

Consolidated Report

Prepared by Hemson for the Town of Whitby



2021 Consolidated Development Charges Background Study

July 7th, 2021



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List of Acronyms

AMP Asset Management Plan

BTE Benefit to Existing

COG Cost of Growth

DCA Development Charges Act

DC Development Charges

GFA Gross Floor Area

PPB Post-Period Benefit

PPU Persons Per Unit

SWM Stormwater Management

Executive Summary

Hemson Consulting Ltd. was retained by the Town of Whitby to complete a Development Charges (DC) Background Study. This Background Study provides the basis and background to update the Town's general and engineered development charges to reflect the servicing needs of new development in the Town.

A. Legislative Context

The Town of Whitby 2021 Development Charges (DC) Background Study (herein referred to as the "DC Background Study") is presented as part of the process to lead to the approval of a new DC by-law in compliance with the *Development Charges Act, 1997* (DCA). The study is prepared in accordance with the DCA and associated regulations, including the amendments that came into force in 2020.

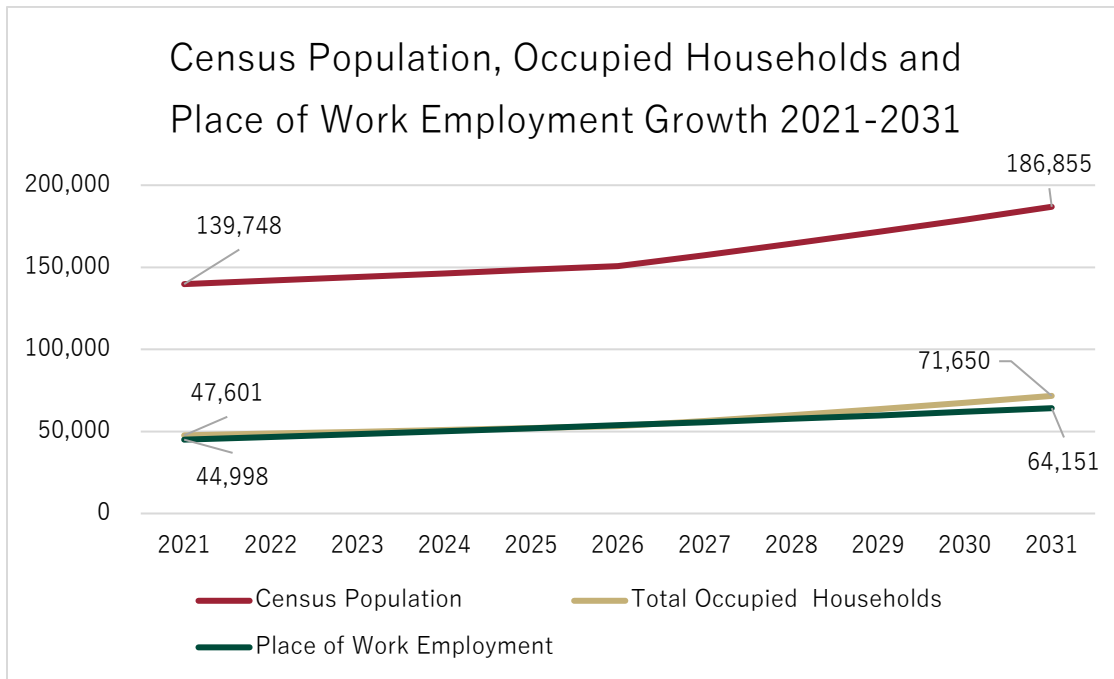
B. Calculation of Development Charges

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
- For some services, adjusting for a cashflow analysis.

C. Development Forecast

In Whitby, over the ten-year planning period of 2021-2030 the Town is anticipated to grow by approximately 42,440 persons, 21,300 occupied dwelling units and 17,400 employees. Over the long-term planning period to 2031, the Town will grow by approximately 50,290 persons, 25,450 occupied dwelling units and 19,630 employees. The development forecast is further discussed in Appendix A.



D. 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 the DC Background Study. This examination is required as one of the provisions of the DCA.

E. Development Charges Administration & Policy Considerations

i. Consideration of Area Rating

As part of the DC Background Study process, Council is required to consider the use of area rating (i.e. area-specific development charges) when preparing a Development Charges Background Study. In developing the assumptions for the DC Background Study, Hemson along with input from Town staff recommended that Town-wide development charge rates be adopted. A resolution recommending the use of Town-wide development charge rates will be brought forward for Council's consideration in April 2021.

ii. Changes Since 2016 DC By-law

As part of this update, the Town is proposing changes to the assumptions in the current 2016 and amended 2017 DC By-law. Additional details on the changes are described further in this report.

- Revised non-residential rate structure from “retail commercial” and “other non-residential” to “commercial”, “industrial” and “institutional”;
- Inclusion of an additional residential rate category for “special care/special needs dwelling units”;
- In accordance with the recent legislative changes to the DCA, Parking & Non Admin Operating Facilities services are not included for consideration as part of the proposed 2021 DC By-law;
- The long-term planning horizon was changed from 2036 to 2031;
- Removal of partial non-statutory DC exemptions; and
- Changes in timing of when DCs are determined (at site plan or rezoning application) in accordance with the requirements of the legislation.

F. Calculated Development Charges

iii. Calculated Town-wide Residential and Non-Residential Development Charges

The Town's 2021 development charge rates have been calculated in accordance with the tests and filters of the legislation. This includes limiting the recovery of all services infrastructure to the ten-year average historical service level; adjusting for the 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 (i.e. 2021-2030 for general and protection services and 2021-2031 for engineered services).

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.

Column	Dwelling Unit Types	Rate
A	Duplex Dwelling Unit Semi-Detached Dwelling Unit Single Detached Dwelling Unit	\$35,815
B	Back-to-Back Townhouse Dwelling Unit (3 or more bedrooms) Four-Plex Dwelling Unit (3 or more bedrooms) Row Townhouse Dwelling Unit (3 or more bedrooms) Semi-Detached Duplex Dwelling Unit (3 or bedrooms) Tri-Plex Dwelling Unit (3 or bedrooms) All other residential dwelling unit types not included in Columns A, C, D, or E	\$27,296

Column	Dwelling Unit Types	Rate
C	Apartment Dwelling Unit (2 or more bedrooms) Back-to-Back Townhouse Dwelling Unit (2 or fewer bedrooms) Four-Plex Dwelling Unit (2 or fewer bedrooms) Mobile Home Dwelling Unit Retirement Home Dwelling Unit (2 or more bedrooms) Row Townhouse Dwelling Unit (2 or fewer bedrooms) Semi-Detached Duplex Dwelling Unit (2 or fewer bedrooms) Stacked Townhouse Dwelling Unit (2 or more bedrooms) Tri-Plex Dwelling Unit (2 or fewer bedrooms)	\$15,036
D	Apartment Dwelling Unit (1 or fewer bedrooms) Retirement Home Dwelling Unit (1 or fewer bedrooms) Stacked Townhouse Dwelling Unit (1 or fewer bedrooms)	\$11,490
E	Special Care/Special Needs Dwelling Unit	\$10,213

Non-Residential Use	Rates
Commercial	\$223.09
Industrial	\$60.60
Institutional	\$126.39

Specific assumptions used in the calculation and analysis are provided in the body of this report.

iv. The DC Background Study is Based Upon the Best Available Information

The 2021 DC Background Study has been prepared based on the best available information at the time of preparing this report and is subject to change based on future operating and capital business plans presented to Council as part of the annual budgeting process. Any excess capacity that occurs over the five-year 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.

v. Draft DC By-law

The new 2021 DC By-law has been made available under Appendix G of this Background Study. It has been released in advance of the two weeks prior to the statutory public meeting in accordance with the requirements of the DCA.

Of particular importance, the definitions that will be included in the DC By-law are used for the purposes of administering the Town's development charges. In the event that definitions in other municipal documents (e.g. Official Plan or Zoning By-law) differs from the DC By-law, the language in the DC By-law prevails.

1. Introduction

A. Background

This Town of Whitby 2021 Development Charges (DC) Background Study is presented as part of a process to lead to the approval of new development charge by-laws in compliance with the *Development Charges Act, 1997* (DCA).

The anticipated residential and non-residential development in the Town of Whitby between 2021 and 2031 will increase demand on all municipal services. The Town wishes to continue implementing DCs to fund development-related capital projects so that development continues to be serviced in a fiscally responsible manner.

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

- A forecast of the amount, type and location of development anticipated in the Town;
- The average capital service levels provided in the Town over the ten-year period immediately preceding the preparation of the background study (2011-2020);
- A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred, or to be incurred, by the Town to provide for the expected development, including the determination of the eligible and ineligible components of the capital projects;

- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate; and
- An asset management plan to deal with all assets whose capital costs are proposed to be funded under the DC by-law, demonstrating that all assets included in the capital program are financially sustainable over their full life cycle.

The study presents the results of the review which determines the development-related net capital costs attributable to development that is forecast to occur in the Town. These development-related net capital costs are then apportioned among various types of development (residential and non-residential) in a manner that reflects the increase in the need for each service attributable to each type of development.

The *DCA* provides for a period of public review and comment regarding the calculated development charges. Following completion of this process in accordance with the *DCA*, Council's review of this study and the comments it receives regarding this study or other information brought to its attention about the calculated charges, it is intended that Council will pass a new development charges by-law for the Town.

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

B. Legislative Context

The study is prepared in accordance with the *DCA* and associated regulations. During the study process, multiple legislative changes have occurred. In 2019, the province announced changes to the *DCA* and the *Planning Act* through two key pieces of legislation Bill 108: *More Homes, More Choice Act* and Bill 138: *Plan to Build Ontario Together Act, 2019*. Prior

to the end of the consultation process, Canada was impacted by the COVID-19 global pandemic. In response, the province of Ontario introduced legislation to enact the state of emergency in July 2020, Bill 197 *COVID-19 Economic Recovery Act, 2020*. Bill 197 reversed many of the initiatives put forward through Bill 108 and 138.

On September 17, 2020, the Province enacted Bill 197 including the following key changes:

- Removal of the statutory 10% reduction on “soft” services;
- A list of eligible services as listed in subsection 2(4) of the DCA;
- Ability to create service classes in subsection 7(3) of the DCA; and
- Changes related to Community Benefits Charges (not included as part of this DC Study process).

Other changes to the DCA that came into force on January 1, 2020 as they relate to the “DC freeze” (Section 26.2 of the DCA) and the “DC deferrals” (Section 26.1 of the DCA) are not impacted by the recent legislation introduced through the *COVID-19 Economic Recovery Act, 2020*.

In particular, an asset management plan for all assets whose capital costs are proposed to be funded under the DC By-law must also be included in the DC Background Study. The asset management plan demonstrates that all such assets mentioned are financially sustainable over their full life cycle. The DC Background Study must also include consideration for the use of area-rated or area-specific development charges.

C. Relevant Analysis

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

The Town’s 2010 Transportation Master Plan has been used as the basis for the roads capital program, augmented by the 2017 Brooklin Transportation Master Plan, recent Environmental Assessments, design studies as well as project tenders.

The Town is also currently undertaking an Active Transportation Master Plan, anticipated to be finalized in 2021.

G. Consultation and Approval Process

The following provides a summary of the consultation and approval process undertaken to complete the 2021 DC 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 April 2021.

Activity	Timeline
Online Stakeholder Forum	August, 2020 to DC By-law passage
Technical Stakeholder Online Consultation Session Prior to Release of DC Background Study	February 3, 2021
Public Release of DC Background Study and draft DC By-law	February 19, 2021
Technical Stakeholder Consultation Sessions Following the Release of the DC Background Study	February to DC By-law passage
Statutory Public Meeting	March 8, 2021
Passage of 2019 DC By-law	May 17, 2021

2. A Town-Wide Methodology Aligns Development-Related Costs and Benefits

Several key steps are required in calculating a development charge. However, specific circumstances arise in each Town which must be reflected in the calculation. In this study, therefore, we have tailored our approach to the Town of Whitby'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 Town-wide basis which is consistent with the Town of Whitby's 2016 and 2017 Development Charges Background Studies. Despite the fact that development charges are calculated on a Town-wide basis, legislation allows a Town to exempt or reduce rates for specific geographic areas. However, the legislation prevents lost revenue, due to exemptions or reductions from being made up through increasing charges on other areas.

A. Town-Wide Development Charges are Calculated

Whitby provides a range of services to the community it serves and has a sizeable inventory of facilities, land, infrastructure, vehicles and equipment. The DCA provides the Town with flexibility when defining services that will be included in the development charge by-laws, provided that the other provisions of the *Act* and *Regulations* are met. The DCA also permits the Town 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 Town or to other designated development areas as specified in the by-laws. As required under the recent changes to the legislation, consideration for the

use of area-rating for development charge eligible services must be considered.

For all of the development charge eligible services that the Town provides, the full range of capital facilities, land, equipment and infrastructure is available throughout the Town. All residents therefore have access to all facilities. A widely accepted method for recovering the development-related capital costs for such services is to apportion them over all new development anticipated in the Town.

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

General Services

- Libraries
- Parks & Recreation
- Fire Services
- Waste Management Services
- By-law Enforcement
- Development Related Studies

Engineered Services

- Services Related to a Highway
 - Operations
 - Roads and Related – Town-wide Infrastructure
 - Roads and Related – Alternative Route and Related Infrastructure
- Stormwater Management

These services form a reasonable basis in which to plan and administer the Town-wide development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that make them up. For example, the Fire Services category includes fire stations and associated land, vehicles, furniture and equipment. The resulting

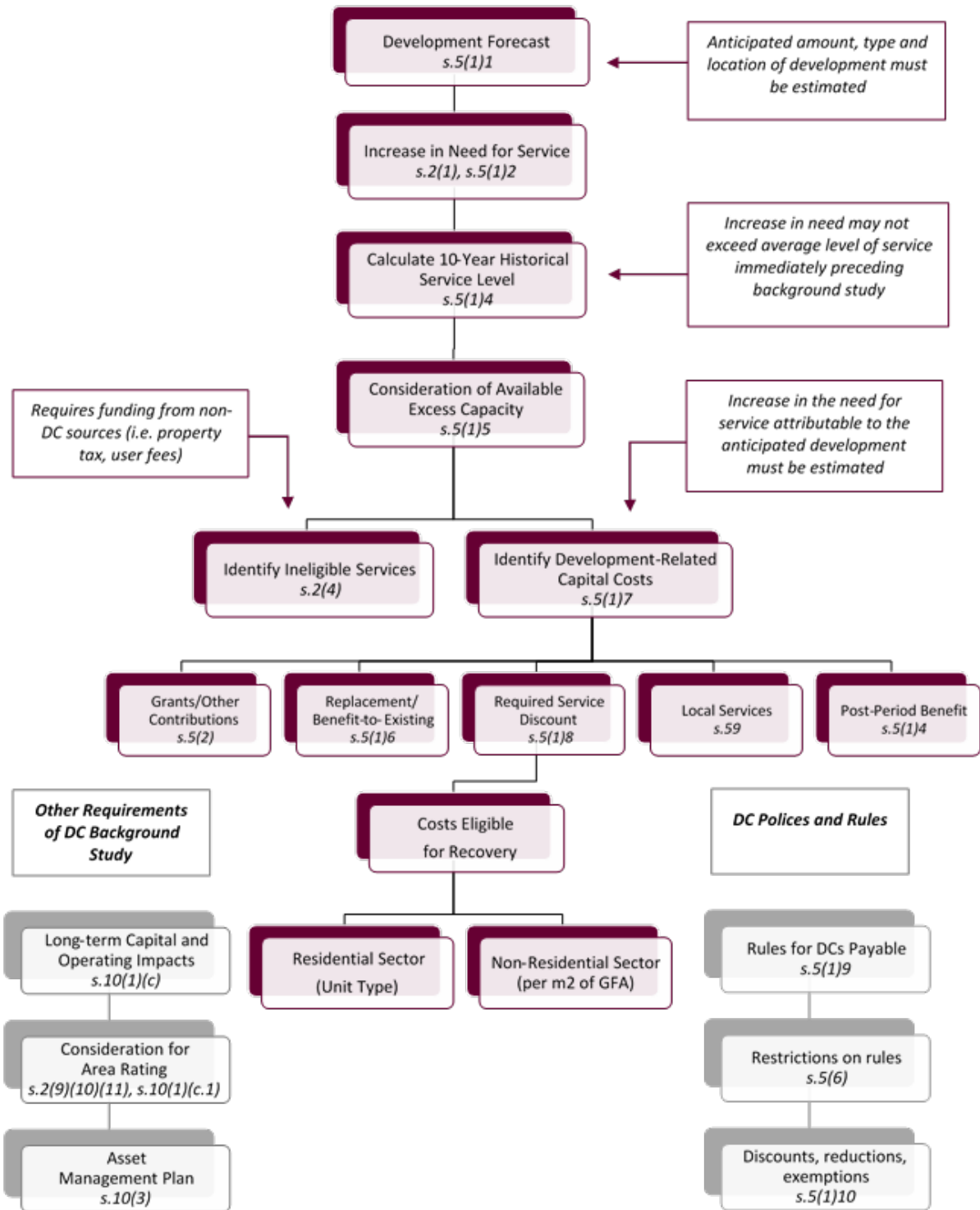
development charge for all of the above services would be imposed uniformly against all new development everywhere in the Town.

As a result of recent legislative changes, Non-Administrative Operations Facilities and Parking services, which are currently included in the Town's 2016 and 2017 amended DC By-laws, are not included in this DC Background Study. However, these rates continue to be levied by the Town as permitted under Section 37 of the *Planning Act*.

B. Key Steps in Determining Development Charges for Future Development-Related Projects

Several key steps are required in calculating development charges for future development-related projects. These steps are shown in Figure 1 and are summarized below.

Figure 1: Statutory Requirements of Development Charge Calculation and Study Process



i. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the ten-year study period, 2021 to 2030, for general services and to 2031 for engineering related services.

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 ten-year period, 2021–2030 and the longer-term period to 2031. The forecast of GFA is based on the employment forecast for the Town. Factors for floor space per worker by category are used to convert the employment forecast into gross floor area 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 10-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historical ten-year average service levels thus form the basis for the general services development charges. A review of the Town's capital service levels for buildings, land, vehicles, and so on has therefore been prepared as a reference for the calculation so that the portion of future capital projects that may be included in the development charge can be determined. The historical service levels used in this study have been calculated based on the period 2011–2020.

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 Town's departments as part of the study. All development-related capital costs included in the study have included accessibility considerations and are priced to meet provincial standards or Town standards, whichever is higher. 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, the provisions have the effect of requiring that the development charge be calculated on the lesser of the historical ten-year average service levels or the service levels embodied in future plans of the Town. The development-related capital 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 Town from non-development charges sources. The amount of municipal funding for such 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 to partially meet future servicing requirements. Adjustments are made in the 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 Town of Whitby, the allocation for general services is based on the consideration of projected changes in population in new units and employment over the planning periods. The exceptions are for the services of Library, Parks & Recreation and Waste Management. The development-related costs for these services have been allocated 100 per cent 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 charges results from adjustments made to development-related DC eligible costs for each service and sector resulting from the application of any unallocated development-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 forecasts used to calculate the development charges for the Town of Whitby. Appendix A contains additional material related to the growth forecast and the Town’s demographics.

The growth forecast used in the 2021 DC Background Study was based on available planning documents, including the Town’s Official Plan, and discussions with Town staff. The forecast provides overall population, housing and employment projections for the Town.

A. Residential Growth Forecast

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

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

Table 1 provides a summary of the residential forecast for the ten-year planning period from 2021 to 2030 and the longer-term period from 2021 to 2031. The ten-year planning period is used throughout this study for the

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

general services and Operations and the longer-term forecast is used for engineered services.

Over the planning period from 2021 to 2030, the total number of new residential units will increase by approximately 21,300, which translates into a population in new units of approximately 42,450. Over the 2021 to 2031 planning period, the Town is forecast to add an additional 25,450 dwelling units with an associated population of 50,290. The population in new units was derived by using data from Statistics Canada analysing household sizes in recently constructed units.

A summary of the residential growth forecast can be found in Table 1.

B. Non-Residential Growth Forecast

Development charges are levied on non-residential development as a charge per square metre of GFA. As with the residential forecast, the non-residential forecast requires both a projection of *employment* growth as well as a projection of the *employment growth associated with new floorspace* in the municipality.

The non-residential forecast projects an increase of approximately 17,400 employees to 2030, which will be accommodated in 1,210,080 square metres of new non-residential building space. To 2031, the Town anticipates adding 1,345,670 square metres of building space, which will be occupied by approximately 19,630 new employees.

A summary of the non-residential growth forecast can be found in Table 1.

TABLE 1

TOWN OF WHITBY
 SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
 DEVELOPMENT FORECAST

Town-wide Development Forecast	2020 Estimate	General Services Planning Period 2021 - 2030		Engineered Services Planning Period 2021 - 2031	
		Growth	Total at 2030	Growth	Total at 2031
Residential					
Total Occupied Dwellings	46,201	21,299	67,500	25,449	71,650
Total Population					
Census	136,562	42,444	179,006	50,293	186,855
<i>Population In New Dwellings</i>		<i>58,344</i>		<i>69,326</i>	
Non-Residential					
Employment	44,519	17,397	61,916	19,632	64,151
Non-Residential Building Space (sq.m.)		1,210,080		1,345,665	

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 Town over the ten-year period immediately preceding the preparation of the background study, on a service by service basis.

For non-engineered services, or general services, the legislative requirement is met by documenting historical service levels for the preceding ten years, in this case, for the period 2011 to 2020. Typically, service levels for general services are measured as a ratio of inputs per capita or per capita and employment.

O. Reg. 82/98 requires that when determining historical service levels both quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet per capita. For most services, the typical approach to addressing 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 dollars per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be charged to new development reflect not only the quantity (number and size), but also the quality (value or replacement cost) of service provided historically by the Town. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information provided by Town staff based on historical records and their experience with costs to acquire or construct similar facilities, equipment and infrastructure as of 2020.

Table 2 summarizes service levels for all Town-wide services included in the development charge calculation (excluding Development Related Studies). Appendix B and C provide detailed historical inventory data upon which the calculation of service levels is based.

TABLE 2

TOWN OF WHITBY
SUMMARY OF AVERAGE HISTORICAL SERVICE LEVELS 2011 - 2020

Service	2011 - 2020 Service Level Indicator
1.0 LIBRARIES	\$486.37 per capita
Buildings	\$327.89 per capita
Land	\$54.30 per capita
Materials	\$78.48 per capita
Furniture And Equipment	\$25.70 per capita
2.0 PARKS & RECREATION	\$4,008.58 per capita
Indoor Recreation	\$2,530.38 per capita
Parkland	\$848.65 per capita
Park Facilities	\$402.71 per capita
Park Buildings & Equipment	\$226.84 per capita
3.0 FIRE SERVICES	\$403.11 per pop & empl
Buildings	\$172.25 per pop & empl
Land	\$117.50 per pop & empl
Furniture And Equipment	\$20.00 per pop & empl
Radio Equipment	\$3.19 per pop & empl
Vehicles	\$90.17 per pop & empl
4.0 WASTE MANAGEMENT	\$55.41 per capita
Vehicles	\$55.41 per capita
5.0 BY-LAW ENFORCEMENT	\$13.45 per pop & empl
Buildings	\$7.27 per pop & empl
Land	\$3.18 per pop & empl
Furniture & Equipment	\$0.40 per pop & empl
Vehicles	\$2.60 per pop & empl
6.0 OPERATIONS	\$230.10 per pop & empl
Buildings	\$75.65 per pop & empl
Land	\$65.53 per pop & empl
Furniture And Equipment	\$44.48 per pop & empl
Vehicles	\$44.44 per pop & empl
7.0 ROADS & RELATED	\$9,251.21 per pop & empl
Roads	\$5,913.92 per pop & empl
Roads Land	\$2,071.25 per pop & empl
Bridges & Culverts	\$549.42 per pop & empl
Traffic Signals	\$50.27 per pop & empl
Sidewalks	\$666.35 per pop & empl
8.0 STORMWATER MANAGEMENT	\$1,317.31 per pop & empl
Storm Sewer	\$1,103.65 per pop & empl
Stormwater Management (Ponds)	\$213.66 per pop & empl

5. The Development-Related Capital Program

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 in Section II, 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.

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

Based on the development forecasts summarized in Section 4 and detailed in Appendix A, Town 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, the capital plan covers the ten-year period from 2021 to 2030. As permitted by the DCA, s. 5(1)4, the development charges for engineered services is based on development anticipated in the Town to 2031.

One of the recommendations contained in the background study is for Council to adopt the development-related capital program developed 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 Town. It is acknowledged that changes to the capital program presented here may occur through the Town's normal capital budget process.

B. The Development-Related Capital Program for General Services

A summary of the development-related capital forecast for general services is presented in Table 3. The table provides a separate total for services analysed over the ten-year period, 2021–2030. Further details on the capital programs for each individual service category are available in Appendix B and Appendix C.1.

TABLE 3

TOWN OF WHITBY
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR SERVICES 2021 - 2030
(in \$000)

Service	Gross Cost	Grants/ Subsidies	Municipal Cost
1.0 LIBRARIES	\$15,179.0	\$0.0	\$15,179.0
Recovery of Central Public Library Facility	\$1,200.5	\$0.0	\$1,200.5
Whitby Library Branches	\$10,073.5	\$0.0	\$10,073.5
Administrative Studies and Initiatives	\$80.0	\$0.0	\$80.0
Library Collection and Information Technology	\$3,825.0	\$0.0	\$3,825.0
2.0 PARKS & RECREATION	\$188,090.0	\$100.0	\$187,990.0
Parks, Forestry and Horticulture Services Fleet and Equipment	\$2,845.7	\$0.0	\$2,845.7
Recreational Trails Program	\$14,651.2	\$0.0	\$14,651.2
Parks Program	\$82,635.3	\$100.0	\$82,535.3
Other Community Centres	\$3,500.0	\$0.0	\$3,500.0
Iroquois Park Sports Centre	\$825.0	\$0.0	\$825.0
Luther Vipond Memorial Arena	\$9,281.0	\$0.0	\$9,281.0
Port Whitby Marina	\$490.0	\$0.0	\$490.0
Operations Centre	\$4,611.6	\$0.0	\$4,611.6
New Whitby Sports Complex	\$66,978.7	\$0.0	\$66,978.7
Parks, Parks Maintenance and Recreation Studies	\$787.0	\$0.0	\$787.0
Existing Debt (Principal 10yr)	\$1,484.6	\$0.0	\$1,484.6
3.0 FIRE SERVICES	\$11,144.9	\$0.0	\$11,144.9
Whitby Fire Facilities	\$9,187.5	\$0.0	\$9,187.5
Fire and Emergency Services Fleet and Equipment	\$372.0	\$0.0	\$372.0
Administrative Studies and Initiatives	\$128.8	\$0.0	\$128.8
Existing Debt (Principal 10yr)	\$1,456.7	\$0.0	\$1,456.7

TABLE 3
TOWN OF WHITBY
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR SERVICES 2021 - 2030
(in \$000)

Service	Gross Cost	Grants/ Subsidies	Municipal Cost
4.0 WASTE MANAGEMENT	\$2,205.0	\$0.0	\$2,205.0
Information Technology - Business Solutions	\$50.0	\$0.0	\$50.0
Waste Management Services Fleet and Equipment	\$2,155.0	\$0.0	\$2,155.0
5.0 BY-LAW ENFORCEMENT	\$1,655.9	\$230.3	\$1,425.6
Building, Furniture and Land	\$1,354.5	\$230.3	\$1,124.2
Legal and Enforcement Services Fleet and Equipment	\$301.4	\$0.0	\$301.4
6.0 DEVELOPMENT RELATED STUDIES	\$5,474.4	\$0.0	\$5,474.4
Corporate Services Studies and Initiatives	\$1,024.0	\$0.0	\$1,024.0
Administrative Studies and Initiatives	\$1,045.9	\$0.0	\$1,045.9
Planning and Development Studies	\$2,987.0	\$0.0	\$2,987.0
Sustainability Program	\$160.0	\$0.0	\$160.0
Downtown Related Studies	\$257.5	\$0.0	\$257.5
1.0 OPERATIONS	\$20,842.7	\$0.0	\$20,842.7
Information Technology - Business Solutions	\$206.0	\$0.0	\$206.0
Roads, Construction & Storm Water Services Fleet and Equipment	\$5,181.6	\$0.0	\$5,181.6
Traffic Services Fleet and Equipment	\$1,087.3	\$0.0	\$1,087.3
Operations Centre	\$5,636.4	\$0.0	\$5,636.4
Sustainability Program	\$300.0	\$0.0	\$300.0
Other Administrative / Operational Facilities	\$5,797.5	\$0.0	\$5,797.5
Existing Debt (Principal 10yr)	\$2,633.9	\$0.0	\$2,633.9
TOTAL - 10-YEAR SERVICES	\$244,591.8	\$330.3	\$244,261.6

The development-related capital program for general services estimates a total gross cost of \$244.59 million. Grants, subsidies or other contributions has been identified for Parks & Recreation and By-law Enforcement Services at a total value of \$330,300. Therefore, the net municipal cost of the capital program is \$244.26 million.

This capital program incorporates those projects identified to be related to development anticipated in the next ten years. It is not implied that all of these costs are to be recovered from new development by way of development charges (see Section 7 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 2021 (for which development charge reserve fund balances exist), for replacement of existing capital facilities, or for development anticipated to occur beyond the 2021–2030 planning period.

Of the \$244.26 million in ten-year net municipal capital costs for general services, \$187.99 million (77 per cent) is related to the provision of Parks & Recreation Services. This amount includes for a number of projects including the parks related share of the proposed Operations Centre expansion, various indoor recreation facilities, new park development and trail development.

The capital program associated with Operations relates to the recovery of the operations related portion of the design and construction of the Operations Centre expansion, the construction of new salt and sand domes, and various additions to fleet and equipment. The total net municipal cost for this program totals to \$20.84 million.

The Library Services capital program focuses on the creation of additional useable space in the Central Branch and future library branch. The net municipal cost for this program is \$15.18 million.

Fire Services has plans to construct a new Fire Hall No. 6 and a new Training Complex. The program also includes for the acquisition of two fire trucks and six fire prevention vehicles and debt associated with the purchases of land. The net municipal cost is \$11.14 million.

The portion of the Town's capital program which relates to the provision of development-related studies has a net municipal cost of \$5.47 million. This service includes various planning, administrative and corporate studies.

Waste Management Services includes for the provision of seven additional collection trucks and a special collections project. The net cost of this program total \$2.21 million.

Finally, By-law Enforcement includes various legal and enforcement services fleets as well as the expansion of Whitby Animal Services building and additional fleet and equipment. The net cost of this program totals \$1.43.

C. The Development-Related Capital Program for Engineered Services

Table 4 provides the development-related capital recoveries for the Town-wide engineered services of Roads and Related – Town-Wide Infrastructure, Roads and Related – Alternate Route and Related Infrastructure, and Stormwater Management. The Town-wide capital program totals \$818.14 million and provides servicing for anticipated development over the longer-term planning period from 2021 to 2031. Further details on the capital plans for each individual service category are available in Appendix C.

A total of \$8.15 million in grants, subsidies or other contributions (e.g. plans of subdivision) have been identified for the capital projects. As such, the remaining net cost of \$809.98 million is the cost to be paid by the Town. The majority of these costs, 84 percent, or \$682.91 million of the net capital program is associated with development-related road and related capital projects. The Town-wide capital program includes a general provision for development-related works to the Town-wide road network and also includes studies.

The remainder of the capital forecast for Roads and Related – Alternate Route and Related Infrastructure includes \$86.83 million and accounts for 11 per cent of the capital program. The capital forecast includes studies, property acquisition, utility relocation and intersection improvements.

Lastly, \$40.24 million, or 5 per cent for the Town-wide Stormwater management capital program. The forecast includes various storm sewers, storm water facilities and studies to identify future servicing requirements.

TABLE 4

TOWN OF WHITBY
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR TOWN-WIDE ENGINEERED SERVICES 2021 - 2031
(in \$000)

Service	Gross Cost	Grants / Subsidies	Other Contributions	Net Municipal Cost
ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE	\$689,935.1	\$25.0	\$6,995.9	\$682,914.2
Bridges and Culverts Program	\$141,059.0	\$0.0	\$551.3	\$140,507.7
Roads Reconstruction Program	\$56,510.0	\$0.0	\$0.0	\$56,510.0
Urban Road Resurfacing Program	\$47,789.8	\$0.0	\$154.6	\$47,635.1
Rural Road Resurfacing Program	\$4,641.8	\$0.0	\$48.0	\$4,593.9
Roads Maintenance Program	\$102.0	\$0.0	\$0.0	\$102.0
Transportation Infrastructure Resilience Program	\$7,970.0	\$0.0	\$0.0	\$7,970.0
Multi-Use Paths and Cycling Facilities Program	\$36,849.1	\$0.0	\$166.2	\$36,682.8
Sidewalk Program	\$10,403	\$0.0	\$191.4	\$10,211.7
Traffic Signals Program	\$4,502.5	\$0.0	\$0.0	\$4,502.5
Street Lighting Program	\$5,645.0	\$0.0	\$74.4	\$5,570.6
Roads, Roads Related and Storm Water Studies	\$3,885.9	\$0.0	\$0.0	\$3,885.9
Road Surface Treated to Hot Mix Conversion Program	\$4,673.7	\$0.0	\$0.0	\$4,673.7
Road Widening and Extension Program	\$231,163.0	\$0.0	\$169.9	\$230,993.1
Road Intersection Improvement Program	\$6,906.0	\$25.0	\$0.0	\$6,881.0
Mid Arterial Roadway	\$65,430.0	\$0.0	\$0.0	\$65,430.0
Dundas Street Multi-Use Path	\$2,283.0	\$0.0	\$0.0	\$2,283.0
Active Transportation Plan Program	\$7,366.7	\$0.0	\$0.0	\$7,366.7
Hwy 407 / Cochrane Interchange Program	\$37,600.0	\$0.0	\$5,640.0	\$31,960.0
Brooklin Expansion - Traffic Control	\$8,175.0	\$0.0	\$0.0	\$8,175.0
Transportation Master Plan and Related Studies	\$1,981.3	\$0.0	\$0.0	\$1,981.3
Downtown Improvement Program	\$800.0	\$0.0	\$0.0	\$800.0
Municipal Parking Program	\$250.0	\$0.0	\$0.0	\$250.0
Administrative Overhead	\$3,948.3	\$0.0	\$0.0	\$3,948.3
ROADS AND RELATED				
ALTERNATE ROUTE AND RELATED INFRASTRUCTURE	\$86,825.0	\$0.0	\$0.0	\$86,825.0
Alternate Route for Hwy 7/12	\$86,825.0	\$0.0	\$0.0	\$86,825.0
STORMWATER MANAGEMENT	\$41,375.7	\$0.0	\$1,133.7	\$40,241.9
Negative Reserve Fund Balance	\$2,040.3	\$0.0	\$0.0	\$2,040.3
Storm Water Program	\$38,679.0	\$0.0	\$1,133.7	\$37,545.3
Roads, Roads Related and Storm Water Studies	\$656.3	\$0.0	\$0.0	\$656.3
TOTAL - ENGINEERED SERVICES CAPITAL PROGRAM	\$818,135.8	\$25.0	\$8,129.6	\$809,981.2

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. The calculated non-residential charges are based on gross floor area (GFA) of building space.

It is noted that the calculation of the Town-wide development charges does not include any provision for statutory exemptions required under the DCA such as the exemption for enlargements of up to 50 per cent on existing industrial buildings. Such legislated exemptions, or other exemptions or reductions which Council may choose to provide, will result in a 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 General Services

A summary of the “unadjusted” residential and non-residential development charges for general services is presented in Table 5. Further details of the calculation for each individual Town service category are available in Appendix B and Appendix C.1.

The capital program for general services incorporates those projects identified to be related to development anticipated in the next ten years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 5 shows that \$26.09 million of the capital program relates to replacement of existing capital facilities or to shares of projects that provide benefit to the existing community. This portion of capital costs will be funded from property taxes.

A share of \$50.49 million has been identified as DC reserve fund monies are available to fund development-related projects. These funds have been earmarked for specific projects and they have each been identified in Appendix D. This portion has been reduced from the eligible capital costs. Another share of the forecast, \$4.93 million, is attributable to development beyond the 2030 period (which will be considered for recovery in future development charges studies, subject to service level considerations).

TABLE 5

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

10 Year Growth in Population in New Units	58,344
10 Year Growth in New Building Space (Sq.M)	1,210,080
Commercial Space (sq.m)	244,563
Industrial Space (sq.m)	719,229
Institutional Space (sq.m)	246,288

Service	Development-Related Capital Program (2021 - 2030)					Residential		Non-Residential Share					
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Available DC Reserves (\$000)	Post-2030 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	Share %	(\$000)	Commercial %	Commercial (\$000)	Industrial %	Industrial (\$000)	Institutional %	Institutional (\$000)
1.0 LIBRARIES	\$19,479.0	\$40.0	\$82.3	\$0.0	\$19,356.7	100%	\$19,356.7	0%	\$0.0	0%	\$0.00	0%	\$0.00
Unadjusted Development Charge Per Capita							\$331.77						
Unadjusted Non-Residential Per Sq.M									\$0.00		\$0.00		\$0.00
2.0 PARKS & RECREATION	\$187,990.0	\$21,152.7	\$45,675.8	\$0.0	\$121,161.5	100%	\$121,161.5	0%	\$0.0	0%	\$0.00	0%	\$0.00
Unadjusted Development Charge Per Capita							\$2,076.69						
Unadjusted Non-Residential Per Sq.M									\$0.00		\$0.00		\$0.00
3.0 FIRE SERVICES	\$19,144.9	\$2,778.2	\$1,046.2	\$0.0	\$15,320.5	77%	\$11,801.5	10%	\$1,476.4	8%	\$1,212.4	5%	\$830.30
Unadjusted Development Charge Per Capita							\$202.28						
Unadjusted Non-Residential Per Sq.M									\$6.04		\$1.69		\$3.37
4.0 WASTE MANAGEMENT*	\$2,205.0	\$0.0	\$540.8	\$0.0	\$1,664.2	100%	\$1,664.2	0%	\$0.0	0%	\$0.00	0%	\$0.00
Unadjusted Development Charge Per Capita							\$31.67						
Unadjusted Non-Residential Per Sq.M									\$0.00		\$0.00		\$0.00
5.0 BY-LAW ENFORCEMENT	\$1,425.6	\$161.0	\$13.4	\$447.0	\$804.3	77%	\$619.5	10%	\$77.5	8%	\$63.64	5%	\$43.59
Unadjusted Development Charge Per Capita							\$10.62						
Unadjusted Non-Residential Per Sq.M									\$0.32		\$0.09		\$0.18
6.0 DEVELOPMENT RELATED STUDIES	\$7,474.4	\$1,718.0	\$783.0	\$0.0	\$4,973.3	77%	\$3,831.0	10%	\$479.3	8%	\$393.6	5%	\$269.53
Unadjusted Development Charge Per Capita							\$65.66						
Unadjusted Non-Residential Per Sq.M									\$1.96		\$0.55		\$1.09
7.0 OPERATIONS	\$20,842.7	\$244.8	\$2,350.0	\$4,478.4	\$13,769.5	77%	\$10,606.7	10%	\$1,326.9	8%	\$1,089.61	5%	\$746.24
Unadjusted Development Charge Per Capita							\$181.80						
Unadjusted Non-Residential Per Sq.M									\$5.43		\$1.51		\$3.03
TOTAL 10 YEAR TOWN-WIDE GENERAL SERVICES	\$258,561.6	\$26,094.7	\$50,491.5	\$4,925.3	\$177,050.0		\$169,041.1		\$3,360.1		\$2,759.2		\$1,889.7
Unadjusted Development Charge Per Capita							\$2,900.49						
Unadjusted Non-Residential Per Sq.M									\$13.75		\$3.84		\$7.67

* Based on an adjusted number of population in new units.



The total costs eligible for recovery through development charges for general services is \$177.05 million. This amount is allocated between the residential, commercial, industrial and institutional sectors to derive the unadjusted development charges. Library Services, Parks & Recreation and Waste Management are all deemed to benefit residential development only, while the other services are allocated between both sectors based on shares of population in new units and employment growth. Approximately \$169.04 million of the general services development charges recoverable amount is deemed to benefit residential development. When this amount is divided by the ten-year population growth in new units (58,344), an unadjusted charge of \$2,900.49 per capita is derived. The commercial share of the general services capital program totals \$3.36 million and when this amount is divided by the ten-year forecast of new commercial non-residential space growth (244,563 square metres), an unadjusted charge of \$13.75 per square metre is derived. For the industrial sector, the total share of the capital program amounts to \$2.76 million and when this amount is divided by the ten-year new industrial space growth (719,229 square metres), an unadjusted charge of \$3.84 per square metre is derived. For the institutional sector, the total share of the capital program amounts to \$1.89 million and when this amount is divided by the ten-year new institutional space growth (246,288 square metres), an unadjusted charge of \$7.67 per square metre is derived.

B. Unadjusted Development Charge Calculation for Engineered Services

Table 6 displays the calculation of the development charge rates for the Town-wide engineered services of Roads and Related – Town-Wide Infrastructure, Roads and Related – Alternate Route and Related Infrastructure and Stormwater Management.

TABLE 6

TOWN OF WHITBY
 SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
 CAPITAL PROGRAM FOR TOWN-WIDE ENGINEERED SERVICES

2016-2036 Growth in Population in New Units	69,326
Employment Growth	19,632
2021-2031 Growth in Square Meters	1,345,665
Commercial Space (sq.m)	278,628
Industrial Space (sq.m)	779,469
Institutional Space (sq.m)	287,568

Service	Development-Related Capital Program (2021 - 2031)					Residential		Non-Residential Share					
	Net Municipal Cost	Replacement & Benefit to Existing	Available DC Reserves	Post-Period Benefit	Total DC Eligible Costs for Recovery	Share		Commercial		Industrial		Institutional	
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	%	(\$000)	%	(\$000)	%	(\$000)	%	(\$000)
1.0 ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE	\$721,827.6	\$137,818.7	\$33,843.9	\$8,442.2	\$541,722.9	78%	\$422,169.5	9%	\$50,811.83	7%	\$39,555.25	5%	\$29,186.38
Unadjusted Development Charge Per Capita							\$6,089.64						
Unadjusted Non-Residential Per Sq.M									\$182.36		\$50.75		\$101.49
2.0 ROADS AND RELATED - ALTERNATE ROUTE AND RELATED INFRASTRUCTURE	\$86,825.0	\$0.0	\$9,320.1	\$0.0	\$77,504.9	78%	\$60,400.2	9%	\$7,269.70	7%	\$5,659.21	5%	\$4,175.73
Unadjusted Development Charge Per Capita							\$871.25						
Unadjusted Retail Commercial Charge Per Sq.M									\$26.09		\$7.26		\$14.52
3.0 STORMWATER MANAGEMENT	\$40,241.9	\$25,422.1	\$0.0	\$0.0	\$14,819.9	78%	\$11,549.3	9%	\$1,390.05	7%	\$1,082.11	5%	\$798.45
Unadjusted Development Charge Per Capita							\$166.59						
Unadjusted Retail Commercial Charge Per Sq.M									\$4.99		\$1.39		\$2.78
TOTAL TOWN-WIDE ENGINEERED SERVICES	\$848,894.6	\$163,240.7	\$43,164.0	\$8,442.2	\$634,047.7		\$433,718.7		\$59,471.6		\$46,296.6		\$29,984.8
Unadjusted Development Charge Per Capita							\$7,127.48						
Unadjusted Retail Commercial Charge Per Sq.M									\$213.44		\$59.40		\$118.79



The development-related town-wide engineering infrastructure will be used to service the development in the Town of Whitby to 2031.

Of the total net municipal cost of all Town-wide engineered services development-related projects, \$848.89 million, not all are to be recovered from new development by way of development charges. Table 6 shows that \$163.24 million is for the replacement of existing capital works or for shares of projects that provide benefit to the existing community.

Available reserve funds, \$43.16 million have also been removed from the development charges calculation. Post-period share of \$8.44 million has been identified as a portion of the engineering services related capital projects will be required to service growth beyond 2031. As such, the total DC eligible cost of \$634.05 million is related to development in the 2021 to 2031 and has been included in the development charge calculation.

Like the general services, the capital program eligible for recovery through development charges is allocated to the residential, commercial, industrial and institutional sectors based on future shares of population in new units and employment growth over the planning period. On this basis, the allocation to the sectors is calculated at 78 per cent for the residential, 9 per cent for commercial, 7 per cent for industrial and 5 per cent for institutional.

As a result, \$433.72 million of the engineered services capital program is deemed to benefit residential development. When this amount is divided by the long-term growth in population in new dwelling units (69,326), a charge of \$7,127.48 per capita is the result.

The commercial share totals \$59.47 million and, when this amount is divided by the long-term forecast of commercial space growth (278,628 square metres), a charge of \$213.44 per square metre results. The industrial share totals \$46.30 million results in a charge of \$59.40 per square metre when divided by the long-term non-commercial growth (779,469 square metres).

The institutional share totals \$29.98 million results in a charge of \$118.79 per square metre when divided by the long-term non-commercial growth (287,568 square metres).

C. Adjusted Residential and Non-Residential Development Charges

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 7 summarize the results of the adjustment for the residential development charge rates. The adjusted per capita rate increases from \$10,027.97 to \$10,212.93 after the cash flow analysis. Residential Town-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 7.

As shown in the table, the calculated residential charge ranges from \$10,214 for a special care or special needs dwelling units, to \$35,815 for single and semi-detached units. The calculated charge for rows and other multiples (including townhouses with three bedrooms or more) is \$27,296, large apartments (including townhouses with less than three bedrooms) is \$15,036, and small apartments (with one bedroom or less) is \$11,490.

The calculated non-residential development charges rates are presented in Table 8. The calculated adjusted rate for new commercial development is \$223.09 per square metre, which is a decrease from the unadjusted rate of \$227.18 per square metre. For industrial development, the adjusted development charge amounts to \$60.60 per square metre which is a

decrease from the unadjusted rate of \$63.23 per square metre. Lastly, for institutional development, the adjusted development charge amounts to \$126.39 per square metre which is a decrease from the unadjusted rate of \$126.46 per square metre.

D. Comparison of 2021 Newly Calculated Development Charges with Charges Currently in Force in Whitby

Tables 9 through 12 present a comparison of the newly calculated residential and non-residential development charges with currently imposed development charge rates (as of January 1, 2021).

Table 9 shows that the calculated Town-wide residential development charge single or semi-detached unit is increasing by \$11,397 over the current charge of \$24,418 currently in force. The comparison of calculated non-residential development charges with current rates is shown on Tables 10, 11 and 12. There is one additional category added for residential development (Special Care / Special Needs Dwelling Units) and the non-residential rate has been further delineated into three categories from the previous two (retail commercial and other non-residential). The new non-residential categories are:

- Commercial,
- Industrial, and
- Institutional

The residential rate categories are as follows:

Column	Dwelling Unit Types
A	Duplex Dwelling Unit Semi-Detached Dwelling Unit Single Detached Dwelling Unit
B	Back-to-Back Townhouse Dwelling Unit (3 or more bedrooms) Four-Plex Dwelling Unit (3 or more bedrooms) Row Townhouse Dwelling Unit (3 or more bedrooms) Semi-Detached Duplex Dwelling Unit (3 or bedrooms) Tri-Plex Dwelling Unit (3 or bedrooms) All other residential dwelling unit types not included in Columns A, C, D, or E
C	Apartment Dwelling Unit (2 or more bedrooms) Back-to-Back Townhouse Dwelling Unit (2 or fewer bedrooms) Four-Plex Dwelling Unit (2 or fewer bedrooms) Mobile Home Dwelling Unit Retirement Home Dwelling Unit (2 or more bedrooms) Row Townhouse Dwelling Unit (2 or fewer bedrooms) Semi-Detached Duplex Dwelling Unit (2 or fewer bedrooms) Stacked Townhouse Dwelling Unit (2 or more bedrooms) Tri-Plex Dwelling Unit (2 or fewer bedrooms)
D	Apartment Dwelling Unit (1 or fewer bedrooms) Retirement Home Dwelling Unit (1 or fewer bedrooms) Stacked Townhouse Dwelling Unit (1 or fewer bedrooms)
E	Special Care/Special Needs Dwelling Unit

TABLE 7
TOWN OF WHITBY
TOWN-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES

Service	Unadjusted Charge per Capita	Adjusted Charge After Cashflow per Capita	Residential Charge By Unit Type ⁽¹⁾					Percentage of Charge
			Category A	Category B	Category C	Category D	Category E	
Libraries	\$331.77	\$325.35	\$1,141	\$870	\$479	\$366	\$325	3.2%
Parks & Recreation	\$2,076.69	\$2,329.69	\$8,170	\$6,227	\$3,430	\$2,621	\$2,330	22.8%
Fire Services	\$202.28	\$202.66	\$711	\$542	\$298	\$228	\$203	2.0%
Waste Management	\$31.67	\$30.33	\$106	\$81	\$45	\$34	\$30	0.3%
By-Law Enforcement	\$10.62	\$11.68	\$41	\$31	\$17	\$13	\$12	0.11%
Development Related Studies	\$65.66	\$63.69	\$223	\$170	\$94	\$72	\$64	0.6%
Total General Services	\$2,718.69	\$2,963.40	\$10,392	\$7,921	\$4,363	\$3,334	\$2,964	29.0%
Services Related to a Highway								
<i>Operations</i>	\$181.80	\$200.59	\$703	\$536	\$295	\$226	\$201	2.0%
<i>Roads & Related - Town-Wide Infrastructure</i>	\$6,089.64	\$6,044.19	\$21,196	\$16,154	\$8,898	\$6,800	\$6,044	59.2%
<i>Roads & Related - Alternate Route And Related Infrastructure</i>	\$871.25	\$825.09	\$2,894	\$2,205	\$1,215	\$928	\$825	8.1%
Stormwater Management	\$166.59	\$179.66	\$630	\$480	\$265	\$202	\$180	1.8%
Total Engineered Services	\$7,309.28	\$7,249.54	\$25,423	\$19,375	\$10,673	\$8,156	\$7,250	71.0%
TOTAL TOWN-WIDE CHARGE PER UNIT	\$10,027.97	\$10,212.93	\$35,815	\$27,296	\$15,036	\$11,490	\$10,214	100.0%
(1) Based on Persons Per Unit Of:			3.51	2.67	1.47	1.13	1.00	



TABLE 8
TOWN OF WHITBY
TOWN-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Commercial			Industrial			Institutional		
	Unadjusted Charge per Square	Adjusted Charge per Square Metre	Percentage of Charge	Unadjusted Charge per Square	Adjusted Charge per Square Metre	Percentage of Charge	Unadjusted Charge per Square	Adjusted Charge per Square Metre	Percentage of Charge
Libraries	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%
Parks & Recreation	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%
Fire Services	\$6.04	\$5.99	2.7%	\$1.69	\$1.64	2.7%	\$3.37	\$3.39	2.7%
Waste Management	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%
By-Law Enforcement	\$0.32	\$0.34	0.2%	\$0.09	\$0.09	0.1%	\$0.18	\$0.20	0.2%
Development Related Studies	\$1.96	\$1.91	0.9%	\$0.55	\$0.52	0.9%	\$1.09	\$1.07	0.8%
General Services Charge Per Square Metre	\$8.31	\$8.24	3.7%	\$2.32	\$2.25	3.7%	\$4.64	\$4.66	3.7%
Services Related to a Highway									
<i>Operations</i>	\$5.43	\$5.89	2.6%	\$1.51	\$1.57	2.6%	\$3.03	\$3.38	2.7%
<i>Roads & Related - Town-Wide Infrastructure</i>	\$182.36	\$179.15	80.3%	\$50.75	\$48.71	80.4%	\$101.49	\$101.54	80.3%
<i>Roads & Related - Alternate Route And Related Infrastructure</i>	\$26.09	\$24.53	11.0%	\$7.26	\$6.67	11.0%	\$14.52	\$13.79	10.9%
Stormwater Management	\$4.99	\$5.28	2.4%	\$1.39	\$1.40	2.3%	\$2.78	\$3.02	2.4%
Engineered Services Charge Per Square Metre	\$218.87	\$214.85	96.3%	\$60.91	\$58.35	96.3%	\$121.82	\$121.73	96.3%
TOTAL TOWN-WIDE CHARGE PER SQUARE METRE	\$227.18	\$223.09	100.0%	\$63.23	\$60.60	100.0%	\$126.46	\$126.39	100.0%

TABLE 9

TOWN OF WHITBY
 COMPARISON OF CURRENT AND CALCULATED
 RESIDENTIAL TOWN-WIDE DEVELOPMENT CHARGES

Service	Current Residential	Calculated Residential	Difference in Charge	
	Charge / SDU	Charge / SDU		
Libraries	\$1,294	\$1,141	(\$153)	-12%
Parks & Recreation	\$7,228	\$8,170	\$942	13%
Fire Services	\$1,074	\$711	(\$363)	-34%
Waste Management	\$171	\$106	(\$65)	-38%
By-Law Enforcement*	\$195	\$41	(\$154)	-79%
Development Related Studies	\$1,172	\$223	(\$949)	-81%
Non-Administrative Operational Facilities*	\$195	\$0	\$0	N/A
Total General Services	\$11,330	\$10,392	(\$938)	-8%
Services Related to a Highway				
<i>Operations</i>	\$757	\$703	(\$54)	-7%
<i>Roads & Related - Town-Wide Infrastructure</i>	\$9,132	\$21,196	\$12,064	132%
<i>Roads & Related - Alternate Route And Related Infrastructure</i>	\$2,759	\$2,894	\$135	5%
Stormwater Management	\$440	\$630	\$190	43%
Total Engineered Services	\$13,088	\$25,423	\$12,335	94%
TOTAL TOWN-WIDE RESIDENTIAL CHARGE	\$24,418	\$35,815	\$11,397	47%

*Non-Administrative Op. Facilities & Parking have not been considered under this DC By-law. Parking was previously combined with By-law



TABLE 10

**TOWN OF WHITBY
COMPARISON OF CURRENT AND CALCULATED
COMMERCIAL TOWN-WIDE DEVELOPMENT CHARGES**

Service	Current Commercial	Calculated Commercial	Difference in Charge	
	Charge / Sq.m	Charge / Sq.m		
Libraries	\$0.00	\$0.00	\$0.00	N/A
Parks & Recreation	\$0.00	\$0.00	\$0.00	N/A
Fire Services	\$7.60	\$5.99	(\$1.61)	-21%
Waste Management	\$0.00	\$0.00	\$0.00	N/A
By-Law Enforcement*	1.43	\$0.34	(\$1.09)	-76%
Development Related Studies	\$8.04	\$1.91	(\$6.13)	-76%
Non-Administrative Operational Facilities*	\$1.32	\$0.00	\$0.00	N/A
General Services Charge Per Square Metre	\$18.38	\$8.24	(\$10.14)	-55%
Services Related to a Highway				
<i>Operations</i>	\$5.28	\$5.89	\$0.61	11%
<i>Roads & Related - Town-Wide Infrastructure</i>	\$64.07	\$179.15	\$115.08	180%
<i>Roads & Related - Alternate Route And Related Infrastructure</i>	\$19.26	\$24.53	\$5.27	27%
Stormwater Management	\$3.08	\$5.28	\$2.20	71%
Engineered Services Charge Per Square Metre	\$91.70	\$214.85	\$122.55	134%
TOTAL TOWN-WIDE CHARGE PER SQUARE METRE	\$110.08	\$223.09	\$113.01	103%

*Non-Administrative Op. Facilities & Parking have not been considered under this DC By-law. Parking was previously combined with By-law



TABLE 11

TOWN OF WHITBY
COMPARISON OF CURRENT AND CALCULATED
INDUSTRIAL TOWN-WIDE DEVELOPMENT CHARGES

Service	Current	Calculated	Difference in Charge	
	Industrial Charge / Sq.m	Industrial Charge / Sq.m		
Libraries	\$0.00	\$0.00	\$0.00	N/A
Parks & Recreation	\$0.00	\$0.00	\$0.00	N/A
Fire Services	\$3.99	\$1.64	(\$2.35)	-59%
Waste Management	\$0.00	\$0.00	\$0.00	N/A
By-Law Enforcement*	\$0.75	\$0.09	(\$0.66)	-88%
Development Related Studies	\$4.23	\$0.52	(\$3.71)	-88%
Non-Administrative Operational Facilities*	\$0.69	\$0.00	\$0.00	N/A
General Services Charge Per Square Metre	\$9.67	\$2.25	(\$7.42)	-77%
Services Related to a Highway				
<i>Operations</i>	\$2.78	\$1.57	(\$1.21)	-43%
<i>Roads & Related - Town-Wide Infrastructure</i>	\$33.69	\$48.71	\$15.02	45%
<i>Roads & Related - Alternate Route And Related Infrastructure</i>	\$10.13	\$6.67	(\$3.46)	-34%
Stormwater Management	\$1.62	\$1.40	(\$0.22)	-14%
Engineered Services Charge Per Square Metre	\$48.22	\$58.35	\$10.13	21%
TOTAL TOWN-WIDE CHARGE PER SQUARE METRE	\$57.89	\$60.60	\$2.71	5%

*Non-Administrative Op. Facilities & Parking have not been considered under this DC By-law. Parking was previously combined with By-law

TABLE 12

**TOWN OF WHITBY
COMPARISON OF CURRENT AND CALCULATED
INSTITUTIONAL TOWN-WIDE DEVELOPMENT CHARGES**

Service	Current	Calculated	Difference in Charge	
	Institutional Charge / Sq.m	Institutional Charge / Sq.m		
Libraries	\$0.00	\$0.00	\$0.00	N/A
Parks & Recreation	\$0.00	\$0.00	\$0.00	N/A
Fire Services	\$3.99	\$3.39	(\$0.60)	-15%
Waste Management	\$0.00	\$0.00	\$0.00	N/A
By-Law Enforcement*	\$0.75	\$0.20	(\$0.55)	-73%
Development Related Studies	\$4.23	\$1.07	(\$3.16)	-75%
Non-Administrative Operational Facilities*	\$0.69	\$0.00	\$0.00	N/A
General Services Charge Per Square Metre	\$9.67	\$4.66	(\$5.01)	-52%
Services Related to a Highway				
<i>Operations</i>	\$2.78	\$3.38	\$0.60	22%
<i>Roads & Related - Town-Wide Infrastructure</i>	\$33.69	\$101.54	\$67.85	201%
<i>Roads & Related - Alternate Route And Related Infrastructure</i>	\$10.13	\$13.79	\$3.66	36%
Stormwater Management	\$1.62	\$3.02	\$1.40	86%
Engineered Services Charge Per Square Metre	\$48.22	\$121.73	\$73.51	152%
TOTAL TOWN-WIDE CHARGE PER SQUARE METRE	\$57.89	\$126.39	\$68.50	118%

*Non-Administrative Op. Facilities & Parking have not been considered under this DC By-law. Parking was previously combined with By-law



7. Cost of Growth Analysis

This section describes the cost of growth analysis for the capital facilities and infrastructure identified in the ten-year capital program as it relates to the assets included in the DC Background Study. The objective of the analysis is to examine the impact of development-related infrastructure needs on the property tax base. The analysis considers both capital and operating implications.

This section is also intended to satisfy the long-term capital and operating costs and asset management plan requirements as required by section 10(1)(c) and 10(3) of the DCA. This analysis is not intended to provide a comprehensive assessment of growth and non-growth related assets as the Town maintains and regularly updates its Long Range Financial Plan (LRFP) model to understand the impacts of growth. Following the completion of the DC Background Study, a comprehensive cost of growth analysis will be completed and the financing mechanisms for DC eligible and non-DC eligible projects will be further evaluated in the context of the Town's existing services and financial policies. Assumptions used in this cost of growth analysis may also be updated through the LRFP.

Appendix E contains additional material related to the Cost of Growth Analysis.

A. The Cumulative Gross Cost of the Ten-Year Capital Program Totals \$741.21 Million

As shown in Table 13, the total gross development-related capital program is anticipated to cost \$741.21 million for general and engineered services over the 2021-2030 period. In accordance with the test and filters required under the *DCA*, not all of the identified infrastructure costs may be recovered through development charges.

Grants, subsidies and other non-tax recoveries total \$12.17 million and are reduced from the total development charge eligible costs. Available DC reserves of \$37.93 million are applied to projects occurring in the initial years of the ten-year period and are also reduced. In total, based on the current development forecast and calculated development charges, the Town anticipates to generate approximately \$483.43 million in development charge revenue over the next ten-years before adjustments for statutory and non-statutory exemptions.

The Town's share of growth, which cannot be funded through the calculated development charges amounts to \$156.88 million in DC deductions including benefit to existing shares and post-period benefiting shares. While it is likely that a portion of the post-period shares could be recovered from development charges in future DC by-laws, for the purposes of creating scenarios to test the annual tax increase, it has been assumed that the post-period shares will be fully funded by property taxes.

Finally, the statutory and non-statutory discounts, exemptions and reductions identified in the 2021 DC By-law will require approximately \$307,970 in funding from non-DC revenue sources over the 2021-2030 planning period.

B. Net Long Term Capital and Operating Costs for Town Services are estimated to Increase over the Forecast Period

Table 13 summarizes the estimated increase in net operating costs that the Town will experience for additions associated with the planned capital program. These estimates are based on average costs derived from a review of recent budgets and indirect operating estimates provided by Town staff (additional details are included in Appendix E).

As shown in Table 13, the Town's cumulative total net direct and indirect operating costs for tax-supported services are estimated to cost \$79.94 million over the 2021-2030 period, which by 2030 will reach \$16.69 million annually. This amount includes, development charge eligible, Town funded, and developer subdivision assets. Included in this amount, is the addition of approximately 137 full-time equivalent employees over ten years.

C. Annual Capital Replacement Provisions will be Required for DC/Town Funded Projects and Assumed Assets

The DCA was amended in late 2015 and, effective January 1, 2016, municipalities are required to complete an Asset Management Plan before the passing of a development charges by-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle. For the purposes of the study, the Asset Management Plan requirement is addressed through the Cost of Growth Analysis.

Table 13 summarizes the cumulative capital provisions over the 2021-2030 period required to replace the capital infrastructure proposed to be funded over the next ten years. This estimate is based on information obtained through discussions with Town staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset.

Table 13 illustrates that over the 2021-2030 planning period, the Town will need to fund a cumulative total of \$70.33 million in new assets considered in the Development Charges Study and \$6.45 million for developer subdivision assets. By 2030, the Town will need to fund an additional \$14.57 million per annum in DC/Town funded assets and \$1.68 million for developer subdivision assets. As per the Town's Maintenance Reserve policy, these assets once constructed and assumed, will be included in the annual maintenance envelope calculation. For the purposes of the DC/Town funded

assets, a two-year lag has been assumed and for the developer subdivision assets, an eight-year lag has been assumed.

The calculated cumulative ten-year total and annual funding provision should be considered within the context of the Town's projected growth; over the next ten years (to 2030) the Town is projecting an increase of approximately 21,300 total private dwellings units, which represents a 46 per cent increase over the existing base as well as approximately 17,400 new employees. As shown in Table 13, this growth will have the effect of increasing the overall assessment base and will result in an additional \$208.05 million in cumulative assessment revenue over the ten-year period. In this respect, the additional assessment and user fee revenue can be utilized to offset the Town's total cost of growth.

TABLE 13

**TOWN OF WHITBY
COST OF GROWTH ANALYSIS - 10-YEAR CAPITAL PLAN**

**TOTAL GROWTH-RELATED CAPITAL PROJECTS
ALL COSTS ARE IN \$2021**

Total Growth-Related Projects	2021-2030
A Total Project Costs	
Gross Project Costs	\$ 741,209,960
Subtotal	\$ 741,209,960
Capital Cost Analysis	
B Grants and Subsidies	
Grants and Subsidies	\$ 12,171,986
Subtotal	\$ 12,171,986
C Development Charges	
Available DC Reserves	\$ 37,929,878
DC Collections 2021-2030 (1)	\$ 483,427,472
Subtotal	\$ 521,357,350
D DC Deductions (Town Share of Growth)	
Benefit-to-Existing/Replacement (2)	\$ 143,513,714
Ineligible Services (2)	\$ -
Post-Period benefit (3)	\$ 13,367,460
Subtotal	\$ 156,881,175
E DC Exemptions (Town Share of Growth)	
Statutory Discounts (2)	\$ 233,338
Non-Statutory Discounts (2)	\$ 74,635
Subtotal	\$ 307,973
TOTAL CAPITAL COSTS (B + C + D + E) (5))	\$ 690,718,483

Notes:

- 1 Recovered through the development charge rates
- 2 Represents ineligible shares of development charge projects that must be funded from taxes
- 3 Assumed to be Tax funded but may be considered for recovery in future development charge by-law
- 4 Town's share of capital program equals DC deductions plus DC exemptions

TABLE 13

TOWN OF WHITBY
 COST OF GROWTH ANALYSIS - 10-YEAR CAPITAL PLAN

OPERATING AND ASSET MANAGEMENT REQUIREMENTS ANALYSIS
 ALL COSTS ARE IN \$2021

Operating Cost Analysis (5)	2021-2030
F Direct and Indirect (Cumulative)	
DC/Town Funded Projects	\$ 76,680,167
Assumed Projects	\$ 3,259,378
Total Operating Cost Analysis	\$ 79,939,545
Additional Full Time Equivalents (FTEs) (6)	
DC/Town Funded Projects	130.8
Assumed Projects	6.3
Total FTEs	137.1
2030 Annual Operating Costs (Cumulative)	
DC/Town Funded Projects	\$ 15,711,135
Assumed Projects	\$ 980,556
Total Annual Provision in 2031	\$ 16,691,691
Capital Maintenance Costs (7)	2021-2030
G Asset Management (Cumulative)	
DC/Town Funded Projects	\$ 70,328,238
Assumed Projects	\$ 6,446,200
Total Capital Maintenance Costs	\$ 76,774,438
2030 Annual Asset Management Provision (Cumulative)	
DC/Town Funded Projects	\$ 14,572,191
Assumed Projects	\$ 1,683,761
Total Annual Provision in 2025	\$ 16,255,952
TOTAL ALL EXPENDITURES (B + C + D + E + F + G)	\$ 847,432,467
TAX SUPPORTED EXPENDITURES (D + E + F + G)	\$ 313,903,131

Notes:

- 5 Direct and indirect operating impacts are net of user fee revenues.
- 6 Based on an average salary, wages and benefits of approximately \$115,000 per employee. Salaries relating to new FTEs are included in the operating costs.
- 7 Calculated using straight-line approach with interest. These are calculated contributions are higher than the Town's current contributions to asset replacement.

TABLE 13

TOWN OF WHITBY
COST OF GROWTH ANALYSIS - 10-YEAR CAPITAL PLAN

TAXATION REVENUE FROM NEW GROWTH
ALL COSTS ARE IN \$2021

Taxation Revenue from New Growth	2021-2030
Taxation Revenue (Cumulative)	
Residential Revenue	\$ 206,656,137
Non-Residential Revenue	\$ 1,396,854
Subtotal	\$ 208,052,991
TOTAL TAX REVENUE	\$ 208,052,991

D. Growth will Require Tax Rate Increases

Table 14 summarizes the components of the development-related capital program that will require funding from property taxes and identifies the annual tax increase requirement. In total, \$233.96 million is related to the net capital funding requirements and \$79.94 million relates to the net operating expenditures over the 2012-2030 period that will be funded from non-development charge sources.

The Town currently maintains a Growth Reserve Fund which is used to pay for the Town's portion of capital growth projects as outlined in the Council approved Development Charges Background Study. As of 2021, the Town had \$27.91 million available in the Growth Reserve Fund that has been applied to off-set the total net capital funding requirements. The model assumes the full utilization of the Growth Reserve Fund balance and existing annual contributions as approved in the Town's annual budget. Over the ten-year period, the Town also anticipates to generate roughly \$208.05 million in additional taxation revenue from new growth. After these adjustments, the cumulative "gap" between tax related expenditures and tax revenue is used to determine the annual tax increase to balance the ten-year plan.

As shown in Table 14, the cost of growth analysis assumes the following:

- No projects are funded through debentures
- All post-period shares are funded through taxes
- Fully utilizes the Growth Reserve Fund balance and annual contributions to Growth Reserve Fund as approved in the Town's annual budget
- Total ten-year funding requirement after reserve adjustments and taxation revenue from new growth equals \$45.26 million
- Annual tax increase calculated to be 0.73% over the ten-year period

TABLE 14

TOWN OF WHITBY
 COST OF GROWTH ANALYSIS - 10-YEAR CAPITAL PLAN

ALL COSTS ARE IN \$2021

COST OF GROWTH ANALYSIS	2021-2030
Capital Funding Required (1)	\$233,963,586
<i>Less Growth Reserve Fund Balance</i>	<i>(\$27,908,068)</i>
<i>Less Growth Reserve Fund Contribution</i>	<i>(\$32,683,086)</i>
Operating Funding Required (2)	\$79,939,545
Revised Capital + Operating Funding Required	\$253,311,977
Taxation Revenue from New Growth	(\$208,052,991)
Revised Funding Requirement	\$45,258,986
Annual Tax Increase to Balance 10-Year Plan	0.73%

Notes:

- 1 Includes "DC Deductions", "DC Exemptions" and "Capital Maintenance Costs"
- 2 Includes direct and indirect operating costs

E. Financing Mechanisms to Mitigate Tax Rate Impacts will be examined through the Long-Range Financial Plan

As summarized in Table 14, the calculated funding requirements are considered to be financially sustainable as it is expected that the increased tax funded expenditure requirements, including long-term operating and capital asset management requirements, can be absorbed by the tax base over the long-term with increases.

The tax increase shown in Table 14 has been calculated on an average annual basis. In order to achieve this, the Town will need to use a number of mitigating measures including but not limited to transfers to/from reserves, timing of projects and use of debt. The Town's financing mechanisms for these projects will be further evaluated context of the Town's existing services and financial policies that will be identified through a Long-Range Financial Plan (LRFP) analysis.

8. Development Charges Administration

A. Development Charge Administration

Many of the administrative requirements of the DCA will be similar to those presently followed by the Town in terms of collection practices. In this regard:

- As required under the DCA, the Town should codify any rules regarding the application of the by-laws and any exemptions within the development charges by-law proposed for adoption;
- The proposed draft by-law sets out the rules to determine development charges applicable in any particular case. Rules for exemptions, potential reductions, and redevelopment of land are also outlined in the proposed draft by-law;
- It is recommended that limited exemptions, other than those required in the DCA be formally adopted in the by-laws; and
- It is recommended that Council adopt the development-related capital program included in this background study, subject to annual review through the Town's normal capital budget process.

B. Local Service Definitions

Appendix F of the study provides the definition of “local service” under the DCA for parkland development, active transportation and other engineered services by the Town of Whitby. The purpose in establishing these definitions is to determine the eligible capital costs for inclusion in the development charges calculation for the Town. The functions or services deemed to be local in nature are not to be included in the determination of the development charges rates. The provision of local services is considered to be a direct developer responsibility under s.59 of the DCA and will (or may) be recovered under other agreement(s) with the landowner or developer.

Appendix A

Town-wide Development Forecast

Introduction

This appendix provides the details of the development forecast that informs the Town’s 2021 DC Background Study. The forecast method and key assumptions are discussed and the results of the forecasts are presented in the following tables:

Historical Development

- Table 1 Historical Population, Occupied Dwellings & Employment Summary
- Table 2 Historical Annual Housing Completions (CMHC)
- Table 3 Historical Households by Period of Construction Showing Household Size
- Table 4 Historical Place of Work Employment

Forecast Development

- Table 5 Population, Household & Employment Forecast Summary
- Table 6 Forecast of Occupied Households by Unit Type
- Table 7 Forecast Population in New Households by Unit Type
- Table 8 Forecast of Place of Work Employment
- Table 9 Non-Residential Space Forecast

A. Forecast and Key Assumptions

The *Development Charges Act* (DCA) requires the Town to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the Town to prepare a reasonable development-related capital program. A 10-year development forecast, from 2021–2030, has been used for all the development charge eligible general services in the Town. For Roads and Related and Stormwater Management services, an 11-year planning horizon of 2021–2031 has been used.

i. Forecast Data and Inputs

The forecasts of population, households and employment have been informed by the 2031 targets for the Town identified in the Region of Durham Official Plan Amendment (ROPA) 128 and the Town's Consolidated Official Plan.

The recent economic slowdown resulting from the COVID-19 pandemic has been accounted for in the analysis. Both the residential and non-residential forecasts incorporate recent historical data and known development applications provided by the Town's Planning and Development Department.

The development forecast is based on estimates of growth occurring within the Town's approved development areas, including the areas of Brooklin and West Whitby, and on a Town-wide basis. This is consistent with Provincial regulations that require development charge forecasts be based on areas approved for development in a municipality's official plan.

ii. Other Relevant Studies

It should be noted that the Region is currently in the process of completing a Municipal Comprehensive Review (MCR), known as Envision Durham. The Region is in the process of developing a Growth Management Strategy to be circulated for public consultation with the final Official Plan anticipated to be completed sometime in 2022. Although the outcomes of the Growth Management Strategy are not incorporated into this analysis as it is not yet public, the Town's future development charge studies will be informed by the Region's new Official Plan once enacted.

iii. Economic Impacts of COVID-19

On March 11, 2020, the World Health Organization declared the outbreak of the novel coronavirus disease (COVID-19) a pandemic. Shortly thereafter, the Canada-U.S. border was closed for travel and a state of emergency was declared in the Province of Ontario. Many municipalities followed suit and

enacted guidelines that limited gatherings and closed city facilities including libraries, community centres, park amenities as well as municipal offices.

Although not yet totally understood, COVID-19 will result in significant economic impacts in the immediate and potentially long-term. The depth of Gross Domestic Product (GDP) contraction is the largest ever recorded and mirrors the scale of the contraction of the Great Depression, which took nearly 5 years to contract as much as what occurred over March, April and May of 2020. This is an unprecedented scale and type of recession and there is little certainty in how the recovery will unfold after COVID, just as there is no certainty as to what or when “after COVID” is.

The immediate impacts of the crisis in the Greater Golden Horseshoe (GGH) are substantial. The GGH will experience curtailed migration while travel is limited as well as enormous financial pressure on all levels of government.

Municipalities are likely to experience significant impacts as they provide most infrastructure and services required to accommodate future development.

In terms of the non-residential sector, Statistics Canada’s May 2020 *Labour Force Survey* recorded an increase in nationwide unemployment from 5.6% to 13.7% between February and May, with a national loss of more than 3 million jobs. In the short term, the closure of businesses will likely result in an increase of vacant non-residential space – although it is anticipated this space will be reoccupied over time.

The long-term impacts of the pandemic are very uncertain; however, the long-term economy outlook for the GGH region remains positive as the area will continue to be attractive to newcomers and businesses.

B. Historical Development in the Town

Historical growth presented in this appendix is based on Statistics Canada Census data, Canada Mortgage and Housing Corporation (CMHC) data and the Town’s historical building permit data. A “Census-based” definition of

population is used for the purposes of the development charges study. This definition does not include the Census net undercoverage, which is typically included in the definition of “total” population used by the Town and the Region in their Official Plans. For development charges purposes, a 10-year historical period of 2011-2020 is used for calculating service levels. Since 2016 was the year of the last Census, figures for 2017-2020 are estimates.

The Town has experienced fluctuations in population, household and employment growth over the last fifteen years due to a number of factors. As shown in Table 1, over the 2006-2011 period the Town experienced substantial development which was fuelled by the available supply of greenfield land. As land supply diminished, residential development in the Town began to slow, but has since rebounded in recent years as new developable land has become available (primarily in West Whitby). At the same time, the Town’s employment base experienced a slow down in the manufacturing sector which was followed by the financial crisis and recession in 2008 and 2009.

As shown in Table 1, the Town’s population increased from approximately 119,770 people in 2010 to 136,560 in 2020. This represents an increase of 14 per cent. The number of occupied dwelling units in the Town also experienced an increase during the 10-year historical period, increasing from 40,240 in 2010 to roughly 46,200 occupied households in 2020, or a 15 per cent increase.

Historical employment figures are also shown in Table 1 and are based on Statistics Canada place of work data. Place of work data records where people work rather than the place of residence. The employment figures used for development charges calculations includes employees with no fixed work place of work, but excludes work at home employment. As shown, the Town’s employment remained generally static over the 2006–2011 period as a result of the global economic slowdown. In contrast, employment growth was relatively steady over the 2011-2016 period, and continued to remain strong until 2020. Recognizing that COVID-19 has generally slowed down businesses and employment growth, marginal employment growth is shown for 2020.

