Report for Public Consultation Prepared by Hemson for the Township of Mapleton

2024 Development Charges Background Study

May 10, 2024





1000 – 30 St. Patrick Street, Toronto, ON M5T 3A3 416 593 5090 | hemson@hemson.com | www.hemson.com

Contents

List	of Acronyms	1
Exec	cutive Summary	2
1.	Introduction	6
Α.	Legislative Context	7
B.	Relevant Analysis	8
C.	Consultation and Approval Process	8
2.	The DC Methodology Aligns Development-Related Costs	
	and Benefits	9
Α.	Consideration for Area Rated Services	9
В.	Township-Wide Development Charges Are Proposed	9
C.	Key Steps In Determining DCs for Future Development-	
	Related Projects	10
D.	Operating & Capital Cost Impacts and Asset Management	
	Plan Legislative Requirements	15
3.	Development Forecast	16
4.	Summary of Historical Capital Service Levels	18
5.	Development-Related Capital Forecast	20
Α.	A Development-Related Capital Forecast is Provided for	
	Council's Approval	20
В.	The Development-Related Capital Forecast	21
6.	Development Charges are Calculated in Accordance with	
	the DCA	24
Α.	Development Charges Calculation	24
В.	Development Charge Rate Tables	28
C.	Statutory Phase-in of Calculated Development Charges	30

HEMSON

D.	Comparison of 2024 Newly Calculated Development	
	Charges With Charges Currently In Force in Mapleton	31
7.	Cost of Growth Analysis	33
Α.	Asset Management Plan	33
В.	Long-Term Capital and Operating Cost Impacts	35
8.	Other Considerations and Legislative Requirements	38
Α.	Development Charges Administration and Collection	38
В.	Changes Arising From the More Homes Built Faster Act	
	(Bill 23)	40
C.	Development Charges Administration	42
D.	Local Service Definitions	43
Ε.	Area-Rating Consideration	45



List of Appendices

Appendix A – Development Forecast	46
Appendix B – General Services	57
Appendix C – Engineered Services	92
Appendix D – Reserve Funds	104
Appendix E – Cost of Growth	107
Appendix F – By-law	116



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



Executive Summary

A. Purpose of Development Charges (DC) Background Study

Hemson Consulting Ltd. was retained by the Township of Mapleton to complete a Development Charges (DC) Background Study (the "Background Study"). The Background Study provides the basis and background to update the Township's development charges to reflect the servicing needs of development and redevelopment.

i. Study Consistent with Development Charges Legislation

The Township's Background Study is presented as part of a process to approve a new DC By-law in compliance with the *Development Charges Act* (DCA). The study is prepared in accordance with the DCA and associated regulations, including amendments that came into force through the *More Homes, More Choice Act*, the *COVID-19 Economic Recovery Act*, and the *More Homes Built Faster Act* (Bill 23).

It is noted that the Government's proposed *Cutting Red Tape to Build More Homes Act, 2024*, introduced on April 10, 2024, is not in force. Should the provisions of this legislation be granted Royal Asset prior to City Council passing a new DC by-law, appropriate changes to the by-law will be made.

ii. Key Steps of the Development Charges Calculation

In accordance with the DCA and associated regulation, several key steps are required to calculate development charges. These include:

- preparing a development (growth) forecast;
- establishing historical service levels;
- determining the increased needs for services arising from development and appropriate shares of capital costs; and
- determining how these costs are attributed to development types (i.e. residential and non-residential).



iii. Development-Related Capital Forecast is Subject to Change

The development-related capital costs and associated development charges in this Background Study were presented to Council on February 27, 2024 and March 19, 2024. However, the Background Study is a point-in-time analysis and there may be changes to capital project timing, scope and costs through the Township's normal annual budget process.

B. Development Forecast

The table summarizes the residential and non-residential development forecast over the 2024-2033 and 2024-2051 planning periods. The development forecast is based on Statistics Canada data and County of Wellington growth allocations, which align with the Township's 2023 Mapleton Water and Wastewater Servicing Master Plan. The forecast is discussed in more detail in Appendix A.

Growth Forecast	2023	General Services 2024-2033		Engineered Services 2024-2051		
Growth Porecast	Estimate	Growth	Total at 2033	Growth	Total at 2051	
Residential Development Forecast						
Total Occupied Dwellings	3,328	506	3,834	1,446	4,774	
Population						
Census	11,088	1,168	12,256	3,604	14,692	
Population in New Dwellings		1,765		5,051		
Non-Residential Development Forecast						
Employment in New Space	3,040	803	3,843	1,705	4,745	
Non-Residential Building Space (sq.m.)		80,300		170,482		

C. Development-Related Capital Program

The development-related capital program for general services is planned over a 10-year period from 2024 to 2033, and engineered services from 2024-2051. The gross cost of the general program amounts to \$60.4 million, of which \$9.4 million is eligible for recovery through development charges. The gross cost of the engineered program amounts to \$39.7 million, of which



\$36.0 million is eligible for recovery through development charges. Details regarding the capital programs for each service are provided in Appendix B and Appendix C of this report.

D. Calculated Development Charges

Development charge rates have been established under the parameters and limitations of the DCA. A Township-wide uniform cost recovery approach is used to calculate development charges for all services.

The table below provides the Township-wide charges for residential and nonresidential development based on the aforementioned development forecasts.

	Chai	ge By Unit Type		Charge (\$/sq.m)	
Service	Single &	Other Multiples	Anartmonto		
	Semi-Detached	Other Multiples	Apartments	(ψ/ Sq.III)	
Fire Protection Services	\$1,692	\$1,195	\$846	\$4.98	
Parks And Recreation	\$5,564	\$3,928	\$2,782	\$0.00	
Development-Related Studies	\$356	\$251	\$178	\$1.05	
Services Related To A Highway	\$6,536	\$4,614	\$3,268	\$19.22	
Township-Wide General Services	\$14,148	\$9,987	\$7,074	\$25.25	
Water Services	\$4,503	\$3,179	\$2,252	\$13.24	
Wastewater Services	\$13,621	\$9,615	\$6,810	\$40.06	
Township-Wide Engineered Services	\$18,124	\$12,793	\$9,062	\$53.31	
TOTAL CHARGE	\$32,272	\$22,780	\$16,136	\$78.55	

Calculated Township-wide Development Charges

Under the current in-force legislation, the calculated development charges will be phased-in over a 5-year time period in accordance with the DCA. The legislation requires that the following phase-in be applied to the fully calculated rates:

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



E. Cost of Growth Analysis

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

F. Local Service Policy

A Local Service Policy has been included in Section 8 (D) of this report.

G. DC By-law Included Under Separate Cover

The Township's proposed DC By-law will be released in draft at least two weeks prior to a public meeting to be held under the DCA on June 11, 2024.



1. Introduction

The Township of Mapleton 2024 Development Charges (DC) Background Study is presented as part of the process to approve a new DC by-law in compliance with the *Development Charges Act, 1997* (DCA). As the Township experiences residential and non-residential development that will increase the demand on municipal services, the Township wishes to implement development charges to fund capital projects related to growth so that development continues to be serviced in a fiscally responsible manner.

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

- A forecast of the amount, type and location of population, housing, and non-residential development anticipated in the Township;
- The average capital service levels provided in the Township over the 15-year period immediately preceding the preparation of the background study;
- A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred, or to be incurred, by the Township or its local boards to provide for the anticipated development, including the determination of the eligible and ineligible components of the capital projects;
- An asset management plan that demonstrates that all assets are financially sustainable over their full life cycle; and,
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.



This study presents the results of the review to determine the developmentrelated net capital costs that are attributable to development that is forecast to occur in the Township. The 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 study therefore calculates development charges for various types of development.

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

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

A. Legislative Context

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

- Five-year mandatory phase-in of the calculated DC rates (beginning with a 20% reduction in Year 1, decreasing by 5% annually until Year 5);
- Extension of historical service level standards from a 10 to 15-year planning period;
- DC by-laws now expire every 10 years instead of 5 years;
- The amount of interest paid on DC deferrals and freeze is capped at prime plus 1%;



- Costs associated with studies, parking, cemeteries, and housing services are now ineligible for recovery through DCs;
- Municipalities must spend or allocate 60% of available DC reserve funds every year for roads, water and wastewater services; and
- Discounts for purpose built rental housing based on the number of bedrooms.

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

B. Relevant Analysis

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

C. Consultation and Approval Process

The following provides a summary of the consultation and approval process undertaken to complete the Background Study. Following the release of the Background Study, consultation will continue with the public prior to the passage of the new DC By-law(s) anticipated to occur in July 2024.

Activity	Date
Council Information Session (1)	February 27, 2024
Council Information Session (2)	March 19, 2024
Public Release of DC Background Study	May 10, 2024
Statutory Public Meeting	June 11, 2024
Passage of 2024 DC By-law	July 2024 (targeted)

Timeline of Consultation and Approval Process



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

Several key steps are required in calculating a development charge. However, specific circumstances arise in each municipality which must be reflected in the calculation. In this study, we have tailored our approach to the Township of Mapleton'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 Township-wide basis which is consistent with the Township's 2020 Development Charges Background Study.

A. Consideration for Area Rated Services

In accordance with the DCA, Council must consider the use of area rating, also known as area-specific development charges, as part of the Background Study. The Township has historically used a Township-wide approach for all services. Based on discussions with staff and Council, this historical practice has been maintained as part of this Background Study update.

B. Township-Wide Development Charges Are Proposed

The DCA requires that DC by-laws designate the areas within which DCs shall be imposed. The development charges may apply to all lands in a municipality or to other designated development areas as specified in the by-laws.

For all services, a range of capital facilities and infrastructure is available throughout the Township, and all Mapleton residents and employees have access to these assets. As new development occurs, new infrastructure will be needed in order to maintain overall service levels in the Township.



A widely accepted method of sharing the development-related capital costs for such Township services is to apportion them over all the anticipated growth.

The following services are included in the Township-wide development charges calculations:

- Fire Protection
- Parks and Recreation
- Development-Related Studies
- Water Services

- Wastewater Services
- Services Related to a Highway (Public Works and Roads and Related)

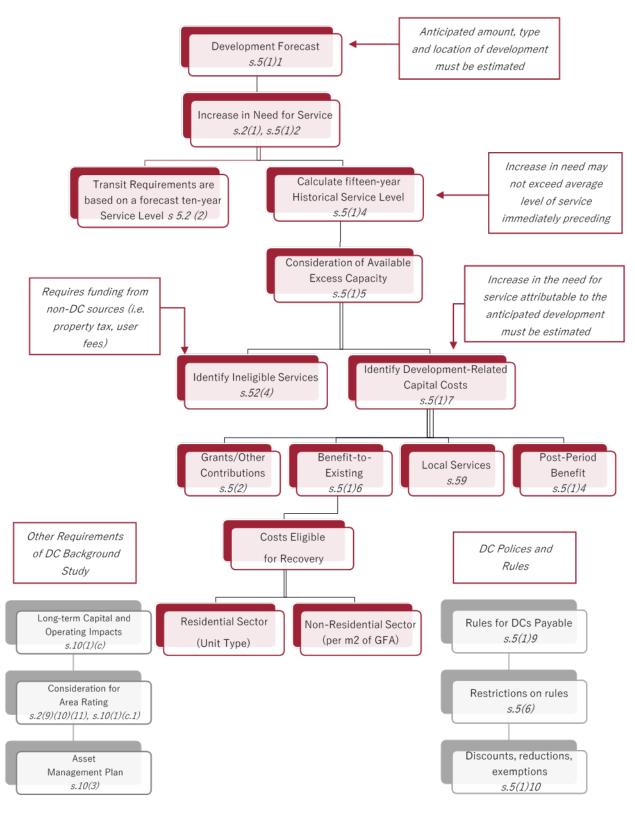
These services form a reasonable basis in which to plan and administer the Township-wide development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that constitute it. The resulting development charges for these services would be imposed against all development anywhere in the Township.

C. Key Steps In Determining DCs for Future Development-Related Projects

Several key steps are required in calculating DCs for future developmentrelated projects. These are summarized below and shown schematically in Figure 1.



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



HEMSON

The DC Methodology Aligns Development-Related Costs and Benefits \mid 11

i. Development Forecast

The first step in the methodology requires that a development forecast be prepared for forecast study period, in this case the 10-year period 2024-2033 for general services, and the long-term planning period 2024-2051 for engineered services.

The forecast of the future residential and non-residential development is based on growth anticipated to occur in the Township. For the residential portion of the forecast both the Census or "net" 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 both of the planning periods. The forecast of GFA is based on the employment forecasts for the Township. Factors for floor space per worker by category are used to convert the employment forecast into gross floor areas for the purposes of the Background Study.

ii. Service Categories and Historical Service Levels

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

... must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the 15-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historical 15-year average service levels thus form the basis for development charges. A review of the Township'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 2009-2023.



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 Township's departments, in consultation with Hemson, as part of the study. The program identifies development-related projects and their gross and net municipal costs, after allowing for capital grants, subsidies or other recoveries as required by the Act (DCA, s. 5. (2)). The capital program provides another cornerstone upon which development charges are based. The DCA requires that the increase in the need for service attributable to the anticipated development may include an increase:

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

In conjunction with DCA, s. 5. (1) 4. referenced above, these sections have the effect of requiring that the development charge be calculated on the lesser of the historical 15-year average service levels or the service levels embodied in future plans of the Township. 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 Township from non-development charges sources. The amount of municipal funding for such non-DC-eligible shares of projects is also identified as part of the preparation of the development-related capital program.

There is also a requirement in the DCA to reduce the applicable development charge by the amount of any "uncommitted excess capacity" that is available for a service. Such capacity is available to partially meet the future servicing requirements. Adjustments are made in the capital program analysis to meet this requirement of the DCA.

iv. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the development-related net capital costs between the residential and the non-residential sectors. In the Township of Mapleton, the allocation is based on projected changes in population in new units and employment over the planning periods.

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

v. Final Adjustment

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

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

Section 10 of the DCA identifies what must be included in a Development Charges Background Study:

s.10 (2) The development charge background study shall include,

(c) an examination, for each service to which the development charge by-law would relate, of the long term capital and operating costs for capital infrastructure required for the service; and

(c.2) an asset management plan prepared in accordance with subsection (3).

i. Asset Management Plan

(3) The asset management plan shall,

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

The requirement to include an Asset Management Plan (AMP) was part of the DCA amendments that came into effect on January 1, 2016. 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. The section of the DC Background Study that deals with the operating and capital cost impacts and the asset management plan can be found in Appendix E.



3. Development Forecast

This section provides the basis for the development forecasts used to calculate the development charges for the Township of Mapleton. A more detailed summary of the forecasts, including tables illustrating historical trends and forecast results is provided in Appendix A.

The forecasts are based on a range of statistical data including Statistics Canada Census and National Household Survey data, Canada Mortgage Housing Corporation (CMHC) housing market information. They are based on Statistics Canada data and County of Wellington Official Plan growth allocations, which align with the Township's 2023 Mapleton Water and Wastewater Servicing Master Plan.

i. Residential Forecast

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of the population growth (or net population growth) as well as the population growth 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, 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 both of the planning periods: 2024-2033 for general services, and 2024-2051 for engineered services.

As shown on Table 1, the Township's total population is forecast to increase by 1,168 over the next 10 years, reaching 12,256 people by 2033; and by 3,604 over the ultimate planning period, reaching 14,692 people by 2051. Over the 10-year planning period from 2024 to 2033, the number of dwellings is forecast to



increase by 506, which translates to population growth in new units of 1,765 persons. Over the ultimate planning period from 2024 to 2051, the number of dwellings is forecast to increase by 1,446, which translates to population growth in new units of 5,051 persons.

ii. Non-Residential Forecast

Development charges are levied on non-residential development as a charge per square metre of GFA. The non-residential forecast requires a projection of employment growth as well as a projection of new floor space in the Township.

The non-residential forecast projects an increase of 803 jobs by 2033, and 1,705 jobs by 2051, excluding work from home employment. The net employment growth will be accommodated in approximately 80,300 square metres of new non-residential building space by 2033, and 170,500 square metres of new non-residential building space by 2051.

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

TABLE 1

Growth Forecast	2023	General Services 2024-2033		Engineere 2024-		
	Estimate	Growth	Total at 2033	Growth	Total at 2051	
Residential Development Forecast						
Total Occupied Dwellings	3,328	506	3,834	1,446	4,774	
Population						
Census	11,088	1,168	12,256	3,604	14,692	
Population in New Dwellings		1,765		5,051		
Non-Residential Development Forecast						
Employment in New Space	3,040	803	3,843	1,705	4,745	
Non-Residential Building Space (sq.m.)		80,300		170,482		

TOWNSHIP OF MAPLETON SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT FORECAST



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 Township over the 15-year period immediately preceding the preparation of the background study, on a service-by-service basis.

For General Services (Parks and Recreation, Fire Protection) and Services Related to a Highway, the legislative requirement is met by documenting historical service levels for the preceding 15 years; in this case, for the period 2009 to 2023. Typically, service levels are measured as a ratio of inputs per capita or per capita and employee.

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



Table 2 summarizes service levels for all services included in the development charges calculations. Appendix B provides detailed historical inventory data upon which the calculation of service levels is based.

TABLE 2

TOWNSHIP OF MAPLETON SUMMARY OF AVERAGE SERVICE LEVELS 2009 - 2023

Service		2009 - 2023 Service Level				
			Indicator			
1.0 Fire Protection Services	\$	976.27	per capita			
Buildings	\$	444.81	per capita			
Land	\$	70.59	per capita			
Vehicles		438.36	per capita			
Equipment	\$	22.52	per capita			
2.0 Parks And Recreation	\$	2,850.95	per capita			
Indoor Recreation	\$	2,102.63	per capita			
Park Development And Amenities	\$	748.32	per capita			
3.0 Services Related To A Highway	\$	32,486.87	per capita & employment			
Public Works	\$	1,389.16	per capita & employment			
Roads	\$	31,097.71	per capita & employment			



5. Development-Related Capital Forecast

The DCA requires the Council of a Municipality to express its intent to provide future capital facilities at the level incorporated in the development charges calculation. As noted above in Section 2, *O. Reg. 82/98*, s. 3 states that:

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

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

Based on the development forecasts summarized in Section 3 and detailed in Appendix A, Township 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 services the capital plan covers the 10-year period from 2024-2033, and the ultimate period from 2024-2051.

