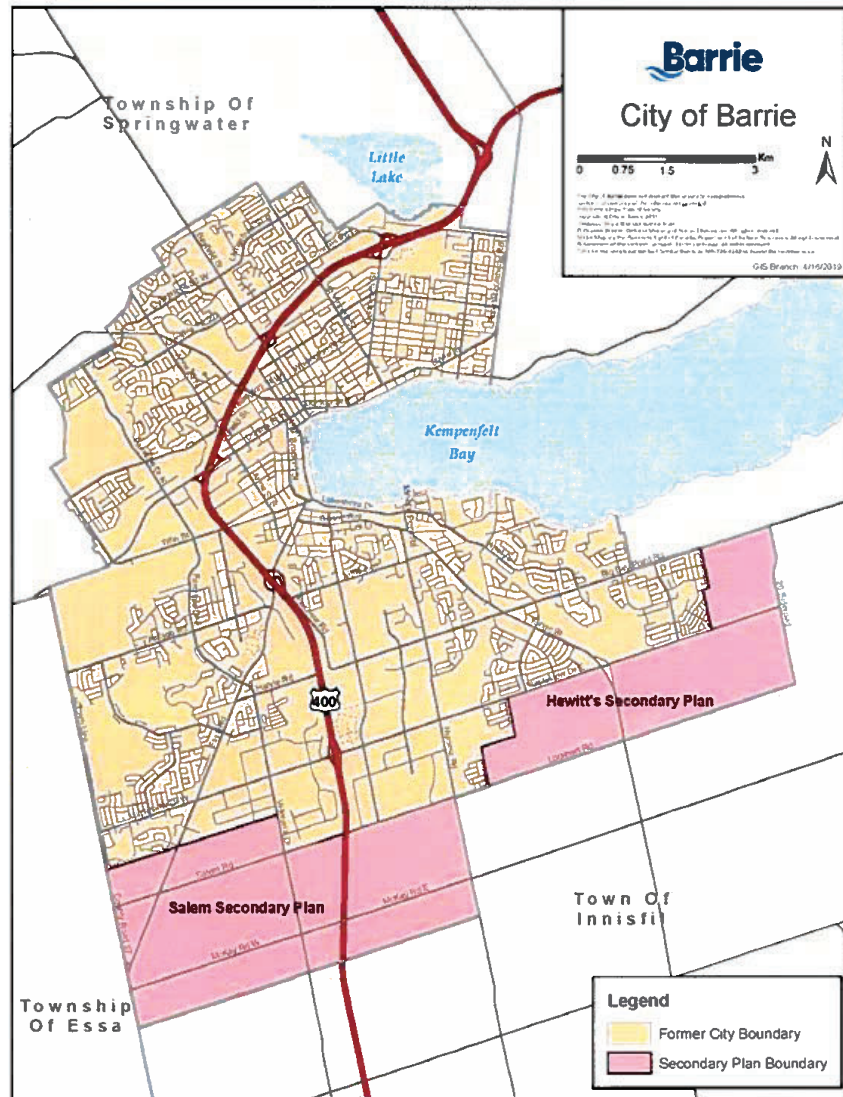
Police Facilities

Police Vehicles

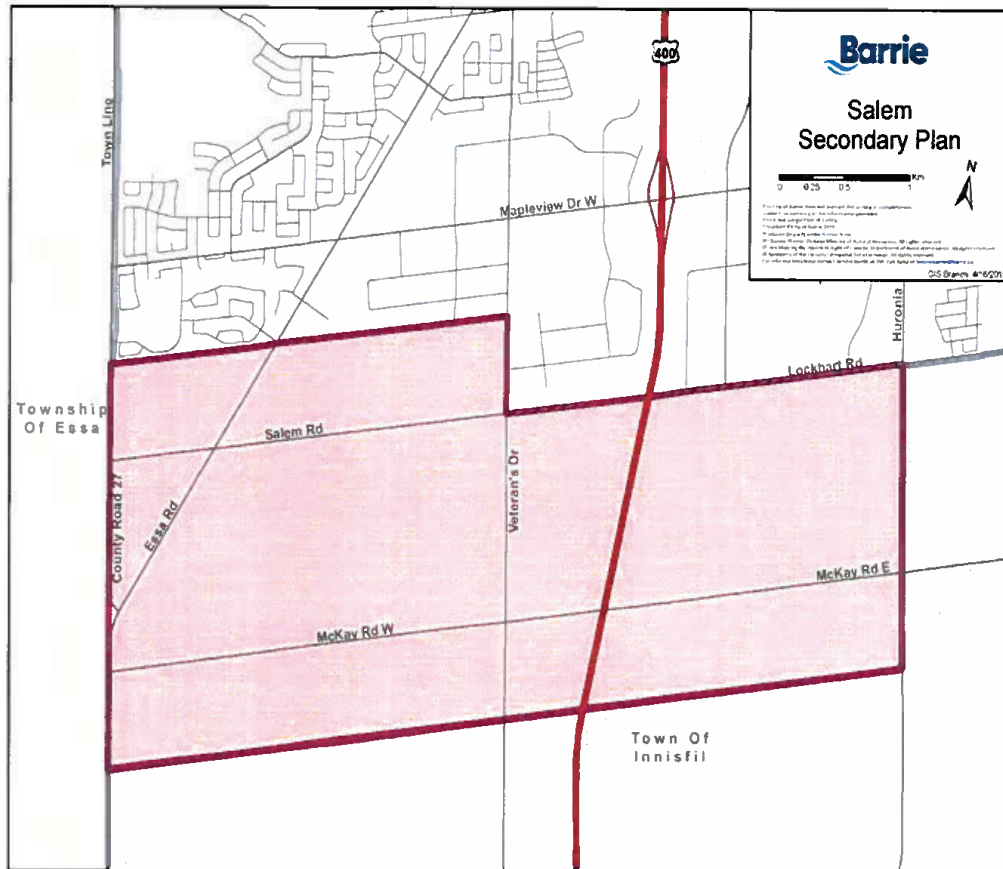
Police Small Equipment and Gear

By-law Number 2023-074
SCHEDULE "B"
Residential and Non-residential Development Charges

Service	RESIDENTIAL \$/UNIT					NON-RESIDENTIAL \$/M ²	
	Single & Semi-Detached	Other Multiples	Apartments 2+ Bedrooms	Apartments Bachelor and 1 Bedroom	Special Care/ Special Dwelling Units	Retail	Non-Retail
Library Services	\$1,425	\$1,068	\$892	\$580	\$446	\$0.00	\$0.00
Protection Services	\$2,227	\$1,669	\$1,394	\$906	\$697	\$14.21	\$7.99
Parks And Recreation	\$14,303	\$10,719	\$8,951	\$5,818	\$4,476	\$0.00	\$0.00
Services Related To A Highway: Public Works And Fleet	\$2,030	\$1,521	\$1,270	\$826	\$635	\$12.60	\$7.25
Transit Services	\$1,861	\$1,394	\$1,164	\$757	\$582	\$12.81	\$7.24
Long Term Care Services	\$137	\$102	\$86	\$56	\$43	\$0.00	\$0.00
Ambulance Services	\$500	\$374	\$313	\$203	\$156	\$2.90	\$1.79
Waste Diversion Services	\$1,153	\$864	\$722	\$469	\$361	\$7.33	\$4.12
Services Related To A Highway: Roads	\$55,293	\$41,440	\$34,604	\$22,493	\$17,302	\$362.94	\$209.89
Water Services - Facilities	\$299	\$224	\$187	\$122	\$94	\$2.00	\$1.16
Water Services - Facilities Related Debt	\$5,716	\$4,284	\$3,577	\$2,325	\$1,788	\$38.56	\$22.31
Wastewater Services - Facilities	\$8,633	\$6,470	\$5,403	\$3,512	\$2,701	\$56.61	\$32.73