Notwithstanding the recent impacts of the COVID-19 pandemic, the Town's employment has increased over the last 10-years from roughly 37,990 in 2010 to 44,520 in 2020; this represents an increase of 17 per cent. The Town's activity rate (the ratio of employment to population) has also increased slightly from 32 per cent in 2010 to 33 per cent in 2020.

Details on historical housing unit growth in the Town are provided in Table 2, Historical Annual Housing Completions. This information is sourced from CMHC Market Information. Overall, the dominant type of new housing in Whitby constructed has been single- and semi-detached units which represents 56 per cent of all housing completions from 2011–2020.

Table 3 provide details on historical occupancy patterns in the Town. The overall average occupancy level in Whitby for single and semi-detached units is 3.18 persons per housing unit (PPU). Generally speaking, occupancy levels for recently constructed units, between 2006 and 2016, are higher than the overall average and are used in the development charges calculation since it better reflects the number of people that are likely to reside in new developments. The dwelling unit types shown in Table 3 reflect the Town's current residential rate structure. The residential unit types are as follows:

- Singles & Semis;
- Rows with 3 or More Bedrooms;
- Rows with 2 Bedrooms or Less;
- Apartments 2 Bedrooms or More; and
- Apartments Less than 2 Bedrooms.

Table 4 summarizes the growth in historical employment by place of work by the following sectors the Town of Whitby from 2006–2020. The sectors align with the Town's proposed non-residential rate categories:

- Commercial
- Institutional
- Industrial

- Other

The decline in the employment land sector from 2006–2011 is largely attributable to significant employment losses in the industrial sector due to the global recession. Employment in this sector grew over the 2011–2016 period and has continued to increase steadily until 2020. In contrast, the rural-based employment sector declined over the 2006–2011 period and increased modestly from 2011–2016. This sector is not anticipated to experience growth as Whitby continues to urbanize.

C. Forecast Method and Results

This section describes the method used to establish the development forecast for the periods of 2021–2030 and 2020–2031.

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the population growth¹ as well as the population in new housing 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). The non-residential forecast includes both a projection of employment growth as well as a projection of the floor space associated with employment growth in the Town.

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

i. Residential Forecast

The residential development forecast incorporates anticipated growth in population and occupied dwelling units by type. The residential forecast for the Town has been informed by the Town's 2031 Official Plan target of 186,855 (equivalent to about 192,860 persons with net undercoverage) and a household target of 71,650.

Despite the impacts of COVID-19, a significant number of housing construction starts were initiated in Q1 and Q2 of 2020, largely attributed to the development of West Whitby. Despite the slowdown in development caused by COVID-19, it is anticipated that the Town will experience strong growth over the planning horizon to 2031.

As detailed in Table 5, the Town's Census population is forecast to grow from approximately 136,560 in 2020 to 179,000 in 2030 and 186,860 in 2031. The 10-year population growth of 42,440 persons represents a 31 per cent increase over the existing base. The increase of 50,290 persons to 2031 represents a 37 per cent increase.

Over the 10-year planning period, the number of occupied housing units is forecast to increase from roughly 46,200 in 2020 to 67,500 in 2030. By 2031, this number is expected to reach 71,650 units. This reflects an average annual increase of approximately 2,310 occupied dwelling units per year from 2021-2031. The overall 10-year growth represents a 46 per cent (21,300 units) increase in occupied dwelling units. The growth of 25,550 units to 2031 represents a 55 per cent increase over the existing base in 2020.

A breakdown of anticipated housing in the Town by unit type is shown in Table 6. The forecast shows that the Town's housing market will continue to be characterized by a preference for single and semi-detached unit types, which is mainly attributed to the build-out of the Town's greenfield areas of West Whitby and Brooklin. The Town is also anticipated to experience an increase in freehold townhouses as single and semis have a higher entry price point.

It is anticipated that an increasing share of the market will be represented by higher density built forms (both rows² and apartments), recognizing that growth will need to be accommodated through intensification once the available greenfield land supply is built-out. This pattern of housing unit growth would represent somewhat higher density housing than the pattern experienced in the Town historically. Such a pattern is, however, in keeping with Town and Regional policies aimed at promoting intensification.

As demonstrated in Table 6, over the 10-year period, the type of new housing in the Town is forecast to be composed largely of single and semi-detached units (51 per cent), followed by rows (26 per cent) and apartments (23 per cent).

As demonstrated in Table 7, population growth in the new units is estimated by applying the following 2016 PPUs to the housing unit forecast. The same PPU is applied to rows (2 bedrooms or less) and apartments (2 bedrooms or more) as they are included in the same residential rate category.

- Singles & Semis = 3.51
- Rows with 3 or More Bedrooms = 2.67
- Rows with 2 Bedrooms or Less = 1.47
- Apartments 2 Bedrooms or More = 1.47
- Apartments Less than 2 Bedrooms = 1.13

The forecast of population expected to reside in new housing units over the 2021–2030 period is 58,345 additional persons. Over the 11-year planning period, 69,325 additional persons are anticipated. This population growth by unit type is shown in Table 7.

ii. Non-Residential Forecast

Table 8 illustrates the forecast total employment growth in the Town of Whitby by employment category to 2031. Non-residential development charges are

² For the purposes of the development charges forecast, “rows” include linked dwellings

calculated on a per unit of gross floor area (GFA) basis. Therefore, as required by the DCA, a forecast of future non-residential building space has also been developed. As with the residential forecast, the employment and GFA forecasts cover the 10-year period from 2021–2030 for general services and the 11-year period from 2021–2031 for engineered services of Roads and Related as well as Storm Water Management.

As detailed in Table 8 and 9, five categories of employment are distinguished for the purposes of determining non-residential employment and floorspace growth:

- **Office Employment** refers to office type employment contained within free standing buildings relating to professional uses including, but not limited to finance and insurance, scientific and technical, health care etc.
- **Commercial Employment** is employment that primarily serves the residential population and includes retail. The rate of growth of this category is generally linked to the rate of population growth in the Town.
- **Institutional Employment** refers to employment accommodated in education, health care, local government employment and informational and cultural industries.
- **Industrial Employment** refers to employment accommodated primarily in low-rise industrial-type buildings located within the Town’s business parks and industrial areas.
- **Rural-based employment** refers to jobs scattered throughout rural areas and includes agricultural and primary industries plus uses typically found in urban employment areas, but not located on urban land designated for industrial or commercial use.

As shown in Table 8, given the impacts of COVID-19, it is assumed that limited employment growth will be added from 2020-2021. In 2022, it is expected that the non-residential sector will generally rebound and begin to grow. The office

sector will lag slightly behind commercial, institutional and industrial employment, with the office space increasing significantly in 2024.

An assumed floorspace per worker (FSW) for each category is applied to the employment forecast in order to estimate the amount of associated GFA. The following FSW assumptions are used:

Commercial	40 m ² per employee
Institutional	60 m ² per employee
Employment Land	120 m ² per employee
Office	23 m ² per employee
Rural-Based	0 m ² per employee

The non-residential floorspace forecast for the Town is summarized in Table 9. The total floorspace growth is forecast at approximately 1,210,080 square metres over the 10-year period and 1,345,670 square metres to 2031. The largest component of floorspace growth over the 10-year period relates to industrial employment (719,230 square metres or 59 per cent), followed by institutional (246,290 square metres or 20 per cent), commercial (180,440 or 15 per cent) and office (64,120 square metres or 5 per cent).

**APPENDIX A - TABLE 1
TOWN OF WHITBY
HISTORICAL POPULATION, OCCUPIED DWELLINGS & EMPLOYMENT SUMMARY**

Mid-Year	Census Population	Annual Growth	Occupied Households	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2006	111,184		37,240		2.99	38,034		34.2%
2007	113,272	2,088	37,967	727	2.98	37,988	(46)	33.5%
2008	115,399	2,127	38,708	741	2.98	37,965	(23)	32.9%
2009	117,566	2,167	39,464	756	2.98	37,965	0	32.3%
2010	119,774	2,208	40,235	771	2.98	37,988	23	31.7%
2011	122,022	2,248	41,021	786	2.97	38,031	43	31.2%
2012	123,267	1,245	41,511	490	2.96	38,807	776	31.5%
2013	124,525	1,258	42,007	496	2.95	39,602	795	31.8%
2014	125,796	1,271	42,509	502	2.94	40,417	815	32.1%
2015	127,080	1,284	43,017	508	2.93	41,251	834	32.5%
2016	128,377	1,297	43,529	512	2.92	42,107	856	32.8%
2017	130,575	2,198	44,134	605	2.91	42,828	721	32.8%
2018	132,810	2,235	44,448	314	2.90	43,561	733	32.8%
2019	135,084	2,274	44,954	506	2.89	44,307	746	32.8%
2020	136,562	1,478	46,201	1,247	2.88	44,519	212	32.6%
Growth 2011-2020		16,788		5,966			6,531	

Source: Statistics Canada, Census of Canada, Hemson estimates

**APPENDIX A - TABLE 2
TOWN OF WHITBY
HISTORICAL ANNUAL HOUSING COMPLETIONS (CMHC)**

Year	CMHC Annual Housing Completions				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2006	794	139	240	1,173	68%	12%	20%	100%
2007	540	118	215	873	62%	14%	25%	100%
2008	596	259	0	855	70%	30%	0%	100%
2009	351	181	131	663	53%	27%	20%	100%
2010	404	66	0	470	86%	14%	0%	100%
2011	479	167	0	646	74%	26%	0%	100%
2012	431	205	0	636	68%	32%	0%	100%
2013	241	93	102	436	55%	21%	23%	100%
2014	154	68	141	363	42%	19%	39%	100%
2015	154	52	0	206	75%	25%	0%	100%
2016	174	153	0	327	53%	47%	0%	100%
2017	171	168	266	605	28%	28%	44%	100%
2018	62	252	0	314	20%	80%	0%	100%
2019	415	91	0	506	82%	18%	0%	100%
2020	656	553	38	1,247	53%	44%	3%	100%
Growth 2016-2020	1,478	1,217	304	2,999	49%	41%	10%	100%
Growth 2011-2020	2,937	1,802	547	5,286	56%	34%	10%	100%
5-year Average	296	243	61	600				
10-year Average	294	180	55	529				

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

**APPENDIX A - TABLE 3
TOWN OF WHITBY
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE**

Dwelling Unit Type	Period of Construction										Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	Pre 2006	2006-2016	Total
Singles & Semis													
Household Population	2,138	5,403	3,750	9,778	20,505	8,958	13,160	21,655	11,290	5,210	85,345	16,500	101,845
Households	830	2,178	1,473	3,415	6,510	2,670	3,928	6,275	3,155	1,550	27,278	4,705	31,983
Household Size	2.58	2.48	2.55	2.86	3.15	3.35	3.35	3.45	3.58	3.36	3.13	3.51	3.18
Rows 2BR: or Less													
Household Population	0	0	45	75	155	160	140	245	190	75	820	265	1,085
Households	0	0	15	45	90	80	80	130	130	50	440	180	620
Household Size	n/a	n/a	3.00	1.67	1.72	2.00	1.75	1.88	1.46	1.50	1.86	1.47	1.75
Rows: 3BR or more													
Household Population	55	0	150	770	1,445	1,175	1,615	3,935	2,180	1,495	9,145	3,675	12,820
Households	15	15	65	335	530	480	625	1,480	800	575	3,545	1,375	4,920
Household Size	3.67	n/a	2.31	2.30	2.73	2.45	2.58	2.66	2.73	2.60	2.58	2.67	2.61
Rows: Total													
Household Population	55	0	195	845	1,600	1,335	1,755	4,180	2,370	1,570	9,965	3,940	13,905
Households	15	15	80	380	620	560	705	1,610	930	625	3,985	1,555	5,540
Household Size	3.67	n/a	2.44	2.22	2.58	2.38	2.49	2.60	2.55	2.51	2.50	2.53	2.51
Apartments: Bachelor or 1BR													
Household Population	140	260	385	455	570	330	105	125	230	175	2,370	405	2,775
Households	120	235	345	395	475	285	125	120	200	160	2,100	360	2,460
Household Size	1.17	1.11	1.12	1.15	1.20	1.16	0.84	1.04	1.15	1.09	1.13	1.13	1.13
Apartments: 2BR or more													
Household Population	293	533	1,050	1,678	1,415	903	245	280	415	225	6,395	640	7,035
Households	180	273	483	765	620	425	143	165	275	160	3,053	435	3,488
Household Size	1.63	1.95	2.18	2.19	2.28	2.12	1.72	1.70	1.51	1.41	2.10	1.47	2.02
Apartments: Total													
Household Population	433	793	1,435	2,133	1,985	1,233	350	405	645	400	8,765	1,045	9,810
Households	300	508	828	1,160	1,095	710	268	285	475	320	5,153	795	5,948
Household Size	1.44	1.56	1.73	1.84	1.81	1.74	1.31	1.42	1.36	1.25	1.70	1.31	1.65
Rows 2BR: or Less and Apartments: 2BR or more													
Household Population	293	533	1,095	1,753	1,570	1,063	385	525	605	300	7,215	905	8,120
Households	180	273	498	810	710	505	223	295	405	210	3,493	615	4,108
Household Size	1.63	1.95	2.20	2.16	2.21	2.10	1.73	1.78	1.49	1.43	2.07	1.47	1.98
Total Apartments (incls "Rows 2BR: or Less")													
Household Population	433	793	1,480	2,208	2,140	1,393	490	650	835	475	9,585	1,310	10,895
Households	300	508	843	1,205	1,185	790	348	415	605	370	5,593	975	6,568
Household Size	1.44	1.56	1.76	1.83	1.81	1.76	1.41	1.57	1.38	1.28	1.71	1.34	1.66
All Units													
Household Population	2,625	6,240	5,415	12,800	24,125	11,545	15,265	26,240	14,305	7,180	104,255	21,485	125,740
Households	1,165	2,735	2,415	4,980	8,255	3,955	4,915	8,180	4,560	2,495	36,600	7,055	43,655
Household Size	2.25	2.28	2.24	2.57	2.92	2.92	3.11	3.21	3.14	2.88	2.85	3.05	2.88

Source: Statistics Canada, 2016

**APPENDIX A - TABLE 4
TOWN OF WHITBY
HISTORICAL PLACE OF WORK EMPLOYMENT**

Mid-Year	Retail Commercial & Office					Institutional		Industrial		Rural-Based		
	Office	Annual Growth	Commercial	Annual Growth	Subtotal	Annual Growth	Institutional	Annual Growth	Industrial	Annual Growth	Rural	Annual Growth
2006	5,672		8,717		14,389		9,095		13,259		1,291	
2007	5,799	127	8,853	136	14,652	263	9,261	166	12,810	(449)	1,265	(26)
2008	5,929	130	8,991	138	14,920	268	9,430	169	12,376	(434)	1,239	(26)
2009	6,062	133	9,131	140	15,193	273	9,602	172	11,956	(420)	1,214	(25)
2010	6,198	136	9,273	142	15,471	278	9,777	175	11,551	(405)	1,189	(25)
2011	6,338	140	9,416	143	15,754	283	9,954	177	11,159	(392)	1,164	(25)
2012	6,483	145	9,730	314	16,213	459	10,034	80	11,363	204	1,197	33
2013	6,631	148	10,054	324	16,685	472	10,115	81	11,571	208	1,231	34
2014	6,783	152	10,389	335	17,172	487	10,197	82	11,782	211	1,266	35
2015	6,938	155	10,735	346	17,673	501	10,279	82	11,997	215	1,302	36
2016	7,097	159	11,092	357	18,189	516	10,362	83	12,216	219	1,340	38
2017	7,248	151	11,310	218	18,558	369	10,566	204	12,364	148	1,340	0
2018	7,402	154	11,532	222	18,934	376	10,773	207	12,514	150	1,340	0
2019	7,559	157	11,758	226	19,317	383	10,984	211	12,666	152	1,340	0
2020	7,569	10	11,798	40	19,367	50	10,994	10	12,817	152	1,340	0
Growth 2011-2020		1,371		2,525		3,896		1,217		1,266		151

Mid-Year	Total For DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
2006	38,034		3,815		41,849	
2007	37,988	(46)	3,954	139	41,942	93
2008	37,965	(23)	4,099	145	42,064	122
2009	37,965	0	4,249	150	42,214	150
2010	37,988	23	4,404	155	42,392	178
2011	38,031	43	4,565	161	42,596	204
2012	38,807	776	4,623	58	43,430	834
2013	39,602	795	4,681	58	44,283	853
2014	40,417	815	4,740	59	45,157	874
2015	41,251	834	4,800	60	46,051	894
2016	42,107	856	4,860	60	46,967	916
2017	42,828	721	4,955	95	47,783	816
2018	43,561	733	5,052	97	48,613	830
2019	44,307	746	5,151	99	49,458	845
2020	44,519	212	5,252	101	49,771	313
Growth 2011-2020		6,531		848		7,379

Note: Employment Values Include No Fixed Place of Work Employment

Source: Statistics Canada, Census of Canada

**APPENDIX A - TABLE 5
TOWN OF WHITBY
POPULATION, HOUSEHOLD & EMPLOYMENT FORECAST SUMMARY**

Mid-Year	Census Population	Annual Growth	Total Occupied Households	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2016	128,377		43,529		2.95	42,107		32.8%
2017	130,575	2,198	44,134	605	2.96	42,828	721	32.8%
2018	132,810	2,235	44,448	314	2.99	43,561	733	32.8%
2019	135,084	2,274	44,954	506	3.00	44,307	746	32.8%
2020	136,562	1,478	46,201	1,247	2.96	44,519	212	32.6%
2021	139,748	3,186	47,601	1,400	2.94	44,998	480	32.2%
2022	141,901	2,153	48,666	1,065	2.92	46,623	1,625	32.9%
2023	144,082	2,180	49,755	1,089	2.90	48,306	1,683	33.5%
2024	146,287	2,206	50,868	1,113	2.88	50,050	1,744	34.2%
2025	148,520	2,233	52,006	1,138	2.86	51,857	1,807	34.9%
2026	150,775	2,255	53,168	1,162	2.84	53,729	1,872	35.6%
2027	157,385	6,610	56,437	3,269	2.79	55,668	1,939	35.4%
2028	164,285	6,900	59,907	3,470	2.74	57,677	2,009	35.1%
2029	171,488	7,203	63,590	3,683	2.70	59,759	2,082	34.8%
2030	179,006	7,518	67,500	3,910	2.65	61,916	2,157	34.6%
2031	186,855	7,849	71,650	4,150	2.61	64,151	2,235	34.3%
Official Plan Targets	186,855		71,650		2.61	64,151		34.3%
Growth 2021-2030		42,444		21,299			17,397	
Growth 2021-2031		50,293		25,449			19,632	

Source: Hemson Consulting

**APPENDIX A - TABLE 6
TOWN OF WHITBY
FORECAST OF ANNUAL GROWTH IN OCCUPIED HOUSEHOLDS BY UNIT TYPE**

Mid-Year	Annual Growth in Occupied Households						Shares By Unit Type					
	Singles/ Semis	Rows 3+ Beds	Rows 2 Beds or Less	Apartments 2+ Beds	Apartments 1 Bed or Less	Total	Singles/ Semis	Rows 3+ Beds	Rows 2 Beds or Less	Apartments 2+ Beds	Apartments 1 Bed or Less	Total
2016	292	210	10	0	0	512	57%	41%	2%	0%	0%	100%
2017	158	151	30	145	121	605	26%	25%	5%	24%	20%	100%
2018	75	223	16	0	0	314	24%	71%	5%	0%	0%	100%
2019	405	81	20	0	0	506	80%	16%	4%	0%	0%	100%
2020	662	486	62	25	12	1,247	53%	39%	5%	2%	1%	100%
2021	812	272	36	154	126	1,400	58%	19%	3%	11%	9%	100%
2022	601	213	32	120	99	1,065	56%	20%	3%	11%	9%	100%
2023	601	223	34	126	105	1,089	55%	20%	3%	12%	10%	100%
2024	603	233	35	132	110	1,113	54%	21%	3%	12%	10%	100%
2025	603	244	36	139	116	1,138	53%	21%	3%	12%	10%	100%
2026	616	257	34	139	116	1,162	53%	22%	3%	12%	10%	100%
2027	1,667	739	111	409	343	3,269	51%	23%	3%	13%	11%	100%
2028	1,718	802	135	451	364	3,470	50%	23%	4%	13%	11%	100%
2029	1,768	869	162	497	387	3,683	48%	24%	4%	14%	11%	100%
2030	1,818	943	191	547	411	3,910	47%	24%	5%	14%	11%	100%
2031	1,867	1,021	224	602	436	4,150	45%	25%	5%	15%	11%	100%
Growth 2021-2030	10,807	4,795	806	2,714	2,177	21,299	51%	23%	4%	13%	10%	100%
Growth 2021-2031	12,674	5,816	1,030	3,316	2,613	25,449	50%	23%	4%	13%	10%	100%

Source: Hemson Consulting

**APPENDIX A - TABLE 7
TOWN OF WHITBY
FORECAST POPULATION IN NEW HOUSEHOLDS BY UNIT TYPE**

Mid-Year	Assumed Average Occupancies (PPU)						Forecast Population in New Households					
	Singles/ Semis	Rows 3+ Beds	Rows 2 Beds or Less	Apartments 2+ Beds	Apartments 1 Bed or Less	Total	Singles/ Semis	Rows 3+ Beds	Rows 2 Beds or Less	Apartments 2+ Beds	Apartments 1 Bed or Less	Total
2016	3.51	2.67	1.47	1.47	1.13	3.13	1,024	561	15	0	0	1,600
2017	3.51	2.67	1.47	1.47	1.13	2.23	554	404	44	213	136	1,351
2018	3.51	2.67	1.47	1.47	1.13	2.81	263	596	24	0	0	883
2019	3.51	2.67	1.47	1.47	1.13	3.29	1,420	216	29	0	0	1,666
2020	3.51	2.67	1.47	1.47	1.13	3.02	2,322	1,299	91	37	14	3,762
2021	3.51	2.67	1.47	1.47	1.13	2.85	2,848	727	53	227	142	3,996
2022	3.51	2.67	1.47	1.47	1.13	2.83	2,108	569	47	177	111	3,012
2023	3.51	2.67	1.47	1.47	1.13	2.81	2,108	596	50	185	118	3,057
2024	3.51	2.67	1.47	1.47	1.13	2.79	2,115	623	52	194	124	3,107
2025	3.51	2.67	1.47	1.47	1.13	2.77	2,115	652	53	205	131	3,155
2026	3.51	2.67	1.47	1.47	1.13	2.78	2,160	687	50	205	131	3,232
2027	3.51	2.67	1.47	1.47	1.13	2.74	5,846	1,975	163	602	386	8,972
2028	3.51	2.67	1.47	1.47	1.13	2.72	6,025	2,144	199	664	410	9,440
2029	3.51	2.67	1.47	1.47	1.13	2.70	6,200	2,323	239	731	435	9,928
2030	3.51	2.67	1.47	1.47	1.13	2.67	6,376	2,520	281	805	462	10,444
2031	3.51	2.67	1.47	1.47	1.13	2.65	6,547	2,729	330	886	491	10,982
Growth 2021-2030							37,899	12,816	1,187	3,993	2,449	58,344
Growth 2021-2031							44,447	15,545	1,516	4,879	2,940	69,326

Source: Statistics Canada, 2011 National Household Survey Special Run.

**APPENDIX A - TABLE 8
TOWN OF WHITBY
FORECAST OF PLACE OF WORK EMPLOYMENT**

Mid-Year	Commercial				Industrial		Institutional		Rural-Based			
	Office	Annual Growth	Retail Commercial	Annual Growth	Subtotal	Annual Growth	Industrial	Annual Growth	Institutional	Annual Growth	Rural	Annual Growth
2016	7,097		11,092		18,189		12,216		10,362		1,340	
2017	7,248	151	11,310	218	18,558	369	12,364	148	10,566	204	1,340	0
2018	7,402	154	11,532	222	18,934	376	12,514	150	10,773	207	1,340	0
2019	7,559	157	11,758	226	19,317	383	12,666	152	10,984	211	1,340	0
2020	7,569	10	11,798	40	19,367	50	12,817	152	10,994	10	1,340	0
2021	7,589	20	11,848	50	19,437	70	13,212	395	11,009	15	1,340	0
2022	7,619	30	12,276	428	19,895	458	14,360	1,148	11,028	19	1,340	0
2023	7,669	50	12,720	444	20,389	494	15,519	1,159	11,058	30	1,340	0
2024	8,005	336	13,180	460	21,185	796	15,964	445	11,561	503	1,340	0
2025	8,356	351	13,656	476	22,012	827	16,418	454	12,087	526	1,340	0
2026	8,723	367	14,150	494	22,873	861	16,879	461	12,637	550	1,340	0
2027	9,106	383	14,661	511	23,767	894	17,349	470	13,212	575	1,340	0
2028	9,505	399	15,191	530	24,696	929	17,828	479	13,813	601	1,340	0
2029	9,922	417	15,740	549	25,662	966	18,315	487	14,442	629	1,340	0
2030	10,357	435	16,309	569	26,666	1,004	18,811	496	15,099	657	1,340	0
2031	10,812	455	16,899	590	27,711	1,045	19,313	502	15,787	688	1,340	0
2032	10,812	0	16,899	0	27,711	0	19,313	0	15,787	0	1,340	0
2033	10,812	0	16,899	0	27,711	0	19,313	0	15,787	0	1,340	0
2034	10,812	0	16,899	0	27,711	0	19,313	0	15,787	0	1,340	0
2035	10,812	0	16,899	0	27,711	0	19,313	0	15,787	0	1,340	0
2036	10,812	0	16,899	0	27,711	0	19,313	(0)	15,787	0	1,340	0
Growth 2021-2030		2,788		4,511		7,299		5,994		4,105		0
Growth 2021-2031		3,243		5,101		8,344		6,496		4,793		0

Mid-Year	Total for DC Study		Total Employment			
	Total	Annual Growth	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
2016	42,107		4,860		46,967	
2017	42,828	721	4,955	95	47,783	816
2018	43,561	733	5,052	97	48,613	830
2019	44,307	746	5,151	99	49,458	845
2020	44,519	212	5,252	101	49,771	313
2021	44,998	480	5,355	103	50,353	583
2022	46,623	1,625	5,460	105	52,083	1,730
2023	48,306	1,683	5,567	107	53,873	1,790
2024	50,050	1,744	5,676	109	55,726	1,853
2025	51,857	1,807	5,787	111	57,644	1,918
2026	53,729	1,872	5,900	113	59,629	1,985
2027	55,668	1,939	6,015	115	61,683	2,054
2028	57,677	2,009	6,132	117	63,809	2,126
2029	59,759	2,082	6,252	120	66,011	2,202
2030	61,916	2,157	6,374	122	68,290	2,279
2031	64,151	2,235	6,499	125	70,650	2,360
Growth 2021-2030		17,397		1,122		18,519
Growth 2021-2031		19,632		1,247		20,879

Note: Includes No Fixed Place of Work Employment



**APPENDIX A - TABLE 9
TOWN OF WHITBY
NON-RESIDENTIAL SPACE FORECAST**

Employment Density Assumptions	
Commercial	40.0 m ² per employee
Institutional	60.0 m ² per employee
Employment Land	120.0 m ² per employee
Office	23.0 m ² per employee
Rural	- m ² per employee

Mid-Year	Office	Commercial	Subtotal	Institutional	Industrial	Rural	Total Non-Res GFA m2
2016							
2017	3,473	8,731	12,204	12,234	17,739	0	42,177
2018	3,542	8,878	12,420	12,440	17,966	0	42,826
2019	3,611	9,033	12,644	12,658	18,267	0	43,568
2020	230	1,600	1,830	600	18,198	0	20,628
2021	460	2,000	2,460	900	47,361	0	50,721
2022	690	17,119	17,809	1,140	137,723	0	156,672
2023	1,150	17,760	18,910	1,800	139,080	0	159,790
2024	7,728	18,400	26,128	30,168	53,425	0	109,720
2025	8,073	19,040	27,113	31,560	54,480	0	113,153
2026	8,441	19,760	28,201	33,000	55,320	0	116,521
2027	8,809	20,440	29,249	34,500	56,400	0	120,149
2028	9,177	21,200	30,377	36,060	57,480	0	123,917
2029	9,591	21,960	31,551	37,740	58,440	0	127,731
2030	10,005	22,760	32,765	39,420	59,520	0	131,705
2031	10,465	23,600	34,065	41,280	60,240	0	135,585
Growth 2021-2030	64,124	180,439	244,563	246,288	719,229	0	1,210,080
Growth 2021-2031	74,589	204,039	278,628	287,568	779,469	0	1,345,665

Source: Hemson Consulting

Appendix B
General Services
Technical Appendix

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

Appendix B.1	Libraries
Appendix B.2	Parks and Recreation
Appendix B.3	Fire Services
Appendix B.4	Waste Management
Appendix B.5	By-Law Enforcement
Appendix B.6	Development Related Studies

Every sub-section, with the exception of Development Related Studies, 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 provided below.

Table 1 Historical Service Levels

Table 1 presents the data used to determine the ten-year historical service level. The *DCA* and *Ontario Regulation 82/98* require that development charges be set at a level no higher than the average service level provided in a municipality over the ten-year period immediately preceding the preparation of the background study, on a service by service basis. For the purpose of this study, the historical inventory period is defined as 2011–2020.

O. Reg. 82/98 requires that when defining and determining historical service levels, both the quantity and quality of service be taken into consideration.

In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet. The qualitative aspect is introduced by considering the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of cost per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be funded by new growth reflect not only the quantity (number and size), but also the quality (replacement value or cost) of service provided by the municipality in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by Town staff and have also been informed by an independent appraisal report completed by Suncorp Valuations¹. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

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

There is also a requirement in the *DCA* to consider “excess capacity” within the Town’s existing infrastructure that may be available to partially meet future servicing requirements. If Council has expressed its intent before or at the time the capacity was created to recoup the cost of providing the capacity from new development, it is considered “committed excess

¹ The Suncorp Report was completed in September 2019 and included details on the market value of land and replacement costs, site improvements, buildings and contents for Town facilities. All values have been indexed to reflect 2020 dollars.

capacity” under the *DCA*, and the associated capital cost is eligible for recovery. This requirement has been addressed through the use of “net” population and employment in the determination of maximum permissible funding envelopes.

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

Table 2 2021 – 2030 Development-Related Capital Program and Calculation of the “Unadjusted” Development Charges

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, Hemson Consulting in collaboration with Town staff has developed a development-related capital program which sets out the projects required to service anticipated growth for the ten-year period from 2021 to 2030. The projects identified in the capital program include all “growth-related” capital projects including projects that are ineligible for recovery under the current provisions of the *DCA*. While any ineligible costs are shown, they are removed from the total development charge eligible costs and are not included in the calculation.

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

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

The capital program less any replacement shares or benefit to existing shares yields the development-related costs. Although deemed development-related, not all of the net development-related capital program may be recoverable from development charges in the period from 2021 to 2030. For some services, reserve fund balances may be available to fund a share of the program. In addition, a portion of the capital program may service growth occurring beyond 2030. This portion of the capital program is deemed “pre-built” service capacity and is considered as committed excess capacity to be recovered under future development charges, or is a service level increase.

The remaining portion of the net capital program represents the development-related cost that may be included in the DC calculation. In all cases, as required, this amount is equal to or less than the maximum allowable capital amount as calculated at the end of Table 1. The result is the discounted development-related net capital costs eligible for recovery against growth over the forecast period from 2021 to 2030.

Calculation of the Unadjusted Development Charges Rates

The section below the capital program displays the calculation of the “unadjusted” development charge rates. The term “unadjusted” development charge is used to distinguish the charge that is calculated prior

to cash flow financing considerations. The cash flow analysis is shown in Table 3.

The first step in determining the unadjusted development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For all general services with the exception of Library Service, Parks & Recreation and Waste Management the development-related costs have been apportioned as 77 per cent residential, 9.6 per cent commercial, 7.9 per cent industrial and 5.4 per cent institutional. This apportionment is based on the anticipated shares of population growth in new units and employment growth in new space over the ten-year forecast period.

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

The residential share of the 2021 – 2030 DC eligible costs is then divided by the forecasted population growth in new dwelling units. This gives the unadjusted residential development charge per capita. The non-residential development-related net capital costs are divided by the forecasted increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential development.

Table 3 Cash Flow Analysis

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

The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

In order to determine appropriate development charge rates reflecting borrowing and earnings necessary to support the net development-related funding requirement, assumptions are used for the inflation rate and interest rate. An inflation rate of 2.0 per cent is used for the funding requirements, an interest rate of 5.5 per cent is used for borrowing on the funds and an interest rate of 3.5 per cent is applied to positive balances.

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

Appendix B.1

Library Service

The Town of Whitby operates Libraries from three branches and is responsible for the associated buildings, collection material and land. Library Services provides a wide-range of resources in a variety of formats as well as a number of programs to Town residents.

Table 1 Historical Service Levels

Table 1 displays Libraries ten-year historical inventory for buildings and land. The building space for the branches amount to 76,800 square feet and is valued at \$42.11 million. Of the total, 76,800 square feet of space at the Central Library, approximately 2,100 square feet relates to the recovery of an outstanding debenture and has been removed from the historical funding envelope calculation. The library buildings occupy 1.43 hectares of land worth \$6.97 million. A large number of collection items including books, CD's, DVDs, E-Books, games, magazines, achieved material etc. are included in the library inventory and amount to \$10.79 million. There is also approximately \$3.63 million in furniture and equipment related to the library facilities.

The 2020 full replacement value of the inventory of capital assets for Libraries amounts to \$63.50 million and the ten-year historical average service level is \$486.37 per capita. The historical service level multiplied by the ten-year forecast of net population growth results in a ten-year maximum allowable funding envelope of \$20.64 million (42,444 net population growth X historical service level of \$486.37/capita).

Table 2 2021-2030 Development-Related Capital Program & Calculation of the “Unadjusted” Development Charges

The ten-year development-related capital plan for Libraries is comprised of the recovery of the remaining principle payments for the Central Library Branch which totals \$1.20 million over the 2021-2030 period. In addition,

\$73,500 has been identified for a makerspace conversation in the Central Library Branch in 2022. A new future library branch has been identified for 2030 at a cost of \$10.00 million. A library strategic plan is planned for at a cost of \$80,000 with 50 per cent of the cost identified as a benefit to existing share. Expansion to the library collection over the ten-year period is included at a cost of \$3.76 million. A book lending machine is identified in 2022 for a cost of \$65,000. Lastly, a provision of \$4.30 million has been included for future-growth related infrastructure.

Of the \$19.44 million DC eligible costs, \$82,300 is recovered from existing DC reserves and the remaining \$19.36 million is eligible for recovery under the new DC by-law. As the in-period recoverable cost is lower than the calculated maximum funding envelope, no post-period benefit shares have been identified.

The 2021–2030 DC costs eligible for recovery amount to \$19.36 million, which is allocated entirely against future residential development in the Town of Whitby. This results in an unadjusted development charge of \$331.77 per capita.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential calculated charge decreases to \$325.35 per capita. This is due to the capital costs occurring later in the ten-year planning period under review. The following table summarizes the calculation of the Library Services development charge:

LIBRARIES SUMMARY						
10-year Hist.	2021 - 2030		Unadjusted		Adjusted	
	Development-Related Capital Program	Net DC Recoverable	Residential	Non-Res	Residential	Non-Res
Service Level per capita	Total		\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$486.37	\$19,478,965	\$19,356,703	\$331.77	\$0.00	\$325.35	\$0.00

APPENDIX B.1

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS

LIBRARIES

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Brooklin Community Centre & Library (1)	11,580	11,580	11,580	11,580	11,580	11,580	11,580	11,580	11,580	11,580	\$510
Central (Main) Library	63,200	63,200	63,200	63,200	63,200	63,200	63,200	63,200	63,200	63,200	\$560
<i>Central (Main) Library Committed Excess Capacity</i>	<i>(2,144)</i>	<i>(2,144)</i>	<i>(2,144)</i>	<i>(2,144)</i>	<i>(2,144)</i>	<i>(2,144)</i>	<i>(2,144)</i>	<i>(2,144)</i>	<i>(2,144)</i>	<i>(2,144)</i>	\$560
Rossland	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	\$480
Total (#)	76,836	76,836	76,836	76,836	76,836	76,836	76,836	76,836	76,836	76,836	
Total (\$000)	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	

1 Only includes portion of facility related to Recreation. Total GFA of facility is 41,550 sq.ft.

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Brooklin Community Centre & Library (2)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$3,075,000
Brooklin Community Centre & Library - Additional Parking (2)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$3,075,000
Central (Main) Library	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	\$6,272,900
Rossland	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	\$4,497,300
Total (ha)	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	
Total (\$000)	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	

2 Only includes portion of land related to the Library. Total size, including additional parking area, is 1.88 ha.

APPENDIX B.1

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS

LIBRARIES

MATERIALS Type of Collection	# of Collection Materials										UNIT COST (\$/item)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Archived Material											
Total Annual Value	\$ 192,052.1	\$ 254,314.1	\$ 348,694.1	\$ 390,404.1	\$ 452,683.1	\$ 473,917.1	\$616,590	\$759,264	\$901,937	\$1,044,610	
Collection Material											
Books	206,867	232,111	242,341	241,941	235,278	234,126	234,548	235,478	222,547	219,087	\$29
Books on Tape	5,073	6,599	7,429	7,616	7,681	7,712	7,531	7,635	7,457	7,330	\$49
CD's-Sound	4,629	3,934	4,879	4,757	5,062	5,062	4,791	4,850	4,736	5,241	\$23
DVD	11,402	14,533	23,594	25,531	27,718	29,343	27,989	27,488	29,351	35,170	\$39
E-Books	9,221	11,012	15,264	17,074	18,555	18,126	12,228	13,880	14,550	23,218	\$31
Electronic Magazine & Newspaper titles	15,630	16,077	15,176	14,665	15,100	15,100	36,233	8,904	6,291	14,511	\$5
Games	629	1,085	1,395	1,434	1,429	1,294	1,255	1,210	1,150	1,099	\$65
Magazines	6,889	6,883	7,080	6,967	6,099	5,859	4,420	4,300	4,320	4,388	\$8
Maps/Charts	383	384	381	386	355	189	165	145	95	52	\$11
Microfilm	1,458	1,503	1,529	1,526	1,543	1,550	1,555	1,560	1,565	1,575	\$141
Reference Books	5,317	3,805	4,891	4,596	4,289	4,056	3,986	3,676	3,489	3,332	\$125
Titles on CD Rom	580	557	507	467	219	215	175	50	-	-	\$35
Total (#)	268,078	298,483	324,466	326,960	323,328	322,632	334,876	309,176	295,551	315,003	
Total (\$000)	\$8,345.6	\$9,224.8	\$10,318.3	\$10,446.8	\$10,407.2	\$10,405.8	\$10,391.9	\$10,416.5	\$10,224.5	\$10,787.5	

FURNITURE AND EQUIPMENT Branch Name	Total Value of Furniture and Equipment (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Brooklin	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Brooklin Community Centre & Library	\$371,000	\$371,000	\$371,000	\$371,000	\$371,000	\$371,000	\$422,500	\$474,000	\$525,500	\$577,000
Central (Main) Library	\$2,806,000	\$2,806,000	\$2,806,000	\$2,806,000	\$2,806,000	\$2,806,000	\$2,862,250	\$2,918,500	\$2,974,750	\$3,031,000
Rossland	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000
Total (\$000)	\$3,198.0	\$3,198.0	\$3,198.0	\$3,198.0	\$3,198.0	\$3,198.0	\$3,305.8	\$3,413.5	\$3,521.3	\$3,629.0



APPENDIX B.1

TABLE 1

TOWN OF WHITBY
CALCULATION OF SERVICE LEVELS

LIBRARIES

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	122,022	123,267	124,525	125,796	127,080	128,377	130,575	132,810	135,084	136,562

INVENTORY SUMMARY (\$000)

Buildings	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2	\$42,113.2
Land	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5	\$6,973.5
Materials	\$8,345.6	\$9,224.8	\$10,318.3	\$10,446.8	\$10,407.2	\$10,405.8	\$10,391.9	\$10,416.5	\$10,224.5	\$10,787.5
Furniture And Equipment	\$3,198.0	\$3,198.0	\$3,198.0	\$3,198.0	\$3,198.0	\$3,198.0	\$3,305.8	\$3,413.5	\$3,521.3	\$3,629.0
Total (\$000)	\$60,630.3	\$61,509.4	\$62,602.9	\$62,731.5	\$62,691.9	\$62,690.5	\$62,784.3	\$62,916.6	\$62,832.4	\$63,503.1

SERVICE LEVEL (\$/pop)											Average Service Level
Buildings	\$345.13	\$341.64	\$338.19	\$334.77	\$331.39	\$328.04	\$322.52	\$317.09	\$311.76	\$308.38	\$327.89
Land	\$57.15	\$56.57	\$56.00	\$55.44	\$54.87	\$54.32	\$53.41	\$52.51	\$51.62	\$51.06	\$54.30
Materials	\$68.39	\$74.84	\$82.86	\$83.05	\$81.89	\$81.06	\$79.59	\$78.43	\$75.69	\$78.99	\$78.48
Furniture And Equipment	\$26.21	\$25.94	\$25.68	\$25.42	\$25.17	\$24.91	\$25.32	\$25.70	\$26.07	\$26.57	\$25.70
Total (\$/pop)	\$496.88	\$498.99	\$502.73	\$498.68	\$493.33	\$488.33	\$480.83	\$473.73	\$465.14	\$465.01	\$486.37

TOWN OF WHITBY
CALCULATION OF MAXIMUM ALLOWABLE

LIBRARIES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$486.37
Net Population Growth 2021 - 2030	42,444
Maximum Allowable Funding Envelope	\$20,643,488

APPENDIX B.1

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARIES

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		Prior Growth	2021-2030	Post 2030
1.0 LIBRARIES										
Recovery of Central Public Library Facility										
1.1.1 Principle Payment	2021 - 2021	\$ 735,527	\$ -	\$ 735,527	0%	\$ -	\$ 735,527	\$ 82,262	\$ 653,265	\$ -
1.1.2 Principle Payment	2022 - 2022	\$ 464,938	\$ -	\$ 464,938	0%	\$ -	\$ 464,938	\$ -	\$ 464,938	\$ -
Subtotal Recovery of Central Public Library Facility		\$ 1,200,465	\$ -	\$ 1,200,465		\$ -	\$ 1,200,465	\$ 82,262	\$ 1,118,203	\$ -
Whitby Library Branches										
90221502 CPL - F10 Makerspace Conversion	2022 - 2022	\$ 73,500	\$ -	\$ 73,500	0%	\$ -	\$ 73,500	\$ -	\$ 73,500	\$ -
71301501 Future Library Branch	2030 - 2030	\$ 10,000,000	\$ -	\$ 10,000,000	0%	\$ -	\$ 10,000,000	\$ -	\$ 10,000,000	\$ -
Subtotal Whitby Library Branches		\$ 10,073,500	\$ -	\$ 10,073,500		\$ -	\$ 10,073,500	\$ -	\$ 10,073,500	\$ -
Administrative Studies and Initiatives										
90237001 Library Strategic Plan	2023 - 2028	\$ 80,000	\$ -	\$ 80,000	50%	\$ 40,000	\$ 40,000	\$ -	\$ 40,000	\$ -
Subtotal Administrative Studies and Initiatives		\$ 80,000	\$ -	\$ 80,000		\$ 40,000	\$ 40,000	\$ -	\$ 40,000	\$ -
Library Collection and Information Technology										
90204001 Library Collection Expansion	2021 - 2030	\$ 3,760,000	\$ -	\$ 3,760,000	0%	\$ -	\$ 3,760,000	\$ -	\$ 3,760,000	\$ -
90204101 Pilot Project - Book Lending Machine	2022 - 2022	\$ 65,000	\$ -	\$ 65,000	0%	\$ -	\$ 65,000	\$ -	\$ 65,000	\$ -
Subtotal Library Collection and Information Technology		\$ 3,825,000	\$ -	\$ 3,825,000		\$ -	\$ 3,825,000	\$ -	\$ 3,825,000	\$ -
Provision for Future Growth-Related Infrastructure										
1.2.1 Provision for Future Growth-Related Infrastructure	2030 - 2030	\$ 4,300,000	\$ -	\$ 4,300,000	0%	\$ -	\$ 4,300,000	\$ -	\$ 4,300,000	\$ -
Subtotal Provision for Future Growth-Related Infrastructure		\$ 4,300,000	\$ -	\$ 4,300,000		\$ -	\$ 4,300,000	\$ -	\$ 4,300,000	\$ -
TOTAL LIBRARIES - DC ELIGIBLE PROJECTS		\$ 19,478,965	\$ -	\$ 19,478,965		\$ 40,000	\$ 19,438,965	\$ 82,262	\$ 19,356,703	\$ -

Residential Development Charge Calculation		
Residential Share of 2021 - 2030 DC Eligible Costs	100.0%	\$19,356,703
10-Year Growth in Population in New Units		58,344
Unadjusted Development Charge Per Capita		\$331.77
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	0.0%	\$0
10-Year Growth in Square Metres		244,563
Unadjusted Development Charge Per Square Metre		\$0.00
<i>Industrial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	0.0%	\$0
10-Year Growth in Square Metres		719,229
Unadjusted Development Charge Per Square Metre		\$0.00
<i>Institutional</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	0.0%	\$0
10-Year Growth in Square Metres		246,288
Unadjusted Development Charge Per Square Metre		\$0.00

2021 - 2030 Net Funding Envelope	\$20,643,488
Reserve Fund Balance Balance as at December 31, 2020	\$82,262



APPENDIX B.1

TABLE 3

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 LIBRARIES
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

LIBRARIES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$82.26	\$348.11	\$481.87	\$1,260.57	\$2,120.81	\$3,044.65	\$3,933.76	\$7,009.54	\$10,406.31	\$14,198.02	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$82.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$82.3
- Libraries: Non Inflated	\$255.0	\$393.5	\$275.0	\$255.0	\$255.0	\$355.0	\$355.0	\$375.0	\$355.0	\$15,365.0	\$18,238.5
- Central Library Debt Principle Payment (1)	\$653.3	\$464.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,118.2
- Libraries: Inflated	\$990.5	\$866.3	\$286.1	\$270.6	\$276.0	\$391.9	\$399.8	\$430.8	\$415.9	\$18,362.6	\$22,690.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	3,996	3,012	3,057	3,107	3,155	3,232	8,972	9,440	9,928	10,444	58,344
REVENUE											
- DC Receipts: Inflated	\$1,300.1	\$999.5	\$1,034.8	\$1,072.7	\$1,111.0	\$1,161.0	\$3,287.4	\$3,528.0	\$3,784.5	\$4,060.9	\$21,340.0
INTEREST											
- Interest on Opening Balance	\$2.9	\$12.2	\$16.9	\$44.1	\$74.2	\$106.6	\$137.7	\$245.3	\$364.2	\$496.9	\$1,501.0
- Interest on In-year Transactions	\$5.4	\$2.3	\$13.1	\$14.0	\$14.6	\$13.5	\$50.5	\$54.2	\$58.9	(\$393.3)	(\$166.7)
- Interest on Central Library Debt	(\$52.0)	(\$14.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$66.0)
TOTAL REVENUE	\$1,256.4	\$1,000.1	\$1,064.8	\$1,130.8	\$1,199.9	\$1,281.1	\$3,475.6	\$3,827.5	\$4,207.6	\$4,164.6	\$22,608.3
CLOSING CASH BALANCE	\$348.1	\$481.9	\$1,260.6	\$2,120.8	\$3,044.6	\$3,933.8	\$7,009.5	\$10,406.3	\$14,198.0	\$0.0	

1 Principle payments not inflated

2021 Adjusted Charge Per Capita	\$325.35
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.2

Parks & Recreation

The Town of Whitby offers its residents a range of parks and recreation opportunities through various parks, arenas, swimming pools, community centres, health club etc. The Town's Parks and Recreation Department is responsible for the delivery of the service.

Table 1 Historical Service Levels

The Town of Whitby offers indoor recreation services to its residents through a number of facilities including community centres, senior activity centres, clubhouses etc. The total square footage of these facilities amounts to approximately 708,700 square feet and these facilities are valued at over \$231.06 million. The buildings occupy 41.7 hectares of land worth \$94.49 million. Indoor recreation services also include various furniture and equipment related to these facilities for a total replacement cost of \$5.93 million.

The Town has roughly 382.58 hectares of parkland and 68.9 kilometres of trails located throughout the community which is valued at \$109.62 million. The Parks and Recreation department is also responsible for park facilities including soccer pitches, artificial turf, playgrounds, splash pads, shade structures, tennis courts, baseball diamonds, courts, skateboard parks and parking spaces. These facilities have a combined total of \$55.46 million. Park buildings and related furniture and equipment, washrooms, pavilions, other equipment and vehicles are also used to provide park services and add a further \$29.82 million to the Parks and Recreation inventory.

The combined value of capital assets for park development and related facilities is \$526.38 million. The ten-year historical service level is \$4,008.57 per capita, and this, multiplied by the ten-year forecast net population growth, results in a maximum allowable funding envelope of \$170.14 million (42,444 net population growth X \$4,008.57 per capita).

Table 2 2021-2030 Development-Related Program & Calculation of the “Unadjusted” Development Charges

The Parks & Recreation program includes additional fleet and equipment, recreational trails, parks development costs, various community centre redevelopments, new Whitby sports complex, parks share of the debt for Phase 1, upcoming costs for Phase 2 and 3 of the Operations centre, and parks and recreation studies. The following provides a brief explanation of the assets included in the capital program:

- **Parks, Forestry and Horticulture Services Fleet and Equipment** – relates to net new vehicle acquisitions for parks. Vehicles include chippers, dump trucks, trucks and plows, mowers, van with man lift bucket and others.
- **Recreational Trails Program** – various segments of trails and pathways.
- **Parks Program** – various stages of park development including design, playground additions, Brooklin district and local park, sports fields, multi-use fields construction and etc.
- **Other Community Centres** – redevelopment of the Heydenshore Pavilion.
- **Iroquois Park Sports Centre** - construction of a garage and garbage storage building.
- **Luther Vipond Memorial Arena** – redevelopment of existing arena to service development in the Town.
- **Port Whitby Marina** – construction of a staff work building and fencing around the dredge sediment containment facility.

- **Operations Centre (Phase 2 & 3)** – parks share of 45 per cent of the expansion to the operations centre. The centre houses parks vehicles, equipment and staff.
- **New Whitby Sports Complex** – new multi-use facility construction project.
- **Parks, Parks Maintenance and Recreation Studies** – various studies related to delivery of parks and recreation services to new development
- **Existing Debt (Principal 10yr)** – relates to the outstanding debentures associated with the land acquisition and construction of the Operations Centre Expansion (Phase 1). Parks share of 45 per cent has been included in this capital program.

Altogether, the ten-year gross development-related capital program for Parks and Recreation amounts to \$188.09 million. Grants, subsidies and other recoveries amount to \$100,000, which is entirely related to the “Fleet to Trees Program” in the parks program. This amount has been netted off the DC eligible cost. Approximately \$21.15 million, has been identified as ineligible cost for recovery (e.g. benefit to existing allocation) and has been removed from the total DC recoverable share. This ineligible cost, or benefit to existing share includes:

- **Recreational Trails Program** – 30% based on shares of existing and proposed active transportation infrastructure in the Town with consideration for the Roads and Related BTE. Details on this calculation are in Appendix C.2. A 50% BTE share is attributed to Cullen Central Park Trail connections to account for the existing gravel paths in the park.
- **Parks Program**
 - **Brooklin Memorial Park Design/Construction** - 65% to account for the replacement share of the project, additional capacity to be created by project to service the need of future development.

- **Downtown Intensification Accessible Playground & Dundas St E Intensification – Accessible Playground & Splashpad** – 50% to account for replacement share of project.
- **Kiwanis Heydenshore Redevelopment** – 75% share to account for replacement of existing assets. DC eligible component of 25% is related to servicing future development.
- **Sports Fields / Multi-Use Fields / Artificial Turf – Construction** – 25% to account for replacement shares of updating existing assets. Largely related to new facilities needed to service future development.
- **Heydenshore Pavilion** - 75% share same as the park redevelopment component.
- **Luther Vipond Memorial Arena** – 76% based on future population growth and existing population in the Town.
- **Port Whitby Marina** – 50% to account for half of the building being replaced by the new structure. The other half will be expanded to service future development.
- **Operations Centre (Phase 2 & 3)** – 17% to account for the decommissioning of parks maintenance depot.
- **Parks, Parks Maintenance and Recreation Studies** – various BTE shares applied to account for benefitting populations.

After netting off the project costs that are ineligible for recovery through development charges, the total DC eligible costs amount to \$166.84 million.

A portion of this cost, \$45.68 million, will be paid for by existing funds in the Parks and Recreation DC reserve fund. After this adjustment, \$121.16 million is considered to be the 2021-2030 development-related DC eligible costs. This entire amount is allocated to the residential sector as Parks and

Recreation will benefit the future residential population and is recovered by the forecast of approximately 58,344 persons in new housing units. This yields an unadjusted charge of \$2,076.69 per capita.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential calculated charge increases to \$2,329.69 per capita. The following table summarizes the calculation of the Parks and Recreation development charge:

PARKS & RECREATION SUMMARY						
10-year Hist.	2021 - 2030		Unadjusted		Adjusted	
	Development-Related Capital Program	Net DC Recoverable	Residential	Non-Res	Residential	Non-Res
Service Level per capita	Total		\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$4,008.57	\$188,090,017	\$121,161,534	\$2,076.69	\$0.00	\$2,329.69	\$0.00

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
INDOOR RECREATION

MAJOR FACILITIES Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Abilities Centre (Walking Track)	-	-	5,740	5,740	5,740	5,740	5,740	5,740	5,740	5,740	5,740	\$230
Asburn Community Centre	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,575	\$484
Brooklin Community Centre	5,914	5,914	5,914	5,914	5,914	5,914	5,914	5,914	5,914	5,914	5,914	\$347
Brooklin Community Centre & Library (1)	29,970	29,970	29,970	29,970	29,970	29,970	29,970	29,970	29,970	29,970	29,970	\$412
Boat Storage Facility (Portion Used by Marina)	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	\$130
Community Schools	13,005	13,005	13,005	13,005	13,005	13,005	13,005	13,005	13,005	13,005	13,005	\$190
Cullen Central Park	18,776	18,776	18,776	-	-	-	-	-	-	-	-	\$270
Cullen Log Cabin	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$368
Cullen Cabin	2,180	2,180	2,180	2,180	2,180	2,180	2,180	2,180	2,180	2,180	2,180	\$204
Heydenshore Pavillion	7,075	7,075	7,075	7,075	7,075	7,075	7,075	7,075	7,075	7,075	7,075	\$359
Iroquois Park Sports Centre (2)	235,260	244,485	244,485	244,485	244,485	244,485	244,485	244,485	244,485	244,485	244,485	\$379
Luther Vipond Memorial Arena	29,700	29,700	29,700	29,700	29,700	29,700	29,700	29,700	29,700	29,700	29,700	\$309
Lynde House - Activity Centre (3)	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	\$431
McKinney Centre Arena	100,640	100,640	100,640	100,640	100,640	100,640	100,640	100,640	100,640	100,640	100,640	\$303
Port Whitby Marina Clubhouse (4)	6,050	6,050	6,050	6,050	6,050	6,050	6,050	6,050	6,050	6,050	6,050	\$2,494
Spencer Community Centre	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	\$424
Whitby Centennial Building (5)	27,750	27,750	27,750	27,750	27,750	27,750	27,750	27,750	27,750	27,750	27,750	\$422
Whitby Civic Recreation Complex	54,925	54,925	54,925	54,925	54,925	54,925	54,925	54,925	54,925	54,925	54,925	\$488
Whitby Seniors Activity Centre	17,210	17,210	17,210	17,210	17,210	17,210	17,210	17,210	17,210	17,210	17,210	\$385
Whitby Iroquois Soccer Dome	55,725	55,725	55,725	55,725	55,725	55,725	55,725	-	-	-	-	\$93
Whitby Soccer Domes	-	-	-	-	-	-	-	155,725	155,725	155,725	155,725	\$93
Whitby Lawn Bowling Clubhouse	840	840	840	840	840	840	840	840	840	840	840	\$266
Total (sq.ft.)	612,485	621,710	627,450	608,674	608,674	608,674	608,674	708,674	708,674	708,674	708,674	
Total (\$000)	\$222,039.7	\$225,533.1	\$226,853.2	\$221,783.7	\$221,783.7	\$221,783.7	\$221,783.7	\$231,057.7	\$231,057.7	\$231,057.7	\$231,057.7	

1 Only includes portion of facility related to Recreation. Total GFA of facility is 41,550 sq.ft.

2 2011 GFA increase of 9,225 sq.ft. relates to increased floor area from expansion.

3 Lynde House Activity Centre includes the Brock Street South Activity Centre as named in the Town's 2016 DC Study.

4 Includes marina site development costs.

5 Total size of facility (30,250 sq.ft.) has been reduced by 2,500 sq.ft. that is attributable to the Theatre and Auditorium (deemed to be Cultural space).

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
INDOOR RECREATION

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Asburn Community Centre	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$889,900
Brooklin Community Centre	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	\$3,178,100
Brooklin Community Centre & Library (1)	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	\$3,178,100
Brooklin Community Centre & Library - Additional Park	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$3,178,100
Community Schools	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	\$1,906,900
Heydenshore Pavillion	0.57	0.57	0.57	0.57	0.57	0.57	1.21	1.21	1.21	1.21	1.21	\$1,144,100
Iroquois Park Sports Centre	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	\$1,906,900
Luther Vipond Memorial Arena	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	\$2,542,500
Lynde House - Activity Centre (2)	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	\$3,178,100
McKinney Centre Arena	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	\$3,178,100
Port Whitby Marina Clubhouse	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	\$889,900
Spencer Community Centre	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$889,900
Whitby Centennial Building (3)	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	\$3,178,100
Whitby Civic Recreation Complex	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	\$4,449,300
Whitby Seniors Activity Centre	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	\$3,178,100
Whitby Soccer Domes	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	\$2,542,500
Total (ha)	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.7	41.7	41.7	41.7	
Total (\$000)	\$93,758.2	\$93,758.2	\$93,758.2	\$93,758.2	\$93,758.2	\$93,758.2	\$94,490.4	\$94,490.4	\$94,490.4	\$94,490.4	\$94,490.4	

1 Only includes portion of land related to Recreation. Total size of site, including additional parking area, is 1.88 ha.

2 Lynde House Activity Centre includes the Brock Street South Activity Centre as named in the Town's 2016 DC Study. Land are excludes additional parking area.

3 Total land (0.66 ha) has been reduced by 0.05 ha attributable to the Theater and Auditorium (deemed to be Cultural space).

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
INDOOR RECREATION

FURNITURE & EQUIPMENT Facility Name	Total Value of Furniture & Equipment (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Asburn Community Centre	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
Brooklin Community Centre	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Brooklin Community Centre & Library	\$467,640	\$467,640	\$467,640	\$467,640	\$467,640	\$467,640	\$467,640	\$467,640	\$467,640	\$467,640
Heydenshore Pavillion	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Iroquois Park Sports Centre	\$2,153,000	\$2,153,000	\$2,153,000	\$2,153,000	\$2,153,000	\$2,153,000	\$2,153,000	\$2,153,000	\$2,153,000	\$2,153,000
Luther Vipond Memorial Arena	\$189,000	\$189,000	\$189,000	\$189,000	\$189,000	\$189,000	\$189,000	\$189,000	\$189,000	\$189,000
Lynde House - Activity Centre	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
McKinney Centre Arena	\$567,000	\$567,000	\$567,000	\$567,000	\$567,000	\$567,000	\$567,000	\$567,000	\$567,000	\$567,000
Port Whitby Marina Clubhouse	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000
Spencer Community Centre	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
Whitby Centennial Building	\$289,000	\$289,000	\$289,000	\$289,000	\$289,000	\$289,000	\$289,000	\$289,000	\$289,000	\$289,000
Whitby Civic Recreation Complex	\$1,043,000	\$1,043,000	\$1,043,000	\$1,043,000	\$1,043,000	\$1,043,000	\$1,043,000	\$1,043,000	\$1,043,000	\$1,043,000
Whitby Seniors Activity Centre	\$243,000	\$243,000	\$243,000	\$243,000	\$243,000	\$243,000	\$243,000	\$243,000	\$243,000	\$243,000
Whitby Soccer Domes	\$278,625	\$278,625	\$278,625	\$278,625	\$278,625	\$278,625	\$278,625	\$778,625	\$778,625	\$778,625
Total (\$000)	\$5,434.3	\$5,434.3	\$5,434.3	\$5,434.3	\$5,434.3	\$5,434.3	\$5,434.3	\$5,934.3	\$5,934.3	\$5,934.3

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION

Land
Development
Cost

PARKLAND DEVELOPMENT

COMMUNITY PARKS Park Name	# of Hectares of Developed Parkland										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Ashburn Community Centre	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$224,000
Brock Street Activity Centre Park	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	\$224,000
Brooklin Community Centre	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	\$224,000
Spencer Community Centre	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$224,000
Total (#)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Total (\$000) Acquisition	\$269.0	\$269.0	\$269.0	\$269.0	\$269.0	\$269.0	\$269.0	\$269.0	\$269.0	\$269.0	

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION

Land
Development
Cost

PARKLAND DEVELOPMENT

DISTRICT PARKS Park Name	# of Hectares of Developed Parkland										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Baycliffe Park	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	\$280,000
Brooklin Memorial Park	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	\$280,000
Brooklin Optimist Park	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	\$280,000
Cachet Park	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	\$280,000
Carnwith Park	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	\$280,000
Consumers Soccer Fields	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	\$280,000
Country Lane Park	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	\$280,000
Darren Park	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	\$280,000
D'Hillier Park	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	\$280,000
Intrepid Park	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	\$280,000
Jack Wilson Park	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	\$280,000
Jeffery Park	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	\$280,000
Kelloryn Park	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	4.0	\$280,000
Kiwanis Heydenshore Park	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	\$280,000
Palmerston Park	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	\$280,000
Peel Park	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	\$280,000
Portage Park	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	\$280,000
Pringle Creek	10.2	10.2	10.2	10.2	10.2	10.2	10.2	5.6	5.6	5.6	\$280,000
Rossland Soccer Complex	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	\$280,000
Whitby Optimist Park	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	\$280,000
Willow Park	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	\$280,000
Total (#)	149.1	149.1	149.1	149.1	149.1	149.1	149.1	144.5	144.5	141.6	
Total (\$000) Acquisition	\$41,749.3	\$41,749.3	\$41,749.3	\$41,749.3	\$41,749.3	\$41,749.3	\$41,749.3	\$40,457.3	\$40,457.3	\$39,655.3	

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION

Land
Development
Cost

PARKLAND DEVELOPMENT

LOCAL PARKS Park Name	# of Hectares of Developed Parkland										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Annes Park	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	\$168,000
Ash Park	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	\$168,000
Ashburn Park	3.9	3.9	3.9	3.9	3.9	3.9	3.5	3.5	3.5	3.5	\$168,000
Bassett Park	5.2	5.2	5.2	5.2	5.2	5.2	1.5	1.5	1.5	1.5	\$168,000
Bradley Park	3.1	3.1	3.1	3.1	3.1	3.1	2.7	2.7	2.7	2.7	\$168,000
Brooklin Kinsmen Park	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$168,000
Carson Park	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	\$168,000
Central Park	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	\$168,000
Coach Park	-	-	-	-	-	0.4	0.4	0.4	0.4	0.4	\$168,000
Consumers Park	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	\$168,000
College Downs Park	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	\$168,000
Deverell Park	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	\$168,000
Divine Park	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	\$168,000
Duggan Park	1.3	1.3	1.3	1.3	1.3	1.3	0.7	0.7	0.7	0.7	\$168,000
Eric Clarke Park	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$168,000
Fallingbrook Park	7.8	7.8	7.8	7.8	7.8	7.8	5.1	5.1	5.1	5.1	\$168,000
Forest Heights Park	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	\$168,000
Folkstone Park	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	\$168,000
Gordon Richards Park	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	\$168,000
Glenayr Park	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	\$168,000
Guthrie Park	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	\$168,000
Hannam Park	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	\$168,000
Hazelwood Park	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	1.1	\$168,000
Huron Park	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	\$168,000
Kapuscinski Park	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	\$168,000
Kinross Park	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	\$168,000

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION

Land
Development
Cost

PARKLAND DEVELOPMENT

LOCAL PARKS Park Name	# of Hectares of Developed Parkland										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Kinsmen Park	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	\$168,000
Lady May Park	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	\$168,000
Kirby Park	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	\$168,000
Lions Promenade	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	\$168,000
Longwood Park	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	\$168,000
Lupin Park	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	\$168,000
Maple Glen Park	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	\$168,000
Martinet Parkette	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$168,000
Norista Park	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	\$168,000
Medland Park	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	\$168,000
Oceanpearl Park	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	\$168,000
Otter Creek Park	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	\$168,000
Phillips Kozaroff Park	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	\$168,000
Pinecone	-	-	-	-	-	1.6	1.6	1.6	1.6	1.6	\$168,000
Powell Park	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	\$168,000

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION

PARKLAND DEVELOPMENT

Land
Development
Cost

LOCAL PARKS CONT. Park Name	# of Hectares of Developed Parkland										UNIT COST (\$/ha)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Prince of Wales Park	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	\$168,000
Promenade Park	-	-	-	-	-	-	-	-	-	-	0.4	\$168,000
Regency Park	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	\$168,000
Robinson Park	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$168,000
Ronald C. Deeth Park	-	-	-	-	-	-	-	-	-	-	17.2	\$168,000
Rolling Acres Park	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	\$168,000
Rosedale Park	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	\$168,000
Rotary Centennial Park	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	\$168,000
Selkirk Park	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	\$168,000
St. Thomas Park	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	\$168,000
Tom Edwards Park	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	\$168,000
Vanier Park	-	-	-	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	\$168,000
Vipond Park	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	\$168,000
Whitburn Park	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	\$168,000
Whitby Civic Gardens	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	\$168,000
Willowbrook Park	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	\$168,000
Windsor Bay Park	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	\$168,000
Total (#)	126.0	126.0	126.0	126.6	126.6	128.6	120.7	120.7	120.7	135.6		
Total (\$000) Acquisition	\$21,164.2	\$21,164.2	\$21,164.2	\$21,266.8	\$21,266.8	\$21,606.2	\$20,278.7	\$20,278.7	\$20,278.7	\$22,778.6		

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION

Land
Development
Cost

PARKLAND DEVELOPMENT

PARKETTES Park Name	# of Hectares of Developed Parkland										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Burns Park	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	\$224,000
Birch Park	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	\$224,000
Brooklin Horticultural Parkette	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$224,000
Calais Park	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	\$224,000
Cathedral Park	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$224,000
Cenotaph Park	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	\$224,000
Chipperfield Park	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	\$224,000
Coronation Park	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	\$224,000
Davies Parkette	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	\$224,000
Elmer Lick	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$224,000
Front/Brock Street	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	\$224,000
Ennislaire Park	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	\$224,000
Glen Hill Park	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	\$224,000
Grass Park	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	\$224,000
Greenfield Parkette	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$224,000
Harold Park	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	\$224,000
Heard Park	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	\$224,000
Hobbs Park	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	\$224,000
Iona Parkette	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	\$224,000

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION

Land
Development
Cost

PARKLAND DEVELOPMENT

PARKETTES CONT. Park Name	# of Hectares of Developed Parkland										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Longueuil Place (Longueuil Sqaure)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$280,000
Majestic Park	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	\$280,000
Manning Parkette	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$280,000
Myrtle Community Park	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$280,000
Myrtle Station Parkette	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$280,000
Nicole Park	-	-	-	-	-	0.6	0.6	0.6	0.6	0.6	\$280,000
Pilkington Parkette	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	\$280,000
Robmar Park	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$280,000
Rivers Edge Park	-	-	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$280,000
Rotary Sunrise Lake Park	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$280,000
Suse Eggert Parkette	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	\$280,000
Stockton Parkette	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	\$280,000
Sato Parkette	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	\$280,000
Sugar Maple Parkette	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$280,000
Valleywood Parkette	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	\$280,000
Teddington Park	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$280,000
Upperview Park	-	-	-	-	-	-	-	0.2	0.2	0.2	\$280,000
Wallace Parkette	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	\$280,000
Watson Park	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$280,000
Wilcox Park	-	-	-	-	-	-	-	0.4	0.4	0.4	\$280,000
Wyndfield Parkette	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	\$280,000
Total (#)	15.6	15.6	15.9	16.7	16.7	17.3	17.0	17.6	17.6	17.6	
Total (\$000) Acquisition	\$3,875.6	\$3,875.6	\$3,975.3	\$4,169.3	\$4,169.3	\$4,340.4	\$4,275.2	\$4,438.6	\$4,438.6	\$4,438.6	

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION

Land
Development
Cost

PARKLAND DEVELOPMENT

TOWN PARKS Park Name	# of Hectares of Developed Parkland										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Cullen Central Park	34.6	34.6	34.6	34.6	34.6	34.6	30.1	30.1	30.1	30.1	\$280,000
Iroquois Park	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	\$280,000
Whitby Harbour Town Park (1)	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	\$280,000
Total (#)	91.0	91.0	91.0	91.0	91.0	91.0	86.5	86.5	86.5	86.5	
Total (\$000) Acquisition	\$25,477.8	\$25,477.8	\$25,477.8	\$25,477.8	\$25,477.8	\$25,477.8	\$24,231.2	\$24,231.2	\$24,231.2	\$24,231.2	

1 Includes Victoria Fields and Gordon Street

PARK TRAILS Park Name	# of Km of Developed Parkland										UNIT COST (\$/km)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Ash Creek Channel Trail	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	\$265,000
Bio-Diversity Trail	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	\$265,000
Brooklin Lions Trail	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	\$265,000
Forest Heights Trail	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$265,000
Holiday Drive Trail	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	\$265,000
Hydro Corridor Trail	2.06	2.06	2.06	3.18	3.18	3.22	4.04	4.04	4.04	4.04	\$265,000
Lynde Creek Trail	-	-	-	1.70	1.70	1.70	1.70	1.70	1.70	1.70	\$265,000
Lynde Creek Valley Trail	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	\$265,000
Manning Bassett Trail	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	\$265,000
Nichol Park Trail	-	-	-	-	-	0.18	0.18	0.18	0.18	0.18	\$265,000
Oshawa Creek Trail	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	\$265,000
Otter Creek Trail	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	\$265,000
Pipeline Trail	0.72	0.72	0.72	1.49	1.49	1.49	1.49	1.49	1.49	1.49	\$265,000
Pringle Creek Trail	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$265,000
Scott Trail	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	\$265,000
St. Thomas Trail	0.56	0.56	0.56	0.56	0.68	0.68	0.68	0.68	0.68	0.68	\$265,000
Waterfront Trail	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	\$265,000
Park Walkways	34.04	36.46	36.57	37.03	37.98	38.93	39.32	39.72	40.11	40.50	\$265,000
Total (#)	57.6	60.1	60.2	64.2	65.3	66.5	67.7	68.1	68.5	68.9	
Total (\$000) Acquisition	\$15,274.6	\$15,915.9	\$15,945.1	\$17,018.3	\$17,301.9	\$17,611.9	\$17,933.2	\$18,037.2	\$18,141.2	\$18,245.3	

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

SENIOR SOCCER FIELDS Park Name	# of Facilities										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Senior Artificial Turf											
Rossland Soccer Complex	-	-	-	-	-	1	1	1	1	1	\$1,232,000
Senior											
Annes Park	1	1	1	1	1	1	1	1	1	1	\$144,000
Baycliffe Park	1	1	1	1	1	1	1	1	1	1	\$196,000
Brooklin Optimist Park	1	1	1	1	1	1	1	1	1	1	\$144,000
Carnwith Park	2	2	2	2	2	2	2	2	2	2	\$196,000
Consumers Soccer Fields	2	2	2	2	2	2	2	2	2	2	\$420,000
Darren Park	1	1	1	1	1	1	1	1	1	1	\$196,000
Forest Heights Park	2	2	2	2	2	2	2	2	2	2	\$144,000
Guthrie Park	1	1	1	1	1	1	1	1	1	1	\$144,000
Huron Park	1	1	1	1	1	1	1	1	1	1	\$144,000
Iroquois Park	1	1	1	1	1	1	1	1	1	1	\$420,000
Jack Wilson Park	2	2	2	2	2	2	2	2	2	2	\$144,000
Jeffery Park	2	2	2	2	2	2	2	2	2	2	\$240,000
Medland Park	1	1	1	1	1	1	1	1	1	1	\$144,000
Palmerston Park	1	1	1	1	1	1	1	1	1	1	\$144,000
Peel Park	-	1	1	1	1	1	1	1	1	1	\$420,000
Pringle Creek Park	1	1	1	1	1	1	1	1	1	1	\$144,000
Rossland Road Soccer Complex	3	3	3	3	3	3	3	3	3	3	\$420,000
Victoria St Soccer Fields	2	2	2	2	2	2	2	2	2	2	\$144,000
Total (#)	25	26	26	26	26	27	27	27	27	27	
Total (\$000)	\$5,656.0	\$6,076.0	\$6,076.0	\$6,076.0	\$6,076.0	\$7,308.0	\$7,308.0	\$7,308.0	\$7,308.0	\$7,308.0	

APPENDIX B.2
TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

JUNIOR SOCCER FIELDS Park Name	# of Facilities										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Junior											
Cullen Central Park	1	1	1	1	1	1	1	1	1	1	\$117,000
Divine Park	1	1	1	1	1	1	1	1	1	1	\$117,000
Guthrie Park	1	1	1	1	1	1	1	1	1	1	\$117,000
Lady May Park	1	1	1	1	1	1	1	1	1	1	\$117,000
Lupin Park	1	1	1	1	1	1	1	1	1	1	\$117,000
Portage Park	1	1	1	1	1	1	1	1	1	1	\$117,000
Selkirk Park	1	1	1	1	1	1	1	1	1	1	\$117,000
Whitby Optimist Park	1	1	1	1	1	1	1	1	1	1	\$117,000
Victoria St Soccer Fields	1	1	1	1	1	1	1	1	1	1	\$117,000
Mini											
Fallingbrook Park	3	3	3	3	3	3	3	3	3	3	\$55,000
Prince of Wales Park	2	2	2	2	2	2	2	2	2	2	\$55,000
Rolling Acres Park	2	2	2	2	2	2	2	2	2	2	\$55,000
Victoria St Soccer Fields	8	8	8	8	8	8	8	8	8	8	\$55,000
Willow Park	-	-	-	-	-	3	3	3	3	3	\$55,000
Practice Fields											
Victoria St Soccer Fields	2	2	2	2	2	2	2	2	2	2	\$117,000
Total (#)	26	26	26	26	26	29	29	29	29	29	
Total (\$000)	\$2,112.0	\$2,112.0	\$2,112.0	\$2,112.0	\$2,112.0	\$2,277.0	\$2,277.0	\$2,277.0	\$2,277.0	\$2,277.0	

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

PARKETTE PLAYGROUNDS	# of Playgrounds										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Ashburn Community Centre	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Birch Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Calais Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Cathedral Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Davies Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Elmer Lick Park	-	-	-	-	-	-	1	1	1	1	1	\$114,000
Ennisclare Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Glen Hill Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Greenfield Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Harold Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Heard Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Hobbs Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Iona Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Lynde House Museum	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Majestic Park	-	-	-	-	1	1	1	1	1	1	1	\$114,000
Myrtle Station Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
River's Edge Parkette	-	-	-	1	1	1	1	1	1	1	1	\$114,000
Sato Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Spencer Community Centre	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Stockton Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Teddington Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Upperview Park	-	-	-	-	-	-	-	-	-	-	1	\$114,000
Wallace Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Wyndfield Park	1	1	1	1	1	1	1	1	1	1	1	\$114,000
Total (#)	20	20	20	21	22	22	23	23	23	23	24	
Total (\$000)	\$2,280.0	\$2,280.0	\$2,280.0	\$2,394.0	\$2,508.0	\$2,508.0	\$2,622.0	\$2,622.0	\$2,622.0	\$2,622.0	\$2,736.0	

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK FACILITIES

LOCAL PARK PLAYGROUNDS Park Name	# of Playgrounds										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Ash Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Ashburn Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Bassett Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Bradley Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Carson Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Central Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Coach Park	-	-	-	-	-	-	-	1	1	1	1	\$158,000
College Downs Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Deverell Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Divine Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Duggan Park	-	-	-	-	1	1	1	1	1	1	1	\$158,000
Eric Clarke Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Fallingbrook Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Forest Heights Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Glenayr Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Guthrie Park	1	1	1	1	1	1	1	1	1	1	2	\$158,000
Hannam Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Kapuscinski Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Kinross Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Kirby Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Lady May Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Longwood Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Lupin Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Medland Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