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



B. The Development-Related Capital Forecast

A summary of the development-related capital forecast for all services considered in this study is presented in Tables 3 and 4.

The capital forecasts incorporate those projects identified to be related to development anticipated in the planning periods. It is not implied that all of these costs are to be recovered from new development by way of development charges. Portions of the capital forecast may relate to replacement of existing facilities, shares of projects that benefit the existing population, or growth anticipated to occur beyond the 2024–2033 and 2024-2051 planning periods. After these reductions, the remaining development-related capital costs are brought forward to the development charges calculation.

Table 3 shows that the gross cost of the Township's general services capital forecast is estimated to be \$60.4 million. A total of \$37,500 in grants and subsidies has been identified to help fund the program.

The largest component of the capital forecast is for **Services Related to a Highway**. It amounts to \$44.0 million and provides for roads and sidewalks, bridges and culverts, and public works fleet and equipment across the Township.

The next largest capital forecast component is associated with **Parks and Recreation** and it includes provisions for additional growth related space, associated furniture and equipment, parkland development, parks facilities, park amenities, and other signage for \$13.4, or 22% of the total program.

The capital forecast associated with **Fire Protection** includes for the new vehicles, fire equipment, and new growth-related space for \$2.7 million, or 4% of the total program.



It is noted that on April 10, 2024, the Minister of Municipal Affairs and Housing introduced legislation, the *Cutting Red Tape to Build More Homes Act, 2024*, that proposed to reintroduce development-related studies as an eligible service/cost under the DCA. At the time of publishing this Background Study, this change has not come into force. However, in anticipation of the change, the Background Study has calculated a development charge for studies.

As such, the capital forecast associated with **Development-Related Studies** includes various planning studies over the planning period, amounting to \$380,000 in total.

Table 4 shows that the gross cost of the Township's engineered services capital forecast is estimated to be \$39.7 million. No grants or subsidies have been identified to help fund the program. Therefore, the Township's share of the general services capital forecast remains at \$39.7 million.

The largest capital program is for **Wastewater Services**. It amounts to \$27.1 million and provides for new and updated wastewater infrastructure, a servicing plan, and recovery of the negative reserve fund balance, 68% of the total program.

The next largest capital forecast is associated with **Water Services** and provides for new and updated water infrastructure, a servicing plan, and recovery of the negative reserve fund balance for \$12.6 million, or 32% of the total program.

Further details on the capital forecasts for each individual service are available in Appendix B and Appendix C.



TABLE 3

TOWNSHIP OF MAPLETON SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM 2024 - 2033 (in \$000)

	Gross	Grants/	Municipal
Service	Cost	Subsidies	Cost
1.0 Fire Protection Services	\$2,652.0	\$0.0	\$2,652.0
2.0 Parks And Recreation	\$13,355.7	\$37.5	\$13,318.2
3.0 Development-Related Studies	\$380.0	\$0.0	\$380.0
4.0 Services Related To A Highway	\$44,000.0	\$0.0	\$44,000.0
TOTAL - GENERAL PROGRAM	\$60,387.7	\$37.5	\$60,350.2

TABLE 4 TOWNSHIP OF MAPLETON SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM 2024 - 2051 (in \$000)

	Gross Grants/		Municipal
Service	Cost	Subsidies	Cost
1.0 Water Services	\$12,620.0	\$0.0	\$12,620.0
2.0 Wastewater Services	\$27,064.6	\$0.0	\$27,064.6
TOTAL - ENGINEERED PROGRAM	\$39,684.6	\$0.0	\$39,684.6



6. Development Charges are Calculated in Accordance with the *DCA*

This section summarizes the calculation of development charges for each service and the resulting total development charge by type of development. For all services, the calculation of the per capita (residential) and per square metre (non-residential) charges is reviewed.

For residential development, the total per capita amount is applied to different housing types on the basis of average occupancy factors. For nonresidential development, the calculated development charges rates are based on gross floor area (GFA) of building space.

It is noted that the calculation of the development charges does not include any provision for exemptions required under the DCA, for example, the exemption for enlargements of up to 50% on existing industrial buildings or for affordable/attainable housing. Such legislated exemptions, or other exemptions which Council may choose to provide, will result in a loss of development charges revenue for the affected types of development. Any such revenue loss may not be offset by increasing other portions of the calculated charge.

A. Development Charges Calculation

A summary of the residential and non-residential development charges for general and engineered services are presented in Tables 5 and 6. Further details of the calculation for each individual service are available in Appendix B and Appendix C.

The capital forecast incorporates those projects identified to be related to growth anticipated over the planning periods. However, not all of the capital costs are to be recovered from new development by way of development charges.



Table 5 shows that \$49.1 million of the capital forecast relates to replacement of existing capital facilities or to shares of projects that provide benefit to the existing community. These portions of capital costs will have to be funded from property taxes or other non-development charges revenue sources.

An additional \$1.1 million of uncommitted development charge reserve funds has been identified, and has been net out of the chargeable capital costs. Another share of the forecast, \$787,500, is either attributable to growth beyond the 2033 period (and can therefore only be recovered under future development charges studies) or represents a service level increase in the Township.

The remaining \$9.4 million is carried forward to the development charges calculation as a development-related cost. Of the development-related cost, \$7.3 million has been allocated to new residential development, and \$2.0 million has been allocated to new non-residential development. This results in charges of \$4,161.29 per capita and \$25.25 per square metre respectively.

Table 6 shows that \$3.7 million of the capital forecast relates to replacement of existing capital facilities or to shares of projects that provide benefit to the existing community. These portions of capital costs will have to be funded from property taxes or other non-development charges revenue sources.

The development charge reserve funds are in a negative, and therefore no reductions have been made from the capital costs. All of the costs have been included for recovery, as no projects exceed the planning period (2024-2051).

The remaining \$36.0 million is carried forward to the development charges calculation as a development-related cost. Of the development-related cost, \$26.9 million has been allocated to new residential development, and \$9.1 million has been allocated to new non-residential development. This results in charges of \$5,330.56 per capita and \$53.30 per square metre respectively.



TABLE 5

TOWNSHIP OF MAPLETON SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES CAPITAL PROGRAM FOR GENERAL SERVICES

1,765 80,300

10 Year Growth in Square Meters	10 Year Growth in Population in New Units	
	10 Year Growth in Square Meters	

		Development-Re	lated Capital Progra	m (2024-2033)				
Service	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Available DC Reserve (\$000)	Post-2033 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential <u>Share</u> % (\$000)	Non- %	Residential <u>Share</u> (\$000)
1.0 FIRE PROTECTION SERVICES	\$2,652.0	\$525.0	\$61.3	\$787.5	\$1,278.2	69% \$878.5	4 31%	\$399.70
Development Charge Per Capita Development Charge Per Sq.M						\$497.7	6	\$4.98
2.0 PARKS AND RECREATION	\$13,318.2	\$10,121.9	\$307.8	\$0.0	\$2,888.5	100% \$2,888.5	1 0%	\$0.00
Development Charge Per Capita Development Charge Per Sq.M						\$1,636.5	5	\$0.00
3.0 DEVELOPMENT-RELATED STUDIES	\$380.0	\$90.0	\$21.2	\$0.0	\$268.8	69% \$184.7	2 31%	\$84.04
Development Charge Per Capita Development Charge Per Sq.M						\$104.6	6	\$1.0
4.0 SERVICES RELATED TO A HIGHWAY	\$44,000.0	\$38,393.7	\$669.8	\$0.0	\$4,936.5	69% \$3,392.9	0 31%	\$1,543.63
Development Charge Per Capita Development Charge Per Sq.M						\$1,922.3	2	\$19.22
TOTAL GENERAL SERVICES (2024-2033)	\$60,350.2	\$49,130.6	\$1,060.1	\$787.5	\$9,372.0	\$7,344	7	\$2,027.4
Development Charge Per Capita Development Charge Per Sq.M						\$4,161.2	9	\$25.25



TABLE 6

TOWNSHIP OF MAPLETON SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES CAPITAL PROGRAM FOR ENGINEERED SERVICES

5,051 170,482

Ultimate Growth in Population in New Units
Ultimate Growth in Square Meters

		Development-Re	lated Capital Program	n (2024-2051)					
Service	Net	Replacement			Total DC Eligible				
	Municipal	& Benefit to	Available	Post-2051	Costs for	Res	idential	Non-Re	esidential
	Cost	Existing	DC Reserve	Benefit	Recovery	<u>s</u>	hare	<u>S</u>	hare
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	%	(\$000)	%	(\$000)
1.0 WATER SERVICES	\$12,620.0	\$3,672.3	\$0.0	\$0.0	\$8,947.7	75%	\$6,689.76	25%	\$2,257.94
Development Charge Per Capita Development Charge Per Sq.M							\$1,324.44		\$13.24
2.0 WASTEWATER SERVICES	\$27,064.6	\$0.0	\$0.0	\$0.0	\$27,064.6	75%	\$20,234.90	25%	\$6,829.72
Development Charge Per Capita Development Charge Per Sq.M							\$4,006.12		\$40.06
TOTAL ENGINEERED SERVICES (2024-2051)	\$39,684.6	\$3,672.3	\$0.0	\$0.0	\$36,012.3		\$26,924.7		\$9,087.7
Development Charge Per Capita Development Charge Per Sq.M							\$5,330.56		\$53.30



B. Development Charge Rate Tables

Table 7 provides the calculated development charge rates by residential unit type. The rates range from a high of \$32,272 per unit for a serviced singleand semi-detached units to a low of \$16,136 per unit for apartments.

Table 8 displays the Township-wide non-residential charges. The fully calculated non-residential charge is \$78.55 per square metre.

TABLE 7

TOWNSHIP OF MAPLETON TOWNSHIP-WIDE DEVELOPMENT CHARGES RESIDENTIAL DEVELOPMENT CHARGES

	Charge Per	Charge By Unit Type (1)			
Service	Capita	Single & Semi-Detached	Other Multiples	Apartments	
Fire Protection Services	\$498	\$1,692	\$1,195	\$846	
Parks And Recreation	\$1,637	\$5,564	\$3,928	\$2,782	
Development-Related Studies	\$105	\$356	\$251	\$178	
Services Related To A Highway	\$1,922	\$6,536	\$4,614	\$3,268	
Township-Wide General Services	\$4,161	\$14,148	\$9,987	\$7,074	
Water Services	\$1,324	\$4,503	\$3,179	\$2,252	
Wastewater Services	\$4,006	\$13,621	\$9,615	\$6,810	
Township-Wide Engineered Services	\$5,331	\$18,124	\$12,793	\$9,062	
TOTAL RESIDENTIAL CHARGE	\$9,492	\$32,272	\$22,780	\$16,136	
(1) Based on Persons Per Unit of:		3.40	2.40	1.70	



TABLE 8

TOWNSHIP OF MAPLETON TOWNSHIP-WIDE DEVELOPMENT CHARGES NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Charge (\$/sq.m)
Fire Protection Services	\$4.98
Parks And Recreation	\$0.00
Development-Related Studies	\$1.05
Services Related To A Highway	\$19.22
Township-Wide General Services	\$25.25
Water Services	\$13.24
Wastewater Services	\$40.06
Township-Wide Engineered Services	\$53.31
TOTAL NON-RESIDENTIAL CHARGE	\$78.55



C. Statutory Phase-in of Calculated Development Charges

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

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

Table 9 provides a summary of the 5-year phase in for the calculated residential and non-residential rates in the Township.

TABLE 9

TOWNSHIP OF MAPLETON 5-YEAR PHASE-IN OF CALCULATED DEVELOPMENT CHARGES

Charge Type	Year 1	Year 2	Year 3	Year 4	Year 5
Singles & Semis \$/unit	\$25,818	\$27,431	\$29,045	\$30,659	\$32,272
Apartments \$/unit	\$12,909	\$13,716	\$14,523	\$15,329	\$16,136
Multiples \$/unit	\$18,224	\$19,363	\$20,502	\$21,641	\$22,780
Non-Residential \$/m2	\$62.84	\$66.77	\$70.70	\$74.63	\$78.55
Phase-in	80%	85%	90%	95%	100%



D. Comparison of 2024 Newly Calculated Development Charges With Charges Currently In Force in Mapleton

Tables 10 and 11 compare the newly calculated residential development charges with currently imposed charges.

As shown in Table 10, the residential development charge rate for a single- or semi-detached unit is calculated to increase by \$13,822 per unit, or 75%.

Table 11 compares the newly calculated non-residential development charges with currently imposed development charges. As shown, the non-residential development charge rate is calculated to increase by \$17.09 per sq.m., or 28%.

TABLE 10

Service	Current Residential Charge / SDU	Residential		ce in Charge to Calculated)	
Fire Protection Services	\$650	\$1,692	\$1,042	160%	
Parks And Recreation	\$180	\$5,564	\$5,384	2991%	
Administration	\$300	\$356	\$56	19%	
Services Related To A Highway	\$5,630	\$6,536	\$906	16%	
Township-Wide General Services	\$6,760	\$14,148	\$7,388	109%	
Water Services	\$3,150	\$4,503	\$1,353	43%	
Wastewater Services	\$8,540	\$13,621	\$5,081	59%	
Township-Wide Engineered Services	\$11,690	\$18,124	\$6,434	55%	
TOTAL RESIDENTIAL CHARGE	\$18,450	\$32,272	\$13,822	75%	

TOWNSHIP OF MAPLETON COMPARISON OF CURRENT AND CALCULATED RESIDENTIAL DEVELOPMENT CHARGES (SDU)



TABLE 11

TOWNSHIP OF MAPLETON COMPARISON OF CURRENT AND CALCULATED NON-RESIDENTIAL DEVELOPMENT CHARGES

	Current	Calculated	Difference in Charge (Current to Calculated		
Service	Non-Residential	Non-Residential			
	Charge / sq.m.	Charge / sq.m.			
Fire Protection Services	\$2.26	\$4.98	\$2.72	120%	
Parks And Recreation	\$0.00	\$0.00	\$0.00	0%	
Administration	\$1.08	\$1.05	-\$0.03	-3%	
Services Related To A Highway	\$19.48	\$19.22	-\$0.26	-1%	
Township-Wide General Services	\$22.82	\$25.25	\$2.43	11%	
Water Services	\$10.44	\$13.24	\$2.80	27%	
Wastewater Services	\$28.20	\$40.06	\$11.86	42%	
Township-Wide Engineered Services	\$38.64	\$53.31	\$14.67	38%	
TOTAL NON-RESIDENTIAL CHARGE	\$61.46	\$78.55	\$17.09	28%	



7. Cost of Growth Analysis

This section examines the long-term capital and operating costs as well as the asset management-related annual provisions for the capital facilities and infrastructure to be included in the DC By-law. This examination is required as one of the provisions of the DCA. The analysis for all services is included in Appendix E.

A. Asset Management Plan

Tables 12 and 13 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2024-2033 and 2024-2051 DC recoverable portion. The years 2034 and 2052 have been included to calculate the annual contribution for the 2024-2033 and 2024-2051 periods as the expenditures in 2033 and 2051 will not trigger asset management contributions until 2034 and 2052, respectively.

As shown in Table 12, by 2034, the Township will need to fund an additional \$235,000 per year in order to properly fund the full life-cycle costs of the new assets related to all general services under the development charges by-law. Table 13 shows that by 2052, the Township will need to fund an additional \$81,000 per year to properly fund all life-cycle costs of the new engineered services assets under the DC by-law.



TABLE 12

TOWNSHIP OF MAPLETON ANNUAL ASSET MANAGEMENT PROVISION BY 2034

Service		l - 2033 I Program	Calculated AMP Annual Provision by 2034			
	DC Related	Non-DC Related*	DC Related Non-DC Relate			
Fire Protection Services	\$1,278,236	\$1,373,764	\$55,441	\$61,461		
Parks And Recreation	\$2,888,507	\$10,467,203	\$71,310	\$238,407		
Development-Related Studies	\$268,755	\$111,245	\$0	\$0		
Services Related To A Highway	\$4,936,530	\$39,063,470	\$108,200	\$869,322		
TOTAL	\$9,372,028	\$51,015,682	\$234,951	\$1,169,191		

* Includes costs that will be recovered under future development charges studies (i.e. other developmentrelated), ineligible shares and shares of projects funded from available reserve funds.

TABLE 13

TOWNSHIP OF MAPLETON ANNUAL ASSET MANAGEMENT PROVISION BY 2052

Service Water Services		ł - 2051 I Program	Calculated AMP Annual Provision by 2052		
	DC Related	Non-DC Related*	DC Related	Non-DC Related*	
Water Services	\$8,947,703	\$3,672,300	\$20,397	\$10,180	
Wastewater Services	\$27,064,614	\$0	\$60,572	\$0	
TOTAL	\$36,012,317	\$3,672,300	\$80,969	\$10,180	

* Includes costs that will be recovered under future development charges studies (i.e. other developmentrelated), ineligible shares and shares of projects funded from available reserve funds.



B. Long-Term Capital and Operating Cost Impacts

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

The Township will experience estimated increase in net operating costs for additions associated with the planned capital program. These estimates are based on average costs derived from a review of recent budgets and the 2022 Financial Information Return (FIR) (additional details are included in Appendix D).

As described in Appendix D, by 2033, the Township's net operating costs are estimated to increase by \$533,400 for property tax supported services. Increases in net operating costs will be experienced as new facilities are opened, park amenities are developed, and roads/sidewalks are constructed.

ii. Long-Term Capital Financing from Non-Development Charge Sources

Table 14 summarizes the components of the development-related capital forecast that will require funding from non-DC sources (e.g. property tax) for the planning periods of 2024 to 2033, and 2024 to 2051. In total, \$49.1 million will need to be funded from non-DC sources over the 10-year planning period, and \$3.7 million over the 2024-2051 planning period. These costs are related to facilities and infrastructure that will benefit the existing community. In addition, \$787,500 (2024-2033 capital program) in interim DC financing related to post-period shares of projects may be required or these costs may be recovered from other growth funding tools.