Wastewater Services - Facilities Related Debt	\$4,694	\$3,518	\$2,937	\$1,909	\$1,469	\$32.43	\$18.75
TOTAL CITY-WIDE CHARGE PER UNIT	\$98,271	\$73,647	\$61,500	\$39,976	\$30,750	\$542.41	\$313.22
FORMER MUNICIPAL BOUNDARY							
Stormwater Drainage And Control Services	\$5,855	\$4,388	\$3,664	\$2,382	\$1,832	\$14.69	\$10.04
Water Services - Distribution Systems	\$2,128	\$1,595	\$1,332	\$866	\$666	\$14.34	\$8.74
Wastewater Services - Collection Systems	\$5,620	\$4,212	\$3,517	\$2,286	\$1,759	\$36.25	\$22.32
Subtotal Former Boundary per Unit	\$13,603	\$10,195	\$8,513	\$5,534	\$4,257	\$65.28	\$41.10
Subtotal City-Wide Charge Per Unit	\$98,271	\$73,647	\$61,500	\$39,976	\$30,750	\$542.41	\$313.22
TOTAL FORMER MUNICIPAL BOUNDARY PER UNIT	\$111,874	\$83,842	\$70,013	\$45,510	\$36,007	\$607.69	\$354.33
SALEM & HEWITT'S SECONDARY PLAN AREA							
Water Services - Distribution Systems	\$14,846	\$11,126	\$9,291	\$6,039	\$4,645	\$103.25	\$41.92
Wastewater Services - Collection Systems	\$12,960	\$9,713	\$8,111	\$5,272	\$4,055	\$89.99	\$36.54
Subtotal Salem & Hewitt's per Unit	\$27,806	\$20,839	\$17,402	\$11,311	\$8,700	\$193.23	\$78.46
Subtotal City-Wide Charge Per Unit	\$98,271	\$73,647	\$61,500	\$39,976	\$30,750	\$542.41	\$313.22
TOTAL SALEM & HEWITT'S BOUNDARY PER UNIT	\$126,077	\$94,486	\$78,902	\$51,287	\$39,450	\$735.64	\$391.69



By-law Number 2023-074
SCHEDULE "D"
Map of Salem Secondary Plan Area



**By-law 2023-074
SCHEDULE "E"
Map of Hewitt's Secondary Plan Area**