LOCAL PARK PLAYGROUNDS CONT. Park Name	# of Playgrounds										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Myrtle Community Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Nichol Park	-	-	-	-	-	-	1	1	1	1	1	\$158,000
Norista Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Oceanpearl Park	-	1	1	1	1	1	1	1	1	1	1	\$158,000
Otter Creek Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
PhillipsKozaroff Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Pinecone Park	-	-	-	-	-	-	1	1	1	1	1	\$158,000
Powell Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Prince of Wales Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Promenade Park	-	-	-	-	-	-	-	-	-	-	1	\$158,000
Robinson Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Robmar Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Rolling Acres Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Rosedale Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Rotary Centennial Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Selkirk Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Tom Edwards Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Vipond Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Watson Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Whitburn Park	-	-	-	-	1	1	1	1	1	1	1	\$158,000
Whitby Kinsmen Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Willowbrook Park	1	1	1	1	1	1	1	1	1	1	1	\$158,000
Iroquois Park	-	1	1	1	1	1	1	1	1	1	1	\$158,000
Vanier Park	-	-	-	-	1	1	1	1	1	1	1	\$158,000
Total (#)	39	41	41	41	44	44	47	47	47	49		
Total (\$000)	\$6,162.0	\$6,478.0	\$6,478.0	\$6,478.0	\$6,952.0	\$6,952.0	\$7,426.0	\$7,426.0	\$7,426.0	\$7,742.0		

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

DISTRICT PARK PLAYGROUNDS Park Name	# of Facilities										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Baycliffe Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Brooklin Memorial Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Brooklin Optimist Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Cachet Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Carnwith Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Country Lane Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Darren Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
D'Hillier Park	1	1	1	1	1	1	1	1	1	1	2	\$257,000
Folkstone Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Iroquois Park	-	-	-	-	-	-	-	-	-	-	1	\$257,000
Jack Wilson Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Jeffery Park	-	1	1	1	1	1	1	1	1	1	1	\$257,000
Kelloryn Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Kiwanis Heydenshore Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Palmerston Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Peel Park	-	1	1	1	1	1	1	1	1	1	1	\$257,000
Portage Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Pringle Creek Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Whitby Optimist Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Willow Park	1	1	1	1	1	1	1	1	1	1	1	\$257,000
Total (#)	17	19	19	19	19	19	19	19	19	19	21	
Total (\$000)	\$4,369.0	\$4,883.0	\$4,883.0	\$4,883.0	\$4,883.0	\$4,883.0	\$4,883.0	\$4,883.0	\$4,883.0	\$4,883.0	\$5,397.0	

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

SPLASH PADS Park Name	# of Facilities										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Baycliffe Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Cachet Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Carnwith Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Country Lane Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Darren Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Folkstone Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Jeffery Park	-	-	-	-	-	-	-	-	-	-	1	\$255,000
Norista Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Peel Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Portage Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Vanier Park	-	-	-	1	1	1	1	1	1	1	1	\$255,000
Willow Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Kiwanis Heydenshore Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Kinsmen Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Rotary Centennial Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Watson Park	1	1	1	1	1	1	1	1	1	1	1	\$255,000
Total (#)	14	14	14	15	15	15	15	15	15	15	16	
Total (\$000)	\$3,570.0	\$3,570.0	\$3,570.0	\$3,825.0	\$3,825.0	\$3,825.0	\$3,825.0	\$3,825.0	\$3,825.0	\$3,825.0	\$4,080.0	

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK FACILITIES

SHADE STRUCTURES Park Name	# of Facilities										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Pavillion											
Baycliffe Park	1	1	1	1	1	1	1	1	1	1	\$90,000
Brooklin East Subdivision	1	1	1	1	1	1	1	1	1	1	\$90,000
Brooklin Optimist Park	1	1	1	1	1	1	1	1	1	1	\$227,000
Brookvalley Subdivision	1	1	1	1	1	1	1	1	1	1	\$90,000
Cachet Park	1	1	1	1	1	1	1	1	1	1	\$90,000
Carnwith Park	1	1	1	1	1	1	1	1	1	1	\$63,000
Darren Park	1	1	1	1	1	1	1	1	1	1	\$90,000
Folkstone Park	1	1	1	1	1	1	1	1	1	1	\$90,000
Grass Park	1	1	1	1	1	1	1	1	1	1	\$227,000
Jeffery Park	-	-	-	-	-	-	-	-	-	1	\$50,000
Landmark Square	2	2	2	2	2	2	2	2	2	2	\$63,000
Lions Promenade	1	1	1	1	1	1	1	1	1	1	\$227,000
Nichol Park	-	-	-	-	-	-	1	1	1	1	\$227,000
Norista Park	1	1	1	1	1	1	1	1	1	1	\$63,000
Pinecone Park	-	-	-	-	-	-	1	1	1	1	\$90,000
Port Whitby Marina	-	2	2	2	2	2	2	2	2	2	\$22,000
Portage Park	1	1	1	1	1	1	1	1	1	1	\$90,000
Ronald C. Deeth Park	1	1	1	1	1	1	1	1	1	1	\$90,000
Rotary Centennial Park	1	1	1	1	1	1	1	1	1	1	\$227,000
Sato Park	1	1	1	1	1	1	1	1	1	1	\$63,000
Vanier Park	-	-	-	-	1	1	1	1	1	1	\$90,000
Selkirk Park	1	1	1	1	1	1	1	1	1	1	\$63,000
Whitburn Park	1	1	1	1	1	1	1	1	1	1	\$63,000

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK FACILITIES

SHADE STRUCTURES CONT. Park Name	# of Facilities										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Picnic Shelter											
Brooklin Kinsmen Park	1	1	1	1	1	1	1	1	1	1	\$65,000
Kiwanis Heydenshore Park	2	2	2	2	2	2	2	2	2	2	\$65,000
Phillips Kozaroff Park	1	1	1	1	1	1	1	1	1	1	\$65,000
Port Whitby Marina	4	4	4	4	4	4	4	4	4	4	\$65,000
Cullen Central Park	-	1	1	1	1	1	1	1	1	1	\$65,000
Willow Park	-	-	-	-	-	-	-	-	-	1	\$35,000
Total (#)	27	30	30	30	31	31	33	33	33	35	
Total (\$000)	\$2,589.0	\$2,698.0	\$2,698.0	\$2,698.0	\$2,788.0	\$2,788.0	\$3,105.0	\$3,105.0	\$3,105.0	\$3,155.0	

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK FACILITIES

TENNIS COURTS Park Name	# of Courts										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Brooklin Memorial Park	2	2	2	2	2	2	2	2	2	2	\$57,000
Central Park	2	2	2	2	2	2	2	2	2	2	\$57,000
D'Hillier Park	-	-	-	2	2	2	2	2	2	2	\$57,000
Folkstone Park	2	2	2	2	2	2	2	2	2	2	\$77,000
Huron Park	2	2	2	2	2	2	2	2	2	2	\$57,000
Iroquois Park	6	6	6	6	6	6	6	6	6	6	\$77,000
Kelloryn Park	3	3	3	3	3	3	3	3	3	3	\$57,000
Lupin Park	2	2	2	2	2	2	2	2	2	2	\$57,000
Palmerston Park	2	2	2	2	2	2	2	2	2	2	\$57,000
Peel Park	3	3	3	3	3	3	3	3	3	3	\$77,000
Willow Park	-	-	2	2	2	2	2	2	2	2	\$77,000
Total (#)	24	24	26	28	28	28	28	28	28	28	
Total (\$000)	\$1,588.0	\$1,588.0	\$1,742.0	\$1,856.0	\$1,856.0	\$1,856.0	\$1,856.0	\$1,856.0	\$1,856.0	\$1,856.0	\$1,856.0

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK FACILITIES

BASEBALL DIAMONDS Park Name	# of Diamonds										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Baseball											
Iroquois Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Portage Park	1	1	1	1	1	1	1	1	1	1	\$600,000
Pringle Creek Park	1	1	1	1	1	1	1	1	1	1	\$480,000
Whitby Optimist Park	1	1	1	1	1	1	1	1	1	1	\$280,000
Major Softball											
Cachet Park	1	1	1	1	1	1	1	1	1	1	\$420,000
D'Hillier Park	1	1	1	1	1	1	1	1	1	1	\$270,000
Hannam Park	1	1	1	1	1	1	1	1	1	1	\$270,000
Iroquois Park	-	-	-	1	1	1	1	1	1	1	\$465,000
Rolling Acres Park	1	1	1	1	1	1	1	1	1	1	\$270,000
Vipond Park	1	1	1	1	1	1	1	1	1	1	\$270,000
Whitby Optimist Park	1	1	1	1	1	1	1	1	1	1	\$270,000
Willow Park	1	1	1	1	1	1	1	1	1	1	\$270,000

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TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

BASEBALL DIAMONDS CONT. Park Name	# of Diamonds										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Minor Softball											
Ash Park	1	1	1	1	1	1	1	1	1	1	\$133,000
Ashburn Park	1	1	1	1	1	1	1	1	1	1	\$133,000
Brooklin Memorial Park	1	1	1	1	1	1	1	1	1	1	\$420,000
Brooklin Optimist Park	1	1	1	1	1	1	1	1	1	1	\$195,000
Cachet Park	1	1	1	1	1	1	1	1	1	1	\$133,000
Carson Park	1	1	1	1	1	1	1	1	1	1	\$195,000
Country Lane Park	2	2	2	2	2	2	2	2	2	2	\$440,000
Iroquois Park	1	1	1	2	2	2	2	2	2	2	\$195,000
Kelloryn Park	2	2	2	2	2	2	2	2	2	2	\$440,000
Kinross Park	1	1	1	1	1	1	1	1	1	1	\$175,000
Kirby Park	1	1	1	1	1	1	1	1	1	1	\$133,000
Palmerston Park	1	1	1	1	1	1	1	1	1	1	\$133,000
Peel Park 1	1	1	1	1	1	1	1	1	1	1	\$394,000
Peel Park 2	1	1	1	1	1	1	1	1	1	1	\$375,000
Peel Park 3	1	1	1	1	1	1	1	1	1	1	\$152,000
Rosedale Park	1	1	1	1	1	1	1	1	1	1	\$133,000
Tom Edwards Park	1	1	1	1	1	1	1	1	1	1	\$175,000
Whitburn Park	1	1	1	1	1	1	1	1	1	1	\$195,000
Willowbrook Park	1	1	1	1	1	1	1	1	1	1	\$175,000
Total (#)	32	32	32	34	34	34	34	34	34	34	
Total (\$000)	\$9,204.0	\$9,204.0	\$9,204.0	\$9,864.0	\$9,864.0	\$9,864.0	\$9,864.0	\$9,864.0	\$9,864.0	\$9,864.0	

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TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

COURTS Park Name	# of Fields										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Multi-Use Court											
Baycliffe Park	1	1	1	1	1	1	1	1	1	1	\$98,000
Brooklin Optimist Park	1	1	1	1	1	1	1	1	1	1	\$98,000
Carnwith Park	1	1	1	1	1	1	1	1	1	1	\$98,000
Darren Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Lady May Park	1	1	1	1	1	1	1	1	1	1	\$98,000
Oceanpearl Park	-	1	1	1	1	1	1	1	1	1	\$55,000
Basketball Half Court											
Davies Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Eric Clarke Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Forest Heights Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Front Street Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Glenayr Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Harold Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Jack Wilson Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Kelloryn Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Pinecone Park	-	-	-	-	-	-	1	1	1	1	\$26,000
Portage Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Rosedale Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Sato Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Teddington Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Tom Edwards Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Whitby Kinsmen Park	1	1	1	1	1	1	1	1	1	1	\$26,000
Whitby Optimist Park	1	1	1	1	1	1	1	1	1	1	\$26,000

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TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK FACILITIES

COURTS CONT. Park Name	# of Fields										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Basketball Full Court											
Annes Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Ashburn Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Cachet Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Carnwith Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Country Lane Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Folkstone Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Norista Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Phillips -Kozaroff Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Whitburn Park	1	1	1	1	1	1	1	1	1	1	\$55,000
Bocce Courts											
Cullen Central Park	-	-	-	2	2	2	2	4	4	4	\$160,000
Horseshoe Pits											
Whitby Kinsmen Park	1	1	1	1	1	1	1	1	1	1	\$50,000
Lacrosse Boxes											
Peel Park	-	2	2	2	2	2	2	2	2	2	\$243,000
Willow Park	-	2	2	2	2	2	2	2	2	2	\$243,000
Total (#)	30	35	35	37	37	37	38	40	40	40	
Total (\$000)	\$1,382.0	\$2,409.0	\$2,409.0	\$2,729.0	\$2,729.0	\$2,729.0	\$2,755.0	\$3,075.0	\$3,075.0	\$3,075.0	

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TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK FACILITIES

SKATEBOARD PARKS Park Name	# of Facilities										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Skateboard Parks											
Brooklin Memorial Park	1	1	1	1	1	1	1	1	1	1	\$456,000
Folkstone Park	1	1	1	1	1	1	1	1	1	1	\$456,000
Iroquois Park	1	1	1	1	1	1	1	1	1	1	\$456,000
Total (#)	3	3	3	3	3	3	3	3	3	3	
Total (\$000)	\$1,368.0	\$1,368.0	\$1,368.0	\$1,368.0	\$1,368.0	\$1,368.0	\$1,368.0	\$1,368.0	\$1,368.0	\$1,368.0	\$1,368.0

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TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

PARKING Park Name	# of Spaces										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
District												
Baycliffe Park	45	45	45	45	45	45	45	45	45	44	\$2,500	
Brooklin Memorial Park	36	36	36	36	36	36	33	30	27	25	\$2,500	
Country Lane Park	44	44	44	44	44	44	44	43	42	42	\$2,500	
Darren Park	42	42	42	42	42	42	42	42	42	42	\$2,500	
D'Hillier Park	55	55	55	55	55	55	55	56	56	57	\$2,500	
Jack Wilson Park	79	79	79	79	79	79	80	81	82	83	\$2,500	
Jeffery Park	68	68	68	68	68	68	69	69	69	70	\$2,500	
Kelloryn Park	51	51	51	51	51	51	52	52	52	53	\$2,500	
Kiwanis Heydenshore Park	56	56	56	56	56	56	56	56	56	56	\$2,500	
Palmerston Park	27	27	27	27	27	27	25	24	23	22	\$2,500	
Peel Park	105	105	105	105	105	105	110	115	120	121	\$2,500	
Portage Park	32	32	32	32	32	32	32	32	32	31	\$2,500	
Rossland Soccer Complex	53	53	53	53	53	53	53	53	53	53	\$2,500	
Whitby Optimist Park	50	51	52	53	54	55	62	64	66	68	\$2,500	
Willow Park	129	129	129	129	129	129	130	132	134	135	\$2,500	
Local												
Annes Park	26	26	26	26	26	26	24	22	20	20	\$2,500	
Ashburn Park	43	43	43	43	43	43	43	43	43	42	\$1,300	
Fallingbrook Park	62	62	62	62	62	62	55	50	47	44	\$2,500	
Folkstone Park	36	36	36	36	36	36	36	36	36	36	\$1,300	
Guthrie Park	37	37	37	37	37	37	37	37	37	37	\$2,500	
Huron Park	24	24	24	24	24	24	24	24	24	24	\$1,300	
Kinsmen Park	10	10	10	10	10	10	9	9	9	8	\$1,300	
Lions Promenade	58	58	58	58	58	58	60	62	64	64	\$2,500	
Rosedale Park	-	-	-	-	-	-	-	-	-	23	\$2,500	
Rotary Centennial Park	39	39	39	39	39	39	39	39	39	39	\$2,500	

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TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK FACILITIES

PARKING CONTINUED Park Name	# of Spaces										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Parkette												
Front/Brock Street	10	10	10	10	10	10	10	10	10	9	\$1,300	
Rotary Sunrise Lake Park	12	12	12	12	12	12	13	14	15	15	\$2,500	
Watson Park	4	4	4	4	4	4	4	4	4	-	\$2,500	
Town												
Iroquois Park	693	693	693	693	693	693	693	693	693	693	\$2,500	
Cullen Central Park	343	343	343	343	343	343	343	343	343	343	\$2,500	
Whitby Harbour Town Park	398	398	398	398	398	398	398	398	398	398	\$2,500	
Total (#)	2,667	2,668	2,669	2,670	2,671	2,672	2,676	2,678	2,681	2,697		
Total (\$000)	\$6,519.9	\$6,522.4	\$6,524.9	\$6,527.4	\$6,529.9	\$6,532.4	\$6,543.6	\$6,548.6	\$6,556.1	\$6,599.7		

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TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK BUILDINGS & EQUIPMENT

PARK BUILDINGS Description	# of Buildings										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Operations Building (Parks % Share)	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%		
Operations Building (share of 64,070 sq.ft.)	28,832	28,832	28,832	28,832	28,832	28,832	28,832	28,832	28,832	28,832	35,259	\$303
<i>Operations Building Excess Capacity</i>	-	-	-	-	-	-	-	-	-	-	(4,904)	\$303
Maintenance Building	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	\$140
Other Park Buildings												
Brooklin Parks Garage	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	\$144
Total (#)	35,932	35,932	35,932	35,932	35,932	35,932	35,932	35,932	35,932	35,932	37,455	
Total (\$000)	\$9,732.3	\$9,732.3	\$9,732.3	\$9,732.3	\$9,732.3	\$9,732.3	\$9,732.3	\$9,732.3	\$9,732.3	\$9,732.3	\$10,193.5	

PARK BUILDINGS LAND Description	# of Ha										UNIT COST (\$/ha)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Operations Building	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%		
Operations Building (Parks share of 6.94 ha)	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	\$2,615,900
Other Park Buildings												
Brooklin Parks Garage	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$3,088,817
Total (#)	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	
Total (\$000)	\$8,355.2	\$8,355.2	\$8,355.2	\$8,355.2	\$8,355.2	\$8,355.2	\$8,355.2	\$8,355.2	\$8,355.2	\$8,355.2	\$8,355.2	

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TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK BUILDINGS & EQUIPMENT

BUILDING FURNITURE AND EQUIPMENT Description	Total Value of Furniture and Equipment (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Operations Building (Parks % Share)	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%
Operations Building	\$585,238	\$585,238	\$585,238	\$585,238	\$585,238	\$585,238	\$585,238	\$585,238	\$585,238	\$585,238
Other Park Buildings										
Brooklin Parks Garage	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Groveside Cemetary Maintenance Building	\$13,300	\$13,300	\$13,300	\$13,300	\$13,300	\$13,300	\$13,300	\$13,300	\$13,300	\$13,300
Maintenance Building	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000
Total (\$000)	\$675.5	\$675.5	\$675.5	\$675.5	\$675.5	\$675.5	\$675.5	\$675.5	\$675.5	\$675.5

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TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK BUILDINGS & EQUIPMENT

WASHROOM FACILITIES Description	# of Facilities										UNIT COST (\$/facility)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Buildings											
Brooklin Memorial Park	1	1	1	1	1	1	1	1	1	1	\$346,810
Cullen Central Park	-	-	1	1	1	1	1	1	1	1	\$346,810
Kiwanis Heydenshore Park	1	1	1	1	1	1	1	1	1	1	\$346,810
Pringle Creek Park	1	1	1	1	1	1	1	1	1	1	\$346,810
Rotary Centennial Park	1	1	1	1	1	1	1	1	1	1	\$346,810
Peel	1	1	1	1	1	1	1	1	1	1	\$346,810
Willow	1	1	1	1	1	1	1	1	1	1	\$346,810
Portable Toilets - Accessible											
Baycliffe Park	-	-	-	-	-	-	1	1	1	1	\$900
Cachet Park	-	-	-	-	-	-	1	1	1	1	\$910
Carnwith Park	-	-	-	-	-	-	1	1	1	1	\$910
Consumers Soccer Field	-	-	-	-	-	-	-	-	1	1	\$910
Country Lane Park	-	-	-	-	-	-	1	1	1	1	\$910
Darren Park	-	-	-	-	-	-	1	1	1	1	\$910
Duggan Park	-	-	-	-	-	-	1	1	1	1	\$910
Kelloryn Park	-	-	-	-	-	-	-	-	1	1	\$910
Norista Park	-	-	-	-	-	-	1	1	1	1	\$910
Portage Park	-	-	-	-	-	-	1	1	1	1	\$910
Port Whitby Marina	2	2	2	2	2	2	4	4	4	4	\$910
Rotary Sunrise Park	-	-	-	-	-	-	-	-	1	1	\$910
Vanier Park	-	-	-	-	-	-	1	1	1	1	\$910
Victoria Street Soccer Fields	-	-	-	-	-	-	-	-	1	1	\$910
Watson Park	-	-	-	-	-	-	1	1	-	-	\$910
Whitby Kinsmen Park	-	-	-	-	-	-	1	1	1	1	\$910

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TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK BUILDINGS & EQUIPMENT

WASHROOM FACILITIES CONT. Description	# of Facilities										UNIT COST (\$/facility)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Portable Toilets - Standard											
Annes Park	-	-	-	-	-	-	1	1	1	1	\$490
Ash Park	-	-	-	-	-	-	-	1	1	1	\$490
Ashburn Park	1	1	1	1	1	1	1	1	1	1	\$490
Baycliffe Park	1	1	1	1	1	1	-	-	-	-	\$490
Brooklin Optimist Park	1	1	1	1	1	1	1	1	1	1	\$490
Cachet Park	1	1	1	1	1	1	-	-	-	-	\$490
Carnwith Park	2	2	2	2	2	2	1	1	1	1	\$490
Carson Park	-	-	-	-	-	-	-	1	1	1	\$490
Consumers Soccer Fields	2	2	2	2	2	2	2	2	1	1	\$490
Country Lane Park	2	2	2	2	2	2	1	1	1	1	\$490
Darren Park	1	1	1	1	1	1	-	-	-	-	\$490
D'Hillier Park	-	-	-	-	-	-	1	1	1	1	\$490
Divine Park	-	-	-	-	-	-	-	1	1	1	\$490
Fallingbrook Park	-	-	-	1	1	1	1	1	1	1	\$490
Forest Heights Park	1	1	1	1	1	1	1	1	1	1	\$490
Gordon Street Practice Field	-	-	-	-	-	-	1	1	1	1	\$490
Guthrie Park	-	-	-	-	-	-	1	1	1	1	\$490
Hannam Park	-	-	-	-	-	-	-	1	1	1	\$490
Huron Park	-	-	-	-	-	-	-	1	1	1	\$490
Jack Wilson Park	1	1	1	1	1	1	1	1	1	1	\$490
Jeffery Park	1	1	1	1	1	1	1	1	1	1	\$490
Kelloryn Park	2	2	2	2	2	2	2	2	1	1	\$490

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TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION
PARK BUILDINGS & EQUIPMENT

WASHROOM FACILITIES CONT. Description	# of Facilities										UNIT COST (\$/facility)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Kinross Park	-	-	-	-	-	-	-	-	-	1	1	\$490
Kirby Park	-	-	-	-	-	-	1	1	1	1	1	\$490
Lady May Park	-	-	-	-	-	-	-	1	1	1	1	\$490
Lupin Park	-	-	-	-	-	-	1	1	1	1	1	\$490
Medland Park	-	-	-	-	-	-	-	1	1	1	1	\$490
Palmerston Park	-	-	-	-	-	-	1	1	1	1	1	\$490
Portage Park	1	1	1	1	1	1	-	-	-	-	-	\$490
Port Whitby Marina	3	3	3	3	3	3	1	1	1	1	1	\$490
Prince of Wales Park	1	1	1	1	1	1	1	1	1	1	1	\$490
Rolling Acres Park	-	-	-	-	-	-	1	1	1	1	1	\$490
Rosedale Park	-	-	-	-	-	-	-	1	1	1	1	\$490
Rotary Sunrise Lake Park	-	1	1	1	1	1	1	1	-	-	-	\$490
Selkirk Park	-	-	-	-	-	-	-	1	1	1	1	\$490
Tom Edwards Park	-	-	-	-	-	-	-	1	1	1	1	\$490
Victoria St Soccer Fields	3	3	3	3	3	3	3	3	2	2	2	\$490
Vipond Park	-	-	-	-	-	-	-	1	1	1	1	\$490
Whitburn Park	-	-	-	-	-	-	-	1	-	-	-	\$490
Whitby Kinsmen Park	2	2	2	2	2	2	-	-	-	-	-	\$490
Willowbrook Park	-	-	-	-	-	-	-	1	1	1	1	\$490
Whitby Optimist Park	1	1	1	1	1	1	1	1	1	1	1	\$490
Total (#)	35	36	37	38	38	38	49	62	61	61		
Total (\$000)	\$2,095.9	\$2,096.4	\$2,443.2	\$2,443.7	\$2,443.7	\$2,443.7	\$2,454.5	\$2,460.9	\$2,461.7	\$2,461.7		

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK BUILDINGS & EQUIPMENT

EQUIPMENT Description	# of Units										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
PWM - Sailboat Trailer	1	1	1	1	1	1	1	1	1	1	\$45,000
PWM - Y20 Trailer	1	1	1	1	1	1	1	1	1	1	\$70,000
PWM - Works Boat	1	1	1	1	1	2	2	2	2	2	\$35,000
PWM - Utility Tow Vehicle	1	1	1	2	2	2	2	2	2	2	\$23,000
PWM - Front End Loader	1	1	1	1	1	1	1	1	1	1	\$100,000
PWM - Boat Lift	1	1	1	1	1	1	1	1	1	1	\$400,000
PWM - Tractor	1	1	1	1	1	1	1	1	1	1	\$60,000
PWM - Utility Trailer	1	1	1	1	1	1	1	1	1	1	\$2,000
PWM - Mast Crane	1	1	1	1	1	1	1	1	1	1	\$50,000
PWM - Waste Pump Out	1	1	1	1	1	1	1	1	1	1	\$10,000
PWM - Combined Small Equipment	1	1	1	1	1	1	1	1	1	1	\$22,000
FACI - Ice Resurfacer	9	9	9	9	9	9	9	9	9	9	\$95,000
FACI - Boom Lift	1	1	1	1	1	1	1	1	1	1	\$40,000
FACI - Aerial Work Platform	2	2	2	2	2	2	2	2	2	2	\$15,000
FACI - Scissor Lift	1	1	1	1	1	1	1	1	1	1	\$22,000
FACI - 16" Trailer	1	1	1	1	1	1	1	1	1	1	\$15,750
FACI - Paint Trailer	1	1	1	1	1	1	1	1	1	1	\$10,000
FACI - Combined Small Equipment	1	1	1	1	1	1	1	1	1	1	\$185,000
FORE - Chipper	2	2	2	2	2	2	2	2	2	2	\$126,000
FORE - Stumper	1	1	1	1	1	1	1	1	1	1	\$110,250
FORE - Water Trailer	1	1	1	1	1	1	1	1	1	1	\$25,000
HORT - Tandum trailer	2	2	2	2	2	1	1	1	1	1	\$15,750
HORT - Water Trailer	3	3	3	3	3	3	3	3	3	4	\$25,000

APPENDIX B.2

TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK BUILDINGS & EQUIPMENT

EQUIPMENT CONTINUED Description	# of Units										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
HORT - Turf Trailer	1	1	1	1	1	1	1	1	1	1	1	\$25,000
HORT - Small Trailer	1	1	1	1	1	1	1	1	1	1	1	\$5,250
HORT - Ball Diamond Groomer	1	1	1	1	1	1	1	1	1	1	1	\$12,600
HORT - Tractor	4	4	4	4	4	4	4	4	4	4	4	\$52,500
HORT - Overseeder	1	1	1	1	1	1	1	1	1	1	1	\$14,700
HORT - Radial Arc Sprayer	1	1	1	1	1	1	1	1	1	1	1	\$16,800
HORT - Wide Cut Mower	1	1	1	1	1	1	1	1	1	1	1	\$157,500
HORT - Bannerman Turf Topper	1	1	1	1	1	1	1	1	1	1	1	\$26,250
PKSG - Buffalo Turbine Debris Blower	-	-	1	1	1	1	1	1	1	1	1	\$15,000
PKSG - Trailer	5	5	5	5	5	6	6	6	6	6	6	\$15,750
PKSG - Alamo Mott Mower	1	1	1	1	1	1	1	1	1	1	1	\$10,500
PKSG - Front Mount Mower	7	7	7	7	7	7	7	7	7	7	7	\$31,500
PKSG - Kut Kwick Mower	1	1	1	1	1	1	1	1	1	1	1	\$52,500
PKSG - Walk Behind Mower	3	3	3	3	3	3	3	3	3	3	3	\$6,300
PKSG - Wide Cut Mower	5	5	5	5	5	5	5	5	5	5	5	\$105,000
PKSG - Wide Cut Mower 16"	2	2	2	2	2	2	2	2	2	2	2	\$157,500
PKSG - Highway Sander	2	2	2	2	2	2	2	2	2	1	1	\$11,200
PKSG - Case Loader	1	1	1	1	1	1	1	1	1	1	1	\$157,500
PKSM - Case Loader	1	1	1	1	1	1	1	1	1	1	1	\$157,500
PKSM - Sand Cleaner	1	1	1	1	1	1	1	1	1	1	1	\$31,500
PKSM - Playground Rake	1	1	1	1	1	1	1	1	1	1	1	\$21,000
PKSM - Trailer	3	3	4	4	4	4	4	4	4	4	4	\$15,750
PKSM - Utility Trailer	-	-	-	-	1	1	1	1	1	1	1	\$26,250
PKSM - Utility	1	1	1	1	1	1	1	1	1	1	1	\$21,000
PKSM - Lift Truck	-	-	-	-	1	1	1	1	1	1	1	\$42,000
PARKS - Combined Small Equipment	1	1	1	1	1	1	1	1	1	1	1	\$128,000
Total (#)	82	82	84	85	87	88	88	88	87	88		
Total (\$000)	\$4,743.9	\$4,743.9	\$4,774.7	\$4,797.7	\$4,865.9	\$4,900.9	\$4,900.9	\$4,900.9	\$4,889.7	\$4,914.7		



APPENDIX B.2

TABLE 1

TOWN OF WHITBY
 INVENTORY OF CAPITAL ASSETS
 PARKS & RECREATION
 PARK BUILDINGS & EQUIPMENT

VEHICLES Description	# of Units											UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
FACI - 1/2 Ton Truck	2	2	2	2	2	2	2	2	2	2	2	\$45,000
MECH - Van	3	3	3	3	3	3	3	3	3	3	3	\$52,500
MECH - 3/4 Ton Truck	-	-	-	1	1	1	1	1	1	1	1	\$52,500
FORE - 1/2 Ton Truck	1	1	1	1	1	1	1	1	1	1	1	\$45,000
FORE - 3/4 Truck	2	2	2	2	2	2	2	2	2	2	2	\$63,000
FORE - Chipper Truck	2	2	2	2	2	2	2	2	2	2	2	\$155,000
FORE - Dump Truck with Crane	1	1	1	1	1	1	1	1	1	1	1	\$168,000
FORE - Bucket Truck	1	1	1	1	1	1	1	1	1	1	1	\$210,000
FORE - 2 Ton Truck with Manlift	-	-	-	-	1	1	1	1	1	1	1	\$157,500
HORT - 1/2 Ton Truck	2	2	2	2	2	1	1	1	1	1	1	\$45,000
HORT - 3/4 Ton Truck	2	3	3	3	3	1	1	1	1	1	1	\$63,000
HORT - 1 Ton Truck	1	1	1	1	1	2	2	2	2	2	2	\$78,750
HORT - 2 Ton Truck	2	2	2	2	2	2	2	2	2	2	2	\$94,500
HORT - 2 Ton Truck with salter/plow	-	-	-	-	-	1	1	1	1	1	1	\$94,500
PKSG - 1/2 Ton Truck	2	2	2	2	2	2	2	2	2	2	2	\$45,000
PKSG - 4X4 Truck with Plow	1	1	1	1	1	1	1	1	1	1	1	\$63,000
PKSG - Dump Truck	1	1	1	1	1	1	1	1	1	1	1	\$157,500
PKSM - 1/2 Ton Truck	1	1	1	1	1	3	3	3	3	3	3	\$45,000
PKSM - 3/4 Ton Truck with Plow	1	1	1	1	1	1	1	1	1	1	1	\$63,000
PKSM - 1 Ton Truck	1	1	1	1	1	1	1	1	1	1	1	\$78,750
PKSM - 2 Ton Dump Truck with Crane	1	1	1	1	1	1	1	1	1	1	1	\$126,000
PKSM - 2 Ton Garbage Truck/Litter Loader	2	2	2	2	2	1	1	1	1	1	1	\$168,000
PKSM - 2 ton Garbage Truck with crane	-	-	-	-	-	1	1	1	1	1	1	\$189,000
PKSM - 1 Ton Utility Truck	2	2	2	2	2	3	3	3	3	3	3	\$94,500
WSAC - Van	1	1	1	1	1	1	1	1	-	-	-	\$106,400
Total (#)	32	33	33	34	35	37	37	37	36	36		
Total (\$000)	\$2,844.9	\$2,907.9	\$2,907.9	\$2,960.4	\$3,117.9	\$3,325.7	\$3,325.7	\$3,325.7	\$3,219.3	\$3,219.3		



APPENDIX B.2

TABLE 1

TOWN OF WHITBY
CALCULATION OF SERVICE LEVELS
PARKS & RECREATION

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	122,022	123,267	124,525	125,796	127,080	128,377	130,575	132,810	135,084	136,562

INVENTORY SUMMARY (\$000)

Indoor Recreation	\$321,232.1	\$324,725.5	\$326,045.6	\$320,976.1	\$320,976.1	\$320,976.1	\$321,708.3	\$331,482.4	\$331,482.4	\$331,482.4
Parkland	\$107,810.5	\$108,451.8	\$108,580.7	\$109,950.6	\$110,234.1	\$111,054.6	\$108,736.6	\$107,712.1	\$107,816.1	\$109,617.9
Park Facilities	\$46,799.9	\$49,188.4	\$49,344.9	\$50,810.4	\$51,490.9	\$52,890.4	\$53,832.6	\$54,157.6	\$54,165.1	\$55,457.7
Park Buildings & Equipment	\$28,447.8	\$28,511.2	\$28,888.8	\$28,964.8	\$29,190.5	\$29,433.3	\$29,444.1	\$29,450.5	\$29,333.7	\$29,819.9
Total (\$000)	\$504,290.3	\$510,877.0	\$512,860.0	\$510,701.9	\$511,891.7	\$514,354.4	\$513,721.7	\$522,802.6	\$522,797.2	\$526,377.9

SERVICE LEVEL (\$/capita)

											Service Level
Indoor Recreation	\$2,632.58	\$2,634.33	\$2,618.31	\$2,551.56	\$2,525.78	\$2,500.26	\$2,463.78	\$2,495.91	\$2,453.90	\$2,427.34	\$2,530.38
Parkland	\$883.53	\$879.81	\$871.96	\$874.04	\$867.44	\$865.07	\$832.75	\$811.02	\$798.14	\$802.70	\$848.65
Park Facilities	\$383.54	\$399.04	\$396.27	\$403.91	\$405.18	\$411.99	\$412.27	\$407.78	\$400.97	\$406.10	\$402.71
Park Buildings & Equipment	\$233.14	\$231.30	\$231.99	\$230.25	\$229.70	\$229.27	\$225.50	\$221.75	\$217.15	\$218.36	\$226.84
Total (\$/capita)	\$4,132.78	\$4,144.47	\$4,118.53	\$4,059.76	\$4,028.11	\$4,006.59	\$3,934.30	\$3,936.47	\$3,870.16	\$3,854.50	\$4,008.57

TOWN OF WHITBY
CALCULATION OF MAXIMUM ALLOWABLE
PARKS & RECREATION

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$4,008.57
Net Population Growth 2021 - 2030	42,444
Maximum Allowable Funding Envelope	\$170,139,745

APPENDIX B.2

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS & RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
2.0 PARKS & RECREATION										
Parks, Forestry and Horticulture Services Fleet and Equipment										
30222105 FORE - 1 Ton Truck (additional)	2022 - 2022	\$ 80,500	\$ -	\$ 80,500	0%	\$ -	\$ 80,500	\$ -	\$ 80,500	\$ -
30242105 FORE - Chipper (additional)	2024 - 2024	\$ 129,000	\$ -	\$ 129,000	0%	\$ -	\$ 129,000	\$ -	\$ 129,000	\$ -
30292403 FORE - Chipper (additional)	2030 - 2030	\$ 129,000	\$ -	\$ 129,000	0%	\$ -	\$ 129,000	\$ -	\$ 129,000	\$ -
30242107 FORE - Chipper Truck (additional)	2024 - 2024	\$ 158,500	\$ -	\$ 158,500	0%	\$ -	\$ 158,500	\$ -	\$ 158,500	\$ -
30292404 FORE - Chipper Truck (additional)	2029 - 2029	\$ 158,500	\$ -	\$ 158,500	0%	\$ -	\$ 158,500	\$ -	\$ 158,500	\$ -
30212402 HORT - 2 Ton Dump Truck (additional)	2021 - 2021	\$ 96,500	\$ -	\$ 96,500	0%	\$ -	\$ 96,500	\$ 96,500	\$ -	\$ -
30278801 HORT - 2 Ton Dump Truck (additional)	2027 - 2027	\$ 96,500	\$ -	\$ 96,500	0%	\$ -	\$ 96,500	\$ -	\$ 96,500	\$ -
30212105 HORT - 3/4 Ton Truck and Plow (additional)	2022 - 2022	\$ 64,500	\$ -	\$ 64,500	0%	\$ -	\$ 64,500	\$ -	\$ 64,500	\$ -
30278802 HORT - 3/4 Ton Truck and Plow (additional)	2028 - 2028	\$ 64,500	\$ -	\$ 64,500	0%	\$ -	\$ 64,500	\$ -	\$ 64,500	\$ -
30212409 HORT - Material Handler/Leaf Shredder	2021 - 2021	\$ 10,000	\$ -	\$ 10,000	0%	\$ -	\$ 10,000	\$ 10,000	\$ -	\$ -
30202401 HORT - Sportsfield Mower (additional)	2022 - 2022	\$ 161,000	\$ -	\$ 161,000	0%	\$ -	\$ 161,000	\$ -	\$ 161,000	\$ -
30200406 PKSG - Front Mount Mower (additional)	2022 - 2022	\$ 32,500	\$ -	\$ 32,500	0%	\$ -	\$ 32,500	\$ -	\$ 32,500	\$ -
30271801 PKSG - Front Mount Mower (additional)	2027 - 2027	\$ 32,500	\$ -	\$ 32,500	0%	\$ -	\$ 32,500	\$ -	\$ 32,500	\$ -
30200403 PKSG - Grounds Maintenance Trailer (additional)	2022 - 2022	\$ 16,100	\$ -	\$ 16,100	0%	\$ -	\$ 16,100	\$ -	\$ 16,100	\$ -
30271802 PKSG - Maintenance Trailer (additional)	2027 - 2027	\$ 16,100	\$ -	\$ 16,100	0%	\$ -	\$ 16,100	\$ -	\$ 16,100	\$ -
30200405 PKSG - Wide Cut Mower (additional)	2022 - 2022	\$ 161,000	\$ -	\$ 161,000	0%	\$ -	\$ 161,000	\$ -	\$ 161,000	\$ -
30271803 PKSG - Wide Cut Mower (additional)	2027 - 2027	\$ 161,000	\$ -	\$ 161,000	0%	\$ -	\$ 161,000	\$ -	\$ 161,000	\$ -
30212401 PKSG - Wide Front Mount Mower (additional)	2023 - 2023	\$ 161,000	\$ -	\$ 161,000	0%	\$ -	\$ 161,000	\$ -	\$ 161,000	\$ -
30292402 PKSG - Wide Front Mount Mower (additional)	2030 - 2030	\$ 161,000	\$ -	\$ 161,000	0%	\$ -	\$ 161,000	\$ -	\$ 161,000	\$ -
30252001 PKSM - 1/2 Ton Truck (additional)	2025 - 2025	\$ 46,000	\$ -	\$ 46,000	0%	\$ -	\$ 46,000	\$ -	\$ 46,000	\$ -
30292006 PKSM - 1/2 Ton Truck (additional)	2029 - 2029	\$ 46,000	\$ -	\$ 46,000	0%	\$ -	\$ 46,000	\$ -	\$ 46,000	\$ -
30262402 PKSM - 2 Ton Van with Man Lift Bucket (additional)	2026 - 2026	\$ 139,500	\$ -	\$ 139,500	0%	\$ -	\$ 139,500	\$ -	\$ 139,500	\$ -
30252104 PKSM - Front End Loader (additional)	2030 - 2030	\$ 161,000	\$ -	\$ 161,000	0%	\$ -	\$ 161,000	\$ -	\$ 161,000	\$ -
30292503 PKSM - Garbage Truck (additional)	2029 - 2029	\$ 172,000	\$ -	\$ 172,000	0%	\$ -	\$ 172,000	\$ -	\$ 172,000	\$ -
30202502 PKSM - Garbage Truck with Crane (additional)	2022 - 2022	\$ 193,000	\$ -	\$ 193,000	0%	\$ -	\$ 193,000	\$ -	\$ 193,000	\$ -
30252402 PKSM - Shoulder Box (additional)	2025 - 2025	\$ 102,000	\$ -	\$ 102,000	0%	\$ -	\$ 102,000	\$ -	\$ 102,000	\$ -
30268801 PKSM - Utility Truck (additional)	2026 - 2026	\$ 96,500	\$ -	\$ 96,500	0%	\$ -	\$ 96,500	\$ -	\$ 96,500	\$ -
Subtotal Parks, Forestry and Horticulture Services Fleet and Equipment		\$ 2,845,700	\$ -	\$ 2,845,700		\$ -	\$ 2,845,700	\$ 106,500	\$ 2,739,200	\$ -

APPENDIX B.2

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS & RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
Recreational Trails Program										
70220114 BCCL to Kinsmen Court	2022 - 2022	\$ 23,000	\$ -	\$ 23,000	30%	\$ 6,820	\$ 16,180	\$ -	\$ 16,180	\$ -
70200112 HEPC Trail (Longwood Park to Thickson)	2021 - 2021	\$ 197,775	\$ -	\$ 197,775	30%	\$ 58,642	\$ 139,133	\$ -	\$ 139,133	\$ -
70270101 Birches Open Space - Thickson to Garrard	2027 - 2027	\$ 204,125	\$ -	\$ 204,125	30%	\$ 60,525	\$ 143,600	\$ -	\$ 143,600	\$ -
70290111 Brawley to Columbus/Lynde	2029 - 2029	\$ 366,735	\$ -	\$ 366,735	30%	\$ 108,741	\$ 257,994	\$ -	\$ 257,994	\$ -
70310101 Brawley to Lynde Creek	2030 - 2030	\$ 299,690	\$ -	\$ 299,690	30%	\$ 88,861	\$ 210,829	\$ -	\$ 210,829	\$ -
70220101 Brooklin Lions Trail - Stormpond to St Thomas	2022 - 2022	\$ 109,825	\$ -	\$ 109,825	30%	\$ 32,564	\$ 77,261	\$ -	\$ 77,261	\$ -
70220108 Brooklin Lions Trail - to Roybrook Ave	2022 - 2022	\$ 388,700	\$ -	\$ 388,700	30%	\$ 115,254	\$ 273,446	\$ -	\$ 273,446	\$ -
70290108 Brooklin SP Boundary to Lynde Creek	2029 - 2029	\$ 368,115	\$ -	\$ 368,115	30%	\$ 109,150	\$ 258,965	\$ -	\$ 258,965	\$ -
70270102 Brooklin SP Boundary to W of Duffs to Lynde	2027 - 2027	\$ 189,060	\$ -	\$ 189,060	30%	\$ 56,058	\$ 133,002	\$ -	\$ 133,002	\$ -
70290102 Brookvalley east to Oshawa	2029 - 2029	\$ 216,487	\$ -	\$ 216,487	30%	\$ 64,191	\$ 152,296	\$ -	\$ 152,296	\$ -
70280104 Camber Court to Brooklin High School Section	2028 - 2028	\$ 120,750	\$ -	\$ 120,750	30%	\$ 35,804	\$ 84,946	\$ -	\$ 84,946	\$ -
70260102 Cedarbrook Trail to west of Baldwin	2026 - 2026	\$ 324,990	\$ -	\$ 324,990	30%	\$ 96,363	\$ 228,627	\$ -	\$ 228,627	\$ -
70290107 Columbus / Cochrane to Lynde Creek	2029 - 2029	\$ 154,560	\$ -	\$ 154,560	30%	\$ 45,829	\$ 108,731	\$ -	\$ 108,731	\$ -
70208302 Country Lane to Coronation	2023 - 2023	\$ 272,550	\$ -	\$ 272,550	30%	\$ 80,814	\$ 191,736	\$ -	\$ 191,736	\$ -
70220104 Cullen Central Park Trail Connections	2022 - 2022	\$ 185,150	\$ -	\$ 185,150	50%	\$ 92,575	\$ 92,575	\$ -	\$ 92,575	\$ -
70220107 Cullen to Heber Down (East Field Route) w/ Bridge	2022 - 2022	\$ 327,750	\$ -	\$ 327,750	30%	\$ 97,181	\$ 230,569	\$ -	\$ 230,569	\$ -
70220112 Deverell Park to Thickson Road	2022 - 2022	\$ 123,395	\$ -	\$ 123,395	30%	\$ 36,588	\$ 86,807	\$ -	\$ 86,807	\$ -
70300104 E of Thickson to N of Columbus	2030 - 2030	\$ 90,965	\$ -	\$ 90,965	30%	\$ 26,972	\$ 63,993	\$ -	\$ 63,993	\$ -
70290106 East of Ashburn to Cedarbrook Trail	2029 - 2029	\$ 237,705	\$ -	\$ 237,705	30%	\$ 70,482	\$ 167,223	\$ -	\$ 167,223	\$ -
70290105 Fallingbrook Open Space - Dryden to Rossland	2029 - 2029	\$ 243,340	\$ -	\$ 243,340	30%	\$ 72,153	\$ 171,187	\$ -	\$ 171,187	\$ -
70210102 Florence Drive to Garden Street	2021 - 2021	\$ 120,000	\$ -	\$ 120,000	30%	\$ 35,581	\$ 84,419	\$ 84,419	\$ -	\$ -
70290101 Future Parks Trail System Segments	2029 - 2030	\$ 575,000	\$ -	\$ 575,000	30%	\$ 170,494	\$ 404,506	\$ -	\$ 404,506	\$ -
70290001 Future Trails Development & Linkages	2029 - 2030	\$ 1,225,900	\$ -	\$ 1,225,900	30%	\$ 363,492	\$ 862,408	\$ -	\$ 862,408	\$ -
70310102 Garrard to Pringle Creek	2030 - 2030	\$ 421,475	\$ -	\$ 421,475	30%	\$ 124,972	\$ 296,503	\$ -	\$ 296,503	\$ -
70220111 HEPC Trail - Ashburn to Hwy 407	2022 - 2022	\$ 550,000	\$ -	\$ 550,000	30%	\$ 163,081	\$ 386,919	\$ -	\$ 386,919	\$ -
70290104 HEPC Trail - Heber Down Lyndebrook to Halls Rd	2029 - 2029	\$ 524,975	\$ -	\$ 524,975	30%	\$ 155,661	\$ 369,314	\$ -	\$ 369,314	\$ -
70280101 Hannam Trail - Solmar to Brooklin	2028 - 2028	\$ 640,550	\$ -	\$ 640,550	30%	\$ 189,930	\$ 450,620	\$ -	\$ 450,620	\$ -
70250101 IPSC Pathway	2025 - 2025	\$ 115,000	\$ -	\$ 115,000	30%	\$ 34,099	\$ 80,901	\$ -	\$ 80,901	\$ -

APPENDIX B.2
TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS & RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
Recreational Trails Program Continued										
70200118 Lynde Creek Trail (Annes to Brock)	2021 - 2021	\$ 305,000	\$ -	\$ 305,000	30%	\$ 90,436	\$ 214,564	\$ 214,564	\$ -	\$ -
70300101 Lynde Creek Trail (Burns St W to Michael Blvd Opening)	2030 - 2030	\$ 132,250	\$ -	\$ 132,250	30%	\$ 39,214	\$ 93,036	\$ -	\$ 93,036	\$ -
70188301 Lynde Creek Trail (Twin Streams to Rossland)	2021 - 2021	\$ 222,300	\$ -	\$ 222,300	30%	\$ 65,914	\$ 156,386	\$ 156,386	\$ -	\$ -
70200113 Lynde Creek Trail - Bonacord to Dundas	2021 - 2021	\$ 220,000	\$ -	\$ 220,000	30%	\$ 65,232	\$ 154,768	\$ 154,768	\$ -	\$ -
70200114 Lynde Creek Trail - Rossland to Bonacord	2021 - 2021	\$ 276,000	\$ -	\$ 276,000	30%	\$ 81,837	\$ 194,163	\$ 194,163	\$ -	\$ -
70210101 Lynde Creek Trail - Taunton to Twin Streams	2021 - 2021	\$ 161,115	\$ -	\$ 161,115	30%	\$ 47,772	\$ 113,343	\$ 113,343	\$ -	\$ -
70300103 Lynde Creek to Thickson	2030 - 2030	\$ 99,015	\$ -	\$ 99,015	30%	\$ 29,359	\$ 69,656	\$ -	\$ 69,656	\$ -
70220106 Manning Trail Open Space (Bassett Pk to Anderson)	2022 - 2022	\$ 217,350	\$ -	\$ 217,350	30%	\$ 64,447	\$ 152,903	\$ -	\$ 152,903	\$ -
70220105 McClintock Trail	2024 - 2024	\$ 82,000	\$ -	\$ 82,000	30%	\$ 24,314	\$ 57,686	\$ -	\$ 57,686	\$ -
70300102 North of Columbus to Brooklin SP Boundary	2030 - 2030	\$ 382,605	\$ -	\$ 382,605	30%	\$ 113,446	\$ 269,159	\$ -	\$ 269,159	\$ -
70280102 Palmerston Open Space - Palmerston Pk to Cochrane	2028 - 2028	\$ 68,425	\$ -	\$ 68,425	30%	\$ 20,289	\$ 48,136	\$ -	\$ 48,136	\$ -
70280103 Pipeline Open Space to Columbus	2028 - 2028	\$ 24,725	\$ -	\$ 24,725	30%	\$ 7,331	\$ 17,394	\$ -	\$ 17,394	\$ -
70200110 Pringle Creek Open Space (Wynfield Pk to Garden)	2021 - 2021	\$ 155,250	\$ -	\$ 155,250	30%	\$ 46,033	\$ 109,217	\$ 109,217	\$ -	\$ -
70240101 Rosedale Park To Hopkins	2024 - 2024	\$ 55,000	\$ -	\$ 55,000	30%	\$ 16,308	\$ 38,692	\$ -	\$ 38,692	\$ -
70220109 Rosedale Park to Burns St	2024 - 2024	\$ 180,000	\$ -	\$ 180,000	30%	\$ 53,372	\$ 126,628	\$ -	\$ 126,628	\$ -
70220102 Rosedale Pk to Galimere Court SWM Pond	2024 - 2024	\$ 100,000	\$ -	\$ 100,000	30%	\$ 29,651	\$ 70,349	\$ -	\$ 70,349	\$ -
70220110 Rossland to Dryden to Morningstar	2022 - 2022	\$ 399,050	\$ -	\$ 399,050	30%	\$ 118,323	\$ 280,727	\$ -	\$ 280,727	\$ -
70268302 S of Winchester to E of Ashburn	2026 - 2026	\$ 749,915	\$ -	\$ 749,915	30%	\$ 222,358	\$ 527,557	\$ -	\$ 527,557	\$ -
70290110 Thickson/Brawley to Columbus	2029 - 2029	\$ 392,265	\$ -	\$ 392,265	30%	\$ 116,311	\$ 275,954	\$ -	\$ 275,954	\$ -
70210309 Trail Rest Stops and Benches	2021 - 2021	\$ 97,150	\$ -	\$ 97,150	30%	\$ 28,806	\$ 68,344	\$ 68,344	\$ -	\$ -
70220301 Trailhead Signs	2022 - 2024	\$ 75,000	\$ -	\$ 75,000	30%	\$ 22,238	\$ 52,762	\$ -	\$ 52,762	\$ -
70290103 Waterfront Trail - Gordon to South Blair	2029 - 2029	\$ 499,100	\$ -	\$ 499,100	30%	\$ 147,988	\$ 351,112	\$ -	\$ 351,112	\$ -
70250102 Waterfront Trail LCBO Boardwalk	2025 - 2025	\$ 700,000	\$ -	\$ 700,000	30%	\$ 207,557	\$ 492,443	\$ -	\$ 492,443	\$ -
70290109 Winchester to Conlin	2029 - 2029	\$ 440,105	\$ -	\$ 440,105	30%	\$ 130,496	\$ 309,609	\$ -	\$ 309,609	\$ -
Subtotal Recreational Trails Program		\$ 14,651,187	\$ -	\$ 14,651,187		\$ 4,381,909	\$ 10,269,278	\$ 1,095,203	\$ 9,174,075	\$ -

APPENDIX B.2

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS & RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030	
Parks Program											
70300205	Ardwick Park Design / Construction	2030 - 2030	\$ 355,500	\$ -	\$ 355,500	0%	\$ -	\$ 355,500	\$ -	\$ 355,500	\$ -
70200306	Ashburn Park Picnic Shelter	2021 - 2021	\$ 130,000	\$ -	\$ 130,000	0%	\$ -	\$ 130,000	\$ -	\$ 130,000	\$ -
70270206	Baldwin/Winchester Intensification Accessible Playground, Splash Pad & Skate Park	2027 - 2027	\$ 1,680,000	\$ -	\$ 1,680,000	0%	\$ -	\$ 1,680,000	\$ -	\$ 1,680,000	\$ -
70290203	Brock/Taunton Intensification - Accessible Playground & Splashpad	2029 - 2029	\$ 600,000	\$ -	\$ 600,000	0%	\$ -	\$ 600,000	\$ -	\$ 600,000	\$ -
70260206	Brooklin Future District Park	2026 - 2026	\$ 2,847,000	\$ -	\$ 2,847,000	0%	\$ -	\$ 2,847,000	\$ -	\$ 2,847,000	\$ -
70280206	Brooklin Future District Park	2028 - 2028	\$ 2,847,000	\$ -	\$ 2,847,000	0%	\$ -	\$ 2,847,000	\$ -	\$ 2,847,000	\$ -
70300202	Brooklin Future District Park	2030 - 2030	\$ 2,847,000	\$ -	\$ 2,847,000	0%	\$ -	\$ 2,847,000	\$ -	\$ 2,847,000	\$ -
70320201	Brooklin Future District Park	2030 - 2030	\$ 2,847,000	\$ -	\$ 2,847,000	0%	\$ -	\$ 2,847,000	\$ -	\$ 2,847,000	\$ -
70260214	Brooklin Future Local Park	2026 - 2026	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70270214	Brooklin Future Local Park	2027 - 2027	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70270215	Brooklin Future Local Park	2027 - 2027	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70280216	Brooklin Future Local Park	2028 - 2028	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70290207	Brooklin Future Local Park	2029 - 2029	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70300215	Brooklin Future Local Park	2030 - 2030	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70310201	Brooklin Future Local Park	2030 - 2030	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70320202	Brooklin Future Local Park	2030 - 2030	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70350201	Brooklin Future Local Park	2030 - 2030	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70360201	Brooklin Future Local Park	2030 - 2030	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70280208	Brooklin Future Parkette	2028 - 2028	\$ 440,400	\$ -	\$ 440,400	0%	\$ -	\$ 440,400	\$ -	\$ 440,400	\$ -
70300204	Brooklin Future Parkette	2030 - 2030	\$ 440,400	\$ -	\$ 440,400	0%	\$ -	\$ 440,400	\$ -	\$ 440,400	\$ -
70320203	Brooklin Future Parkette	2030 - 2030	\$ 440,400	\$ -	\$ 440,400	0%	\$ -	\$ 440,400	\$ -	\$ 440,400	\$ -
70340202	Brooklin Future Parkette	2030 - 2030	\$ 440,400	\$ -	\$ 440,400	0%	\$ -	\$ 440,400	\$ -	\$ 440,400	\$ -
70360202	Brooklin Future Parkette	2030 - 2030	\$ 440,400	\$ -	\$ 440,400	0%	\$ -	\$ 440,400	\$ -	\$ 440,400	\$ -
70210209	Brooklin Memorial Park Design / Construction	2022 - 2023	\$ 4,786,200	\$ -	\$ 4,786,200	65%	\$ 3,111,030	\$ 1,675,170	\$ -	\$ 1,675,170	\$ -
70220218	Chelseahill Local Park	2022 - 2022	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70200226	Cullen Central Park Redevelopment - Phase 2	2022 - 2022	\$ 4,233,600	\$ -	\$ 4,233,600	0%	\$ -	\$ 4,233,600	\$ -	\$ 4,233,600	\$ -
70270208	Downtown Intensification Accessible Playground	2027 - 2027	\$ 560,000	\$ -	\$ 560,000	50%	\$ 280,000	\$ 280,000	\$ -	\$ 280,000	\$ -
70320204	DuPont Lands Development	2030 - 2030	\$ 4,985,000	\$ -	\$ 4,985,000	0%	\$ -	\$ 4,985,000	\$ -	\$ 4,985,000	\$ -

APPENDIX B.2

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS & RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
Parks Program Continued										
70270207 Dundas St E Intensification - Accessible Playground & Splashpad	2027 - 2027	\$ 784,000	\$ -	\$ 784,000	50%	\$ 392,000	\$ 392,000	\$ -	\$ 392,000	\$ -
30210003 Fleet to Trees Program	2021 - 2030	\$ 100,000	\$ 100,000	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -
70280210 Intrepid Park	2028 - 2029	\$ 3,500,000	\$ -	\$ 3,500,000	0%	\$ -	\$ 3,500,000	\$ -	\$ 3,500,000	\$ -
70260207 Iroquois Beach Park Development	2026 - 2027	\$ 2,700,000	\$ -	\$ 2,700,000	0%	\$ -	\$ 2,700,000	\$ -	\$ 2,700,000	\$ -
70210308 Iroquois Park Baseball - Field 4 - Add Lighting	2021 - 2021	\$ 290,000	\$ -	\$ 290,000	0%	\$ -	\$ 290,000	\$ 290,000	\$ -	\$ -
70230208 Iroquois Park Skatepark (expansion)	2023 - 2023	\$ 650,000	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
70220302 Kiwanis Heydenshore Pumphouse	2022 - 2023	\$ 650,000	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
70200217 Kiwanis Heydenshore Redevelopment	2021 - 2021	\$ 812,500	\$ -	\$ 812,500	75%	\$ 609,375	\$ 203,125	\$ 203,125	\$ -	\$ -
70210215 Lazy Dolphin Local Park	2022 - 2022	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70290202 Leash Free Park Areas	2029 - 2029	\$ 250,000	\$ -	\$ 250,000	0%	\$ -	\$ 250,000	\$ -	\$ 250,000	\$ -
70220103 Lion's Promenade Parking Lot Expansion	2022 - 2022	\$ 400,000	\$ -	\$ 400,000	0%	\$ -	\$ 400,000	\$ -	\$ 400,000	\$ -
70200225 Mattamy District Park	2021 - 2021	\$ 2,847,000	\$ -	\$ 2,847,000	0%	\$ -	\$ 2,847,000	\$ 2,847,000	\$ -	\$ -
70220210 Portage Park Multiskills Court	2022 - 2022	\$ 180,000	\$ -	\$ 180,000	0%	\$ -	\$ 180,000	\$ -	\$ 180,000	\$ -
70260301 Pringle Creek Park Splash Pad Development	2026 - 2026	\$ 400,000	\$ -	\$ 400,000	0%	\$ -	\$ 400,000	\$ -	\$ 400,000	\$ -
70200224 Shirley Scott Park	2022 - 2022	\$ 570,000	\$ -	\$ 570,000	0%	\$ -	\$ 570,000	\$ -	\$ 570,000	\$ -
70230205 Skate Zones	2023 - 2027	\$ 172,500	\$ -	\$ 172,500	0%	\$ -	\$ 172,500	\$ -	\$ 172,500	\$ -
70250207 Sports Fields / Multi-Use Fields / Artificial Turf - Construction	2025 - 2025	\$ 6,200,000	\$ -	\$ 6,200,000	25%	\$ 1,550,000	\$ 4,650,000	\$ -	\$ 4,650,000	\$ -
70210216 TFP Whitby District Park	2021 - 2021	\$ 2,847,000	\$ -	\$ 2,847,000	0%	\$ -	\$ 2,847,000	\$ 2,847,000	\$ -	\$ -
70250212 Trails of Whitby Local Park	2025 - 2025	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70240207 Victoria Fields Urban Park	2024 - 2024	\$ 9,100,000	\$ -	\$ 9,100,000	0%	\$ -	\$ 9,100,000	\$ -	\$ 9,100,000	\$ -
70240301 Waterfront Lighting	2024 - 2024	\$ 900,000	\$ -	\$ 900,000	0%	\$ -	\$ 900,000	\$ -	\$ 900,000	\$ -
70240206 Waterfront Master Plan Capital Improvements	2024 - 2024	\$ 1,200,000	\$ -	\$ 1,200,000	0%	\$ -	\$ 1,200,000	\$ -	\$ 1,200,000	\$ -
70280211 West Whitby Holdings Local Park	2028 - 2028	\$ 995,000	\$ -	\$ 995,000	0%	\$ -	\$ 995,000	\$ -	\$ 995,000	\$ -
70210208 Whitby Optimist Park - Soccer Field / Parking Lot Addition	2024 - 2024	\$ 385,000	\$ -	\$ 385,000	0%	\$ -	\$ 385,000	\$ -	\$ 385,000	\$ -
70260213 Whitby Taunton Holdings - District Park	2026 - 2026	\$ 2,847,000	\$ -	\$ 2,847,000	0%	\$ -	\$ 2,847,000	\$ -	\$ 2,847,000	\$ -
Subtotal Parks Program		\$ 82,635,300	\$ 100,000	\$ 82,535,300		\$ 5,942,405	\$ 76,592,895	\$ 6,187,125	\$ 70,405,770	\$ -

APPENDIX B.2
TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS & RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
Other Community Centres										
71231113 Heydenshore Pavilion Redevelopment	2023 - 2023	\$ 3,500,000	\$ -	\$ 3,500,000	75%	\$ 2,625,000	\$ 875,000	\$ -	\$ 875,000	\$ -
Subtotal Other Community Centres		\$ 3,500,000	\$ -	\$ 3,500,000		\$ 2,625,000	\$ 875,000	\$ -	\$ 875,000	\$ -
Iroquois Park Sports Centre										
71211012 IPSC - F1010 Garage and Garbage Storage Building Construction	2023 - 2023	\$ 825,000	\$ -	\$ 825,000	0%	\$ -	\$ 825,000	\$ -	\$ 825,000	\$ -
Subtotal Iroquois Park Sports Centre		\$ 825,000	\$ -	\$ 825,000		\$ -	\$ 825,000	\$ -	\$ 825,000	\$ -
Luther Vipond Memorial Arena										
71251016 LVMA - Repurpose Conversion / Development	2025 - 2025	\$ 9,281,000	\$ -	\$ 9,281,000	76%	\$ 7,080,388	\$ 2,200,612	\$ -	\$ 2,200,612	\$ -
Subtotal Luther Vipond Memorial Arena		\$ 9,281,000	\$ -	\$ 9,281,000		\$ 7,080,388	\$ 2,200,612	\$ -	\$ 2,200,612	\$ -
Port Whitby Marina										
74301101 PWM - F10 Staff Work Building	2030 - 2030	\$ 420,000	\$ -	\$ 420,000	50%	\$ 210,000	\$ 210,000	\$ -	\$ 210,000	\$ -
74201104 PWM - Fencing Dredge Sediment Containment Facility	2022 - 2022	\$ 70,000	\$ -	\$ 70,000	0%	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -
Subtotal Port Whitby Marina		\$ 490,000	\$ -	\$ 490,000		\$ 210,000	\$ 280,000	\$ -	\$ 280,000	\$ -
Operations Centre⁽¹⁾										
30211305 OPC - Expansion Phase 2	2021 - 2023	\$ 3,666,600	\$ -	\$ 3,666,600	17%	\$ 630,000	\$ 3,036,600	\$ 1,012,200	\$ 2,024,400	\$ -
30291301 OPC - Expansion Phase 3	2029 - 2029	\$ 945,000	\$ -	\$ 945,000	0%	\$ -	\$ 945,000	\$ -	\$ 945,000	\$ -
Subtotal Operations Centre		\$ 4,611,600	\$ -	\$ 4,611,600		\$ 630,000	\$ 3,981,600	\$ 1,012,200	\$ 2,969,400	\$ -
New Whitby Sports Complex										
71201033 New Whitby Sports Complex	2021 - 2022	\$ 66,978,657	\$ -	\$ 66,978,657	0%	\$ -	\$ 66,978,657	\$ 36,901,632	\$ 30,077,025	\$ -
Subtotal New Whitby Sports Complex		\$ 66,978,657	\$ -	\$ 66,978,657		\$ -	\$ 66,978,657	\$ 36,901,632	\$ 30,077,025	\$ -

APPENDIX B.2
TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS & RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
Parks, Parks Maintenance and Recreation Studies										
72080101 Brooklin Memorial Park Master Plan	2022 - 2022	\$ 100,000	\$ -	\$ 100,000	65%	\$ 65,000	\$ 35,000	\$ -	\$ 35,000	\$ -
70247301 CPROS Update	2021 - 2021	\$ 257,500	\$ -	\$ 257,500	25%	\$ 64,375	\$ 193,125	\$ 193,125	\$ -	\$ -
70207302 Cullen Master Plan	2021 - 2021	\$ 100,000	\$ -	\$ 100,000	20%	\$ 20,000	\$ 80,000	\$ 80,000	\$ -	\$ -
70217301 Parks Cash in Lieu of Parkland Dedication Study	2021 - 2021	\$ 100,000	\$ -	\$ 100,000	0%	\$ -	\$ 100,000	\$ 100,000	\$ -	\$ -
30227102 Parks Waste Analysis and Strategy	2022 - 2022	\$ 75,000	\$ -	\$ 75,000	75%	\$ 56,371	\$ 18,629	\$ -	\$ 18,629	\$ -
74257301 Prelim Site Assessment - Charles St	2025 - 2025	\$ 154,500	\$ -	\$ 154,500	50%	\$ 77,250	\$ 77,250	\$ -	\$ 77,250	\$ -
Subtotal Parks, Parks Maintenance and Recreation Studies		\$ 787,000	\$ -	\$ 787,000		\$ 282,996	\$ 504,004	\$ 373,125	\$ 130,879	\$ -
Existing Debt (Principal 10yr)⁽¹⁾										
2.1.1 Operations Centre Expansion (Phase 1)	2021 - 2030	\$ 1,484,573	\$ -	\$ 1,484,573	0%	\$ -	\$ 1,484,573	\$ -	\$ 1,484,573	\$ -
Subtotal Existing Debt (Principal 10yr)		\$ 1,484,573	\$ -	\$ 1,484,573		\$ -	\$ 1,484,573	\$ -	\$ 1,484,573	\$ -
TOTAL PARKS & RECREATION		\$ 188,090,017	\$ 100,000	\$ 187,990,017		\$ 21,152,698	\$ 166,837,319	\$ 45,675,785	\$ 121,161,534	\$ -

(1) - Operations Centre costs have been allocated 45% by Parks Services and 55% Operations services based on anticipated future use of the facility.

Residential Development Charge Calculation		
Residential Share of 2021 - 2030 DC Eligible Costs	100.0%	\$121,161,534
10-Year Growth in Population in New Units		58,344
Unadjusted Development Charge Per Capita		\$2,076.69
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	0.0%	\$0
10-Year Growth in Square Metres		244,563
Unadjusted Development Charge Per Square Metre		\$0.00
<i>Industrial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	0.0%	\$0
10-Year Growth in Square Metres		719,229
Unadjusted Development Charge Per Square Metre		\$0.00
<i>Institutional</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	0.0%	\$0
10-Year Growth in Square Metres		246,288
Unadjusted Development Charge Per Square Metre		\$0.00

2021 - 2030 Net Funding Envelope	\$170,139,745
Reserve Fund Balance Balance as at December 31, 2020	\$45,675,785

APPENDIX B.2

TABLE 3

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

PARKS & RECREATION	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$45,675.79	\$20,143.17	(\$26,540.34)	(\$27,382.25)	(\$35,067.62)	(\$39,206.53)	(\$42,996.69)	(\$31,120.57)	(\$15,141.38)	(\$1,484.51)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS											
-Prior Growth (Funding form DC Reserve Balance)	\$22,890.18	\$22,329.1	\$456.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$45,675.8
- Parks & Recreation: Non Inflated	\$12,637.81	\$28,966.2	\$5,719.1	\$12,183.4	\$8,644.2	\$8,181.2	\$7,611.0	\$6,043.0	\$9,622.3	\$20,068.7	\$119,677.0
- Operations Centre PH1 Debt Principle Payment (1)	\$143.17	\$144.3	\$145.2	\$146.1	\$147.2	\$148.3	\$149.9	\$151.5	\$153.5	\$155.5	\$1,484.6
- Parks & Recreation: Inflated	\$35,671.2	\$53,234.9	\$6,760.7	\$13,654.1	\$10,066.6	\$9,865.0	\$9,505.7	\$7,839.8	\$12,824.3	\$27,507.1	\$186,929.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	3,996	3,012	3,057	3,107	3,155	3,232	8,972	9,440	9,928	10,444	58,344
REVENUE											
- DC Receipts: Inflated	\$9,309.2	\$7,157.3	\$7,410.1	\$7,681.1	\$7,955.6	\$8,313.8	\$23,539.5	\$25,262.7	\$27,099.2	\$29,078.9	\$152,807.6
INTEREST											
- Interest on Opening Balance	\$1,598.7	\$705.0	(\$1,459.7)	(\$1,506.0)	(\$1,928.7)	(\$2,156.4)	(\$2,364.8)	(\$1,711.6)	(\$832.8)	(\$81.6)	(\$9,738.0)
- Interest on In-year Transactions	(\$725.0)	(\$1,267.1)	\$11.4	(\$164.3)	(\$58.1)	(\$42.7)	\$245.6	\$304.9	\$249.8	\$27.5	(\$1,417.9)
- Interest on Operations Centre PH1	(\$44.4)	(\$43.8)	(\$43.0)	(\$42.1)	(\$41.1)	(\$39.9)	(\$38.5)	(\$36.9)	(\$35.1)	(\$33.2)	(\$398.1)
TOTAL REVENUE	\$10,138.5	\$6,551.4	\$5,918.8	\$5,968.7	\$5,927.7	\$6,074.8	\$21,381.8	\$23,819.0	\$26,481.1	\$28,991.6	\$141,253.6
CLOSING CASH BALANCE	\$20,143.2	(\$26,540.3)	(\$27,382.3)	(\$35,067.6)	(\$39,206.5)	(\$42,996.7)	(\$31,120.6)	(\$15,141.4)	(\$1,484.5)	\$0.0	

1 Principle payments not inflated

2021 Adjusted Charge Per Capita \$2,329.69

Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.3

Fire Protection Services

The Whitby Fire Department provides for fire suppression, emergency preparedness, fire prevention and public education throughout the Town. The department consists of Suppression staff, Public Education and Fire Prevention staff, Training Officers, Administration and Logistics staff, Deputy Fire Chiefs, and Fire Chief. The department operates from five halls located throughout the Town.

Table 1 Historical Service Levels

The Fire Services inventory of capital assets includes five fire stations for a combined area of 58,810 square feet, valued at approximately \$29.26 million. Land related to the delivery of Fire Services occupies roughly 4.00 hectares of land which is valued at \$19.96 million. Personal firefighting equipment, station equipment and gear and communication equipment amount to \$4.64 million. The 30 vehicles associated with the fire stations in the Town have a replacement value of \$16.26 million.

The current value of the capital infrastructure including building, land, vehicles, furniture and equipment is approximately \$70.12 million and provides the Town with a ten-year average historical service level of \$403.11 per capita and employee.

The calculated maximum allowable recoverable through development charges is \$24.12 million (59,841 net population and employment growth X historical service level of \$403.11).

Table 2 2021–2030 Development-Related Capital Program & Calculation of the “Unadjusted” Development Charges

The 2021 to 2030 development-related capital program provides for a number of new and expanded facilities including design development and construction of Fire Hall #6 and a new Fire Training Complex. In total, the

cost of the new facilities amounts to \$9.19 million. Approximately \$2.25 million of the Fire Training Complex costs, or 78 per cent, has been deemed a benefit to existing share and is removed from the calculation.

The capital program also includes for the acquisition of a number of fire trucks and vehicles. The first project is the acquisition of additional equipment for the fire training facility in 2030 for \$200,000. The program also includes four additional vehicles for \$43,000 between 2023 and 2025. A Fire Master Plan is planned for 2026 at \$128,800 and a share of 50% is attributed to benefitting the existing population and employment in the Town.

The program also includes the recovery of the principal related to debt for land acquisitions for Fire Hall #6 and the Fire Training Complex. The Fire Training Complex land acquisition, similar to the construction above, has a 78% or \$461,600 benefit to existing share netted off the DC-eligible cost.

Lastly, a provision of \$8.00 million for future growth-related fire infrastructure includes a fire station, vehicles and equipment.

Altogether, the ten-year capital forecast for the Fire Services amounts to \$19.14 million. No grants, subsidies or other recoveries have been identified for this service and there are no ineligible projects. The replacement shares, relating to the replacement of existing buildings, vehicles and equipment, totals \$2.78 million.

A portion of this cost, \$1.05 million, will be paid for by existing funds in the Fire Services DC reserve fund and is applied to projects occurring in the initial years of the planning period. The remaining \$15.32 million is related to development between 2021 and 2030 and the full amount is included in the present calculation.

The development-related cost is allocated 77 per cent, or \$11.80 million to the residential sector, 9.6 per cent, or \$1.48 million to the commercial sector,

7.9 per cent, or \$1.21 million to the industrial sector and 5.4 per cent, or \$830,300, to the institutional sector based on shares of ten-year growth in population in new units and employment. This yields an unadjusted development charge of \$202.28 per capita and non-residential unadjusted development charge as follows:

- **Commercial** = \$6.04 per square metre
- **Industrial** = \$1.69 per square metre
- **Institutional** = \$3.37 per square metre

Table 3 Cash Flow Analysis

The following table summarizes the calculation of the Fire Services charge.