TABLE 14

TOWNSHIP OF MAPLETON SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM FOR GENERAL AND ENGINEERED SERVICES

(in \$000)

		Development-Re	lated Capital Program	(2024-2033)	
General Services	Net	Replacement &	Available	Post-2033	Total DC Eligible
	Municipal Cost	Benefit to Existing	DC Reserves	Benefit	Costs for Recovery
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
1.0 Fire Protection Services	\$2,652.0	\$525.0	\$61.3	\$787.5	\$1,278.2
2.0 Parks And Recreation	\$13,318.2	\$10,121.9	\$307.8	\$0.0	\$2,888.5
3.0 Development-Related Studies	\$380.0	\$90.0	\$21.2	\$0.0	\$268.8
4.0 Services Related To A Highway	\$44,000.0	\$38,393.7	\$669.8	\$0.0	\$4,936.5
TOTAL - GENERAL SERVICES (2024-2033)	\$60,350.2	\$49,130.6	\$1,060.1	\$787.5	\$9,372.0

		Development-Re	elated Capital Program	(2024-2051)	
Engineered Services	Net	Replacement &	Available	Post-2051	Total DC Eligible
	Municipal Cost	Benefit to Existing	DC Reserves	Benefit	Costs for Recovery
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
1.0 Water Services	\$12,620.0	\$3,672.3	\$0.0	\$0.0	\$8,947.7
2.0 Wastewater Services	\$27,064.6	\$0.0	\$0.0	\$0.0	\$27,064.6
TOTAL - ENGINEERED SERVICES (2024-2051)	\$39,684.6	\$3,672.3	\$0.0	\$0.0	\$36,012.3
TOTAL GENERAL AND ENGINEERED SERVICES	\$100,034.8	\$52,802.9	\$1,060.1	\$787.5	\$45,384.3

iii. Program is Deemed Financially Sustainable

The calculated annual funding provision should be considered within the context of the Township's projected growth. Over the next 10 years (to 2033), the Township is projected to increase by 506 dwelling units and about 1,168 people. By 2051, the Township is project to increase by 1,446 dwelling units and about 3,604 people. In addition, the Township will also add 803 new employees that will result in approximately 80,300 square metres of additional non-residential building space by 2033, and add 1,705 employees and 170,482 square metres of non-residential building space by 2051.

In addition, as part of the annual budget update the Township also contributes to asset replacement reserves and spends on yearly asset replacement needs as needed. Through this annual exercise, staff identify the required funding and propose mitigating measures in order to ensure there are sufficient funds in reserves over the long term. Life-cycle funding methodologies are also reviewed in order to ensure that the Township is continuing to implement financially sustainable practices for funding the eventual replacement of assets.

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



8. Other Considerations and Legislative Requirements

This section sets out other considerations and legislative requirements relating to the *DCA* including administration and collection, recent legislative changes, and consideration for area rating.

A. Development Charges Administration and Collection

The DCA requirements in respect of the collection of DCs, certification and remittance, as well as reserve fund management are outlined in this section.

i. Development Charges Amount Payable and Date of Payment

The total amount of a DC is the amount of the DC that would be determined under the by-law on the day of an application for site plan approval or the day of an application for rezoning or, if neither of these apply, the day of building permit issuance. Full details on determining the DCs payable in any particular case are provided in s.26 and s.26.2 of the DCA.

The default date of payment of a DC is the date of building permit issuance. However, under s.27 of the DCA the Township may enter into an agreement with a developer to alter the timing of payment.

For two specific types of development, DCs must be paid according to the following plan:

 Six equal annual installments beginning at building occupancy (permit or actual occupancy) and for the following five anniversaries of that date for rental housing and institutional development.

For required instalments, the Township may charge interest from the date the DC would have been payable to the date the instalment is paid. Interest may



accrue on each installment until the final payment has been made. Any skipped or late payments can be added to the tax roll (including interest). Full details on the prescribed payment plans are provided in s.26.1 of the DCA. In accordance with s.26.3 of the DCA the maximum interest rate a municipal can charge is prime plus 1%.

ii. Reserve Funds

Under the DCA, a municipality that has passed a development charge by-law must establish a separate reserve fund for each service to which the development charge relates and pay each development charge it collects into the respective reserve fund. While the DCA does permit municipalities to borrow from the reserve fund, the amount borrowed is to be repaid with interest at a rate not less than the prescribed minimum interest rate. Additionally, money in the reserve fund is to be spent only on developmentrelated capital costs.

Annual financial statements are to be provided to Council and must include the following:

- Opening and closing balances and in-year transactions
- A description of service or category of service
- Details on credits paid by individual credit holders
- Amounts borrowed and purpose of borrowing
- Interest accrued on borrowing
- Amount and source of money used to repay borrowing
- Projects funded from DCs including amount and source of DC and non-DC funding



B. Changes Arising From the More Homes Built Faster Act (Bill 23)

As of November 28, 2022, there are several changes to the DCA due to the enactment and Royal Assent of Bill 23. A list of the changes that are now in force is provided below in Table 15.

Section	Description
Section	Exemptions for existing rental residential buildings and a
2(1)	range of residential units in existing and new houses.
Section	Housing services are ineligible for DC funding (repeal of
2(4)	paragraph 17 of ss.2(4) of the DCA). Existing by-laws are
	deemed to be "amended" and no development charges can
	be collected for housing services from November 28, 2022
	onward.
Section 4.2	Exemptions for non-profit housing development. This does
	not apply with respect to a DC payable before November 28,
	2022.
Section 4.3	Exemption for inclusionary zoning residential units. This
	does not apply with respect to a DC payable before
	November 28, 2022.
Section	Historical service level calculation period extended from 10
5(1)	years to 15 years. Does not apply to by-laws in force prior to
	November 28, 2022.
Section	Studies, including DC studies, are no longer a DC-eligible
5(4)	capital cost. Does not apply retroactively to by-laws that
	were in force prior to November 28, 2022.

Table 15: Bill 23 – DCA Changes in Force as of November 28, 2022



Section	Description
Section	DC by-laws passed on or after November 28, 2022 must be
5(6) and	phased-in according to a prescribed schedule. The phase-in
Section	also applies retroactively to by-laws passed on or after
5(7)	January 1, 2022 as well as to the DCs "frozen" under s.26.2 of the DCA.
Section	Maximum life of a DC by-law extended from 5 years to 10
9(1)	years. This does not apply to by-laws in-force before November 28, 2022.
Section	Deferral payments now apply to rental housing and
26.1	institutional development. Interest on deferral payments is
	now capped at prime plus 1% in accordance with s.26.3.
Section	DCs for rental housing development are now discounted
26.2	based on the number of bedrooms proposed. Interest on DC
	freeze now capped at prime plus 1% in accordance with section 26.3.
Section	Maximum interest rates are capped at prime plus 1%. This
26.3	does not apply with respect to a DC that was payable before
2000	November 28, 2022.
Section 35	Municipalities are now required to spend or allocate at least
	60% of reserve balances each year for Water Supply,
	Wastewater, and services related to a highway beginning in
	2023.
Section	Additional services for which municipalities are required to
60(1)(s.4)	spend or allocate at least 60% of reserve fund balances may
	be prescribed through Regulations (none are proposed as of
	yet).



Table 16 summarizes the DCA changes that will take effect at a date to be determined. It is noted that section 60(1)(I) of the DCA allows for future regulations to identify services for which land will be an ineligible capital cost. No regulations have been released in this regard.

Section	Description
DCA,	Exemptions for affordable and attainable residential units.
Section 4.1	Note: Implementation is contingent on the Minister developing a definition of "attainable residential unit" as well as bulletins to establish eligibility and (possibly) standard forms of agreement to assist with administration.
DCA,	Rules for front ending agreements as they relate to
Section	affordable and attainable residential units.
44(4)	
DCA,	Prescribes developments and criteria related to attainable
Section	residential units (section 4.1).
60(1)(d.2)	
and 9d.3)	

Table 16: Bill 23 – DCA Changes Not Currently In Force

C. Development Charges Administration

Many of the administrative requirements of the DCA will be similar to those presently followed by the Township in terms of collection practices. However, changes will likely be required in the use of and reporting on the new development charges. In this regard:

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



- As required under the DCA, the Township should codify any rules regarding application of the by-laws and any exemptions within the development charges by-laws proposed for adoption;
- It is recommended that the Township develop reporting policies consistent with the requirements of the DCA;
- It is recommended that the by-laws permit the payment of a development charge in cash or through services-in-lieu agreements. The municipality is not obligated to enter into services-in-lieu agreements;
- The proposed draft by-law sets out the rules to determine development charges applicable in any particular case. Rules for exemptions are also outlined in the proposed draft by-law;
- It is recommended that Council adopt the development-related capital forecast included in this background study, subject to annual review through the Township's normal capital budget process.

D. Local Service Definitions

The following provides the definition of "local service" under the DCA for a number of services provided by the Township. The purpose of establishing these definitions is to determine the eligible capital costs for inclusion in the development charges (DC) calculation for the Township. 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 responsibility under s. 59 of the DCA and will (or may) be recovered under other agreement(s) with the landowner or developmer. The issue of "local services" is specifically considered for the services of:

- Roads and Related Services
- Parkland Development and Tree Planting



1. Roads:

- Local roads and the local share of roads are not included in the DC calculation;
- Where a local road is oversized to accommodate needs external to the subject lands, the oversized share is to be included in the DC (such oversizing usually relates to collector roads but could conceivably represent a share of an arterial road).
- Alternatively, a road could be defined as a "local service" if it has a road allowance of 20 m or less and a pavement width of 10 m or less. It may have sidewalks and/or streetlights on one or both sides. Its primary function is to serve local traffic, to provide access to properties that front on it and to provide connections to major collector or arterial roads.

2. Parkland Development:

Local Services include:

- Park plan, including design and grading plans;
- Stripping, stockpiling, levelling, top soiling, seeding and storm water servicing, plus services to the lot line;
- Parkland dedication or cash-in-lieu;
- All other components are in the DC calculation, including parking, park furniture, signage, landscaping, walkways/trails, plus necessary fields, diamonds, playground equipment, lighting, irrigation and field houses.

3. Street Tree Planting:

• Street tree planting is a local service and direct developer responsibility.



E. Area-Rating Consideration

In accordance with the recent changes to s.10 (2) of the DCA, a development charge background study must give consideration for "the use of more than one development charge by-law to reflect different needs for services in different areas". Following consultation with Township staff and Council, it was determined that a municipal-wide approach continues to be most appropriate for the nature of the works and services provided in the Township, and as such, only a Township-wide charge has been proposed.

For all of the development charge eligible services that Mapleton provides, the full range of capital facilities, land, equipment and infrastructure is available throughout the Township. 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 Township.

The needs for servicing are outlined as follows:

i. General and Engineering Services

- Services such as Parks & Recreation are open and accessible to all residents in the Township and are driven and planned for based on Township-wide population growth.
- Fire Services, Services Related to a Highway: Public Works: Buildings and Fleet, and Development-Related Studies are provided to all residents and employees in the Township and are driven and planned for based on Township-wide population or population and employment growth.
- All engineered services, including Roads & Related, are provided through a Township-wide network and are planned based on Township-wide population and employment growth.



Appendix A Development Forecast



Development Forecast

This appendix summarizes the development forecasts used to prepare the Development Charges Background Study for the Township of Mapleton.

The Development Charges Act (DCA) requires the Township to estimate "the anticipated amount, type and location of development" for which development charges may be imposed. The forecast must cover both residential and non-residential development and be specific enough with regards to the quantum, type, location and timing of such development to allow the Township to prepare a reasonable development-related capital program.

The development forecasts are based on Statistics Canada data and County of Wellington allocations, which align with the Township's 2023 Mapleton Water and Wastewater Servicing Master Plan. The forecast results are presented in the following tables:

Historical Development

- A-1 Population, Occupied Dwellings, and Employment Summary
- A-2 Housing by Period of Construction Showing Household Size

Forecast Development

- A-3 Population, Dwelling, and Employment Growth
- A-4 Occupied Dwellings by Unit Type
- A-5 Population Growth in New Dwellings by Unit Type
- A-6 Place of Work Employment and Non-Residential Space

The forecasts are based on a range of statistical data including Statistics Canada Census and building permit data and Canada Mortgage Housing Corporation (CMHC) housing market information.



A. Key Assumptions, Definitions, and Historical Trends

Historical population and employment set out in this appendix are used to determine the average service levels attained in the Township over the last 15 years (2009-2023). Population figures shown in the development forecast represent mid-year estimates. Population figures account for the population recorded in the Census ("Census population"). This definition does not include the Census net under-coverage which represents those who were missed or double-counted by the Census.

Similarly, the forecasts of households and housing units account for both permanently occupied households and households that are occupied only part of the year, usually the summer months.

Historical data indicates the population of Mapleton increased from 9,906 in 2008 to 11,088 in 2023; an increase of 1,182 people. Total private dwellings increased by 420 dwellings, from 2,908 to 3,328, over the same.

"Place of Work Employment" figures in the forecasts record where people work rather than their place of residence. It includes employment with a regular or no fixed place of work. However, work-at-home employment is excluded from the figures as, for development charge purposes, this type of employment is considered not to require building floorspace for its activities.

Place of work data indicates that employment in Mapleton has increased by 664 jobs over the last 15 years, from 2,376 jobs in 2008 to 3,040 jobs in 2023.

Table 2 provides details on historical occupancy patterns for permanently occupied dwelling units in the Township of Mapleton. The overall average occupancy level in the Township for single and semi-detached units is 3.38 persons per housing unit (PPU). The overall historic PPU for Singles and Semis have been used, as the base forecast shows the PPU's declining over the forecast period; new units will still have higher occupancy than existing



units. PPU's for other unit types have been based on assumptions, as Mapleton historic sample size for other units too small.

B. Development Forecast Summary

A ten-year development forecast, from 2024 to 2033, has been used for all the development charge eligible services in the Township.

Residential Forecast

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

- The population growth¹ 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.

The residential development forecast incorporates anticipated growth in population and private dwellings by type. As shown in Table 3, the Township's total population is forecast to grow from 11,215 in 2024 to 12,256 in 2033, and to 14,692 in 2051.

In keeping with past trends, the majority of new housing (85%) is anticipated to be constructed as single detached dwelling units (see Table 4). Population growth in the new units is estimated by applying the following PPUs to the housing unit forecast: 3.80 for single and semi-detached units; 2.50 for rows; 1.70 for apartments (see Table 5).

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



Non-Residential Forecast

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

Approximately 80,300 square metres of new non-residential floor space is anticipated to be added over the 2024-2033 planning period, and approximately 170,482 square metres over the 2024-2051 planning period. An assumed floor space per worker (FSW) for each employment category is applied to the new floorspace forecast in order to establish the number of associated employees. An average assumption of 100m² per employee has been applied to the forecast (see Table 6).



APPENDIX A - TABLE 1 TOWNSHIP OF MAPLETON HISTORICAL POPULATION, OCCUPIED DWELLINGS AND EMPLOYMENT SUMMARY

Mid-Year	Census	Annual	Occupied	Household	PPU	Employment	Growth	Activity Rate
Wild-Teal	Population	Growth	Dwellings	Growth	110	by Place of Work	Growth	Activity Nate
2008	9,906	28	2,908	9	3.41	2,376	50	24.0%
2009	9,934	28	2,917	9	3.41	2,427	51	24.4%
2010	9,962	28	2,926	9	3.40	2,479	52	24.9%
2011	9,989	27	2,935	9	3.40	2,534	55	25.4%
2012	10,093	104	2,975	40	3.39	2,600	66	25.8%
2013	10,198	105	3,015	40	3.38	2,668	68	26.2%
2014	10,304	106	3,056	41	3.37	2,738	70	26.6%
2015	10,411	107	3,098	42	3.36	2,809	71	27.0%
2016	10,520	109	3,140	42	3.35	2,881	72	27.4%
2017	10,583	63	3,161	21	3.35	2,885	4	27.3%
2018	10,646	63	3,182	21	3.35	2,889	4	27.1%
2019	10,710	64	3,203	21	3.34	2,893	4	27.0%
2020	10,774	64	3,224	21	3.34	2,897	4	26.9%
2021	10,839	65	3,245	21	3.34	2,900	3	26.8%
2022	10,963	124	3,286	41	3.34	2,969	69	27.1%
2023	11,088	125	3,328	42	3.33	3,040	71	27.4%
Growth 2009 - 2023		1,182		420			664	

Source: Statistics Canada, Census of Canada



APPENDIX A - TABLE 2
TOWNSHIP OF MAPLETON
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE

Dwelling Unit Type	Period of Construction										Period of Construction Summaries			
Dweiling Unit Type	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	2016-2021	Pre 2011	2011-2021	Total
Singles and Semis														
Household Population	2,345	520	755	980	1,495	860	660	885	655	570	560	9,155	1,130	10,285
Households	700	175	220	330	460	250	190	250	175	160	135	2,750	295	3.045
Household Size	3.35	2.97	3.43	2.97	3.25	3.44	3.47	3.54	3.74	3.56	4.15	3.33	3.83	3.38
Rows														
Household Population	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Households	0	0	0 0	0	0	10	0	0	0	10	10	10	20	30
Household Size	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apartments (excl. Duplexes)														
Household Population	55	0	45	0	35	0	0	0	0	0	0	135	0	135
Households	40	0	25	0	30	10	10	10	0	0	10	125	10	135
Household Size	1.38	0.00	1.80	0.00	1.17	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	1.00
Duplexes														
Household Population	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Households	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Household Size	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All Units														
Household Population	2,400	520	800	980	1.530	860	660	885	655	570	560	9,290	1,130	10.420
Households	740	175	245	330	490	270	200	260	175	170	155	2,885	325	3,210
Household Size	3.24	2.97	3.27	2,97	3.12	3.19	3.30	3.40	3.74	3.35	3.61	3.22	3.48	3.25

Source: Statistics Canada, National Household Survey Special Run



APPENDIX A - TABLE 3 TOWNSHIP OF MAPLETON POPULATION, DWELLING, & EMPLOYMENT FORECAST SUMMARY

	Census	Census	Occupied	Total Dwelling	Household	Employment	Employment by	Activity
Mid-Year	Population	Population Growth	Dwellings	Growth	Size	by POW	POW Growth	Rate
2024	11,215	127	3,370	42	3.33	3,112	72	27.7%
2025	11,343	128	3,413	43	3.32	3,186	74	28.1%
2026	11,473	130	3,455	42	3.32	3,262	76	28.4%
2027	11,575	102	3,506	51	3.30	3,339	77	28.8%
2028	11,678	103	3,557	51	3.28	3,418	79	29.3%
2029	11,782	104	3,609	52	3.26	3,499	81	29.7%
2030	11,887	105	3,662	53	3.25	3,582	83	30.1%
2031	11,992	105	3,715	53	3.23	3,667	85	30.6%
2032	12,123	131	3,774	59	3.21	3,754	87	31.0%
2033	12,256	133	3,834	60	3.20	3,843	89	31.4%
2034	12,391	135	3,895	61	3.18	3,934	91	31.7%
2035	12,527	136	3,957	62	3.17	4,027	93	32.1%
2036	12,665	138	4,018	61	3.15	4,124	97	32.6%
2037	12,807	142	4,081	63	3.14	4,163	39	32.5%
2038	12,951	144	4,145	64	3.12	4,203	40	32.5%
2039	13,097	146	4,210	65	3.11	4,243	40	32.4%
2040	13,244	147	4,276	66	3.10	4,284	41	32.3%
2041	13,394	150	4,343	67	3.08	4,325	41	32.3%
2042	13,524	130	4,386	43	3.08	4,367	42	32.3%
2043	13,655	131	4,430	44	3.08	4,409	42	32.3%
2044	13,787	132	4,474	44	3.08	4,452	43	32.3%
2045	13,921	134	4,519	45	3.08	4,495	43	32.3%
2046	14,056	135	4,565	46	3.08	4,538	44	32.3%
2047	14,181	125	4,606	41	3.08	4,579	40	32.3%
2048	14,307	126	4,648	42	3.08	4,619	41	32.3%
2049	14,434	127	4,690	42	3.08	4,660	41	32.3%
2050	14,562	128	4,732	42	3.08	4,703	42	32.3%
2051	14,692	130	4,774	42	3.08	4,745	42	32.3%
2024 - 2033		1,168		506			803	
2024 - 2051		3,604		1,446			1,705	

Source: Hemson based on Statistics Canada data and County of Wellington allocations



APPENDIX A - TABLE 4 TOWNSHIP OF MAPLETON FORECAST OF DWELLING GROWTH BY UNIT TYPE

		Annual Growth in Tota	l Occupied Dwelli	Shares by Unit Type				
Mid-Year	Singles &	Rows &	Apartments	Total	Singles & Rows &		Apartments	Total
	Semis	Other Multiples	Apartments	New Dwellings	Semis	Other Multiples	Apartments	Total
2024	36	0	6	42	85%	1%	14%	100%
2025	37	0	6	43	85%	1%	14%	100%
2026	36	0	6	42	85%	1%	14%	100%
2027	43	1	7	51	85%	1%	14%	100%
2028	43	1	7	51	85%	1%	14%	100%
2029	44	1	7	52	85%	1%	14%	100%
2030	45	1	7	53	85%	1%	14%	100%
2031	45	1	7	53	85%	1%	14%	100%
2032	50	1	8	59	85%	1%	14%	100%
2033	51	1	8	60	85%	1%	14%	100%
2034	52	1	9	61	85%	1%	14%	100%
2035	53	1	9	62	85%	1%	14%	100%
2036	52	1	9	61	85%	1%	14%	100%
2037	54	1	9	63	85%	1%	14%	100%
2038	54	1	9	64	85%	1%	14%	100%
2039	55	1	9	65	85%	1%	14%	100%
2040	56	1	9	66	85%	1%	14%	100%
2041	57	1	9	67	85%	1%	14%	100%
2042	37	0	6	43	85%	1%	14%	100%
2043	37	0	6	44	85%	1%	14%	100%
2044	37	0	6	44	85%	1%	14%	100%
2045	38	0	6	45	85%	1%	14%	100%
2046	39	0	6	46	85%	1%	14%	100%
2047	35	0	6	41	85%	1%	14%	100%
2048	36	0	6	42	85%	1%	14%	100%
2049	36	0	6	42	85%	1%	14%	100%
2050	36	0	6	42	85%	1%	14%	100%
2051	36	0	6	42	85%	1%	14%	100%
2024 - 2033	430	5	71	506	85%	1%	14%	100%
2024 - 2051	1,229	14	202	1,446	85%	1%	14%	100%

Source: Hemson based on Statistics Canada data and County of Wellington allocations



APPENDIX A - TABLE 5 TOWNSHIP OF MAPLETON FORECAST POPULATION GROWTH IN NEW DWELLINGS BY UNIT TYPE*

Mid-Year	Singles &	Rows & Other	Aportmonto	Total Population i
wid-rear	Semis	Multiples	Apartments	New Dwellings
2024	136	1	10	147
2025	139	1	10	150
2026	136	1	10	147
2027	164	1	12	177
2028	165	1	12	178
2029	168	1	12	181
2030	171	1	13	185
2031	171	1	13	185
2032	190	1	14	205
2033	194	2	14	210
2034	197	2	15	214
2035	200	2	15	217
2036	196	2	14	212
2037	204	2	15	221
2038	207	2	15	224
2039	210	2	15	227
2040	213	2	16	231
2041	216	2	16	234
2042	140	1	10	151
2043	142	1	10	153
2044	142	1	10	153
2045	145	1	11	157
2046	147	1	11	159
2047	134	1	10	145
2048	136	1	10	147
2049	136	1	10	147
2050	136	1	10	147
2051	136	1	10	147
2024 - 2033	1,634	11	120	1,765
2024 - 2051	4,671	37	343	5,051

Source: Hemson based on Statistics Canada data



APPENDIX A - TABLE 6 TOWNSHIP OF MAPLETON PLACE OF WORK EMPLOYMENT & NON-RESIDENTIAL SPACE FORECAST

Average	sa.m.	per	emp	lovee:
	99	P • • •	•p	

100 m² per employee

	Place of Work	America Original	Employment in	Growth in Space
Mid-Year	Employment	Annual Growth	New Space	(m ²)
2024	3,112	72	72	7,200
2025	3,186	74	74	7,400
2026	3,262	76	76	7,600
2027	3,339	77	77	7,700
2028	3,418	79	79	7,900
2029	3,499	81	81	8,100
2030	3,582	83	83	8,300
2031	3,667	85	85	8,500
2032	3,754	87	87	8,700
2033	3,843	89	89	8,900
2034	3,934	91	91	9,100
2035	4,027	93	93	9,300
2036	4,124	97	97	9,661
2037	4,163	39	39	3,939
2038	4,203	40	40	4,000
2039	4,243	40	40	4,000
2040	4,284	41	41	4,100
2041	4,325	41	41	4,060
2042	4,367	42	42	4,200
2043	4,409	42	42	4,230
2044	4,452	43	43	4,262
2045	4,495	43	43	4,327
2046	4,538	44	44	4,351
2047	4,579	40	40	4,044
2048	4,619	41	41	4,068
2049	4,660	41	41	4,101
2050	4,703	42	42	4,233
2051	4,745	42	42	4,207
2024 - 2033	34,662	803	803	80,300
2024 - 2051	113,530	1,705	1,705	170,482

Source: Hemson based on Statistics Canada data and County of Wellington allocations



Appendix B General Services Technical Appendix



General Services Technical Appendix -Introduction and Overview

The following appendix provides the detailed analysis undertaken to establish the development charge rates for each of the General Services in the Township of Mapleton. Six services have been analysed as part of the Development Charges Background Study. Water and Wastewater Services are discussed in Appendix C. This appendix focuses on the the four general services:

Appendix B.1	Fire Protection
Appendix B.2	Parks and Recreation
Appendix B.3	Development-Related Studies
Appendix B.4	Services Related to a Highway

Every service, with the exception of Development Related Studies, contains a set of two tables. The tables provide the background data and analysis undertaken to arrive at the calculated development charge rates for that particular service. An overview of the content and purpose of each of the tables is given below.

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

Table 1 presents the data used to determine the 15-year historical service level. The DCA and O. Reg. 82/98 require that development charges be set at a level no higher than the average service level provided in the Township over the 15-year period immediately preceding the preparation of the background study, on a service-by-service basis. For the purpose of this study, the historical inventory period has been defined as 2009 to 2023.



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

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

There is also a requirement in the DCA to consider "excess capacity" within the Township's existing infrastructure that may be available to partially meet the future servicing requirements. If Council has expressed its intent before or at the time the capacity was created to recoup the cost of providing the capacity from new development, it is considered "committed excess capacity" under the DCA, and the associated capital cost is eligible for recovery. The development of the capital programs takes into consideration any available, or useable, servicing capacity within existing infrastructure.



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

B. Development Related Capital Program

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, Township master plans and capital budgets, Hemson Consulting, in collaboration with Township staff, have developed a development-related capital program which sets out the projects required to service anticipated growth for the 10-year period from 2024 to 2033. Township Council directed that this development charges background study be prepared on the basis of information on development-related capital costs that were presented to Council on February 27, 2024, and March 19, 2024.

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

Benefit to existing shares represent portions of costs that benefit existing residents of the Township. A replacement share occurs when a new facility will, at least in part, replace a facility that is demolished, redeployed or will otherwise not be available to serve its former function. The benefit to existing and replacement shares of the capital program are not deemed to be development-related and are therefore removed from the development charge calculation. The capital cost for these shares will require funding from non-development charge sources, typically property taxes or user fees.

The capital program less any replacement or benefit to existing shares, yields the net development-related capital program. Although deemed development-related, not all of the net development-related capital program may be recoverable from development charges in the period from 2024 to



2033. For some of the services, a portion of the capital program will service growth that will not occur until after 2033. This portion of the capital program is either deemed "pre-built" service capacity to be considered as committed excess capacity to be recovered under future development, or represents a service level increase. The capital costs associated with this "post-period" benefit is also removed from the development charge calculation.

The remaining portion of the net capital program represents the development-related cost that may be included in the development charge. In all cases, as required, this amount is equal to or less than the maximum allowable funding envelope as calculated on the final page of Table 1. The result is the development-related net capital cost that is eligible for recovery against growth over the period from 2024 to 2033.

Calculation of the Unadjusted Development Charge Rates

The section below the capital program displays the calculation of the development charge rates.

The first step when determining the development charge rate is to allocate the development-related net capital cost between the residential and nonresidential sectors. For the services of Fire Protection, Services Related to a Highway, and Development-Related Studies, the development-related costs have been apportioned as 69% residential and 31% non-residential. This apportionment is based on the anticipated shares of population growth in new units and employment growth over the 10-year forecast period.

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

The residential share of the 2024-2033 development charge-eligible costs are then divided by the forecast population growth in new units. This results in



the residential development charge per capita. The non-residential development-related net capital costs are divided by the forecast increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential GFA. The DCA permits the inclusion of interest on money borrowed to pay for the development-related capital program in the development charge calculation. However, given the uncertainty of the timing of projects in the program, a cashflow analysis of interest and financing requirements has not been undertaken.



Appendix B.1 Fire Protection



Fire Protection

The Mapleton Fire Department is responsible for the provision of fire protection services across the entire Township. The department currently operates two fire stations and 45 firefighters, officers, and chief. A Township-wide approach to the development charge calculation has been utilized.

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

The Fire services fifteen-year historical inventory of capital assets includes two fire stations, with a combined area of 14,000 square feet and a current value of \$5.9 million. The land area associated with the buildings is 1.4 hectares and is valued at \$933,100. Equipment adds another \$290,500 to the value of the inventory. Finally, the 12 Fire vehicles are valued at a total of \$6.3 million.

The 2024 full replacement value of the inventory of capital assets for Fire Services amounts to \$13.4 million and the 15-year historical average service level is \$976.27 per capita and employment. The historical service level multiplied by the 10-year forecast of net population and employment growth results in a 10-year maximum allowable funding envelope of \$1.9 million (1,971 net population and employment growth X historical service level of \$976.27/capita and employment). Table 1 provides a summary of the level of service and the calculation of the 10-year funding envelope from 2024 to 2033. The calculation of the maximum allowable funding envelope is summarized as follows:

15-Year Average Service Level (2009 – 2023)	\$976.27
Net Population & Employment Growth (2024 – 2033)	1,971
Maximum Allowable Funding Envelope	\$1,924,235

10-Year Funding Envelope Calculation



B. Development-Related Capital Program

The Fire Services capital program recovers for vehicles, equipment, and growth-related space for the Fire Department. This includes an ATV and Rescue Boat, Pickup Truck, Pumper, a provision for 5 additional equipped firefighters, and a provision for growth-related space. The total capital program has a gross cost of \$2.7 million.

No grants or subsidies are identified to help pay for the Fire capital program. Benefit to existing and replacement shares amounting to \$525,000 have been identified for the pickup truck and the pumper, as they are replacements with increased capacity. The remaining \$2.1 million is treated as a development-related cost.

Of this development-related cost, \$61,264 can be funded through the Township's existing Fire DC reserve fund. Another \$787,500 is considered is other development related, to be considered under future development charge studies, as the project may occur outside of the 10-year planning period. The remaining \$1.3 million is brought forward to the development charge calculation.

These costs are allocated 69%, or \$878,538, against residential development, and 31%, or \$399,698, against non-residential development. The allocation between residential and non-residential development is based on shares of forecasted growth in population in new units and employment. The resulting development charge is \$497.76 per capita for residential and \$4.98 per square metre for non-residential.

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



FIRE PROTECTION SERVICES SUMMARY

15-year Historical	202	4 - 2033	Calcu	llated
Service Level	Development Rel	ated Capital Program	Developm	ent Charge
Per Capita	Total	Net DC Recoverable	\$/capita	\$/sq.m.
\$976.27	\$2,652,000	\$1,278,236	\$497.76	\$4.98





TOWNSHIP OF MAPLETON INVENTORY OF CAPITAL ASSETS FIRE PROTECTION SERVICES

BUILDINGS							Nur	ber of Square	Feet							UNIT COST
Station Name	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/sq.ft.
Drayton Station	6,50	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	\$420
Moorefield Station	7,50	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	\$420
Total (sq.ft.)	14,00	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	
Total (\$000)	\$ 5,880.) \$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	\$ 5,880.0	

LAND								Nu	mber of Hecta	ires							UNIT COST
Station Name	200	09	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/ha
Drayton Station		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$682,000
Moorefield Station		1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	\$682,000
Total (hectares)		1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	
Total (\$000)	\$	933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	\$ 933.1	

VEHICLES							N	umber of Vehic	les							UNIT COST
Vehicle Type	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/vehicle
Tanker	2	2	2	3	3	3	3	4	4	4	4	4	4	4	4	\$680,000
Pumper	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$800,000
Rescue Van	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$525,000
Pick Up	-	-	1	1	1	1	1	1	1	1	1	1	1	2	2	\$75,000
Fire Safety House	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$25,000
Total (units)	8	8	9	10	10	10	10	11	11	11	11	11	11	12	12	
Total (\$000)	\$ 4,835.0	\$ 4,835.0	\$ 4,910.0	\$ 5,590.0	\$ 5,590.0	\$ 5,590.0	\$ 5,590.0	\$ 6,270.0	\$ 6,270.0	\$ 6,270.0	\$ 6,270.0	\$ 6,270.0	\$ 6,270.0	\$ 6,345.0	\$ 6,345.0	

EQUIPMENT										Nu	umber of Uni	its									UNIT COST
Equipment Type	2009	2010		2011	2012	2013		2014	2015		2016		2017	2018	201	9	2020	2021	2022	2023	\$/unit
Drayton Firefighters	20	2	0	20	20		20	20		23	21		23	21		21	20	20	20	20	\$6,800
Moorfield Firefighters	20	2	0	20	20		20	20		23	21		23	20		20	20	20	20	20	\$6,800
Auxillary Officers	4		4	4	4		4	4		4	4		4	4		4	4	4	4	4	\$3,700
Fire Chief	1		1	1	1		1	1		1	1		1	1		1	1	1	1	1	\$3,700
Total (units)	45	4	5	45	45		45	45		51	47		51	46		46	45	45	45	45	
Total (\$000)	\$ 290.5	\$ 290.	5 \$	290.5	\$ 290.5	\$ 29	0.5	\$ 290.5	\$ 331	L.3	\$ 304.1	\$	331.3	\$ 297.3	\$ 2	97.3	\$ 290.5	\$ 290.5	\$ 290.5 \$	290.5	



APPENDIX B.1 TABLE 1

TOWNSHIP OF MAPLETON CALCULATION OF SERVICE LEVELS FIRE PROTECTION SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historical Population	9,934	9,962	9,989	10,093	10,198	10,304	10,411	10,520	10,583	10,646	10,710	10,774	10,839	10,963	11,088
Historical Employment	2,427	2,479	2,534	2,600	2,668	2,738	2,809	2,881	2,885	2,889	2,893	2,897	2,900	2,969	3,040
Total Historical Population & Employment	12,361	12,441	12,523	12,693	12,866	13,042	13,220	13,401	13,468	13,535	13,603	13,671	13,739	13,932	14,128

INVENTORY SUMMARY (\$000)