FIRE SERVICES SUMMARY					
10-year Hist. Service Level per pop & emp		Residential \$/capita	Unadjusted Development Charge		
			Commercial \$/sq.m	Industrial \$/sq.m	Institutional \$/sq.m
\$403.11		\$202.28	\$6.04	\$1.69	\$3.37
2021 - 2030 Development-Related Capital Program		Residential \$/capita	Adjusted Development Charge		
			Commercial \$/sq.m	Industrial \$/sq.m	Institutional \$/sq.m
Total	Net DC Recoverable	\$202.66	\$5.99	\$1.64	\$3.39
\$19,144,947	\$15,320,508				

APPENDIX B.3

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Hall 1	8,393	8,393	8,393	8,393	8,393	8,393	8,393	8,393	8,393	8,393	8,393	\$500
Hall 2	7,202	7,202	7,202	7,202	7,202	7,202	7,202	7,202	7,202	7,202	7,202	\$480
Hall 3	8,393	8,393	8,393	8,393	8,393	8,393	8,393	8,393	8,393	8,393	8,393	\$500
Hall 4	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	\$500
Hall 5	26,395	26,395	26,395	26,395	26,395	26,395	26,395	26,395	26,395	26,395	26,395	\$500
Total (sq.ft)	58,810	58,810	58,810	58,810	58,810	58,810	58,810	58,810	58,810	58,810	58,810	
Total (\$000)	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Hall 1	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	\$5,593,400
Hall 2	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$3,178,100
Hall 3	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	\$3,178,100
Hall 4	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	\$5,847,700
Hall 5	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	\$5,593,400
Total (ha)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
Total (\$000)	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	

APPENDIX B.3

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

FURNITURE AND EQUIPMENT Description	Total Furniture & Equipment (#)										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Number of Fire Fighters												
Personal clothing & PPE	112	112	112	112	112	112	112	135	135	135		\$7,040
Station Furniture												
Dorm Furniture	5	5	5	5	5	5	5	5	5	5	5	\$15,400
Washing Machine	5	5	5	5	5	5	5	5	5	5	5	\$900
Dryer	5	5	5	5	5	5	5	5	5	5	5	\$800
Stove	5	5	5	5	5	5	5	5	5	5	5	\$1,000
Fridge	5	5	5	5	5	5	5	5	5	5	5	\$1,000
Dishwasher	5	5	5	5	5	5	5	5	5	5	5	\$700
General Station Tools	5	5	5	5	5	5	5	5	5	5	5	\$54,500
Lounge Furniture	5	5	5	5	5	5	5	5	5	5	5	\$6,200
Fitness equipment	5	5	5	5	5	5	5	5	5	5	5	\$10,300
Generator	-	-	-	-	-	-	-	-	1	1	1	\$308,700
Firefighting Equipment												
SCBA Air Cylinders	100	100	100	100	100	100	164	164	164	164	164	\$1,500
SCBA	72	72	72	72	72	72	72	72	72	72	72	\$6,700
Thermal Imaging Cameras	9	9	9	9	9	9	9	9	9	9	12	\$11,300
Extractor / Gear Drying Systems	2	2	2	2	2	2	2	2	2	2	2	\$18,500
Hazmat/ Training Equipment	1	1	1	1	1	1	1	1	1	1	1	\$7,700
SCBA Air Compressor / Cascade System	3	3	3	3	3	3	3	3	3	3	3	\$51,400
Ice/Water Equipment	-	-	-	-	-	-	-	1	1	1	1	\$10,800
Ice / Water Rescue Suits	14	14	14	14	14	14	14	14	14	14	14	\$2,100
Auto Extrication Equipment	5	5	7	8	8	8	9	9	9	9	9	\$51,400
Slope Rescue Equipment	-	-	-	-	-	-	-	-	-	1	1	\$13,400
Hazardous Materials Equipment	1	1	1	1	1	1	1	1	1	1	1	\$5,100
Hazardous Materials Exposure Protection Suits	10	10	10	10	10	10	10	10	10	10	10	\$1,000

APPENDIX B.3

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

FURNITURE AND EQUIPMENT CON'T Description	Total Furniture & Equipment (\$)										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Communications Equipment											
Vehicle Repeater	2	2	2	2	2	2	2	2	2	2	\$14,900
Fire Dash Mount Radio	20	20	20	20	20	20	20	20	20	20	\$6,200
Portable Radios	50	50	50	50	50	50	50	50	50	50	\$6,700
Portable Radio Belt Clip Standard	50	50	50	50	50	50	50	50	50	50	\$100
Speaker Mic, Rugged, Coiled	50	50	50	50	50	50	50	50	50	50	\$20
Battery, Li-ion, 2000MAH	100	100	100	100	100	100	100	100	100	100	\$150
Charger, Single Radio	15	15	15	15	15	15	15	15	15	15	\$310
Charger, 6 Bay	10	10	10	10	10	10	10	10	10	10	\$670
Truck Radio Headset System	5	5	5	5	5	5	5	5	6	8	\$5,100
Pre Alert System	5	5	5	5	5	5	5	5	5	5	\$10,300
Hand Held Beon Apps	-	-	-	-	-	-	-	12	12	12	\$1,000
Total (#)	569	569	571	572	572	572	638	651	653	658	
Total (\$000)	\$3,075.1	\$3,075.1	\$3,177.9	\$3,229.3	\$3,229.3	\$3,229.3	\$3,387.5	\$3,870.2	\$3,888.7	\$3,932.8	

RADIO EQUIPMENT Description	Total Radio Equipment (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Regional Radio System	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%
Regional Radio (Fire Share) ¹	\$363,940	\$363,940	\$363,940	\$ 363,940	\$ 606,570	\$ 606,570	\$703,318	\$ 703,318	\$ 703,318	\$ 703,318
Total (\$000)	\$363.9	\$363.9	\$363.9	\$363.9	\$606.6	\$606.6	\$703.3	\$703.3	\$703.3	\$703.3

¹ Radio system is shared between Operations & Fire Services



APPENDIX B.3

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

VEHICLES Vehicle Type	# Of Vehicles										UNIT COST (\$/vehicle)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Aerial	2	2	2	2	2	2	1	1	1	1	\$2,350,000
Car	7	7	7	7	7	7	8	8	8	8	\$40,000
Command Vehicle	1	1	1	1	1	1	1	1	1	1	\$135,000
Fire Safety Trailer	1	1	1	1	1	1	1	1	1	1	\$85,000
Ladder	-	-	-	-	-	-	-	-	1	1	\$1,900,000
Minivan	-	-	-	-	-	-	-	-	-	2	\$42,500
Pumper / Pumper Rescue	7	7	7	7	7	7	8	8	8	8	\$1,200,000
Rescue	1	1	1	1	1	1	1	1	1	1	\$1,000,000
Tanker	1	1	1	1	1	1	1	1	1	1	\$550,000
Training Portables	2	2	2	2	2	2	2	2	2	2	\$20,000
Training truck with Portable pump	1	1	1	1	1	1	1	1	-	-	\$45,000
ATV	-	-	-	-	-	-	-	-	1	1	\$45,000
Trucks (1/2 ton)	3	3	3	3	3	3	1	1	1	1	\$45,000
Trucks (3/4 ton)	-	-	-	-	-	-	2	2	2	2	\$52,500
Total (#)	26	26	26	26	26	26	27	27	28	30	
Total (\$000)	\$15,370.0	\$15,370.0	\$15,370.0	\$15,370.0	\$15,370.0	\$15,370.0	\$14,275.0	\$14,275.0	\$16,175.0	\$16,260.0	

APPENDIX B.3

TABLE 1

TOWN OF WHITBY
CALCULATION OF SERVICE LEVELS

FIRE SERVICES

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	122,022	123,267	124,525	125,796	127,080	128,377	130,575	132,810	135,084	136,562
Historic Employment	<u>38,031</u>	<u>38,807</u>	<u>39,602</u>	<u>40,417</u>	<u>41,251</u>	<u>42,107</u>	<u>42,828</u>	<u>43,561</u>	<u>44,307</u>	<u>44,519</u>
Total Historic Population & Employment	160,053	162,074	164,127	166,213	168,331	170,484	173,403	176,371	179,391	181,081

INVENTORY SUMMARY (\$000)

Buildings	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0	\$29,261.0
Land	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6	\$19,959.6
Furniture And Equipment	\$3,075.1	\$3,075.1	\$3,177.9	\$3,229.3	\$3,229.3	\$3,229.3	\$3,387.5	\$3,870.2	\$3,888.7	\$3,932.8
Radio Equipment	\$363.9	\$363.9	\$363.9	\$363.9	\$606.6	\$606.6	\$703.3	\$703.3	\$703.3	\$703.3
Vehicles	\$15,370.0	\$15,370.0	\$15,370.0	\$15,370.0	\$15,370.0	\$15,370.0	\$14,275.0	\$14,275.0	\$16,175.0	\$16,260.0
Total (\$000)	\$68,029.6	\$68,029.6	\$68,132.4	\$68,183.8	\$68,426.5	\$68,426.5	\$67,586.4	\$68,069.0	\$69,987.5	\$70,116.6

SERVICE LEVEL (\$/pop+empl)

Average
Service
Level

Buildings	\$182.82	\$180.54	\$178.28	\$176.04	\$173.83	\$171.63	\$168.75	\$165.91	\$163.11	\$161.59	\$172.25
Land	\$124.71	\$123.15	\$121.61	\$120.08	\$118.57	\$117.08	\$115.11	\$113.17	\$111.26	\$110.22	\$117.50
Furniture And Equipment	\$19.21	\$18.97	\$19.36	\$19.43	\$19.18	\$18.94	\$19.54	\$21.94	\$21.68	\$21.72	\$20.00
Radio Equipment	\$2.27	\$2.25	\$2.22	\$2.19	\$3.60	\$3.56	\$4.06	\$3.99	\$3.92	\$3.88	\$3.19
Vehicles	\$96.03	\$94.83	\$93.65	\$92.47	\$91.31	\$90.16	\$82.32	\$80.94	\$90.17	\$89.79	\$90.17
Total (\$/pop+empl)	\$425.04	\$419.74	\$415.12	\$410.22	\$406.50	\$401.37	\$389.76	\$385.94	\$390.14	\$387.21	\$403.11

TOWN OF WHITBY
CALCULATION OF MAXIMUM ALLOWABLE

FIRE SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$403.11
Net Population and Employment Growth 2021 - 2030	59,841
Maximum Allowable Funding Envelope	\$24,122,645

APPENDIX B.3

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
FIRE SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
3.0 FIRE SERVICES										
Whitby Fire Facilities										
71231201 FH6 - New Construction Firehall #6	2023 - 2025	\$ 6,300,000	\$ -	\$ 6,300,000	0%	\$ -	\$ 6,300,000	\$ 1,046,223	\$ 5,253,777	\$ -
71291201 Fire Training Complex	2029 - 2030	\$ 2,887,500	\$ -	\$ 2,887,500	78%	\$ 2,252,250	\$ 635,250	\$ -	\$ 635,250	\$ -
Subtotal Whitby Fire Facilities		\$ 9,187,500	\$ -	\$ 9,187,500		\$ 2,252,250	\$ 6,935,250	\$ 1,046,223	\$ 5,889,027	\$ -
Fire and Emergency Services Fleet and Equipment										
20303101 Fire Training Equipment (Fire Training Facility)	2030 - 2030	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
20212001 Fire Vehicle (additional)	2024 - 2024	\$ 43,000	\$ -	\$ 43,000	0%	\$ -	\$ 43,000	\$ -	\$ 43,000	\$ -
20212002 Fire Vehicle (additional)	2024 - 2024	\$ 43,000	\$ -	\$ 43,000	0%	\$ -	\$ 43,000	\$ -	\$ 43,000	\$ -
20232001 Fire Vehicle (additional)	2023 - 2023	\$ 43,000	\$ -	\$ 43,000	0%	\$ -	\$ 43,000	\$ -	\$ 43,000	\$ -
20258401 Fire Vehicle (additional)	2025 - 2025	\$ 43,000	\$ -	\$ 43,000	0%	\$ -	\$ 43,000	\$ -	\$ 43,000	\$ -
Subtotal Fire and Emergency Services Fleet and Equipment		\$ 372,000	\$ -	\$ 372,000		\$ -	\$ 372,000	\$ -	\$ 372,000	\$ -
Administrative Studies and Initiatives										
20267001 Fire Master Plan	2026 - 2026	\$ 128,750	\$ -	\$ 128,750	50%	\$ 64,375	\$ 64,375	\$ -	\$ 64,375	\$ -
Subtotal Administrative Studies and Initiatives		\$ 128,750	\$ -	\$ 128,750		\$ 64,375	\$ 64,375	\$ -	\$ 64,375	\$ -
Existing Debt (Principal 10yr)										
3.1.1 Land Acquisition - Fire Hall	2021 - 2030	\$ 864,914	\$ -	\$ 864,914	0%	\$ -	\$ 864,914	\$ -	\$ 864,914	\$ -
3.1.2 Land Acquisition - Fire Training Complex	2021 - 2030	\$ 591,783	\$ -	\$ 591,783	78%	\$ 461,591	\$ 130,192	\$ -	\$ 130,192	\$ -
Subtotal Existing Debt (Principal 10yr)		\$ 1,456,697	\$ -	\$ 1,456,697		\$ 461,591	\$ 995,106	\$ -	\$ 995,106	\$ -
Provision for Future Growth-Related Infrastructure										
3.2.1 Provision for Future Fire Station, Vehicles and Equipment	2030 - 2030	\$ 8,000,000	\$ -	\$ 8,000,000	0%	\$ -	\$ 8,000,000	\$ -	\$ 8,000,000	\$ -
Subtotal Provision for Future Growth-Related Infrastructure		\$ 8,000,000	\$ -	\$ 8,000,000		\$ -	\$ 8,000,000	\$ -	\$ 8,000,000	\$ -
TOTAL FIRE SERVICES - ALL PROJECTS		\$ 19,144,947	\$ -	\$ 19,144,947		\$ 2,778,216	\$ 16,366,731	\$ 1,046,223	\$ 15,320,508	\$ -

Residential Development Charge Calculation		
Residential Share of 2021 - 2030 DC Eligible Costs	77.0%	\$11,801,459
10-Year Growth in Population in New Units		58,344
Unadjusted Development Charge Per Capita		\$202.28
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	9.6%	\$1,476,401
10-Year Growth in Square Metres		244,563
Unadjusted Development Charge Per Square Metre		\$6.04
<i>Industrial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	7.9%	\$1,212,351
10-Year Growth in Square Metres		719,229
Unadjusted Development Charge Per Square Metre		\$1.69
<i>Institutional</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	5.4%	\$830,297
10-Year Growth in Square Metres		246,288
Unadjusted Development Charge Per Square Metre		\$3.37

2021 - 2030 Net Funding Envelope	\$24,122,645
Reserve Fund Balance Balance as at December 31, 2020	\$1,046,223



APPENDIX B.3

TABLE 3

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

FIRE SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$805.9	\$1,560.1	\$2,149.6	\$2,233.0	\$2,820.5	(\$1,364.3)	(\$858.8)	\$1,077.5	\$3,251.0	\$5,604.1	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$0.0	\$0.0	\$80.6	\$0.0	\$725.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$805.9
- Fire Services: Non Inflated	\$0.0	\$0.0	\$437.8	\$66.2	\$3,675.4	\$49.6	\$0.0	\$0.0	\$48.9	\$6,756.9	\$11,034.9
- Land Acquisition-Fire Hall Debt Principle Payment (1)	\$64.25	\$64.75	\$65.16	\$65.56	\$66.06	\$66.56	\$67.27	\$67.97	\$68.88	\$69.78	\$666.2
- Land Acq.-Fire Training Cmplx Debt Principle Pmnt. (1)	\$8.41	\$8.75	\$9.02	\$9.30	\$9.64	\$9.99	\$10.47	\$10.95	\$11.57	\$12.19	\$100.3
- Fire Services: Inflated	\$72.7	\$73.5	\$613.5	\$145.2	\$4,839.2	\$131.3	\$77.7	\$78.9	\$137.8	\$8,157.1	\$14,326.9
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	3,996	3,012	3,057	3,107	3,155	3,232	8,972	9,440	9,928	10,444	58,344
REVENUE											
- DC Receipts: Inflated	\$809.8	\$622.6	\$644.6	\$668.2	\$692.1	\$723.2	\$2,047.7	\$2,197.6	\$2,357.4	\$2,529.6	\$13,292.9
INTEREST											
- Interest on Opening Balance	\$28.2	\$54.6	\$75.2	\$78.2	\$98.7	(\$75.0)	(\$47.2)	\$37.7	\$113.8	\$196.1	\$560.3
- Interest on In-year Transactions	\$12.9	\$9.6	\$0.5	\$9.2	(\$114.0)	\$10.4	\$34.5	\$37.1	\$38.8	(\$154.8)	(\$115.8)
- Interest on Land Acq. - Fire Hall	(\$21.0)	(\$20.7)	(\$20.3)	(\$19.9)	(\$19.4)	(\$18.9)	(\$18.2)	(\$17.4)	(\$16.6)	(\$15.7)	(\$188.1)
- Interest on Land Acq. - Fire Training Cmplx.	(\$3.2)	(\$3.1)	(\$3.1)	(\$3.0)	(\$2.9)	(\$2.8)	(\$2.7)	(\$2.6)	(\$2.5)	(\$2.4)	(\$28.3)
TOTAL REVENUE	\$826.8	\$663.0	\$697.0	\$732.6	\$654.4	\$636.9	\$2,014.1	\$2,252.4	\$2,490.9	\$2,553.0	\$13,521.0
CLOSING CASH BALANCE	\$1,560.1	\$2,149.6	\$2,233.0	\$2,820.5	(\$1,364.3)	(\$858.8)	\$1,077.5	\$3,251.0	\$5,604.1	\$0.0	

1 Principle payments not inflated

2021 Adjusted Charge Per Capita	\$202.66
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Allocation of Capital Program	
Residential Sector	77.0%
Non-Residential Sector	23.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.3

TABLE 3

TOWN OF WHITBY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
COMMERCIAL DEVELOPMENT CHARGE
(in \$000)

FIRE SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$100.82	\$107.08	\$209.22	\$255.44	\$412.05	(\$17.72)	\$151.67	\$345.24	\$557.47	\$782.38	
2021 - 2030 COMMERCIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$0.00	\$0.0	\$10.1	\$0.0	\$90.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$100.8
- Fire Services: Non Inflated	\$0.00	\$0.0	\$54.8	\$8.3	\$459.8	\$6.2	\$0.0	\$0.0	\$6.1	\$845.3	\$1,380.5
- Land Acquisition-Fire Hall Debt Principle Payment (1)	\$8.04	\$8.10	\$8.15	\$8.20	\$8.26	\$8.33	\$8.42	\$8.50	\$8.62	\$8.73	\$83.3
- Land Acq.-Fire Training Cmplx Debt Principle Pmnt. (1)	\$1.05	\$1.09	\$1.13	\$1.16	\$1.21	\$1.25	\$1.31	\$1.37	\$1.45	\$1.52	\$12.5
- Fire Services: Inflated	\$9.1	\$9.2	\$76.8	\$18.2	\$605.4	\$16.4	\$9.7	\$9.9	\$17.2	\$1,020.5	\$1,792.3
NEW COMMERCIAL DEVELOPMENT											
- Growth in Square Metres	2,460	17,809	18,910	26,128	27,113	28,201	29,249	30,377	31,551	32,765	244,563
REVENUE											
- DC Receipts: Inflated	\$14.7	\$108.8	\$117.9	\$166.1	\$175.8	\$186.5	\$197.3	\$209.0	\$221.5	\$234.6	\$1,632.3
INTEREST											
- Interest on Opening Balance	\$3.5	\$3.7	\$7.3	\$8.9	\$14.4	(\$1.0)	\$5.3	\$12.1	\$19.5	\$27.4	\$101.3
- Interest on In-year Transactions	\$0.1	\$1.7	\$0.7	\$2.6	(\$11.8)	\$3.0	\$3.3	\$3.5	\$3.6	(\$21.6)	(\$15.0)
- Interest on Land Acq. - Fire Hall	(\$2.6)	(\$2.6)	(\$2.5)	(\$2.5)	(\$2.4)	(\$2.4)	(\$2.3)	(\$2.2)	(\$2.1)	(\$2.0)	(\$23.5)
- Interest on Land Acq. - Fire Training Cmplx.	(\$0.4)	(\$0.4)	(\$0.4)	(\$0.4)	(\$0.4)	(\$0.4)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$3.5)
TOTAL REVENUE	\$15.3	\$111.3	\$123.0	\$174.8	\$175.6	\$185.8	\$203.3	\$222.1	\$242.2	\$238.1	\$1,691.5
CLOSING CASH BALANCE	\$107.1	\$209.2	\$255.4	\$412.1	(\$17.7)	\$151.7	\$345.2	\$557.5	\$782.4	\$0.0	

1 Principle payments not inflated

2021 Adjusted Charge Per Square Metre	\$5.99
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Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.3

TABLE 3

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 FIRE SERVICES
 INDUSTRIAL DEVELOPMENT CHARGE
 (in \$000)

FIRE SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$82.79	\$154.54	\$383.91	\$571.95	\$668.92	\$278.47	\$374.05	\$482.71	\$599.32	\$718.03	
2021 - 2030 INDUSTRIAL FUNDING REQUIREMENTS											
-Prior Growth (Funding form DC Reserve Balance)	\$0.00	\$0.0	\$8.3	\$0.0	\$74.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$82.8
- Fire Services: Non Inflated	\$0.0	\$0.0	\$45.0	\$6.8	\$377.6	\$5.1	\$0.0	\$0.0	\$5.0	\$694.1	\$1,133.6
- Land Acquisition-Fire Hall Debt Principle Payment (1)	\$6.60	\$6.65	\$6.69	\$6.73	\$6.79	\$6.84	\$6.91	\$6.98	\$7.08	\$7.17	\$68.4
- Land Acq.-Fire Training Cmplx Debt Principle Pmnt. (1)	\$0.86	\$0.90	\$0.93	\$0.96	\$0.99	\$1.03	\$1.08	\$1.12	\$1.19	\$1.25	\$10.3
- Fire Services: Inflated	\$7.5	\$7.6	\$63.0	\$14.9	\$497.1	\$13.5	\$8.0	\$8.1	\$14.2	\$838.0	\$1,471.8
INDUSTRIAL SPACE GROWTH											
- Growth in Square Metres	47,361	137,723	139,080	53,425	54,480	55,320	56,400	57,480	58,440	59,520	719,229
REVENUE											
- DC Receipts: Inflated	\$77.6	\$230.1	\$237.0	\$92.9	\$96.6	\$100.0	\$104.0	\$108.1	\$112.1	\$116.5	\$1,274.9
INTEREST											
- Interest on Opening Balance	\$2.9	\$5.4	\$13.4	\$20.0	\$23.4	\$9.7	\$13.1	\$16.9	\$21.0	\$25.1	\$151.0
- Interest on In-year Transactions	\$1.2	\$3.9	\$3.0	\$1.4	(\$11.0)	\$1.5	\$1.7	\$1.8	\$1.7	(\$19.8)	(\$14.7)
- Interest on Land Acq. - Fire Hall	(\$2.2)	(\$2.1)	(\$2.1)	(\$2.0)	(\$2.0)	(\$1.9)	(\$1.9)	(\$1.8)	(\$1.7)	(\$1.6)	(\$19.3)
- Interest on Land Acq. - Fire Training Cmplx.	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.2)	(\$2.9)
TOTAL REVENUE	\$79.2	\$236.9	\$251.1	\$111.9	\$106.7	\$109.1	\$116.6	\$124.7	\$132.9	\$119.9	\$1,389.0
CLOSING CASH BALANCE	\$154.5	\$383.9	\$571.9	\$668.9	\$278.5	\$374.0	\$482.7	\$599.3	\$718.0	(\$0.0)	

1 Principle payments not inflated

2021 Adjusted Charge Per Square Metre	\$1.64
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Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.3

TABLE 3

TOWN OF WHITBY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
INSTITUTIONAL DEVELOPMENT CHARGE
(in \$000)

FIRE SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$56.70	\$54.87	\$53.85	\$16.26	\$115.22	(\$113.19)	(\$4.70)	\$121.98	\$262.02	\$412.46	
2021 - 2030 INSTITUTIONAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$0.00	\$0.0	\$5.7	\$0.0	\$51.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$56.7
- Fire Services: Non Inflated	\$0.0	\$0.0	\$30.8	\$4.7	\$258.6	\$3.5	\$0.0	\$0.0	\$3.4	\$475.4	\$776.4
- Land Acquisition-Fire Hall Debt Principle Payment (1)	\$4.52	\$4.56	\$4.58	\$4.61	\$4.65	\$4.68	\$4.73	\$4.78	\$4.85	\$4.91	\$46.9
- Land Acq.-Fire Training Cmplx Debt Principle Pmnt. (1)	\$0.59	\$0.62	\$0.63	\$0.65	\$0.68	\$0.70	\$0.74	\$0.77	\$0.81	\$0.86	\$7.1
- Fire Services: Inflated	\$5.1	\$5.2	\$43.2	\$10.2	\$340.5	\$9.2	\$5.5	\$5.6	\$9.7	\$573.9	\$1,008.0
INSITUTIONAL SPACE GROWTH											
- Growth in Square Metres	900	1,140	1,800	30,168	31,560	33,000	34,500	36,060	37,740	39,420	246,288
REVENUE											
- DC Receipts: Inflated	\$3.1	\$3.9	\$6.3	\$108.5	\$115.8	\$123.5	\$131.7	\$140.4	\$149.9	\$159.7	\$942.7
INTEREST											
- Interest on Opening Balance	\$2.0	\$1.9	\$1.9	\$0.6	\$4.0	(\$6.2)	(\$0.3)	\$4.3	\$9.2	\$14.4	\$31.8
- Interest on In-year Transactions	(\$0.1)	(\$0.0)	(\$1.0)	\$1.7	(\$6.2)	\$2.0	\$2.2	\$2.4	\$2.5	(\$11.4)	(\$7.9)
- Interest on Land Acq. - Fire Hall	(\$1.5)	(\$1.5)	(\$1.4)	(\$1.4)	(\$1.4)	(\$1.3)	(\$1.3)	(\$1.2)	(\$1.2)	(\$1.1)	(\$13.2)
- Interest on Land Acq. - Fire Training Cmplx.	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$2.0)
TOTAL REVENUE	\$3.3	\$4.2	\$5.6	\$109.2	\$112.1	\$117.7	\$132.1	\$145.6	\$160.1	\$161.4	\$951.3
CLOSING CASH BALANCE	\$54.9	\$53.8	\$16.3	\$115.2	(\$113.2)	(\$4.7)	\$122.0	\$262.0	\$412.5	\$0.0	

1 Principle payments not inflated

2021 Adjusted Charge Per Square Metre	\$3.39
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Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.4

Waste Management

The Town of Whitby provides curbside residential waste collection services to Whitby residents. This includes residual garbage, green bin organics, yard waste, and a special collection program for metals, tires, and other bulky items. The Region of Durham provides blue box recycling collection service.

As of January 1, 2016, the Development Charges Act permits the inclusion of capital costs associated with all waste management operations with the exception of incineration and landfill activities. These shares have been removed from the development charges calculation, where applicable.

Table 1 Historical Service Levels

The ten-year historical service level includes vehicles relating to the collection of waste in the Town. No buildings or land have been included in the inventory as no facilities are used for the sole purpose of waste management. The Town currently owns and operates a fleet of 23 waste management vehicles including trucks, hook lifts, rear loaders and single and dual stream side loaders. The total replacement value of the fleet is \$7.04 million.

The total value of the inventory of capital assets for Waste Management Services in 2020 was \$7.04 million, resulting in a ten-year historical average service level of \$55.41 per capita. For the purposes of establishing the ten-year historical average service level, the historical population residing in dwelling units that are responsible for their own garbage collection has been removed from the calculation. Similarly, the forecast net population growth, used to arrive at the maximum permissible funding envelope calculation, has also been reduced by the associated population growth that will reside in dwelling units where no waste collection services are provided by the Town.

After this adjustment, the historical service level, multiplied by the ten-year net population growth, results in a ten-year maximum allowable funding

envelope of \$1.87 million (33,684 adjusted net population growth X historical average service level of \$55.41).

Table 2 2021 – 2030 Development-Related Capital Program & Calculation of the “Unadjusted” Development Charges

The ten-year development-related capital plan for Waste Management services includes a special collections project, a provision for seven additional collection trucks and other development-related vehicles for a total cost of \$2.21 million. No grant, subsidies or other recoveries are identified and as such, the total is carried forward to the net municipal costs.

No benefit to existing shares have been calculated as the projects in the capital program only relate to the increase in need for service relating to new development.

The total DC eligible cost of \$2.21 million is funded in part by existing DC reserves of \$540,800. The remaining \$1.66 million is eligible for recovery through development charges during the 2021-2030 planning period.

This amount is allocated entirely to the residential sector and yields an unadjusted development charges of \$31.67 per capita. Similar to the maximum permissible funding envelope calculation, the ten-year growth in population in new units has been reduced by the associated population growth that will reside in dwelling units where no waste collection services are provided by the Town.

Table 3 Cash Flow Analysis

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

WASTE MANAGEMENT SUMMARY						
10-year Hist.	2021 - 2030		Unadjusted		Adjusted	
	Development-Related Capital Program	Residential	Non-Res	Development Charge		
Service Level	Total	Net DC Recoverable	Residential	Non-Res	Residential	Non-Res
per capita			\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$55.41	\$2,205,000	\$1,664,231	\$31.67	\$0.00	\$30.33	\$0.00

APPENDIX B.4

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
WASTE MANAGEMENT

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
WAST - Truck (1/2 Ton)	2	2	2	2	2	2	1	1	1	1	\$46,300
WAST- Truck (1 Ton)	1	1	1	1	1	1	1	1	1	1	\$81,000
WAST - Hook lift Truck	1	1	1	1	1	1	1	1	1	1	\$194,500
WAST - Rear Loader	3	3	3	3	3	3	3	3	3	3	\$280,900
WAST - Single Stream Side Loader	5	5	5	5	5	5	5	5	5	5	\$345,700
WAST - Two Stream Side Loader	12	12	12	12	12	12	12	12	12	12	\$345,700
Total (#)	24	24	24	24	24	24	23	23	23	23	
Total (\$000)	\$7,087.7	\$7,087.7	\$7,087.7	\$7,087.7	\$7,087.7	\$7,087.7	\$7,041.4	\$7,041.4	\$7,041.4	\$7,041.4	

APPENDIX B.4

TABLE 1

TOWN OF WHITBY
CALCULATION OF SERVICE LEVELS
WASTE MANAGEMENT

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historical Population	122,022	123,267	124,260	125,087	126,371	127,668	128,996	131,231	133,505	134,944

INVENTORY SUMMARY (\$000)

Vehicles	\$7,087.7	\$7,087.7	\$7,087.7	\$7,087.7	\$7,087.7	\$7,087.7	\$7,041.4	\$7,041.4	\$7,041.4	\$7,041.4
Total (\$000)	\$7,087.7	\$7,087.7	\$7,087.7	\$7,087.7	\$7,087.7	\$7,087.7	\$7,041.4	\$7,041.4	\$7,041.4	\$7,041.4

SERVICE LEVEL (\$/pop)											Average Service Level
Vehicles	\$58.09	\$57.50	\$57.04	\$56.66	\$56.09	\$55.52	\$54.59	\$53.66	\$52.74	\$52.18	\$55.41
Total (\$/pop)	\$58.09	\$57.50	\$57.04	\$56.66	\$56.09	\$55.52	\$54.59	\$53.66	\$52.74	\$52.18	\$55.41

TOWN OF WHITBY
CALCULATION OF MAXIMUM ALLOWABLE

WASTE MANAGEMENT

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$55.41
Net Population Growth 2021 - 2030	33,684
Maximum Allowable Funding Envelope	\$1,866,447

Note: Historical & forecast population excludes population related to high-rise apartment dwellings that provide their own waste management collection

APPENDIX B.4
TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
WASTE MANAGEMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
4.0 WASTE MANAGEMENT										
Information Technology - Business Solutions										
10215606 Special Project - Special Collections (Waste)	2021 - 2021	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ -
Subtotal Information Technology - Business Solutions		\$ 50,000	\$ -	\$ 50,000		\$ -	\$ 50,000	\$ 50,000	\$ -	\$ -
Waste Management Services Fleet and Equipment										
30242502 Garbage Packer - Organics/Waste Side Loader (additional)	2024 - 2024	\$ 343,000	\$ -	\$ 343,000	0%	\$ -	\$ 343,000	\$ 343,000	\$ -	\$ -
30292501 Garbage Packer - Organics/Waste Side Loader (additional)	2029 - 2029	\$ 343,000	\$ -	\$ 343,000	0%	\$ -	\$ 343,000	\$ -	\$ 343,000	\$ -
30292502 Garbage Packer - Organics/Waste Side Loader (additional)	2029 - 2029	\$ 343,000	\$ -	\$ 343,000	0%	\$ -	\$ 343,000	\$ -	\$ 343,000	\$ -
30242501 Garbage Packer - Rear Loader (additional)	2024 - 2024	\$ 279,000	\$ -	\$ 279,000	0%	\$ -	\$ 279,000	\$ 147,769	\$ 131,231	\$ -
30308601 Garbage Packer - Yard Waste Side Loader (additional)	2030 - 2030	\$ 343,000	\$ -	\$ 343,000	0%	\$ -	\$ 343,000	\$ -	\$ 343,000	\$ -
30302501 WAST - Garbage Packer - Rear Loader (additional)	2030 - 2030	\$ 311,000	\$ -	\$ 311,000	0%	\$ -	\$ 311,000	\$ -	\$ 311,000	\$ -
30282103 WAST - Hook Lift	2028 - 2028	\$ 193,000	\$ -	\$ 193,000	0%	\$ -	\$ 193,000	\$ -	\$ 193,000	\$ -
Subtotal Waste Management Services Fleet and Equipment		\$ 2,155,000	\$ -	\$ 2,155,000		\$ -	\$ 2,155,000	\$ 490,769	\$ 1,664,231	\$ -
TOTAL WASTE MANAGEMENT		\$ 2,205,000	\$ -	\$ 2,205,000		\$ -	\$ 2,205,000	\$ 540,769	\$ 1,664,231	\$ -

Residential Development Charge Calculation		
Residential Share of 2021 - 2030 DC Eligible Costs	100.0%	\$1,664,231
10-Year Growth in Population in New Units (Adjusted)		52,546
Unadjusted Development Charge Per Capita		\$31.67
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	0.0%	\$0
10-Year Growth in Square Metres		244,563
Unadjusted Development Charge Per Square Metre		\$0.00
<i>Industrial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	0.0%	\$0
10-Year Growth in Square Metres		719,229
Unadjusted Development Charge Per Square Metre		\$0.00
<i>Institutional</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	0.0%	\$0
10-Year Growth in Square Metres		246,288
Unadjusted Development Charge Per Square Metre		\$0.00

2021 - 2030 Net Funding Envelope	\$1,866,447
Reserve Fund Balance	
Balance as at December 31, 2020	\$540,769



APPENDIX B.4

TABLE 3

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 WASTE MANAGEMENT
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

WASTE MANAGEMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$540.8	\$621.9	\$730.3	\$845.3	\$289.9	\$395.4	\$509.1	\$807.8	\$910.9	\$441.1	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$50.0	\$0.0	\$0.0	\$490.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$540.8
- Waste Management: Non Inflated	\$0.0	\$0.0	\$0.0	\$131.2	\$0.0	\$0.0	\$0.0	\$193.0	\$686.0	\$654.0	\$1,664.2
- Waste Management: Inflated	\$50.0	\$0.0	\$0.0	\$660.1	\$0.0	\$0.0	\$0.0	\$221.7	\$803.8	\$781.6	\$2,517.1
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	3,664	2,753	2,784	2,821	2,853	2,931	8,083	8,474	8,878	9,304	52,546
REVENUE											
- DC Receipts: Inflated	\$111.1	\$85.2	\$87.9	\$90.8	\$93.7	\$98.1	\$276.1	\$295.2	\$315.5	\$337.2	\$1,790.8
INTEREST											
- Interest on Opening Balance	\$18.9	\$21.8	\$25.6	\$29.6	\$10.1	\$13.8	\$17.8	\$28.3	\$31.9	\$15.4	\$213.2
- Interest on In-year Transactions	\$1.1	\$1.5	\$1.5	(\$15.7)	\$1.6	\$1.7	\$4.8	\$1.3	(\$13.4)	(\$12.2)	(\$27.7)
TOTAL REVENUE	\$131.1	\$108.4	\$115.0	\$104.7	\$105.5	\$113.7	\$298.7	\$324.8	\$333.9	\$340.5	\$1,976.3
CLOSING CASH BALANCE	\$621.9	\$730.3	\$845.3	\$289.9	\$395.4	\$509.1	\$807.8	\$910.9	\$441.1	\$0.0	

2021 Adjusted Charge Per Capita	\$30.33
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.5

By-Law Enforcement Service

Whitby provides By-law Enforcement Services to the community in relation to enforcing a variety of by-law enforcement activities. These services are provided through a variety of facilities including the Parking & By-law Office and the Whitby Animal Control building.

Table 1 Historical Service Levels

The ten-year historical inventory of capital assets includes 3,200 square feet of building space and is valued at \$1.18 million. A share has been netted off the Animal Control Building's kennel space at 4680 Thickson Rd related to kennel space utilized for animals collected by Town of Ajax By-law enforcement.

The By-law Services buildings occupy 0.57 hectares of land worth \$509,600. The inventory also includes approximately various furniture and equipment related to by-law enforcement for a total replacement cost of \$90,200. Finally, the inventory includes 12 vehicles valued at \$554,400.

The total value of the By-law Enforcement capital infrastructure is estimated to be \$2.33 million. The ten-year historical average service level is \$13.44 per capita and employment, and multiplied by the ten-year forecast net population and employment growth, results in a ten-year maximum allowable of \$804,268 (59,841 net population and employment growth X historical service level of \$13.44).

Table 2 2021 – 2030 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The ten-year development-related capital plan for By-law Enforcement Services totals \$1.66 million and includes for additional vehicles and equipment as well as an addition to the existing kennel at 4680 Thickson Rd. A share of \$96,400 is attributed to Ajax's use of the future facility and a

share of 34 percent has been netted off the DC-eligible share as it relates to the renovation share of the project cost.

After statutory adjustments, the total DC eligible cost of the capital program is reduced to \$1.26 million. Of that amount, \$13,400 is recovered for from existing DC reserves. The DC-eligible capital program exceeds the maximum permissible funding envelope of \$804,300 and as such, a share of \$447,000 is attributed to development occurring beyond 2030 and will be considered for recovery in subsequent development charge studies. The remaining amount of \$804,300 is eligible for recovery within the 2021-2030 period.

The development-related cost is allocated 77 per cent, or \$619,531 to the residential sector, 9.6 per cent, or \$77,505 to the commercial sector, 7.9 per cent, or \$63,644 to the industrial sector and 5.4 per cent, or \$43,587, to the institutional sector based on shares of ten-year growth in population in new units and employment. This yields an unadjusted development charge of \$10.62 per capita and an unadjusted non-residential development charges as follows:

- **Commercial** = \$0.32 per square metre
- **Industrial** = \$0.09 per square metre
- **Institutional** = \$0.18 per square metre

Table 3 Cash Flow Analysis

The following table summarizes the calculation of the By-law Enforcement Services development charges.

BY-LAW ENFORCEMENT SUMMARY

		Unadjusted			
		Development Charge			
10-year Hist.		Residential	Commercial	Industrial	Institutional
Service Level		\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
per pop & emp					
\$13.44		\$10.62	\$0.32	\$0.09	\$0.18
		Adjusted			
		Development Charge			
2021 - 2030		Residential	Commercial	Industrial	Institutional
Development-Related Capital Program	Net DC Recoverable	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
Total					
\$1,655,900	\$804,268	\$11.68	\$0.34	\$0.09	\$0.20

APPENDIX B.5

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
BY-LAW ENFORCEMENT

BUILDINGS	# of Square Feet										UNIT COST (\$/sq.ft.)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Parking & By-law Office - 128 Brock St.	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	-	-	\$250
3000 Garden Street (Leased Parking Share)	-	-	-	-	-	-	-	-	-	861	861	\$205
4680 Thickson Rd (1)	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	\$430
Total (#)	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,185	3,185	
Total (\$000)	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,175.7	\$1,175.7	

(1) Ajax share has been removed.

LAND	# of Hectares										UNIT COST (\$/ha)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Parking & By-law Office - 120 Brock St.	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-	-	\$3,212,400
4680 Thickson Rd (1)	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	\$894,000
Total (#)	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.57	0.57	
Total (\$000)	\$547.4	\$547.4	\$547.4	\$547.4	\$547.4	\$547.4	\$547.4	\$547.4	\$547.4	\$509.6	\$509.6	

FURNITURE & EQUIPMENT	# of Units										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
By-law Services												
Ballistic Vests	-	-	11	15	15	15	15	22	22	22	26	\$1,800
Cell Phone/ Radio	14	16	17	17	17	17	17	17	17	17	17	\$350
Cameras	8	10	10	10	10	10	6	6	6	6	6	\$200
Uniforms	13	15	15	15	15	15	15	15	15	15	15	\$1,000
Bicycles	-	2	2	2	2	2	2	2	2	2	2	\$2,000
Tranquilizer Guns	2	2	2	2	2	2	2	2	2	2	2	\$1,500
Animal Scanners	4	4	4	5	5	5	5	5	5	5	5	\$2,500
Animal Traps	7	6	5	5	5	5	5	5	5	5	5	\$350
Total (#)	48	55	66	71	71	71	67	74	74	74	78	
Total (\$000)	\$35.0	\$41.7	\$61.5	\$71.2	\$71.2	\$71.2	\$70.4	\$83.0	\$83.0	\$83.0	\$90.2	

VEHICLES	# of Units										UNIT COST (\$/unit)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Vehicles (By-Law)	7	8	9	9	9	10	10	11	11	11	12	\$46,200
Total (#)	7	8	9	9	9	10	10	11	11	11	12	
Total (\$000)	\$323.4	\$369.6	\$415.8	\$415.8	\$415.8	\$462.0	\$462.0	\$508.2	\$508.2	\$508.2	\$554.4	



**APPENDIX B.5
TABLE 1**

**TOWN OF WHITBY
CALCULATION OF SERVICE LEVELS**

BY-LAW ENFORCEMENT

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	122,022	123,267	124,525	125,796	127,080	128,377	130,575	132,810	135,084	136,562
Historic Employment	<u>38,031</u>	<u>38,807</u>	<u>39,602</u>	<u>40,417</u>	<u>41,251</u>	<u>42,107</u>	<u>42,828</u>	<u>43,561</u>	<u>44,307</u>	<u>44,519</u>
Total Historic Population & Employment	160,053	162,074	164,127	166,213	168,331	170,484	173,403	176,371	179,391	181,081

INVENTORY SUMMARY (\$000)

Buildings	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,249.3	\$1,175.7	\$1,175.7
Land	\$547.4	\$547.4	\$547.4	\$547.4	\$547.4	\$547.4	\$547.4	\$547.4	\$509.6	\$509.6
Furniture & Equipment	\$35.0	\$41.7	\$61.5	\$71.2	\$71.2	\$71.2	\$70.4	\$83.0	\$83.0	\$90.2
Vehicles	\$323.4	\$369.6	\$415.8	\$415.8	\$415.8	\$462.0	\$462.0	\$508.2	\$508.2	\$554.4
Total (\$000)	\$2,155.0	\$2,208.0	\$2,274.0	\$2,283.7	\$2,283.7	\$2,329.9	\$2,329.1	\$2,387.9	\$2,276.5	\$2,329.9

Average
Service
Level

SERVICE LEVEL (\$/pop+empl)

Buildings	\$7.81	\$7.71	\$7.61	\$7.52	\$7.42	\$7.33	\$7.20	\$7.08	\$6.55	\$6.49	\$7.27
Land	\$3.42	\$3.38	\$3.34	\$3.29	\$3.25	\$3.21	\$3.16	\$3.10	\$2.84	\$2.81	\$3.18
Furniture & Equipment	\$0.22	\$0.26	\$0.37	\$0.43	\$0.42	\$0.42	\$0.41	\$0.47	\$0.46	\$0.50	\$0.40
Vehicles	\$2.02	\$2.28	\$2.53	\$2.50	\$2.47	\$2.71	\$2.66	\$2.88	\$2.83	\$3.06	\$2.60
Total (\$/pop+empl)	\$13.46	\$13.62	\$13.86	\$13.74	\$13.57	\$13.67	\$13.43	\$13.54	\$12.69	\$12.87	\$13.44

**TOWN OF WHITBY
CALCULATION OF MAXIMUM ALLOWABLE**

BY-LAW ENFORCEMENT

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$13.44
Net Population and Employment Growth 2021 - 2030	59,841
Maximum Allowable Funding Envelope	\$804,268

APPENDIX B.5
TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
BY-LAW ENFORCEMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
5.0 BY-LAW ENFORCEMENT										
Building, Furniture and Land ⁽¹⁾										
71291401 WAS - F10 Building Expansion	2030 - 2030	\$ 787,500	\$ 133,875	\$ 653,625	0%	\$ -	\$ 653,625	\$ -	\$ 206,675	\$ 446,950
71211132 WAS - F1040 Kennel Renovation & Addition	2021 - 2021	\$ 567,000	\$ 96,390	\$ 470,610	34%	\$ 160,988	\$ 309,623	\$ 13,429	\$ 296,193	\$ -
Subtotal Building, Furniture and Land		\$ 1,354,500	\$ 230,265	\$ 1,124,235		\$ 160,988	\$ 963,248	\$ 13,429	\$ 502,868	\$ 446,950
Legal and Enforcement Services Fleet and Equipment										
54212901 BYLW - Ballistic Vests (additional)	2021 - 2027	\$ 7,200	\$ -	\$ 7,200	0%	\$ -	\$ 7,200	\$ -	\$ 7,200	\$ -
54212001 BYLW - Vehicle and Equipment (additional)	2022 - 2022	\$ 45,000	\$ -	\$ 45,000	0%	\$ -	\$ 45,000	\$ -	\$ 45,000	\$ -
54232002 BYLW - Vehicle and Equipment (additional)	2023 - 2023	\$ 45,000	\$ -	\$ 45,000	0%	\$ -	\$ 45,000	\$ -	\$ 45,000	\$ -
54272001 BYLW - Vehicle with Equipment (additional)	2027 - 2027	\$ 45,000	\$ -	\$ 45,000	0%	\$ -	\$ 45,000	\$ -	\$ 45,000	\$ -
54218001 Parking Ballistic Vest (Additional)	2021 - 2026	\$ 7,200	\$ -	\$ 7,200	0%	\$ -	\$ 7,200	\$ -	\$ 7,200	\$ -
54212002 Parking Vehicle & Equipment (additional)	2021 - 2021	\$ 51,000	\$ -	\$ 51,000	0%	\$ -	\$ 51,000	\$ -	\$ 51,000	\$ -
54262001 Parking Vehicle & Equipment (additional)	2026 - 2026	\$ 51,000	\$ -	\$ 51,000	0%	\$ -	\$ 51,000	\$ -	\$ 51,000	\$ -
54232001 WAS - Van with Equipment (additional)	2023 - 2023	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
Subtotal Legal and Enforcement Services Fleet and Equipment		\$ 301,400	\$ -	\$ 301,400		\$ -	\$ 301,400	\$ -	\$ 301,400	\$ -
TOTAL BY-LAW ENFORCEMENT		\$ 1,655,900	\$ 230,265	\$ 1,425,635		\$ 160,988	\$ 1,264,648	\$ 13,429	\$ 804,268	\$ 446,950

(1) Other Recoveries include a share of Town of Ajax's use of the facility (approximately 17% of the total space).

Residential Development Charge Calculation		
Residential Share of 2021 - 2030 DC Eligible Costs	77.0%	\$619,531
10-Year Growth in Population in New Units		58,344
Unadjusted Development Charge Per Capita		\$10.62
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	9.6%	\$77,505
10-Year Growth in Square Metres		244,563
Unadjusted Development Charge Per Square Metre		\$0.32
<i>Industrial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	7.9%	\$63,644
10-Year Growth in Square Metres		719,229
Unadjusted Development Charge Per Square Metre		\$0.09
<i>Institutional</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	5.4%	\$43,587
10-Year Growth in Square Metres		246,288
Unadjusted Development Charge Per Square Metre		\$0.18

2021 - 2030 Net Funding Envelope	\$804,268
Reserve Fund Balance	
Balance as at December 31, 2020	\$13,429



APPENDIX B.5

TABLE 3

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 BY-LAW ENFORCEMENT
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

BY-LAW ENFORCEMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$10.3	(\$231.0)	(\$243.2)	(\$301.1)	(\$278.5)	(\$253.2)	(\$270.5)	(\$206.6)	(\$89.1)	\$44.2	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$10.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.3
- By-Law Enforcement: Non Inflated	\$271.6	\$34.7	\$77.3	\$0.0	\$0.0	\$40.7	\$36.1	\$0.0	\$0.0	\$159.2	\$619.5
- By-Law Enforcement: Inflated	\$281.9	\$35.4	\$80.5	\$0.0	\$0.0	\$44.9	\$40.6	\$0.0	\$0.0	\$190.3	\$673.5
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	3,996	3,012	3,057	3,107	3,155	3,232	8,972	9,440	9,928	10,444	58,344
REVENUE											
- DC Receipts: Inflated	\$46.7	\$35.9	\$37.1	\$38.5	\$39.9	\$41.7	\$118.0	\$126.6	\$135.8	\$145.8	\$766.0
INTEREST											
- Interest on Opening Balance	\$0.4	(\$12.7)	(\$13.4)	(\$16.6)	(\$15.3)	(\$13.9)	(\$14.9)	(\$11.4)	(\$4.9)	\$1.5	(\$101.1)
- Interest on In-year Transactions	(\$6.5)	\$0.0	(\$1.2)	\$0.7	\$0.7	(\$0.1)	\$1.4	\$2.2	\$2.4	(\$1.2)	(\$1.6)
TOTAL REVENUE	\$40.6	\$23.2	\$22.6	\$22.6	\$25.3	\$27.7	\$104.5	\$117.5	\$133.3	\$146.1	\$663.2
CLOSING CASH BALANCE	(\$231.0)	(\$243.2)	(\$301.1)	(\$278.5)	(\$253.2)	(\$270.5)	(\$206.6)	(\$89.1)	\$44.2	\$0.0	

2021 Adjusted Charge Per Capita	\$11.68
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Allocation of Capital Program	
Residential Sector	77.0%
Non-Residential Sector	23.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.5

TABLE 3

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 BY-LAW ENFORCEMENT
 COMMERCIAL DEVELOPMENT CHARGE
 (in \$000)

BY-LAW ENFORCEMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$1.29	(\$34.03)	(\$34.04)	(\$39.30)	(\$31.75)	(\$23.22)	(\$19.31)	(\$14.01)	(\$2.56)	\$10.25	
2021 - 2030 COMMERCIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$1.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.3
- By-Law Enforcement: Non Inflated	\$34.0	\$4.3	\$9.7	\$0.0	\$0.0	\$5.1	\$4.5	\$0.0	\$0.0	\$19.9	\$77.5
- By-Law Enforcement: Inflated	\$35.3	\$4.4	\$10.1	\$0.0	\$0.0	\$5.6	\$5.1	\$0.0	\$0.0	\$23.8	\$84.3
NEW COMMERCIAL DEVELOPMENT											
- Growth in Square Metres	2,460	17,809	18,910	26,128	27,113	28,201	29,249	30,377	31,551	32,765	244,563
REVENUE											
- DC Receipts: Inflated	\$0.8	\$6.3	\$6.8	\$9.5	\$10.1	\$10.7	\$11.3	\$12.0	\$12.7	\$13.5	\$93.8
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.9)	(\$1.9)	(\$2.2)	(\$1.7)	(\$1.3)	(\$1.1)	(\$0.8)	(\$0.1)	\$0.4	(\$10.5)
- Interest on In-year Transactions	(\$0.9)	\$0.0	(\$0.1)	\$0.2	\$0.2	\$0.1	\$0.1	\$0.2	\$0.2	(\$0.3)	(\$0.3)
TOTAL REVENUE	(\$0.1)	\$4.4	\$4.8	\$7.5	\$8.5	\$9.5	\$10.4	\$11.4	\$12.8	\$13.6	\$83.0
CLOSING CASH BALANCE	(\$34.0)	(\$34.0)	(\$39.3)	(\$31.8)	(\$23.2)	(\$19.3)	(\$14.0)	(\$2.6)	\$10.3	(\$0.0)	

2021 Adjusted Charge Per Square Metre	\$0.34
---------------------------------------	--------

Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.5

TABLE 3

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 BY-LAW ENFORCEMENT
 INDUSTRIAL DEVELOPMENT CHARGE
 (in \$000)

BY-LAW ENFORCEMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$1.06	(\$24.21)	(\$16.15)	(\$11.98)	(\$7.36)	(\$2.27)	(\$1.40)	\$0.19	\$6.34	\$12.94	
2021 - 2030 INDUSTRIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$1.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.1
- By-Law Enforcement: Non Inflated	\$27.9	\$3.6	\$7.9	\$0.0	\$0.0	\$4.2	\$3.7	\$0.0	\$0.0	\$16.4	\$63.6
- By-Law Enforcement: Inflated	\$29.0	\$3.6	\$8.3	\$0.0	\$0.0	\$4.6	\$4.2	\$0.0	\$0.0	\$19.5	\$69.2
INDUSTRIAL SPACE GROWTH											
- Growth in Square Metres	47,361	137,723	139,080	53,425	54,480	55,320	56,400	57,480	58,440	59,520	719,229
REVENUE											
- DC Receipts: Inflated	\$4.3	\$12.9	\$13.2	\$5.2	\$5.4	\$5.6	\$5.8	\$6.0	\$6.3	\$6.5	\$71.2
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.3)	(\$0.9)	(\$0.7)	(\$0.4)	(\$0.1)	(\$0.1)	\$0.0	\$0.2	\$0.5	(\$2.8)
- Interest on In-year Transactions	(\$0.7)	\$0.2	\$0.1	\$0.1	\$0.1	\$0.0	\$0.0	\$0.1	\$0.1	(\$0.4)	(\$0.3)
TOTAL REVENUE	\$3.7	\$11.7	\$12.4	\$4.6	\$5.1	\$5.5	\$5.8	\$6.2	\$6.6	\$6.6	\$68.1
CLOSING CASH BALANCE	(\$24.2)	(\$16.2)	(\$12.0)	(\$7.4)	(\$2.3)	(\$1.4)	\$0.2	\$6.3	\$12.9	\$0.0	

2021 Adjusted Charge Per Square Metre	\$0.09
---------------------------------------	--------

Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.5

TABLE 3

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 BY-LAW ENFORCEMENT
 INSTITUTIONAL DEVELOPMENT CHARGE
 (in \$000)

BY-LAW ENFORCEMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.73	(\$19.45)	(\$22.84)	(\$29.53)	(\$24.73)	(\$19.24)	(\$16.20)	(\$12.20)	(\$4.56)	\$4.07	
2021 - 2030 INSTITUTIONAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$0.73	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.7
- By-Law Enforcement: Non Inflated	\$19.1	\$2.4	\$5.4	\$0.0	\$0.0	\$2.9	\$2.5	\$0.0	\$0.0	\$11.2	\$43.6
- By-Law Enforcement: Inflated	\$19.8	\$2.5	\$5.7	\$0.0	\$0.0	\$3.2	\$2.9	\$0.0	\$0.0	\$13.4	\$47.4
INSITUTIONAL SPACE GROWTH											
- Growth in Square Metres	900	1,140	1,800	30,168	31,560	33,000	34,500	36,060	37,740	39,420	246,288
REVENUE											
- DC Receipts: Inflated	\$0.2	\$0.2	\$0.4	\$6.3	\$6.7	\$7.2	\$7.7	\$8.2	\$8.7	\$9.3	\$54.9
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.1)	(\$1.3)	(\$1.6)	(\$1.4)	(\$1.1)	(\$0.9)	(\$0.7)	(\$0.3)	\$0.1	(\$8.0)
- Interest on In-year Transactions	(\$0.5)	(\$0.1)	(\$0.1)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2	(\$0.1)	(\$0.2)
TOTAL REVENUE	(\$0.3)	(\$0.9)	(\$1.0)	\$4.8	\$5.5	\$6.2	\$6.9	\$7.6	\$8.6	\$9.3	\$46.7
CLOSING CASH BALANCE	(\$19.4)	(\$22.8)	(\$29.5)	(\$24.7)	(\$19.2)	(\$16.2)	(\$12.2)	(\$4.6)	\$4.1	\$0.0	

2021 Adjusted Charge Per Square Metre \$0.20

Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.6

Development Related Studies

The DCA allows the cost of development-related studies to be included in the calculation of the development charges as long as they are permitted under the legislation.

Table 1 2021–2030 Development-Related Capital Program and Calculation of the “Unadjusted” Development Charges

As shown on Table 1, the 2021–2030 development-related gross cost for administration is \$7.47 million. The program includes for the recovery of a number of development-related studies relating to Corporate, Administrative, Planning and Development, Sustainability and Downtown related. An overview of these categories is provided below:

- **Corporate Services Studies and Initiatives** - DC Study Preparation, Growth Plan – DC Study, Long Range Financial Plan and Long Range Financial Plan Annual Update. The only study with no BTE share is the DC study, while the Growth Plan is 25% benefit to existing and the Long Range Financial Plan is 50% benefit to existing.
- **Administrative Studies and Initiatives** - Digital Strategy, GIS Master Plan, Economic Development Strategy Update, Information Technology Master Plan, Ward Boundary Review and Workforce Planning Study. Most studies in this category are assigned an 75% BTE based on the growth share of population and employment, with the exception of the Economic development Strategy Update and the Ward Boundary Review which are more growth-related and therefore are assigned a 50% benefit to existing share.
- **Planning and Development Studies** - Comprehensive Zoning By-law and Official Plan (Major and Minor) all have a 20% BTE.
- **Sustainability Program** - Corporate Sustainability Plan Update and Sustainable Development Guidelines Update.

- **Downtown Related Studies** - Secondary Plans, Community Improvement Plans, Urban Design Studies, Zoning By-law Reviews etc. have a 50% BTE share assigned.
- **Provision for Future Growth-Related Studies** – Includes roughly \$200,000 per annum for growth-related studies that have not been identified in the capital program. No BTE share is assigned to these projects.

No grant, subsidies or other recoveries have been identified for this service. In total, an amount of \$1.72 million is considered to a benefit to existing share and is removed from the total development charge eligible costs. The available DC reserves of \$783,000 has been applied to projects occurring in the earlier years of the capital program. After these adjustments, the remaining amount of \$4.97 million is eligible for development charges funding in the ten-year planning period. This amount is included in the development charge calculation.

The total costs eligible for DC recovery amounts to \$4.97 million and is allocated 77 per cent, or \$3.83 million to the residential sector, 9.6 per cent, or \$479,266 to the commercial sector, 7.9 per cent, or \$393,551, to the industrial sector and 5.4 per cent, or \$269,529, to the institutional sector based on shares of ten-year growth in population in new units and employment. The resulting unadjusted per capita residential charge is \$65.66 before cash flow adjustments and non-residential unadjusted development charges as follows:

- **Commercial** = \$1.96 per square metre
- **Industrial** = \$0.55 per square metre
- **Institutional** = \$1.09 per square metre

A. Table 2 Cash Flow Analysis

The cash-flow analysis is displayed in Table 2 and considers the timing of the development charges revenues to determine the adjusted rates. The following table summarizes the calculation of the Development Related Studies Service development charges.

DEVELOPMENT RELATED STUDIES SUMMARY					
2021 - 2030		Unadjusted			
Development-Related Capital Program		Residential	Commercial	Industrial	Institutional
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
\$7,474,350	\$5,756,335	\$65.66	\$1.96	\$0.55	\$1.09
		Adjusted			
		Residential	Commercial	Industrial	Institutional
		\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
		\$63.69	\$1.91	\$0.52	\$1.07

APPENDIX B.6

TABLE 1

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
DEVELOPMENT RELATED STUDIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
6.0 DEVELOPMENT RELATED STUDIES										
Corporate Services Studies and Initiatives										
13227001 DC Study Prep - Facility Replacement Cost Analysis	2022 - 2028	\$ 141,000	\$ -	\$ 141,000	0%	\$ -	\$ 141,000	\$ 141,000	\$ -	\$ -
13237001 Growth Plan - DC Study, Long Range Financial Plan	2023 - 2029	\$ 780,000	\$ -	\$ 780,000	25%	\$ 195,000	\$ 585,000	\$ -	\$ 585,000	\$ -
13197001 Long Range Financial Plan Annual Update	2021 - 2030	\$ 103,000	\$ -	\$ 103,000	50%	\$ 51,500	\$ 51,500	\$ 51,500	\$ -	\$ -
Subtotal Corporate Services Studies and Initiatives		\$ 1,024,000	\$ -	\$ 1,024,000		\$ 246,500	\$ 777,500	\$ 192,500	\$ 585,000	\$ -
Administrative Studies and Initiatives										
10247001 Digital Strategy	2021 - 2030	\$ 211,800	\$ -	\$ 211,800	75%	\$ 159,192	\$ 52,608	\$ 5,261	\$ 47,347	\$ -
10227001 GIS Master Plan	2023 - 2023	\$ 50,000	\$ -	\$ 50,000	75%	\$ 37,581	\$ 12,419	\$ 12,419	\$ -	\$ -
55207501 Economic Development Strategy Update	2025 - 2025	\$ 100,000	\$ -	\$ 100,000	50%	\$ 50,000	\$ 50,000	\$ 50,000	\$ -	\$ -
10247002 Informational Technology Master Plan	2021 - 2030	\$ 422,250	\$ -	\$ 422,250	75%	\$ 317,370	\$ 104,880	\$ 10,488	\$ 94,392	\$ -
51237001 Ward Boundary Review	2023 - 2023	\$ 61,800	\$ -	\$ 61,800	50%	\$ 30,900	\$ 30,900	\$ 30,900	\$ -	\$ -
50217001 Workforce Planning Study	2022 - 2022	\$ 200,000	\$ -	\$ 200,000	75%	\$ 150,323	\$ 49,677	\$ 49,677	\$ -	\$ -
Subtotal Administrative Studies and Initiatives		\$ 1,045,850	\$ -	\$ 1,045,850		\$ 745,365	\$ 300,485	\$ 158,745	\$ 141,740	\$ -
Planning and Development Studies										
81287201 Official Plan (Major Review)	2028 - 2029	\$ 2,060,000	\$ -	\$ 2,060,000	20%	\$ 412,000	\$ 1,648,000	\$ -	\$ 1,648,000	\$ -
81227201 Official Plan (Minor Review)	2022 - 2024	\$ 515,000	\$ -	\$ 515,000	20%	\$ 103,000	\$ 412,000	\$ 206,000	\$ 206,000	\$ -
81297201 Zoning By-Law Update	2029 - 2029	\$ 412,000	\$ -	\$ 412,000	20%	\$ 82,400	\$ 329,600	\$ -	\$ 329,600	\$ -
Subtotal Planning and Development Studies		\$ 2,987,000	\$ -	\$ 2,987,000		\$ 597,400	\$ 2,389,600	\$ 206,000	\$ 2,183,600	\$ -

APPENDIX B.6
TABLE 1

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
DEVELOPMENT RELATED STUDIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
Sustainability Program										
55227602 Corporate Sustainability Plan Update	2022 - 2022	\$ 60,000	\$ -	\$ 60,000	0%	\$ -	\$ 60,000	\$ 60,000	\$ -	\$ -
55237602 Sustainable Development Guidelines Update	2023 - 2028	\$ 100,000	\$ -	\$ 100,000	0%	\$ -	\$ 100,000	\$ 37,028	\$ 62,972	\$ -
Subtotal Sustainability Program		\$ 160,000	\$ -	\$ 160,000		\$ -	\$ 160,000	\$ 97,028	\$ 62,972	\$ -
Downtown Related Studies										
81227401 Brooklin HCD Plan and Guidelines Update	2023 - 2023	\$ 51,500	\$ -	\$ 51,500	50%	\$ 25,750	\$ 25,750	\$ 25,750	\$ -	\$ -
81247401 Downtown Whitby Four Corners HCD Plan and Guidelines	2024 - 2024	\$ 103,000	\$ -	\$ 103,000	50%	\$ 51,500	\$ 51,500	\$ 51,500	\$ -	\$ -
81217401 Downtown Whitby Perry's Plan HCD Plan and Guidelines	2022 - 2022	\$ 103,000	\$ -	\$ 103,000	50%	\$ 51,500	\$ 51,500	\$ 51,500	\$ -	\$ -
Subtotal Downtown Related Studies		\$ 257,500	\$ -	\$ 257,500		\$ 128,750	\$ 128,750	\$ 128,750	\$ -	\$ -
Provision for Future Growth-Related Studies										
6.1.1 Provision for Future Growth Related Studies	2030 - 2030	\$ 2,000,000	\$ -	\$ 2,000,000	0%	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -
Subtotal Provision for Future Growth-Related Studies		\$ 2,000,000	\$ -	\$ 2,000,000		\$ -	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -
TOTAL DEVELOPMENT RELATED STUDIES		\$ 7,474,350	\$ -	\$ 7,474,350		\$ 1,718,015	\$ 5,756,335	\$ 783,023	\$ 4,973,312	\$ -

Residential Development Charge Calculation		
Residential Share of 2021 - 2030 DC Eligible Costs	77.0%	\$3,830,965
10-Year Growth in Population in New Units		58,344
Unadjusted Development Charge Per Capita		\$65.66
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	9.6%	\$479,266
10-Year Growth in Square Metres		244,563
Unadjusted Development Charge Per Square Metre		\$1.96
<i>Industrial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	7.9%	\$393,551
10-Year Growth in Square Metres		719,229
Unadjusted Development Charge Per Square Metre		\$0.55
<i>Institutional</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	5.4%	\$269,529
10-Year Growth in Square Metres		246,288
Unadjusted Development Charge Per Square Metre		\$1.09

Reserve Fund Balance	
Balance as at December 31, 2020	\$783,023



APPENDIX B.6

TABLE 2

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 DEVELOPMENT RELATED STUDIES
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

DEVELOPMENT RELATED STUDIES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$603.2	\$852.1	\$877.5	\$679.9	\$706.2	\$865.5	\$953.9	\$1,601.4	\$1,525.0	\$1,084.2	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$6.6	\$180.2	\$152.6	\$108.1	\$78.7	\$4.0	\$7.1	\$54.4	\$4.0	\$7.4	\$603.2
- Development Related Studies: Non Inflated	\$23.9	\$15.9	\$255.7	\$87.5	\$0.0	\$150.2	\$28.4	\$659.0	\$1,038.8	\$1,571.6	\$3,831.0
- Development Related Studies: Inflated	\$30.6	\$200.0	\$424.8	\$207.6	\$85.2	\$170.2	\$40.0	\$819.5	\$1,221.8	\$1,887.1	\$5,086.7
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	3,996	3,012	3,057	3,107	3,155	3,232	8,972	9,440	9,928	10,444	58,344
REVENUE											
- DC Receipts: Inflated	\$254.5	\$195.7	\$202.6	\$210.0	\$217.5	\$227.3	\$643.5	\$690.6	\$740.8	\$795.0	\$4,177.5
INTEREST											
- Interest on Opening Balance	\$21.1	\$29.8	\$30.7	\$23.8	\$24.7	\$30.3	\$33.4	\$56.0	\$53.4	\$37.9	\$341.2
- Interest on In-year Transactions	\$3.9	(\$0.1)	(\$6.1)	\$0.0	\$2.3	\$1.0	\$10.6	(\$3.5)	(\$13.2)	(\$30.0)	(\$35.2)
TOTAL REVENUE	\$279.5	\$225.4	\$227.2	\$233.8	\$244.5	\$258.6	\$687.5	\$743.1	\$781.0	\$802.9	\$4,483.5
CLOSING CASH BALANCE	\$852.1	\$877.5	\$679.9	\$706.2	\$865.5	\$953.9	\$1,601.4	\$1,525.0	\$1,084.2	\$0.0	

2021 Adjusted Charge Per Capita	\$63.69
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Allocation of Capital Program	
Residential Sector	77.0%
Non-Residential Sector	23.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.6

TABLE 2

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 DEVELOPMENT RELATED STUDIES
 COMMERCIAL DEVELOPMENT CHARGE
 (in \$000)

DEVELOPMENT RELATED STUDIES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$75.46	\$2.31	\$35.55	\$41.09	\$84.48	\$144.35	\$188.67	\$255.07	\$235.03	\$159.18	
2021 - 2030 COMMERCIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding form DC Reserve Balance)	\$75.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$75.5
- Development Related Studies: Non Inflated	\$3.0	\$2.0	\$32.0	\$10.9	\$0.0	\$18.8	\$3.6	\$82.4	\$130.0	\$196.6	\$479.3
- Development Related Studies: Inflated	\$78.5	\$2.0	\$33.3	\$11.6	\$0.0	\$20.7	\$4.0	\$94.7	\$152.3	\$235.0	\$632.1
NEW COMMERCIAL DEVELOPMENT											
- Growth in Square Metres	2,460	17,809	18,910	26,128	27,113	28,201	29,249	30,377	31,551	32,765	244,563
REVENUE											
- DC Receipts: Inflated	\$4.7	\$34.6	\$37.5	\$52.8	\$55.9	\$59.3	\$62.8	\$66.5	\$70.5	\$74.6	\$519.3
INTEREST											
- Interest on Opening Balance	\$2.6	\$0.1	\$1.2	\$1.4	\$3.0	\$5.1	\$6.6	\$8.9	\$8.2	\$5.6	\$42.7
- Interest on In-year Transactions	(\$2.0)	\$0.6	\$0.1	\$0.7	\$1.0	\$0.7	\$1.0	(\$0.8)	(\$2.3)	(\$4.4)	(\$5.4)
TOTAL REVENUE	\$5.3	\$35.3	\$38.8	\$55.0	\$59.9	\$65.1	\$70.4	\$74.7	\$76.4	\$75.8	\$556.6
CLOSING CASH BALANCE	\$2.3	\$35.6	\$41.1	\$84.5	\$144.3	\$188.7	\$255.1	\$235.0	\$159.2	\$0.0	

2021 Adjusted Charge Per Square Metre	\$1.91
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Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.6

TABLE 2

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 DEVELOPMENT RELATED STUDIES
 INDUSTRIAL DEVELOPMENT CHARGE
 (in \$000)

DEVELOPMENT RELATED STUDIES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$61.96	\$85.85	\$141.86	\$178.55	\$192.94	\$221.81	\$243.92	\$281.69	\$240.12	\$155.94	
2021 - 2030 INDUSTRIAL FUNDING REQUIREMENTS											
-Prior Growth (Funding form DC Reserve Balance)	\$0.68	\$18.51	\$15.68	\$11.11	\$8.08	\$0.41	\$0.73	\$5.59	\$0.41	\$0.76	\$62.0
- Development Related Studies: Non Inflated	\$2.5	\$1.6	\$26.3	\$9.0	\$0.0	\$15.4	\$2.9	\$67.7	\$106.7	\$161.4	\$393.6
- Development Related Studies: Inflated	\$3.1	\$20.5	\$43.6	\$21.3	\$8.7	\$17.5	\$4.1	\$84.2	\$125.5	\$193.9	\$522.5
INDUSTRIAL SPACE GROWTH											
- Growth in Square Metres	47,361	137,723	139,080	53,425	54,480	55,320	56,400	57,480	58,440	59,520	719,229
REVENUE											
- DC Receipts: Inflated	\$24.5	\$72.6	\$74.8	\$29.3	\$30.5	\$31.6	\$32.8	\$34.1	\$35.4	\$36.8	\$402.5
INTEREST											
- Interest on Opening Balance	\$2.2	\$3.0	\$5.0	\$6.2	\$6.8	\$7.8	\$8.5	\$9.9	\$8.4	\$5.5	\$63.2
- Interest on In-year Transactions	\$0.4	\$0.9	\$0.5	\$0.1	\$0.4	\$0.2	\$0.5	(\$1.4)	(\$2.5)	(\$4.3)	(\$5.1)
TOTAL REVENUE	\$27.0	\$76.6	\$80.3	\$35.7	\$37.6	\$39.6	\$41.9	\$42.6	\$41.3	\$37.9	\$460.6
CLOSING CASH BALANCE	\$85.9	\$141.9	\$178.6	\$192.9	\$221.8	\$243.9	\$281.7	\$240.1	\$155.9	\$0.0	

2021 Adjusted Charge Per Square Metre	\$0.52
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Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.6

TABLE 2

TOWN OF WHITBY
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 DEVELOPMENT RELATED STUDIES
 INSTITUTIONAL DEVELOPMENT CHARGE
 (in \$000)

DEVELOPMENT RELATED STUDIES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$42.44	\$42.70	\$31.01	\$3.44	\$23.48	\$55.31	\$84.64	\$126.94	\$117.58	\$81.87	
2021 - 2030 INSTITUTIONAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.47	\$12.68	\$10.74	\$7.61	\$5.54	\$0.28	\$0.50	\$3.83	\$0.28	\$0.52	\$42.4
- Development Related Studies: Non Inflated	\$1.7	\$1.1	\$18.0	\$6.2	\$0.0	\$10.6	\$2.0	\$46.4	\$73.1	\$110.6	\$269.5
- Development Related Studies: Inflated	\$2.2	\$14.1	\$29.9	\$14.6	\$6.0	\$12.0	\$2.8	\$57.7	\$86.0	\$132.8	\$357.9
INSITUATIONAL SPACE GROWTH											
- Growth in Square Metres	900	1,140	1,800	30,168	31,560	33,000	34,500	36,060	37,740	39,420	246,288
REVENUE											
- DC Receipts: Inflated	\$1.0	\$1.2	\$2.0	\$34.2	\$36.5	\$38.9	\$41.5	\$44.2	\$47.2	\$50.3	\$296.9
INTEREST											
- Interest on Opening Balance	\$1.5	\$1.5	\$1.1	\$0.1	\$0.8	\$1.9	\$3.0	\$4.4	\$4.1	\$2.9	\$21.3
- Interest on In-year Transactions	(\$0.0)	(\$0.4)	(\$0.8)	\$0.3	\$0.5	\$0.5	\$0.7	(\$0.4)	(\$1.1)	(\$2.3)	(\$2.8)
TOTAL REVENUE	\$2.4	\$2.4	\$2.3	\$34.6	\$37.8	\$41.3	\$45.1	\$48.3	\$50.3	\$50.9	\$315.4
CLOSING CASH BALANCE	\$42.7	\$31.0	\$3.4	\$23.5	\$55.3	\$84.6	\$126.9	\$117.6	\$81.9	\$0.0	

2021 Adjusted Charge Per Square Metre	\$1.07
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Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix C
Engineering Services
Technical Appendix

Appendix C.1
Services Related to a Highway:
Public Works

Appendix C.1 – Services Related to a Highway: Operations

The Town of Whitby Operational Division of the Public Works Department is responsible for all roads within the Town, including sidewalks, streetlights, storm sewers and stormwater management ponds, and road and driveway culverts. In addition, the department is also responsible for the winter maintenance of the Town’s roads. As permitted under Section 2(4) of the DCA, Operations services falls under the Services Related to a Highway category.

Table 1 Historical Service Levels

The ten-year historical inventory of capital assets for Operations include 71,258 square feet of building space related to the Town’s Operation Centre (represents the Operations Centre only and is shared with Parks), Maintenance Building, Salt and Sand Domes, a Vehicle Cold Storage Building, and leased facility located at Garden Street. Excess capacity related to the debt associated with the recent 2020 Operations Centre expansion has been reduced from the facilities square footage. In total, the replacement value of these facilities \$12.64 million. The 51.57 hectares of land associated with the Operations buildings are valued at \$11.13 million. In total, approximately \$7.10 million relates to various furniture and equipment including a portion of the communication equipment (i.e. Regional Radio System) shared with Fire Services. Finally, the Operations fleet comprises of 49 vehicles and adds an additional \$7.14 million to the value of the capital assets.

The total value of the Operations capital infrastructure is estimated to be \$38.02 million. The ten-year historical average service level is \$230.10 per capita and employment and this, multiplied by the ten-year forecast of net

population and employment growth, results in a ten-year maximum allowable of \$13.77 million (59,841 net population and employment growth X historical service level of \$230.10).

No uncommitted excess capacity has been identified, and as such, no deductions are made from the funding envelope. The resulting net maximum allowable funding envelope brought forward to the development charges calculation is \$13.77 million.

Table 2 2021 – 2030 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The ten-year development-related capital plan for Operations is comprised of buildings, vehicles and equipment as well as debenture payments for existing facilities. The following provides a brief explanation of the assets included in the capital program:

- **Information Technology - Business Solutions** – relates to the optimization of operations vehicles.
- **Roads, Construction & Storm Water Services Fleet and Equipment** – relates to net new vehicle acquisitions to service roads related and storm water assets. Vehicles include dump trucks, street sweepers, tri-axel trailers, trailer with water pump etc.
- **Traffic Services Fleet and Equipment** - relates to net new vehicle acquisitions to service roads related assets and includes portable radar message boards and traffic signs, sidewalk plow and sander etc.
- **Operations Centre** – include Phase 2 and Phase 3 of expanding the Town’s existing Operations Centre facility. As the facility is, and will continue to be shared with Parks services, only 55 per cent of the total costs have been identified in the Operations capital program, the residual 45 per cent is identified in the Parks & Recreation capital program.

- **Sustainability Program** – relates to the installation of EV charging changes for municipal fleet and can be used by the public during non-work hours.
- **Other Administrative / Operational Facilities** – includes future buildings/structures including a future satellite facility (including land and construction costs), salt dome, sand dome as well as a future Fleet Strategic Master Plan.
- **Existing Debt (Principal 10yr)** – relates to the outstanding debentures associated with the land acquisition and construction of the Operations Centre Expansion (Phase 1).

Altogether, the ten-year capital forecast for Operations amounts to \$20.84 million. No grants, subsidies or other recoveries have been identified and as such, no reductions are made. Approximately \$244,800 has been identified as ineligible costs and are removed from the total DC recoverable share. The ineligible costs, or benefit to existing development include:

- **Special Project - Vehicle Routing Optimization** – 75% based on shares of population and employment growth over the ten-year planning period.
- **EV Joint Venture (Charging Stations)** – 25% for stations used for Town vehicles during off hours.
- **Fleet Strategic Master Plan Update** – 20% to account for existing fleet that will be reviewed as part of the plan.

After these deductions the total DC eligible costs amount to \$20.60 million. Of these eligible costs, \$2.35 million is expected to be funded from the DC reserve balance and \$4.48 million is deemed to benefit as a post-2030 benefit and will be considered in subsequent development charges studies.