Buildings	\$ 5,880.0	\$ 5,880.0	\$ 5,880.) \$	5,880.0	\$	5,880.0	\$ 5,880.0									
Land	\$ 933.1	\$ 933.1	\$ 933.	L \$	933.1	69	933.1	\$ 933.1									
Vehicles	\$ 4,835.0	\$ 4,835.0	\$ 4,910.) \$	5,590.0	69	5,590.0	\$ 5,590.0	\$ 5,590.0	\$ 6,270.0	\$ 6,270.0	\$ 6,270.0	\$ 6,270.0	\$ 6,270.0	\$ 6,270.0	\$ 6,345.0	\$ 6,345.0
Equipment	\$ 290.5	\$ 290.5	\$ 290.	5 \$	290.5	\$	290.5	\$ 290.5	\$ 331.3	\$ 304.1	\$ 331.3	\$ 297.3	\$ 297.3	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5
Total (\$000)	\$ 11,938.6	\$ 11,938.6	\$ 12,013.	5\$	12,693.6	\$	12,693.6	\$ 12,693.6	\$ 12,734.4	\$ 13,387.2	\$ 13,414.4	\$ 13,380.4	\$ 13,380.4	\$ 13,373.6	\$ 13,373.6	\$ 13,448.6	\$ 13,448.6

SERVICE LEVEL (\$/pop & emp)

																Level
Buildings	\$ 475.69	\$ 472.63	\$ 469.55	\$ 463.25	\$ 457.02	\$ 450.85	\$ 444.78	\$ 438.76	\$ 436.59	\$ 434.43	\$ 432.26	\$ 430.11	\$ 427.98	\$ 422.05	\$ 416.19	\$ 444.81
Land	\$ 75.49	\$ 75.01	\$ 74.52	\$ 73.52	\$ 72.53	\$ 71.55	\$ 70.59	\$ 69.63	\$ 69.29	\$ 68.94	\$ 68.60	\$ 68.26	\$ 67.92	\$ 66.98	\$ 66.05	\$ 70.59
Vehicles	\$ 391.15	\$ 388.63	\$ 392.09	\$ 440.40	\$ 434.48	\$ 428.62	\$ 422.84	\$ 467.87	\$ 465.55	\$ 463.24	\$ 460.93	\$ 458.64	\$ 456.37	\$ 455.43	\$ 449.11	\$ 438.36
Equipment	\$ 23.50	\$ 23.35	\$ 23.20	\$ 22.89	\$ 22.58	\$ 22.27	\$ 25.06	\$ 22.69	\$ 24.60	\$ 21.97	\$ 21.86	\$ 21.25	\$ 21.14	\$ 20.85	\$ 20.56	\$ 22.52
Total (#/pop & emp)	\$ 965.83	\$ 959.62	\$ 959.36	\$ 1,000.05	\$ 986.60	\$ 973.29	\$ 963.27	\$ 998.95	\$ 996.02	\$ 988.58	\$ 983.64	\$ 978.25	\$ 973.41	\$ 965.31	\$ 951.91	\$ 976.27

TOWNSHIP OF MAPLETON CALCULATION OF MAXIMUM ALLOWABLE FIRE PROTECTION SERVICES

15-Year Funding Envelope Calculation 15-Year Average Service Level 2009-2023 \$976.27 Net Population & Employment Growth 2024-2033 1,971 Maximum Allowable Funding Envelope \$1,924,235



Average

Service

APPENDIX B.1

TABLE 2

TOWNSHIP OF MAPLETON DEVELOPMENT-RELATED CAPITAL PROGRAM FIRE PROTECTION SERVICES

	T	Gr	'0SS	Grants/		Net	Ineligit	ole Co	sts		Total			DC E	ligible Costs	
Project Description	Timing	Pro	oject	Subsidies/Other	1	Municipal	BTE	Re	placement	D	C Eligible		Prior		2024 -	Post
		Co	ost	Recoveries		Cost	%	& E	BTE Shares		Costs	(Growth		2033	2033
1.0 FIRE PROTECTION SERVICES																
1.1 Vehicles																
1.1.1 ATV & Rescue Boat	1-5	\$	168,000	\$-	\$	168,000	0%	\$	-	\$	168,000	\$	61,264	\$	106,736	\$ -
1.1.2 Pickup Truck (Unit 2)	1-5	\$	75,000	\$ -	\$	75,000	60%	\$	45,000	\$	30,000.0	\$	-	\$	30,000	\$ -
1.1.3 Pumper	1-5	\$	800,000	\$ -	\$	800,000	60%	\$	480,000	\$	320,000.0	\$	-	\$	320,000	\$ -
Subtotal Vehicles		\$1,	,043,000	\$ -	\$	1,043,000		\$	525,000	\$	518,000	\$	61,264	\$	456,736	\$ -
1.2 Fire Equipment																
1.2.1 Provision for Additional Equipped Firefighters (5)	Various	\$	34,000	\$ -	\$	34,000	0%	\$	-	\$	34,000	\$	-	\$	34,000	\$ -
Subtotal Fire Equipment		\$	34,000	\$ -	\$	34,000		\$	-	\$	34,000	\$	-	\$	34,000	\$ -
1.3 Other																
1.3.1 Provision for Growth-Related Space (3,750 sq.ft.)	6-10	<u>\$</u> 1,	,575,000	\$ -	\$	1,575,000	0%	\$	-	\$	1,575,000	\$	-	\$	787,500	\$ 787,500
Subtotal Other		\$1,	,575,000	\$ -	\$	1,575,000		\$	-	\$	1,575,000	\$	-	\$	787,500	\$ 787,500
TOTAL FIRE PROTECTION SERVICES		\$2,	,652,000	\$-	\$	2,652,000		\$	525,000	\$	2,127,000	\$	61,264	\$	1,278,236	\$ 787,500

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	69%	\$878,538
10-Year Growth Population in New Units		1,765
Unadjusted Development Charge Per Capita		\$497.76
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2033 DC Eligible Costs	31%	\$399,698
10-Year Growth in Square Metres		80,300
Unadjusted Development Charge Per Square Metre		\$4.98

2024 - 2033 Net Funding Envelope	\$ 1,924,235
Uncommitted Reserve Fund Balance Balance as at December 31, 2023	\$ 61,264



Appendix B.2 Parks and Recreation



Parks and Recreation

The Township of Mapleton Parks and Recreation department provides indoor and outdoor services at a number of facilities, parks, trails, playgrounds, and other spaces. All residents have access to all facilities. A Township-wide approach has been used when calculating the development charge for Parks and Recreation services.

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

Table 1 displays the Parks and Recreation 15-year historical inventory for buildings, land, furniture and equipment, and various parks, fields, amenities, and fleet. The building space associated with indoor recreation facilities amounts to 63,222 square feet, valued at \$15.0 million. The land associated with the buildings amount to 9.4 hectares, and is valued at \$6.4 million. Furniture and equipment associated with the indoor recreation facilities has a total value of \$948,300.

Parks in the Township totals 32.7 hectares, and has an estimated replacement value of \$4.9 million (excluding land acquisition costs). The Township also has four park trails, valued at \$220,100, and a number of parks, amenities, fields, courts, and other facilities, valued at \$2.7 million. Finally, the 15 units of parks fleet total \$452,000.

The 2024 full replacement value of the inventory of capital assets for Parks and Recreation amounts to \$30.6 million, and this yields an average service level of \$2,850.95 per capita.

The historical service level multiplied by the 10-year forecast of net population growth results in a 10-year maximum allowable funding envelope of \$3.3 million (1,168 net population growth X historical service level of \$2,850.95/capita). Table 1 provides a summary of the level of service and



the calculation of the 10-year funding envelope from 2024 to 2033. The calculation of the maximum allowable funding envelope is summarized as follows:

Maximum Allowable Funding Envelope	\$3,329,911
Net Population Growth (2024 – 2033)	1,168
15-Year Average Service Level (2009 – 2023)	\$2,850.95

10-Year Funding Envelope Calculation

B. Development-Related Capital Program

The 2024-2033 development-related capital program for Parks and Recreation amounts to \$13.4 million. It includes provision for growth related space and associated furniture and equipment as well as provisions for trail expansion, various park facilities, park amenities, and signage for parks.

Approximately \$37,500 in grants have been identified for the trail expansion over the planning period. An additional 50% (\$71,250) benefit to existing share has been idenitifed for the trail expansion, as it will include for improving the existing trail system.

The Township is actively developing a plan to expand its indoor recreation facilities, in part to maintain service levels for its growing community. Accordingly, a provision for a \$12.9 million recreation facility has been included in the capital program. A 78% (\$10.1 million) benefit to existing share has been identified for this growth related space provision, as it is anticipated that any new facility will in large part replace existing indoor recreation space. The \$2.8 million growth-related share, which represents additional space of 3,800 sq.ft., has been included in the DC recoverable costs.

Parks and Recreation reserve funds in the amount of \$307,802 are available to fund the development-related costs. The 2024-2033 DC-eligible cost of



\$2.9 million is allocated entirely against future residential development in the Township. This results in a development charge of \$1,636.55 per capita.

The following table summarizes the calculation of the Parks and Recreation development charge:

	PARKS AN	D RECREATION SUMM	ARY	
15-year Historical	202	4 - 2033	Calcu	lated
Service Level	Development Rel	ated Capital Program	Developme	ent Charge
Per Capita	Total	Net DC Recoverable	\$/capita	\$/sq.m.
\$2,850.95	\$13,355,710	\$2,888,507	\$1,636.55	\$0.00



TOWNSHIP OF MAPLETON INVENTORY OF CAPITAL ASSETS PARKS AND RECREATION INDOOR RECREATION

BUILDINGS							Nur	nber of Square F	eet							UNIT COST
Facility Name	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/sq.ft.
Community Hall/Arena - Drayton	34,941	34,941	34,941	34,941	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	\$26
Mayborough Community Centre	7,348	7,348	7,348	7,348	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	\$21
Drayton Parks Shop (58 Woods St)	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	\$10
Storage Building (Optimist Hall)	2,796	2,796	2,796	2,796	2,200	2,200	2,200	2,200	2,200	2,200	2,200	-	-	-	-	\$6
Alma Community Centre	-	-	8,522	8,522	8,522	8,522	8,522	8,522	8,522	8,522	8,522	8,522	8,522	8,522	8,522	\$22
Drayton Festival Theatre	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	\$21
Total (sq.ft.)	52,585	52,585	61,107	61,107	65,422	65,422	65,422	65,422	65,422	65,422	65,422	63,222	63,222	63,222	63,222	
Total (\$000)	\$ 12,040.5	\$ 12,040.5	\$ 13,915.3	\$ 13,915.3	\$ 15,163.8	\$ 15,163.8	\$ 15,163.8	\$ 15,163.8	\$ 15,163.8	\$ 15,163.8	\$ 15,163.8	\$ 15,031.8	\$ 15,031.8	\$ 15,031.8	\$ 15,031.8	

LAND							N	umber of Hectar	es							UNIT COST
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/ha
Community Hall/Arena - Drayton	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	\$682,000
Mayborough Community Centre	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	\$682,000
Drayton Parks Shop (58 Woods St)	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$682,000
Storage Building (Optimist Hall)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	-	-	-	-	\$682,000
Alma Community Centre	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	\$682,000
Drayton Festival Theatre	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$682,000
Total (hectares)	9.65	9.65	9.65	9.65	9.65	9.65	9.65	9.65	9.65	9.65	9.65	9.35	9.35	9.35	9.35	1
Total (\$000)	\$ 6,579.1	\$ 6,579.1	\$ 6,579.1	\$ 6,579.1	\$ 6,579.1	\$ 6,579.1	\$ 6,579.1	\$ 6,579.1	\$ 6,579.1	\$ 6,579.1	\$ 6,579.1	\$ 6,374.5	\$ 6,374.5	\$ 6,374.5	\$ 6,374.5	

FURNITURE AND EQUIPMENT								Tot	tal Value	of Fi	urniture and	Equi	ipment						
Facility Name	2009	2010		2011	2012	2013	2014	20	015		2016		2017	2018	2019	2020	2021	2022	2023
Community Hall/Arena - Drayton	\$ 524,115	\$ 524,115	\$	524,115	\$ 524,115	\$ 600,000	\$ 600,000	\$	600,000	\$	600,000	\$	600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000
Mayborough Community Centre	\$ 110,220	\$ 110,220	69	110,220	\$ 110,220	\$ 108,000	\$ 108,000	\$	108,000	\$	108,000	\$	108,000	\$ 108,000	\$ 108,000	\$ 108,000	\$ 108,000	\$ 108,000	\$ 108,000
Drayton Parks Shop (58 Woods St)	\$ 45,000	\$ 45,000	\$	45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$	45,000	\$	45,000	\$	45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000
Storage Building (Optimist Hall)	\$ 41,940	\$ 41,940	\$	41,940	\$ 41,940	\$ 33,000	\$ 33,000	\$	33,000	\$	33,000	\$	33,000	\$ 33,000	\$ 33,000	\$ -	\$ -	\$ -	\$ -
Alma Community Centre	\$ -	\$ -	\$	127,830	\$ 127,830	\$ 127,830	\$ 127,830	\$	127,830	\$	127,830	\$	127,830	\$ 127,830	\$ 127,830	\$ 127,830	\$ 127,830	\$ 127,830	\$ 127,830
Drayton Festival Theatre	\$ 67,500	\$ 67,500	\$	67,500	\$ 67,500	\$ 67,500	\$ 67,500	\$	67,500	\$	67,500	\$	67,500	\$ 67,500	\$ 67,500	\$ 67,500	\$ 67,500	\$ 67,500	\$ 67,500
Total (\$000)	\$ 788.8	\$ 788.8	\$	916.6	\$ 916.6	\$ 981.3	\$ 981.3	\$	981.3	\$	981.3	\$	981.3	\$ 981.3	\$ 981.3	\$ 948.3	\$ 948.3	\$ 948.3	\$ 948.3



TOWNSHIP OF MAPLETON INVENTORY OF CAPITAL ASSETS PARKS AND RECREATION PARK DEVELOPMENT AND AMENITIES

PARKS							Nu	mber of Hecta	ares							UNIT COST
Park Name	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/ha
ABC Park	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	\$84,200
Centennial Park	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	\$29,300
Drayton Sportfield	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	\$168,100
Glen Allan Park	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$9,300
Kinsmen Park	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	\$29,300
Memorial Park	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,400
Moorefield Ball Park	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	\$175,100
Rothsay Optimist Park	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$2,000
Wallace Cummings Park	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	\$209,500
River side Park (Partly owned by Grand River Conservation)	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	\$79,700
Rotary Park	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	\$52,100
Wellington Trail	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	\$173,300
Total (hectares)	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	
Total (\$000)	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	\$ 4,920.8	

PARK TRAILS											Per Unit										UNIT COST
Description	2009)	2010	2011	2	2012	2013		2014	2015	2016	2017	2018	2019)	2020	2021		2022	2023	\$/unit
Wallace Cummings Park (1km Walking Trail and Boardwalk)		1	1	1		1		1	1	1	1	1	1		1	1	1		1		1 \$60,000
Moorefield Ball Park (5km Mulch Walking Trail)		1	1	1		1		1	1	1	1	1	1		1	1	1		1		1 \$31,310
Riverside Park (Walking Trail)		1	1	1		1		1	1	1	1	1	1		1	1	1		1		1 \$28,800
Wellington Trail (Walking Trail)		1	1	1		1		1	1	1	1	1	1		1	1	1		1		1 \$100,000
Total (units)		4	4	4		4		1	4	4	4	4	4		4	4	4	L.	4		4
Total (\$000)	\$ 22	0.1 \$	\$ 220.1	\$ 220.1	\$	220.1	\$ 220.	L \$	220.1	\$ 220.1	\$ 220.1	\$ 220.1 \$	220.1	\$ 22	0.1	\$ 220.1	\$ 220.1	\$	220.1	\$ 220	1



TOWNSHIP OF MAPLETON INVENTORY OF CAPITAL ASSETS PARKS AND RECREATION PARK DEVELOPMENT AND AMENITIES

PLAYGROUNDS, SPLASH PADS, AND SKATEBOARD PARKS											Per Unit									UNIT COST
Description	2009	2	2010	2011	2012	!	2013	2014		2015	2016	2017	2018		2019	2020	2021	2022	2023	\$/unit
Accessible Playgrounds																				
ABC Park		2	2	2		2	2		2	2	2	2		2	2	2	2	2	2	\$50,000
Glen Allan Park		1	1	1		1	1		1	1	1	1		1	1	1	1	1	1	\$50,000
Kingsmen Park		1	1	1		1	1		1	1	1	1		1	1	1	1	1	1	\$50,000
Moorefield Ball Park		1	1	1		1	1		1	1	1	1		1	1	1	1	1	1	\$100,000
Rothsay Optimist Park	-		-	-		-	-			2	2	2		2	2	2	2	2	2	\$50,000
Wallace Cummings Park		4	4	4		4	4		4	4	4	4		4	5	5	5	5	5	\$30,000
Rotary Park	-		-	-		-	-			-	-	-			-	-	-	1	1	\$200,000
Non-Accessible Playgrounds																				
ABC Park		1	1	1		1	1		1	1	1	1		1	1	1	1	1	1	\$20,000
Kinsmen Park		1	1	1		1	1		1	1	1	1		1	1	1	1	1	1	\$20,000
Moorefield Ball Park		1	1	1		1	1		1	1	1	1		1	1	1	1	1	1	\$30,000
Skateboard Park														-						
Drayton Sportfield	-		-	-		-	-			-	1	1		1	1	1	1	1	1	\$93,700
SPLASH PADS																				
ABC Park	-		-	-		-	-			-	-	-		1	1	1	1	1	1	\$281,200
Total (units)	1	2	12	12		12	12		12	14	15	15		16	17	17	17	18	18	
Total (\$000)	\$ 490	0\$	490.0	\$ 490.0	\$ 49	0.0	\$ 490.0	\$ 49	0.0	\$ 590.0	\$ 683.7	\$ 683.7	\$ 96	4.9 \$	\$ 994.9	\$ 994.9	\$ 994.9	\$ 1,194.9	\$ 1,194.9	1