The development-related cost is allocated 77%, or \$10.61 million to the residential sector resulting in an unadjusted rate of \$181.80 per capita. A

further, 9.6%, or \$1.33 million to the commercial sector, 7.9%, or \$1.09 to the industrial sector, and 5.4%, or \$746,240, to the institutional sector based on shares of ten-year growth in employment. This yields an unadjusted development charge as follows:

- **Commercial** = \$5.43 per square metre
- **Industrial** = \$1.51 per square metre
- **Institutional** = \$3.03 per square metre

Table 3 Cash Flow Analysis

The following table summarizes the calculation of the Operations development charge.

OPERATIONS SUMMARY					
10-year Hist. Service Level per pop & emp \$230.10		Residential \$/capita \$181.80	Unadjusted Development Charge		
			Commercial \$/sq.m \$5.43	Industrial \$/sq.m \$1.51	Institutional \$/sq.m \$3.03
			Adjusted Development Charge		
2021 - 2030		Residential \$/capita \$200.59	Commercial \$/sq.m \$5.89	Industrial \$/sq.m \$1.57	Institutional \$/sq.m \$3.38
Development-Related Capital Program Total \$20,842,670	Net DC Recoverable \$13,769,494				

APPENDIX C.1
TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
OPERATIONS

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Operations Centre (Operation % Share)	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%		
Operations Centre (share of 64,390 sq.ft.)	35,415	35,415	35,415	35,415	35,415	35,415	35,415	35,415	35,415	35,415	43,271	\$300
<i>Operations Centre Excess Capacity</i>	-	-	-	-	-	-	-	-	-	-	(8,780)	\$300
Maintenance Building	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	\$140
Other Operations Buildings												
Salt & Sand Domes	15,450	15,450	15,450	15,450	15,450	15,450	15,450	15,450	15,450	15,450	15,450	\$42
Vehicle Cold Storage Building	-	-	3,850	3,850	3,850	3,850	3,850	3,850	3,850	3,850	3,850	\$54
3000 Garden Street (Leased - Op. Share)	3,188	3,188	3,188	3,188	3,188	3,188	3,188	3,188	3,188	3,188	3,188	\$210
Total (sq.ft.)	59,552	59,552	63,402	63,402	63,402	63,402	63,402	63,402	63,402	63,402	62,479	
Total (\$000)	\$12,712.7	\$12,712.7	\$12,920.6	\$12,920.6	\$12,920.6	\$12,920.6	\$12,920.6	\$12,920.6	\$12,920.6	\$12,920.6	\$12,643.5	

LAND Station Name	# of Hectares										UNIT COST (\$/ha)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Operations Centre (Operation % Share)	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%		
Operations Centre (share of 6.94 ha) (1)	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	\$ 2,615,900
Other Facilities												
Whitby Gravel Pit	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	\$24,000
Total (ha)	51.57	51.57	51.57	51.57	51.57	51.57	51.57	51.57	51.57	51.57	51.57	
Total (\$000)	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	

(1) Land relating to Salt & Sand Domes and Cold Vehicle Storage Building is included under the Operations Centre Land.

APPENDIX C.1

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
OPERATIONS

FURNITURE AND EQUIPMENT Description	Total Value of Equipment (\$)										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Operation Centre Facility Equipment	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	
Operations Centre	\$715,291	\$715,291	\$715,291	\$715,291	\$715,291	\$715,291	\$715,291	\$715,291	\$715,291	\$715,291	
Regional Radio System	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	
Regional Radio System (Ops Share) (1)	\$296,108	\$296,108	\$296,108	\$296,108	\$493,516	\$493,516	\$572,232	\$572,232	\$572,232	\$572,232	
Misc. Equipment											
FLEE - Fork Lift	1	1	1	1	1	1	1	1	1	1	\$ 61,700
FLEE - HOIST	3	3	3	3	3	3	3	3	3	3	\$ 28,800
FLEE - Crane	1	1	1	1	1	1	1	1	1	1	\$ 34,600
FLEE - Combined Small Equipment	1	1	1	1	1	1	1	1	1	1	\$ 17,300
OPER - Fuel Monitoring System	1	1	1	1	1	1	1	1	1	1	\$ 17,300
OPER - Fuel Pumps	3	3	3	3	3	3	3	3	3	3	\$ 15,400
OPER - Generator	1	1	1	1	1	1	1	1	1	1	\$ 26,500
OPER - Air Compressor	2	2	2	2	2	2	2	2	2	2	\$ 46,100
OPER - Floor Scrubber/Sweeper	1	1	1	1	1	1	1	1	1	1	\$ 74,900
OPER - Hotsy Pressure Washer	2	2	2	2	2	2	2	2	2	2	\$ 23,000
RDSR - Boom Mower	1	1	1	1	1	1	1	1	1	1	\$ 270,100
RDSR - Chipper	1	1	1	1	1	1	1	1	1	1	\$ 129,600
RSDR - Front End Loader	3	3	3	3	3	2	2	2	2	2	\$ 324,100
RDSR - Gradall	1	1	1	1	1	1	1	1	1	1	\$ 388,900

1 Radion System is shared between Operations & Fire Services.

APPENDIX C.1
TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
OPERATIONS

FURNITURE AND EQUIPMENT CONT. Description	Total Value of Equipment (\$)										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
RDSR - Grader	1	1	1	1	1	1	1	1	1	1	\$ 432,100
RDSR - Grader V-Plow	1	1	1	1	1	1	1	1	1	1	\$ 23,000
RDSR - Hotsy Pressuer Waster	1	1	1	1	1	1	1	1	1	1	\$ 23,000
RDSR - Patcher Trailer	1	1	1	1	1	1	1	1	1	1	\$ 86,400
RDSR - Snow Blower	1	1	1	1	1	1	1	1	1	1	\$ 205,800
RDSR - Tractor	1	1	1	1	1	1	1	1	1	1	\$ 161,500
RDSR - Wobble Wheel Compactor	1	1	1	1	1	1	1	1	1	1	\$ 51,400
RDSU - 2 Ton Compaction Roller	1	1	1	1	1	1	1	1	1	1	\$ 30,900
RDSU - Backhoe	1	1	1	1	1	1	1	1	1	1	\$ 164,600
RDSU - Compressor	1	1	1	1	1	1	1	1	1	1	\$ 34,600
RDSU - Debris Vacuum	2	2	2	2	2	2	2	2	2	2	\$ 77,200
RDSU - Tandem Trailer	4	4	4	4	4	4	4	4	4	4	\$ 20,600
RDSU - John Deere Gator	1	1	1	1	1	1	1	1	1	1	\$ 23,000
RDSU - Skid Steer Loader	1	1	1	1	1	1	1	1	1	1	\$ 92,600
TRAF - Arrow Boards	3	3	3	3	3	3	3	3	3	3	\$ 11,500
TRAF - Tandem Trailer	2	2	2	2	2	2	2	2	2	2	\$ 25,700
TRAF - Pavement Marker	2	2	2	2	2	2	2	2	2	2	\$ 10,300
TRAF - Portable Vacuum	1	1	1	1	1	1	1	1	1	1	\$ 123,500
TRAF - Sidewalk Plow (Bombardier)	10	10	7	7	7	5	5	5	5	5	\$ 195,500
TRAF - Sidewalk Plow - Tractors (Replaced Bom	3	3	7	7	7	7	7	7	7	7	\$ 61,700
TRAF - Sidewalk Plower and Sander	1	1	2	2	2	-	-	-	-	-	\$ 195,500
TRAF - Trackless Sidewalk Snow Plow	3	3	3	3	3	3	3	3	3	3	\$ 195,500
ROADS - Arrow Boards	1	1	1	1	1	1	1	1	1	1	\$ 11,500
ROADS - Portable Traffic Signs	-	-	-	2	2	2	2	2	2	2	\$ 26,500
ROADS - Combined Small Equipment	1	1	1	1	1	1	1	1	1	1	\$ 17,300
Total (#)	67	67	69	71	71	66	66	66	66	66	
Total (\$000)	\$8,022.0	\$8,022.0	\$7,877.8	\$7,930.8	\$8,128.2	\$7,022.1	\$7,100.8	\$7,100.8	\$7,100.8	\$7,100.8	

APPENDIX C.1

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
OPERATIONS

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
CONS - 1/2 Ton Truck	-	3	3	3	3	3	3	3	3	3	\$46,300
STRM - 3/4 Ton Truck	-	1	1	1	1	1	1	1	1	1	\$45,900
FLEE - 3/4 Ton Truck (utility body)	1	1	1	1	1	1	1	1	1	1	\$97,200
OPER - 1/2 Ton Truck	5	5	5	5	5	5	5	5	5	5	\$46,300
OPER - Hybrid SUV	1	1	1	1	1	1	1	1	1	1	\$51,900
RDSR - Truck 1/2 Ton	5	5	5	6	6	3	3	3	3	3	\$46,300
RDSR - Single Axle Dump with Plow/Wing	3	3	3	3	3	4	4	4	4	4	\$270,100
RDSR - Tandem Dump with Plow and Wing	8	8	8	8	8	6	6	6	6	6	\$324,100
RDSR - Water Truck	1	1	1	1	1	1	1	1	1	1	\$270,100
RDSR - 1 Ton Dump Truck	1	1	1	1	1	1	1	1	1	1	\$81,000
RDSR - 1 Ton With Lift Gate	1	1	1	1	1	1	1	1	1	1	\$81,000
RDSU - Truck 1/2 ton	4	4	4	4	4	4	4	4	4	4	\$46,300
RDSU -1 ton Dump Truck with Crane	1	1	1	1	1	1	1	1	1	1	\$97,200
RDSU -1 ton Dump Truck	2	2	2	2	2	3	3	3	3	3	\$81,000
RDSU - 2 Ton Dump with plow/sander	1	1	1	1	1	1	1	1	1	1	\$129,600
RDSU - 3/4 Ton Truck	1	1	2	2	2	2	2	2	2	2	\$54,000
RDSU - Cab/Chassis for Hot Patcher	1	1	1	1	1	1	1	1	1	1	\$231,500
RDSU - Cube Van	1	1	1	1	1	1	1	1	1	1	\$118,800
RDSU - Sewer Cleaner	1	1	1	1	1	1	1	1	1	1	\$594,200
RDSU - Single Axle Dump with Plow/Wing	1	1	1	1	1	-	-	-	-	-	\$257,200
RDSU - Street Sweeper	1	1	1	1	1	2	2	2	2	2	\$356,500
RDSU - Truck with Van Body	1	1	1	1	1	1	1	1	1	1	\$113,200
TRAF- 1Ton Utility	1	1	1	1	1	1	1	1	1	1	\$97,200
TRAF -2 Ton Truck with Crane	4	4	4	4	4	1	1	1	1	1	\$129,600
TRAF - Truck 1/2 Ton	5	5	5	5	5	1	1	1	1	1	\$46,300
TRAF - 3/4 Ton Truck	-	-	-	1	1	1	1	1	1	1	\$54,000
TRAF - Truck with Van Body	1	1	1	1	1	1	1	1	1	1	\$118,800
Total (#)	52	56	57	59	59	49	49	49	49	49	
Total (\$000)	\$7,712.6	\$7,897.4	\$7,951.4	\$8,051.7	\$8,051.7	\$7,141.0	\$7,141.0	\$7,141.0	\$7,141.0	\$7,141.0	



APPENDIX C.1

TABLE 1

**TOWN OF WHITBY
CALCULATION OF SERVICE LEVELS
OPERATIONS**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	122,022	123,267	124,525	125,796	127,080	128,377	130,575	132,810	135,084	136,562
Historic Employment	<u>38,031</u>	<u>38,807</u>	<u>39,602</u>	<u>40,417</u>	<u>41,251</u>	<u>42,107</u>	<u>42,828</u>	<u>43,561</u>	<u>44,307</u>	<u>44,519</u>
Total Historic Population & Employment	160,053	162,074	164,127	166,213	168,331	170,484	173,403	176,371	179,391	181,081

INVENTORY SUMMARY (\$000)

Buildings	\$12,712.7	\$12,712.7	\$12,920.6	\$12,920.6	\$12,920.6	\$12,920.6	\$12,920.6	\$12,920.6	\$12,920.6	\$12,643.5
Land	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5	\$11,131.5
Furniture And Equipment	\$8,022.0	\$8,022.0	\$7,877.8	\$7,930.8	\$8,128.2	\$7,022.1	\$7,100.8	\$7,100.8	\$7,100.8	\$7,100.8
Vehicles	\$7,712.6	\$7,897.4	\$7,951.4	\$8,051.7	\$8,051.7	\$7,141.0	\$7,141.0	\$7,141.0	\$7,141.0	\$7,141.0
Total (\$000)	\$39,578.7	\$39,763.5	\$39,881.2	\$40,034.5	\$40,231.9	\$38,215.1	\$38,293.9	\$38,293.9	\$38,293.9	\$38,016.8

SERVICE LEVEL (\$/pop+empl)

											Average Service Level
Buildings	\$79.43	\$78.44	\$78.72	\$77.73	\$76.76	\$75.79	\$74.51	\$73.26	\$72.02	\$69.82	\$75.65
Land	\$69.55	\$68.68	\$67.82	\$66.97	\$66.13	\$65.29	\$64.19	\$63.11	\$62.05	\$61.47	\$65.53
Furniture And Equipment	\$50.12	\$49.50	\$48.00	\$47.71	\$48.29	\$41.19	\$40.95	\$40.26	\$39.58	\$39.21	\$44.48
Vehicles	\$48.19	\$48.73	\$48.45	\$48.44	\$47.83	\$41.89	\$41.18	\$40.49	\$39.81	\$39.44	\$44.44
Total (\$/pop+empl)	\$247.28	\$245.34	\$242.99	\$240.86	\$239.00	\$224.16	\$220.84	\$217.12	\$213.47	\$209.94	\$230.10

**TOWN OF WHITBY
CALCULATION OF MAXIMUM ALLOWABLE**

OPERATIONS

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$230.10
Net Population & Employment Growth 2021 - 2030	59,841
Maximum Allowable Funding Envelope	\$13,769,494

APPENDIX C.1

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
OPERATIONS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
1.0 OPERATIONS										
Information Technology - Business Solutions										
10245601 Special Project - Vehicle Routing Optimization	2023 - 2028	\$ 206,000	\$ -	\$ 206,000	75%	\$ 154,833	\$ 51,167	\$ -	\$ 51,167	\$ -
Subtotal Information Technology - Business Solutions		\$ 206,000	\$ -	\$ 206,000		\$ 154,833	\$ 51,167	\$ -	\$ 51,167	\$ -
Roads, Construction & Storm Water Services Fleet and Equipment										
30222102 RDSR - 1 Ton Truck with Dump (additional)	2022 - 2022	\$ 80,500	\$ -	\$ 80,500	0%	\$ -	\$ 80,500	\$ -	\$ 80,500	\$ -
30252105 RDSR - 1 Ton Truck with Dump (additional)	2027 - 2027	\$ 80,500	\$ -	\$ 80,500	0%	\$ -	\$ 80,500	\$ -	\$ 80,500	\$ -
30292008 RDSR - 1/2 Ton Pickup Truck (additional)	2029 - 2029	\$ 46,000	\$ -	\$ 46,000	0%	\$ -	\$ 46,000	\$ -	\$ -	\$ 46,000
30272105 RDSR - 4x4 Truck with Plow (additional)	2027 - 2027	\$ 64,500	\$ -	\$ 64,500	0%	\$ -	\$ 64,500	\$ -	\$ -	\$ 64,500
30262006 RDSR - Extended Cab Pickup (additional)	2026 - 2026	\$ 46,000	\$ -	\$ 46,000	0%	\$ -	\$ 46,000	\$ -	\$ 46,000	\$ -
30250401 RDSR - Front End Loader (additional)	2025 - 2025	\$ 322,000	\$ -	\$ 322,000	0%	\$ -	\$ 322,000	\$ -	\$ 322,000	\$ -
30252102 RDSR - Hook Lift with 3 bodies (additional)	2025 - 2025	\$ 183,000	\$ -	\$ 183,000	0%	\$ -	\$ 183,000	\$ -	\$ 183,000	\$ -
30160904 RDSR - Single Axle Dump Truck (additional)	2021 - 2021	\$ 268,000	\$ -	\$ 268,000	0%	\$ -	\$ 268,000	\$ -	\$ 268,000	\$ -
30292103 RDSR - Single Axle Dump Truck (additional)	2029 - 2029	\$ 268,000	\$ -	\$ 268,000	0%	\$ -	\$ 268,000	\$ -	\$ -	\$ 268,000
30242106 RDSR - Tandem Dump with Plow, Wing and Sander (additional)	2024 - 2024	\$ 322,000	\$ -	\$ 322,000	0%	\$ -	\$ 322,000	\$ -	\$ 322,000	\$ -
30160401 RDSR - Vibratory Roller (additional)	2022 - 2022	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
30212101 RDSU - 1 Ton Truck with Dump (additional)	2022 - 2022	\$ 80,500	\$ -	\$ 80,500	0%	\$ -	\$ 80,500	\$ -	\$ 80,500	\$ -
30252103 RDSU - 1 Ton Truck with Dump (additional)	2025 - 2025	\$ 80,500	\$ -	\$ 80,500	0%	\$ -	\$ 80,500	\$ -	\$ 80,500	\$ -
30212102 RDSU - 1/2 Ton Pickup Truck (additional)	2022 - 2022	\$ 46,000	\$ -	\$ 46,000	0%	\$ -	\$ 46,000	\$ -	\$ 46,000	\$ -
30222101 RDSU - 2 Ton Crane Truck (additional)	2023 - 2023	\$ 129,000	\$ -	\$ 129,000	0%	\$ -	\$ 129,000	\$ -	\$ 129,000	\$ -
30170902 RDSU - 4x4 Truck with Plow (additional)	2021 - 2021	\$ 64,500	\$ -	\$ 64,500	0%	\$ -	\$ 64,500	\$ 64,500	\$ -	\$ -
30288701 RDSU - 4x4 Truck with Plow (additional)	2028 - 2028	\$ 64,500	\$ -	\$ 64,500	0%	\$ -	\$ 64,500	\$ -	\$ -	\$ 64,500
30222104 RDSU - Hook Lift with 3 bodies (additional)	2022 - 2022	\$ 183,000	\$ -	\$ 183,000	0%	\$ -	\$ 183,000	\$ -	\$ 183,000	\$ -
30232101 RDSU - Portable Vactor (additional)	2023 - 2023	\$ 129,000	\$ -	\$ 129,000	0%	\$ -	\$ 129,000	\$ -	\$ 129,000	\$ -
30130908 RDSU - Single Axle Dump Truck	2022 - 2022	\$ 268,000	\$ -	\$ 268,000	0%	\$ -	\$ 268,000	\$ -	\$ 268,000	\$ -
30242104 RDSU - Single Axle Dump Truck (additional)	2024 - 2024	\$ 268,000	\$ -	\$ 268,000	0%	\$ -	\$ 268,000	\$ -	\$ 268,000	\$ -
30212103 RDSU - Street Sweeper	2021 - 2021	\$ 353,500	\$ -	\$ 353,500	0%	\$ -	\$ 353,500	\$ 353,500	\$ -	\$ -
30252106 RDSU - Street Sweeper (additional)	2025 - 2025	\$ 353,500	\$ -	\$ 353,500	0%	\$ -	\$ 353,500	\$ -	\$ 353,500	\$ -
30202201 RDSU - Tri-Axle Trailer (additional)	2022 - 2022	\$ 16,100	\$ -	\$ 16,100	0%	\$ -	\$ 16,100	\$ 16,100	\$ -	\$ -
30302203 RDSU - Tri-Axle Trailer (additional)	2030 - 2030	\$ 16,100	\$ -	\$ 16,100	0%	\$ -	\$ 16,100	\$ -	\$ -	\$ 16,100
30252101 RDSU - Water Truck / Flusher (additional)	2025 - 2025	\$ 268,000	\$ -	\$ 268,000	0%	\$ -	\$ 268,000	\$ -	\$ 268,000	\$ -
30242703 RDSU - 2 Tonne Truck with Plow and Salter	2024 - 2024	\$ 94,500	\$ -	\$ 94,500	0%	\$ -	\$ 94,500	\$ -	\$ 94,500	\$ -
30242701 RDSU - Loader with Variable Wing	2024 - 2024	\$ 340,000	\$ -	\$ 340,000	0%	\$ -	\$ 340,000	\$ -	\$ 340,000	\$ -
30242702 RDSU - Single Axle Dump Truck	2024 - 2024	\$ 262,500	\$ -	\$ 262,500	0%	\$ -	\$ 262,500	\$ -	\$ 262,500	\$ -
30222005 STRM - 1/2 Ton Pickup Truck (additional)	2022 - 2022	\$ 46,000	\$ -	\$ 46,000	0%	\$ -	\$ 46,000	\$ -	\$ 46,000	\$ -
30278705 STRM - 3/4 Ton Pickup Truck with Dump (additional)	2027 - 2027	\$ 80,500	\$ -	\$ 80,500	0%	\$ -	\$ 80,500	\$ -	\$ 80,500	\$ -
30222103 STRM - Crane Truck 5 Ton (additional)	2022 - 2022	\$ 139,500	\$ -	\$ 139,500	0%	\$ -	\$ 139,500	\$ 139,500	\$ -	\$ -
30202901 STRM - Sewer Camera System (additional)	2021 - 2021	\$ 12,900	\$ -	\$ 12,900	0%	\$ -	\$ 12,900	\$ 12,900	\$ -	\$ -
30150401 STRM - Trailer with Water Pump (additional)	2021 - 2021	\$ 10,200	\$ -	\$ 10,200	0%	\$ -	\$ 10,200	\$ 10,200	\$ -	\$ -
30212201 STRM - Trailer with Water Pump (additional)	2021 - 2021	\$ 16,100	\$ -	\$ 16,100	0%	\$ -	\$ 16,100	\$ 16,100	\$ -	\$ -
30292201 STRM - Trailer with Water Pump (additional)	2029 - 2029	\$ 16,100	\$ -	\$ 16,100	0%	\$ -	\$ 16,100	\$ -	\$ -	\$ 16,100
30302202 STRM - Trailer with Water Pump (additional)	2030 - 2030	\$ 16,100	\$ -	\$ 16,100	0%	\$ -	\$ 16,100	\$ -	\$ -	\$ 16,100
30212104 STRM - Utility Truck with Lift/Winch/Racking (additional)	2021 - 2021	\$ 96,500	\$ -	\$ 96,500	0%	\$ -	\$ 96,500	\$ 96,500	\$ -	\$ -
Subtotal Roads, Construction & Storm Water Services Fleet and Equipment		\$ 5,181,600	\$ -	\$ 5,181,600		\$ -	\$ 5,181,600	\$ 709,300	\$ 3,981,000	\$ 491,300



APPENDIX C.1

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
OPERATIONS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
Traffic Services Fleet and Equipment										
30302103 TRAF - 2 Ton Crane Truck (additional)	2030 - 2030	\$ 129,000	\$ -	\$ 129,000	0%	\$ -	\$ 129,000	\$ 129,000	\$ -	\$ -
30202002 TRAF - Extended Cab Pickup Truck (additional)	2021 - 2021	\$ 45,500	\$ -	\$ 45,500	0%	\$ -	\$ 45,500	\$ 45,500	\$ -	\$ -
40161806 TRAF - Portable Radar Message Boards (additional)	2021 - 2021	\$ 6,600	\$ -	\$ 6,600	0%	\$ -	\$ 6,600	\$ 6,600	\$ -	\$ -
30212901 TRAF - Portable Traffic Signs (additional)	2021 - 2021	\$ 49,500	\$ -	\$ 49,500	0%	\$ -	\$ 49,500	\$ 49,500	\$ -	\$ -
30212902 TRAF - Portable Traffic Signs (additional)	2021 - 2021	\$ 10,200	\$ -	\$ 10,200	0%	\$ -	\$ 10,200	\$ 10,200	\$ -	\$ -
30251402 TRAF - Portable Traffic Signs (additional)	2026 - 2026	\$ 11,000	\$ -	\$ 11,000	0%	\$ -	\$ 11,000	\$ -	\$ 11,000	\$ -
30262901 TRAF - Portable Traffic Signs (additional)	2026 - 2026	\$ 49,500	\$ -	\$ 49,500	0%	\$ -	\$ 49,500	\$ -	\$ 49,500	\$ -
30212701 TRAF - Sidewalk Plow and Sander (additional)	2021 - 2021	\$ 174,000	\$ -	\$ 174,000	0%	\$ -	\$ 174,000	\$ 174,000	\$ -	\$ -
30252701 TRAF - Sidewalk Plow and Sander (additional)	2025 - 2025	\$ 182,500	\$ -	\$ 182,500	0%	\$ -	\$ 182,500	\$ -	\$ 182,500	\$ -
30281403 TRAF - Sidewalk Plow and Sander (additional)	2027 - 2027	\$ 182,500	\$ -	\$ 182,500	0%	\$ -	\$ 182,500	\$ -	\$ 182,500	\$ -
30281404 TRAF - Sidewalk Plow and Sander (additional)	2028 - 2028	\$ 182,500	\$ -	\$ 182,500	0%	\$ -	\$ 182,500	\$ -	\$ -	\$ 182,500
30302403 TRAF - Trackless Side and Rear Mower (additional)	2030 - 2030	\$ 64,500	\$ -	\$ 64,500	0%	\$ -	\$ 64,500	\$ -	\$ 64,500	\$ -
Subtotal Traffic Services Fleet and Equipment		\$ 1,087,300	\$ -	\$ 1,087,300		\$ -	\$ 1,087,300	\$ 414,800	\$ 490,000	\$ 182,500
Operations Centre ⁽¹⁾										
30211305 OPC - Expansion Phase 2	2021 - 2023	\$ 4,481,400	\$ -	\$ 4,481,400	0%	\$ -	\$ 4,481,400	\$ 1,225,885	\$ 3,255,515	\$ -
30291301 OPC - Expansion Phase 3	2029 - 2029	\$ 1,155,000	\$ -	\$ 1,155,000	0%	\$ -	\$ 1,155,000	\$ -	\$ -	\$ 1,155,000
Subtotal Operations Centre		\$ 5,636,400	\$ -	\$ 5,636,400		\$ -	\$ 5,636,400	\$ 1,225,885	\$ 3,255,515	\$ 1,155,000
Sustainability Program										
55208001 EV Joint Venture (charging stations)	2021 - 2029	\$ 300,000	\$ -	\$ 300,000	25%	\$ 75,000	\$ 225,000	\$ -	\$ 125,000	\$ 100,000
Subtotal Sustainability Program		\$ 300,000	\$ -	\$ 300,000		\$ 75,000	\$ 225,000	\$ -	\$ 125,000	\$ 100,000
Other Administrative / Operational Facilities										
30261302 Future Satellite Facility	2026 - 2029	\$ 4,830,000	\$ -	\$ 4,830,000	0%	\$ -	\$ 4,830,000	\$ -	\$ 2,280,442	\$ 2,549,558
30251307 Salt Dome	2025 - 2025	\$ 446,250	\$ -	\$ 446,250	0%	\$ -	\$ 446,250	\$ -	\$ 446,250	\$ -
30251306 Sand Dome	2025 - 2025	\$ 446,250	\$ -	\$ 446,250	0%	\$ -	\$ 446,250	\$ -	\$ 446,250	\$ -
30277101 Fleet Strategic Master Plan Update	2027 - 2027	\$ 75,000	\$ -	\$ 75,000	20%	\$ 15,000	\$ 60,000	\$ -	\$ 60,000	\$ -
Subtotal Other Administrative / Operational Facilities		\$ 5,797,500	\$ -	\$ 5,797,500		\$ 15,000	\$ 5,782,500	\$ -	\$ 3,232,942	\$ 2,549,558

APPENDIX C.1
TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
OPERATIONS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Prior Growth	2021-2030	Post 2030
Existing Debt (Principal 10yr)										
1.1.1 Land Acquisition - Operations Satellite Facility	2021 - 2030	\$ 819,392	\$ -	\$ 819,392	0%	\$ -	\$ 819,392	\$ -	\$ 819,392	\$ -
1.1.2 Operations Centre Expansion (Phase 1) ⁽¹⁾	2021 - 2030	\$ 1,814,478	\$ -	\$ 1,814,478	0%	\$ -	\$ 1,814,478	\$ -	\$ 1,814,478	\$ -
Subtotal Existing Debt (Principal 10yr)		\$ 2,633,870	\$ -	\$ 2,633,870		\$ -	\$ 2,633,870	\$ -	\$ 2,633,870	\$ -
TOTAL OPERATIONS		\$ 20,842,670	\$ -	\$ 20,842,670		\$ 244,833	\$ 20,597,837	\$ 2,349,985	\$ 13,769,494	\$ 4,478,358

(1) - Operations Centre costs have been allocated 45% by Parks Services and 55% Operations services based on anticipated future use of the facility.

Residential Development Charge Calculation		
Residential Share of 2021 - 2030 DC Eligible Costs	77.0%	\$10,606,706
10-Year Growth in Population in New Units		58,344
Unadjusted Development Charge Per Capita		\$181.80
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	9.6%	\$1,326,934
10-Year Growth in Square Metres		244,563
Unadjusted Development Charge Per Square Metre		\$5.43
<i>Industrial</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	7.9%	\$1,089,615
10-Year Growth in Square Metres		719,229
Unadjusted Development Charge Per Square Metre		\$1.51
<i>Institutional</i>		
Non-Residential Share of 2021 - 2030 DC Eligible Costs	5.4%	\$746,240
10-Year Growth in Square Metres		246,288
Unadjusted Development Charge Per Square Metre		\$3.03

2021 - 2030 Net Funding Envelope	\$13,769,494
Reserve Fund Balance	
Balance as at December 31, 2020	\$2,349,985

APPENDIX C.1

TABLE 3

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

OPERATIONS	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$1,810.2	\$1,411.7	(\$774.1)	(\$2,322.7)	(\$3,150.6)	(\$4,838.9)	(\$4,987.9)	(\$4,255.6)	(\$2,561.4)	(\$1,994.4)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$676.8	\$608.1	\$425.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$99.4	\$1,810.2
- Operations: Non Inflated	\$318.6	\$1,877.5	\$1,349.5	\$1,023.5	\$1,757.8	\$311.2	\$692.7	\$19.7	\$1,177.7	\$49.7	\$8,577.8
- Land Acq. - Ops. Satellite Facility Debt Principle Pmnt. (1)	\$60.9	\$61.3	\$61.7	\$62.1	\$62.6	\$63.1	\$63.7	\$64.4	\$65.3	\$66.1	\$631.2
- Operations Centre PH1 Debt Principle Pmnt. (1)	\$134.8	\$135.8	\$136.7	\$137.5	\$138.6	\$139.6	\$141.1	\$142.6	\$144.5	\$146.4	\$1,397.7
- Operations: Inflated	\$1,191.0	\$2,732.5	\$2,045.6	\$1,285.8	\$2,103.9	\$546.3	\$984.9	\$229.6	\$1,589.6	\$390.6	\$13,099.9
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	3,996	3,012	3,057	3,107	3,155	3,232	8,972	9,440	9,928	10,444	58,344
REVENUE											
- DC Receipts: Inflated	\$801.6	\$616.3	\$638.0	\$661.4	\$685.0	\$715.8	\$2,026.8	\$2,175.2	\$2,333.3	\$2,503.8	\$13,157.1
INTEREST											
- Interest on Opening Balance	\$63.4	\$49.4	(\$42.6)	(\$127.8)	(\$173.3)	(\$266.1)	(\$274.3)	(\$234.1)	(\$140.9)	(\$109.7)	(\$1,255.9)
- Interest on In-year Transactions	(\$10.7)	(\$58.2)	(\$38.7)	(\$17.2)	(\$39.0)	\$3.0	\$18.2	\$34.0	\$13.0	\$37.0	(\$58.6)
- Interest on Land Acq. - Ops. Satellite Facility	(\$19.9)	(\$19.6)	(\$19.3)	(\$18.9)	(\$18.4)	(\$17.9)	(\$17.2)	(\$16.5)	(\$15.7)	(\$14.8)	(\$178.2)
- Interest on Operations Centre PH1 Debt Principle Pmnt	(\$41.8)	(\$41.2)	(\$40.5)	(\$39.7)	(\$38.7)	(\$37.6)	(\$36.2)	(\$34.8)	(\$33.1)	(\$31.2)	(\$374.8)
TOTAL REVENUE	\$792.5	\$546.7	\$497.0	\$457.9	\$415.6	\$397.2	\$1,717.2	\$1,923.9	\$2,156.7	\$2,385.0	\$11,289.6
CLOSING CASH BALANCE	\$1,411.7	(\$774.1)	(\$2,322.7)	(\$3,150.6)	(\$4,838.9)	(\$4,987.9)	(\$4,255.6)	(\$2,561.4)	(\$1,994.4)	\$0.0	

1 Principle payments not inflated

2021 Adjusted Charge Per Capita

\$200.59

Allocation of Capital Program

Residential Sector	77.0%
Non-Residential Sector	23.0%

Rates for 2021

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



APPENDIX C.1

TABLE 3

TOWN OF WHITBY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
OPERATIONS
COMMERCIAL DEVELOPMENT CHARGE
(in \$000)

OPERATIONS	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$226.46	\$88.46	(\$157.37)	(\$317.40)	(\$339.70)	(\$458.38)	(\$373.48)	(\$328.71)	(\$173.34)	(\$169.81)	
2021 - 2030 COMMERCIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$84.67	\$76.08	\$53.28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.43	\$226.5
- Operations: Non Inflated	\$39.85	\$234.9	\$168.8	\$128.0	\$219.9	\$38.9	\$86.7	\$2.5	\$147.3	\$6.2	\$1,073.1
- Land Acq. - Ops. Satellite Facility Debt Principle Pmnt. (1)	\$7.62	\$7.7	\$7.7	\$7.8	\$7.8	\$7.9	\$8.0	\$8.1	\$8.2	\$8.3	\$79.0
- Operations Centre PH1 Debt Principle Pmnt. (1)	\$16.86	\$17.0	\$17.1	\$17.2	\$17.3	\$17.5	\$17.7	\$17.8	\$18.1	\$18.3	\$174.9
- Operations: Inflated	\$149.0	\$341.8	\$255.9	\$160.9	\$263.2	\$68.3	\$123.2	\$28.7	\$198.9	\$48.9	\$1,638.8
NEW COMMERCIAL DEVELOPMENT											
- Growth in Square Metres	2,460	17,809	18,910	26,128	27,113	28,201	29,249	30,377	31,551	32,765	244,563
REVENUE											
- DC Receipts: Inflated	\$14.5	\$107.0	\$115.9	\$163.3	\$172.8	\$183.4	\$194.0	\$205.5	\$217.7	\$230.6	\$1,604.6
INTEREST											
- Interest on Opening Balance	\$7.9	\$3.1	(\$8.7)	(\$17.5)	(\$18.7)	(\$25.2)	(\$20.5)	(\$18.1)	(\$9.5)	(\$9.3)	(\$116.5)
- Interest on In-year Transactions	(\$3.7)	(\$6.5)	(\$3.9)	\$0.0	(\$2.5)	\$2.0	\$1.2	\$3.1	\$0.3	\$3.2	(\$6.6)
- Interest on Land Acq. - Ops. Satellite Facility	(\$2.5)	(\$2.5)	(\$2.4)	(\$2.4)	(\$2.3)	(\$2.2)	(\$2.2)	(\$2.1)	(\$2.0)	(\$1.9)	(\$22.3)
- Interest on Operations Centre PH1	(\$5.2)	(\$5.2)	(\$5.1)	(\$5.0)	(\$4.8)	(\$4.7)	(\$4.5)	(\$4.4)	(\$4.1)	(\$3.9)	(\$46.9)
TOTAL REVENUE	\$11.0	\$96.0	\$95.9	\$138.6	\$144.5	\$153.2	\$168.0	\$184.1	\$202.4	\$218.7	\$1,412.4
CLOSING CASH BALANCE	\$88.5	(\$157.4)	(\$317.4)	(\$339.7)	(\$458.4)	(\$373.5)	(\$328.7)	(\$173.3)	(\$169.8)	\$0.0	

1 Principle payments not inflated

2021 Adjusted Charge Per Square Metre	\$5.89
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Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.1

TABLE 3

TOWN OF WHITBY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
OPERATIONS
INDUSTRIAL DEVELOPMENT CHARGE
(in \$000)

OPERATIONS	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$185.96	\$136.69	\$73.04	\$86.42	\$39.02	(\$92.58)	(\$63.06)	(\$73.69)	(\$1.72)	(\$64.34)	
2021 - 2030 INDUSTRIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$69.53	\$62.47	\$43.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10.21	\$186.0
- Operations: Non Inflated	\$32.73	\$192.9	\$138.6	\$105.1	\$180.6	\$32.0	\$71.2	\$2.0	\$121.0	\$5.1	\$881.2
- Land Acq. - Ops. Satellite Facility Debt Principle Pmnt. (1)	\$6.25	\$6.3	\$6.3	\$6.4	\$6.4	\$6.5	\$6.5	\$6.6	\$6.7	\$6.8	\$64.8
- Operations Centre PH1 Debt Principle Pmnt. (1)	\$13.85	\$14.0	\$14.0	\$14.1	\$14.2	\$14.3	\$14.5	\$14.6	\$14.8	\$15.0	\$143.6
- Operations: Inflated	\$122.4	\$280.7	\$210.1	\$132.1	\$216.1	\$56.1	\$101.2	\$23.6	\$163.3	\$40.1	\$1,345.7
INDUSTRIAL SPACE GROWTH											
- Growth in Square Metres	47,361	137,723	139,080	53,425	54,480	55,320	56,400	57,480	58,440	59,520	719,229
REVENUE											
- DC Receipts: Inflated	\$74.2	\$220.2	\$226.8	\$88.9	\$92.4	\$95.7	\$99.6	\$103.5	\$107.3	\$111.5	\$1,220.1
INTEREST											
- Interest on Opening Balance	\$6.5	\$4.8	\$2.6	\$3.0	\$1.4	(\$5.1)	(\$3.5)	(\$4.1)	(\$0.1)	(\$3.5)	\$2.0
- Interest on In-year Transactions	(\$1.3)	(\$1.7)	\$0.3	(\$1.2)	(\$3.4)	\$0.7	(\$0.0)	\$1.4	(\$1.5)	\$1.2	(\$5.5)
- Interest on Land Acq. - Ops. Satellite Facility	(\$2.0)	(\$2.0)	(\$2.0)	(\$1.9)	(\$1.9)	(\$1.8)	(\$1.8)	(\$1.7)	(\$1.6)	(\$1.5)	(\$18.3)
- Interest on Operations Centre PH1	(\$4.3)	(\$4.2)	(\$4.2)	(\$4.1)	(\$4.0)	(\$3.9)	(\$3.7)	(\$3.6)	(\$3.4)	(\$3.2)	(\$38.5)
TOTAL REVENUE	\$73.1	\$217.1	\$223.5	\$84.7	\$84.5	\$85.6	\$90.5	\$95.6	\$100.7	\$104.5	\$1,159.8
CLOSING CASH BALANCE	\$136.7	\$73.0	\$86.4	\$39.0	(\$92.6)	(\$63.1)	(\$73.7)	(\$1.7)	(\$64.3)	\$0.0	

1 Principle payments not inflated

2021 Adjusted Charge Per Square Metre	\$1.57
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Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.1

TABLE 3

TOWN OF WHITBY
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
OPERATIONS
INSTITUTIONAL DEVELOPMENT CHARGE
(in \$000)

OPERATIONS	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$127.36	\$44.50	(\$151.72)	(\$305.65)	(\$308.63)	(\$363.19)	(\$300.99)	(\$258.33)	(\$150.27)	(\$123.84)	
2021 - 2030 INSTITUTIONAL FUNDING REQUIREMENTS											
-Prior Growth (Funding form DC Reserve Balance)	\$47.62	\$42.8	\$30.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.0	\$127.4
- Operations: Non Inflated	\$22.41	\$132.1	\$94.9	\$72.0	\$123.7	\$21.9	\$48.7	\$1.4	\$82.9	\$3.5	\$603.5
- Land Acq. - Ops. Satellite Facility Debt Principle Pmnt. (1)	\$4.28	\$4.3	\$4.3	\$4.4	\$4.4	\$4.4	\$4.5	\$4.5	\$4.6	\$4.7	\$44.4
- Operations Centre PH1 Debt Principle Pmnt. (1)	\$9.48	\$9.6	\$9.6	\$9.7	\$9.8	\$9.8	\$9.9	\$10.0	\$10.2	\$10.3	\$98.3
- Operations: Inflated	\$83.8	\$192.2	\$143.9	\$90.5	\$148.0	\$38.4	\$69.3	\$16.2	\$111.8	\$27.5	\$921.6
INSITUTIONAL SPACE GROWTH											
- Growth in Square Metres	900	1,140	1,800	30,168	31,560	33,000	34,500	36,060	37,740	39,420	246,288
REVENUE											
- DC Receipts: Inflated	\$3.0	\$3.9	\$6.3	\$108.1	\$115.4	\$123.0	\$131.2	\$139.9	\$149.3	\$159.1	\$939.2
INTEREST											
- Interest on Opening Balance	\$4.5	\$1.6	(\$8.3)	(\$16.8)	(\$17.0)	(\$20.0)	(\$16.6)	(\$14.2)	(\$8.3)	(\$6.8)	(\$101.9)
- Interest on In-year Transactions	(\$2.2)	(\$5.2)	(\$3.8)	\$0.3	(\$0.9)	\$1.5	\$1.1	\$2.2	\$0.7	\$2.3	(\$4.1)
- Interest on Land Acq. - Ops. Satellite Facility	(\$1.4)	(\$1.4)	(\$1.4)	(\$1.3)	(\$1.3)	(\$1.3)	(\$1.2)	(\$1.2)	(\$1.1)	(\$1.0)	(\$12.5)
- Interest on Operations Centre PH1	(\$2.9)	(\$2.9)	(\$2.9)	(\$2.8)	(\$2.7)	(\$2.6)	(\$2.6)	(\$2.4)	(\$2.3)	(\$2.2)	(\$26.4)
TOTAL REVENUE	\$0.9	(\$4.0)	(\$10.0)	\$87.5	\$93.5	\$100.6	\$112.0	\$124.2	\$138.3	\$151.3	\$794.3
CLOSING CASH BALANCE	\$44.5	(\$151.7)	(\$305.6)	(\$308.6)	(\$363.2)	(\$301.0)	(\$258.3)	(\$150.3)	(\$123.8)	\$0.0	

1 Principle payments not inflated

2021 Adjusted Charge Per Square Metre	\$3.38
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Allocation of Capital Program	
Commercial Share	9.6%
Industrial Share	7.9%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix C.2

Roads and Related Services

Appendix C.2 – Services Related to a Highway: Roads and Related Services

This appendix provides the detailed analysis undertaken to establish the development charge rates for Roads and Related services in the Town of Whitby. As permitted under Section 2 (4) of the DCA, Roads and Related services fall under the Services Related to a Highway category. These established rate categories are as follows:

- Roads and Related Services – Town-wide Infrastructure; and
- Roads and Related Services – Alternative Route and Related Infrastructure

The “Roads and Related Services – Town-wide Infrastructure” service category includes the full range of capital infrastructure within, and related to, the road network including; road constriction and improvements, bridges and structures, pedestrian and cycling infrastructure, intersections and street lighting. In contrast, the “Roads and Related – Alternative Route and Related Infrastructure” relates to design, property acquisition, utility relocation, and roundabout construction of the Highway 7/12 Alternative Route.

The development-related Roads and Related infrastructure projects are required to service the demands of new development to 2031. The projects including scope of work, timing and costs, are subject to review through the Town’s annual capital budgeting process. The development forecast related to the 2021-2031 planning period is discussed in greater detail in Appendix A.

The following tables set out the 2021 to 2031 development-related capital program and the calculation of the development charges for Roads and

Related. The development-related capital programs for Town-wide Infrastructure and Alternative Route and Related Infrastructure is based upon the Town's Transportation Master Plan, 2010, Brooklin North Transportation Master Plan, 2017 and updated information provided by staff. Maps have also been provided which identify the location and timing of the identified capital projects to 2031.

Table 1 Historical Service Level

Table 1 displays the ten-year historical inventory for all Roads and Related infrastructure. The Town's existing 535 kilometres of roads were valued at \$1.05 billion in 2020. Associated with the road kilometers above, is the land the roadways occupy, which is valued at \$366.35 million in 2020. There are currently 50 bridges and culverts in the Town that provide for a combined value of \$97.44 million. In addition, the 34 traffic signals add an additional \$9.45 million and the 544 kilometres of sidewalks add a further \$117.18 million to the total value of capital assets. The total value of all Roads and Related infrastructure is approximately \$1.64 billion. This results in a ten-year historical average service level of \$9,251.21 per population and employment. The historical service level, multiplied by the long-term net population and employment in growth of 69,925, results in a maximum allowable funding envelope of \$646.89 million.

Table 2 2021-2031 Development-Related Capital Programs

Roads and Related Capital Program – Town-wide Infrastructure

The total cost of the 11-year Roads and Related – Town-wide Infrastructure capital program is \$736.10 million and provides for the undertaking of projects throughout the Town. In total, \$7.28 million in grants and subsidies and \$7.00 million of other contributions from subdivision agreements have been identified and are removed from the total capital program cost.

Approximately \$137.82 million of the program has been identified as the benefit to existing share. The benefit to existing share for roads projects has been generally calculated in the following manner.

Roads Project	Description
Bridges and Culverts – New	<ul style="list-style-type: none"> <li data-bbox="634 447 1344 646">▪ 0% BTE infrastructure is related to the increased need arising for a new development and therefore is 100% attributable to new development <li data-bbox="634 657 1344 961">▪ A 0% BTE has been applied to the Des Newman/CP Rail Grade Separation as it is a brand new road segment located in the Town’s West Whitby development area. There is no existing road segment or rail grade separation in this location. <li data-bbox="634 972 1344 1119">▪ A 10% BTE has been applied to the Mary St/Crawford St Extension consistent with the last DC Study. <li data-bbox="634 1129 1344 1434">▪ 20% BTE share has been applied to the Pedestrian Bridge at Victoria Fields and a 30% BTE share has been applied to the Pedestrian Tunnel – Taunton Rd at Hydro Corridor to account for minor benefit to existing community.

Roads Project	Description
Bridges and Culverts – Growth Related Improvements	<ul style="list-style-type: none"> ▪ Where applicable, the BTE share matches the related roads project ▪ A BTE share of 80% has been included for most bridges that are not related to the reconstruction of a roads projects ▪ A 72% BTE share has been applied to White Bridge and a 90% BTE share has been applied to the remaining existing bridges that are being replaced (e.g. Coultice, Way and Kerr Bridge) with marginal improvements.
Roads Reconstruction Program	<ul style="list-style-type: none"> ▪ Can be either a rural or urban roadway. Typical works include improvement/ upgrades such as in terms of capacity, safety, alignment, intersections, access, servicing, drainage systems, road structure, pedestrian/active transportation systems, in addition to the reconstruction/rehabilitation of the roadway. ▪ 20% BTE has been applied to account for the repaving of the existing road segment and is based on a sampling of roads reconstruction projects.
Urban Road Resurfacing Program	<ul style="list-style-type: none"> ▪ Relates to new overlays and may be a single or multiple lifts. Often referred to as a “shave and pave” which includes minor base repairs, catchbasin works, and curb repairs ▪ 90% BTE share reflects the resurfacing of existing road infrastructure and marginal servicing improvements related to future development

Roads Project	Description
Rural Road Resurfacing Program	<ul style="list-style-type: none"> ▪ Relates to new asphalt lifts typically through a “pulverize and pave” process. Minor base repairs, shoulder and drainage repairs may also be part of the works. ▪ 90% BTE share reflects the resurfacing of existing road infrastructure and marginal servicing improvements related to future development
Roads Maintenance Program	<ul style="list-style-type: none"> ▪ Relates to the construction of new guard rails on existing road segments ▪ 15% BTE share recognizes the benefit provided to the existing community
Transportation Infrastructure Resilience Program	<ul style="list-style-type: none"> ▪ Relates to the rehabilitation and upsizing of existing culverts ▪ 72% BTE based on shares of population and employment growth to 2031
Multi-Use Paths and Cycling Facilities Program	<ul style="list-style-type: none"> ▪ 30% BTE share is based on consideration of the road widening and extensions and reconstruction BTE shares as well as the existing and proposed cycling lane kilometers. The Town’s investment in active transportation infrastructure is, in part, aimed at increasing the share of transportation trips using travel methods other than single occupancy vehicles, this will provide reduce traditional road infrastructure investment needs.

Roads Project	Description
Sidewalk Program	<ul style="list-style-type: none"> ▪ 0% BTE share applied to sidewalks located in new development areas ▪ 50% BTE share applied in semi-built out areas ▪ 90% BTE share for those projects in built-out areas with limited intensification growth
Traffic Signals Program	<ul style="list-style-type: none"> ▪ 0% BTE share has been applied to most projects, infrastructure is related to the increased need for servicing arising from new development except for the Intersection Modifications at Montgomery and Carnwith where a 50% BTE share has been applied.
Street Lighting Program	<ul style="list-style-type: none"> ▪ BTE shares are based on the <u>Region of Durham's 2018 DC Background Study</u>

Roads Project	Description
Roads, Roads Related and Storm Water Studies	<ul style="list-style-type: none"> ▪ Varies based on nature of the study ▪ 72% BTE is applied to the “Automated Speed Enforcement (ASE) Consideration/Review” based on shares of population and employment growth to 2031 ▪ 20% BTE share is applied to design guidelines, route planning design, salt management plan, streetlight strategy recognizing that these studies will largely be used to accommodate future development, but will also review the existing conditions in the community ▪ 0% BTE share is applied to the Municipal Engineering Growth Studies/Design Review and Traffic & Transportation Study as these studies are needed to support infrastructure projects required to service future development
Road Surface Treated to Hot Mix Conversion Program	<ul style="list-style-type: none"> ▪ 13% BTE based on cost of LBD rehabilitation and replacement cost
Road Widening and Extension Program	<ul style="list-style-type: none"> ▪ 15% BTE is applied to most projects and is based on a sampling of representative projects, the range of BTE is roughly 10-20% with the majority being less than 10%, especially for larger and more expensive projects. Thus, a 15% BTE share is applied.
Road Intersection Improvement Program	<ul style="list-style-type: none"> ▪ 50% BTE share to account for replacement/reconstruction of existing road infrastructure

Roads Project	Description
Mid Arterial Roadway	<ul style="list-style-type: none"> ▪ 1% BTE for Anderson/Oshawa, Ashburn/Anserson, and Cochrane/Ashburn mid-arterial roadway construction to account for cycling infrastructure and related BTE included in the project cost ▪ 0% BTE for Ashburn/Anderson and Property Acquisition for Future Phases, infrastructure related to the increased need for service arising from new development and therefore is 100% attributable to new development
Dundas Street Multi-Use Path	<ul style="list-style-type: none"> ▪ See description for “Multi-Use Paths and Cycling Facilities Program”
Active Transportation Plan Program	<ul style="list-style-type: none"> ▪ See description for “Multi-Use Paths and Cycling Facilities Program”
Hwy 407 / Cochrane Interchange Program	<ul style="list-style-type: none"> ▪ 0% BTE, infrastructure is related to the increased need for service arising from new development
Brooklin Expansion - Traffic Control	<ul style="list-style-type: none"> ▪ 0% BTE, infrastructure is related to the increased need for service arising from new development
Transportation Master Plan and Related Studies	<ul style="list-style-type: none"> ▪ 0% BTE share for Transportation Master Plan (TMP) Study and Lakeshore Integrated TMP as the studies will address future growth-related infrastructure needs ▪ 20% BTE share is applied to all other projects recognizing that the studies will, in part, benefit existing development, but is largely needed to meet the increase infrastructure needs arising from future development
Downtown Improvement Program	<ul style="list-style-type: none"> ▪ 72% BTE share is applied based on share of population and employment growth to 2031

Roads Project	Description
Municipal Parking Program	<ul style="list-style-type: none"> ▪ 72% BTE share is applied based on share of population and employment growth to 2031
Administrative Overhead	<ul style="list-style-type: none"> ▪ As permitted under Section 5(3) of the DCA, the DC Study includes costs associated with the administration and implementation of the DC Study. The idea being that if the Town were to outsource this work, it would be embedded within the capital project costs. These costs are commonly included in DC Background Studies. For the purposes of the Town of Whitby, costs associated with the administration of the capital program amount to 0.05% of the total DC eligible costs. Therefore, a 0% BTE share is applied to this project.

After these adjustments, the total Roads and Related Town-wide Infrastructure capital program amounts to \$584.01 million. Available reserves in the amount of \$33.84 million have been applied to projects occurring in the initial years of the capital program. Approximately \$8.44 million has been deemed a post-2031 share that will be considered for recovery under future development charges.

The remaining costs eligible for recovery through development charges during the planning period from 2021 to 2031 is reduced to \$541.72 million. This amount is included in the development charge calculation and is allocated 77.9%, or \$422.17 million to the residential sector, 9.4%, or \$50.81 million to the commercial sector, 7.3%, or \$39.56 million to the industrial sector, and 5.4%, or \$29.19 million, to the institutional sector based on 2021-2031 shares of growth in population in new units and employment. The

resulting unadjusted per capita residential charge is \$6,089.64 before cash flow adjustments. The non-residential unadjusted charges are as follows:

- **Commercial** = \$182.36 per square metre
- **Industrial** = \$50.75 per square metre
- **Institutional** = \$101.49 per square metre

Roads and Related Capital Program – Alternative Route and Related Infrastructure

The total cost of the 11-year Roads and Related – Alternative Route and Related Infrastructure capital program is \$86.83 million and provides for the undertaking of the Alternative Route Highway 7/12 related infrastructure. No grants or DC ineligible projects have been identified and as such, no reductions have been made.

As the Alternative Route and Related infrastructure is related to the increased need for service arising from new development no BTE share has been identified and therefore, the total \$86.83 million is 100% attributable to new development. Available reserves associated with this program amounts to \$9.32 million.

The total costs eligible for DC recovery amounts to \$77.50 million and is allocated 77.9%, or \$60.40 million to the residential sector, 9.4%, or \$7.27 million to the commercial sector, 7.3%, or \$5.66 million to the industrial sector and 5.4%, or \$4.18 million, to the institutional sector based on 2021-2031 shares of growth in population in new units and employment. The resulting unadjusted per capita residential charge is \$871.25 before cash flow adjustments. The non-residential unadjusted charges are as follows:

- **Commercial** = \$26.09 per square metre
- **Industrial** = \$7.26 per square metre
- **Institutional** = \$14.52 per square metre

Table 3 Residential & Non-Residential Cash Flow Analysis

The long term cash flow analysis, shown on Table 3 takes into consideration expenditure timing and revenue projections. The reason for the increase in the rates is the “front-ending” of the roads capital program. This relationship, between the timing of the infrastructure emplacement preceding the development, is normal and expected as the roads and related network needs to be in place prior to full-development of the benefiting lands.

Roads and Related Capital Program – Town-wide Infrastructure

The following is a summary of the Roads and Related – Town-wide Infrastructure calculated unadjusted and cash flow adjusted development charge rates:

ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE SUMMARY					
10-year Hist. Service Level per pop & emp \$9,251.21			Unadjusted Development Charge		
	Residential	Commercial	Industrial	Institutional	
	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m	\$/sq.m
	\$6,089.64	\$182.36	\$50.75	\$101.49	
			Adjusted Development Charge		
2021 - 2031		Residential	Commercial	Industrial	Institutional
Development-Related	Capital Program	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
Total	Net DC Recoverable	\$6,044.19	\$179.15	\$48.71	\$101.54
\$736,100,149	\$541,722,934				

Roads and Related Capital Program – Alternative Route and Related Infrastructure

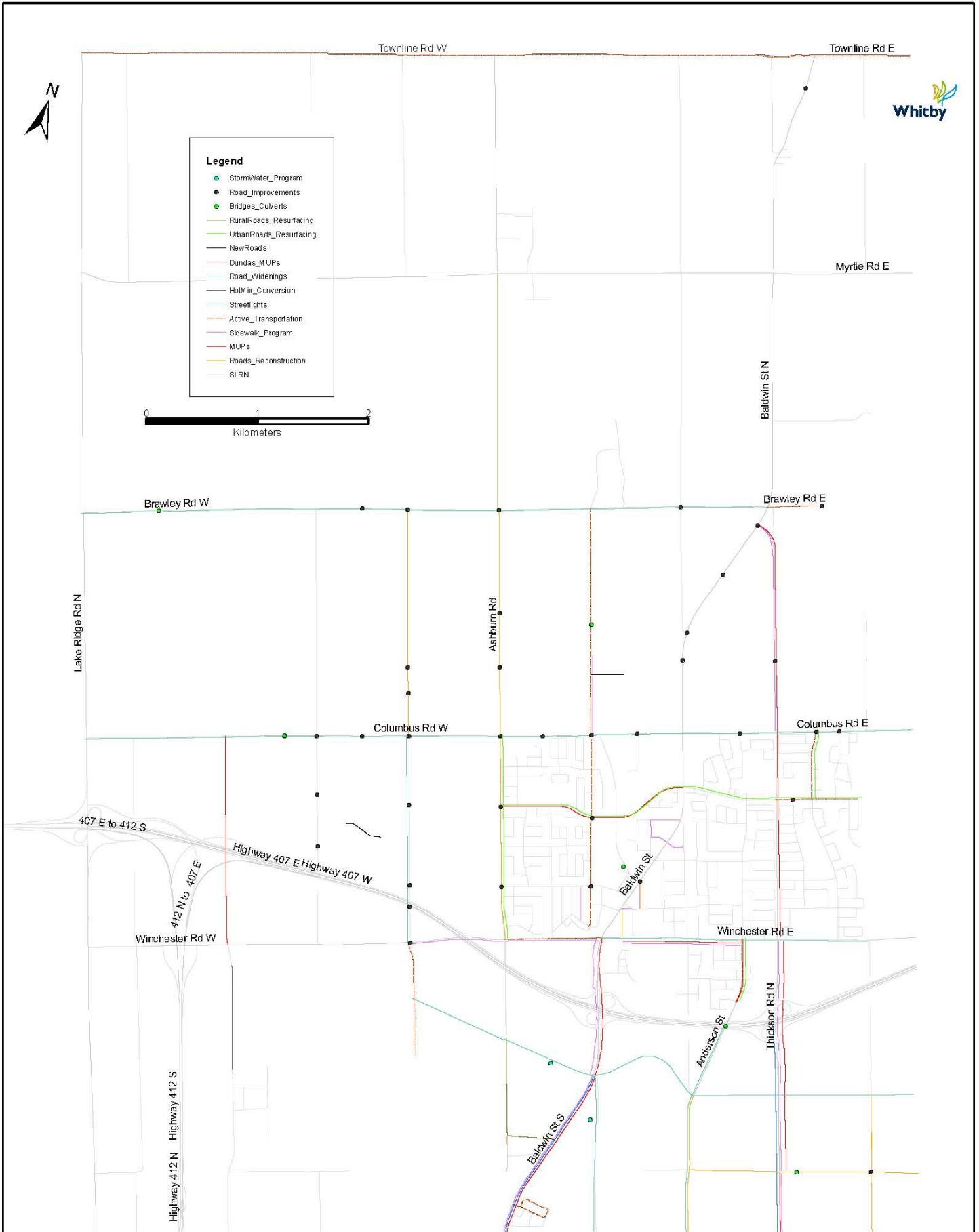
The following is a summary of the Roads and Related – Alternative Route and Related Infrastructure calculated unadjusted and cash flow adjusted development charge rates:

ROADS & RELATED - ALTERNATE ROUTE AND RELATED INFRASTRUCTURE SUMMARY					
2021 - 2031		Unadjusted			
Development-Related Capital Program		Residential	Commercial	Industrial	Institutional
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
\$86,825,000	\$86,825,000	\$871.25	\$26.09	\$7.26	\$14.52
		Adjusted			
		Residential	Commercial	Industrial	Institutional
		\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
		\$825.09	\$24.53	\$6.67	\$13.79

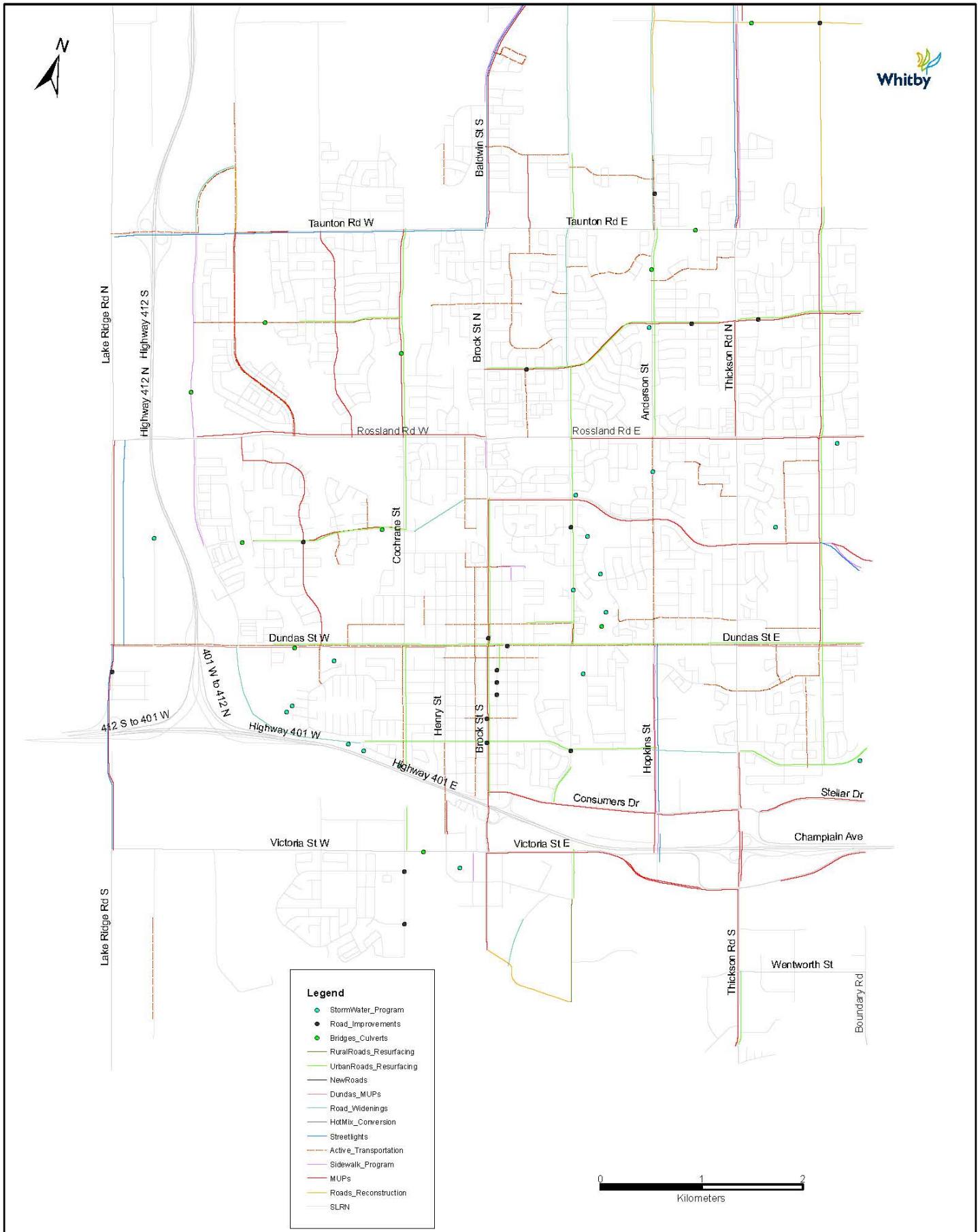
Maps of Key Town-wide Roads Projects

The following maps have been prepared which show the location and type of roads and related projects in the Town of Whitby between 2021 and 2031.

HEMSON DC STUDY CAPITAL FORECAST, NORTH



HEMSON DC STUDY CAPITAL FORECAST, SOUTH



APPENDIX C.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE

ROADS Type of Road	# of Kilometres										UNIT COST (\$/km)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
HCB1	12	12	12	12	12	12	12	12	11	11	\$5,051,500
HCB2	8	8	8	8	8	9	9	9	10	9	\$3,624,100
HCB3	122	122	125	126	137	137	137	137	137	139	\$2,195,400
HCB4	295	294	292	294	284	284	288	295	301	311	\$2,113,400
LCB	68	66	66	66	64	64	65	65	62	64	\$62,400
Gravel	6	6	6	6	6	5	3	3	3	2	\$12,700
Total (km)	511	509	509	512	511	511	513	521	523	535	
Total (\$000)	\$985,752.1	\$985,891.7	\$986,494.8	\$992,494.3	\$995,197.3	\$997,907.2	\$1,005,386.1	\$1,020,818.9	\$1,030,986.7	\$1,053,345.4	

ROADS LAND Type of Road	# of Kilometres										UNIT COST (\$/km)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
HCB1	12	12	12	12	12	12	12	12	11	11	\$686,115
HCB2	8	8	8	8	8	9	9	9	10	9	\$686,115
HCB3 (some DEV)	122	122	125	126	137	137	137	137	137	139	\$686,115
HCB4 (assumed to be all DEV)	295	294	292	294	284	284	288	295	301	311	\$686,115
LCB	68	66	66	66	64	64	65	65	62	64	\$686,115
Gravel	6	6	6	6	6	5	3	3	3	2	\$343,058
Total (km)	511	509	509	512	511	511	513	521	523	535	
Total (\$000)	\$348,374.9	\$346,934.0	\$347,071.3	\$348,992.4	\$348,477.8	\$348,958.1	\$351,119.4	\$356,162.3	\$358,152.0	\$366,347.7	

BRIDGES & CULVERTS Description	# of Bridges & Culverts										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
BRIDGES	23	23	23	23	23	23	22	22	22	22	\$2,995,400
CULVERTS	21	21	21	21	21	21	23	24	27	28	\$1,126,600
Total (#)	44	44	44	44	44	44	45	46	49	50	
Total (\$000)	\$92,552.8	\$92,552.8	\$92,552.8	\$92,552.8	\$92,552.8	\$92,552.8	\$91,810.6	\$92,937.2	\$96,317.0	\$97,443.6	

APPENDIX C.2

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE

TRAFFIC SIGNALS Description	# of Traffic Signals										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Signal - 3	2	2	2	2	2	2	2	2	2	2	\$231,900
Signal - 4	24	24	24	24	24	24	24	25	25	27	\$289,900
IPS - 2	3	3	4	4	4	4	5	5	5	5	\$231,900
Warning Signal - 1	-	1	1	1	1	-	-	-	-	-	\$34,800
Total (#)	29	30	31	31	31	30	31	32	32	34	
Total (\$000)	\$8,117.1	\$8,151.9	\$8,383.8	\$8,383.8	\$8,383.8	\$8,349.0	\$8,580.9	\$8,870.8	\$8,870.8	\$9,450.6	

SIDEWALKS Description	# of Kilometres										UNIT COST (\$/km)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
1.2-1.4m Wide, concrete	30	31	31	31	31	31	31	31	31	31	\$193,000
1.5m wide, concrete	438	445	448	454	465	460	465	470	471	472	\$222,700
1.5m wide, asphalt	0	0	1	1	1	2	2	3	3	3	\$60,300
3.0m wide, asphalt	4	5	6	7	10	10	11	15	18	20	\$60,300
1.6-1.8m wide, concrete	12	12	13	13	13	13	14	15	15	15	\$252,400
2.0-2.7m wide, concrete	2	2	2	2	2	2	2	2	2	1	\$348,900
> 2.7m wide, concrete	1	1	1	1	1	1	1	1	2	1	\$415,700
Total (#)	488	497	502	509	523	519	525	536	541	544	
Total (\$000)	\$107,714.0	\$109,461.0	\$110,463.2	\$111,815.6	\$114,448.4	\$113,586.5	\$114,849.2	\$116,537.0	\$117,141.0	\$117,178.8	

APPENDIX C.2

TABLE 1

TOWN OF WHITBY
CALCULATION OF SERVICE LEVELS
ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	122,022	123,267	124,525	125,796	127,080	128,377	130,575	132,810	135,084	136,562
Historic Employment	<u>38,031</u>	<u>38,807</u>	<u>39,602</u>	<u>40,417</u>	<u>41,251</u>	<u>42,107</u>	<u>42,828</u>	<u>43,561</u>	<u>44,307</u>	<u>44,519</u>
Total Historic Population & Employment	160,053	162,074	164,127	166,213	168,331	170,484	173,403	176,371	179,391	181,081

INVENTORY SUMMARY (\$000)

Roads	\$985,752.1	\$985,891.7	\$986,494.8	\$992,494.3	\$995,197.3	\$997,907.2	\$1,005,386.1	\$1,020,818.9	\$1,030,986.7	\$1,053,345.4
Roads Land	\$348,374.9	\$346,934.0	\$347,071.3	\$348,992.4	\$348,477.8	\$348,958.1	\$351,119.4	\$356,162.3	\$358,152.0	\$366,347.7
Bridges & Culverts	\$92,552.8	\$92,552.8	\$92,552.8	\$92,552.8	\$92,552.8	\$92,552.8	\$91,810.6	\$92,937.2	\$96,317.0	\$97,443.6
Traffic Signals	\$8,117.1	\$8,151.9	\$8,383.8	\$8,383.8	\$8,383.8	\$8,349.0	\$8,580.9	\$8,870.8	\$8,870.8	\$9,450.6
Sidewalks	\$107,714.0	\$109,461.0	\$110,463.2	\$111,815.6	\$114,448.4	\$113,586.5	\$114,849.2	\$116,537.0	\$117,141.0	\$117,178.8
Total (\$000)	\$1,542,510.8	\$1,542,991.4	\$1,544,965.9	\$1,554,238.9	\$1,559,060.1	\$1,561,353.5	\$1,571,746.1	\$1,595,326.2	\$1,611,467.5	\$1,643,766.1

Average
Service
Level

SERVICE LEVEL (\$/pop+empl)

Roads	\$6,158.90	\$6,082.97	\$6,010.56	\$5,971.22	\$5,912.14	\$5,853.38	\$5,797.97	\$5,787.91	\$5,747.15	\$5,817.00	\$5,913.92
Roads Land	\$2,176.62	\$2,140.59	\$2,114.65	\$2,099.67	\$2,070.19	\$2,046.87	\$2,024.87	\$2,019.39	\$1,996.49	\$2,023.12	\$2,071.25
Bridges & Culverts	\$578.26	\$571.05	\$563.91	\$556.83	\$549.83	\$542.88	\$529.46	\$526.94	\$536.91	\$538.12	\$549.42
Traffic Signals	\$50.72	\$50.30	\$51.08	\$50.44	\$49.81	\$48.97	\$49.49	\$50.30	\$49.45	\$52.19	\$50.27
Sidewalks	\$672.99	\$675.38	\$673.04	\$672.72	\$679.90	\$666.26	\$662.33	\$660.75	\$652.99	\$647.11	\$666.35
Total (\$/pop+empl)	\$9,637.49	\$9,520.29	\$9,413.23	\$9,350.89	\$9,261.87	\$9,158.36	\$9,064.12	\$9,045.29	\$8,982.99	\$9,077.54	\$9,251.21

TOWN OF WHITBY
CALCULATION OF MAXIMUM ALLOWABLE

ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE

Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$9,251.21
Net Population & Employment Growth 2021 - 2031	69,925
Maximum Allowable Funding Envelope	\$646,894,061

APPENDIX C.2

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED - TOWN-WIDE INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
2.0 ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE											
Bridges and Culverts Program											
40366101 Anderson Highway 407 Structure Widening	2031 - 2031	\$ 15,000,000	\$ -	\$ -	\$ 15,000,000	0%	\$ -	\$ 15,000,000	\$ -	\$ 15,000,000	\$ -
40276110 BR A08 01 - Coultice Bridge	2027 - 2029	\$ 2,700,000	\$ -	\$ -	\$ 2,700,000	90%	\$ 2,430,000	\$ 270,000	\$ -	\$ 270,000	\$ -
40206111 BR A08 02 - White Bridge	2021 - 2022	\$ 6,350,000	\$ -	\$ -	\$ 6,350,000	72%	\$ 4,581,015	\$ 1,768,985	\$ 1,768,985	\$ -	\$ -
40306113 BR A08 06 - Way Bridge	2025 - 2031	\$ 3,170,000	\$ -	\$ -	\$ 3,170,000	90%	\$ 2,853,000	\$ 317,000	\$ -	\$ 317,000	\$ -
40276101 BR B04 01 - Kerr Bridge	2026 - 2027	\$ 341,000	\$ -	\$ -	\$ 341,000	90%	\$ 306,900	\$ 34,100	\$ -	\$ 34,100	\$ -
40236103 Bonacord Crossing at Lynde Creek (L6 Tributary)	2023 - 2025	\$ 2,650,000	\$ -	\$ -	\$ 2,650,000	0%	\$ -	\$ 2,650,000	\$ -	\$ 2,650,000	\$ -
40230301 Brawley Road Culvert (CU_A07_02)	2021 - 2028	\$ 28,000	\$ -	\$ -	\$ 28,000	80%	\$ 22,400	\$ 5,600	\$ 1,400	\$ 4,200	\$ -
40206105 Bridge & Culvert Structure Design Future Work	2022 - 2031	\$ 900,000	\$ -	\$ -	\$ 900,000	0%	\$ -	\$ 900,000	\$ 75,000	\$ 825,000	\$ -
40336101 Columbus White's Structure Widening	2031 - 2031	\$ 3,000,000	\$ -	\$ -	\$ 3,000,000	0%	\$ -	\$ 3,000,000	\$ -	\$ 3,000,000	\$ -
40236104 CU D01 06 - Lynde Creek Gardens Culvert	2023 - 2027	\$ 5,200,000	\$ -	\$ -	\$ 5,200,000	80%	\$ 4,160,000	\$ 1,040,000	\$ -	\$ 1,040,000	\$ -
40216105 Des Newman/CP Rail Grade Separation - Environmental	2021 - 2021	\$ 2,200,000	\$ -	\$ -	\$ 2,200,000	0%	\$ -	\$ 2,200,000	\$ 2,200,000	\$ -	\$ -
40130201 Des Newman/CP Rail Grade Separation - Phase 1	2021 - 2021	\$ 6,000,000	\$ -	\$ -	\$ 6,000,000	0%	\$ -	\$ 6,000,000	\$ -	\$ 6,000,000	\$ -
40316111 Des Newman/CP Rail Grade Separation - Phase 2	2023 - 2023	\$ 12,000,000	\$ -	\$ -	\$ 12,000,000	0%	\$ -	\$ 12,000,000	\$ -	\$ 12,000,000	\$ -
40326101 Des Newman/CP Rail Grade Separation - Phase 3	2031 - 2031	\$ 7,500,000	\$ -	\$ -	\$ 7,500,000	0%	\$ -	\$ 7,500,000	\$ -	\$ 7,500,000	\$ -
40316102 Mary St / Crawford St Extension	2031 - 2031	\$ 17,825,000	\$ -	\$ 460,809	\$ 17,364,191	10%	\$ 1,736,419	\$ 15,627,772	\$ -	\$ 15,627,772	\$ -
40246037 New Road XI Bridge (Brooklin Development Area)	2031 - 2031	\$ 34,000,000	\$ -	\$ -	\$ 34,000,000	0%	\$ -	\$ 34,000,000	\$ -	\$ 34,000,000	\$ -
40266023 New Road XVI Bridge (Brooklin Development Area)	2031 - 2031	\$ 5,700,000	\$ -	\$ -	\$ 5,700,000	0%	\$ -	\$ 5,700,000	\$ -	\$ 5,700,000	\$ -
40326019 Twin Streams - Baycliffe to Coronation	2031 - 2031	\$ 11,870,000	\$ -	\$ 85,157	\$ 11,784,843	0%	\$ 44,477	\$ 11,740,366	\$ -	\$ 11,740,366	\$ -
40306102 Pedestrian Bridge - Victoria at Victoria Fields	2029 - 2030	\$ 1,305,000	\$ -	\$ 5,327	\$ 1,299,673	20%	\$ 259,935	\$ 1,039,738	\$ -	\$ 1,039,738	\$ -
40316110 Pedestrian Tunnel - Taunton Rd at Hydro Corridor	2030 - 2031	\$ 3,320,000	\$ -	\$ -	\$ 3,320,000	30%	\$ 984,415	\$ 2,335,585	\$ -	\$ 2,335,585	\$ -
Subtotal Bridges and Culverts Program		\$ 141,059,000	\$ -	\$ 551,293	\$ 140,507,707		\$ 17,378,560	\$ 123,129,147	\$ 4,045,385	\$ 119,083,761	\$ -
Roads Reconstruction Program											
40256049 Anderson - 620m north of Solmar to MBA	2025 - 2025	\$ 3,950,000	\$ -	\$ -	\$ 3,950,000	20%	\$ 790,000	\$ 3,160,000	\$ -	\$ 3,160,000	\$ -
40256048 Ashburn Rd - Highway 7 to Columbus	2023 - 2023	\$ 5,820,000	\$ -	\$ -	\$ 5,820,000	21%	\$ 1,217,563	\$ 4,602,437	\$ -	\$ 4,602,437	\$ -
40306034 Ashburn Road - Columbus to Street D	2027 - 2027	\$ 7,080,000	\$ -	\$ -	\$ 7,080,000	21%	\$ 1,476,802	\$ 5,603,198	\$ -	\$ 5,603,198	\$ -
40316041 Ashburn - Street D to Brawley	2031 - 2031	\$ 4,720,000	\$ -	\$ -	\$ 4,720,000	21%	\$ 968,610	\$ 3,751,390	\$ -	\$ 3,751,390	\$ -
40316042 Cochrane - Columbus to Street C	2031 - 2031	\$ 5,860,000	\$ -	\$ -	\$ 5,860,000	21%	\$ 1,222,668	\$ 4,637,332	\$ -	\$ 4,637,332	\$ -
40326078 Cochrane - Street C to Brawley	2031 - 2031	\$ 1,800,000	\$ -	\$ -	\$ 1,800,000	20%	\$ 360,000	\$ 1,440,000	\$ -	\$ 1,440,000	\$ -
40206030 Colborne St - Brock to Green	2023 - 2023	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	20%	\$ 200,000	\$ 800,000	\$ -	\$ 800,000	\$ -
40336028 Conlin - Anderson to Garrard	2031 - 2031	\$ 2,140,000	\$ -	\$ -	\$ 2,140,000	20%	\$ 428,000	\$ 1,712,000	\$ -	\$ 1,712,000	\$ -
40326079 Conlin - Garrard to Oshawa	2031 - 2031	\$ 720,000	\$ -	\$ -	\$ 720,000	20%	\$ 144,000	\$ 576,000	\$ -	\$ 576,000	\$ -
40246046 Coronation Rd - Tauton to 650m North	2024 - 2024	\$ 2,500,000	\$ -	\$ -	\$ 2,500,000	21%	\$ 518,820	\$ 1,981,180	\$ -	\$ 1,981,180	\$ -
40255901 Durham St - Winchester to Cassels	2025 - 2025	\$ 1,020,000	\$ -	\$ -	\$ 1,020,000	20%	\$ 204,000	\$ 816,000	\$ -	\$ 816,000	\$ -
40316043 Garrard - Birchpark to Conlin	2031 - 2031	\$ 7,500,000	\$ -	\$ -	\$ 7,500,000	21%	\$ 1,592,723	\$ 5,907,277	\$ -	\$ 5,907,277	\$ -
40236051 Garrard - Conlin to MBA	2023 - 2023	\$ 1,300,000	\$ -	\$ -	\$ 1,300,000	20%	\$ 260,000	\$ 1,040,000	\$ -	\$ 1,040,000	\$ -
40316044 Garrard - Conlin to MBA	2031 - 2031	\$ 4,200,000	\$ -	\$ -	\$ 4,200,000	20%	\$ 840,000	\$ 3,360,000	\$ -	\$ 3,360,000	\$ -
40296022 Pearl St - Cassels to Baldwin	2029 - 2029	\$ 880,000	\$ -	\$ -	\$ 880,000	20%	\$ 176,000	\$ 704,000	\$ -	\$ 704,000	\$ -
40236019 Water Street 2. Design	2023 - 2023	\$ 300,000	\$ -	\$ -	\$ 300,000	20%	\$ 60,000	\$ 240,000	\$ -	\$ 240,000	\$ -
40246022 Water Street 3. Property	2024 - 2024	\$ 300,000	\$ -	\$ -	\$ 300,000	20%	\$ 60,000	\$ 240,000	\$ -	\$ 240,000	\$ -
40256015 Water Street 4. Utilities	2025 - 2025	\$ 30,000	\$ -	\$ -	\$ 30,000	20%	\$ 6,000	\$ 24,000	\$ -	\$ 24,000	\$ -
40226012 Water Street 5. Construction	2026 - 2026	\$ 5,390,000	\$ -	\$ -	\$ 5,390,000	20%	\$ 1,078,000	\$ 4,312,000	\$ -	\$ 4,312,000	\$ -
Subtotal Roads Reconstruction Program		\$ 56,510,000	\$ -	\$ -	\$ 56,510,000		\$ 11,603,186	\$ 44,906,814	\$ -	\$ 44,906,814	\$ -