SPORTS FIELDS AND COURTS									Per Unit								UNIT COST
Description	20	009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/unit
Baseball Diamonds																	
Drayton Sportfield		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$250,000
Moorefield Ball Park		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$100,000
Batting Cages																	-
Drayton Sportfield		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$20,000
Basketball Courts																	
Drayton Sportfield		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$20,000
Rothsay Optimist Park		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$20,000
Beach Volleyball Court																	-
Wallace Cummings Park		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$10,000
Frisbee Golf Course																	-
Wallace Cummings Park		-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	\$50,000
Cenotaph																	+
Memorial Park		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$50,000
Total (units)		9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	
Total (\$000)	\$	820.0	\$ 820.0	\$ 820.0	\$ 820.0	\$ 820.0	\$ 820.0	\$ 820.0	\$ 820.0	\$ 820.0	\$ 870.0	\$ 870.0	\$ 870.0	\$ 870.0	\$ 870.0	\$ 870.0	1



TOWNSHIP OF MAPLETON INVENTORY OF CAPITAL ASSETS PARKS AND RECREATION PARK DEVELOPMENT AND AMENITIES

OTHER								Per Unit								UNIT COST
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/unit
Gazebo (with sitting area)																
ABC Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$10,000
Picnic Shelters																
ABC Park	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	\$20,000
Centennial Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$49,490
Glen Allan Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$35,040
Kinsmen Park	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$30,000
Moorefield Ball Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$35,350
Wallace Cummings Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$96,720
Washroom Facilities																
ABC Park	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	\$25,000
Drayton Sportfield	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$50,000
Moorefield Ball Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$138,000
Concession Booths																
Drayton Sportfield	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$50,000
Moorefield Ball Park	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$63,630
Storage Building Boy Scouts																
Drayton Sportfield	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$10,800
Total (units)	10	10	10	10	10	10	10	10	10	10	11	12	13	13	12	
Total (\$000)	\$ 539.0	\$ 539.0	\$ 539.0	\$ 539.0	\$ 539.0	\$ 539.0	\$ 539.0	\$ 539.0	\$ 539.0	\$ 539.0	\$ 559.0	\$ 589.0	\$ 614.0	\$ 614.0	\$ 589.0	1

VEHICLES AND EQUIPMENT									Per Unit								UNIT COST
Description	200)9	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/sq.ft.
Tractor		-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	\$55,000
Olympia						1	1	1	1	1	1	1	1	1	1		\$300,000
Pick Up (0.75 Ton)		-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	\$60,000
Mowers		3	4	4	4	5	5	5	5	5	6	6	6	6	6	6	\$27,000
Trailers		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$10,000
1 Ton Truck		-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	\$100,000
Aerator		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$15,000
Rotary Tiller		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$15,000
Roller		-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	\$15,000
Drag Box		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$10,000
Diamond Groomer		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$10,000
Total (units)		8	9	9	10	14	14	15	15	15	16	16	16	16	16	15	
Total (\$000)	\$ 1	41.0	\$ 168.0	\$ 168.0	\$ 183.0	\$ 625.0	\$ 625.0	\$ 725.0	\$ 725.0	\$ 725.0	\$ 752.0	\$ 752.0	\$ 752.0	\$ 752.0	\$ 752.0	\$ 452.0	1

APPENDIX B.2

TABLE 1

TOWNSHIP OF MAPLETON CALCULATION OF SERVICE LEVELS PARKS AND RECREATION

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historical Population	9,934	9,962	9,989	10,093	10,198	10,304	10,411	10,520	10,583	10,646	10,710	10,774	10,839	10,963	11,088

INVENTORY SUMMARY (\$000)

Indoor Recreation	\$ 19,408	\$ 19,408	\$ 21,411	\$ 21,411	\$ 22,724	\$ 22,724	\$ 22,724	\$ 22,724	\$ 22,724	\$ 22,724	\$ 2	2,724	\$ 22,355	\$ 22,355	\$ 22,355	\$ 22,355
Park Development And Amenities	\$ 7,131	\$ 7,158	\$ 7,158	\$ 7,173	\$ 7,615	\$ 7,615	\$ 7,815	\$ 7,909	\$ 7,909	\$ 8,267	\$	8,317	\$ 8,347	\$ 8,372	\$ 8,572	\$ 8,247
Total (\$000)	\$ 26,539	\$ 26,566	\$ 28,569	\$ 28,584	\$ 30,339	\$ 30,339	\$ 30,539	\$ 30,633	\$ 30,633	\$ 30,991	\$ 3	1,041	\$ 30,701	\$ 30,726	\$ 30,926	\$ 30,601

SERVICE LEVEL (\$/CAPITA)

Average Service

Level

Total (\$000)	\$ 3	2,671.56	\$ 2,666.76	\$ 2,860.04	1\$	\$ 2,832.06	\$2	,975.01	\$ 2,944.41	\$ 2,933.36	\$ 2,91	l.87	\$ 2,894.54	\$ 2	2,911.06	\$ 2,8	98.33	\$ 2,	849.59	\$ 2,834.81	\$ 2,820.99	\$ 2	,759.88	\$ 2,850.9
Park Development And Amenities	\$	717.8	\$ 718.5	\$ 716.6	6 \$	5 710.7	\$	746.7	\$ 739.0	\$ 750.6	\$ 7	51.8	\$ 747.3	\$	776.5	\$	776.5	\$	774.7	\$ 772.4	\$ 781.9	\$	743.8	\$ 748.
Indoor Recreation	\$	1,953.7	\$ 1,948.2	\$ 2,143.5	5\$	5 2,121.4	\$	2,228.3	\$ 2,205.4	\$ 2,182.7	\$ 2,1	60.1	\$ 2,147.2	\$	2,134.5	\$ 2	121.8	\$ 3	2,074.9	\$ 2,062.4	\$ 2,039.1	\$	2,016.1	\$ 2,102.

TOWNSHIP OF MAPLETON

CALCULATION OF MAXIMUM ALLOWABLE

PARKS AND RECREATION

15-Year Funding Envelope Calculation	
15-Year Average Service Level 2009-2023	\$2,850.95
Net Population Growth 2024-2033	1,168
Maximum Allowable Funding Envelope	\$3,329,911



APPENDIX B.2

TABLE 2

TOWNSHIP OF MAPLETON DEVELOPMENT-RELATED CAPITAL PROGRAM PARKS AND RECREATION

			Gross	Grants/		Net	Ineligib	le Costs	Total		DC E	Eligible Costs	
Project Des	cription	Timing	Project	Subsidies/Oth	ər M	lunicipal	BTE	Replacement	DC Eligible	Prior		2024 -	Post
			Cost	Recoveries		Cost	%	& BTE Shares	Costs	Growth		2033	2033
2.0 PARKS AND	DRECREATION												
2.1 Indoo	or Recreation												
2.1.1	Provision for Growth-Related Space	1-10	\$ 12,882,960	\$ -	\$	12,882,960	78%	\$ 10,050,651	\$ 2,832,309	\$ 142,802	\$	2,689,507	\$ -
2.1.2	Provision for Growth-Related Space: Furniture & Equipment	1-10	\$ 57,000	\$ -	\$	57,000	0%	\$ -	\$ 57,000	\$ -	\$	57,000	\$ -
	Subtotal Indoor Recreation		\$ 12,882,960	\$ -	\$	12,882,960		\$ 10,050,651	\$ 2,832,309	\$ 142,802	\$	2,689,507	\$ -
2.2 Parkl	and Development												
2.2.1	Trail Expansion	1-10	\$ 180,000	\$ 37,50	0 \$	142,500	50%	\$ 71,250	\$ 71,250	<u>\$</u> -	\$	71,250	\$ -
	Subtotal Parkland Development		\$ 180,000	\$ 37,50	0 \$	142,500		\$ 71,250	\$ 71,250	\$ -	\$	71,250	\$ -
2.3 Parks	s Facilities												
2.3.1	Wallace Cummings Park - Park Furnishings	6-10	\$ 10,000	\$ -	\$	10,000	0%	\$ -	\$ 10,000	\$ -	\$	10,000	\$ -
2.3.2	PMD Arena - Outdoor Free Form Rink	6-10	\$ 50,000	\$ -	\$	50,000	0%	\$ -	\$ 50,000	\$ -	\$	50,000	\$ -
2.3.3	Drayton & Riverside Park Walking Trail - Additional Amenities	6-10	\$ 10,750	\$ -	\$	10,750	0%	\$ -	\$ 10,750	\$ -	\$	10,750	\$ -
	Subtotal Parks Facilities		\$ 70,750	\$ -	\$	70,750		\$-	\$ 70,750	\$-	\$	70,750	\$ -
2.4 Parks	s Amenities												
2.4.1	New Playground Equipment	1-5	\$ 45,000	\$ -	\$	45,000	0%	\$ -	\$ 45,000	\$ 45,000	\$	-	\$ -
2.4.2	Rotary Park Lookout	1-5	\$ 100,000	\$ -	\$	100,000	0%	\$ -	\$ 100,000	\$ 100,000	\$	-	\$ -
	Subtotal Parks Amenities		\$ 145,000	\$ -	\$	145,000		\$-	\$ 145,000	\$ 145,000	\$	-	\$ -
2.5 Other	r												
2.5.1	Signage to Parks, Sportsfields, and Trails	1-5	\$ 20,000	\$ -	\$	20,000	0%	\$ -	\$ 20,000	\$ 20,000	\$	-	\$ -
	Subtotal Other		\$ 20,000	\$ -	\$	20,000		\$-	\$ 20,000	\$ 20,000	\$	-	\$ -
TOTAL PAR	RKS AND RECREATION		\$ 13,355,710	\$ 37,50	0 \$ 1	13,318,210		\$ 10,121,901	\$ 3,196,309	\$ 307,802	\$	2,888,507	\$ -

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	100%	\$2,888,507
10-Year Growth Population in New Units		1,765
Unadjusted Development Charge Per Capita		\$1,636.55
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2033 DC Eligible Costs	0%	\$0.00
10-Year Growth in Square Metres		80,300
Unadjusted Development Charge Per Square Metre		\$0.00

2024 - 2033 Net Funding Envelope	\$ 3,329,911
Uncommitted Reserve Fund Balance Balance as at December 31, 2023	\$ 307,802



Appendix B.3

Development-Related Studies



Development-Related Studies

On December 13, 2023, the Minister of Municipal Affairs and Housing committed to consultation on potential changes to the DCA, including the reintroduction of development-related studies as a DC-eligible capital cost. The proposed legislation Cutting Red Tape to Build More Homes Act, 2024, released on April 10, 2024, confirmed this change to the DCA. In anticipation of the proposed legislation receiving Royal Assent, a Development Related Studies capital program has been included in this DC Background Study.

A. 2024-2033 Development Related Capital Program

The 2024–2033 development-related capital program for Studies is \$380,000 and makes provision for updated Development Charge Studies, General Service Master Servicing Plans, an Official Plan update, and a Zoning Bylaw Update.

A benefit to existing share of \$90,000 has been identified and removed from the net municipal costs. The DC recoverable share amounts to \$290,000.

The \$21,245 available in the Development-Related Studies DC reserve fund has been applied to the DC eligible total. The remaining \$268,755 is related to growth between 2024 and 2033, and is allocated against future residential and non-residential development in the Township. This results in development charges of \$104.66 per capita and \$1.05 per square metre respectively.

The following table summarizes the calculation of the Development-Related Studies development charge:

DEV	ELOPMENT-RELATED S		
202	24 - 2033	Calcu	lated
Development Re	elated Capital Program	Developme	ent Charge
Total	Net DC Recoverable	\$/capita	\$/sq.m.
\$380,000	\$268,755	\$104.66	\$1.05



APPENDIX B.3

TABLE 1

TOWNSHIP OF MAPLETON DEVELOPMENT-RELATED CAPITAL PROGRAM DEVELOPMENT-RELATED STUDIES

		Gros	SS	Grants/		Net	Inelig	ible Cost	s	Total			DC Eli	gible Costs		
Project Description	Timing	Proje	ect	Subsidies/Oth	er	Municipal	BTE	Repla	acement	DC Eligible		Prior	2	2024 -	Р	ost
		Cos	st	Recoveries		Cost	%	& BT	E Shares	Costs		Growth		2033	2	033
3.0 DEVELOPMENT-RELATED STUDIES																
3.1 Studies																
3.1.1 Development Charges Study (2028/29)	1-5	\$	50,000	\$-	\$	50,000	0%	\$	-	\$ 50,00	0 \$	21,245	\$	28,755	\$	-
3.1.2 Development Charges Study (2033/34)	6-10	\$	50,000	\$-	\$	50,000	0%	\$	-	\$ 50,00	0 \$	-	\$	50,000	\$	-
3.1.3 General Service Master Servicing Plans	Various	\$ 10	100,000	\$-	\$	100,000	0%	\$	-	\$ 100,00	0 \$	-	\$	100,000	\$	-
3.1.4 Official Plan Update	Various	\$ 10	100,000	\$ -	\$	100,000	50%	\$	50,000	\$ 50,00	0 \$	-	\$	50,000	\$	-
3.1.5 Zoning Bylaw Update	Various	\$ 8	80,000	\$ -	\$	80,000	50%	\$	40,000	\$ 40,00	0 \$	-	\$	40,000	\$	-
Subtotal Studies		\$ 38	380,000	\$ -	\$	380,000		\$	90,000	\$ 290,00	0 \$	21,245	\$	268,755	\$	-
TOTAL DEVELOPMENT-RELATED STUDIES		\$ 38	80,000	\$-	\$	380,000		\$	90,000	\$ 290,00	0\$	21,245	\$	268,755	\$	-

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	69%	\$184,717
10-Year Growth Population in New Units		1,765
Unadjusted Development Charge Per Capita		\$104.66
Non-Residential Development Charge Calculation		
Non-Residential Share of 2023 - 2032 DC Eligible Costs	31%	\$84,038
10-Year Growth in Square Metres		80,300
Unadjusted Development Charge Per Square Metre		\$1.05

Uncommitted Reserve Fund Balance \$ 21,245 Balance as at December 31, 2023



Appendix B.4

Services Related to a Highway



Services Related to a Highway: Roads and Related, Public Works, and Fleet

The Township's Public Works Department is responsible for the operation and maintenance of Township infrastructure, including public works buildings, fleet, and equipment, as well as roads and related infrastructure. A Township-wide approach has been used to calculate the development charges for these Services Related to a Highway.

The cost, quantum and timing of projects identified in the developmentrelated capital program for Services Related to a Highway have been developed in consultation with Township staff.

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

The 15-year historical inventory of capital assets for Public Works includes 41,854 square feet of building space, valued at a total of \$8.9 million. This includes various public works buildings, garages, and domes. Land associated with Public Works facilities, totalling 2.7 hectares, is valued at \$1.8 million. Finally, the Township's Public Works fleet and equipment is valued \$10.2 million.

The roads and related infrastructure 15-year historical inventory of capital assets includes 376 kilometres of roadway, 316 bridges and culverts, 18,086 metres of sidewalks, and 522 streetlights, with a current replacement value of \$412.1 million.

The total inventory of capital assets for the Services Related to a Highway has a full replacement value of \$433.0 million. This results in a 15-year historical service level of \$32,486.87 per capita and employee. The resulting



maximum allowable funding envelope is \$64.0 million (\$32,486.87 x 1,971 net population and employment growth over the 10-year planning horizon).

Table 1 summarizes the level of service and the calculation of the 10-year funding envelope from 2024 to 2033. The calculation of the maximum allowable funding envelope is summarized as follows:

10-Year Funding Envelope Calculation

15-Year Average Service Level (2009 – 2023)	\$32,486.87
Net Population & Employment Growth (2024 – 2033)	1,971
Maximum Allowable Funding Envelope	\$64,031,620

B. Development-Related Capital Program

Table 2 summarizes the development-related capital program for Services Related to a Highway. The program totals \$44.0 million and includes roads and related projects that benefit development across the Township. The projects include township-wide roads and sidewalks, bridges and culverts, and a provision for additional growth-related public works fleet.

No grants or subsidies have been identified to fund the projects. A significant benefit to existing share of \$38.4 million, associated with the roads, sidewalks, bridges and culverts, has been and removed from the development charge calculation, as the projects will benefit existing infrastructure. The remaining \$5.6 million is treated as a development-related cost. Services Related to a Highway reserve funds in the amount of \$669,781 are available to fund the development-related cost.

The 2024-2033 DC-eligible cost of \$4.9 million is allocated against future residential and non-residential development in the Township.The full development-related cost is allocated 69%, or \$3.4 million, against residential development, and 31%, or \$1.5 million against non-residential development. The allocation between residential and non-residential



development is based on shares of forecasted growth in population in new units and employment. The resulting development charge is \$1,922.32 per capita for the residential sector, and \$19.22 per square metre for the nonresidential sector.

The following table summarizes the calculation of the Services Related to a Highway development charge:

	SERVICES RELA	ATED TO A HIGHWAY S	UMMARY	
15-year Historical		4 - 2033	Calcu	lated
Service Level	Development Rel	ated Capital Program	Developme	ent Charge
Per Capita	Total	Net DC Recoverable	\$/capita	\$/sq.m.
\$32,486.87	\$44,000,000	\$4,936,530	\$1,922.32	\$19.22



TOWNSHIP OF MAPLETON INVENTORY OF CAPITAL ASSETS SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS

BUILDINGS							Numl	ber of Square	e Feet							UNIT COST
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/sq.ft.
Maintenance Building	12,960	12,960	12,960	12,960	12,960	12,960	12,960	30,204	30,204	30,204	30,204	30,204	30,204	30,204	30,204	\$248
Bldg-30 - Shed at Municipal Office	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	\$23
Sand Salt Building Moorefield - Sand / Salt Building - Moorefield	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	\$126
Sand / Salt Building - Peel - Sand / Salt Building - Peel	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	\$126
Storage Building - Storage Building 58 Wood St.	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	\$118
Maintenance Building Moorefield	7,920	7,920	7,920	7,920	7,920	7,920	7,920	7,920	-	-	-	-	-	-	-	\$118
Total (sq.ft.)	32,530	32,530	32,530	32,530	32,530	32,530	32,530	49,774	41,854	41,854	41,854	41,854	41,854	41,854	41,854	
Total (\$000)	\$ 5,568.5	\$ 5,568.5	\$ 5,568.5	\$ 5,568.5	\$ 5,568.5	\$ 5,568.5	\$ 5,568.5	\$ 9,847.1	\$ 8,913.9	\$ 8,913.9	\$ 8,913.9	\$ 8,913.9	\$ 8,913.9	\$ 8,913.9	\$ 8,913.9]

LAND							Nu	nber of Hecta	ares							UNIT COST
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/ha
Maintenance Building	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	\$682,000
Bldg-30 - Shed at Municipal Office	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$682,000
Sand Salt Building Moorefield - Sand / Salt Building - Moorefield	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	\$682,000
Sand / Salt Building - Peel - Sand / Salt Building - Peel	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$682,000
Storage Building - Storage Building 58 Wood St.	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	\$682,000
Maintenance Building Moorefield	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	-	-	-	-	-	-	-	\$682,000
Total (hectares)	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	2.71	2.71	2.71	2.71	2.71	2.71	2.71	
Total (\$000)	\$ 2,392.3	\$ 2,392.3	\$ 2,392.3	\$ 2,392.3	\$ 2,392.3	\$ 2,392.3	\$ 2,392.3	\$ 2,392.3	\$ 1,846.7	\$ 1,846.7	\$ 1,846.7	\$ 1,846.7	\$ 1,846.7	\$ 1,846.7	\$ 1,846.7	



TOWNSHIP OF MAPLETON INVENTORY OF CAPITAL ASSETS SERVICES RELATED TO A HIGHWAY: PUBLIC WORKS

VEHICLES							Nu	mber of Vehic	cles							UNIT COST
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/sq.ft.
Tandems	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	\$500,000
1 Ton Truck	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	\$75,000
0.75 Ton Pickups	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	\$75,000
Crew Cab Trucks	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	\$600,000
0.5 Ton Pick Up Trucks	1	1	2	2	2	2	3	3	3	3	3	3	5	6	6	\$50,000
Graders	3	3	3	3	4	4	4	4	4	4	5	5	5	5	4	\$500,000
Articulate Loader	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$280,000
Bi-directional Tractor	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	\$220,000
Kubota Tractor	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	\$48,000
Backhoe/Loader	-	-	1	1	1	1	1	1	1	1	1	2	2	2	2	\$45,000
Static Rubber Tired Road Compactor	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	\$10,000
Trailer	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	\$30,000
Road Widener	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	\$80,000
Sweeper	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	\$7,500
Gravel Edger	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$8,000
Salt Spreader Box	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$6,000
Kubota Blade	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$2,500
Excavator	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	\$267,000
Debris Vacuum	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	\$25,000
Mobile Speed Sign	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	\$60,000
Gravel Reclaimer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$8,000
Wood Chipper	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$45,000
Mowers	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	\$27,000
Snow Blower	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$40,000
Total (units)	28	28	30	30	32	33	35	35	35	37	39	41	43	46	48	
Total (\$000)	\$ 7,675.5	\$ 7,675.5	\$ 7,770.5	\$ 7,770.5	\$ 8,345.5	\$ 8,565.5	\$ 8,623.0	\$ 8,623.0	\$ 8,623.0	\$ 9,250.0	\$ 9,760.0	\$ 10,085.0	\$ 10,205.0	\$ 10,328.0	\$ 10,200.0]



TOWNSHIP OF MAPLETON INVENTORY OF CAPITAL ASSETS SERVICES RELATED TO A HIGHWAY

ROADS							1	Number of KM								UNIT COST
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/km
Collector Roads - Paved	210.1	210.1	210.1	210.1	210.1	210.1	210.1	212.2	212.2	212.2	212.5	211.7	211.7	211.7	211.7	\$1,033,680
Collector Roads - Gravel	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	164.1	164.1	164.1	164.1	\$557,740
Total (km)	373	373	373	373	373	373	373	376	376	376	376	376	376	376	376	
Total (\$000)	\$ 308,255.1	\$ 308,255.1	\$ 308,255.1	\$ 308,255.1	\$ 308,255.1	\$ 308,255.1	\$ 308,255.1	\$ 310,425.8	\$ 310,425.8	\$ 310,425.8	\$ 310,735.9	\$ 310,336.2	\$ 310,355.2	\$ 310,355.2	\$ 310,355.2	1

BRIDGES AND CULVERTS							N	mber of Hectar	es							UNIT COST
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/hectare
Culverts																
Culverts (≥3m)	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	\$710,00
Culverts (<3m)	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	\$65,00
B.11.																
Bridges																
Bridges (≥3m)	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	\$850,00
Total (hectares)	316	316	316	316	316	316	316	316	316	316	316	316	316	316	316	
Total (\$000)	\$ 85,395.0	\$ 85,395.0	\$ 85,395.0	\$ 85,395.0	\$ 85,395.0	\$ 85,395.0	\$ 85,395.0	\$ 85,395.0	\$ 85,395.0	\$ 85,395.0 \$	85,395.0 \$	85,395.0	\$ 85,395.0	\$ 85,395.0	\$ 85,395.0	

SIDEWALKS							N	umber of Meters								UNIT COST
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/m
Sidewalks	18,08	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	\$240
Total (meters)	18,08	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	18,086	
Total (\$000)	\$ 4,340.	\$ 4,340.6	\$ 4,340.6	\$ 4,340.6	\$ 4,340.6	\$ 4,340.6	\$ 4,340.6	\$ 4,340.6 \$	4,340.6	\$ 4,340.6	\$ 4,340.6	\$ 4,340.6 \$	4,340.6	\$ 4,340.6	\$ 4,340.6	

STREETLIGHTS								Nu	nber of Streetli	ghts							UNIT COST
Description	200	Э	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	\$/unit
Streetlights		522	522	522	522	522	522	522	522	522	522	522	522	522	522	522	\$22,940
Total (units)		522	522	522	522	522	522	522	522	522	522	522	522	522	522	522	
Total (\$000)	\$ 11,9	974.7 \$	11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	\$ 11,974.7	



TOWNSHIP OF MAPLETON CALCULATION OF SERVICE LEVELS SERVICES RELATED TO A HIGHWAY: ROADS AND RELATED

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historical Population	9,934	9,962	9,989	10,093	10,198	10,304	10,411	10,520	10,583	10,646	10,710	10,774	10,839	10,963	11,088
Historical Employment	2,427	2,479	2,534	2,600	2,668	2,738	2,809	2,881	2,885	2,889	2,893	2,897	2,900	2,969	3,040
Total Historical Population & Employment	12,361	12,441	12,523	12,693	12,866	13,042	13,220	13,401	13,468	13,535	13,603	13,671	13,739	13,932	14,128

INVENTORY SUMMARY (\$000)

Public Works	\$ 15,636	\$ 15,636	\$ 15,731	\$ 15,731	\$ 16,306	\$	16,526	\$ 16,584	\$ 20,862	\$ 19,384	\$ 20,011	\$ 20,521	\$ 20,846	\$ 20,966	\$ 21,089	\$ 20,961
Roads	\$ 409,965	\$ 409,965	\$ 409,965	\$ 409,965	\$ 409,965	\$	409,965	\$ 409,965	\$ 412,136	\$ 412,136	\$ 412,136	\$ 412,446	\$ 412,046	\$ 412,066	\$ 412,066	\$ 412,066
Total (\$000)	\$ 425,602	\$ 425,602	\$ 425,697	\$ 425,697	\$ 426,272	\$ 4	426,492	\$ 426,549	\$ 432,999	\$ 431,520	\$ 432,147	\$ 432,967	\$ 432,892	\$ 433,031	\$ 433,154	\$ 433,026

SERVICE LEVEL (\$/CAPITA)

Average Service Level

																	Level
Public Works	\$ 1,265.0	J \$	1,256.8	\$ 1,256.2	\$ 1,239.4	\$ 1,267.4	\$ 1,267.2	\$ 1,254.4	\$ 1,556.7	\$ 1,439.2	\$ 1,478.4	\$ 1,508.5	\$ 1,524.8	\$ 1,526.0	\$ 1,513.7	\$ 1,483.6	\$ 1,389.2
Roads	\$ 33,166.0)\$	32,952.8	\$ 32,738.1	\$ 32,298.5	\$ 31,864.2	\$ 31,434.2	\$ 31,011.0	\$ 30,753.5	\$ 30,601.1	\$ 30,449.7	\$ 30,320.2	\$ 30,140.2	\$ 29,992.4	\$ 29,576.9	\$ 29,166.6	\$ 31,097.7
Total (\$000)	\$ 34,431.01	\$	34,209.61	\$ 33,994.35	\$ 33,537.91	\$ 33,131.64	\$ 32,701.41	\$ 32,265.45	\$ 32,310.27	\$ 32,040.37	\$ 31,928.09	\$ 31,828.77	\$ 31,664.99	\$ 31,518.38	\$ 31,090.59	\$ 30,650.20	\$32,486.87

TOWNSHIP OF MAPLETON

CALCULATION OF MAXIMUM ALLOWABLE

SERVICES RELATED TO A HIGHWAY: ROADS AND RELATED

Maximum Allowable Funding Envelope	\$64,031,620
Net Population & Employment Growth 2024-2033	1,971
15-Year Average Service Level 2009-2023	\$32,486.87
15-Year Funding Envelope Calculation	



TOWNSHIP OF MAPLETON DEVELOPMENT-RELATED CAPITAL PROGRAM SERVICES RELATED TO A HIGHWAY

		Gross	Grants/	Net	Ineligil	ble Costs	Total		DC Eligible Costs	3
Project Description		Project	Subsidies/Other	Municipal	BTE	Replacement	DC Eligible	Prior	2024 -	Post
		Cost	Recoveries	Cost	%	& BTE Shares	Costs	Growth	2033	2033
1.0 SERVICES RELATED TO A HIGHWAY										
1.1 Township-wide Roads										
1.1.1 Roads and Sidewalks	Various	\$ 28,450,000	\$ -	\$ 28,450,000	88%	\$ 24,966,868	\$ 3,483,132	\$ -	\$ 3,483,132	\$ -
Subtotal Township-wide Roads		\$ 28,450,000	\$-	\$ 28,450,000		\$ 24,966,868	\$ 3,483,132	\$-	\$ 3,483,132	\$-
1.2 Bridges and Culverts										
1.2.1 Bridges and Culverts	Various	\$ 15,300,000	\$ -	\$ 15,300,000	88%	\$ 13,426,822	\$ 1,873,178	\$ 419,781	\$ 1,453,397	\$ -
Subtotal Bridges and Culverts		\$ 15,300,000	\$-	\$ 15,300,000		\$ 13,426,822	\$ 1,873,178	\$ 419,781	\$ 1,453,397	\$-
1.3 Public Works Fleet and Equipment										
1.3.1 Provision for Additional Growth-Related Public Works Fleet	Various	\$ 250,000	\$ -	\$ 250,000	0%	\$ -	\$ 250,000	\$ 250,000	<u>s -</u>	\$ -
Subtotal Public Works Fleet and Equipment		\$ 250,000	\$-	\$ 250,000		\$-	\$ 250,000	\$ 250,000	\$-	\$-
TOTAL SERVICES RELATED TO A HIGHWAY		\$ 44,000,000	\$-	\$ 44,000,000		\$ 38,393,689	\$ 5,606,311	\$ 669,781	\$ 4,936,530	\$-

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	69%	\$3,392,903
10-Year Growth Population in New Units		1,765
Unadjusted Development Charge Per Capita		\$1,922.32
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2033 DC Eligible Costs	31%	\$1,543,627
10-Year Growth in Square Metres		80,300
Unadjusted Development Charge Per Square Metre		\$19.22

2024 - 2033 Net Funding Envelope	\$ 64,031,62
Uncommitted Reserve Fund Balance Balance as at December 31, 2023	\$ 669,78



Appendix C Engineered Services Technical Appendix



Engineered Services Technical Appendix -Introduction and Overview

The following appendix provides the detailed analysis undertaken to establish the development charge rates for each of the Engineered Services in the Township of Mapleton. Six services have been analysed as part of the Development Charges Background Study. General Services are discussed in Appendix B. This appendix discusses the following two engineered services:

Appendix C.1	Water Services
Appendix C.2	Wastewater Protection

Each service has a capital program which provides detailed 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 capital program tables is given below.

A. Development Related Capital Program

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, Township master plans, and capital budgets, Hemson Consulting, in collaboration with Township staff have developed a development-related capital program which sets out the projects required to service anticipated growth for the planning period from 2024 to 2051. Township Council directed that this development charges background study be prepared on the basis of information on development-related capital costs that were presented to Council on February 27, 2024, and March 19, 2024.

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



Benefit to existing shares represent portions of costs that benefit existing residents of the Township. A replacement share occurs when a new facility will, at least in part, replace a facility that is demolished, redeployed or will otherwise not be available to serve its former function. The benefit to existing and replacement shares of the capital program are not deemed to be development-related and are therefore removed from the development charge calculation. The capital cost for these shares will require funding from non-development charge sources, typically property taxes or user fees.

The capital program less any replacement or benefit to existing shares, yields the net development-related capital program. Although deemed development-related, not all of the net development-related capital program may be recoverable from development charges in the period from 2024 to 2051. For some of the services, a portion of the capital program will service growth that will not occur until after 2051. This portion of the capital program is either deemed "pre-built" service capacity to be considered as committed excess capacity to be recovered under future development, or represents a service level increase. The capital costs associated with this "post-period" benefit is also removed from the development charge calculation.

The remaining portion of the net capital program represents the development-related cost that may be included in the development charge. The result is the development-related net capital cost that is eligible for recovery against growth over the period from 2024 to 2051.

Calculation of the Unadjusted Development Charge Rates

The section below the capital program displays the calculation of the development charge rates.

The first step when determining the development charge rate is to allocate the development-related net capital cost between the residential and nonresidential sectors. For the services of Water Services and Wastewater



Services, the development-related costs have been apportioned as 75% residential and 25% non-residential. This apportionment is based on the anticipated shares of population growth in new units and employment growth over the ultimate planning forecast period.

The residential share of the 2024-2051 development charge-eligible costs are then divided by the forecast population growth in new units. This results in the residential development charge per capita. The non-residential development-related net capital costs are divided by the forecast increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential GFA.The DCA permits the inclusion of interest on money borrowed to pay for the development-related capital program in the development charge calculation. However, given the uncertainty of the timing of projects in the program, a cashflow analysis of interest and financing requirements has not been undertaken.



Appendix C.1 Water Services



Water Services

Given that Mapleton provides water services throughout the Township, a Township-wide approach to the development charge calculation has been utilized.

A. Development-Related Capital Program

The Water Services capital program was informed by the 2023 Mapleton Water and Wastewater Servicing Master Plan, and updates from Township staff. The \$12.6 million capital program includes a provision for a new well and water distribution extensions in Drayton a well rehabilitation and additional standpipe in Moorefield, and an elevated tank, new master servicing plan, and recovery for the negative reserve fund balance.

No grants, subsidies, or other recoveries are are anticipated to offset the gross cost of the program. Approximately \$3.7 million of replacement or benefit to existing shares been identified to reflect infrastructure replacement components of the new well in Drayton and elevated tank.

The remaining \$9.0 million cost is related to development between 2024 and 2051. These costs are allocated 75%, or \$6.7 million, against residential development, and 25%, or \$2.3 million, against non-residential development. The allocation between residential and non-residential development is based on shares of forecasted growth in population in new units and employment. The resulting development charge is \$1,324.44 per capita for residential and \$13.24 per square metre for non-residential.

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



WATER SERVICES SUMMARY

2024 - 2033 Development Related Capital Program Total Net DC Recoverable \$12,620,003 \$8,947,703

Calculated Development Charge \$/capita \$/sq.m. \$1,324.44 \$13.24

HEMSON

APPENDIX C.1 TABLE 1

TOWNSHIP OF MAPLETON DEVELOPMENT-RELATED CAPITAL PROGRAM WATER SERVICES

			Gross	Gran	ts/	Net Municipal		Ineligib	le Co	sts	Total		DC Eligible Cost			;	
Project Description	Timing	Timing Project		Subsidies	s/Other			BTE	Replacement		DC Eligible		Prior		2024 -	Post	
			Cost	Recov	eries		Cost	%	& E	BTE Shares	c	Costs	Growth		2051		2051
1.0 WATER SERVICES																	
1.1 Drayton																	
1.1.1 Install new well at the existing DWS site to increase capacity (Drayton)	2027	\$	1,580,000	\$	-	\$	1,580,000	50%	\$	790,000	\$	790,000	\$ -	\$	790,000	\$	-
1.1.2 Water distribution extension at Wellington Street South (Drayton)	2028	\$	220,000	\$	-	\$	220,000	0%	\$	-	\$	220,000	\$ -	\$	220,000	\$	-
1.1.3 Water distrbution extension at Main Street West, near Drayton Industrial Drive (Drayton)	2033	\$	760,000	\$	-	\$	760,000	0%	\$	-	\$	760,000	\$-	\$	760,000	\$	-
1.1.4 Water distribution extension at Main Street East (Drayton)	2032	\$	140,000	\$	-	\$	140,000	0%	\$	-	\$	140,000	\$-	\$	140,000	\$	-
Subtotal Drayton		\$	2,700,000	\$	-	\$	2,700,000		\$	790,000	\$	1,910,000	\$-	\$	1,910,000	\$	-
1.2 Moorefield																	
1.2.1 Well Rehabilitation - Remaining Costs	2025	\$	570,000	\$	-	\$	570,000	0%	\$	-	\$	570,000	\$-	\$	570,000	\$	-
1.2.2 Additional standpipe & Building Upgrades	2024-2026	\$	730,000	\$	-	\$	730,000	0%	\$	-	\$	730,000	\$ -	\$	730,000	\$	-
Subtotal Moorefield		\$	1,300,000	\$	-	\$	1,300,000		\$	-	\$	1,300,000	\$-	\$	1,300,000	\$	-
1.3 Previous DC Background Study																	
1.3.1 Elevated Tank - Outstanding Costs	2028	\$	7,030,000	\$	-	\$	7,030,000	41%	\$	2,882,300	\$	4,147,700	\$ -	\$	4,147,700	\$	-
Subtotal Previous DC Background Study		\$	7,030,000	\$	-	\$	7,030,000		\$	2,882,300	\$	4,147,700	\$-	\$	4,147,700	\$	-
1.4 Water & Wastewater Master Servicing Plan (Water share =50%)		\$	100,000	\$	-	\$	100,000	0%	\$	-	\$	100,000	\$ -	\$	100,000	\$	-
1.5 Adjustment for Reserve Fund Balance: Recovery of Negative/(Reduction if Positive)		\$	1,490,003	\$	-	\$	1,490,003	0%	\$	-	\$	1,490,003	\$ -	\$	1,490,003	\$	-
TOTAL WATER SERVICES		\$ 1	12,620,003	\$	-	\$	12,620,003		\$	3,672,300	\$ 8	8,947,703	\$-	\$	8,947,703	\$	

Residential Development Charge Calculation		
Residential Share of 2024 - 2051 DC Eligible Costs	75%	\$6,689,763
Ultimate Growth Population in New Units		5,051
Unadjusted Development Charge Per Capita		\$1,324.44
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2051 DC Eligible Costs	25%	\$2,257,940
Ultimate Growth in Square Metres		170,482
Unadjusted Development Charge Per Square Metre		\$13.24

Uncommitted Reserve Fund Balance	\$ (1,490,003)
Balance as at December 31, 2023	



Appendix C.2 Wastewater Services



Wastewater Services

As with Water Services, Mapleton provides wastewater services throughout the Township. As such, a Township-wide approach to the development charge calculation has been utilized.