APPENDIX C.2

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED - TOWN-WIDE INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
Urban Road Resurfacing Program											
40256003 Anderson St - Clair to Winchester	2025 - 2025	\$ 832,900	\$ -	\$ -	\$ 832,900	90%	\$ 749,610	\$ 83,290	\$ -	\$ 83,290	\$ -
40266015 Anderson St - Dryden Blvd to Taunton Rd	2026 - 2026	\$ 861,700	\$ -	\$ -	\$ 861,700	90%	\$ 775,530	\$ 86,170	\$ -	\$ 86,170	\$ -
40236023 Anderson St - Glen Dhu Dr to Dryden Blvd	2023 - 2023	\$ 855,200	\$ -	\$ -	\$ 855,200	90%	\$ 769,680	\$ 85,520	\$ -	\$ 85,520	\$ -
40366002 Anderson St - Rossland Rd E to Glen Dhu Dr (R1)	2031 - 2031	\$ 118,600	\$ -	\$ -	\$ 118,600	90%	\$ 106,740	\$ 11,860	\$ -	\$ 11,860	\$ -
40306008 Annes St - Burns St to Dunlop St	2030 - 2030	\$ 660,100	\$ -	\$ -	\$ 660,100	90%	\$ 594,090	\$ 66,010	\$ -	\$ 66,010	\$ -
40356006 Annes St - Burns St to End of Rd	2031 - 2031	\$ 94,300	\$ -	\$ -	\$ 94,300	90%	\$ 84,870	\$ 9,430	\$ -	\$ 9,430	\$ -
40356007 Annes St - Dunlop St to Dundas St (R1)	2031 - 2031	\$ 107,000	\$ -	\$ -	\$ 107,000	90%	\$ 96,300	\$ 10,700	\$ -	\$ 10,700	\$ -
40296043 Ashburn - Winchester to Columbus	2029 - 2029	\$ 1,346,700	\$ -	\$ -	\$ 1,346,700	90%	\$ 1,212,030	\$ 134,670	\$ -	\$ 134,670	\$ -
40236028 Bonacord Ave - Mackey Dr to McQuay Blvd	2026 - 2026	\$ 463,200	\$ -	\$ -	\$ 463,200	90%	\$ 416,880	\$ 46,320	\$ -	\$ 46,320	\$ -
40346001 Bonacord Ave - McQuay Blvd to Cochrane St (R1)	2029 - 2031	\$ 1,259,660	\$ -	\$ -	\$ 1,259,660	90%	\$ 1,133,694	\$ 125,966	\$ -	\$ 125,966	\$ -
40266016 Brock N - Dundas to Manning	2026 - 2026	\$ 1,884,600	\$ -	\$ -	\$ 1,884,600	90%	\$ 1,696,140	\$ 188,460	\$ -	\$ 188,460	\$ -
40286028 Brock S - 401 to Dundas	2028 - 2028	\$ 1,966,100	\$ -	\$ -	\$ 1,966,100	90%	\$ 1,769,490	\$ 196,610	\$ -	\$ 196,610	\$ -
40226028 Burns - Annes to Brock	2022 - 2022	\$ 762,800	\$ -	\$ -	\$ 762,800	90%	\$ 686,520	\$ 76,280	\$ -	\$ 76,280	\$ -
40341701 Burns - Brock to Hopkins	2027 - 2027	\$ 1,544,000	\$ -	\$ -	\$ 1,544,000	90%	\$ 1,389,600	\$ 154,400	\$ -	\$ 154,400	\$ -
40296001 Burns - End of Rd to Annes St (R1)	2029 - 2029	\$ 228,200	\$ -	\$ -	\$ 228,200	90%	\$ 205,380	\$ 22,820	\$ -	\$ 22,820	\$ -
40256023 Burns - Thickson to Oshawa	2025 - 2025	\$ 1,355,700	\$ -	\$ -	\$ 1,355,700	90%	\$ 1,220,130	\$ 135,570	\$ -	\$ 135,570	\$ -
40356005 Cachet Blvd - Carnwith Dr to Columbus Rd	2031 - 2031	\$ 518,490	\$ -	\$ -	\$ 518,490	90%	\$ 466,641	\$ 51,849	\$ -	\$ 51,849	\$ -
40256041 Carnwith Dr - Ashburn Rd to Montgomery Ave	2025 - 2025	\$ 1,164,900	\$ -	\$ -	\$ 1,164,900	90%	\$ 1,048,410	\$ 116,490	\$ -	\$ 116,490	\$ -
40256033 Carnwith Dr - Baldwin St to Thickson Rd	2025 - 2025	\$ 1,176,000	\$ -	\$ -	\$ 1,176,000	90%	\$ 1,058,400	\$ 117,600	\$ -	\$ 117,600	\$ -
40296049 Carnwith Dr - Montgomery Ave to Baldwin St	2029 - 2029	\$ 1,260,600	\$ -	\$ -	\$ 1,260,600	90%	\$ 1,134,540	\$ 126,060	\$ -	\$ 126,060	\$ -
40306002 Carnwith Dr - Thickson Rd to End of Rd	2030 - 2030	\$ 1,023,500	\$ -	\$ -	\$ 1,023,500	90%	\$ 921,150	\$ 102,350	\$ -	\$ 102,350	\$ -
40286032 Cochrane - Bonacord to Rossland	2028 - 2028	\$ 1,117,800	\$ -	\$ -	\$ 1,117,800	90%	\$ 1,006,020	\$ 111,780	\$ -	\$ 111,780	\$ -
40296048 Cochrane - Rossland to Taunton	2029 - 2029	\$ 1,900,800	\$ -	\$ -	\$ 1,900,800	90%	\$ 1,710,720	\$ 190,080	\$ -	\$ 190,080	\$ -
40306009 Dryden Blvd - Anderson St to Bremner St (R1)	2030 - 2030	\$ 414,100	\$ -	\$ -	\$ 414,100	90%	\$ 372,690	\$ 41,410	\$ -	\$ 41,410	\$ -
40246019 Dryden Blvd - Brock St to Jason Dr	2024 - 2024	\$ 1,355,500	\$ -	\$ -	\$ 1,355,500	90%	\$ 1,219,950	\$ 135,550	\$ -	\$ 135,550	\$ -
40216047 Dryden Blvd - Fallingbrook St to Anderson St	2021 - 2021	\$ 520,000	\$ -	\$ -	\$ 520,000	90%	\$ 468,000	\$ 52,000	\$ 52,000	\$ -	\$ -
40286033 Dryden Blvd - Jason Dr to Fallingbrook St (R1)	2028 - 2028	\$ 155,400	\$ -	\$ -	\$ 155,400	90%	\$ 139,860	\$ 15,540	\$ -	\$ 15,540	\$ -
40236029 Dryden Blvd - Thickson to Oshawa	2023 - 2023	\$ 1,608,900	\$ -	\$ -	\$ 1,608,900	90%	\$ 1,448,010	\$ 160,890	\$ -	\$ 160,890	\$ -
40256031 Dundas E - Bowman to Oshawa	2025 - 2025	\$ 2,148,200	\$ -	\$ 18,690	\$ 2,129,510	90%	\$ 1,916,559	\$ 212,951	\$ -	\$ 212,951	\$ -
40326040 Dundas St E - Brock St to Hickory St (R1)	2031 - 2031	\$ 256,800	\$ -	\$ -	\$ 256,800	90%	\$ 231,120	\$ 25,680	\$ -	\$ 25,680	\$ -
40276033 Dundas St E - Craydon St to Hopkins St (R1)	2027 - 2027	\$ 383,500	\$ -	\$ -	\$ 383,500	90%	\$ 345,150	\$ 38,350	\$ -	\$ 38,350	\$ -
40256025 Dundas St E - Hickory to Craydon	2025 - 2025	\$ 1,031,400	\$ -	\$ -	\$ 1,031,400	90%	\$ 928,260	\$ 103,140	\$ -	\$ 103,140	\$ -
40256021 Dundas St E - Hopkins to Bowman	2025 - 2025	\$ 619,100	\$ -	\$ -	\$ 619,100	90%	\$ 557,190	\$ 61,910	\$ -	\$ 61,910	\$ -
40276034 Dundas St E - Springwood St to Garrard Rd (R1)	2027 - 2027	\$ 323,900	\$ -	\$ -	\$ 323,900	90%	\$ 291,510	\$ 32,390	\$ -	\$ 32,390	\$ -
40256034 Dundas St W - Annes to Brock	2025 - 2025	\$ 1,104,200	\$ -	\$ -	\$ 1,104,200	90%	\$ 993,780	\$ 110,420	\$ -	\$ 110,420	\$ -
40256026 Dundas St W - Jeffery to Fothergill	2025 - 2025	\$ 685,700	\$ -	\$ -	\$ 685,700	90%	\$ 617,130	\$ 68,570	\$ -	\$ 68,570	\$ -
40326041 Dundas St W - Jeffrey St to Annes St (R1)	2031 - 2031	\$ 546,800	\$ -	\$ -	\$ 546,800	90%	\$ 492,120	\$ 54,680	\$ -	\$ 54,680	\$ -

APPENDIX C.2

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED - TOWN-WIDE INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031	
Urban Road Resurfacing Program Continued												
40226040	Garden St - Consumers Dr to 180m South of Burns St	2022 - 2022	\$ 546,100	\$ -	\$ -	\$ 546,100	90%	\$ 491,490	\$ 54,610	\$ -	\$ 54,610	\$ -
40236049	Garden St - Dundas to Mary	2023 - 2023	\$ 424,700	\$ -	\$ -	\$ 424,700	90%	\$ 382,230	\$ 42,470	\$ -	\$ 42,470	\$ -
40226034	Garden St - Manning to Dryden	2023 - 2023	\$ 1,909,700	\$ -	\$ -	\$ 1,909,700	90%	\$ 1,718,730	\$ 190,970	\$ -	\$ 190,970	\$ -
40216019	Garden St - Martinet to Manning	2022 - 2022	\$ 862,100	\$ -	\$ -	\$ 862,100	90%	\$ 775,890	\$ 86,210	\$ -	\$ 86,210	\$ -
40216029	Garden St - Mary to Martinet	2022 - 2022	\$ 890,000	\$ -	\$ -	\$ 890,000	90%	\$ 801,000	\$ 89,000	\$ -	\$ 89,000	\$ -
40316001	Garden St - Taunton Rd to Robert Attersley Dr	2031 - 2031	\$ 846,000	\$ -	\$ -	\$ 846,000	90%	\$ 761,400	\$ 84,600	\$ -	\$ 84,600	\$ -
40311701	Garrard Rd - Dundas to Rossland	2031 - 2031	\$ 1,984,600	\$ -	\$ -	\$ 1,984,600	90%	\$ 1,786,140	\$ 198,460	\$ -	\$ 198,460	\$ -
40276024	Garrard Rd - Rossland to Taunton	2027 - 2027	\$ 1,864,800	\$ -	\$ -	\$ 1,864,800	90%	\$ 1,678,320	\$ 186,480	\$ -	\$ 186,480	\$ -
40286001	Garrard Rd - Taunton Rd to Birchpark Dr	2028 - 2028	\$ 304,200	\$ -	\$ -	\$ 304,200	90%	\$ 273,780	\$ 30,420	\$ -	\$ 30,420	\$ -
40256004	Gordon St - Victoria to End of Rd	2025 - 2025	\$ 434,100	\$ -	\$ -	\$ 434,100	90%	\$ 390,690	\$ 43,410	\$ -	\$ 43,410	\$ -
40316026	Green St - Dunlop St E to Dundas St E	2031 - 2031	\$ 244,100	\$ -	\$ 18,538	\$ 225,562	90%	\$ 203,006	\$ 22,556	\$ -	\$ 22,556	\$ -
40331701	Kendalwood - Burns to Dundas	2031 - 2031	\$ 1,125,000	\$ -	\$ -	\$ 1,125,000	90%	\$ 1,012,500	\$ 112,500	\$ -	\$ 112,500	\$ -
40256017	Mary St E - Hickory St to Garden St	2025 - 2025	\$ 433,600	\$ -	\$ -	\$ 433,600	90%	\$ 390,240	\$ 43,360	\$ -	\$ 43,360	\$ -
40366001	South Blair St - Watson St E to Victoria St E	2031 - 2031	\$ 650,200	\$ -	\$ -	\$ 650,200	90%	\$ 585,180	\$ 65,020	\$ -	\$ 65,020	\$ -
40306006	Thickson Rd - Wentworth St to End of Rd	2030 - 2030	\$ 678,600	\$ -	\$ -	\$ 678,600	90%	\$ 610,740	\$ 67,860	\$ -	\$ 67,860	\$ -
40301702	Twin Streams - Baycliffe to Cochrane	2030 - 2030	\$ 935,600	\$ -	\$ 117,412	\$ 818,188	90%	\$ 736,369	\$ 81,819	\$ -	\$ 81,819	\$ -
	Subtotal Urban Road Resurfacing Program		\$ 47,789,750	\$ -	\$ 154,640	\$ 47,635,110		\$ 42,871,599	\$ 4,763,511	\$ 52,000	\$ 4,711,511	\$ -
Rural Road Resurfacing Program												
40306001	Ashburn Rd - Brawley Rd to Myrtle Rd	2030 - 2030	\$ 1,750,000	\$ -	\$ -	\$ 1,750,000	90%	\$ 1,575,000	\$ 175,000	\$ -	\$ 175,000	\$ -
40246045	Ashburn Rd - Spencers to Mid Arterial	2024 - 2024	\$ 900,000	\$ -	\$ -	\$ 900,000	90%	\$ 810,000	\$ 90,000	\$ -	\$ 90,000	\$ -
40286026	Spencers - Baldwin to Ashburn Rehabilitation	2028 - 2028	\$ 1,200,000	\$ -	\$ -	\$ 1,200,000	90%	\$ 1,080,000	\$ 120,000	\$ -	\$ 120,000	\$ -
40306005	South Blair St - Water St to Watson St E	2030 - 2030	\$ 791,805	\$ -	\$ 47,950	\$ 743,855	90%	\$ 669,470	\$ 74,386	\$ -	\$ 74,386	\$ -
	Subtotal Rural Road Resurfacing Program		\$ 4,641,805	\$ -	\$ 47,950	\$ 4,593,855		\$ 4,134,470	\$ 459,386	\$ -	\$ 459,386	\$ -
Roads Maintenance Program												
40216404	New Guiderails	2021 - 2021	\$ 102,000	\$ -	\$ -	\$ 102,000	15%	\$ 15,300	\$ 86,700	\$ 86,700	\$ -	\$ -
	Subtotal Roads Maintenance Program		\$ 102,000	\$ -	\$ -	\$ 102,000		\$ 15,300	\$ 86,700	\$ 86,700	\$ -	\$ -
Transportation Infrastructure Resilience Program												
40216503	Additional Hydraulic Assessments Bridges & Culverts	2021 - 2021	\$ 50,000	\$ -	\$ -	\$ 50,000	72%	\$ 36,071	\$ 13,929	\$ 13,929	\$ -	\$ -
40246114	CU360001 - Anderson St Culvert n/o Darren Ave	2024 - 2024	\$ 1,940,000	\$ -	\$ -	\$ 1,940,000	72%	\$ 1,399,554	\$ 540,446	\$ -	\$ 540,446	\$ -
40256113	CU480017 - Conlin Rd Culvert e/o Thickson Rd	2025 - 2025	\$ 980,000	\$ -	\$ -	\$ 980,000	72%	\$ 706,991	\$ 273,009	\$ -	\$ 273,009	\$ -
40236102	Rehabilitation & Upsizing Culverts - Lynde Creek	2025 - 2027	\$ 4,000,000	\$ -	\$ -	\$ 4,000,000	72%	\$ 2,885,678	\$ 1,114,322	\$ -	\$ 1,114,322	\$ -
40246101	Rehabilitation & Upsizing Culverts - Pringle Creek	2026 - 2026	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	72%	\$ 721,420	\$ 278,580	\$ -	\$ 278,580	\$ -
	Subtotal Transportation Infrastructure Resilience Program		\$ 7,970,000	\$ -	\$ -	\$ 7,970,000		\$ 5,749,714	\$ 2,220,286	\$ 13,929	\$ 2,206,357	\$ -

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Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031	
Multi-Use Paths and Cycling Facilities Program												
40246208	Anderson - Claire to Winchester (Paved Shoulders)	2031 - 2031	\$ 210,000	\$ -	\$ -	\$ 210,000	30%	\$ 62,267	\$ 147,733	\$ -	\$ 147,733	\$ -
40256046	Baldwin - Taunton to Sonley	2025 - 2025	\$ 450,000	\$ -	\$ -	\$ 450,000	30%	\$ 133,430	\$ 316,570	\$ -	\$ 316,570	\$ -
40286203	Bonacord - Cochrane to Mackey	2022 - 2030	\$ 600,000	\$ -	\$ -	\$ 600,000	30%	\$ 177,906	\$ 422,094	\$ -	\$ 422,094	\$ -
40286035	Brock - Consumers to Mary	2028 - 2028	\$ 2,850,000	\$ -	\$ -	\$ 2,850,000	30%	\$ 845,055	\$ 2,004,945	\$ -	\$ 2,004,945	\$ -
40326075	Brock - Consumers to Victoria	2031 - 2031	\$ 2,210,000	\$ -	\$ -	\$ 2,210,000	30%	\$ 655,289	\$ 1,554,711	\$ -	\$ 1,554,711	\$ -
40266045	Brock - Maple to Manning	2026 - 2026	\$ 375,000	\$ -	\$ -	\$ 375,000	30%	\$ 111,191	\$ 263,809	\$ -	\$ 263,809	\$ -
40266046	Brock - Mary to Maple	2026 - 2026	\$ 325,000	\$ -	\$ -	\$ 325,000	30%	\$ 96,366	\$ 228,634	\$ -	\$ 228,634	\$ -
40316039	Brock - Victoria to Water	2031 - 2031	\$ 445,000	\$ -	\$ -	\$ 445,000	30%	\$ 131,947	\$ 313,053	\$ -	\$ 313,053	\$ -
40316201	Carnwith - Baldwin to Ashburn	2031 - 2031	\$ 655,000	\$ -	\$ -	\$ 655,000	30%	\$ 194,214	\$ 460,786	\$ -	\$ 460,786	\$ -
40276203	Cochrane - Rossland to Taunton (Bike Lanes)	2027 - 2027	\$ 45,000	\$ -	\$ -	\$ 45,000	30%	\$ 13,343	\$ 31,657	\$ -	\$ 31,657	\$ -
40236206	Coronation - Taunton to Winchester (Bike Lane)	2023 - 2023	\$ 1,000,050	\$ -	\$ -	\$ 1,000,050	30%	\$ 296,525	\$ 703,525	\$ -	\$ 703,525	\$ -
40256206	Coronation - Winchester to Columbus (Signed Route)	2031 - 2031	\$ 10,000	\$ -	\$ -	\$ 10,000	30%	\$ 2,965	\$ 7,035	\$ -	\$ 7,035	\$ -
40226204	Country Lane - Rossland to Taunton (Signed Route)	2025 - 2025	\$ 10,000	\$ -	\$ -	\$ 10,000	30%	\$ 2,965	\$ 7,035	\$ -	\$ 7,035	\$ -
35196201	Cycling Misc. Facility Improvements	2021 - 2031	\$ 1,210,000	\$ -	\$ -	\$ 1,210,000	30%	\$ 358,778	\$ 851,222	\$ 154,768	\$ 696,454	\$ -
40266208	Dryden - Brock to Thicksen (Bike Lane)	2026 - 2026	\$ 50,000	\$ -	\$ -	\$ 50,000	30%	\$ 14,826	\$ 35,174	\$ -	\$ 35,174	\$ -
40306202	Dryden Blvd - Thicksen to Oshawa	2031 - 2031	\$ 670,000	\$ -	\$ -	\$ 670,000	30%	\$ 198,662	\$ 471,338	\$ -	\$ 471,338	\$ -
40150701	Garden - Dundas to Mary	2021 - 2023	\$ 420,000	\$ -	\$ -	\$ 420,000	30%	\$ 124,534	\$ 295,466	\$ 84,419	\$ 211,047	\$ -
40296205	Garrard - Dundas to Birchpark (Bike Lane)	2029 - 2029	\$ 90,000	\$ -	\$ -	\$ 90,000	30%	\$ 26,686	\$ 63,314	\$ -	\$ 63,314	\$ -
40316040	McKinney - Taunton to Robert Attersley	2031 - 2031	\$ 410,000	\$ -	\$ -	\$ 410,000	30%	\$ 121,569	\$ 288,431	\$ -	\$ 288,431	\$ -
40296206	McQuay - Dundas to Rossland (Bike Lane)	2029 - 2029	\$ 55,000	\$ -	\$ -	\$ 55,000	30%	\$ 16,308	\$ 38,692	\$ -	\$ 38,692	\$ -
40216217	Misc. Striping and Signage	2021 - 2030	\$ 145,000	\$ -	\$ -	\$ 145,000	30%	\$ 42,994	\$ 102,006	\$ 30,250	\$ 71,756	\$ -
40236201	RH 12 Baldwin - Sonley to Spencers	2024 - 2024	\$ 460,000	\$ -	\$ -	\$ 460,000	30%	\$ 136,395	\$ 323,605	\$ -	\$ 323,605	\$ -
40246204	RH 12 Baldwin - Spencers Rd to Winchester	2024 - 2024	\$ 900,000	\$ -	\$ -	\$ 900,000	30%	\$ 266,860	\$ 633,140	\$ -	\$ 633,140	\$ -
40131813	RR 22 Victoria - Brock to South Blair	2021 - 2021	\$ 590,000	\$ -	\$ -	\$ 590,000	30%	\$ 174,941	\$ 415,059	\$ 415,059	\$ -	\$ -
40206211	RR 22 Victoria - Home Depot to Oshawa	2021 - 2021	\$ 170,000	\$ -	\$ 56,440	\$ 113,560	30%	\$ 33,672	\$ 79,888	\$ 79,888	\$ -	\$ -
40071802	RR 22 Victoria - South Blair to Thicksen	2021 - 2021	\$ 410,000	\$ -	\$ 98,876	\$ 311,124	30%	\$ 92,252	\$ 218,872	\$ 218,872	\$ -	\$ -
40220701	RR 23 Lake Ridge - Dundas to Rossland	2031 - 2031	\$ 750,000	\$ -	\$ -	\$ 750,000	30%	\$ 222,383	\$ 527,617	\$ -	\$ 527,617	\$ -
40216204	RR 23 Lake Ridge - Victoria to Dundas	2031 - 2031	\$ 965,000	\$ -	\$ -	\$ 965,000	30%	\$ 286,133	\$ 678,867	\$ -	\$ 678,867	\$ -
40296202	RR 25 Consumers - Brock to Garden	2030 - 2030	\$ 350,000	\$ -	\$ -	\$ 350,000	30%	\$ 103,779	\$ 246,221	\$ -	\$ 246,221	\$ -
40306071	RR 25 Consumers - Garden to Hopkins	2030 - 2030	\$ 590,000	\$ -	\$ -	\$ 590,000	30%	\$ 174,941	\$ 415,059	\$ -	\$ 415,059	\$ -
40306072	RR 25 Consumers - Hopkins to Thicksen	2030 - 2030	\$ 385,000	\$ -	\$ -	\$ 385,000	30%	\$ 114,157	\$ 270,843	\$ -	\$ 270,843	\$ -

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						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
Multi-Use Paths and Cycling Facilities Program Continued											
40216216 RR 25 Stellar - City of Oshawa Boundary to Thickson	2021 - 2021	\$ 330,000	\$ -	\$ -	\$ 330,000	30%	\$ 97,849	\$ 232,151	\$ 232,151	\$ -	\$ -
35326203 RR 26 Thickson - Carnwith to Columbus	2031 - 2031	\$ 285,000	\$ -	\$ -	\$ 285,000	30%	\$ 84,506	\$ 200,494	\$ -	\$ 200,494	\$ -
35326001 RR 26 Thickson - Columbus to Brawley	2031 - 2031	\$ 950,000	\$ -	\$ -	\$ 950,000	30%	\$ 281,685	\$ 668,315	\$ -	\$ 668,315	\$ -
35256201 RR 26 Thickson - Conlin to Winchester	2025 - 2025	\$ 980,000	\$ -	\$ -	\$ 980,000	30%	\$ 290,580	\$ 689,420	\$ -	\$ 689,420	\$ -
35286203 RR 26 Thickson - Consumers to Burns	2028 - 2028	\$ 365,000	\$ -	\$ -	\$ 365,000	30%	\$ 108,226	\$ 256,774	\$ -	\$ 256,774	\$ -
35306201 RR 26 Thickson - Glengowan to Conlin	2030 - 2030	\$ 585,000	\$ -	\$ -	\$ 585,000	30%	\$ 173,459	\$ 411,541	\$ -	\$ 411,541	\$ -
40226044 RR 26 Thickson - Hwy 401 Structure	2022 - 2022	\$ 400,000	\$ -	\$ -	\$ 400,000	30%	\$ 118,604	\$ 281,396	\$ 281,396	\$ -	\$ -
40256204 RR 26 Thickson - Rossland to Dryden	2025 - 2025	\$ 450,000	\$ -	\$ -	\$ 450,000	30%	\$ 133,430	\$ 316,570	\$ -	\$ 316,570	\$ -
35296201 RR 26 Thickson - Taunton to Glengowan	2025 - 2025	\$ 375,000	\$ -	\$ -	\$ 375,000	30%	\$ 111,191	\$ 263,809	\$ -	\$ 263,809	\$ -
35326202 RR 26 Thickson - Victoria to Consumers	2031 - 2031	\$ 315,000	\$ -	\$ -	\$ 315,000	30%	\$ 93,401	\$ 221,599	\$ -	\$ 221,599	\$ -
35326201 RR 26 Thickson - Waterfront Trail to Wentworth	2031 - 2031	\$ 285,000	\$ -	\$ -	\$ 285,000	30%	\$ 84,506	\$ 200,494	\$ -	\$ 200,494	\$ -
40206212 RR 26 Thickson - Wentworth to Victoria	2021 - 2021	\$ 215,000	\$ -	\$ -	\$ 215,000	30%	\$ 63,750	\$ 151,250	\$ 151,250	\$ -	\$ -
35326204 RR 26 Thickson - Winchester to Carnwith	2031 - 2031	\$ 590,000	\$ -	\$ -	\$ 590,000	30%	\$ 174,941	\$ 415,059	\$ -	\$ 415,059	\$ -
40216203 RR 28 Rossland - Garden to Oshawa	2031 - 2031	\$ 1,445,000	\$ -	\$ -	\$ 1,445,000	30%	\$ 428,458	\$ 1,016,542	\$ -	\$ 1,016,542	\$ -
40206210 RR 3 Winchester - Durham to Anderson	2021 - 2021	\$ 600,000	\$ -	\$ 10,927	\$ 589,073	30%	\$ 174,666	\$ 414,407	\$ 414,407	\$ -	\$ -
35286202 RR 36 Hopkins - Burns to Nichol (Buffered Bike Lanes)	2028 - 2028	\$ 32,000	\$ -	\$ -	\$ 32,000	30%	\$ 9,488	\$ 22,512	\$ -	\$ 22,512	\$ -
35266201 RR 36 Hopkins - Consumers to Burns (Buffered Bike Lanes)	2028 - 2028	\$ 25,000	\$ -	\$ -	\$ 25,000	30%	\$ 7,413	\$ 17,587	\$ -	\$ 17,587	\$ -
40266202 RR 36 Hopkins - New Victoria Alignment to Champlain	2026 - 2026	\$ 175,000	\$ -	\$ -	\$ 175,000	30%	\$ 51,889	\$ 123,111	\$ -	\$ 123,111	\$ -
35286201 RR 36 Hopkins - Nichol to Dundas (Buffered Bike Lanes)	2028 - 2028	\$ 7,000	\$ -	\$ -	\$ 7,000	30%	\$ 2,076	\$ 4,924	\$ -	\$ 4,924	\$ -
40286201 RR 36 Hopkins - Victoria to Consumers (Buffered Bike Lanes)	2028 - 2028	\$ 25,000	\$ -	\$ -	\$ 25,000	30%	\$ 7,413	\$ 17,587	\$ -	\$ 17,587	\$ -
40171806 RR 4 Taunton - Coronation Rd to Baycliffe Dr	2021 - 2021	\$ 175,000	\$ -	\$ -	\$ 175,000	30%	\$ 51,889	\$ 123,111	\$ 123,111	\$ -	\$ -
40216202 RR 45 Henry - IPSC to North Go Access	2022 - 2025	\$ 3,375,000	\$ -	\$ -	\$ 3,375,000	30%	\$ 1,000,723	\$ 2,374,277	\$ -	\$ 2,374,277	\$ -
40211801 RR 12 Brock - Victoria to Consumers	2026 - 2026	\$ 2,750,000	\$ -	\$ -	\$ 2,750,000	30%	\$ 815,404	\$ 1,934,596	\$ -	\$ 1,934,596	\$ -
40246203 RR 46 Brock - Water to Victoria (WS)	2026 - 2026	\$ 520,000	\$ -	\$ -	\$ 520,000	30%	\$ 154,186	\$ 365,814	\$ -	\$ 365,814	\$ -
40306201 RR 58 Manning - Brock to Thickson	2031 - 2031	\$ 1,385,000	\$ -	\$ -	\$ 1,385,000	30%	\$ 410,667	\$ 974,333	\$ -	\$ 974,333	\$ -
40326076 RR 58 Manning - Garrard to Oshawa	2031 - 2031	\$ 260,000	\$ -	\$ -	\$ 260,000	30%	\$ 77,093	\$ 182,907	\$ -	\$ 182,907	\$ -
40246206 RR 58 Manning - Thickson to Garrard	2031 - 2031	\$ 425,000	\$ -	\$ -	\$ 425,000	30%	\$ 126,017	\$ 298,983	\$ -	\$ 298,983	\$ -
40201701 Rossland - Des Newman to Brock	2021 - 2023	\$ 1,720,000	\$ -	\$ -	\$ 1,720,000	30%	\$ 509,998	\$ 1,210,002	\$ -	\$ 1,210,002	\$ -
Subtotal Multi-Use Paths and Cycling Facilities Program		\$ 36,849,050	\$ -	\$ 166,243	\$ 36,682,807		\$ 10,876,842	\$ 25,805,965	\$ 2,185,571	\$ 23,620,394	\$ -

APPENDIX C.2

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED - TOWN-WIDE INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031	
Sidewalk Program												
40216211	Ash St - Chestnut to Maple	2022 - 2022	\$ 69,825	\$ -	\$ 16,010	\$ 53,815	90%	\$ 48,434	\$ 5,382	\$ 5,382	\$ -	\$ -
40216210	Brock - Rossland to Palmerson (WS)	2021 - 2021	\$ 26,250	\$ -	\$ 16,458	\$ 9,792	50%	\$ 4,896	\$ 4,896	\$ 4,896	\$ -	\$ -
40216208	Cassels Rd E - Baldwin to 50m East	2021 - 2021	\$ 52,500	\$ -	\$ -	\$ 52,500	50%	\$ 26,250	\$ 26,250	\$ 26,250	\$ -	\$ -
40306203	Cedarbrook Trail - Columbus to 700m north	2031 - 2031	\$ 2,073,750	\$ -	\$ -	\$ 2,073,750	0%	\$ -	\$ 2,073,750	\$ -	\$ 2,073,750	\$ -
40276202	Centre St E - Colston Ave E to Queen St	2027 - 2027	\$ 78,750	\$ -	\$ -	\$ 78,750	90%	\$ 70,875	\$ 7,875	\$ -	\$ 7,875	\$ -
40226203	Charles St - Watson to Victoria	2022 - 2022	\$ 183,750	\$ -	\$ 3,880	\$ 179,870	90%	\$ 161,883	\$ 17,987	\$ 17,987	\$ -	\$ -
40216205	Colston Ave - Centre St W to North St	2022 - 2022	\$ 52,500	\$ -	\$ 5,169	\$ 47,331	90%	\$ 42,598	\$ 4,733	\$ 4,733	\$ -	\$ -
40296201	Desmond Newman - Bonacord to Taunton (ws)	2029 - 2029	\$ 945,000	\$ -	\$ -	\$ 945,000	0%	\$ -	\$ 945,000	\$ -	\$ 945,000	\$ -
40216601	Hwy 12 Baldwin - Garden to Winchester	2024 - 2024	\$ 866,250	\$ -	\$ -	\$ 866,250	0%	\$ -	\$ 866,250	\$ -	\$ 866,250	\$ -
40266205	MTO Hwy 7 - Ashburn to Cochrane	2026 - 2026	\$ 656,250	\$ -	\$ -	\$ 656,250	0%	\$ -	\$ 656,250	\$ -	\$ 656,250	\$ -
40256203	MTO Hwy 7 - Baldwin to Ashburn	2025 - 2025	\$ 223,125	\$ -	\$ -	\$ 223,125	0%	\$ -	\$ 223,125	\$ -	\$ 223,125	\$ -
40216212	Maple St - Perry to Hickory	2022 - 2022	\$ 157,500	\$ -	\$ 6,445	\$ 151,055	90%	\$ 135,950	\$ 15,106	\$ 15,106	\$ -	\$ -
40236204	New Sidewalk Installations	2023 - 2031	\$ 1,732,500	\$ -	\$ -	\$ 1,732,500	0%	\$ -	\$ 1,732,500	\$ -	\$ 1,732,500	\$ -
40216214	North - Colston to Baldwin	2022 - 2022	\$ 173,250	\$ -	\$ -	\$ 173,250	90%	\$ 155,925	\$ 17,325	\$ 17,325	\$ -	\$ -
40276201	Pearl Street - Baldwin to Cassels	2027 - 2027	\$ 63,000	\$ -	\$ -	\$ 63,000	90%	\$ 56,700	\$ 6,300	\$ -	\$ 6,300	\$ -
40216209	RR 12 Baldwin - Sonley to Garden (WS)	2024 - 2024	\$ 221,813	\$ -	\$ -	\$ 221,813	0%	\$ -	\$ 221,813	\$ -	\$ 221,813	\$ -
40256202	RR 26 Thickson - Columbus to Brawley	2025 - 2025	\$ 540,750	\$ -	\$ 1,531	\$ 539,219	0%	\$ -	\$ 539,219	\$ -	\$ 539,219	\$ -
40246201	RR 26 Thickson - Taunton to Winchester	2024 - 2024	\$ 1,102,500	\$ -	\$ 65,917	\$ 1,036,583	0%	\$ -	\$ 1,036,583	\$ -	\$ 1,036,583	\$ -
40216201	RR 3 Winchester - Durham to Anderson	2021 - 2021	\$ 315,000	\$ -	\$ -	\$ 315,000	0%	\$ -	\$ 315,000	\$ 315,000	\$ -	\$ -
40266203	RR 36 Hopkins - Consumers to Dundas	2026 - 2026	\$ 433,125	\$ -	\$ 33,561	\$ 399,564	0%	\$ -	\$ 399,564	\$ -	\$ 399,564	\$ -
40266204	RR 36 Hopkins - Victoria to Consumers	2026 - 2026	\$ 105,000	\$ -	\$ 42,434	\$ 62,566	0%	\$ -	\$ 62,566	\$ -	\$ 62,566	\$ -
40226202	RR 58 Manning - Adelaide Connection	2022 - 2022	\$ 157,500	\$ -	\$ -	\$ 157,500	0%	\$ -	\$ 157,500	\$ 157,500	\$ -	\$ -
40216213	Torian - Heber Down to Vipond	2023 - 2023	\$ 173,250	\$ -	\$ -	\$ 173,250	90%	\$ 155,925	\$ 17,325	\$ -	\$ 17,325	\$ -
	Subtotal Sidewalk Program		\$ 10,403,138	\$ -	\$ 191,405	\$ 10,211,733		\$ 859,435	\$ 9,352,298	\$ 564,178	\$ 8,788,120	\$ -

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TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED - TOWN-WIDE INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031	
Traffic Signals Program												
40226045	Downtown Whitby Reduced Speed Limit Review	2022 - 2022	\$ 20,000	\$ -	\$ -	\$ 20,000	0%	\$ -	\$ 20,000	\$ 20,000	\$ -	\$ -
40177102	Future Traffic Signage and Pavement Markings	2021 - 2031	\$ 480,000	\$ -	\$ -	\$ 480,000	0%	\$ -	\$ 480,000	\$ 60,000	\$ 420,000	\$ -
35206402	Future Traffic Signals / Traffic Control Devices	2021 - 2031	\$ 1,735,000	\$ -	\$ -	\$ 1,735,000	0%	\$ -	\$ 1,735,000	\$ 40,000	\$ 1,695,000	\$ -
40296401	Garden Street and Bradley Drive	2029 - 2029	\$ 525,000	\$ -	\$ -	\$ 525,000	0%	\$ -	\$ 525,000	\$ -	\$ 525,000	\$ -
40216402	Intersection Modifications - Montgomery/Carnwith	2022 - 2022	\$ 275,000	\$ -	\$ -	\$ 275,000	50%	\$ 137,500	\$ 137,500	\$ 137,500	\$ -	\$ -
35226001	Pedestrian Traffic Signal - Anderson St Corridor (north of Taunton)	2022 - 2022	\$ 157,500	\$ -	\$ -	\$ 157,500	0%	\$ -	\$ 157,500	\$ 157,500	\$ -	\$ -
40217101	Pedestrian Traffic Signal - Baldwin / Way	2025 - 2025	\$ 157,500	\$ -	\$ -	\$ 157,500	0%	\$ -	\$ 157,500	\$ -	\$ 157,500	\$ -
40246401	Pedestrian Traffic Signal - Brock / Elm	2024 - 2024	\$ 157,500	\$ -	\$ -	\$ 157,500	0%	\$ -	\$ 157,500	\$ -	\$ 157,500	\$ -
35216401	Pedestrian Traffic Signal - Brock / Trent	2023 - 2023	\$ 300,000	\$ -	\$ -	\$ 300,000	0%	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
35226401	Pedestrian Traffic Signal - Dundas / Athol	2022 - 2022	\$ 210,000	\$ -	\$ -	\$ 210,000	0%	\$ -	\$ 210,000	\$ 210,000	\$ -	\$ -
35236401	Pedestrian Traffic Signal/PXO - Dryden/HEPC	2023 - 2023	\$ 210,000	\$ -	\$ -	\$ 210,000	0%	\$ -	\$ 210,000	\$ -	\$ 210,000	\$ -
35246401	Traffic Signal - Dryden/Waller	2024 - 2024	\$ 275,000	\$ -	\$ -	\$ 275,000	0%	\$ -	\$ 275,000	\$ -	\$ 275,000	\$ -
	Subtotal Traffic Signals Program		\$ 4,502,500	\$ -	\$ -	\$ 4,502,500		\$ 137,500	\$ 4,365,000	\$ 625,000	\$ 3,740,000	\$ -
Street Lighting Program												
40216602	RR 12 Baldwin - Taunton to Garden	2024 - 2024	\$ 1,050,000	\$ -	\$ -	\$ 1,050,000	9%	\$ 94,500	\$ 955,500	\$ -	\$ 955,500	\$ -
40226604	RR 23 Lake Ridge - Dundas to Rossland	2023 - 2023	\$ 800,000	\$ -	\$ -	\$ 800,000	11%	\$ 88,000	\$ 712,000	\$ -	\$ 712,000	\$ -
40216603	RR 23 Lake Ridge - Victoria to Dundas	2022 - 2022	\$ 800,000	\$ -	\$ 24,913	\$ 775,087	27%	\$ 209,273	\$ 565,814	\$ 565,814	\$ -	\$ -
40236601	RR 26 Thickson - Taunton to Hwy 407	2025 - 2025	\$ 918,750	\$ -	\$ -	\$ 918,750	9%	\$ 82,688	\$ 836,063	\$ -	\$ 836,063	\$ -
40266601	RR 36 Hopkins - Consumers to Dundas	2028 - 2028	\$ 340,000	\$ -	\$ -	\$ 340,000	5%	\$ 17,000	\$ 323,000	\$ -	\$ 323,000	\$ -
40266602	RR 36 Hopkins Overpass	2026 - 2026	\$ 450,000	\$ -	\$ 49,506	\$ 400,494	0%	\$ -	\$ 400,494	\$ -	\$ 400,494	\$ -
40296601	RR 4 Taunton - Lake Ridge to Brock	2031 - 2031	\$ 786,250	\$ -	\$ -	\$ 786,250	12%	\$ 94,350	\$ 691,900	\$ -	\$ 691,900	\$ -
40216605	RR 58 Manning - Garrard to Oshawa	2024 - 2024	\$ 250,000	\$ -	\$ -	\$ 250,000	1%	\$ 2,500	\$ 247,500	\$ -	\$ 247,500	\$ -
40216606	Streetslights - Additional Dark Zone Lights	2021 - 2021	\$ 250,000	\$ -	\$ -	\$ 250,000	69%	\$ 173,492	\$ 76,508	\$ 76,508	\$ -	\$ -
	Subtotal Street Lighting Program		\$ 5,645,000	\$ -	\$ 74,419	\$ 5,570,581		\$ 761,803	\$ 4,808,778	\$ 642,322	\$ 4,166,457	\$ -
Roads, Roads Related and Storm Water Studies												
35207101	Automated Speed Enforcement (ASE) Consideration/Review	2022 - 2022	\$ 100,000	\$ -	\$ -	\$ 100,000	72%	\$ 72,142	\$ 27,858	\$ 27,858	\$ -	\$ -
40227103	Bike Parking Design Guidelines	2022 - 2022	\$ 5,000	\$ -	\$ -	\$ 5,000	20%	\$ 1,000	\$ 4,000	\$ 4,000	\$ -	\$ -
40112302	Municipal Engineering Growth Studies/Design Reviews	2021 - 2031	\$ 2,060,000	\$ -	\$ -	\$ 2,060,000	0%	\$ -	\$ 2,060,000	\$ 257,500	\$ 1,802,500	\$ -
40237101	Route Planning Design	2023 - 2023	\$ 10,000	\$ -	\$ -	\$ 10,000	20%	\$ 2,000	\$ 8,000	\$ -	\$ 8,000	\$ -
30187701	Salt Management Plan	2022 - 2027	\$ 32,000	\$ -	\$ -	\$ 32,000	20%	\$ 6,400	\$ 25,600	\$ 12,800	\$ 12,800	\$ -
30197701	Streetlight Strategy Study	2025 - 2025	\$ 30,900	\$ -	\$ -	\$ 30,900	20%	\$ 6,180	\$ 24,720	\$ -	\$ 24,720	\$ -
40122304	Traffic & Transportation Study	2021 - 2031	\$ 1,648,000	\$ -	\$ -	\$ 1,648,000	0%	\$ -	\$ 1,648,000	\$ 644,500	\$ 1,003,500	\$ -
	Subtotal Roads, Roads Related and Storm Water Studies		\$ 3,885,900	\$ -	\$ -	\$ 3,885,900		\$ 87,722	\$ 3,798,178	\$ 946,658	\$ 2,851,520	\$ -

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ROADS AND RELATED - TOWN-WIDE INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
Road Surface Treated to Hot Mix Conversion Program											
40306038 Coronation Rd - Philips Rd to Winchester Rd	2030 - 2030	\$ 745,400	\$ -	\$ -	\$ 745,400	13%	\$ 96,902	\$ 648,498	\$ -	\$ 648,498	\$ -
40266011 Townline Rd - Pickering to Oshawa	2026 - 2026	\$ 3,928,260	\$ -	\$ -	\$ 3,928,260	13%	\$ 510,674	\$ 3,417,586	\$ -	\$ 3,417,586	\$ -
Subtotal Road Surface Treated to Hot Mix Conversion Program		\$ 4,673,660	\$ -	\$ -	\$ 4,673,660		\$ 607,576	\$ 4,066,084	\$ -	\$ 4,066,084	\$ -
Remaining Front Ending Credits											
2.1.1 Remaining Front Ending Credits (West Whitby Frontending Agreement)	2021 - 2027	\$ 46,165,035	\$ 7,251,634	\$ -	\$ 38,913,401	0%	\$ -	\$ 38,913,401	\$ -	\$ 38,913,401	\$ -
Subtotal Remaining Front Ending Credits		\$ 46,165,035	\$ 7,251,634	\$ -	\$ 38,913,401		\$ -	\$ 38,913,401	\$ -	\$ 38,913,401	\$ -
Road Widening and Extension Program											
40236050 Anderson - Taunton to Solmar	2023 - 2023	\$ 3,150,000	\$ -	\$ -	\$ 3,150,000	18%	\$ 563,923	\$ 2,586,077	\$ -	\$ 2,586,077	\$ -
40336027 Anderson - Solmar to 620m north	2031 - 2031	\$ 1,600,000	\$ -	\$ -	\$ 1,600,000	18%	\$ 286,883	\$ 1,313,117	\$ -	\$ 1,313,117	\$ -
40326077 Anderson - 620m north of Solmar to MBA	2031 - 2031	\$ 6,713,000	\$ -	\$ -	\$ 6,713,000	17%	\$ 1,171,042	\$ 5,541,958	\$ -	\$ 5,541,958	\$ -
40366003 Anderson - MBA to Hwy 407	2031 - 2031	\$ 3,040,000	\$ -	\$ -	\$ 3,040,000	17%	\$ 529,841	\$ 2,510,159	\$ -	\$ 2,510,159	\$ -
40336029 Bonacord - Cochrane to Starr Extension 3. Property Acquisition	2031 - 2031	\$ 5,000,000	\$ -	\$ -	\$ 5,000,000	15%	\$ 750,000	\$ 4,250,000	\$ -	\$ 4,250,000	\$ -
40296026 Brawley - Lake Ridge to Baldwin (3 Intersections)	2028 - 2028	\$ 6,000,000	\$ -	\$ -	\$ 6,000,000	15%	\$ 900,000	\$ 5,100,000	\$ -	\$ 5,100,000	\$ -
40346011 Brawley - Lake Ridge to Baldwin	2024 - 2031	\$ 16,820,000	\$ -	\$ -	\$ 16,820,000	15%	\$ 2,523,000	\$ 14,297,000	\$ -	\$ 14,297,000	\$ -
40306039 Burns Street - Hopkins to Thickson Extension	2031 - 2031	\$ 19,130,000	\$ -	\$ -	\$ 19,130,000	15%	\$ 2,869,500	\$ 16,260,500	\$ -	\$ 16,260,500	\$ -
40306041 Burns Street - Michael to Dundas	2031 - 2031	\$ 25,180,000	\$ -	\$ -	\$ 25,180,000	15%	\$ 3,864,906	\$ 21,315,094	\$ -	\$ 21,315,094	\$ -
40316045 Cochrane - Hwy 7 to Vipond	2031 - 2031	\$ 8,100,000	\$ -	\$ -	\$ 8,100,000	16%	\$ 1,295,406	\$ 6,804,594	\$ -	\$ 6,804,594	\$ -
40246047 Cochrane - Vipond to Columbus	2024 - 2025	\$ 9,790,000	\$ -	\$ -	\$ 9,790,000	16%	\$ 1,544,031	\$ 8,245,969	\$ -	\$ 8,245,969	\$ -
40346012 Columbus - Lake Ridge to Country Lane	2031 - 2031	\$ 12,860,000	\$ -	\$ -	\$ 12,860,000	15%	\$ 1,929,000	\$ 10,931,000	\$ -	\$ 10,931,000	\$ -
40326080 Columbus - Country Lane to Cochrane	2031 - 2031	\$ 12,900,000	\$ -	\$ -	\$ 12,900,000	15%	\$ 1,972,360	\$ 10,927,640	\$ -	\$ 10,927,640	\$ -
40286036 Columbus - Cochrane to Ashburn	2028 - 2029	\$ 12,900,000	\$ -	\$ -	\$ 12,900,000	15%	\$ 1,970,163	\$ 10,929,837	\$ -	\$ 10,929,837	\$ -
40246048 Columbus - Ashburn to Baldwin	2024 - 2025	\$ 25,800,000	\$ -	\$ 82,886	\$ 25,717,114	15%	\$ 3,934,485	\$ 21,782,629	\$ -	\$ 21,782,629	\$ -
40266047 Columbus - Baldwin to Thickson	2026 - 2026	\$ 8,000,000	\$ -	\$ -	\$ 8,000,000	15%	\$ 1,237,360	\$ 6,762,640	\$ -	\$ 6,762,640	\$ -
40276038 Columbus - Thickson to Garrard	2027 - 2027	\$ 12,900,000	\$ -	\$ 16,143	\$ 12,883,857	15%	\$ 1,968,620	\$ 10,915,237	\$ -	\$ 10,915,237	\$ -
40306075 Columbus - Garrard to Oshawa	2030 - 2030	\$ 5,600,000	\$ -	\$ -	\$ 5,600,000	15%	\$ 861,977	\$ 4,738,023	\$ -	\$ 4,738,023	\$ -
40256047 Columbus Road - EA and Design	2025 - 2025	\$ 750,000	\$ -	\$ 70,908	\$ 679,092	15%	\$ 101,864	\$ 577,228	\$ -	\$ 577,228	\$ -
40216032 Desmond Newman Blvd - Taunton to Coronation	2021 - 2022	\$ 4,580,000	\$ -	\$ -	\$ 4,580,000	1%	\$ 65,825	\$ 4,514,175	\$ 4,514,175	\$ -	\$ -
40296032 Garden - Dryden to Taunton 5. Construction	2027 - 2029	\$ 3,170,000	\$ -	\$ -	\$ 3,170,000	15%	\$ 475,500	\$ 2,694,500	\$ -	\$ 2,694,500	\$ -
40226021 Garden - Robert Attersley to MBA 1. EA	2022 - 2022	\$ 800,000	\$ -	\$ -	\$ 800,000	15%	\$ 120,000	\$ 680,000	\$ 680,000	\$ -	\$ -
40246021 Garden - Robert Attersley to MBA 2. Design	2023 - 2023	\$ 800,000	\$ -	\$ -	\$ 800,000	15%	\$ 120,000	\$ 680,000	\$ -	\$ 680,000	\$ -
40256012 Garden - Robert Attersley to MBA 3. Property Acquisition	2023 - 2023	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	15%	\$ 150,000	\$ 850,000	\$ -	\$ 850,000	\$ -
40256014 Garden - Robert Attersley to MBA 4. Utilities	2023 - 2023	\$ 100,000	\$ -	\$ -	\$ 100,000	15%	\$ 15,000	\$ 85,000	\$ -	\$ 85,000	\$ -
40266012 Garden - Robert Attersley to MBA 5. Construction	2025 - 2026	\$ 21,480,000	\$ -	\$ -	\$ 21,480,000	15%	\$ 3,309,906	\$ 18,170,094	\$ -	\$ 18,170,094	\$ -
40296023 Harbour Street 4. Design	2029 - 2029	\$ 300,000	\$ -	\$ -	\$ 300,000	15%	\$ 45,000	\$ 255,000	\$ -	\$ 255,000	\$ -
40306030 Harbour Street 5. Construction	2031 - 2031	\$ 2,550,000	\$ -	\$ -	\$ 2,550,000	16%	\$ 413,267	\$ 2,136,733	\$ -	\$ 2,136,733	\$ -
40206026 Harbour Street Feasibility Study	2021 - 2021	\$ 150,000	\$ -	\$ -	\$ 150,000	15%	\$ 22,500	\$ 127,500	\$ 127,500	\$ -	\$ -
Subtotal Road Widening and Extension Program		\$ 231,163,000	\$ -	\$ 169,937	\$ 230,993,063		\$ 35,011,361	\$ 195,981,702	\$ 5,321,675	\$ 190,660,027	\$ -

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						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031	
Road Intersection Improvement Program												
40216040	Brock/Burns Turning Lanes	2022 - 2023	\$ 550,000	\$ -	\$ -	\$ 550,000	50%	\$ 275,000	\$ 275,000	\$ 75,000	\$ 200,000	\$ -
40175906	Carnwith Curb Extension	2022 - 2022	\$ 575,000	\$ -	\$ -	\$ 575,000	50%	\$ 287,500	\$ 287,500	\$ 287,500	\$ -	\$ -
40295801	Civic Centre/Dryden - Roundabout	2029 - 2029	\$ 750,000	\$ -	\$ -	\$ 750,000	50%	\$ 375,000	\$ 375,000	\$ -	\$ 375,000	\$ -
35256001	Conlin/Garrard - Roundabout	2022 - 2022	\$ 650,000	\$ -	\$ -	\$ 650,000	50%	\$ 325,000	\$ 325,000	\$ 325,000	\$ -	\$ -
40226038	Cresser / Lake Ridge Intersection (Hwy 407 Deficiencies) - MTO	2022 - 2022	\$ 25,000	\$ 25,000	\$ -	\$ -	50%	\$ -	\$ -	\$ -	\$ -	\$ -
35236001	Downtown - Mini Roundabout	2023 - 2030	\$ 600,000	\$ -	\$ -	\$ 600,000	50%	\$ 300,000	\$ 300,000	\$ -	\$ 300,000	\$ -
40186008	Future Design - Road Intersection Improvements	2021 - 2030	\$ 500,000	\$ -	\$ -	\$ 500,000	50%	\$ 250,000	\$ 250,000	\$ 50,000	\$ 200,000	\$ -
35186001	Garden/Burns Corridor Safety Review	2022 - 2022	\$ 206,000	\$ -	\$ -	\$ 206,000	50%	\$ 103,000	\$ 103,000	\$ 103,000	\$ -	\$ -
40236020	Gordon/Scadding - Roundabout	2023 - 2023	\$ 300,000	\$ -	\$ -	\$ 300,000	50%	\$ 150,000	\$ 150,000	\$ -	\$ 150,000	\$ -
40246020	Gordon/W. Shores Green. - Roundabout	2024 - 2024	\$ 650,000	\$ -	\$ -	\$ 650,000	50%	\$ 325,000	\$ 325,000	\$ -	\$ 325,000	\$ -
40296025	McQuay/Bonacord - Roundabout	2029 - 2029	\$ 650,000	\$ -	\$ -	\$ 650,000	50%	\$ 325,000	\$ 325,000	\$ -	\$ 325,000	\$ -
40306032	Montgomery/Vipond - Roundabout	2030 - 2030	\$ 300,000	\$ -	\$ -	\$ 300,000	50%	\$ 150,000	\$ 150,000	\$ -	\$ 150,000	\$ -
35196402	Traffic Calming Initiatives	2021 - 2031	\$ 600,000	\$ -	\$ -	\$ 600,000	50%	\$ 300,000	\$ 300,000	\$ 50,000	\$ 250,000	\$ -
40216025	Winchester Road Widening (Baldwin to Garrard)	2021 - 2021	\$ 550,000	\$ -	\$ -	\$ 550,000	50%	\$ 275,000	\$ 275,000	\$ 275,000	\$ -	\$ -
	Subtotal Road Intersection Improvement Program		\$ 6,906,000	\$ 25,000	\$ -	\$ 6,881,000		\$ 3,440,500	\$ 3,440,500	\$ 1,165,500	\$ 2,275,000	\$ -
Mid Arterial Roadway												
40306054	Mid Arterial Roadway - Anderson to Oshawa 5. Construction	2030 - 2030	\$ 17,080,000	\$ -	\$ -	\$ 17,080,000	1%	\$ 195,697	\$ 16,884,303	\$ -	\$ 8,442,151	\$ 8,442,151
40216030	Mid Arterial Roadway - Ashburn to Anderson 2. Design	2021 - 2021	\$ 500,000	\$ -	\$ -	\$ 500,000	0%	\$ -	\$ 500,000	\$ 500,000	\$ -	\$ -
40226020	Mid Arterial Roadway - Ashburn to Anderson 5. Construction	2021 - 2024	\$ 32,500,000	\$ -	\$ -	\$ 32,500,000	1%	\$ 166,342	\$ 32,333,658	\$ 17,694,967	\$ 14,638,690	\$ -
40296054	Mid Arterial Roadway - Cochrane to Ashburn 5. Construction	2029 - 2029	\$ 12,350,000	\$ -	\$ -	\$ 12,350,000	1%	\$ 164,563	\$ 12,185,437	\$ -	\$ 12,185,437	\$ -
40216031	Mid Arterial Roadway - Property Acquisition Future Phases	2025 - 2025	\$ 3,000,000	\$ -	\$ -	\$ 3,000,000	0%	\$ -	\$ 3,000,000	\$ -	\$ 3,000,000	\$ -
	Subtotal Mid Arterial Roadway		\$ 65,430,000	\$ -	\$ -	\$ 65,430,000		\$ 526,603	\$ 64,903,397	\$ 18,194,967	\$ 38,266,278	\$ 8,442,151
Dundas Street Multi-Use Path												
40276035	Dundas - Cochrane to Henry	2027 - 2027	\$ 240,000	\$ -	\$ -	\$ 240,000	30%	\$ 71,163	\$ 168,837	\$ -	\$ 168,837	\$ -
40226041	Dundas - Des Newman to McQuay / Jeffery	2022 - 2022	\$ 450,000	\$ -	\$ -	\$ 450,000	30%	\$ 133,430	\$ 316,570	\$ -	\$ 316,570	\$ -
40326053	Dundas - Halls to Des Newman	2031 - 2031	\$ 308,000	\$ -	\$ -	\$ 308,000	30%	\$ 91,325	\$ 216,675	\$ -	\$ 216,675	\$ -
40326052	Dundas - Lake Ridge to Halls	2031 - 2031	\$ 160,000	\$ -	\$ -	\$ 160,000	30%	\$ 47,442	\$ 112,558	\$ -	\$ 112,558	\$ -
40306059	Dundas - McQuay / Jeffery to Cochrane	2030 - 2030	\$ 450,000	\$ -	\$ -	\$ 450,000	30%	\$ 133,430	\$ 316,570	\$ -	\$ 316,570	\$ -
40326074	Dundas - Thickson to Oshawa	2031 - 2031	\$ 675,000	\$ -	\$ -	\$ 675,000	30%	\$ 200,145	\$ 474,855	\$ -	\$ 474,855	\$ -
	Subtotal Dundas Street Multi-Use Path		\$ 2,283,000	\$ -	\$ -	\$ 2,283,000		\$ 676,934	\$ 1,606,066	\$ -	\$ 1,606,066	\$ -

APPENDIX C.2

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED - TOWN-WIDE INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
Active Transportation Plan Program											
40236048 Anderson - Clair to Winchester (Signed Route)	2023 - 2023	\$ 2,000	\$ -	\$ -	\$ 2,000	30%	\$ 593	\$ 1,407	\$ -	\$ 1,407	\$ -
40326071 Anderson - Crawford to Rossland (MUP)	2031 - 2031	\$ 675,000	\$ -	\$ -	\$ 675,000	30%	\$ 200,145	\$ 474,855	\$ -	\$ 474,855	\$ -
40316038 Anderson - Dundas to Crawford	2031 - 2031	\$ 90,000	\$ -	\$ -	\$ 90,000	30%	\$ 26,686	\$ 63,314	\$ -	\$ 63,314	\$ -
40216044 Anderson - Taunton to Solmar (Signed Route)	2021 - 2021	\$ 150,000	\$ -	\$ -	\$ 150,000	30%	\$ 44,477	\$ 105,523	\$ -	\$ 105,523	\$ -
40216045 Annes - Dundas to Burns (Bike Lanes)	2021 - 2021	\$ 20,000	\$ -	\$ -	\$ 20,000	30%	\$ 5,930	\$ 14,070	\$ -	\$ 14,070	\$ -
40216046 Annes - Roadway terminus to Burns (Signed Route)	2021 - 2021	\$ 2,000	\$ -	\$ -	\$ 2,000	30%	\$ 593	\$ 1,407	\$ -	\$ 1,407	\$ -
40326063 Ashburn - Spencers to 70m south of Spencers	2024 - 2024	\$ 26,250	\$ -	\$ -	\$ 26,250	30%	\$ 7,783	\$ 18,467	\$ -	\$ 18,467	\$ -
40326068 Brawley - Balwin to Oshawa (MUP)	2031 - 2031	\$ 485,000	\$ -	\$ -	\$ 485,000	30%	\$ 143,808	\$ 341,192	\$ -	\$ 341,192	\$ -
40276036 Byron - Maple to Dundas (Signed Route)	2027 - 2027	\$ 2,350	\$ -	\$ -	\$ 2,350	30%	\$ 697	\$ 1,653	\$ -	\$ 1,653	\$ -
40246040 Byron - St John to Dundas (Bike Lane)	2024 - 2024	\$ 12,500	\$ -	\$ -	\$ 12,500	30%	\$ 3,706	\$ 8,794	\$ -	\$ 8,794	\$ -
40256042 Byron - St John to Trail (signed Route)	2025 - 2025	\$ 2,700	\$ -	\$ -	\$ 2,700	30%	\$ 801	\$ 1,899	\$ -	\$ 1,899	\$ -
40236044 Cachet - Carnwith to Columbus (signed Route)	2023 - 2023	\$ 2,000	\$ -	\$ -	\$ 2,000	30%	\$ 593	\$ 1,407	\$ -	\$ 1,407	\$ -
40326054 Canary - Florence to Baldwin (signed Route)	2031 - 2031	\$ 200	\$ -	\$ -	\$ 200	30%	\$ 59	\$ 141	\$ -	\$ 141	\$ -
40326072 Carnwith - Thickson to East Limits (Bike Lane)	2031 - 2031	\$ 15,500	\$ -	\$ -	\$ 15,500	30%	\$ 4,596	\$ 10,904	\$ -	\$ 10,904	\$ -
40236043 Cedarbrook - Columbus to Brawley (Signed Route)	2023 - 2023	\$ 2,000	\$ -	\$ -	\$ 2,000	30%	\$ 593	\$ 1,407	\$ -	\$ 1,407	\$ -
40266025 Centre - Maple to Beech (signed Route)	2026 - 2026	\$ 500	\$ -	\$ -	\$ 500	30%	\$ 148	\$ 352	\$ -	\$ 352	\$ -
40256043 Centre - Rossland to Willis (signed Route)	2025 - 2025	\$ 2,700	\$ -	\$ -	\$ 2,700	30%	\$ 801	\$ 1,899	\$ -	\$ 1,899	\$ -
40276037 Civic Centre - Rossland to Dryden (Bike Lane)	2027 - 2027	\$ 14,000	\$ -	\$ -	\$ 14,000	30%	\$ 4,151	\$ 9,849	\$ -	\$ 9,849	\$ -
40326064 Cochrane - Heber Down to Winchester (Paved Shoulder)	2031 - 2031	\$ 134,000	\$ -	\$ -	\$ 134,000	30%	\$ 39,732	\$ 94,268	\$ -	\$ 94,268	\$ -
40246041 Colborne - Henry to Hickory (Bike Lane)	2024 - 2024	\$ 16,500	\$ -	\$ -	\$ 16,500	30%	\$ 4,892	\$ 11,608	\$ -	\$ 11,608	\$ -
40236047 Colborne - Reynolds to Byron (MUP)	2023 - 2023	\$ 370,000	\$ -	\$ -	\$ 370,000	30%	\$ 109,709	\$ 260,291	\$ -	\$ 260,291	\$ -
40266028 Cork - Fallingbrook to Garden (signed Route)	2026 - 2026	\$ 600	\$ -	\$ -	\$ 600	30%	\$ 178	\$ 422	\$ -	\$ 422	\$ -
40226043 Coronation - Rossland to Trail North of Taunton (Bike Lane)	2022 - 2022	\$ 60,000	\$ -	\$ -	\$ 60,000	30%	\$ 17,791	\$ 42,209	\$ -	\$ 42,209	\$ -
40306069 Coronation - Rossland to Trail North of Taunton (MUP)	2030 - 2030	\$ 1,080,000	\$ -	\$ -	\$ 1,080,000	30%	\$ 320,231	\$ 759,769	\$ -	\$ 759,769	\$ -
40236045 Crawford - Thickson to Pringle (signed Route)	2023 - 2023	\$ 3,500	\$ -	\$ -	\$ 3,500	30%	\$ 1,038	\$ 2,462	\$ -	\$ 2,462	\$ -
40266036 Darren - Thickson to Anderson (signed Route)	2026 - 2026	\$ 3,000	\$ -	\$ -	\$ 3,000	30%	\$ 890	\$ 2,110	\$ -	\$ 2,110	\$ -
40216043 Data Collection - Radar Message Boards and Cyclist/Pedestrians Counters	2021 - 2030	\$ 300,000	\$ -	\$ -	\$ 300,000	30%	\$ 88,953	\$ 211,047	\$ -	\$ 211,047	\$ -

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TOWN OF WHITBY
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Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
Active Transportation Plan Program Continued											
40246042 Des Newman - Taunton to Coronation (MUP)	2024 - 2024	\$ 312,000	\$ -	\$ -	\$ 312,000	30%	\$ 92,511	\$ 219,489	\$ -	\$ 219,489	\$ -
40266042 Dundas Street Corridor Review	2026 - 2026	\$ 30,000	\$ -	\$ -	\$ 30,000	30%	\$ 8,895	\$ 21,105	\$ -	\$ 21,105	\$ -
40266040 Dundas and Brock Street Intersection Design	2026 - 2026	\$ 20,000	\$ -	\$ -	\$ 20,000	30%	\$ 5,930	\$ 14,070	\$ -	\$ 14,070	\$ -
40256044 Dymond - Garrard to Hazelwood	2025 - 2025	\$ 1,000	\$ -	\$ -	\$ 1,000	30%	\$ 297	\$ 703	\$ -	\$ 703	\$ -
40266024 Elizabeth - Marta to Ericson (signed Route)	2026 - 2026	\$ 400	\$ -	\$ -	\$ 400	30%	\$ 119	\$ 281	\$ -	\$ 281	\$ -
40266032 Ericson - Elizabeth to William Stephenson (signed Route)	2026 - 2026	\$ 1,300	\$ -	\$ -	\$ 1,300	30%	\$ 385	\$ 915	\$ -	\$ 915	\$ -
40326058 Florence Trail to Canary (Signed Route)	2031 - 2031	\$ 1,000	\$ -	\$ -	\$ 1,000	30%	\$ 297	\$ 703	\$ -	\$ 703	\$ -
40266034 Giffard - Cochrane to Raglan (signed Route)	2026 - 2026	\$ 1,650	\$ -	\$ -	\$ 1,650	30%	\$ 489	\$ 1,161	\$ -	\$ 1,161	\$ -
40236040 Golders Green - West limits to Willowbrook (signed Route)	2023 - 2023	\$ 300	\$ -	\$ -	\$ 300	30%	\$ 89	\$ 211	\$ -	\$ 211	\$ -
40216042 Halls - Waterfront Tr to Waterfront Tr (signed Route)	2021 - 2021	\$ 3,000	\$ -	\$ -	\$ 3,000	30%	\$ 890	\$ 2,110	\$ -	\$ 2,110	\$ -
40266035 Hazelwood - Manning to Dymond (signed Route)	2026 - 2026	\$ 2,500	\$ -	\$ -	\$ 2,500	30%	\$ 741	\$ 1,759	\$ -	\$ 1,759	\$ -
40306068 Henry - Burn to GO (MUP)	2030 - 2030	\$ 210,000	\$ -	\$ -	\$ 210,000	30%	\$ 62,267	\$ 147,733	\$ -	\$ 147,733	\$ -
40326057 High - Mary to Walnut (Signed Route)	2031 - 2031	\$ 850	\$ -	\$ -	\$ 850	30%	\$ 252	\$ 598	\$ -	\$ 598	\$ -
40326055 Holiday - Bonacord to Habitat (Signed Route)	2031 - 2031	\$ 200	\$ -	\$ -	\$ 200	30%	\$ 59	\$ 141	\$ -	\$ 141	\$ -
40326056 Holiday - Habitat to 30m north of Barrow (Signed Route)	2031 - 2031	\$ 700	\$ -	\$ -	\$ 700	30%	\$ 208	\$ 492	\$ -	\$ 492	\$ -
40266039 Jeffery - Michael to Dundas (Bike Lane)	2026 - 2026	\$ 8,000	\$ -	\$ -	\$ 8,000	30%	\$ 2,372	\$ 5,628	\$ -	\$ 5,628	\$ -
40296056 Kendalwood - Nichol to Burns (Bike Lane)	2029 - 2029	\$ 18,500	\$ -	\$ -	\$ 18,500	30%	\$ 5,485	\$ 13,015	\$ -	\$ 13,015	\$ -
40296055 Kendalwood - Nichol to Dundas (Bike Lane)	2029 - 2029	\$ 6,200	\$ -	\$ -	\$ 6,200	30%	\$ 1,838	\$ 4,362	\$ -	\$ 4,362	\$ -
40306066 Kilbride - Anderson to Fallingbrook (Signed Route)	2030 - 2030	\$ 2,000	\$ -	\$ -	\$ 2,000	30%	\$ 593	\$ 1,407	\$ -	\$ 1,407	\$ -
40306065 Lloyd - Garrard to Kathleen (Signed Route)	2030 - 2030	\$ 1,600	\$ -	\$ -	\$ 1,600	30%	\$ 474	\$ 1,126	\$ -	\$ 1,126	\$ -
40266033 Maple - Centre to Ash (Signed Route)	2026 - 2026	\$ 1,350	\$ -	\$ -	\$ 1,350	30%	\$ 400	\$ 950	\$ -	\$ 950	\$ -
40266026 Marta - Thicksn to Elizabeth (Signed Route)	2026 - 2026	\$ 500	\$ -	\$ -	\$ 500	30%	\$ 148	\$ 352	\$ -	\$ 352	\$ -
40236046 Mary - Brock to Euclid (Bike Lane)	2023 - 2023	\$ 10,000	\$ -	\$ -	\$ 10,000	30%	\$ 2,965	\$ 7,035	\$ -	\$ 7,035	\$ -
40226042 Mary - Garden to Brock (Bike Lane)	2022 - 2022	\$ 30,000	\$ -	\$ -	\$ 30,000	30%	\$ 8,895	\$ 21,105	\$ -	\$ 21,105	\$ -
40266027 Meadowglen - Garden to Forest Heights (Signed Route)	2026 - 2026	\$ 500	\$ -	\$ -	\$ 500	30%	\$ 148	\$ 352	\$ -	\$ 352	\$ -
40266030 Montgomery - Heber Down to Vipond (Signed Route)	2026 - 2026	\$ 1,000	\$ -	\$ -	\$ 1,000	30%	\$ 297	\$ 703	\$ -	\$ 703	\$ -
40266038 Montgomery - Vipond to Columbus (Signed Route)	2026 - 2026	\$ 4,200	\$ -	\$ -	\$ 4,200	30%	\$ 1,245	\$ 2,955	\$ -	\$ 2,955	\$ -
40326067 Nichol - Kendalwood to 100m west of Wood (MUP)	2031 - 2031	\$ 440,000	\$ -	\$ -	\$ 440,000	30%	\$ 130,465	\$ 309,535	\$ -	\$ 309,535	\$ -
40306060 Pringle - Crawforth to 120m north of Crawforth	2030 - 2030	\$ 400	\$ -	\$ -	\$ 400	30%	\$ 119	\$ 281	\$ -	\$ 281	\$ -
40326062 Promenade - Anderson to Garden (Signed Route)	2031 - 2031	\$ 2,600	\$ -	\$ -	\$ 2,600	30%	\$ 771	\$ 1,829	\$ -	\$ 1,829	\$ -

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TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
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Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
Active Transportation Plan Program Continued											
40256045 RR4 Taunton - Baycliffe to Coronation	2025 - 2025	\$ 230,000	\$ -	\$ -	\$ 230,000	30%	\$ 68,197	\$ 161,803	\$ -	\$ 161,803	\$ -
40326066 RR4 Taunton - Des Newman to Lake Ridge (MUP)	2031 - 2031	\$ 385,000	\$ -	\$ -	\$ 385,000	30%	\$ 114,157	\$ 270,843	\$ -	\$ 270,843	\$ -
40266029 Raglan - Dundas to Gifford (Signed Route)	2026 - 2026	\$ 625	\$ -	\$ -	\$ 625	30%	\$ 185	\$ 440	\$ -	\$ 440	\$ -
40266031 Resolute - 337m south of Bonacord to Bonacord (Signed Route)	2026 - 2026	\$ 1,000	\$ -	\$ -	\$ 1,000	30%	\$ 297	\$ 703	\$ -	\$ 703	\$ -
40236041 Riverwood - Stonemanor to Taunton (signed Route)	2023 - 2023	\$ 1,000	\$ -	\$ -	\$ 1,000	30%	\$ 297	\$ 703	\$ -	\$ 703	\$ -
40306067 Robert Attersely - Garden to Baldwin (Signed Route)	2030 - 2030	\$ 2,500	\$ -	\$ -	\$ 2,500	30%	\$ 741	\$ 1,759	\$ -	\$ 1,759	\$ -
40306063 Springwood - Nichol to Dundas (Signed Route)	2030 - 2030	\$ 1,200	\$ -	\$ -	\$ 1,200	30%	\$ 356	\$ 844	\$ -	\$ 844	\$ -
40306061 Starr - Brock to Centre (Signed Route)	2030 - 2030	\$ 650	\$ -	\$ -	\$ 650	30%	\$ 193	\$ 457	\$ -	\$ 457	\$ -
40246039 Stonemanor - Forest Heights to Willowbrook (Signed Route)	2024 - 2024	\$ 1,400	\$ -	\$ -	\$ 1,400	30%	\$ 415	\$ 985	\$ -	\$ 985	\$ -
40326060 Tormina - Trail to Robert Attersley (Signed Route)	2031 - 2031	\$ 1,600	\$ -	\$ -	\$ 1,600	30%	\$ 474	\$ 1,126	\$ -	\$ 1,126	\$ -
40316037 Townline - Pickering to Oshawa (Paved Shoulder)	2031 - 2031	\$ 1,117,000	\$ -	\$ -	\$ 1,117,000	30%	\$ 331,202	\$ 785,798	\$ -	\$ 785,798	\$ -
40306064 Trent - Brock to Centre (Signed Route)	2030 - 2030	\$ 1,250	\$ -	\$ -	\$ 1,250	30%	\$ 371	\$ 879	\$ -	\$ 879	\$ -
40306062 Trent - Peel to Brock (Signed Route)	2030 - 2030	\$ 850	\$ -	\$ -	\$ 850	30%	\$ 252	\$ 598	\$ -	\$ 598	\$ -
40266037 Twin Streams - Baycliff to Cochrane (Signed Route)	2026 - 2026	\$ 3,050	\$ -	\$ -	\$ 3,050	30%	\$ 904	\$ 2,146	\$ -	\$ 2,146	\$ -
40266041 Twin Streams - Des Newman to Baycliffe (Bike Lane)	2031 - 2031	\$ 21,300	\$ -	\$ -	\$ 21,300	30%	\$ 6,316	\$ 14,984	\$ -	\$ 14,984	\$ -
40266043 Twin Streams - Des Newman to Baycliffe (MUP)	2031 - 2031	\$ 380,000	\$ -	\$ -	\$ 380,000	30%	\$ 112,674	\$ 267,326	\$ -	\$ 267,326	\$ -
40216403 Urban Mobility Amenities (ie bike repair stands, bike parking)	2021 - 2030	\$ 300,000	\$ -	\$ -	\$ 300,000	30%	\$ 88,953	\$ 211,047	\$ -	\$ 211,047	\$ -
40326061 Whitburn - Brock to Trail (Signed Route)	2031 - 2031	\$ 1,700	\$ -	\$ -	\$ 1,700	30%	\$ 504	\$ 1,196	\$ -	\$ 1,196	\$ -
40326059 William Stephenson - Erickson to Overlord (Signed Route)	2031 - 2031	\$ 1,200	\$ -	\$ -	\$ 1,200	30%	\$ 356	\$ 844	\$ -	\$ 844	\$ -
40246038 Willis - Byron to Centre (Signed Route)	2024 - 2024	\$ 350	\$ -	\$ -	\$ 350	30%	\$ 104	\$ 246	\$ -	\$ 246	\$ -
40306070 Willowbrook - Forest Heights to Stone Manor (Signed Route)	2030 - 2030	\$ 5,000	\$ -	\$ -	\$ 5,000	30%	\$ 1,483	\$ 3,517	\$ -	\$ 3,517	\$ -
40246043 Winchester - Ashburn to Baldwin (MUP)	2024 - 2024	\$ 325,000	\$ -	\$ -	\$ 325,000	30%	\$ 96,366	\$ 228,634	\$ -	\$ 228,634	\$ -
40236042 Woodlands - Willowbrook to Brock (signed Route)	2023 - 2023	\$ 1,000	\$ -	\$ -	\$ 1,000	30%	\$ 297	\$ 703	\$ -	\$ 703	\$ -
Subtotal Active Transportation Plan Program		\$ 7,366,725	\$ -	\$ -	\$ 7,366,725		\$ 2,184,312	\$ 5,182,413	\$ -	\$ 5,182,413	\$ -

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DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED - TOWN-WIDE INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031	
Hwy 407 / Cochrane Interchange Program												
40206110	Cochrane Highway 407 Interchange 1, EA Study & Design	2022 - 2025	\$ 2,600,000	\$ -	\$ 390,000	\$ 2,210,000	0%	\$ -	\$ 2,210,000	\$ -	\$ 2,210,000	\$ -
40316112	Cochrane Highway 407 Ramps	2031 - 2031	\$ 20,000,000	\$ -	\$ 3,000,000	\$ 17,000,000	0%	\$ -	\$ 17,000,000	\$ -	\$ 17,000,000	\$ -
40306114	Cochrane Highway 407 Structure Widening	2030 - 2030	\$ 15,000,000	\$ -	\$ 2,250,000	\$ 12,750,000	0%	\$ -	\$ 12,750,000	\$ -	\$ 12,750,000	\$ -
	Subtotal Hwy 407 / Cochrane Interchange Program		\$ 37,600,000	\$ -	\$ 5,640,000	\$ 31,960,000		\$ -	\$ 31,960,000	\$ -	\$ 31,960,000	\$ -
Brooklin Expansion - Traffic Control												
40326046	Baldwin / Duffs (Roundabout)	2031 - 2031	\$ 650,000	\$ -	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
40326048	Baldwin / Minor Collector (Roundabout)	2031 - 2031	\$ 650,000	\$ -	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
40316402	Baldwin / Street C (Traffic Signal)	2031 - 2031	\$ 275,000	\$ -	\$ -	\$ 275,000	0%	\$ -	\$ 275,000	\$ -	\$ 275,000	\$ -
40326045	Brawley / Duffs (Roundabout)	2031 - 2031	\$ 650,000	\$ -	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
40326042	Cochrane / Brawley (Roundabout)	2031 - 2031	\$ 650,000	\$ -	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
40276406	Columbus / Street V (Traffic Signal)	2027 - 2027	\$ 275,000	\$ -	\$ -	\$ 275,000	0%	\$ -	\$ 275,000	\$ -	\$ 275,000	\$ -
40326051	Columbus / Wyecombe (Roundabout)	2031 - 2031	\$ 750,000	\$ -	\$ -	\$ 750,000	0%	\$ -	\$ 750,000	\$ -	\$ 750,000	\$ -
40306056	Country Lane / Street G (Roundabout)	2030 - 2030	\$ 650,000	\$ -	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
40306058	Country Lane / Street E (Roundabout)	2030 - 2030	\$ 650,000	\$ -	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
40326044	Street A / Brawley (Roundabout)	2031 - 2031	\$ 650,000	\$ -	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
40326047	Street B / Baldwin Extension (Roundabout)	2031 - 2031	\$ 650,000	\$ -	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
40326043	Street B / Brawley (Roundabout)	2031 - 2031	\$ 650,000	\$ -	\$ -	\$ 650,000	0%	\$ -	\$ 650,000	\$ -	\$ 650,000	\$ -
40326050	Thickson / Baldwin (Roundabout)	2031 - 2031	\$ 750,000	\$ -	\$ -	\$ 750,000	0%	\$ -	\$ 750,000	\$ -	\$ 750,000	\$ -
40296403	Thickson / Street C (Traffic Signal)	2029 - 2029	\$ 275,000	\$ -	\$ -	\$ 275,000	0%	\$ -	\$ 275,000	\$ -	\$ 275,000	\$ -
	Subtotal Brooklin Expansion - Traffic Control		\$ 8,175,000	\$ -	\$ -	\$ 8,175,000		\$ -	\$ 8,175,000	\$ -	\$ 8,175,000	\$ -

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Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions and Future Considerations*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
Transportation Master Plan and Related Studies											
35237101 Active Transportation Plan	2023 - 2024	\$ 154,500	\$ -	\$ -	\$ 154,500	20%	\$ 30,900	\$ 123,600	\$ -	\$ 123,600	\$ -
35227101 Design Initiatives Study	2021 - 2023	\$ 125,000	\$ -	\$ -	\$ 125,000	20%	\$ 25,000	\$ 100,000	\$ -	\$ 100,000	\$ -
40227101 Traffic Operations Study	2022 - 2023	\$ 103,000	\$ -	\$ -	\$ 103,000	20%	\$ 20,600	\$ 82,400	\$ -	\$ 82,400	\$ -
40142302 Transportation Master Plan Study Update	2022 - 2029	\$ 922,500	\$ -	\$ -	\$ 922,500	0%	\$ -	\$ 922,500	\$ -	\$ 922,500	\$ -
40122302 Lakeshore Integrated Transportation Master Plan	2022 - 2022	\$ 370,000	\$ -	\$ -	\$ 370,000	0%	\$ -	\$ 370,000	\$ -	\$ 370,000	\$ -
40202301 Zones and Corridor Studies / Designs	2022 - 2031	\$ 306,250	\$ -	\$ -	\$ 306,250	20%	\$ 61,250	\$ 245,000	\$ -	\$ 245,000	\$ -
Subtotal Transportation Master Plan and Related Studies		\$ 1,981,250	\$ -	\$ -	\$ 1,981,250		\$ 137,750	\$ 1,843,500	\$ -	\$ 1,843,500	\$ -
Downtown Improvement Program											
55217401 Downtown Whitby Brock St. Streetscape Design Study	2022 - 2022	\$ 100,000	\$ -	\$ -	\$ 100,000	72%	\$ 72,142	\$ 27,858	\$ -	\$ 27,858	\$ -
55207401 Downtown Whitby Gateways and Brock St. Designs	2023 - 2023	\$ 500,000	\$ -	\$ -	\$ 500,000	72%	\$ 360,710	\$ 139,290	\$ -	\$ 139,290	\$ -
55227401 Downtown Whitby Gateways and Brock St. Implementation	2024 - 2024	\$ 200,000	\$ -	\$ -	\$ 200,000	72%	\$ 144,284	\$ 55,716	\$ -	\$ 55,716	\$ -
Subtotal Downtown Improvement Program		\$ 800,000	\$ -	\$ -	\$ 800,000		\$ 577,136	\$ 222,864	\$ -	\$ 222,864	\$ -
Municipal Parking Program											
35216302 On-Street Accessible Parking	2021 - 2023	\$ 150,000	\$ -	\$ -	\$ 150,000	72%	\$ 108,213	\$ 41,787	\$ -	\$ 41,787	\$ -
35226304 On-Street Metres / Pay and Display (additional)	2022 - 2022	\$ 100,000	\$ -	\$ -	\$ 100,000	72%	\$ 72,142	\$ 27,858	\$ -	\$ 27,858	\$ -
Subtotal Municipal Parking Program		\$ 250,000	\$ -	\$ -	\$ 250,000		\$ 180,355	\$ 69,645	\$ -	\$ 69,645	\$ -
Administrative Overhead											
2.2.1 Administrative Overhad (0.5% of Net Municipal Cost)	2021 - 2031	\$ 3,948,336	\$ -	\$ -	\$ 3,948,336	0%	\$ -	\$ 3,948,336	\$ -	\$ 3,948,336	\$ -
TOTAL ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE		\$ 736,100,149	\$ 7,276,634	\$ 6,995,887	\$ 721,827,628		\$ 137,818,657	\$ 584,008,971	\$ 33,843,885	\$ 541,722,934	\$ 8,442,151

* Other contributions from subdivision agreements (external funding).

Residential Development Charge Calculation		
Residential Share of 2021 - 2031 DC Eligible Costs	77.9%	\$422,169,479
Growth in Population in New Units 2021 - 2031		69,326
Unadjusted Development Charge Per Capita		\$6,089.64
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2031 DC Eligible Costs	9.4%	\$50,811,829
11-Year Growth in Square Metres		278,628
Unadjusted Development Charge Per Square Metre		\$182.36
<i>Industrial</i>		
Non-Residential Share of 2021 - 2031 DC Eligible Costs	7.3%	\$39,555,250
11-Year Growth in Square Metres		779,469
Unadjusted Development Charge Per Square Metre		\$50.75
<i>Institutional</i>		
Non-Residential Share of 2021 - 2031 DC Eligible Costs	5.4%	\$29,186,377
11-Year Growth in Square Metres		287,568
Unadjusted Development Charge Per Square Metre		\$101.49

2021 - 2031 Net Funding Envelope	\$646,894,061
Reserve Fund Balance	
Balance as at December 31, 2020	\$33,843,885



APPENDIX C.2

TABLE 3

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED - ALTERNATE ROUTE AND RELATED INFRASTRUCTURE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
ROADS AND RELATED - ALTERNATE ROUTE AND RELATED INFRASTRUCTURE											
Alternate Route for Hwy 7/12											
40206041 Alternate Route for Hwy 7/12 - 1. EA Mod. & Design	2021 - 2024	\$ 2,500,000	\$ -	\$ -	\$ 2,500,000	0%	\$ -	\$ 2,500,000	\$ 2,500,000	\$ -	\$ -
40266009 Alternate Route for Hwy 7/12 - 3. Property Acquisition	2024 - 2024	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -
40296030 Alternate Route for Hwy 7/12 - 4. Utility Relocation	2029 - 2029	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -
40306040 Alternate Route for Hwy 7/12 - 5. Construction	2031 - 2031	\$ 77,325,000	\$ -	\$ -	\$ 77,325,000	0%	\$ -	\$ 77,325,000	\$ 4,820,114	\$ 72,504,886	\$ -
40256020 Baldwin/Thickson - Intersection Improvements	2025 - 2027	\$ 5,000,000	\$ -	\$ -	\$ 5,000,000	0%	\$ -	\$ 5,000,000	\$ -	\$ 5,000,000	\$ -
Subtotal Alternate Route for Hwy 7/12		\$ 86,825,000	\$ -	\$ -	\$ 86,825,000		\$ -	\$ 86,825,000	\$ 9,320,114	\$ 77,504,886	\$ -
TOTAL ROADS AND RELATED - ALTERNATE ROUTE AND RELATED INFRASTRUCTURE		\$ 86,825,000	\$ -	\$ -	\$ 86,825,000		\$ -	\$ 86,825,000	\$ 9,320,114	\$ 77,504,886	\$ -

* Other contributions from subdivision agreements (external funding).

** Project 40306040 excludes costs beyond the 2031 planning horizon

Residential Development Charge Calculation		
Residential Share of 2021 - 2031 DC Eligible Costs	77.9%	\$60,400,244
Growth in Population in New Units 2021 - 2031		69,326
Unadjusted Development Charge Per Capita		\$871.25
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2031 DC Eligible Costs	9.4%	\$7,269,703
11-Year Growth in Square Metres		278,628
Unadjusted Development Charge Per Square Metre		\$26.09
<i>Industrial</i>		
Non-Residential Share of 2021 - 2031 DC Eligible Costs	7.3%	\$5,659,212
11-Year Growth in Square Metres		779,469
Unadjusted Development Charge Per Square Metre		\$7.26
<i>Institutional</i>		
Non-Residential Share of 2021 - 2031 DC Eligible Costs	5.4%	\$4,175,727
11-Year Growth in Square Metres		287,568
Unadjusted Development Charge Per Square Metre		\$14.52

2021 - 2031 Net Funding Envelope (See Roads & Related Funding Envelope)	
Reserve Fund Balance	
Balance as at December 31, 2020	\$9,320,114



APPENDIX C.2

TABLE 4.1

TOWN OF WHITBY
ROADS AND RELATED - TOWN-WIDE INFRASTRUCTURE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS: RESIDENTIAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	\$26,374.8	\$23,198.2	\$20,163.7	\$7,692.6	(\$4,038.7)	(\$21,906.8)	(\$27,505.2)	\$8,729.0	\$62,316.5	\$110,958.9	\$159,276.8	
2021 - 2031 RESIDENTIAL FUNDING REQUIREMENTS												
Prior Growth (Funding form DC Reserve Balance)	\$10,784.5	\$8,333.0	\$3,297.8	\$3,180.7	\$71.9	\$72.9	\$76.9	\$72.9	\$90.3	\$71.5	\$322.6	\$26,374.8
Roads: Residential: Non Inflated	\$8,389.4	\$5,560.6	\$25,275.8	\$22,444.8	\$34,706.6	\$23,178.9	\$15,759.4	\$11,398.1	\$20,943.5	\$26,514.6	\$197,672.2	\$391,843.9
WWLG Credits: Inflated	\$8,968.2	\$8,141.2	\$2,321.2	\$4,413.4	\$168.6	\$173.6	\$6,139.4	\$0.0	\$0.0	\$0.0	\$0.0	\$30,325.6
Roads: Residential: Inflated	\$28,142.1	\$22,312.6	\$32,049.1	\$31,607.4	\$37,813.8	\$25,845.4	\$23,973.6	\$13,176.5	\$24,644.5	\$31,772.8	\$241,354.7	\$512,692.7
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	3,996	3,012	3,057	3,107	3,155	3,232	8,972	9,440	9,928	10,444	10,982	69,326
REVENUE												
- DC Receipts: Inflated	\$24,152.1	\$18,569.1	\$19,225.0	\$19,928.1	\$20,640.2	\$21,569.4	\$61,071.4	\$65,542.0	\$70,306.8	\$75,443.0	\$80,915.3	\$477,362.3
INTEREST												
- Interest on Opening Balance	\$923.1	\$811.9	\$705.7	\$269.2	(\$222.1)	(\$1,204.9)	(\$1,512.8)	\$305.5	\$2,181.1	\$3,883.6	\$5,574.7	\$11,715.1
- Interest on In-year Transactions	(\$109.7)	(\$102.9)	(\$352.7)	(\$321.2)	(\$472.3)	(\$117.6)	\$649.2	\$916.4	\$799.1	\$764.2	(\$4,412.1)	(\$2,759.5)
TOTAL REVENUE	\$24,965.5	\$19,278.1	\$19,578.1	\$19,876.1	\$19,945.8	\$20,246.9	\$60,207.9	\$66,763.9	\$73,286.9	\$80,090.7	\$82,077.9	\$486,317.8
CLOSING CASH BALANCE	\$23,198.2	\$20,163.7	\$7,692.6	(\$4,038.7)	(\$21,906.8)	(\$27,505.2)	\$8,729.0	\$62,316.5	\$110,958.9	\$159,276.8	\$0.0	

2021 Adjusted Charge Per Capita

\$6,044.19

Allocation of Capital Program

Residential Sector	77.9%
Non-Residential Sector	22.1%

Rates for 2021

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

APPENDIX C.2

TABLE 4.2

TOWN OF WHITBY
ROADS AND RELATED - ALTERNATE ROUTE AND RELATED INFRASTRUCTURE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS: RESIDENTIAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	\$7,263.2	\$10,515.3	\$13,462.6	\$15,779.2	\$17,374.4	\$18,703.6	\$22,354.2	\$29,386.9	\$39,519.2	\$49,738.8	\$61,958.7	
2021 - 2031 RESIDENTIAL FUNDING REQUIREMENTS												
Prior Growth (Funding form DC Reserve Balance)	\$350.7	\$0.0	\$779.3	\$1,597.6	\$0.0	\$0.0	\$0.0	\$0.0	\$779.3	\$0.0	\$3,756.4	\$7,263.2
Roads: Residential: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$1,948.3	\$0.0	\$1,948.3	\$0.0	\$0.0	\$0.0	\$56,503.7	\$60,400.2
Roads: Residential: Inflated	\$350.7	\$0.0	\$810.8	\$1,695.4	\$2,108.9	\$0.0	\$2,194.1	\$0.0	\$913.1	\$0.0	\$73,456.7	\$81,529.6
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	3,996	3,012	3,057	3,107	3,155	3,232	8,972	9,440	9,928	10,444	10,982	69,326
REVENUE												
- DC Receipts: Inflated	\$3,297.0	\$2,534.9	\$2,624.4	\$2,720.4	\$2,817.6	\$2,944.4	\$8,336.9	\$8,947.2	\$9,597.6	\$10,298.7	\$11,045.8	\$65,164.8
INTEREST												
- Interest on Opening Balance	\$254.2	\$368.0	\$471.2	\$552.3	\$608.1	\$654.6	\$782.4	\$1,028.5	\$1,383.2	\$1,740.9	\$2,168.6	\$10,012.0
- Interest on In-year Transactions	\$51.6	\$44.4	\$31.7	\$17.9	\$12.4	\$51.5	\$107.5	\$156.6	\$152.0	\$180.2	(\$1,716.3)	(\$910.5)
TOTAL REVENUE	\$3,602.8	\$2,947.3	\$3,127.3	\$3,290.6	\$3,438.1	\$3,650.6	\$9,226.8	\$10,132.3	\$11,132.7	\$12,219.8	\$11,498.0	\$74,266.3
CLOSING CASH BALANCE	\$10,515.3	\$13,462.6	\$15,779.2	\$17,374.4	\$18,703.6	\$22,354.2	\$29,386.9	\$39,519.2	\$49,738.8	\$61,958.7	\$0.0	

2021 Adjusted Charge Per Capita	\$825.09
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Allocation of Capital Program	
Residential Sector	77.9%
Non-Residential Sector	22.1%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.2

TABLE 5.1

TOWN OF WHITBY
ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS: COMMERCIAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	\$3,174.4	\$258.1	\$845.9	\$533.6	\$1,735.8	\$2,515.5	\$5,114.1	\$8,361.5	\$13,401.2	\$17,590.8	\$21,453.3	
2021 - 2031 COMMERCIAL FUNDING REQUIREMENTS												
Prior Growth (Funding form DC Reserve Balance)	\$1,298.0	\$1,002.9	\$396.9	\$382.8	\$8.6	\$8.8	\$9.3	\$8.8	\$10.9	\$8.6	\$38.8	\$3,174.4
Roads: Commercial: Non: Inflated	\$1,009.7	\$669.3	\$3,042.2	\$2,701.4	\$4,177.2	\$2,789.8	\$1,896.8	\$1,371.9	\$2,520.7	\$3,191.3	\$23,791.6	\$47,161.9
WWLG Credits: Inflated	\$1,079.4	\$979.9	\$279.4	\$531.2	\$20.3	\$20.9	\$738.9	\$0.0	\$0.0	\$0.0	\$0.0	\$3,649.9
Roads: Commercial: Inflated	\$3,387.1	\$2,685.5	\$3,857.4	\$3,804.2	\$4,551.2	\$3,110.7	\$2,885.4	\$1,585.9	\$2,966.2	\$3,824.1	\$29,049.2	\$61,707.1
COMMERCIAL DEVELOPMENT												
- New Retail Commerical GFA - SQ.M	2,460	17,809	18,910	26,128	27,113	28,201	29,249	30,377	31,551	32,765	34,065	278,628
REVENUE												
- DC Receipts: Inflated	\$440.7	\$3,254.4	\$3,524.6	\$4,967.4	\$5,257.8	\$5,578.1	\$5,901.1	\$6,251.3	\$6,622.7	\$7,015.1	\$7,439.3	\$56,252.5
INTEREST												
- Interest on Opening Balance	\$111.1	\$9.0	\$29.6	\$18.7	\$60.8	\$88.0	\$179.0	\$292.7	\$469.0	\$615.7	\$750.9	\$2,624.4
- Interest on In-year Transactions	(\$81.0)	\$10.0	(\$9.2)	\$20.4	\$12.4	\$43.2	\$52.8	\$81.6	\$64.0	\$55.8	(\$594.3)	(\$344.3)
TOTAL REVENUE	\$470.8	\$3,273.4	\$3,545.1	\$5,006.4	\$5,330.9	\$5,709.3	\$6,132.9	\$6,625.6	\$7,155.8	\$7,686.6	\$7,595.9	\$58,532.6
CLOSING CASH BALANCE	\$258.1	\$845.9	\$533.6	\$1,735.8	\$2,515.5	\$5,114.1	\$8,361.5	\$13,401.2	\$17,590.8	\$21,453.3	\$0.0	

2021 Adjusted Charge Per Square Metre

\$179.15

Allocation of Capital Program

Commercial Share	9.4%
Industrial Share	7.3%
Institutional Share	5.4%

Rates for 2021

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



APPENDIX C.2

TABLE 5.2

TOWN OF WHITBY

ROADS AND RELATED - ALTERNATE ROUTE AND RELATED INFRASTRUCTURE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS: COMMERCIAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	\$874.2	\$923.2	\$1,408.9	\$1,849.8	\$2,398.9	\$2,957.0	\$3,837.5	\$4,525.1	\$5,554.2	\$6,559.3	\$7,766.0	
2021 - 2031 COMMERCIAL FUNDING REQUIREMENTS												
Prior Growth (Funding form DC Reserve Balance)	\$42.2	\$0.0	\$93.8	\$192.3	\$0.0	\$0.0	\$0.0	\$0.0	\$93.8	\$0.0	\$452.1	\$874.2
Roads: Commercial: Non: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$234.5	\$0.0	\$234.5	\$0.0	\$0.0	\$0.0	\$6,800.7	\$7,269.7
Roads: Commercial: Inflated	\$42.2	\$0.0	\$97.6	\$204.1	\$253.8	\$0.0	\$264.1	\$0.0	\$109.9	\$0.0	\$8,841.2	\$9,812.8
COMMERCIAL DEVELOPMENT												
- New Retail Commerical GFA - SQ.M	2,460	17,809	18,910	26,128	27,113	28,201	29,249	30,377	31,551	32,765	34,065	278,628
REVENUE												
- DC Receipts: Inflated	\$60.3	\$445.5	\$482.5	\$680.0	\$719.8	\$763.6	\$807.9	\$855.8	\$906.6	\$960.4	\$1,018.4	\$7,700.9
INTEREST												
- Interest on Opening Balance	\$30.6	\$32.3	\$49.3	\$64.7	\$84.0	\$103.5	\$134.3	\$158.4	\$194.4	\$229.6	\$271.8	\$1,352.9
- Interest on In-year Transactions	\$0.3	\$7.8	\$6.7	\$8.3	\$8.2	\$13.4	\$9.5	\$15.0	\$13.9	\$16.8	(\$215.1)	(\$115.2)
TOTAL REVENUE	\$91.2	\$485.6	\$538.6	\$753.1	\$811.9	\$880.5	\$951.7	\$1,029.1	\$1,115.0	\$1,206.7	\$1,075.1	\$8,938.6
CLOSING CASH BALANCE	\$923.2	\$1,408.9	\$1,849.8	\$2,398.9	\$2,957.0	\$3,837.5	\$4,525.1	\$5,554.2	\$6,559.3	\$7,766.0	\$0.0	

2021 Adjusted Charge Per Square Metre	\$24.53
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Allocation of Capital Program	
Commercial Share	9.4%
Industrial Share	7.3%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.2

TABLE 6.1

TOWN OF WHITBY
ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS: INDUSTRIAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	\$2,471.2	\$2,218.9	\$7,132.1	\$11,498.2	\$11,695.4	\$11,416.0	\$12,378.8	\$13,674.7	\$16,169.7	\$17,779.9	\$18,898.8	
2021 - 2031 INDUSTRIAL FUNDING REQUIREMENTS												
Prior Growth (Funding form DC Reserve Balance)	\$1,010.5	\$780.8	\$309.0	\$298.0	\$6.7	\$6.8	\$7.2	\$6.8	\$8.5	\$6.7	\$30.2	\$2,471.2
Roads: Industrial: Non: Inflated	\$786.0	\$521.0	\$2,368.2	\$2,103.0	\$3,251.8	\$2,171.7	\$1,476.6	\$1,067.9	\$1,962.3	\$2,484.3	\$18,520.9	\$36,713.9
WWLG Credits: Inflated	\$840.3	\$762.8	\$217.5	\$413.5	\$15.8	\$16.3	\$575.2	\$0.0	\$0.0	\$0.0	\$0.0	\$2,841.4
Roads: Industrial: Inflated	\$2,636.8	\$2,090.6	\$3,002.9	\$2,961.5	\$3,543.0	\$2,421.6	\$2,246.2	\$1,234.6	\$2,309.1	\$2,977.0	\$22,613.8	\$48,036.8
NEW INDUSTRIAL DEVELOPMENT												
- New Other Non-Residential GFA - SQ.M	47,361	137,723	139,080	53,425	54,480	55,320	56,400	57,480	58,440	59,520	60,240	\$779,468.9
REVENUE												
- DC Receipts: Inflated	\$2,307.0	\$6,843.0	\$7,048.6	\$2,761.7	\$2,872.6	\$2,975.2	\$3,094.0	\$3,216.3	\$3,335.4	\$3,465.0	\$3,577.0	\$41,495.8
INTEREST												
- Interest on Opening Balance	\$86.5	\$77.7	\$249.6	\$402.4	\$409.3	\$399.6	\$433.3	\$478.6	\$565.9	\$622.3	\$661.5	\$4,386.7
- Interest on In-year Transactions	(\$9.1)	\$83.2	\$70.8	(\$5.5)	(\$18.4)	\$9.7	\$14.8	\$34.7	\$18.0	\$8.5	(\$523.5)	(\$316.8)
TOTAL REVENUE	\$2,384.5	\$7,003.8	\$7,369.0	\$3,158.7	\$3,263.5	\$3,384.5	\$3,542.1	\$3,729.6	\$3,919.3	\$4,095.8	\$3,715.0	\$45,565.6
CLOSING CASH BALANCE	\$2,218.9	\$7,132.1	\$11,498.2	\$11,695.4	\$11,416.0	\$12,378.8	\$13,674.7	\$16,169.7	\$17,779.9	\$18,898.8	\$0.0	

2021 Adjusted Charge Per Square Metre

\$48.71

Allocation of Capital Program

Commercial Share	9.4%
Industrial Share	7.3%
Institutional Share	5.4%

Rates for 2021

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



APPENDIX C.2

TABLE 6.2

TOWN OF WHITBY
ROADS AND RELATED - ALTERNATE ROUTE AND RELATED INFRASTRUCTURE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS: INDUSTRIAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	\$680.5	\$992.4	\$1,980.7	\$2,954.9	\$3,281.6	\$3,595.7	\$4,136.1	\$4,502.9	\$5,108.7	\$5,665.2	\$6,346.3	
2021 - 2031 INDUSTRIAL FUNDING REQUIREMENTS												
Prior Growth (Funding form DC Reserve Balance)	\$32.9	\$0.0	\$73.0	\$149.7	\$0.0	\$0.0	\$0.0	\$0.0	\$73.0	\$0.0	\$352.0	\$680.5
Roads: Industrial: Non: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$182.5	\$0.0	\$182.5	\$0.0	\$0.0	\$0.0	\$5,294.1	\$5,659.2
Roads: Industrial: Inflated	\$32.9	\$0.0	\$76.0	\$158.8	\$197.6	\$0.0	\$205.6	\$0.0	\$85.6	\$0.0	\$6,882.5	\$7,638.9
NEW INDUSTRIAL DEVELOPMENT												
- New Other Non-Residential GFA - SQ.M	47,361	137,723	139,080	53,425	54,480	55,320	56,400	57,480	58,440	59,520	60,240	\$779,468.9
REVENUE												
- DC Receipts: Inflated	\$316.0	\$937.2	\$965.3	\$378.2	\$393.4	\$407.5	\$423.7	\$440.5	\$456.8	\$474.5	\$489.9	\$5,683.0
INTEREST												
- Interest on Opening Balance	\$23.8	\$34.7	\$69.3	\$103.4	\$114.9	\$125.8	\$144.8	\$157.6	\$178.8	\$198.3	\$222.1	\$1,373.6
- Interest on In-year Transactions	\$5.0	\$16.4	\$15.6	\$3.8	\$3.4	\$7.1	\$3.8	\$7.7	\$6.5	\$8.3	(\$175.8)	(\$98.2)
TOTAL REVENUE	\$344.7	\$988.3	\$1,050.2	\$485.5	\$511.7	\$540.4	\$572.3	\$605.8	\$642.1	\$681.1	\$536.2	\$6,958.4
CLOSING CASH BALANCE	\$992.4	\$1,980.7	\$2,954.9	\$3,281.6	\$3,595.7	\$4,136.1	\$4,502.9	\$5,108.7	\$5,665.2	\$6,346.3	\$0.0	

2021 Adjusted Charge Per Square Metre	\$6.67
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Allocation of Capital Program	
Commercial Share	9.4%
Industrial Share	7.3%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.2

TABLE 7.1

TOWN OF WHITBY
ROADS & RELATED - TOWN-WIDE INFRASTRUCTURE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS: INSTITUTIONAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	\$1,823.4	(\$18.0)	(\$1,482.6)	(\$3,645.4)	(\$2,761.7)	(\$2,044.2)	(\$210.4)	\$2,105.8	\$5,532.1	\$8,560.6	\$11,492.5	
2021 - 2031 INSTITUTIONAL FUNDING REQUIREMENTS												
Prior Growth (Funding from DC Reserve Balan	\$745.6	\$576.1	\$228.0	\$219.9	\$5.0	\$5.0	\$5.3	\$5.0	\$6.2	\$4.9	\$22.3	\$1,823.4
Roads: Institutional: Non-Inflated	\$580.0	\$384.4	\$1,747.4	\$1,551.7	\$2,399.4	\$1,602.5	\$1,089.5	\$788.0	\$1,447.9	\$1,833.1	\$13,665.9	\$27,089.8
WWLG Credits: Inflated	\$620.0	\$562.8	\$160.5	\$305.1	\$11.7	\$12.0	\$424.4	\$0.0	\$0.0	\$0.0	\$0.0	\$2,096.5
Roads: Institutional: Inflated	\$1,945.6	\$1,542.6	\$2,215.7	\$2,185.2	\$2,614.2	\$1,786.8	\$1,657.4	\$910.9	\$1,703.8	\$2,196.6	\$16,685.9	\$35,444.6
NEW INSTITUTIONAL DEVELOPMENT												
- New Other Non-Residential GFA - SQ.M	900	1,140	1,800	30,168	31,560	33,000	34,500	36,060	37,740	39,420	41,280	287,568
REVENUE												
- DC Receipts: Inflated	\$91.4	\$118.1	\$190.2	\$3,250.7	\$3,468.7	\$3,699.6	\$3,945.1	\$4,205.9	\$4,489.9	\$4,783.6	\$5,109.5	\$33,352.6
INTEREST												
- Interest on Opening Balance	\$63.8	(\$1.0)	(\$81.5)	(\$200.5)	(\$151.9)	(\$112.4)	(\$11.6)	\$73.7	\$193.6	\$299.6	\$402.2	\$474.1
- Interest on In-year Transactions	(\$51.0)	(\$39.2)	(\$55.7)	\$18.6	\$15.0	\$33.5	\$40.0	\$57.7	\$48.8	\$45.3	(\$318.4)	(\$205.4)
TOTAL REVENUE	\$104.2	\$77.9	\$52.9	\$3,068.8	\$3,331.8	\$3,620.6	\$3,973.5	\$4,337.3	\$4,732.3	\$5,128.5	\$5,193.4	\$33,621.2
CLOSING CASH BALANCE	(\$18.0)	(\$1,482.6)	(\$3,645.4)	(\$2,761.7)	(\$2,044.2)	(\$210.4)	\$2,105.8	\$5,532.1	\$8,560.6	\$11,492.5	\$0.0	

2021 Adjusted Charge Per Square Metre

\$101.54

Allocation of Capital Program

Commercial Share	9.4%
Industrial Share	7.3%
Institutional Share	5.4%

Rates for 2021

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



APPENDIX C.2

TABLE 7.2

TOWN OF WHITBY
ROADS AND RELATED - ALTERNATE ROUTE AND RELATED INFRASTRUCTURE
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS: INSTITUTIONAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	\$502.1	\$507.6	\$541.6	\$529.5	\$878.1	\$1,239.9	\$1,794.7	\$2,248.4	\$2,908.4	\$3,566.6	\$4,352.5	
2021 - 2031 INSTITUTIONAL FUNDING REQUIREMENTS												
Prior Growth (Funding form DC Reserve Balan	\$24.2	\$0.0	\$53.9	\$110.4	\$0.0	\$0.0	\$0.0	\$0.0	\$53.9	\$0.0	\$259.7	\$502.1
Roads: Institutional: Non: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$134.7	\$0.0	\$134.7	\$0.0	\$0.0	\$0.0	\$3,906.3	\$4,175.7
Roads: Institutional: Inflated	\$24.2	\$0.0	\$56.1	\$117.2	\$145.8	\$0.0	\$151.7	\$0.0	\$63.1	\$0.0	\$5,078.4	\$5,636.5
NEW INSTITUTIONAL DEVELOPMENT												
- New Other Non-Residential GFA - SQ.M	900	1,140	1,800	30,168	31,560	33,000	34,500	36,060	37,740	39,420	41,280	287,568
REVENUE												
- DC Receipts: Inflated	\$12.4	\$16.0	\$25.8	\$441.6	\$471.2	\$502.5	\$535.9	\$571.3	\$609.9	\$649.8	\$694.1	\$4,530.5
INTEREST												
- Interest on Opening Balance	\$17.6	\$17.8	\$19.0	\$18.5	\$30.7	\$43.4	\$62.8	\$78.7	\$101.8	\$124.8	\$152.3	\$667.4
- Interest on In-year Transactions	(\$0.3)	\$0.3	(\$0.8)	\$5.7	\$5.7	\$8.8	\$6.7	\$10.0	\$9.6	\$11.4	(\$120.6)	(\$63.6)
TOTAL REVENUE	\$29.7	\$34.1	\$44.0	\$465.8	\$507.6	\$554.7	\$605.4	\$660.0	\$721.3	\$786.0	\$725.8	\$5,134.3
CLOSING CASH BALANCE	\$507.6	\$541.6	\$529.5	\$878.1	\$1,239.9	\$1,794.7	\$2,248.4	\$2,908.4	\$3,566.6	\$4,352.5	\$0.0	

2021 Adjusted Charge Per Square Metre	\$13.79
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Allocation of Capital Program	
Commercial Share	9.4%
Industrial Share	7.3%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix C.3

Stormwater Management

Appendix C.3 – Stormwater Management

The following tables set out the 2021–2031 development-related capital forecast and the calculation of the development charge for Whitby’s Stormwater Management services. The cost, quantum and description of the projects included in the forecast have been informed largely by stormwater studies, as well as the Town’s approved ten-year capital forecast. The identified development-related projects are required in order to accommodate the increased stormwater needs arising from growth as the Town continues to develop over the planning period to 2031.

It should be noted that all minor/major stormwater management facilities that are internal to a subdivision, as required through the Town’s local service definitions, are considered a direct developer responsibility under section 59 of the DCA and have not been included in the capital program.

Stormwater management facilities included in the DC capital program are required to achieve health and safety standards as identified in relevant legislation including Provincial and Conservation Authority regulations, the Planning Act, the Ontario Water Resources Act and the Municipal Act. In accordance with section 4(3) of O. Reg. 82/98, the ten-year historical service level does not apply; however, a ten-year historical inventory of assets and historical service level has been prepared.

Table 1 Historical Service Level

Table 1 displays the ten-year historical inventory for all Stormwater Management infrastructure. The Town’s existing 397 kilometres of storm sewer pipes were valued at \$198.04 million in 2020. There are currently 44 stormwater management ponds in the Town that provide for a combined value of \$40.47 million. The total value of all Stormwater Management infrastructure is approximately \$238.51 million. This results in a ten-year

historical average service level of \$1,317.31 per population and employment. The historical service level, multiplied by the long-term net population and employment in growth of 69,925, results in a maximum allowable funding envelope of \$92.11 million.

Table 2 2021-2031 Development-Related Capital Program & Calculation of “Unadjusted” Development Charges

Table 2 provides a list of the Stormwater Management capital projects included in the development charges calculation and the capital cost estimate of the works. The projects relate to the recovery of a negative DC reserve fund balance (\$2.04 million) and the construction of new and expanded storm sewers, storm water facilities and stormwater-related studies. In total, the gross capital program cost amounts to \$41.38 million.

Approximately \$1.13 million in other contributions from subdivision agreements are anticipated and therefore have been reduced from the total the capital projects. Recognizing that the development of new stormwater management infrastructure will benefit existing and new development, a 60% benefit to existing share, consistent with the BTE share applied in the 2016 DC Background Study, has been applied to almost all new and expanded storm sewers and storm water facilities and related studies.

The benefit to existing shares for Stormwater Management totals \$25.42 million and this portion is removed from the DC calculation and must be funded through non-DC sources. As no post-period shares have been identified, the total eligible development charge related cost brought forward to the DC calculation amounts to \$14.82 million.

The 2021-2031 DC eligible cost is then apportioned approximately 77.9%, or \$11.55 million to the residential sector, 9.4%, or \$1.39 million to the commercial sector, 7.3%, or \$1.08 million to the industrial sector, and 5.4%, or \$798,450, to the institutional sector based on 2021-2031 shares of growth

APPENDIX C.3

TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS

STORMWATER MANAGEMENT

Storm Sewer Type of Storm Sewer (Size)	# of Kilometres										UNIT COST (\$/km)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
150	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$287,853
200	2.23	2.37	2.37	2.37	2.37	2.38	2.38	2.38	2.38	2.38	\$295,050
250	1.79	1.80	1.83	1.83	1.84	1.84	1.84	1.84	1.84	1.84	\$302,246
300	61.34	62.69	62.88	63.53	63.85	64.49	65.06	66.88	67.72	68.04	\$316,639
375	55.39	57.23	57.51	58.38	58.99	59.30	60.45	61.92	63.18	64.03	\$345,424
400	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$355,019
450	57.15	58.72	58.91	60.02	60.73	61.18	61.67	62.55	63.40	63.94	\$374,209
525	34.40	35.12	35.14	36.05	36.63	36.86	37.33	38.15	39.64	39.89	\$393,400
575	-	-	-	-	-	-	-	-	0.01	0.01	\$402,995
600	26.35	26.90	27.00	27.87	28.19	28.40	28.75	29.93	30.67	30.96	\$431,780
675	20.04	20.53	20.53	20.85	21.15	21.56	21.93	22.73	22.96	23.03	\$467,762
685	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$470,000
750	16.17	16.68	16.68	17.29	17.42	17.58	17.61	17.80	18.31	18.31	\$518,136
825	8.75	9.10	9.10	9.23	9.27	9.47	9.71	10.07	10.49	10.69	\$561,314
900	11.18	11.50	11.60	11.83	12.20	12.22	12.22	12.66	12.82	13.04	\$618,885
975	6.92	6.99	7.10	7.24	7.32	7.32	7.40	8.15	8.25	8.25	\$662,063
1050	12.09	12.09	12.25	12.47	12.47	12.67	12.67	12.85	13.14	13.14	\$690,848
1200	10.09	10.09	10.09	10.48	10.48	10.83	11.19	11.24	11.32	11.32	\$791,597
1350	9.81	9.81	9.81	10.16	10.42	10.42	10.50	10.54	10.54	10.62	\$863,560
1500	4.76	4.88	4.88	4.88	5.02	5.02	5.02	5.14	5.14	5.14	\$971,505
1650	4.12	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	\$1,439,267
1800	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	\$1,727,120
1950	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	\$2,014,974
2000	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$2,100,000
2100	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	\$2,302,827
2140	-	-	-	-	-	0.07	0.07	0.07	0.07	0.07	\$2,500,000
2250	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$2,878,534
2400	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$3,238,350
2550	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$3,598,167
2700	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	\$4,317,801
2850	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	\$3,957,984
3650	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	\$5,877,006
5400	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$10,074,868
Total (km)	351	359	360	367	371	374	378	387	394	397	
Total (\$000)	\$177,310.9	\$180,884.8	\$181,419.5	\$184,614.7	\$186,434.2	\$188,081.4	\$189,904.7	\$193,923.0	\$196,874.6	\$198,041.0	



APPENDIX C.3
TABLE 1

TOWN OF WHITBY
INVENTORY OF CAPITAL ASSETS

STORMWATER MANAGEMENT

Stormwater Management (Ponds) Description	# of Ponds										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Small (storage < 7,000 m ³)	20	22	23	24	25	25	25	26	26	26	\$706,631
Medium (storage > 7,000 m ³ & < 15,000 m ³)	6	6	6	6	7	7	8	9	9	9	\$1,046,111
Large (Storage > 15,000 m ³)	7	8	8	8	8	8	9	9	9	9	\$1,408,617
Total (#)	33	36	37	38	40	40	42	44	44	44	
Total (\$000)	\$30,269.6	\$33,091.5	\$33,798.1	\$34,504.7	\$36,257.5	\$36,257.5	\$38,712.2	\$40,465.0	\$40,465.0	\$40,465.0	

APPENDIX C.3

TABLE 1

TOWN OF WHITBY
CALCULATION OF SERVICE LEVELS

STORMWATER MANAGEMENT

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	122,022	123,267	124,525	125,796	127,080	128,377	130,575	132,810	135,084	136,562
Historic Employment	<u>38,031</u>	<u>38,807</u>	<u>39,602</u>	<u>40,417</u>	<u>41,251</u>	<u>42,107</u>	<u>42,828</u>	<u>43,561</u>	<u>44,307</u>	<u>44,519</u>
Total Historic Population & Employment	160,053	162,074	164,127	166,213	168,331	170,484	173,403	176,371	179,391	181,081

INVENTORY SUMMARY (\$000)

Storm Sewer	\$177,310.9	\$180,884.8	\$181,419.5	\$184,614.7	\$186,434.2	\$188,081.4	\$189,904.7	\$193,923.0	\$196,874.6	\$198,041.0
Stormwater Management (Ponds)	\$30,269.6	\$33,091.5	\$33,798.1	\$34,504.7	\$36,257.5	\$36,257.5	\$38,712.2	\$40,465.0	\$40,465.0	\$40,465.0
Total (\$000)	\$207,580.5	\$213,976.3	\$215,217.6	\$219,119.4	\$222,691.7	\$224,338.9	\$228,617.0	\$234,388.0	\$237,339.5	\$238,505.9

SERVICE LEVEL (\$/pop+empl)

Storm Sewer	\$1,107.82	\$1,116.06	\$1,105.36	\$1,110.71	\$1,107.55	\$1,103.22	\$1,095.16	\$1,099.52	\$1,097.46	\$1,093.66	\$1,103.65
Stormwater Management (Ponds)	\$189.12	\$204.18	\$205.93	\$207.59	\$215.39	\$212.67	\$223.25	\$229.43	\$225.57	\$223.46	\$213.66
Total (\$/pop+empl)	\$1,296.95	\$1,320.24	\$1,311.29	\$1,318.30	\$1,322.94	\$1,315.89	\$1,318.41	\$1,328.95	\$1,323.03	\$1,317.13	\$1,317.31

Average
Service
Level

TOWN OF WHITBY
CALCULATION OF MAXIMUM ALLOWABLE

STORMWATER MANAGEMENT

Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$1,317.31
Net Population & Employment Growth 2021 - 2031	69,925
Maximum Allowable Funding Envelope	\$92,113,358

APPENDIX C.3

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
STORMWATER MANAGEMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
3.0 STORMWATER MANAGEMENT											
Negative Reserve Fund Balance											
3.1.1 Balance as of December 31, 2020	2021 - 2021	\$ 2,040,314	\$ -	\$ -	\$ 2,040,314	0%	\$ -	\$ 2,040,314	\$ -	\$ 2,040,314	\$ -
Subtotal Negative Reserve Fund Balance		\$ 2,040,314	\$ -	\$ -	\$ 2,040,314		\$ -	\$ 2,040,314	\$ -	\$ 2,040,314	\$ -
Storm Water Program											
40246501 Braebrook OGS (Anderson/Braebrook)	2024 - 2024	\$ 200,000	\$ -	\$ -	\$ 200,000	60%	\$ 120,000	\$ 80,000	\$ -	\$ 80,000	\$ -
40236501 Cambridge Pond with OGS (Bradley/Cambridge)	2024 - 2025	\$ 636,000	\$ -	\$ -	\$ 636,000	60%	\$ 381,600	\$ 254,400	\$ -	\$ 254,400	\$ -
40216502 Cawker Court SWQ Pond with OGS (Burns / Cawker)	2023 - 2024	\$ 559,300	\$ -	\$ 157,269	\$ 402,031	60%	\$ 241,219	\$ 160,812	\$ -	\$ 160,812	\$ -
40296502 Corbett Creek Plunge Pools with OGS (Rossland/Meadow)	2028 - 2029	\$ 841,700	\$ -	\$ 254,869	\$ 586,831	60%	\$ 352,099	\$ 234,732	\$ -	\$ 234,732	\$ -
40226503 Creek Erosion Restoration Works	2021 - 2031	\$ 8,050,000	\$ -	\$ -	\$ 8,050,000	90%	\$ 7,245,000	\$ 805,000	\$ -	\$ 805,000	\$ -
40256501 Deerfield SWQ Pond (Deerfield/Michael Blvd)	2026 - 2027	\$ 2,667,000	\$ -	\$ 257,368	\$ 2,409,632	60%	\$ 1,445,779	\$ 963,853	\$ -	\$ 963,853	\$ -
40246502 Duntop Plunge Pool with OGS (Lupin/Dunlop)	2023 - 2024	\$ 470,000	\$ -	\$ -	\$ 470,000	60%	\$ 282,000	\$ 188,000	\$ -	\$ 188,000	\$ -
40226501 Future Capacity Improvement Projects	2022 - 2031	\$ 2,100,000	\$ -	\$ -	\$ 2,100,000	60%	\$ 1,260,000	\$ 840,000	\$ -	\$ 840,000	\$ -
40216501 Garden St Snow Storage Facility - Phase 2	2021 - 2023	\$ 1,365,000	\$ -	\$ -	\$ 1,365,000	60%	\$ 819,000	\$ 546,000	\$ -	\$ 546,000	\$ -
40256503 Glenayr Plunge Pool with OGS (Anderson/Glenayr)	2024 - 2025	\$ 683,000	\$ -	\$ -	\$ 683,000	60%	\$ 409,800	\$ 273,200	\$ -	\$ 273,200	\$ -
40167202 Halls Rd Culvert @ Lynde Creek	2025 - 2029	\$ 682,500	\$ -	\$ -	\$ 682,500	60%	\$ 409,500	\$ 273,000	\$ -	\$ 273,000	\$ -
40256502 Hazelwood Pond (Manning/Hazelwood)	2025 - 2026	\$ 833,000	\$ -	\$ -	\$ 833,000	60%	\$ 499,800	\$ 333,200	\$ -	\$ 333,200	\$ -
40296501 Lynde Creek Berm Work at Michael Blvd	2023 - 2023	\$ 735,000	\$ -	\$ -	\$ 735,000	50%	\$ 367,500	\$ 367,500	\$ -	\$ 367,500	\$ -
40306501 Lynde Creek Plunge Pools	2030 - 2030	\$ 746,300	\$ -	\$ 52,668	\$ 693,632	60%	\$ 416,179	\$ 277,453	\$ -	\$ 277,453	\$ -
40122004 Lynde and Pringle Creek Stabilization	2021 - 2031	\$ 1,932,000	\$ -	\$ -	\$ 1,932,000	90%	\$ 1,738,800	\$ 193,200	\$ -	\$ 193,200	\$ -
40226504 Mid-Arterial SWM Pond	2022 - 2022	\$ 1,700,000	\$ -	\$ -	\$ 1,700,000	0%	\$ -	\$ 1,700,000	\$ -	\$ 1,700,000	\$ -
40276501 Mozart SWQ Pond (Jeffery/Dundas)	2027 - 2028	\$ 750,350	\$ -	\$ 35,900	\$ 714,450	60%	\$ 428,670	\$ 285,780	\$ -	\$ 285,780	\$ -
40296503 Pringle Creek Plunge Pools with OGS (Coniston/Pringle)	2028 - 2029	\$ 771,288	\$ -	\$ -	\$ 771,288	60%	\$ 462,773	\$ 308,515	\$ -	\$ 308,515	\$ -
40306503 Pringle Pond with OGS (Pringle/Bradley)	2029 - 2030	\$ 1,223,000	\$ -	\$ 17,219	\$ 1,205,781	60%	\$ 723,469	\$ 482,312	\$ -	\$ 482,312	\$ -
40206102 Rowe Channel	2021 - 2025	\$ 5,200,000	\$ -	\$ 5,468	\$ 5,194,532	60%	\$ 3,116,719	\$ 2,077,813	\$ -	\$ 2,077,813	\$ -
40177301 SWM Facility Improvement Design	2021 - 2031	\$ 453,600	\$ -	\$ -	\$ 453,600	60%	\$ 272,160	\$ 181,440	\$ -	\$ 181,440	\$ -
40177302 SWM Facility Rehabilitation Analysis	2021 - 2031	\$ 1,008,000	\$ -	\$ -	\$ 1,008,000	60%	\$ 604,800	\$ 403,200	\$ -	\$ 403,200	\$ -
40306502 Stargell Pond with OGS (Stargell/Manning)	2030 - 2030	\$ 1,767,000	\$ -	\$ -	\$ 1,767,000	60%	\$ 1,060,200	\$ 706,800	\$ -	\$ 706,800	\$ -
40206505 Whitby Shoreline Erosion Work	2025 - 2025	\$ 2,000,000	\$ -	\$ -	\$ 2,000,000	90%	\$ 1,800,000	\$ 200,000	\$ -	\$ 200,000	\$ -
40306504 Wyndfield Pond (Garden/Wyndfield)	2030 - 2030	\$ 1,305,000	\$ -	\$ 352,943	\$ 952,057	60%	\$ 571,234	\$ 380,823	\$ -	\$ 380,823	\$ -
Subtotal Storm Water Program		\$ 38,679,038	\$ -	\$ 1,133,704	\$ 37,545,334		\$ 25,028,300	\$ 12,517,034	\$ -	\$ 12,517,034	\$ -

APPENDIX C.3

TABLE 2

TOWN OF WHITBY
DEVELOPMENT-RELATED CAPITAL PROGRAM
STORMWATER MANAGEMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Recoveries	Other Contributions*	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Share	Replacement & BTE Shares		Prior Growth	2021-2031	Post 2031
Roads, Roads Related and Storm Water Studies											
40162302 Lynde Creek Study Update	2029 - 2029	\$ 267,800	\$ -	\$ -	\$ 267,800	60%	\$ 160,680	\$ 107,120	\$ -	\$ 107,120	\$ -
40297101 SWM Quality and Erosion Control Enhancement Study	2029 - 2029	\$ 115,500	\$ -	\$ -	\$ 115,500	60%	\$ 69,300	\$ 46,200	\$ -	\$ 46,200	\$ -
40227102 SWM Utility Study	2022 - 2022	\$ 273,000	\$ -	\$ -	\$ 273,000	60%	\$ 163,800	\$ 109,200	\$ -	\$ 109,200	\$ -
Subtotal Roads, Roads Related and Storm Water Studies		\$ 656,300	\$ -	\$ -	\$ 656,300		\$ 393,780	\$ 262,520	\$ -	\$ 262,520	\$ -
TOTAL STORMWATER MANAGEMENT		\$ 41,375,652	\$ -	\$ 1,133,704	\$ 40,241,948		\$ 25,422,080	\$ 14,819,868	\$ -	\$ 14,819,868	\$ -

* Other contributions from Subdivision agreements (external funding).

Residential Development Charge Calculation		
Residential Share of 2021 - 2031 DC Eligible Costs	77.9%	\$11,549,254
Growth in Population in New Units 2021 - 2031		69,326
Unadjusted Development Charge Per Capita		\$166.59
Non-Residential Development Charge Calculation		
<i>Commercial</i>		
Non-Residential Share of 2021 - 2031 DC Eligible Costs	9.4%	\$1,390,055
11-Year Growth in Square Metres		278,628
Unadjusted Development Charge Per Square Metre		\$4.99
<i>Industrial</i>		
Non-Residential Share of 2021 - 2031 DC Eligible Costs	7.3%	\$1,082,110
11-Year Growth in Square Metres		779,469
Unadjusted Development Charge Per Square Metre		\$1.39
<i>Institutional</i>		
Non-Residential Share of 2021 - 2031 DC Eligible Costs	5.4%	\$798,449
11-Year Growth in Square Metres		287,568
Unadjusted Development Charge Per Square Metre		\$2.78

2021 - 2031 Net Funding Envelope	\$ 92,113,358
Reserve Fund Balance Balance as at December 31, 2020	(\$2,040,314)



APPENDIX C.3

TABLE 3

TOWN OF WHITBY
STORMWATER MANAGEMENT
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER: RESIDENTIAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	(\$1,590.0)	(\$1,084.6)	(\$2,270.9)	(\$2,533.9)	(\$2,586.4)	(\$4,503.5)	(\$4,537.4)	(\$3,852.9)	(\$2,510.0)	(\$1,444.1)	(\$1,214.1)	
2021 - 2031 RESIDENTIAL FUNDING REQUIREMENTS												
Prior Growth (Funding form 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	\$0.0
Stormwater: Residential: Non Inflated	\$135.2	\$1,616.1	\$678.4	\$477.8	\$2,162.7	\$390.3	\$796.8	\$365.7	\$773.8	\$1,622.0	\$940.4	\$9,959.2
Stormwater: Residential: Inflated	\$135.2	\$1,648.5	\$705.8	\$507.0	\$2,340.9	\$430.9	\$897.4	\$420.1	\$906.7	\$1,938.4	\$1,146.3	\$11,077.2
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	3,996	3,012	3,057	3,107	3,155	3,232	8,972	9,440	9,928	10,444	10,982	69,326
REVENUE												
- DC Receipts: Inflated	\$717.9	\$552.0	\$571.5	\$592.4	\$613.5	\$641.1	\$1,815.3	\$1,948.2	\$2,089.8	\$2,242.5	\$2,405.2	\$14,189.4
INTEREST												
- Interest on Opening Balance	(\$87.5)	(\$59.7)	(\$124.9)	(\$139.4)	(\$142.3)	(\$247.7)	(\$249.6)	(\$211.9)	(\$138.0)	(\$79.4)	(\$66.8)	(\$1,547.0)
- Interest on In-year Transactions	\$10.2	(\$30.2)	(\$3.7)	\$1.5	(\$47.5)	\$3.7	\$16.1	\$26.7	\$20.7	\$5.3	\$22.0	\$24.9
TOTAL REVENUE	\$640.7	\$462.2	\$442.9	\$454.5	\$423.8	\$397.1	\$1,581.8	\$1,763.0	\$1,972.5	\$2,168.4	\$2,360.4	\$12,667.2
CLOSING CASH BALANCE	(\$1,084.6)	(\$2,270.9)	(\$2,533.9)	(\$2,586.4)	(\$4,503.5)	(\$4,537.4)	(\$3,852.9)	(\$2,510.0)	(\$1,444.1)	(\$1,214.1)	\$0.0	

2021 Adjusted Charge Per Capita	\$179.66
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Allocation of Capital Program	
Residential Sector	77.9%
Non-Residential Sector	22.1%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.3

TABLE 3

TOWN OF WHITBY
STORMWATER MANAGEMENT
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER: COMMERCIAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	(\$191.4)	(\$205.3)	(\$321.8)	(\$320.2)	(\$250.9)	(\$394.9)	(\$302.0)	(\$251.5)	(\$129.2)	(\$48.6)	(\$78.5)	
2021 - 2031 COMMERCIAL FUNDING REQUIREMENTS												
Prior Growth (Funding form 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	\$0.0
Stormwater: Commercial: Non: Inflated	\$16.3	\$194.5	\$81.6	\$57.5	\$260.3	\$47.0	\$95.9	\$44.0	\$93.1	\$195.2	\$113.2	\$1,198.7
Stormwater: Commercial: Inflated	\$16.3	\$198.4	\$84.9	\$61.0	\$281.8	\$51.9	\$108.0	\$50.6	\$109.1	\$233.3	\$138.0	\$1,333.2
COMMERCIAL DEVELOPMENT												
- New Retail Commerical GFA - SQ.M	2,460	17,809	18,910	26,128	27,113	28,201	29,249	30,377	31,551	32,765	34,065	278,628
REVENUE												
- DC Receipts: Inflated	\$13.0	\$96.0	\$103.9	\$146.5	\$155.0	\$164.5	\$174.0	\$184.3	\$195.3	\$206.9	\$219.4	\$1,658.7
INTEREST												
- Interest on Opening Balance	(\$10.5)	(\$11.3)	(\$17.7)	(\$17.6)	(\$13.8)	(\$21.7)	(\$16.6)	(\$13.8)	(\$7.1)	(\$2.7)	(\$4.3)	(\$137.2)
- Interest on In-year Transactions	(\$0.1)	(\$2.8)	\$0.3	\$1.5	(\$3.5)	\$2.0	\$1.2	\$2.3	\$1.5	(\$0.7)	\$1.4	\$3.1
TOTAL REVENUE	\$2.4	\$81.9	\$86.6	\$130.4	\$137.7	\$144.7	\$158.5	\$172.8	\$189.7	\$203.4	\$216.5	\$1,524.6
CLOSING CASH BALANCE	(\$205.3)	(\$321.8)	(\$320.2)	(\$250.9)	(\$394.9)	(\$302.0)	(\$251.5)	(\$129.2)	(\$48.6)	(\$78.5)	\$0.0	

2021 Adjusted Charge Per Square Metre	\$5.28
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Allocation of Capital Program	
Commercial Share	9.4%
Industrial Share	7.3%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.3

TABLE 3

TOWN OF WHITBY
STORMWATER MANAGEMENT
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER: INDUSTRIAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	(\$149.0)	(\$102.6)	(\$65.3)	\$70.0	\$104.9	(\$32.0)	\$12.2	\$17.6	\$72.2	\$85.8	\$4.6	
2021 - 2031 INDUSTRIAL FUNDING REQUIREMENTS												
Prior Growth (Funding form DC Reserve Balance)	(\$149.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$149.0)
Stormwater: Industrial: Non: Inflated	\$161.6	\$151.4	\$63.6	\$44.8	\$202.6	\$36.6	\$74.7	\$34.3	\$72.5	\$152.0	\$88.1	\$1,082.1
Stormwater: Industrial: Inflated	\$12.7	\$154.5	\$66.1	\$47.5	\$219.3	\$40.4	\$84.1	\$39.4	\$84.9	\$181.6	\$107.4	\$1,037.9
NEW INDUSTRIAL DEVELOPMENT												
- New Other Non-Residential GFA - SQ.M	47,361	137,723	139,080	53,425	54,480	55,320	56,400	57,480	58,440	59,520	60,240	779,469
REVENUE												
- DC Receipts: Inflated	\$66.3	\$196.7	\$202.6	\$79.4	\$82.6	\$85.5	\$88.9	\$92.4	\$95.9	\$99.6	\$102.8	\$1,192.7
INTEREST												
- Interest on Opening Balance	(\$8.2)	(\$5.6)	(\$3.6)	\$2.5	\$3.7	(\$1.8)	\$0.4	\$0.6	\$2.5	\$3.0	\$0.2	(\$6.3)
- Interest on In-year Transactions	\$0.9	\$0.7	\$2.4	\$0.6	(\$3.8)	\$0.8	\$0.1	\$0.9	\$0.2	(\$2.3)	(\$0.1)	\$0.5
TOTAL REVENUE	\$59.1	\$191.8	\$201.4	\$82.4	\$82.5	\$84.5	\$89.4	\$94.0	\$98.6	\$100.3	\$102.8	\$1,186.9
CLOSING CASH BALANCE	(\$102.6)	(\$65.3)	\$70.0	\$104.9	(\$32.0)	\$12.2	\$17.6	\$72.2	\$85.8	\$4.6	\$0.0	

2021 Adjusted Charge Per Square Metre	\$1.40
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Allocation of Capital Program	
Commercial Share	9.4%
Industrial Share	7.3%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.3

TABLE 3

TOWN OF WHITBY
STORMWATER MANAGEMENT
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER: INSTITUTIONAL	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)	(\$109.9)	(\$122.8)	(\$243.0)	(\$300.7)	(\$254.6)	(\$329.0)	(\$265.5)	(\$224.0)	(\$138.6)	(\$74.2)	(\$70.0)	
2021 - 2031 INSTITUTIONAL FUNDING REQUIREMENTS												
Prior Growth (Funding form DC Reserve Balan	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Stormwater: Institutional: Non: Inflated	\$9.3	\$111.7	\$46.9	\$33.0	\$149.5	\$27.0	\$55.1	\$25.3	\$53.5	\$112.1	\$65.0	\$688.5
Stormwater: Institutional: Inflated	\$9.3	\$114.0	\$48.8	\$35.1	\$161.8	\$29.8	\$62.0	\$29.0	\$62.7	\$134.0	\$79.3	\$765.8
NEW INSTITUTIONAL DEVELOPMENT												
- New Other Non-Residential GFA - SQ.M	900	1,140	1,800	30,168	31,560	33,000	34,500	36,060	37,740	39,420	41,280	287,568
REVENUE												
- DC Receipts: Inflated	\$2.7	\$3.5	\$5.7	\$96.6	\$103.1	\$110.0	\$117.3	\$125.0	\$133.4	\$142.2	\$151.9	\$991.3
INTEREST												
- Interest on Opening Balance	(\$6.0)	(\$6.8)	(\$13.4)	(\$16.5)	(\$14.0)	(\$18.1)	(\$14.6)	(\$12.3)	(\$7.6)	(\$4.1)	(\$3.9)	(\$117.3)
- Interest on In-year Transactions	(\$0.2)	(\$3.0)	(\$1.2)	\$1.1	(\$1.6)	\$1.4	\$1.0	\$1.7	\$1.2	\$0.1	\$1.3	\$1.8
TOTAL REVENUE	(\$3.5)	(\$6.3)	(\$8.9)	\$81.2	\$87.5	\$93.3	\$103.6	\$114.4	\$127.1	\$138.2	\$149.3	\$875.7
CLOSING CASH BALANCE	(\$122.8)	(\$243.0)	(\$300.7)	(\$254.6)	(\$329.0)	(\$265.5)	(\$224.0)	(\$138.6)	(\$74.2)	(\$70.0)	\$0.0	

2021 Adjusted Charge Per Square Metre	\$3.02
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Allocation of Capital Program	
Commercial Share	9.4%
Industrial Share	7.3%
Institutional Share	5.4%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix D

Reserve Fund

Balances

Development Charges Reserve Funds

The DCA requires that a reserve fund be established for each service for which development charges are collected. Table 1 presents the reserve fund balances that are available to help fund the development-related capital costs identified in the study. The closing balances of the development charges reserve funds as at December 31, 2020 are displayed.

As shown on Table 1, the December 31, 2020 total reserve fund balance was approximately \$91.62 million. The balances for each service are deemed to be “uncommitted” and have been treated appropriately in each of the cash flow analyses. The application of the available monies in each of the reserve funds is discussed in the appendix section related to each service.

Not included in the table below are Parking and Non-Administrative DC reserves. Rates have not been calculated for those services as they are not eligible under Section 2(4) of the DCA. The reserves continue to be used by the Town for these services as permitted under the requirements of the recently amended DCA legislation.

APPENDIX D

TABLE 1

**TOWN OF WHITBY
DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
TOWN-WIDE RESERVES
YEAR ENDING DECEMBER 31, 2020**

Service	Reserve Fund Balance as of Dec. 31, 2020
Libraries	\$82,262
Parks & Recreation	\$45,675,785
Fire Services	\$1,046,223
Waste Management	\$540,769
Development Related Studies	\$783,023
By-Law Enforcement	\$13,429
Operations	\$2,349,985
Roads & Related - Town-wide	\$33,843,885
Roads & Related - Alternate Route	\$9,320,114
Stormwater Management	(\$2,040,314)
Total Development Charge Reserves	\$91,615,161

*Parking & Non-Admin Ops Facility reserve fund has been apportioned to parking, animal control and by-law services based on the capital program. Only the share related to by-law has been included in the DC Study.

Appendix E

Cost of Growth Analysis

Cost of Growth Analysis

The following appendix provides the detailed Cost of Growth Analysis undertaken for the growth-related ten-year capital program in the Town of Whitby. The objective of the analysis is to examine the impact of development-related infrastructure needs on the property tax base, irrespective of whether the infrastructure was funded by development charges or not. The analysis considers both capital and operating implications.

This section is also intended to satisfy the long-term capital and operating costs and asset management plan requirements as required by subsections 10(1)(c) and 10(3) of the DCA. This analysis is not intended to provide a comprehensive assessment of growth and non-growth related assets as the Town maintains and regularly updates its Long Range Financial Plan (LRFP) model to understand the impacts of growth. Following the completion of the DC Background Study, a comprehensive cost of growth analysis will be completed and the financing mechanisms for DC eligible and non-DC eligible projects will be further evaluated in the context of the Town's existing services and financial policies. Assumptions used in this cost of growth analysis may also be updated through the LRFP.

Long-Term Operating Impact Analysis

Table 1 summarizes the annual estimated increase in net operating costs associated with the planned capital program. These estimates are based on average costs derived from a review of the Town's 2020 budget and indirect operating estimates provided by Town staff.

As shown in Table 1, the Town's cumulative total net direct and indirect operating costs for tax-supported services are estimated to cost \$76.68 million over the 2021-2030 period. This amount includes, operating costs

resulting from the emplacement of infrastructure and Town funded assets. Included in this amount, is the addition of approximately 137 full-time equivalent employees over ten years. As shown in the attached, operating impacts include a one-year lag (beginning in 2022) from the year the project is undertaken.

The Town also incurs operating costs when local assets included in subdivision plans are assumed. In accordance with Town policy, these assets have an eight-year lag from the time they are constructed to the time they are assumed by the Town. Over the ten-year period, the cumulative operating impact of the subdivision assets is anticipated to be \$3.26 million. The Town's cumulative total operating impact for the 2021-2030 period amounts to \$79.94 million.

APPENDIX E

TABLE 1

TOWN OF WHITBY
NET LONG-TERM OPERATING IMPACTS
TOWN/DC FUNDED AND ASSUMED ASSETS

TOWN/DC FUNDED PROJECTS	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Expenditures											
Salaries, wages & benefits (Broad based)		\$347,632	\$695,982	\$1,044,976	\$1,394,732	\$1,744,863	\$2,455,492	\$3,166,336	\$3,877,445	\$4,588,671	\$19,316,128
Salaries, wages & benefits		\$2,173,237	\$4,833,061	\$5,344,781	\$6,723,846	\$7,898,921	\$8,391,391	\$9,028,457	\$9,593,221	\$10,480,631	\$64,467,544
Employee Related		\$38,122	\$78,205	\$86,004	\$117,665	\$149,510	\$154,020	\$164,712	\$172,499	\$184,836	\$1,145,573
Corporate Training		\$253	\$619	\$688	\$788	\$902	\$968	\$1,034	\$1,088	\$1,201	\$7,541
Services/Contracted work		\$147,860	\$358,240	\$457,450	\$762,727	\$858,828	\$945,903	\$1,430,034	\$1,509,410	\$1,672,698	\$8,143,150
Administrative		\$35,369	\$107,209	\$131,121	\$147,987	\$161,485	\$169,694	\$203,522	\$206,330	\$258,048	\$1,420,765
Operating Supplies		\$370	\$904	\$1,005	\$4,576	\$4,742	\$4,838	\$11,786	\$11,865	\$12,030	\$52,117
Utilities		\$336,655	\$842,040	\$942,820	\$1,044,531	\$1,135,946	\$1,199,411	\$1,357,810	\$1,406,855	\$1,549,236	\$9,815,304
Repairs & Maintenance		\$78,974	\$203,889	\$224,531	\$260,045	\$280,338	\$296,523	\$348,360	\$357,619	\$398,219	\$2,448,499
Vehicle & Equipment		\$219,590	\$426,666	\$474,994	\$734,936	\$958,826	\$977,607	\$1,043,821	\$1,100,991	\$1,216,002	\$7,153,435
Other Building Related		\$50,019	\$119,919	\$129,744	\$159,194	\$177,634	\$197,407	\$215,853	\$230,527	\$252,982	\$1,533,279
Miscellaneous		\$6,741	\$16,428	\$17,112	\$18,055	\$19,133	\$19,764	\$20,360	\$20,837	\$21,790	\$160,218
Subtotal		\$3,434,822	\$7,683,162	\$8,855,227	\$11,369,080	\$13,391,128	\$14,813,018	\$16,992,085	\$18,488,688	\$20,636,342	\$115,663,553
Grants		\$0	\$9,101	\$9,101	\$9,101	\$9,101	\$9,101	\$9,101	\$9,101	\$9,101	\$72,807
Debt Charges		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interfund Transfers		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL		\$3,434,822	\$7,692,263	\$8,864,328	\$11,378,181	\$13,400,229	\$14,822,119	\$17,001,186	\$18,497,789	\$20,645,443	\$115,736,360
Revenues											\$0
General Taxation		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Supplementary		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PIL		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Licences & Permits		(\$10,970)	(\$21,805)	(\$32,939)	(\$44,387)	(\$55,968)	(\$66,804)	(\$78,385)	(\$89,221)	(\$100,355)	(\$500,834)
Rentals		(\$718,763)	(\$1,758,802)	(\$1,803,478)	(\$1,803,853)	(\$1,861,757)	(\$1,862,009)	(\$1,862,243)	(\$1,862,429)	(\$1,887,477)	(\$15,420,811)
Miscellaneous Fees		(\$154,493)	(\$371,495)	(\$392,340)	(\$415,983)	(\$440,390)	(\$452,980)	(\$466,256)	(\$481,540)	(\$510,169)	(\$3,685,646)
Other Municipal		(\$442,142)	(\$1,080,296)	(\$1,111,333)	(\$1,119,632)	(\$1,160,263)	(\$1,166,551)	(\$1,172,742)	(\$1,178,030)	(\$1,199,658)	(\$9,630,647)
Donations/Sponsorship		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Programs		(\$446,205)	(\$1,090,473)	(\$1,121,647)	(\$1,137,767)	(\$1,181,219)	(\$1,192,048)	(\$1,202,123)	(\$1,210,125)	(\$1,236,649)	(\$9,818,255)
Subtotal		(\$1,772,573)	(\$4,322,871)	(\$4,461,737)	(\$4,521,622)	(\$4,699,598)	(\$4,740,391)	(\$4,781,749)	(\$4,821,344)	(\$4,934,308)	(\$39,056,193)
Provincial		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Federal		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contribution from Own Funds		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL		(\$1,772,573)	(\$4,322,871)	(\$4,461,737)	(\$4,521,622)	(\$4,699,598)	(\$4,740,391)	(\$4,781,749)	(\$4,821,344)	(\$4,934,308)	(\$39,056,193)
NET EXPENDITURE TOWN/DC FUNDED		\$1,662,249	\$3,369,392	\$4,402,591	\$6,856,560	\$8,700,631	\$10,081,728	\$12,219,436	\$13,676,445	\$15,711,135	\$76,680,167
ASSUMED ASSETS	\$0	\$0	\$0	\$91,033	\$175,997	\$244,111	\$371,749	\$585,566	\$810,366	\$980,556	\$3,259,378
TOTAL OPERATING IMPACTS	\$0	\$1,662,249	\$3,369,392	\$4,493,624	\$7,032,557	\$8,944,742	\$10,453,477	\$12,805,003	\$14,486,810	\$16,691,691	\$79,939,545

Asset Management Plan

The recently enacted changes to the DCA require the completion of an Asset Management Plan before the passing of a development charges by-law. The primary purpose of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

Asset Types

Summaries of the future municipal-owned assets and estimated useful life assumptions considered under the 2021 Development Charges Study are outlined on Table 2 for general services and Table 3 for engineered services. These assumptions were primarily derived from the Town's 2019 Asset Management Plan (AMP). Some adjustments have been made to these assumptions as per staff direction from Town staff.

Although all capital assets considered in the 2021 Development Charges Study have been identified, not all assets will necessitate future replacement or ongoing maintenance activities. These exceptions include:

- Works identified that represent one-time expenditures or assets such as land that do not depreciate. Such assets are identified as “not a long-term asset” in the table; and
- Projects such as development-related studies or infrastructure needs studies, which do not relate to the emplacement of a tangible capital asset. Such projects are identified as “not infrastructure” in the tables.

It should be noted that the capital cost estimates prepared for each of the identified projects include grouped costs of various individual elements, which, as a stand-alone item, may have their own useful life. For example, new buildings include elements such as HVAC, structural elements, and roofs, among others; new bridges include deck, superstructure, and

substructure components. Accordingly, the average useful life assumptions noted below are applicable to all project components.