A. Development-Related Capital Program

The Wastewater Services capital program was informed by the 2023 Mapleton Water and Wastewater Servicing Master Plan, and updates from Township staff. The capital program includes a provision for new SPS with emergency storage, an Inflow/Infiltration Monitoring Program, and upgrading gravity sewers in Drayton, upgrading existing SPS facilities in Moorefield, future capacity upgrades to the wastewater treatment facility, and a portion of prior growth-related expenditures to increase system, pumping station, and forcemain capacity.

No grants, subsidies, or other recoveries are are anticipated to offset the gross cost of the \$27.1 million program. As well, no replacement or benefit to existing shares have been identified.

The \$27.1 million cost is related to development between 2024 and 2051. These costs are allocated 75%, or \$20.2 million, against residential development, and 25%, or \$6.8 million, against non-residential development. The allocation between residential and non-residential development is based on shares of forecasted growth in population in new units and employment. The resulting development charge is \$4,006.12 per capita for residential and \$40.06 per square metre for non-residential.

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



WASTEWATER SERVICES SUMMARY

2024 - 2051 Development Related Capital Program Total Net DC Recoverable \$27,064,614 \$27,064,614

Calculated Development Charge \$/capita \$/sq.m. \$4,006.12 \$40.06

HEMSON

TOWNSHIP OF MAPLETON DEVELOPMENT-RELATED CAPITAL PROGRAM WASTEWATER SERVICES

				Gross	Gr	rants/		Net	Ineligib	le Cos	ts		Total		DC I	Eligible Costs		
Project Desc	cription	Timing	P	Project	Subsid	lies/Other	М	lunicipal	BTE	Rep	lacement	D	C Eligible	Prior		2024 -		Post
				Cost	Rec	overies		Cost	%	& B'	TE Shares		Costs	Growth		2051	2	2051
2.0 WASTEWAT	ER SERVICES																	
2.1 Drayte	on																	
2.1.1	New SPS with emergency storage (Drayton)	2025	\$	5,680,000	\$	-	\$	5,680,000	0%	\$	-	\$	5,680,000	\$ -	\$	5,680,000	\$	-
2.1.2	Inflow/Infiltration Monitoring Program (Drayton)	2026-2027	\$	420,000	\$	-	\$	420,000	0%	\$	-	\$	420,000	\$ -	\$	420,000	\$	-
2.1.3	Upgrade gravity sewers on Wellington Street South (Drayton)	2028	\$	770,000	\$	-	\$	770,000	0%	\$	-	\$	770,000	\$ -	\$	770,000	\$	-
2.1.4	Upgrade gravity sewers on Main Street West near the existing SPS (Drayton)	2031	\$	500,000	\$	-	\$	500,000	0%	\$	-	\$	500,000	\$ -	\$	500,000	\$	-
2.1.5	Upgrade gravity sewers on Main Street East (Drayton)	2032	\$	330,000	\$	-	\$	330,000	0%	\$	-	\$	330,000	\$-	\$	330,000	\$	-
	Subtotal Drayton		\$	7,700,000	\$	-	\$	7,700,000		\$	-	\$	7,700,000	\$ -	\$	7,700,000	\$	-
2.2 Moore	əfield																	
2.2.1	Upgrade the existing SPS (Moorefield)	2026	\$	1,060,000	\$	-	\$	1,060,000	0%	\$	-	\$	1,060,000	\$ -	\$	1,060,000	\$	-
1	Subtotal Moorefield		\$	1,060,000	\$	-	\$	1,060,000		\$	-	\$	1,060,000	\$-	\$	1,060,000	\$	-
2.3 Town	ship-Wide																	
2.3.1	Upgrades to Waste Water Treatment facility - Growth Related Capacity Increase	2027	\$	6,600,000	\$	-	\$	6,600,000	0%	\$	-	\$	6,600,000	\$ -	\$	6,600,000	\$	-
	Subtotal Township-Wide		\$	6,600,000	\$	-	\$	6,600,000		\$	-	\$	6,600,000	\$-	\$	6,600,000	\$	-
2.4 Previo	bus DC Background Study																	
2.4.1	Wastewater Capacity Increase to 1,300 m ³ /day	2025	\$	4,510,000	\$	-	\$	4,510,000	0%	\$	-	\$	4,510,000	\$-	\$	4,510,000	\$	-
2.4.2	Pumping Station and Forcemain	2025	\$	1,980,000	\$	-	\$	1,980,000	0%	\$	-	\$	1,980,000	\$ -	\$	1,980,000	\$	-
	Subtotal Previous DC Background Study		\$	6,490,000	\$	-	\$	6,490,000		\$	-	\$	6,490,000	\$-	\$	6,490,000	\$	-
2.5 Water	& Wastewater Master Servicing Plan (Wastewater share =50%)		\$	100,000	\$	-	\$	100,000	0%	\$	-	\$	100,000	\$ -	\$	100,000	\$	-
2.6 Adjus	tment for Reserve Fund Balance: Recovery of Negative/(Reduction if Positive)		\$	5,114,614	\$	-	\$	5,114,614	0%	\$	-	\$	5,114,614	\$-	\$	5,114,614	\$	-
TOTAL WAS	TEWATER SERVICES		\$2	27,064,614	\$	-	\$ 2	27,064,614		\$	-	\$	27,064,614	\$-	\$	27,064,614	\$	-

Residential Development Charge Calculation		
Residential Share of 2024 - 2051 DC Eligible Costs	75%	\$20,234,898
Ultimate Growth Population in New Units		5,051
Unadjusted Development Charge Per Capita		\$4,006.12
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2051 DC Eligible Costs	25%	\$6,829,716
Ultimate Growth in Square Metres		170,482
Unadjusted Development Charge Per Square Metre		\$40.06

Uncommitted Reserve Fund Balance \$ (5,114,614) Balance as at December 31, 2023



Appendix D Reserve Fund Balances



Development Charges Reserve Fund Unallocated Balances

The DCA requires that a reserve fund be established for each service for which development charges are collected. Table 1 presents the uncommitted reserve fund balances that are available to fund the development-related net capital costs identified in this study. The opening balances of the development charges reserve funds are as of December 31, 2023 since the first capital-planning year of the Background Study is 2024.

As shown on Table 1, the December 31, 2023 total reserve fund balance was in a deficit of \$5.5 million. The application of each of the reserve funds is discussed in Appendix B and Appendix C related to each service.



APPENDIX D TABLE 1

TOWNSHIP OF MAPLETON DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT YEAR ENDING DECEMBER 31, 2023

Service		Reserve Fund Balance as at December 31, 2023		
FIRE PROTECTION SERVICES	\$	61,264		
PARKS AND RECREATION Indoor Recreation Outdoor Recreation	\$ \$	150,684 157,118		
DEVELOPMENT-RELATED STUDIES	\$	21,245		
SERVICES RELATED TO A HIGHWAY: Roads and Related	\$	669,781		
WATER SERVICES	\$	(1,490,003)		
WASTEWATER SERVICES	\$	(5,114,614)		
Total Development Charge Reserves	\$	(5,544,525)		



Appendix E Cost of Growth – All Services



Cost of Growth Analysis – All Services

A. Asset Management Plan

The Development Charges Act requires that municipalities complete an Asset Management Plan before passing a development charges by-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life-cycle.

Asset Types

A summary of the future Township-owned assets and estimated useful life assumptions for eligible DC services considered as part of the study are outlined in Table 1. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some projects do not relate to the emplacement of a tangible capital asset, such as the recovery of completed projects.

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



Service	Estimated Useful Life
Fire Services	
Buildings	50 years
Vehicles	15 years
Equipment	10 years
Parks and Recreation	
Buildings	50 years
Parks and Open Space	20 years
Furniture and Equipment	15 years
Services Related to a Highway	
Roads and Sidewalks	50 years
Bridges and Culverts	50 years
Fleet and Equipment	15 years
Development Related Studies	
Growth Studies	0 years
Water Services	
Water Infrastructure	75 years
Servicing Plan	0 years
Negative Reserve Fund	0 years
Wastewater Services	
Wastewater Infrastructure	75 years
Servicing Plan	0 years
Negative Reserve Fund	0 years

Table 1 – Summary of Municipal Assets Useful Lives

Annual Provision

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



Based on the useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated for both the general and engineered services. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, a number of assumptions are made to account for inflation (2.0 per cent) and interest (3.5 per cent).

Consistent with the requirements of the DCA, assets that are proposed to be funded under the development charges by-law have been included in the analysis. As a result, the total calculated annual provision for development charge related infrastructure has been netted down to consider the replacement of existing infrastructure or benefit-to-existing development. However, for reference, the annual replacement provisions associated with the non-development charge funded costs, including costs related to the benefit-to-existing and post-period benefit have also been calculated.

Tables 2 and 3 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2024-2033 and 2024-2051 DC recoverable portion. The years 2034 and 2052 have been included to calculate the annual contribution for the 2024-2033 and 2024-2051 periods as the expenditures in 2033 and 2051 will not trigger asset management contributions until 2034 and 2052, respectively.

As shown in Table 2, by 2034, the Township will need to fund an additional \$235,000 per year in order to properly fund the full life-cycle costs of the new assets related to all general services under the development charges by-law. Table 3 shows that by 2052, the Township will need to fund an additional \$81,000 per year to properly fund all life-cycle costs of the new engineered service assets under the DC by-law.



APPENDIX E TABLE 2

TOWNSHIP OF MAPLETON ANNUAL ASSET MANAGEMENT PROVISION BY 2034

Service		4 - 2033 I Program	Calculated AMP Annual Provision by 2034		
	DC Related	Non-DC Related*	DC Related	Non-DC Related*	
Fire Protection Services	\$1,278,236	\$1,373,764	\$55,441	\$61,461	
Parks And Recreation	\$2,888,507	\$10,467,203	\$71,310	\$238,407	
Development-Related Studies	\$268,755	\$111,245	\$0	\$0	
Services Related To A Highway	\$4,936,530	\$39,063,470	\$108,200	\$869,322	
TOTAL	\$9,372,028	\$51,015,682	\$234,951	\$1,169,191	

* Includes costs that will be recovered under future development charges studies (i.e. other developmentrelated), ineligible shares and shares of projects funded from available reserve funds.

APPENDIX E TABLE 3

TOWNSHIP OF MAPLETON ANNUAL ASSET MANAGEMENT PROVISION BY 2052

Service	2024 - 2051 Capital Program DC Related Non-DC Related*		Calculated AMP Annual Provision by 2052		
			DC Related	Non-DC Related*	
Water Services	\$8,947,703	\$3,672,300	\$20,397	\$10,180	
Wastewater Services	\$27,064,614	\$0	\$60,572	\$0	
TOTAL	\$36,012,317	\$3,672,300	\$80,969	\$10,180	

* Includes costs that will be recovered under future development charges studies (i.e. other developmentrelated), ineligible shares and shares of projects funded from available reserve funds.

Future Revenue Growth

The calculated annual funding provision should be considered within the context of the Township's projected growth. The Township's total population is projected to increase by 1,168 by 2033, and by 3,604 by 2051. In addition, the Township will also add 803 employees that will result in approximately 80,300 square metres of additional non-residential building space by 2033, and an additional 1,705 employees and 170,482 square metres of building space by 2051.



This growth will have the effect of increasing the overall assessment base. This leads to additional user fee and charge revenues to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the development charges by-law. The collection of these funds is intended to be allocated to the Township's reserves for future replacement of these assets.

B. Long-Term Capital and Operating Impact Analysis

As shown in Table 4, by 2033 the Township's net operating costs are estimated to increase by \$533,400 for property tax supported services. Increases in net operating costs will be experienced as there are operational costs associated with additional capital.

Table 5 summarizes the components of the development-related capital forecast that will require funding from non-DC sources (e.g. property tax) for the planning periods of 2024 to 2033, and 2024 to 2051. In total, \$49.1 million will need to be funded from non-DC sources over the 10-year planning period, and \$3.7 million over the 2024-2051 planning period. These costs are related to facilities and infrastructure that will benefit the existing community. In addition, \$787,500 (2024-2033 capital program) in interim DC financing related to post-period shares of projects may be required or these costs may be recovered from other growth funding tools.

Council is made aware of these factors so that they understand the operating and capital costs that will not be covered by DCs as it adopts the development-related capital forecast set out in the study.



APPENDIX E

TABLE 4

TOWNSHIP OF MAPLETON COST OF GROWTH ANALYSIS ALL SERVICES ESTIMATED NET OPERATING COST OF THE PROPOSED 2024-2033 DEVELOPMENT-RELATED CAPITAL PROGRAM (in constant 2024 dollars)

		Cost Driver		Additional	Source and Commentary	
Category	\$	(in 2024 \$) unit meaure	Quantity	Operating Costs at 2033		
Development-Related Studies	Ť		(\$0		
No additional operating costs	\$0	No additional costs	-	\$0	N/A	
Parks And Recreation				\$79,575		
New Space	\$10	per sq.ft.	3,800	\$38,000	Based on 2022 FIR and 2024 Capital Program	
Parks, Parkland and Trail Development	\$0.10	per \$1.00 value of asset	\$ 415,750	\$41,575	Based on 2022 FIR and 2024 Capital Program	
Fire Protection Services				\$211,250		
New Space	\$35	per sq.ft.	3,750	\$131,250	Based on 2022 FIR and 2024 Capital Program	
New Pumper	\$0.10	per \$1.00 new vehicle	\$ 800,000	\$80,000	Based on 2022 FIR and 2024 Capital Program	
Services Related To A Highway				\$242,580		
Fleet and Equipment Additions	\$0.10	per \$1.00 value of asset	\$ 250,000	\$25,000	Based on 2022 FIR and 2024 Capital Program	
Development-Related Roads Infrastructure	\$430	per household	506	\$217,580	Based on 2022 FIR and 2024 Capital Program	
TOTAL ESTIMATED OPERATING COSTS				\$533,405		



APPENDIX E

TABLE 5

TOWNSHIP OF MAPLETON SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM FOR GENERAL AND ENGINEERED SERVICES

(in \$000)

	Development-Related Capital Program (2024-2033)						
General Services	Net	Replacement &	Available	Post-2033	Total DC Eligible		
	Municipal Cost	Benefit to Existing	DC Reserves	Benefit	Costs for Recovery		
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)		
1.0 Fire Protection Services	\$2,652.0	\$525.0	\$61.3	\$787.5	\$1,278.2		
2.0 Parks And Recreation	\$13,318.2	\$10,121.9	\$307.8	\$0.0	\$2,888.5		
3.0 Development-Related Studies	\$380.0	\$90.0	\$21.2	\$0.0	\$268.8		
4.0 Services Related To A Highway	\$44,000.0	\$38,393.7	\$669.8	\$0.0	\$4,936.5		
TOTAL - GENERAL SERVICES (2024-2033)	\$60,350.2	\$49,130.6	\$1,060.1	\$787.5	\$9,372.0		

	Development-Related Capital Program (2024-2051)					
Engineered Services	Net	Replacement &	Available	Post-2051	Total DC Eligible	
	Municipal Cost	Benefit to Existing	DC Reserves	Benefit	Costs for Recovery	
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	
1.0 Water Services	\$12,620.0	\$3,672.3	\$0.0	\$0.0	\$8,947.7	
2.0 Wastewater Services	\$27,064.6	\$0.0	\$0.0	\$0.0	\$27,064.6	
TOTAL - ENGINEERED SERVICES (2024-2051)	\$39,684.6	\$3,672.3	\$0.0	\$0.0	\$36,012.3	
	-					
TOTAL GENERAL AND ENGINEERED SERVICES	\$100,034.8	\$52,802.9	\$1,060.1	\$787.5	\$45,384.3	

C. The Program is Deemed Financially Sustainable

In summary, the Asset Management Plan and long-term capital and operating analysis included in this appendix demonstrates that the Township can afford to invest and operate the identified general and engineered services infrastructure over the ten-year planning period.

Importantly, the Township's annual budget review allows staff to continue to monitor and implement mitigating measures should the program become less sustainable.



Appendix E | 115

Appendix F Draft By-Law

(Available Under Separate Cover)