Table 2 – Summary of General Services Useful Life Assumptions

Capital Project Description	Estimated Useful Life
Facility Construction, Replacement, or Expansion	40 years
Furniture	15 years
Software Tools	5 years
Computing / Communication Devices	7 years
Land Acquisitions	Not a long-term asset
Building Design Development	Not infrastructure
Fire Training Equipment	10 years
Additional Fire Vehicles	15 years
Parking Lot Construction/Expansion	35 years
Public Works Vehicles (Misc.)	10 years
Public Works Equipment (Misc.)	10 years
Tri-Axle Trailer	15 years
Vehicle Routing Optimization	5 years
Soccer Dome	100 years
Sports Field Design	Not infrastructure
Sports Field Construction	40 years
Park Design	Not infrastructure
Park Development	20 years
Splashpad	10 years
Ball Diamonds Shade Structures	40 years
Tennis Courts	20 years
Playground Redevelopment	15 years
Waterfront Lighting	40 years
Misc. Local and District Parks	20 years
Trails	20 years
Parks Maintenance Front Mount Mower	7 years
Parks Maintenance Wide Cut Mower	8 years
Parks Maintenance Trailer	15 years
Parks Maintenance Front End Loader	10 years
Forestry – Chipper Truck	8 years

Capital Project Description	Estimated Useful Life
Library Collection Expansion	7 years
½ Ton Extended Cab – Solid Waste	10 years
Garbage Packer – Rear Loader	10 years
Garbage Packer – Side Loader	7 years

Table 3 – Summary of Engineered Services Useful Life Assumptions

Capital Project Description	Estimated Useful Life
Bridges	50 years
Culverts	50 years
Pedestrian Bridges	50 years
Multi-Use Pathways	20 years
Road Construction and Reconstruction	60 years
Road Design	Not infrastructure
Intersection Improvements	25 years
Roundabouts	60 years
Roads Environmental Assessment	Not infrastructure
Rural Road Resurfacing	20 years
Urban Road Resurfacing	15 – 35 years
Sidewalk Construction	45 years
Street Lighting	30 years
Traffic Signals	40 years
Stormwater Infrastructure	80 years

Annual Provision

When assets require rehabilitation or are due for replacement, funding sources are generally limited to reserves, debt, grants or contributions from the tax base through the operating budget. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not development-related, and therefore, are not eligible for funding through development charge revenues or other developer contributions.

Using the useful life assumptions obtained from Town staff and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated. Provisions for infrastructure replacement

are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, an assumption of a 1.5 per cent real earnings rate was assumed.

Under the requirements of the DCA, only the assets that are proposed to be funded under the development charges by-law are to be included in the AMP.

Table 4 provides an overview of the capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law. Table 4 illustrates that, by 2030, the Town will need to contribute an additional \$14.57 million per annum in order to fully fund the full tax-supported life-cycle costs of the new assets included in this development charges study, and does not include any additional assets assumed by the Town through plans of subdivision. As per the Maintenance Reserve Town policy, these assets, once constructed and assumed after a two-year lag period, will be included in the annual maintenance envelope calculation.

The calculated annual funding provision should be considered within the context of the Town's projected growth. Over the next ten years (to 2030) the Town is projecting an increase of approximately 21,300 total private dwelling units, representing a 46 per cent increase over the existing (2020) base, as well as nearly 17,400 new employees. This growth will have the effect of increasing the overall assessment base and will result in an additional \$208.05 million in cumulative assessment revenue over the ten-year period. In this respect, the additional assessment and user fee revenue can be utilized to offset the Town's total cost of growth.

APPENDIX E

TABLE 4

**TOWN OF WHITBY
ANNUAL PROVISION SCHEDULE**

AMP Contributions	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
General Government			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Services			\$1,738	\$3,496	\$19,458	\$26,404	\$135,274	\$137,105	\$138,965	\$140,853
Operations			\$105,082	\$236,946	\$305,435	\$449,025	\$588,272	\$614,680	\$678,156	\$708,576
Parks and Rec			\$838,824	\$2,067,662	\$2,284,091	\$2,823,510	\$3,147,238	\$3,513,317	\$3,862,580	\$4,127,584
Library			\$48,375	\$99,192	\$134,014	\$168,836	\$203,658	\$252,135	\$300,613	\$349,090
By-law			\$43,205	\$47,410	\$56,790	\$56,790	\$56,790	\$61,724	\$66,097	\$66,097
Waste Management			\$4,672	\$4,672	\$4,672	\$62,788	\$62,788	\$62,788	\$62,788	\$80,821
Roads and Related - Town-Wide			\$896,169	\$1,589,001	\$2,956,726	\$4,375,224	\$6,040,022	\$7,097,368	\$8,189,243	\$8,864,288
Roads and Related - Alt Route			\$7,500	\$7,500	\$24,167	\$58,333	\$100,000	\$100,000	\$141,667	\$141,667
Stormwater			\$1,928	\$23,757	\$33,429	\$40,241	\$71,076	\$76,641	\$88,001	\$93,216
Total	\$0	\$0	\$1,947,494	\$4,079,636	\$5,818,782	\$8,061,151	\$10,405,117	\$11,915,758	\$13,528,109	\$14,572,191

Note: Based on Cumulative 2 Year Lag with Real Interest Rate of 1.5%

Cost of Growth Analysis

Table 5 provides the details of the Cost of Growth analysis and summarizes the components of the development-related capital program that will require funding from property taxes and identifies the annual tax increase requirement. In total, \$156.88 million is related to the net capital funding requirements and \$79.94 million relates to the net operating expenditures over the 2021-2030 period that will be funded from non-development charge sources.

The Town currently maintains a Growth Reserve Fund which is used to pay for the Town's portion of capital growth projects as outlined in the Council approved Development Charges Background Study. As of 2021, the Town had \$27.91 million available in the Growth Reserve Fund that has been applied to off-set the total net capital funding requirements. The model assumes the full utilization of the Growth Reserve Fund balance and existing annual contributions as approved in the Town's annual budget. Over the ten-year period, the Town also anticipates to generate roughly \$208.05 million in additional taxation revenue from new growth. After these adjustments, the cumulative "gap" between tax related expenditures and tax revenue is used to determine the annual tax increase to balance the ten-year plan.

As shown in Table 5, a cost of growth analysis assumes the following:

- No projects are funded through debentures
- All post-period shares are funded through taxes
- Fully utilizes the Growth Reserve Fund balance and annual contributions to Growth Reserve Fund as approved in the Town's annual budget
- Total ten-year funding requirement after reserve adjustments and taxation revenue from new growth equals \$45.26 million

- Annual tax increase calculated to be 0.73 per cent over the ten-year period

Financing Mechanisms to Mitigate Tax Rate Impacts will be examined through the Long-Range Financial Plan

As summarized in Table 5, the calculated funding requirements are considered to be financially sustainable as it is expected that the increased tax funded expenditure requirements, including long-term operating and capital asset management requirements, can be absorbed by the tax base over the long-term with increases.

The tax increase shown in Table 5 has been calculated on an average annual basis. In order to achieve this, the Town will need to use a number of mitigating measures including but not limited to transfers to/from reserves, timing of projects and use of debt. The Town's financing mechanisms for these projects will be further evaluated in the context of the Town's existing services and financial policies identified through a Long-Range Financial Plan (LRFP) analysis.

APPENDIX E
TABLE 5

TOWN OF WHITBY
COST OF GROWTH ANALYSIS - 10-YEAR CAPITAL PLAN
TOTAL GROWTH-RELATED CAPITAL PROJECTS
ALL COSTS ARE IN \$2021

Total Growth-Related Capital Projects											Total
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
A Total Project Costs											
Gross Project Costs	\$ 82,112,828	\$ 99,213,867	\$ 75,770,968	\$ 66,566,776	\$ 103,032,151	\$ 51,949,386	\$ 58,575,350	\$ 32,428,328	\$ 59,857,926	\$ 111,702,379	\$741,209,960
Subtotal	\$ 82,112,828	\$ 99,213,867	\$ 75,770,968	\$ 66,566,776	\$ 103,032,151	\$ 51,949,386	\$ 58,575,350	\$ 32,428,328	\$ 59,857,926	\$ 111,702,379	\$741,209,960
Capital Cost Analysis											
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
B Grants and Subsidies											
Grants and Subsidies	\$ 289,301	\$ 136,417	\$ 7,275,693	\$ 260,570	\$ 492,830	\$ 137,914	\$ 283,491	\$ 58,648	\$ 251,229	\$ 2,985,894	\$12,171,986
Subtotal	\$ 289,301	\$ 136,417	\$ 7,275,693	\$ 260,570	\$ 492,830	\$ 137,914	\$ 283,491	\$ 58,648	\$ 251,229	\$ 2,985,894	\$12,171,986
C Development Charges											
Available DC Reserves	\$ 14,288,493	\$ 10,692,753	\$ 5,231,715	\$ 6,131,492	\$ 92,219	\$ 93,492	\$ 98,619	\$ 93,492	\$ 1,115,905	\$ 91,698	\$37,929,878
DC Collections 2021-2030 (1)	\$ 39,314,021	\$ 52,452,745	\$ 45,501,211	\$ 49,645,926	\$ 66,453,012	\$ 40,195,752	\$ 41,053,262	\$ 23,073,410	\$ 41,964,184	\$ 83,773,949	\$483,427,472
Subtotal	\$ 53,602,514	\$ 63,145,498	\$ 50,732,926	\$ 55,777,419	\$ 66,545,230	\$ 40,289,244	\$ 41,151,881	\$ 23,166,902	\$ 43,080,089	\$ 83,865,647	\$521,357,350
D DC Deductions (Town Share of Growth)											
Benefit-to-Existing/Replacement (2)	\$ 4,256,870	\$ 12,553,164	\$ 16,423,034	\$ 9,832,803	\$ 34,917,651	\$ 11,150,638	\$ 16,476,827	\$ 8,848,642	\$ 13,302,421	\$ 15,751,662	\$143,513,714
Ineligible Services (2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$0
Post-Period benefit (3)	\$ 33,333	\$ -	\$ -	\$ 33,333	\$ -	\$ 332,551	\$ 618,752	\$ 247,000	\$ 3,181,189	\$ 8,921,302	\$13,367,460
Subtotal	\$ 4,290,204	\$ 12,553,164	\$ 16,423,034	\$ 9,866,136	\$ 34,917,651	\$ 11,483,190	\$ 17,095,579	\$ 9,095,642	\$ 16,483,610	\$ 24,672,964	\$156,881,175
E DC Exemptions (Town Share of Growth)											
Statutory and Non-Statutory Discounts (4)	\$ 7,721	\$ 26,330	\$ 27,114	\$ 31,506	\$ 32,689	\$ 33,889	\$ 35,152	\$ 36,472	\$ 37,848	\$ 39,253	\$307,973
Subtotal	\$ 7,721	\$ 26,330	\$ 27,114	\$ 31,506	\$ 32,689	\$ 33,889	\$ 35,152	\$ 36,472	\$ 37,848	\$ 39,253	\$307,973
TOTAL CAPITAL COSTS (B + C + D + E) (5)	\$ 58,189,740	\$ 75,861,409	\$ 74,458,767	\$ 65,935,631	\$ 101,988,400	\$ 51,944,236	\$ 58,566,102	\$ 32,357,664	\$ 59,852,776	\$ 111,563,758	\$690,718,483

Notes:

- 1 Recovered through the development charge rates before adjustments for statutory and non-statutory exemptions
- 2 Represents ineligible shares of development charge projects that must be funded from taxes
- 3 Assumed to be tax funded but may be considered for recovery in future development charge by-law
- 4 Estimate subject to further review through subsequent Long Range Financial Plan analysis
- 5 Town's share of capital program equals DC deductions plus DC exemptions

APPENDIX E
TABLE 5

TOWN OF WHITBY
COST OF GROWTH ANALYSIS - 10-YEAR CAPITAL PLAN

OPERATING AND ASSET MANAGEMENT REQUIREMENTS ANALYSIS
ALL COSTS ARE IN \$2021

Operating Cost Analysis (5)											Total
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
F Direct and Indirect (Cumulative)											
DC/Town Funded Projects	\$ -	\$ 1,662,249	\$ 3,369,392	\$ 4,402,591	\$ 6,856,560	\$ 8,700,631	\$ 10,081,728	\$ 12,219,436	\$ 13,676,445	\$ 15,711,135	\$ 76,680,167
Assumed Projects	\$ -	\$ -	\$ -	\$ 91,033	\$ 175,997	\$ 244,111	\$ 371,749	\$ 585,566	\$ 810,366	\$ 980,556	\$ 3,259,378
Total Operating Cost Analysis	\$ -	\$ 1,662,249	\$ 3,369,392	\$ 4,493,624	\$ 7,032,557	\$ 8,944,742	\$ 10,453,477	\$ 12,805,003	\$ 14,486,810	\$ 16,691,691	\$ 79,939,545
Additional Full Time Equivalents (FTEs) (6)											
DC/Town Funded Projects	0.0	21.9	26.1	7.5	15.0	13.2	10.4	11.7	11.1	13.9	130.8
Assumed Projects	0.0	0.0	0.0	0.6	0.5	0.4	0.8	1.4	1.5	1.1	6.3
Total FTEs	0.0	21.9	26.1	8.1	15.6	13.7	11.3	13.1	12.5	15.0	137.1
Asset Management Requirements (7)											
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
G Asset Management (Cumulative)											
DC/Town Funded Projects	\$ -	\$ -	\$ 1,947,494	\$ 4,079,636	\$ 5,818,782	\$ 8,061,151	\$ 10,405,117	\$ 11,915,758	\$ 13,528,109	\$ 14,572,191	\$ 70,328,238
Assumed Projects	\$ -	\$ -	\$ 133,013	\$ 257,158	\$ 356,683	\$ 543,181	\$ 855,600	\$ 1,184,065	\$ 1,432,739	\$ 1,683,761	\$ 6,446,200
Total Capital Maintenance Costs	\$ -	\$ -	\$ 2,080,507	\$ 4,336,794	\$ 6,175,464	\$ 8,604,332	\$ 11,260,717	\$ 13,099,823	\$ 14,960,848	\$ 16,255,952	\$ 76,774,438
TOTAL ALL EXPENDITURES (B + C + D + E + F + G)	\$ 58,189,740	\$ 77,523,659	\$ 79,908,667	\$ 74,766,049	\$ 115,196,421	\$ 69,493,310	\$ 80,280,296	\$ 58,262,490	\$ 89,300,434	\$ 144,511,401	\$ 847,432,467
TAX SUPPORTED EXPENDITURES (D + E + F + G)	\$ 4,297,924	\$ 14,241,744	\$ 21,900,047	\$ 18,728,061	\$ 48,158,361	\$ 29,066,153	\$ 38,844,924	\$ 35,036,940	\$ 45,969,116	\$ 57,659,860	\$ 313,903,131

Notes:

- 5 Direct and indirect operating impacts are net of user fee revenues.
- 6 Based on an average salary, wages and benefits of approximately \$115,000 per employee. Salaries relating to new FTEs are included in the operating costs.
- 7 Calculated using straight-line approach with interest. These are calculated contributions are higher than the Town's current contributions to asset replacement.

Taxation Revenue from New Growth											Total
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Taxation Revenue (Cumulative)											
Residential Revenue	\$ 3,368,377	\$ 5,915,348	\$ 8,508,430	\$ 11,149,314	\$ 13,838,506	\$ 16,581,778	\$ 24,244,450	\$ 32,329,822	\$ 40,859,832	\$ 49,860,280	\$ 206,656,137
Non-Residential Revenue	\$ 7,451	\$ 34,504	\$ 62,533	\$ 90,931	\$ 120,343	\$ 150,813	\$ 182,360	\$ 215,043	\$ 248,902	\$ 283,974	\$ 1,396,854
Subtotal	\$ 3,375,828	\$ 5,949,852	\$ 8,570,963	\$ 11,240,245	\$ 13,958,849	\$ 16,732,591	\$ 24,426,810	\$ 32,544,865	\$ 41,108,734	\$ 50,144,254	\$ 208,052,991
TOTAL TAX REVENUE	\$ 3,375,828	\$ 5,949,852	\$ 8,570,963	\$ 11,240,245	\$ 13,958,849	\$ 16,732,591	\$ 24,426,810	\$ 32,544,865	\$ 41,108,734	\$ 50,144,254	\$ 208,052,991

APPENDIX E
TABLE 5

TOWN OF WHITBY
COST OF GROWTH ANALYSIS - 10-YEAR CAPITAL PLAN

ALL COSTS ARE IN \$2021

COST OF GROWTH ANALYSIS												Total
Cost of Growth Analysis	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Capital Funding Required (1)	\$ 4,297,924	\$ 12,579,494	\$ 18,530,655	\$ 14,234,437	\$ 41,125,804	\$ 20,121,411	\$ 28,391,448	\$ 22,231,937	\$ 31,482,306	\$ 40,968,169	\$ 233,963,586	
Less Growth Reserve Fund Balance	\$ 35,162	\$ (9,429,494)	\$ (18,513,736)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (27,908,068)	
Less Growth Reserve Fund Contribution	\$ (4,333,086)	\$ (3,150,000)	\$ (3,150,000)	\$ (3,150,000)	\$ (3,150,000)	\$ (3,150,000)	\$ (3,150,000)	\$ (3,150,000)	\$ (3,150,000)	\$ (3,150,000)	\$ (32,683,086)	
Operating Funding Required (2)	\$ -	\$ 1,662,249	\$ 3,369,392	\$ 4,493,624	\$ 7,032,557	\$ 8,944,742	\$ 10,453,477	\$ 12,805,003	\$ 14,486,810	\$ 16,691,691	\$ 79,939,545	
Revised Capital + Operating Funding Required	\$ -	\$ 1,662,249	\$ 236,312	\$ 15,578,061	\$ 45,008,361	\$ 25,916,153	\$ 35,694,924	\$ 31,886,940	\$ 42,819,116	\$ 54,509,860	\$ 253,311,977	
Existing Tax Levy	\$ (104,279,000)	\$ (105,044,118)	\$ (105,814,849)	\$ (106,591,235)	\$ (107,373,318)	\$ (108,161,140)	\$ (108,954,741)	\$ (109,754,166)	\$ (110,559,456)	\$ (111,370,655)		
Tax Revenue from Existing Levy	\$ -	\$ (765,118)	\$ (1,535,849)	\$ (2,312,235)	\$ (3,094,318)	\$ (3,882,140)	\$ (4,675,741)	\$ (5,475,166)	\$ (6,280,456)	\$ (7,091,655)	\$ (35,112,678)	
Tax Revenue from New Growth	\$ (3,375,828)	\$ (5,993,507)	\$ (8,697,198)	\$ (11,489,481)	\$ (14,373,056)	\$ (17,355,518)	\$ (25,522,078)	\$ (34,253,632)	\$ (43,584,607)	\$ (53,554,392)	\$ (218,199,299)	
Annual Tax Increase to Balance 10-Year Plan 0.73%	\$ (3,375,828)	\$ (5,096,376)	\$ (9,996,736)	\$ 1,776,344	\$ 27,540,986	\$ 4,678,495	\$ 5,497,105	\$ (7,841,858)	\$ (7,045,947)	\$ (6,136,186)	\$ (0)	

Appendix F

Local Service Definitions

General Policy Guidelines on Development Charge and Local Service Funding for Town-Related Works

The following guidelines set out in general terms the size and nature of engineered infrastructure that is included in the Town of Whitby Development Charge Study, as a project to be eligible to be funded in part by development charges the following will apply:

- The project will be required to be listed in the most current Town of Whitby Development Charges Study.
- If any infrastructure does not add any additional capacity over and above the capacity requirement for that development, these projects 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 Town 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 development and 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.

These local service policy guidelines are subject to review and amendment by the Town which may be independent of an amendment or update to the Town's development charge by-laws.

The detailed engineering requirements for all work and/or development are governed by the Town of Whitby Official Plan, and specified through the Public Works engineering design criteria and standards, Road needs are determined at a strategic level in the 2010 Transportation Master Plan (TMP), the 2017 Brooklin Transportation Master Plan, and other relevant strategic documents identifying development-related transportation needs. Project costs are updated annually as part of the budgeting process and as the Town receives tenders.

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.

Roads Internal to Development

1.0 Road Internal to Development

1.1 All local and collector roads related to a plan of subdivision or within the area to which a plan relates (including road base and surface, streetlighting, storm sewers, bridges, culverts, sidewalks, cycling facilities, noise walls, utilities, turning lanes, line painting, signage, traffic control measures etc.) – are the direct responsibility of the direct developer under s.59 of the DCA (as a local service).

1.2 Arterial Roadways internal to a development are subject to oversizing cost recoveries for the direct developer. Oversizing costs (the costs associated with providing a roadway width greater than a 12.0m

collector roadway as identified in the paragraph above) have been included in this study.

- 1.3 In addition, there may be circumstances where road improvements (turning lanes, traffic signalization, pedestrian crossings, all-way stop-control, horizontal/vertical grade upgrades for applicable intersection sightlines, etc.) are required on adjacent external roadways in order to facilitate a development. These road improvements are the responsibility of the direct developer under s.59 of the DCA (as a local service) and have not been identified in this study.

Roads External to Development

2.0 Road Widenings and New Alignments

- 2.1 The Whitby Transportation Master Plan (2010) and the Brooklin Transportation Master Plan (2017), as approved by Council, defines at a strategic level, an integrated mobility plan and sets out guiding principles for the accommodation of future anticipated growth in a cost-effective, efficient, balanced and environmentally sensitive manner. These studies were used as a basis for determining all new roads and road widenings (i.e. widening from 2 to 4 lanes) that provide service to future development areas.
- 2.2 All costs for studies, environmental assessments, engineering, contract administration and inspection, property acquisition, sidewalks, storm sewers, cycling facilities, streetlighting, bridges, traffic signals, etc., associated with these projects have been included in the Road Widenings and New Alignments section of this study, unless specifically identified elsewhere. Traffic signalization for development adjacent to a highway or major arterial is a direct developer responsibility under s.59 of the DCA (local services).

3.0 Road Reconstruction

- 3.1 Road Reconstruction projects are projects that are intended to maintain the same number of basic lanes, however, the existing roadway is required to be significantly rehabilitated (i.e. full depth granular replacement) in order to accommodate current and future transportation needs, or requires upgrading (i.e. urbanization) to current engineering standards. Typical works include for improvements/upgrades in terms of capacity, alignment, intersections, access, servicing, drainage systems, road structure, pedestrian/active transportation systems, in addition to the reconstruction of the roadway. These projects will also include the construction of appropriate turning lanes as required to service future growth.
- 3.2 On an annual basis, the Town of Whitby undertakes a Road Needs Study which assesses and assigns condition ratings for all existing roadways - and is used as a basis for determining the required rehabilitation timing/strategies.
- 3.3 Existing collector and arterial roadways that provide service to future development areas, and require reconstruction, have been included in this study.

4.0 Road Resurfacing

- 4.1 Road resurfacing projects are projects that are intended to maintain the same number of basic lanes, however the asphalt will require partial or full-depth replacement. These projects will also include the construction of appropriate turning lanes as required to service future growth. Urban Road Resurfacing typical works include providing new overlays to the roadway and may be a single or multiple lifts. Often referred to as a “shave and pave”. Minor base repairs, catch basin works, and curb repairs may also be part of the works. Rural Road

Resurfacing typical works relate to providing new asphalt lifts typically through a “pulverize and pave” process. Minor base repairs, shoulder and drainage repairs may also be part of the works.

- 4.2 On an annual basis, the Town of Whitby undertakes a Road Needs Study which assesses and assigns condition ratings for all existing roadways - and is used as a basis for determining the required rehabilitation timing/strategies.

5.0 Bridges

- 5.1 On a bi-annual basis, the Town of Whitby undertakes a Bridge Needs Study which evaluates the condition of existing bridge structures. Those bridges that require rehabilitation to service future growth (bringing the bridge up to current engineering standards and/or require upgrades to accommodate increased transportation needs) have been included in this study.
- 5.2 New bridges that are required to service future growth (as identified by the Town’s Transportation Master Plan) have generally been included in the associated road Widening/New Alignment project cost.

6.0 Traffic Signals

- 6.1 New traffic signals associated with road widening/new alignment projects that are required to service future growth (as identified by the Town’s Transportation Master Plan) have generally been included in the associated Road Widening/New Alignment project cost.
- 6.2 Existing intersections that are currently stop-controlled, but are projected to require full signalization to service future growth, and are not associated with a road project, are included individually within this study. These projects are based on the Town’s annual traffic count program and associated traffic signal warrant calculations.

7.0 Street Lights

- 7.1 New street lights associated with road widening/new alignment projects that are required to service future growth (as identified by the Town's Transportation Master Plan) have generally been included in the associated Road Widening/New Alignment project cost.
- 7.2 The Town of Whitby's current practice is to collect Development Charges on behalf of the Region of Durham to provide streetlighting on Regional road widening/new alignment projects that are required to service future growth. The timing of these projects is based on the Region's Capital Road Program, and have been included in this study.
- 7.3 New street light installations on existing Town collector and arterial roads that are required to service future growth, and are not associated with a road project, are included individually within this study.

8.0 Active Transportation

- 8.1 Multi-use pathways and trails including related structures, crossings and appurtenances internal to the development area are the responsibility of the developer/landowner.
- 8.2 Multi-use trails and walkways, identified in the "Cycling and Leisure Trails Plan" and Off-Road Trails," identified in the "Active Transportation Plan", or any successor thereto, including related structures, crossings and appurtenances that are external to the development area but required to connect the development to major multi-use pathway networks ("Core Network" in the Cycling and Trails Master Plan or "Spine Network" in the Active Transportation Plan, or any successor thereto) or surrounding community facilities and parkland are the responsibility of the developer/landowner. New sidewalks, multi-use paths or cycling facilities associated with road widening/new alignment projects that are required to service future

growth (as identified by the Town's Transportation Master Plan and the Active Transportation Plan) have generally been included in the associated Road Widening/New Alignment project cost unless they are part of a development adjacent to the road.

- 8.3 The Town of Whitby is mandated by the Municipal Act with the responsibility of providing/maintaining sidewalks on Regional roads within the Town. The timing of these projects is based on the Region's Capital Road Program, and have been included in this study.
- 8.4 New sidewalk installations on existing Town collector, arterial and local roads that are required to service future growth, and are not associated with a road project, are included individually within this study.
- 8.5 New Intersection Pedestrian Signals or pedestrian crossovers for pedestrian and other active transportation users on existing Town collector and arterial roads that are required to service future growth, and are not associated with a road or development project, may be included individually within this study.
- 8.6 In June of 2010, Town of Whitby Council approved the Town of Whitby Cycling & Leisure Trails Plan which defines a linked system of bikeways and pathways to service existing and future growth within Whitby. This study was used as a basis for projecting new cycling facilities that that provide service to future development areas. In addition to the Cycling & Leisure Trails Plan, currently under review is an Active Transportation Plan (ATP). Upon Council's approval, the ATP will be used in place of the Cycling & Leisure Trails Plan. Cycling facilities on Regional Roads or related to Regional roads are subject to the following cost-sharing arrangement:
 - **On-road (rural cross-section: paved shoulders):**
 - Region: land acquisition, utility relocation, grading, and customized bridge structures, and all maintenance activities.

- 50/50 Local Municipalities/Region: Granular, asphalt, signage, marking, the provision of other amenities.
- **Off-road (urban cross-section: multi-use pathway):**
 - Region: land acquisition, utility relocation, grading, and customized bridge structures.
 - Local Municipalities: Granular, asphalt, signage, marking, the provision of other amenities, and path maintenance (i.e. short term regular maintenance, ownership, and long term maintenance).
- **On-road (urban cross-section: cycling lanes, signage):**
 - Considered on a case-by-case basis.

8.7 Only the Town's share of these projects has been included within this study. In addition, the timing of these projects on regional facilities is based on the Region's Capital Road Program.

9.0 Studies

9.1 Environmental Assessment Studies associated with road widening/new alignment projects that are required to service future growth (as identified by the Town's Transportation Master Plan) have generally been included in the associated Road Widening/New Alignment project cost.

9.2 Other Transportation related studies, not specifically related to an individual road project, which are required to facilitate future growth, are included within this study under the General Government component.

10.0 Provincial Roadways Where agreements have been secured with the Ministry of Transportation to cost share new Provincial interchanges, the projects have been included within this study.

10.2 In addition, where the municipality is responsible for providing sidewalks or cycling facilities on provincial roadways, the projects have been included within this study.

11.0 Storm Water Management Facilities Internal to Development

11.1 The following guidelines were used to identify Storm Water Management Facilities internal to development:

1. the conveyance system within creeks internal to a development whereby local benefit is apparent or re-alignment is necessary for the development of adjacent lands (for example: creek erosion and bank stabilization);
2. a share of the cost of culverts based on the local benefits derived;
3. all storm water management facilities, outfalls and localized creek or channel improvements related to a secondary plan will be cost-shared among all landowners within the secondary planning area through Developer Cost Sharing Agreements unless over-control is required due to downstream constraints; and
4. any storm water quality control measures required to mitigate impacts of development.

11.2 All minor/local storm water management facilities internal to a development (including storm sewer pipe networks, storm water management ponds, plunge pools, creek/channel stabilization measures, LID and infiltration galleries etc.) – are the responsibility of the direct developer under s.59 of the DCA (as a local service), thus have not been identified in this study.

12.0 Storm Sewer Rehabilitation

- 12.1 Storm Sewer Rehabilitation projects are intended to repair or replace existing storm sewer infrastructure to retain structural integrity, improve function, or upgrading (i.e. upsizing) to meet current drainage needs and/or current engineering standards.
- 12.2 On an as required basis, the Town of Whitby undertakes a Storm Water Sewers Condition Surveys which assesses and assigns condition ratings for existing storm sewer facilities - and is used as a basis for determining the required rehabilitation timing/strategies.
- 12.3 Depending on their design, Storm Water Management Facilities provide a flood protection, a water quantity and quality treatment, an erosion control, a base flow augmentation, an infiltration, a spill management, aesthetics, and a buffer between urbanized and/or natural areas. New Storm Water Management ponds and/or plunge pools that are required to service future growth and intensification areas have generally been included in this study.
- 12.4 Periodically, the Town of Whitby undertakes Creek/Channel Stabilization Studies on various creeks/channels within the Town of Whitby. The purpose of those studies is to identify mitigating measures to improve the deteriorating condition of the existing channels. The improvements might include: a stabilization of the channel to accommodate additional drainage flows while protecting adjacent properties from damages resulting from premature erosion; a restoration of the channel to provide for a balanced sediment transfer and improve the quality of water to sustain healthy aquatic and wildlife habitats. Those creeks/channels that require rehabilitation to service future growth have been included in this study.
- 12.5 Environmental Assessment Studies associated with Storm Water Management projects that are required to service future growth (as

identified by the Town's Transportation Master Plan) have generally been included in the associated Storm Water Management facility project cost.

13.0 Parkland and Open Space Development

13.1 **Parkland** - The following elements of Park Development are not eligible for DCs:

- **Design** - Professional services of a qualified Landscape Architect, Engineer and other consultants to prepare for the park, in consultation with the Town:
 - A design Plan developed to incorporate the amenities, required by the Community Services Department - Parks Development Division.
 - A Grading and Drainage Plan to articulate the ultimate finished grades to be achieved upon completion of park construction, accommodating the amenities required.
 - A Servicing and Storm Water Management Plan coordinated with the park grading design that includes sizing of pipe, catch basin elevations and inverts, electrical and water.
- **Approvals** - Park Development approvals required from all agencies/authorities.
- **Clearing and grubbing** - removal of all agreed upon trees, stumps and debris from the site.
- **Hoarding** - Supply and installation of silt and/or post and wire construction fence and tree protection fencing per approved plans.
- **Topsoil**
 - Stripping and stockpiling of full depth of topsoil from the park block
 - Removal and disposal of contaminated organics offsite.

- Excess topsoil or fill removal and disposal offsite.
- Provision of topsoil for park block use.
 - The quantity shall be sufficient to meet the needs of the approved park design and shall be stockpiled on the park block at location approved by the Community Services Department.
 - Testing of topsoil by an Ontario accredited soil testing laboratory. Topsoil provided to park must conform to specifications set by the Town. If the topsoil does not conform to the stipulated specifications it will need to be amended based on the testing laboratory recommendations to meet the desired characteristics. All cost for topsoil provision and amendment, if deemed necessary, is to be borne by the Subdivider/Developer.

- **Earthworks** - Grading the park to the approved plans. Provide fill or excavation, whichever is necessary to achieve the final grades shown on the approved plans to minus 300mm of finished grade.
 - If earth fill is required, the developer will use only compacted engineered fill under proposed hard surfaces, playground areas and ball diamond infields.

- **Storm Drainage** - Installation of underground storm drainage facilities and connections to the street storm system to ensure adequate drainage of the Park Block. This equates to a minimum of one (1) catch basin/manhole (cb/mh) per catchment area and road frontage per block.

- **Servicing** - Installation of, a sanitary sewer stub, a 50mm diameter water supply line and single-phase or three-phase electrical supply, as required, including all hydro chambers or vaults. These

services are to be stubbed 1.5 metres into the park property and adequately marked with a permanent monument at ground level.

- **Surveying** - Written confirmation from and Ontario Land Surveyor (O.L.S) that the as-built topographic condition of the park meet the approved proposed grades.
- **As-built survey** completed by an O.L.S provided to the Town in digital PDF format and digital AutoCAD format utilizing UTM coordinate system North American Datum 1983 (NAD83.)
- **Temporary Works** - restoration of the Park Block if rough graded in advance of its development. Restoration work may include topsoil spreading, seeding and or sodding to the satisfaction of the Town.

13.2 **Open Space** - The following elements of Open Space Development are not eligible for DCs:

- **Design** - Professional services of a qualified Landscape Architect, Engineer and other consultants to prepare for the Open Space, in consultation with the Town a:
 - **Design Plan** to incorporate the amenities, if any, required by the Community Services Department - Parks Development Division.
 - **Edge management and Naturalization planting plan** for the open space.
 - **Grading/Drainage Plan** - to articulate the ultimate finished grades to be achieved upon completion of construction, accommodating the amenities required.

- **Storm Water Management design plans.**
 - The storm water management plans to include sizing of pipe, catch basin elevations.
- **Approvals** – Approvals required for any work within Open Spaces from all agencies/authorities.
- **Clearing and grubbing** - removal of all agreed upon trees, stumps and debris from the site. Developers shall arrange for an inspection of the open space with Town Staff. The inspection shall identify all dead or hazardous trees particularly those that may affect lots, all debris, and construction waste. All dead or hazardous trees shall be felled and removed or laid on the ground. All debris and construction waste shall be removed.
- **Hoarding** - Supply and installation of silt and/or post and wire construction fence and tree protection fencing per approved plans.
- **Topsoil:**
 - Stripping and stockpiling of full depth of topsoil from Open Space blocks where required.
 - Removal and disposal of contaminated organics offsite.
 - Excess topsoil or fill removal and disposal offsite.
 - Provision of topsoil for Open Space block where required.
 - The quantity shall be sufficient to meet the needs of the approved Open Space Block design.
 - Topsoil to be native stripped uncontaminated topsoil.
- **Earthworks** - Grading the Open Space Block to the approved plans where required. Provide fill or excavation, whichever is necessary to achieve the final grades shown on the approved plans.

- If earth fill is required, the developer will use only compacted engineered fill under proposed hard surfaces.
- Minimum 300mm depth of topsoil or per approved plans.

- **Storm Drainage** - Installation of underground storm drainage facilities and connections to the street storm system to accommodate run off from open space blocks as required.

- **Planting** – Installation of all plantings in accordance with the approved Open Space planting plans.

Appendix G
Approved 2021 Development Charges
By-Law



Town of Whitby By-law # 7748-21

Development Charges By-law

Being a By-law to establish Development Charges for The Corporation of the Town of Whitby.

WHEREAS subsection 2(1) of the *Development Charges Act, 1997*, S.O. 1997, c. 27, as amended (hereinafter called the “**Act**”) provides that the 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 of the area to which the by-law applies;

AND WHEREAS a Development Charges Background Study for The Corporation of the Town of Whitby (the “**Town**”) was prepared by Hemson Consulting Ltd. and dated February 19, 2021 (the “**Study**”) as required by section 10 of the Act, and was presented to Council along with a draft of this by-law as then proposed on March 1, 2021 and was completed within a one-year period prior to the enactment of this by-law;

AND WHEREAS notice of a public meeting was given pursuant to subsection 12(1) of the Act and in accordance with the regulations under the Act, on February 12, 2021;

AND WHEREAS copies of the Study and this proposed by-law were made available to the public in accordance with subsections 10(4) and 12(1) of the Act;

AND WHEREAS a public meeting was held on March 8, 2021 in accordance with the Act to hear comments and representations from all persons who applied to be heard (the “**Public Meeting**”);

AND WHEREAS at the Public Meeting, the Council of the Town had before it the Study, wherein it is indicated that the development of any land within the Town of Whitby will increase the need for services as defined herein;

AND WHEREAS the Council of the Town has heard all persons who applied to be heard no matter whether in objection to, or in support of, the development charge proposal at the Public Meeting, and the public was generally afforded the opportunity to make written submissions relating to this proposed by-law and the Study;

AND WHEREAS the Council of the Town on May 17, 2021 approved the Study, in which certain recommendations were made relating to the establishment of a development charge policy for the Town pursuant to the Act;

AND WHEREAS by the recommendations identified in the staff report approved by the Council of the Town on May 17, 2021, Council determined that the increase in the need for services attributable to the anticipated development as contemplated in the Study, as modified,

including any capital costs, will be met by updating the capital budget and forecast for the Town and provided that sufficient development charge revenues are generated, where appropriate;

AND WHEREAS by resolution adopted by the Council of the Town on May 17, 2021, Council approved the Study and determined that no further public meetings were required under subsection 12(3) of the Act;

AND WHEREAS by the recommendations identified in the staff report approved by the Council of the Town on May 17, 2021, Council determined that the future excess capacity identified in the Study, as modified, shall be paid for by the development charges contemplated in the Study, or other similar charges;

AND WHEREAS the Council of the Town 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 development charges, and has determined that for the services and associated infrastructure proposed to be funded by development charges under this by-law, that it is fair and reasonable that the charges be calculated on a municipal-wide uniform basis;

AND WHEREAS the Study includes a Cost of Growth Analysis that deals with all assets whose capital costs are intended to be funded under this by-law, and that such assets are considered to be financially sustainable over their full life-cycle;

AND WHEREAS the Council of the Town approved the asset management plan outlined in the Study and gave consideration to incorporate the asset management plan identified in the Study within the Town's ongoing practices and corporate asset management strategy;

NOW THEREFORE the Council of The Corporation of the Town of Whitby hereby enacts as follows:

Definitions

1. In this by-law,
 - (1) "**Act**" means the *Development Charges Act, 1997*, S.O. 1997, c. 27, as amended or any successor thereto;
 - (2) "**agricultural use**" means lands, buildings or structures, excluding any portion thereof used as a dwelling unit or for a commercial use, used or designed or intended for use for the purpose of a bona fide farming operation including, but not limited to, animal husbandry, dairying, livestock, fallow, field crops, removal of sod, forestry, fruit farming, greenhouses, horticulture, market gardening, pasturage, poultry keeping, and equestrian facilities;
 - (3) "**apartment dwelling unit**" means a dwelling unit in an apartment building;
 - (4) "**apartment building**" means a residential building, which is not any other residential dwelling type defined in this by-law, consisting of more than four (4) apartment dwelling units, which dwelling units generally have separate

entrances onto interior corridors and which corridors give access, directly or through stairwells or elevators, to the exterior of the building through a common principal entrance;

- (5) **“back-to-back townhouse dwelling”** means a building containing a minimum of six (6) and a maximum of sixteen (16) dwelling units that are divided vertically by common walls, including a common rear wall, where each dwelling unit has a separate entrance to grade;
- (6) **“bedroom”** means any room used or designed or intended principally for use as sleeping quarters with a window or access to natural light in accordance with the requirements of the Building Code Act and includes a den, a study or other similar area with or without a window or access to natural light but does not include a living room, dining room, or kitchen;
- (7) **“board of education”** means a “board” as defined in subsection 1(1) of the *Education Act*, R.S.O. 1990, c. E.2, as amended or any successor thereto;
- (8) **“bona fide farm use”** means the proposed development will qualify as a farm business operating with a valid Farm Business Registration Number issued by the Ontario Ministry of Agriculture, Food and Rural Affairs and be assessed in the Farmland Realty Tax Class by the Municipal Property Assessment Corporation, but “bona fide farm use” shall not include the growing of cannabis, cannabis production facilities, or any other cannabis operations;
- (9) **“building”** means a structure that occupies an area greater than 10 square metres consisting of a wall, roof, and floor or any of them, or a structural system servicing the function thereof, including any plumbing, works, fixtures and service systems appurtenant thereto and includes, but is not limited to, an above grade storage tank, mezzanine, air supported structures, and industrial tents, but does not include a free-standing roof-like structure constructed on lands used for a gas bar or a service station;
- (10) **“Building Code Act”** means the *Building Code Act, 1992*, S.O. 1992, c. 23, as amended or any successor thereto, and all regulations made under it including the Ontario Building Code (O. Reg. 332/12), as amended or any successor thereto;
- (11) **“capital cost”** means costs incurred or proposed to be incurred by the municipality or a local board thereof directly or by others on behalf of, and as authorized by, the municipality or local board,
 - (a) to acquire land or an interest in land, including a leasehold interest;
 - (b) to improve land;
 - (c) to acquire, lease, construct or improve buildings and structures;
 - (d) to acquire, lease, construct or improve facilities including,
 - (i) rolling stock with an estimated useful life of seven (7) years or more,

- (ii) furniture and equipment, other than computer equipment, and
 - (iii) materials acquired for circulation, reference or information purposes by a library board as defined in the *Public Libraries Act*, R.S.O. 1990, c. P.44, as amended or any successor thereto;
 - (e) to undertake studies in connection with any matter under the Act and any of the matters referred to in clauses (a) to (d) inclusive, including the development charge background study required for the provision of services designated in this by-law within or outside the municipality;
 - (f) to pay interest on borrowing for those expenditures referred to in clauses (a) to (e) inclusive that are growth related;
- (12) “**commercial**” means a building or a portion thereof that is used, designed, or intended to be used for: the sale or rental, or offer for sale or rental, of goods or services to the general public for consumption or use; the practice of a profession; the carrying on of a business or occupation; or administrative or professional work as part of a business, and shall include, but not be limited to:
- (a) ancillary facilities and uses of any kind that support or are related to the sale, rental or service use;
 - (b) restaurant uses;
 - (c) office uses;
 - (d) hotel/motel uses;
 - (e) rooming house uses;
 - (f) storage or warehousing areas which are used, designed or intended to be used in connection with sales, service or rental areas;
 - (g) warehouse clubs or similar uses;
 - (h) self-storage units;
 - (i) secure document storage;
 - (j) funeral homes;
 - (k) a branch of a bank or other financial institution, (including credit unions), that offers banking services to consumers and businesses;
 - (l) the sale or rental of goods or services where membership is a precondition to a person being able to acquire the goods or services at that place; or
 - (m) all other uses not included under “industrial”, “institutional, and “residential” uses under this by-law.
- (13) “**complete building permit application**” means a building permit application as defined in the Ontario Building Code and that is considered complete by the Town’s Chief Building Official, including payment of all applicable building permit fees;

- (14) “**Council**” means the Council of The Corporation of the Town of Whitby;
- (15) “**development**” means any activity or proposed activity in respect of land that requires one or more of the actions referred to in section 13 of this by-law and includes the redevelopment of land or the redevelopment, expansion, extension or alteration of a use, except interior alterations to an existing building which do not change or intensify the use of land;
- (16) “**development charge**” (or “**development charges**”) means a charge (or charges) imposed by the Town pursuant to this by-law;
- (17) “**duplex dwelling**” means a building that is divided horizontally, into two separate dwelling units each of which has an independent entrance either directly from the outside or through a common vestibule;
- (18) “**dwelling unit**” means a habitable dwelling comprised of a room or suite of rooms used or designed or intended for use by one (1) or more persons living together in which culinary and sanitary facilities are provided for the exclusive use of such person or persons;
- (19) “**existing industrial**” means an industrial building or buildings existing on a site in the Town of Whitby on June 1, 2021 or the first building or buildings constructed and occupied on a vacant site pursuant to site plan approval under section 41 of the Planning Act subsequent to June 1, 2021 for which full development charges were paid;
- (20) “**four-plex dwelling**” means a building that is divided both horizontally and vertically into four (4) dwelling units each of which has an independent entrance either directly from the outside or through a common vestibule;
- (21) “**grade**” means the average level of finished ground adjoining a building at all exterior walls;
- (22) “**gross floor area**” means the total floor area, measured between the outside of exterior walls or between the outside of exterior walls and the centre line of party walls dividing the building from another building, of all floors above the average level of finished ground adjoining the building at its exterior walls; and, for the purposes of this definition, in a mixed-use building the gross floor area of any area common to the residential and non-residential parts of such mixed-use building shall be allocated one-half to the residential part of the building and one-half to the non-residential part of the building;
- (23) “**hospice**” means an institutional building or a portion thereof not located within a special care/special needs dwelling or a retirement home that is used or designed or intended for use as a residence by persons who are receiving on-site palliative care, on-site end-of-life care, or who are receiving on-site care due to a terminal illness;
- (24) “**hospital**” means land, buildings, or structures used, or designed or intended for use as a hospital, as defined in section 1 of the *Public Hospitals Act*, R.S.O 1990, c. P.40, as amended or any successor thereto;

- (25) **“hotel/motel”** means a commercial establishment offering lodging to the traveling public and that may provide other services such as restaurants, meeting rooms and retail stores and services that are available to the general public;
- (26) **“industrial”** means a building or a portion thereof that is used or designed or intended to be used for:
- (a) manufacturing, producing, processing, warehousing, storage or distributing, and including a greenhouse that is not open to the public for retail sales;
 - (b) agricultural uses;
 - (c) research or development in connection with manufacturing, producing or processing;
 - (d) 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, production, or processing takes place; or
 - (e) office or administrative purposes, if carried out with respect to manufacturing, producing, processing, warehousing, storage or distribution and in the building used for the manufacturing, producing, storage or distribution or attached to the building,
- but “industrial” shall not include any use that is considered to be a “commercial”, “residential”, or “institutional” use as defined in this by-law;
- (27) **“institutional”** means a building or a portion thereof that is used or designed or intended to be used by an organized body, society, or religious group for promoting a public or non-profit purpose and shall include, without limiting the generality of the foregoing, a private career college, private post-secondary school, a place of worship, and a hospital, but “institutional” shall not include any use that is considered to be a “commercial”, “industrial”, or “residential” use as defined in this by-law;
- (28) **“local board”** has the same meaning as defined in section 1 of the Act;
- (29) **“mezzanine”** means the floor area located between the floor and the ceiling of any room or storey, with or without partitions or other visual obstructions, including an interior balcony but excluding any stairway, and which shall form part of the gross floor area of a building;
- (30) **“mixed use”** means any land or building or portion thereof that is used or designed or intended to be used for both residential and non-residential uses;
- (31) **“mobile home dwelling”** means any dwelling that is designed to be mobile, and constructed or manufactured to provide a permanent or temporary dwelling unit for one or more persons, but does not include a recreational vehicle, travel trailer tent trailer or trailer otherwise designed;
- (32) **“non-residential”** means any land or building, or a portion thereof, that is used

or designed or intended to be used for a use other than a residential use including, without limiting the generality of the foregoing, a “commercial”, “industrial” or “institutional” use;

- (33) “**parking structure/garage**” means a building provided exclusively for the purpose of vehicle parking;
- (34) “**place of worship**” means that part of a building used or designed or intended to be used for worship and that is exempt from taxation as a place of worship under the *Assessment Act*, R.S.O. 1990, c. A.31, as amended or any successor thereto;
- (35) “**Planning Act**” means the *Planning Act*, R.S.O. 1990, c. P.13, as amended or any successor thereto;
- (36) “**redevelopment**” means the construction, erection or placing of one or more buildings on land where all or part of a building has previously been demolished on such land, or changing the use of a building from a residential use to a non-residential use or from a non-residential use to a residential use, or changing a building from one form of residential use to another form of residential use or from one form of non-residential use to another form of non-residential use;
- (37) “**Regulation**” means O. Reg. 82/98, as amended or any successor thereto, made under the Act;
- (38) “**residential**” means a building or a portion thereof that is used or designed or intended to be used as a residence of one (1) or more individuals, and shall include, but is not limited to, a single detached dwelling, a semi-detached dwelling, a duplex dwelling, a semi-detached duplex, a tri-plex dwelling, a four-plex dwelling, a row townhouse, a back-to-back townhouse, a stacked townhouse, an apartment dwelling, a mobile home dwelling, a retirement home, a special care/special needs dwelling and a residential dwelling unit accessory to a non-residential use;
- (39) “**retirement home**” has the same meaning as it is defined in subsection 2(1) of the *Retirement Homes Act, 2010*, S.O. 2010, c. 11, as amended or any successor thereto;
- (40) “**retirement home dwelling unit**” means a unit located within a retirement home comprised of a room or suite of rooms used or designed or intended for use by one (1) or more persons living together in which sanitary facilities are present in the unit for the exclusive use of such person or persons, but culinary facilities may or may not be present in the unit for the exclusive use of such person or persons;
- (41) “**rooming house**” means an existing residential building or structure in which three (3) or more bedrooms are intended to be rented for lodging, and where the bedrooms do not have both culinary and sanitary facilities for the exclusive use of individual occupants;
- (42) “**row townhouse dwelling**” means a building containing at least three (3)

dwelling units, with each dwelling unit separated vertically from the other(s) by a party wall and with each dwelling unit having an independent entrance directly from the outside;

- (43) **“semi-detached dwelling”** means a building divided by a common wall or a connecting wall to contain two (2) dwelling units, each of which has an independent entrance directly from the outside;
- (44) **“semi-detached duplex dwelling”** means a building containing two (2) duplex dwellings attached by a common vertical wall;
- (45) **“single detached dwelling”** means a building containing one (1) dwelling unit which is freestanding, separate and detached from other main buildings, but does not include a mobile home dwelling;
- (46) **“special care/special needs dwelling”** means a building or portion of a building containing more than three (3) special care/special needs dwelling units, licensed as a long-term care home under the *Long-Term Care Homes Act, 2007*, S.O. 2007, c. 8, as amended or any successor thereto, or as a home for special care under the *Homes for Special Care Act*, R.S.O. 1990, c. H.12, as amended or any successor thereto, or as a children’s residence under the *Child and Family Services Act*, R.S.O. 1990, c. C.11, as amended or any successor thereto, or a residential hospice, but does not include a retirement home under the *Retirement Homes Act, 2010*, S.O. 2010, c. 11, as amended or any successor thereto;
- (47) **“special care/special needs dwelling unit”** means a unit located within a special care/special needs dwelling, where such units may or may not have exclusive sanitary or culinary facilities, or both, and which have a common enclosed entrance from street level, where the occupants have the right to use, in common, halls, stairs, yards, common rooms and accessory buildings and which are used or designed or intended for use by individuals with special needs, including an independent long-term living arrangement, where support services such as meal preparation, grocery shopping, laundry, housekeeping, nursing, respite care and attendant services are provided as appropriate to the individuals;
- (48) **“stacked townhouse dwelling”** means a building containing more than four (4) dwelling units, each of which has a vertical and a horizontal wall in common and each of which has an independent entrance directly from the outside;
- (49) **“Town”** means The Corporation of the Town of Whitby;
- (50) **“Treasurer”** means the Treasurer of the Town appointed by Council pursuant to section 286 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended or any successor thereto, and includes his or her designate/deputy; and
- (51) **“tri-plex dwelling”** means a building that is divided horizontally, into three dwelling units each of which has an independent entrance either directly from the outside or through a common vestibule.

Designation of Service

2. It is hereby declared by Council that all development and redevelopment of land within the Town will increase the need for services.
3. (1) The categories of service for which development charges are imposed under this by-law are as follows:
 - (a) Development Related Studies
 - (b) Library Services
 - (c) Fire Services
 - (d) Services Related to a Highway – Operations
 - (e) Parks & Recreation
 - (f) By-law Enforcement
 - (g) Waste Management
 - (h) Services Related to a Highway – Roads & Related – Town-wide Infrastructure
 - (i) Services Related to a Highway – Roads & Related – Alternate Route and Related Infrastructure
 - (j) Stormwater Management
- (2) A development charge shall include:
 - (a) a charge in respect of Development Related Studies;
 - (b) a charge in respect of Library Services;
 - (c) a charge in respect of Fire Services;
 - (d) a charge in respect of Services Related to a Highway – Operations;
 - (e) a charge in respect of Parks & Recreation;
 - (f) a charge in respect of By-law Enforcement;
 - (g) if Waste Management services are provided, a charge in respect to Waste Management;
 - (h) a charge in respect of Services Related to a Highway – Roads & Related – Town-wide Infrastructure;
 - (i) a charge in respect of Services Related to a Highway – Roads & Related – Alternate Route and Related Infrastructure; and
 - (j) a charge in respect of Stormwater Management.

Calculation of Development Charges

4. (1) Subject to the provisions of this by-law, development charges against land in the Town shall be imposed, calculated and collected in accordance with the base

rates set out in Schedules “B” and “C” which relate to the services set out in Schedule “A” to this by-law.

- (2) The development charge with respect to the use of any land or building shall be calculated as follows:
 - (a) in the case of residential development or redevelopment, or a residential portion of a mixed-use development or redevelopment, the sum of the product of the number of dwelling units of each type multiplied by the corresponding total dollar amount for such dwelling unit type, as set out in Schedule “B”;
 - (b) in the case of non-residential development or redevelopment, or a non-residential portion of a mixed-use development or redevelopment, the development charge shall be the gross floor area of the type of non-residential use multiplied by the corresponding total dollar amount per square metre of gross floor area for the type of non-residential use, as set out in Schedule “C”;
 - (c) where a non-residential development has both commercial and other non-residential uses, development charges will be imposed against the commercial portion and the other non-residential portion gross floor areas of the building as though the uses were separate.

Retirement Home Dwelling Unit

5. Notwithstanding the grouping of types of residential dwellings in Schedule “B”, the development charges imposed on a retirement home dwelling unit shall be payable at the rate applicable to a dwelling unit in the type of dwelling identified in Schedule “B” within which the retirement home dwelling unit is located.

Mobile Home Dwelling Unit

6.
 - (1) The development charges paid in regard to a mobile home dwelling unit shall be refunded in full to the then current owner thereof, upon request and without interest, if the mobile home dwelling unit is demolished or removed within ten (10) years of the issuance of the first building permit relating thereto.
 - (2) The onus is on the applicant to produce evidence to the satisfaction of the Town, acting reasonably, which establishes that the applicant is entitled to the refund claimed under this section.

No Phase-In of Development Charges

7. The development charges imposed pursuant to this by-law are not proposed to be phased-in.

Applicable Lands

8. This by-law applies to all lands in the Town of Whitby, whether or not the land or use is exempt from taxation under section 3 of the *Assessment Act*, R.S.O. 1990, c. A.31, as amended or any successor thereto.

Intensification of Existing Housing

9. (1) Pursuant to subsections 2(3) and (3.1) of the Act, no development charge shall be imposed with respect to the following:
- (a) the enlargement of an existing dwelling unit;
 - (b) the creation of additional dwelling units as prescribed in the Regulation, subject to any restrictions as set out in the Regulation, in prescribed classes of existing residential buildings or prescribed structures ancillary to existing residential buildings as set out in the Regulation; or
 - (c) the creation of a second dwelling unit in prescribed classes of proposed new residential buildings as set out in the Regulation, including structures ancillary to dwellings, subject to any restrictions as set out in the Regulation.
- (2) Where the requirements of subsections 9(1)(b) or (c) of this by-law are not met, development charges shall be calculated and collected in accordance with Schedule "B" for any additional dwelling units.

Exemption for Municipal and School Board Pursuant to Section 3 of the Act

10. Land owned by and used for the purposes of the Town, the Regional Municipality of Durham or a board as defined in subsection 1(1) of the *Education Act*, R.S.O. 1990, c. E.2, as amended or any successor thereto, is exempt from a development charge as required by section 3 of the Act.

Exemption for Industrial Development Pursuant to Section 4 of the Act

11. (1) If a development includes the enlargement of the gross floor area of an existing industrial building and if the gross floor area is enlarged by fifty percent (50%) or less before the first enlargement for which an exemption from the payment of development charges was granted pursuant to subsection 4(2) of the Act or this section, the amount of the development charge in respect of the enlargement is zero.
- (2) If a development includes the enlargement of the gross floor area of an existing industrial building and if the gross floor area is enlarged by more than fifty percent (50%), development charges in accordance with Schedule "C" are payable on the amount of the enlargement that exceeds fifty percent (50%) of the gross floor area before the enlargement as required by subsection 4(3) of the Act.

Exemptions

12. (1) Notwithstanding the provisions of this by-law, development charges shall not be

imposed under this by-law respecting:

- (a) the development of a non-residential farm building used for a bona fide farm use;
 - (b) an area of worship within a building or structure owned by and used for a place of worship;
 - (c) land, buildings, or structures owned by and used for a hospital;
 - (d) land, buildings, or structures owned by and used for a hospice;
 - (e) land, buildings, or structures used for a temporary use permitted under a Zoning By-law amendment enacted under section 39 of the Planning Act;
 - (f) the temporary erection of a building without foundation as defined in the Building Code Act for a period not exceeding six (6) consecutive months and not more than six (6) months in any one calendar year on a site for which development charges or lot levies have previously been paid;
 - (g) the temporary erection of a building without foundation as defined in the Building Code Act for the primary use as a temporary sales trailer on land undergoing development, provided that such building is removed or demolished from the site no later than six (6) months after sales are completed, otherwise development charges shall be calculated and deemed payable in accordance with this by-law;
 - (h) a parking structure/garage that is primarily for the use of the public within the Town's Downtown Whitby Community Improvement Plan area or Downtown Brooklin Community Improvement Plan area; or
 - (i) such owners, uses, or buildings that may be exempt from the payment of development charges as a result of the application of a statute, regulation, or order of the Province of Ontario or the Government of Canada.
- (2) Notwithstanding the exemption of development charges pursuant to subsection 12(1)(e) of this by-law, the Town may require that an agreement be executed regarding the payment of development charges that would otherwise be paid but for that exemption, with such agreement and any amounts to be paid to be provided immediately prior to building permit issuance or approval of the use. Such amounts shall be refunded, without interest, upon proof of removal or demolition of such building, or the cessation of the use, in accordance with the terms of the agreement.

Development Charges Imposed

13. (1) Development charges shall be calculated and collected in accordance with the provisions of this by-law and be imposed on land to be developed for residential or non-residential use or both where the development requires:
- (a) the passing of a zoning by-law or an amendment thereto under section

- 34 of the Planning Act;
 - (b) the approval of a minor variance under section 45 of the Planning Act;
 - (c) a conveyance of land to which a by-law passed under subsection 50(7) of the Planning Act applies;
 - (d) the approval of a plan of subdivision under section 51 of the Planning Act;
 - (e) a consent under section 53 of the Planning Act;
 - (f) the approval of a description under section 9 of the *Condominium Act, 1998*, S.O. 1998, c. 19 as amended or any successor thereto; or
 - (g) the issuing of a permit under the Building Code Act, in relation to a building or structure.
- (2) Subsection 13(1) of this by-law shall not apply in respect to:
- (a) local services installed or paid for by the owner within a plan of subdivision or within the area to which the plan relates, as a condition of approval under section 51 of the Planning Act; or
 - (b) local services installed or paid for by the owner as a condition of approval under section 53 of the Planning Act.

Local Service Installation

14. Nothing in this by-law prevents Council from requiring, as a condition of an agreement under sections 51 or 53 of the Planning Act that the owner, at his or her own expense, shall install or pay for such local services, within the plan of subdivision or within the area to which the plan relates, as Council may require, or that the owner pay for the local connection to a storm drainage facility and associated administration, processing, or inspection fees, related to the approval or within the area to which the approval relates.

Multiple Charges

15. (1) Where two (2) or more of the actions described in subsection 13(1) of this by-law are required before land to which a development charge applies can be developed, only one development charge shall be calculated and collected in accordance with the provisions of this by-law.
- (2) Notwithstanding subsection 15(1) of this by-law, if two or more of the actions described in subsection 13(1) of this by-law occur at different times, and if the subsequent action has the effect of increasing the need for municipal services as set out in Schedule "A", an additional development charge on the additional residential units and non-residential floor area, shall be calculated and collected in accordance with the provisions of this by-law.
- (3) If a development does not require a building permit but does require one or more of the actions described in subsection 13(1) of this by-law, then the development

charge shall nonetheless be payable in respect of any increased or additional development permitted by such action.

Services In Lieu

16. (1) Council may authorize an owner, through a credit agreement under section 38 of the Act, to substitute such part of the development charge applicable to the owner's development as may be specified in the agreement, by the provision at the sole expense of the owner, of services in lieu. Such agreement shall further specify that where the owner provides services in lieu in accordance with the agreement, Council shall give to the owner a credit against the development charge in accordance with the agreement provisions and the provisions of section 39 of the Act, equal to the reasonable cost to the owner of providing the services in lieu, as determined by the Town. In no case shall the agreement provide for a credit which exceeds the total development charge payable by an owner to the Town in respect of the development to which the agreement relates.
- (2) In any agreement under subsection 16(1) of this by-law, Council may also give a further credit to the owner equal to the reasonable cost of providing services in addition to, or of a greater size or capacity, than would be required under this by-law.
- (3) The credit provided for in subsection 16(2) of this by-law shall not be charged to any development charge reserve fund.

Redevelopment

17. In the case of the demolition of all or part of a residential, non-residential, or mixed-use building:
 - (1) A credit shall be allowed, provided that the land was improved by occupied buildings within the five (5) years prior to the issuance of the building permit, and the building permit has been issued for the development or redevelopment within five (5) years from the date the demolition permit has been issued.
 - (2) If a development or redevelopment involves the demolition of and replacement of a building, or the conversion from one principal use to another, a credit shall be allowed equivalent to:
 - (a) 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
 - (b) the gross floor area of the building demolished/converted multiplied by the applicable non-residential development charge in place at the time the development charge is payable; and/or
 - (c) in the case of a mixed-use building,
 - (i) for the residential portion of the building, 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

- (ii) for the non-residential portion of the building, the gross floor area of the non-residential portion of the building multiplied by the applicable non-residential development charge in place at the time the development charge is payable.
- (3) The five (5) year period referred to in subsection 17(1) of this by-law shall be calculated from the date of the issuance of the first demolition permit.
- (4) Development charges shall not be reduced under this section where the building that is to be demolished or has been demolished or converted from one principal use to another was, or would have been, exempt from development charges under this by-law.
- (5) In no case will a credit exceed the amount of the development charge that would otherwise be payable and no credit is available if the existing land use is exempt from paying development charges under this by-law.
- (6) Development charge credits applied under this section shall use the same schedule of development charge rates that are applicable to the proposed development or redevelopment.
- (7) No development charge credit shall be granted for the demolition or conversion of any building or structure that was constructed without the payment of development charges under paragraphs 12(1)(e), (f), or (g) of this by-law.

Timing of Calculation and Payment

- 18. (1) The total amount of development charges shall be calculated and be payable pursuant to this by-law, in accordance with Section 26, Section 26.1, and Section 26.2 of the Act.
- (2) Where Section 26.1 and Section 26.2 of the Act do not apply, the total amount of development charges shall be calculated and be payable pursuant to this by-law as of the date the first building permit is issued.
- (3) 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 or as otherwise required in accordance with the Act.
- (4) Notwithstanding subsections 18(1) and (2) of this by-law, an owner and the Town may enter into an agreement to provide for the payment in full of a development charge before building permit issuance or later than the issuing of a building permit, in accordance with section 27 of the Act.
- (5) If a development does not require a building permit, the development charge shall be calculated and paid in full at the rate in effect at the time the approval is granted as a condition of the earliest of any of the approvals required for the development as enumerated in subsection 13(1) of this by-law.

- (6) Notwithstanding subsection 18(2) of this by-law, when the total amount of development charges is to be calculated under the Act or this by-law as of the day the first building permit is issued, such calculation shall be subject to the following provisions:

Complete building permit applications received prior to June 1, 2021 will be subject to the development charge rate in effect as of May 31, 2021 as long as all of the following conditions have been met:

- (a) the application has been considered complete within 15 business days of being received;
- (b) development charges have been paid in full prior to July 1, 2021; and
- (c) the building permit has been issued prior to September 1, 2021 and all other fees and charges have been paid in full.

If an application is not complete, or if a building permit is revoked or not issued, it will be subject to the development charge rate in effect at the time of building permit issuance.

Speculative Non-Residential Buildings

19. (1) Where an owner has applied for a building permit for a speculative non-residential building where the final use of the building has not yet been determined to the satisfaction of the Town, the owner shall pay the commercial development charge rate.
- (2) No later than six (6) months following confirmation from the Town's Building Division that the building or structure is fit for occupancy, the owner may submit evidence satisfactory to the Treasurer to establish that all or a portion of the speculative non-residential building is an industrial or institutional building. Should such evidence be provided to the satisfaction of the Treasurer, then the difference between the commercial development charge rate and the industrial or institutional development charge rate (whichever applies to all or part of the building's gross floor area) shall be refunded to the owner without interest. Any difference in the development charge rates shall be calculated using the rates that were in force at the time the building permit was issued. Any refund request under this subsection shall be subject to the payment of the applicable refund request fee as set by the Town from time to time in its Fees and Charges By-law, as amended.
- (3) Where the owner, within the time period specified in subsection 19(2) of this by-law, has failed to submit evidence satisfactory to the Treasurer to establish that a speculative non-residential building is an industrial building or institutional building, then the final development charge rate applicable to the building shall conclusively be deemed to be the commercial rate, and the provisions of section 25 of this by-law shall not apply.

Interest Payments

20. (1) The Town may charge interest on the installments required by subsection 26.1(3) of the Act from the date the development charge would have been payable in accordance with Section 26 of the Act to the date the installment is paid.
- (2) Where subsections 26.2(1) (a) or (b) of the Act applies, the Town may charge interest on the development charge from the date of the application referred to in the applicable clause to the date the development charge is payable under subsection 26.2(3) of the Act.
- (3) The Town may determine, by Council resolution or policy external to this by-law, interest rates in relation to subsections 20(1) and (2) of this by-law.

By-law Registration

21. A certified copy of this by-law may be registered on title to any land to which this by-law applies.

Reserve Funds

22. (1) Monies received from payment of development charges under this by-law shall be maintained in separate reserve funds as per the services set out in Schedule "A", plus interest earned thereon.
- (2) Monies received for the payment of development charges shall be used only in accordance with the provisions of section 35 of the Act.
- (3) Where any development charge, or part thereof, remains unpaid after the due date, the amount unpaid shall be added to the tax roll and shall be collected as taxes.
- (4) Where any unpaid development charges are collected as taxes under subsection 22(3) of this by-law, the monies so collected shall be credited to the development charge reserve funds referred to in subsection 22(1) of this by-law.
- (5) The Treasurer shall, in each year, furnish to Council a statement in respect of the reserve funds established hereunder for the prior year, containing the information set out in section 43 of the Act and section 12 of the Regulation.

By-law Amendment or Appeal

23. (1) Where this by-law or any development charge prescribed thereunder is amended or repealed either by order of the Local Planning Appeal Tribunal or by resolution of Council, the Treasurer shall calculate forthwith the amount of any overpayment to be refunded as a result of said amendment or repeal in accordance with the provisions of the Act.
- (2) Refunds that are required to be paid under subsection 23(1) of this by-law shall be paid with interest to be calculated as follows:
 - (a) interest shall be calculated from the date on which the overpayment was collected to the date on which the refund is paid; and

- (b) the Bank of Canada interest rate in effect on the date of enactment of this by-law shall be used.
- (3) Refunds that are required to be paid under subsection 23(1) of this by-law shall include the interest owed under this section.

By-law Indexing

- 24. (1) The development charges set out in Schedules “B” and “C” to this by-law shall be adjusted annually, as of February 1, 2022 and annually thereafter on February 1, while this by-law is in force, without amendment to this by-law, in accordance with the most recent twelve-month change in the Statistics Canada Non-residential Building Construction Price Index for Toronto.
- (2) For greater certainty, the development set out in Schedules “B” and “C” to this by-law shall only be adjusted by the percentage change during the preceding year, as recorded in the Statistics Canada Non-residential Building Construction Price Index for Toronto, if there is an increase in the percentage change.

Refunds or Corrections

- 25. Refunds or partial refunds of development charges that have been paid will be made, without interest, where:
 - (1) a building permit is cancelled, revoked, or amended for any reason prior to the commencement of construction resulting in an overpayment of development charges to the Town, subject to the payment of the applicable refund request fee as set by the Town from time to time in its Fees and Charges By-law, as amended; or
 - (2) an internal clerical error, including the transposition of figures, a typographical or similar error, has occurred with respect to the calculation of a development charge which resulted in an overpayment to the Town.
- 26. Additional payment of development charges shall be made where a clerical or factual error, including the transposition of figures, a typographical or similar error, has occurred with respect to the calculation of a development charge under this by-law or any other by-law which resulted in an underpayment to the Town or any other government entity.

Severability

- 27. 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 considered 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.

Headings for Reference Only

- 28. The headings inserted in this by-law are for convenience of reference only and shall not affect the construction or interpretation of this by-law.

General

29. This by-law shall be administered by the Town's Financial Services Department and the Planning and Development Department.
30. Where the Town and an owner or former owner of land have entered into an agreement with respect to land within the area to which this by-law applies, and a conflict exists between the provisions of this by-law and such agreement, the provisions of this by-law shall prevail to the extent that there is a conflict.
31. The onus is on the property owner to produce evidence to the satisfaction of the Town which establishes that the owner is entitled to any exemption, credit, or refund claimed under this by-law.
32. Only one of the applicable exemption(s), relief, or adjustment(s) set out in this by-law shall be applicable to development or redevelopment. Where the circumstances of a development or redevelopment are such that more than one exemption, relief, or adjustment could apply, only one exemption, relief, or adjustment shall apply and it shall be the exemption, relief, or adjustment that results in the lowest development charges being payable pursuant to this by-law.

Schedules to the By-law

33. The following Schedules to this by-law form an integral part of this by-law:
 - Schedule "A" - Designated Town Services under this by-law
 - Schedule "B" - Residential Development Charges effective the date this by-law comes into force
 - Schedule "C" - Non-Residential Development Charges effective the date this by-law comes into force

Date By-law Effective and Repeal of Existing By-laws

34. This by-law shall come into full force and effect on June 1, 2021.
35. Upon the coming into full force and effect of this by-law, Town By-law No. 7255-17 and Town By-law No. 7319-17 are repealed.

Date By-law Expires

36. This by-law expires five (5) years after the day on which it comes into force.

Short Title

37. This by-law may be cited as the "Town of Whitby Development Charge By-law, 2021"

By-law read and passed this 17th day of May, 2021.

Don Mitchell, Mayor

Christopher Harris, Town Clerk

Schedule "A"
To By-law No. 7748-21
Designated Town Services Under This By-law

1. Development Related Studies
2. Library Services
3. Fire Services
4. Services Related to a Highway – Operations
5. Parks & Recreation
6. By-law Enforcement
7. Waste Management
8. Services Related to a Highway – Roads & Related – Town-wide Infrastructure
9. Services Related to a Highway – Roads & Related – Alternate Route and Related Infrastructure
10. Stormwater Management

Schedule "B"
To By-law No. 7748-21
Schedule of Residential Development Charges

	Column A: Single/Semi	Column B: Large Townhome/Other	Column C: Small Townhome/ Large Apartment	Column D: Small Apartment	Column E: Special Needs
Dwelling Unit Types	<ul style="list-style-type: none"> - Duplex Dwelling Unit - Semi-Detached Dwelling Unit - Single Detached Dwelling Unit 	<ul style="list-style-type: none"> - Back-to-Back Townhouse Dwelling Unit (3 or more bedrooms) - Four-Plex Dwelling Unit (3 or more bedrooms) - Row Townhouse Dwelling Unit (3 or more bedrooms) - Semi-Detached Duplex Dwelling Unit (3 or more bedrooms) - Tri-Plex Dwelling Unit (3 or more bedrooms) - All other residential dwelling unit types not included in Columns A, C, D, or E 	<ul style="list-style-type: none"> - Apartment Dwelling Unit (2 or more bedrooms) - Back-to-Back Townhouse Dwelling Unit (2 or fewer bedrooms) - Four-Plex Dwelling Unit (2 or fewer bedrooms) - Mobile Home Dwelling Unit - Retirement Home Dwelling Unit (2 or more bedrooms) - Row Townhouse Dwelling Unit (2 or fewer bedrooms) - Semi-Detached Duplex Dwelling Unit (2 or fewer bedrooms) - Stacked Townhouse Dwelling Unit (2 or more bedrooms) - Tri-Plex Dwelling Unit (2 or fewer bedrooms) 	<ul style="list-style-type: none"> - Apartment Dwelling Unit (1 or fewer bedrooms) - Retirement Home Dwelling Unit (1 or fewer bedrooms) - Stacked Townhouse Dwelling Unit (1 or fewer bedrooms) 	<ul style="list-style-type: none"> - Special Care/Special Needs Dwelling Unit

Service	Category A	Category B	Category C	Category D	Category E	% of Charge
Libraries	\$1,141	\$870	\$479	\$366	\$325	3.2%
Parks & Recreation	\$8,170	\$6,227	\$3,430	\$2,621	\$2,330	22.8%
Fire Services	\$711	\$542	\$298	\$228	\$203	2.0%
Waste Management	\$106	\$81	\$45	\$34	\$30	0.3%
By-Law Enforcement	\$41	\$31	\$17	\$13	\$12	0.1%
Development Related Studies	\$223	\$170	\$94	\$72	\$64	0.6%
Total General Services	\$10,392	\$7,921	\$4,363	\$3,334	\$2,964	29.0%
Services Related to a Highway						
Operations	\$703	\$536	\$295	\$226	\$201	2.0%
Roads & Related - Town-Wide Infrastructure	\$21,196	\$16,154	\$8,898	\$6,800	\$6,044	59.2%
Roads & Related - Alternate Route And Related Infrastructure	\$2,894	\$2,205	\$1,215	\$928	\$825	8.1%
Stormwater Management	\$630	\$480	\$265	\$202	\$180	1.8%
Total Engineered Services	\$25,423	\$19,375	\$10,673	\$8,156	\$7,250	71.0%
TOTAL TOWN-WIDE CHARGE PER UNIT	\$35,815	\$27,296	\$15,036	\$11,490	\$10,214	100.0%
<i>(1) Based on Persons Per Unit Of:</i>	<i>3.51</i>	<i>2.67</i>	<i>1.47</i>	<i>1.13</i>	<i>1.00</i>	

Schedule "C"
To By-law No. 7748-21
Schedule of Non-Residential
Development Charges

Service	Commercial		Industrial		Institutional	
	Charge per m ²	% of Charge	Charge per m ²	% of Charge	Charge per m ²	% of Charge
Libraries	\$0.00	0.0%	\$0.00	0.00%	\$0.00	0.00%
Parks & Recreation	\$0.00	0.0%	\$0.00	0.00%	\$0.00	0.00%
Fire Services	\$5.99	2.7%	\$1.64	2.71%	\$3.39	2.68%
Waste Management	\$0.00	0.0%	\$0.00	0.00%	\$0.00	0.00%
By-Law Enforcement	\$0.34	0.2%	\$0.09	0.15%	\$0.20	0.16%
Development Related Studies	\$1.91	0.9%	\$0.52	0.86%	\$1.07	0.85%
General Services Charge per Square Metre	\$8.24	3.7%	\$2.25	3.71%	\$4.66	3.69%
Services Related to a Highway						
Operations	\$5.89	2.6%	\$1.57	2.59%	\$3.38	2.67%
Roads & Related - Town-Wide Infrastructure	\$179.15	80.3%	\$48.71	80.38%	\$101.54	80.34%
Roads & Related - Alternate Route and Related Infrastructure	\$24.53	11.0%	\$6.67	11.01%	\$13.79	10.91%
Stormwater Management	\$5.28	2.4%	\$1.40	2.31%	\$3.02	2.39%
Engineered Services Charge per Square Metre	\$214.85	96.3%	\$58.35	96.29%	\$121.73	96.31%
TOTAL TOWN-WIDE CHARGE PER SQUARE METRE	\$223.09	100.0%	\$60.60	100.00%	\$126.39	100.00%